

## **DX NEWS**

The magazine of the National Radio Club

-SINCE 1933-

Volume 58, No. 20 - February 25, 1991 (ISSN 0737-1659)

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Monitor Radio

John Bardeen
12 .. MWT- 2 Tuner (Part One)

CPC Calendar ...

 Date
 Station
 From/To (EST)

 Feb. 25
 KUAI-720
 5:30/6:00 AM

 Mar. 11
 KTIB-640
 2:00/4:00 AM

 Mar. 16
 KBBW-1010
 1:00/7:00 AM

 Mar. 23
 KTGG-1540
 4:30/5:00 AM

KUAI-720. BOX 720, Eleele, Kauai, HI 96705 will conduct a special DX TEST on Monday morning. February 25, 1991 from 0530-0600 EST This test will include Morse code ID's. Our thanks to Mr. Roger D. Rogelstad, Chief Operator for this test. Arranged by the Colorado CPC Machine for the National Radio Club.

KTIB-640, Box 682, Thibodaux, LA 70301 will conduct a special DX TEST on Monday morning, March 11, 1991 between 0200-0400 EST. This test will include Morse code ID's. Our thanks to Mr Ray Saadi, General Manager for this test. Arranged by the Colorado CPC Machine for the National Radio Club.

KBBW-1010, 1019 Washington, Waco, TX 76701 will conduct a special DX TEST on Saturday morning. March 16, 1991 from 0100-0700 EST. This test will feature music, voice and Morse code ID's. Our thanks to Mr. Bernarr Howell, Chief Engineer for this test. Arranged by the Colorado CPC Machine for the National Radio Club.

KTGG-1540, Spring Arbor College. Spring Arbor, MI 49283 will conduct a special DX TEST on Saturday morning, March 23, 1991 from 0430-0500 EST. Details to follow. Our thanks to Mr. Edmond R. Trombley, Chief Engineer for this test. Arranged by the Colorado CPC Machine for the National Radio Club.

From the publisher ... We've received news of several noteworthy publications this week. Steve Whitt - 21 Cauldwell Avenue Ipswich IP4 4EB -

England is offering "Get the Best from Your Sony ICF-2001D" and the sequel, "Get Even More

..." etc. for \$12.00/\$6.00 respectively, or \$15.00 for both. The 2001D, of course, is the ICF-2010 in the USA. Payment must be in U\$ dollar bills, or in Sterling made payable to "S Whitt" (c. g., Bank drats. Eurocheques, Int. Postal Money Orders), or other negotiable currencies (no coins, please). IRC's? 19 IRC's will get you both books, 15 the first, 8 the second. All prices postpaid.

Proceedings, from Fine Tuning, is available now; check page 23 for details. Although aimed at SW DX'ers, the publication contains much material of use to MW DX'ers.

1991 Shortwave Directory, by Bob Grove, is categorized by services and cross-referenced by frequency. For MW DX'ers who want to check parallels to BCB stations, or just to check out hot SW frequencies, this volume is a must. Order from Grove Enterprises - P. O. Box 98 - Brasstown. NC 28902 for \$21.95 plus \$3.50 UPS, or VISA/MC by calling 1-800-438-8155.

DX'ing must be slowing down ... as you can tell by perusing the contents of DXN. For those who have promised articles, now is the time to get them in to Topeka!

#### DX Time Machine From the Pages of DX News

50 years ago ... from the Feb. 22, 1941 DXN: Eldon Addy, Marcus, IA, reported receiving "a swell verie" from HJCK-1290, Bogotá, Colombia ... George Cryder, Delaware, OH logged YV5RB behind ZNS on 970 kcs. and 1YA on 540 ... DXN included six BCB and three SW pages.

25 years ago ...from the Feb. 26, 1966 DXN: Jim Neff - Springgville, NY tested the "new" Hallicrafters SX-130 and called it "one of the worst BCB RXes I have ever seen ... NO selectivity or ability to separate on BCB."

10 years ago ... from the Mar. 2, 1981 DXN: Mark Connelly's loggings dominated IDXD, with one of his best loggings being HCRH2-830 Guayaquil, Ecuador on Feb. 7.

Thanks to Skip Dabelstein, Kermit Geary, and Ron Musco for continuing to provide the above info!

## M Switch

### **Jerry Starr**

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

Status changes in AM stations, supplied by the FCC and NRC members

CALL	ᄔ	IER	CHANGE 5
Old	Ca 11		

01d c	all:			New call:
880	KIKR	TX	Conroe	KJOJ
1050	WMDK	NH	Peterborough	WRPT
1100	*New	CA	Bakersfield	KZPM
1190	KY I I	TX	Dallas	KUTI
1260	WCRT	ΑŁ	Birmingham	WCEO
1380	KWIC	TX	Beaumont	KKFH
1400	KTUS	TX	Galveston	KHCB
1470	WOJY	PA	Farrell	WAXF
1490	WKQS	PA	Johnstown	LTNW
1540	WSNI	PA	Philadelphia	WPGR*
1550	WCTW	IN	New Castle	WMDH
	KMXT	WA	Vancouver	KMJK*



\*Call changes that were set aside and never used, stations remain WPGR and KMJK.

APPLICATIONS/GRANTS FOR NEW STATIONS None

APPLICATIONS/GRANTS FOR EXISTING FACILITIES None

#### OTHERNESS

560	WYOR	TN	Brentwood: silent station has new owners, may be returning to the air
870	WKZN	ME	Gorham: get ready for more mass confusion, seems WKZN will swap calls with WLAM-1470 Lewiston, ME, and will simulcast, calling BOTH stations "WLAM" except for legal IDs. WKZN moves to 1470 while WLAM goes to 870. Why?
910	WLAS	NC	Jacksonville: station went SILENT 1-31 after 37 years on the air. The station, which serves the Camp Lejeune area, sights the war in the Persian Gulf as the reason. manager Paul Parker claims the deployment of more than 30,000 troops from their listening area was "the straw that broke the camel's back, that finished it off."
1120	WHOG	AL.	Hobson City: new station is ON THE AIR
1230	KRMH	$\infty$	Leadville: station is SILENT, we understand that the economy of Leadville is in dire straits
1240	CKBS	PQ	St. Hyacinthe: station went SILENT 1-16 (along with co-owned CKDO-FM!) claiming a pre-tax loss of \$500,000 for the AM alone last year. Looks like the U.S. isn't alone as far as struggling AMs bowing to financial problems.
1320	KAV1	$\infty$	Rocky Ford: station is SILENT
1400	KTFS	TX	Texarkana: silent station has been sold, new

owners will be returning it to the air

1470 WLAM ME Lewiston: see the 870 WKZN mess above 1510 KDKO  $\infty$  Littleton: another broadcaster receives a hefty fine of \$10,000 for, among other things, failing to switch to their nighttime power/pattern after sunset.

THANKS: ANDY RUGG, MIKE HARDESTER, PERRY CRABILL (W3HQX), DALE HAMM (Audio Service member) and M STREET JOURNAL

SMY & BKF Jerry Starr & Buffalo K> Foorman 73 and Good DX,

BY JOHN D. BOWKER

THIS IS THE COMPLETE LIST OF U. S. BROADCAST STATIONS ON THE INDICATED FREQUENCY AS PUBLISHED BY THE FEDERAL RADIO COMMISSION IN 1934. "S" MEANS SHARED: "SH" MEANS SPECIFIED HOURS: "T" INDICATES TRANSMITTER LOCATION; "D" MEANS DAYTIME OPERATION ONLY; "U" MEANS UNLIMITED TIME.

Frequency (kc)	Call letters	Main studio and transmitter location	Power	Time designation
930, regional (Canadian	WDBJ	Roanoke, Va	{250 w 500 w LS_	} <b>ਹ</b> .
shared).	WBRC	Birmingham, Ala	500 w 1 kw LS	<b>)</b> υ.
	KMA	Shenandoah, Iowa	500 w 1 kw LS	}s-KGBZ.
	KGBZ	York, Nebr	500 w 1 kw LS	}s-kma.
	KROW	Oakland, Calif	{500 w  1 kw LS	$\}$ ½ time.

AM Stations carrying "Monitor Radio", via Mrs. Leslie Edwards.

(Note: Distributed by American Public Radio Network, "Monitor Radio" is also widely available on educational FM stations.)

State	City	Call	Freq	Early	Daily	Weekend
IL	Urbana	WILL	580 -	-		Sat. 5 am/Sun. 6:30 am
AK	Dillingham	KDLG	670		1:30 pm	Sat. 5 pm
AK	Barrow	KBRW	680	6 am	12:30 pm	
SD	Vermillion	KUSD	690			Sun. 3 pm
NY	New York	WNYC	820		4 pm	
OH	Columbus	WOSU	820	5 am	-	Sat. 2 pm
AK	Sand Point	KSDP	840		1:30 pm	
AK	McGrath	KSKO	870		12:30 pm	
MI	East Lansing	WKAR	870	10 am	5:30 pm	Sat. 2 pm/Sun. 8 pm
IA	Iowa City	WSUI	910		6:30 pm	Sat 6/11 am
IN	West Lafayette	WBAA	920		-	Sun. 10 am
WI	Auburndale	WLBL	930		5:30 pm	Sat. 6 am/3 pm
NY	Buffalo	WEBR	970		7 pm	Sun. 2 pm
WI	Madison	WHA	970		5:30 pm	Sat. 6 am/3 pm

NRC **AM RADIO** LOG

• 1991 Edition

The 1991 NRC Log contains two cross-reference sections and more station information than ever before. Only \$16.95; Canada \$17.95 to U. S./Canadian NRC Subscribers ONLY, \$19.95 to U.S., Non-NRC Subscriber; \$20.95 Canadian Non-NRC Subscriber. Others - please write.

Mail or Call your order in. Specify your mailing address and number of Logs ordered. Make out check or money order to: NRC. Mail to: NRC Publications -Box 164 - Mannsville, NY 13661 or use your credit card (VISA/MC) and call (608) 423-4159.

# Domestic DX Digest - East

#### William Hale

734 Burleson San Marcos, TX 78666-4335

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

#### MEDIUM WAVE RAMBLINGS

■ Mike Brooker needs the REAL address for WEND-760 Brandon, FL. He sent a report to the St. Petersburg address as in the 1991 Log, and got it back stamped "Forwarding Order Expired". And remember, it costs Canadians even more for postage, and extra expenses like this are big headaches . If anybody knows the address for WEND, send it in and it'll get published pronto. And don't forget to send it to Jerry Starr for the address change column.

■ Mike Hardester relates an item from his local paper, The Daily News of Jacksonville, NC...(the

"Thursday" quoted is 31 January 91)...On Thursday night, country music radio station WLAS signed off the air for the final time after 37 years or service...Jacksonville is suffering from the double problems of the national economic decline and the deployment of more than 30,000 troops from the area, said WLAS business manager Paul Parker..."The deployment was the straw that broke this camel's back", Parker said the day the station closed. "That finished it off". WLAS was on 910.

Welcome to DDXD-E, Edward Soule of Huntsville, AL who checks in with help on an unID.

Remember the deadline we have for loggings...no older than one month by the date I mail the column into Topeka. That is usually two weeks before the Masthead Date. Please don't be offended if your 7 or 8 week old DX does not appear. Unless it's of slogan or schedule change value, out it goes. Example: this column is being printed here on Feb 10th, so any DX dated 1/9 and before is really too old. But being the benevolent guy that I am, everything in 1991 is included (this week). But watch it!! HI! Yes, special consideration will be given to postal delays, etc. And there are some of those again this week.

And we don't publicize Pirates...except if they're playing baseball in Pittsburgh.

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MB WINNIPEG - 1/29 0414 XLNT; on the air 24 hrs during Gulf crisis/war as are all CBC AM stations with a national news on the hour & other (often repeat) pgms						
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1330	WYWR	OH CAMPBELL - carries the WFMJ Channel 21 6:00 Action News (J *OH)
1390	KJJY	IA DES MOINES - as of 2/3 is still KJJY, not KKSO as past AMS said (MH-NE)
1420	KGNB	TX NEW BRAUNFELS - add to America In The Morning and Tom Snyder lists [EdTX]
1440	WRRO	OH WARREN - carries the WFMJ Channel 21 6:00 Action News (J *-OH)
1470	WVOL	TN BERRY HILL - 1/21 =0315 on (schedule in Log says 0600-0100) but kinda weak; they may have been testing (DS-TN)
1510	WVAC	MO INDEPENDENCE - haven't hrd in over a weekmaybe silent? (MH-NE) OH NORWALK - 1/28 1650 semi-local noted with new CL (ex:WLKR) with bird-fed NOS; 1700 ID: Serving Huron, Lorain and Eric Counties, this is WVAC, Norwalk - ABC Nx; per annet on WLKR(FM), AM's format will switch to Unistar AC on or about 2/18 and slogan will be The Voice of the Vacationland and on 5/1 would add info pgms for Vacationland tourists (another commercial TIS?); also sed they are adding CNN Nx; sked is LSR to LSS and phone #s are 419-668-8151/2 (REH-ON)
1580	KFDF	AR FT. SMITH - 2/3 sign-on said studios and transmitters in Ft. Smith, not Van Buren, as Log says (MH-NE)
		UNIDS AND UNID HELP
770	WVNN	AL ATHENS - probably Jim Renfrew's unID of 12/31 (Issue 16) (REH-ON)is JR-NY's unID with Newsradio slogan and stock reports; they are BRN/FNN/AL Nets (MH-NE)is probably WVNN, as they use 770 Newsradio call often; they're also on the Auburn University FB & BKB nets, so this would also match Jim Renfrew's other tentative; by the way, they are among the growing ranks which simuleast TV news feeds, carrying the 5 O'Clock evening news from WHNT Channel 19 (ES-AL)
1020 1370	UNID	77 - 23 0130-0145 C&W in null of KDKA; NOT KCKN; any ideas? (MH-NE) 79 - 27 0350-0407 most strangesomebody carrying WCBS-FM with CBS-FM IDs, wx for NYC, other NYC mentions, legal ID at :00; maybe somebody getting the wrong feed off the satellite? is WCBS-FM on a bird? not KFON or KFRO [Ed-TX]
1600	WWRL	NY NEW YORK - is most certainly Dave Hascall's unID in Issue 15; station covers general New York City Metro area, which would explain mentions of New Jersey towns; format is black REL/GOS (GU-NY)most probably DLH-IN's unID od Issue 15; they have many GOS pgms. both national and local (LMc-NY)
		DX AND EQUIPMENT TESTS
700	KBYR	AK. ANCHORAGE - 2/4 0/400-0/430 WLW nulled, nothing heard; who knows?  Maybe I'll log Alaska yet, hi! (JB-TX)not heard (SF-TN)
720	WGN	IL CHICAGO - 2/3 0211-0600 running OC and variable TTs; annex said they would return to normal prgmmg @ 0600; later had NOS mx (MH-NE)
970 1280	KFEL	CO PUEBLO - 1/14 not heard (SF-TN) KS ARKANSAS CITY - 2/3 0500-0600 heard Morse at 0500, 0519 & 0525, but no audio, report sent; WQUE dominating & partially nulled, XEAW secondary (JB-TX)
	KSOK	KS ARKANSAS CTTY - 2/3 0500-0600 nothing noted 'til 0538, when weak CIDs heard clearly for about 15-20 seconds under WWOK/unID Talknet in null of WADO; more CIDs at 0541 (SF-TN)
	KSOK	KS ARKANSAS CITY - 2/3 0500 checked briefly to see if they were there, but no signt of them; KOIL splash was terrible (MH-NE)
		TIS AND NDB STUFF
517	GQ	77 - 1/25 0550 unlisted NDB, very weak; no DF possible as had to use loop to null out local noise source (REH-ON)
526	UOC	IA IOWA CITY - 1/28 2234 fair with CIDs (MH-NE)
		MIDNIGHT TO 0800 HOURS ELT
530	CJFT	ON FORT ERIE - 1/21 0150 good with NOS (DS-TN)
580	KALB	LA LAFAYETTE - 1/8 0045 fair with satellite OLD, call ID The Great 58 KALB (DS-TN)
	WELO	MS TUPELO - 1/14 0100 poor with OLD, 58 Gold WELO Tupelo (DS-TN)
600	WCVP	NC MURPHY - 1/25 0704 poor with tri-state news, ad for Bank of Hiawassee, school closings in Murphy and Hayesville (DS-TN)
670	WYLS	AL YORK - 2/3 0741 poor u/WMAQ with Sunday REL pgm; AL #20 (MH-NE)
680	WCTT	KY CORBIN - 1/25 0711 poor but fading up with wx (21° in downtown Corbin) and ad for leep-Eagle dealer in Corbin (DS-TN)
710	WROM	GA ROME - 1/25 0715 weak with SSB, full-data sign-on including street address, then birthday annots (DS-TN)

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720	WEKC	KY WILLIAMSBURG - 1/21 0718-0800 atop channel for a couple of minutes with Kentucky nx and - a deep fade u/WOR & copied once in awhile 'til 0800 (HH-MD1)  NV LAS VEGAS - 2/3 0300 ID after WGN left the air for a few minutes; R.
1,000		Jamaica also heard (MH-NE)
500	WWII	PA SHIREMANSTOWN - 1/25 0716 good over WGN w/wx (17 in the Harrisburg area), Love 720 AM, Listener supported Christian radio slogan (DS-TN)
730	WJMT	WI MERRILL - 1/2 0708 local newscast, ad, WJMT news sponsored by a local credit union and mentioning their branch in Minocqua; call ID again after wx; fair, not heard in a few years (MC-ON)
760	WCHU	NY CHAMPLAIN - 1/20 0757-1025 rough to copy with much <sup>2</sup> WJR QRM; if I nulled WJR with loop, WCHP too weak to copy and with the LW WJR usually way atop WCHP; but got some IDs and pgm content at times; REL pgms (HH-MD1&2)
770	WYRV	VA CEDAR BLUFF - 1/?? 0803-0824 very rough under WABC but finally enough for a report; seldom heard here; C&W and ads; lost around 0824 (HH-MDI)
	WYRV	VA CEDAR BLUFF - 2/3 0725 fair with many IDs; temp given, then C&W VA #7 (MH-NE)
800	WMGY	
830	WCCO	MN MINNEAPOLIS - 2/4 0325 with sports - TC - wx; female with station promo From 1 to 3 on WCCO Radio; KBUC silent (JB-TX)
900	WSSR	DE GEORGETOWN - 1/19 0803-0845 with mx from past 50 years; WSSR Stardust 900, mx, ads, special Persian Gulf nx bulletin; very little QRM WILC MD nulled with
930	WSLI	loop (HH-MD1)  MS JACKSON - 1/21 0158 BRN Nx, Wo're 930 WSLI Jackson, Mississippi, fair - good (DS-TN)
940	KIOA	IA DES MOINES - 1/21 0121 Oldies KIOA call ID, slogan with 93.3 FM (DS-TN)
950	KPRC	TX HOUSTON - 1/7 0130 This is Talk Radio AM 950 KPRC Houston ID; fair over unID signing 97.5 FM (DS-TN)
960	KZIM	MO CAPE GIRARDEAU - 1/21 0118 fair but fadey, call ID & ad for auto dealer in Jackson, MO (DS-TN)
	WEAV	NY PLATTSBURGH - 1/26 0600 good with sign-on, with WELI (LMc-NY)
990	WEIS	AL CENTRE - 1/25 0726 poor over unID C&W with ad for Centre Tire &
1000	WTAK	Appliance West, talk with several mentions of Centre (DS-TN) AL HUNTSVILLE - 2/2 0734 very poor with AC (or ACR) and ID; KTOK QRM, no WLUP (MH-NE)
12/0	KOKK	SD HURON - 1/25 0738 good with ads for SDSU Family Days with 605- phone number, Home & Health Fair at Pierre Convention Center, SD wx (DS-TN)
1250	WTMA	
	WKBL	TN COVINGTON - 1/12 0700 atop with SSB, long AM-FM sign-on by owner Royce Wilson - two rooster crows as intro to The Early Bird Weather Forecast
		brought to you by Ripley Farm Center, your John Deere dealer in this area, long sought (SF-TN)
1310	WDOD	TN CHATTANOOGA 1/21 0336 poor WDOD proudly salutes our area people, list of locals in Gulf War (DS-TN)
1330	WFTO	MS FULTON - 1/25 0742 poor with wx from Tupelo, MS NWS office, directly into C&W mx without ID (DS-TN)
1350	WGAD	
1360	KNRB	TX FORT WORTH - 1/15 0300 fair under WSAI with Praise 1360 slogan and KNRB Fort Worth-Dallas wx by youthful anner; first Fort Worth newie here since the Three Easies (820/1270/1540) in my 1st few weeks of Dxing in 1970 (SF-TN)
1410	WS?N	AL PRATTVILLE 1/9 0120-0205+ fair in/out with UC; 0203 Montgomery-Area Red Cross PSA. WS?N Radio 1410 Prattville-Montgomery ID; not sure whether it's WSIN or WSKN, a few of my DXN's didn't make the trip from Wisconsin & I can't find the CL change in AMS; ex:WRNB (DS-TN) [I still have them as WRNBno CL change for them has appeared in AMS this Volume year. Maybe it's one of those changes that fell through the bureaucratic crack, or has yet to come down the AMS pike -Ed.]
1420	WRCG	GA COLUMBUS - 1/9 0105-0200+ fair in/out with MoYL; WRCG Columbus SID crudely cut in over MoYL satellite feed at 0200 (DS-TN)
1480	WABB	AL MOBILE - 1/7 0105 good with in-state AL tourism spot, Mobile's new information station is WABB-AM (DS-TN)
1490	WKBV	IN RICHMOND - 1/4 0400 readable with legal ID for IN #65 (SF-TN)

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		7
1530	KXTD	OK WAGONER - 2/6 0550 fair with "local" sounding Oklahoma City annets, making me think KOMA was off-frequency, but WCKY was behind them, and KOMA was cranking out the OLD; female anner, then ID at 0600; 1st-timer heard [EdTX]
	KCLRt	TX RALLS - 2/2 0758 fair with SS ID and mx (MH-NE)
1560	WOXY	KY HAZARD - 1/11 0615 very good in WQXR null with sign-on (SF-TN)
	KKID	OK SALLISAW 1/14 0230-0244 weak (sounded like 50 watts or so) but alone, in WSLA null with satellite C&W and ID at 0244: Kickin Country, KKID-FM, Sallisaw-Fort Smith; probably overboard as PSSA on this channel is supposed to be good for only an hour or two after LSS; 1560 #50; no CL changes (SF-TN)
1580	WPGC	MD MORNINGSIDB - 1/21 0324 fair with BRN biznews, WPGC Morningside- Washington DC, business Radio 1580 Time: 3:30 (DS-TN)
1600	WTZQ	NC HENDERSONVILLE - 1/25 0745 fair but faded very quickly; WTZQ
		Hendersonville - ?? County Schools (DS-TN)
	WKGK	VA SALTVILLE 1/25 0745 fair after WTZQ faded with HS BKB scores from Gate City, Richlands and Abingdon; ad for Smith Co. Mutual Insurance on Main Street on Marion (DS-TN)
		0800 TO 1600 HOURS ELT
580	WILL	IL URBANA - 1/9 1157 very poor (but faded up) with sports, 1D WILL Radio Urbana, a broadcasting service of the University of Illinois, Illinois wx; XLNT conditions to north this noon (DS-TN)
720	WGN	IL CHICAGO - 1/9 1208 good with ad for WYVV (TV Channel 20) (DS-TN)
780	<b>WBBM</b>	IL CHICAGO - 1/9 1209 fair - good with Bob Larsen and Chicago wx (DS-TN)
1020	MIEL	GA OCHLOCKNEE - 1/16 0855 fair with contemp REL, You're listening to the Voice of Love, WIEP Ochlocknee, Georgia (DS-TN)
1210	KRSV	WY AFTON - 1/31 0831 ID and temp given, then Paul Harvey (MH-NE)
1380	WPHM	MI PORT HURON - 1/27 1440 poor with Celtics vs Lakers NBA BKB; John with
		ad for Open Line on Mondays; The very best in local news, sports1380 WPHM Port Huron (HF-MI)
1430	WFXF	IN INDIANAPOLIS 1/25 0904 fair with More classic rock with less talk on 103 point 3, The Fox   FM; IN #18 (SA-MB)
	WION	MI IONIA - 1/27 1353 good with Bob Guernsey for MacPherson Broadcasting with Return of the Big Bands, Paul Harvey ad; local nx at 1400; West Central

ock with less talk on 103 herson Broadcasting... 00; West Central Michigan's weather outlook...at WION the weather station...WION the Voice of the Heartland, community calendar at 1413 (HF-MI)

WRTH MO ST. LOUIS - 1/26 0915 good with NOS or MoR mx, WRTH & 1430 Worth IDs; MO #50 (SA-MB)

WKMF MI FLINT - 1/27 1313 good with ad for WJRT-TV Channel 12 & ABC News; Country Countdown, female with WKMF Flint's weather station, C&W mx (HF-MI)

#### 1600 TO 2400 HOURS ELT

530 ON FORT ERIE - 1/21 2227 fair with You're listening to the great music. AM 530 CJFT; MoYL (HF-MI)

KDFT TX DE SOTO - 1/19 2040 poor with KDFT ID, GOS mx in CBK null; TX #33; thanks to Wayne McRae for the call! (SA-MB)

KDFT TX DE SOTO - 1/23 2048 ID and programming notes; 220 watt night CP must be on (DLH-IN)

550 CFNB NB FREDERICTON - 1/2 2127 thru WGR with POP mx, female anner with 550 CFNB call ID, rundown of mx to be heard, another call ID - song Daddy-O, good,

no sign of usual WKRC (MC-ON) WFRB MD FROSTBURG - 1/5 1734 dual AM/FM ID, ad for Blue Ball Supply Co. & 560 Hooked on Phonics; WFRB Tri-State Wx at 1736, ...37° at the country leader, 105.3

and AM 560 - C&W song by female; very good (MC-ON) CFOS ON OWEN SOUND - 1/29 1930 fair - good with OLD, IDs and contest details

(DLH-IN)

580 CHLC PQ BAIE COMEAU - 1/10 2325 good in FF & EE with Jesus rock mx; nx by Claude @ 2400; took over from another POP/OLD Canuck IDing as The Nation's Super Station (HF-MI)

610 WTVN OH COLUMBUS - 1/21 2255 fair with On the full service giant in Columbus, 610 WTVN: Tom Snyder pgm (HF-MI)

ID BOISE - 1/30 1918 best signal ever from them with Stevic Wonder mx, ad for 670 **KBOI** Ist Interstate Bank of Idaho, then Paul Harvey (MH-NE)

8	MAIGH	BAT WEST AND UIO 2005 C. with AA wood on the CP WATE Worker
680	WNZK	MI WESTLAND - 1/10 2225 fair with AA vocal mx pgm; EE WNZK Westland broadcasting on 680 kc's bringing you new excitement in radio (HF-MI)
720	WMXY	GA HOGANSVILLE - 1/6 1749-1800 good with UC; WMXY X720 Hogansville- LaGrange sign-off at 1800 (DS-TN)
820	WOSU	OH COLUMBUS - 1/28 1730 NPR Nx and ID, then faded; #3 from the <u>Buckeye</u> 's home (MH-NE)
840	WBHY	AL MOBILE - 1/6 1808 good with contChr countdown, promo with WHBY welcoming Colin to the Mobile Civic Center Arena (DS-TN)
850	KOA	CO DENVER - 1/15 1958 good with News Radio 85 KOA Denver & Colorado's 24-hour news room; Karen Trinidad with news with Roz Brown, Boulder Bureau; Marty Matthews with wx; ads for Office Club & Snow Mass skiing (HF-MI)
880	KIKR KIXI	TX CONROE - 1/13 1833 fair with C&W, AM 880 KIKR call ID (DS-TN) WA SEATTLE - 1/30 1945 very weak with mx and beginning of ID: KI. then pattern change; good conditions to the west (MH-NE)
890	KDXU	UT ST. GEORGE - 2/2 2001 weak under WLS with AC mx and ID; #1200 ever (MH-NE)
900	CHML	ON HAMILTON - 1/21 2338 good with Ted Michaels with OLD; AM 900 CHML; ad for Pet Talk; XEW QRM (HF-MI)
910	KGLC	OK MIAMI - 1/11 2307 in CKLY null with CHML splatter, C&W mx, Take It easy by The Eagles at 2313, ID at 2316 possibly (Solid Gold) Country, KGLC (not sure of the 1st two words); first I've hrd this in a few years, QSL'd in early '80s (MC-ON)
920	WTCW	KY WHITESBURG - 1/5 1718 in with ad for Hoover's Home Furnishings in downtown Whitesburg, dual ID We'll keep your favorite music coming, all day long,
	NE	on K104FM and WTCW - song by <u>Billy Yera</u> , followed by <u>Everly Brothers</u> ' All I Have To Do Is Dream, dual ID again at 1725 of WTCW and K104FM (which is 103.9 WXKQ), ad for <u>Cardinal Chevrolet-Cadillac-Geo</u> ; only 2nd time ever heard, in 12
	WBBB	years! (MC-ON)  NC BURLINGTON - 1/5 1856-1905 in with end of Dr. Jim's Animal Clinic (pet medical advice), ID at 1859 News Talk 920, WBBB Burlington-Graham, North Carolina and - MBS Nx; in & out 'til nx ended at 1905, then ad for 'Bob' Crabill pgm
930	THEFT	five days a week, on News Talk 920, WBBB, new for #1276 & NC #46 (MC-ON)
960	WSLI	MS JACKSON - 1/25 2000 with Superbowl report, fair with ID (DLH-IN) PA CARLISLE - 1/30 1643 good with annet warning us all of impending switch to
980	KMZZ	low power at 1645, bidding some listeners goodbye, like me! (LMc-NY)  MN RICHFIELD - 1/18 2150 fair with Z-Rock format, dual AM-FM ID on the hour; MN #103 (SA-MB)
1020	WPEO	IL PEORIA - 1/7 in at 1757 with piano mx filler, ID and sign-off annet at 1759; fair - good in KDKA null (MC-ON)
1040	CHRS	PQ MONTREAL - 1/24 1735 fair - good with FF talk (WPT-DC)
1050	MEAD	NY NEW YORK - 1/9 2210 poor with ad for <u>Bob's Auto</u> in Queen's Village; <u>Islander HKY (HF-MI)</u>
1080	WEEP	PA PITTSBURGH - 1/20 1713 good with BRN, local ID 1080 WEEP, Pittsburgh's station for business news, with a daytime power of 50,000 watts, cut power at 1715 and
1130	WCXI	vanished under KRLD; note format change from OLD in Log (DS-TN)  MI DETROIT - 1/6 2112 poor in mess w/C&W, AM 1130 WCXI call ID (DS-TN)
1140	WQBA	FL MIAMI - 1/6 1725 fair with Cuban mx, ID in EE at 1730 and in SS at 1737 (DS-TN)
1150	WCEN	MI MT. PLEASANT - 1/24 1735 good, mixing with an unusually submissive WCNX with MoYL-type mx, jx with slogan The great songs, the great artists and Central Michigan's most accurate forecasts, new! (LMc-NY)
1200	WBZY	PA NEW CASTLE - 1/22 2348 poor with ad for WBZY Bridal Fair; ads for Perleman's (") Jewelry in downtown New Castle, Central Heating & Plumbing; QRM/WCHB? + (HF-MI)
	WOAI	TX SAN ANTONIO - 1/11 1928 just ending Coastal Fishing Report - WOAI Skywatch, wx 4cast, CST TC as 6:30 and - sports talk pgm; very good signal, little QRM from usual pests WBZY/WAGE/etc (MC-ON)
1220		NC KINGS MOUNTAIN - 1/6 1829 poor in mess with black GOS, Sunday afternoon here on WKMT (DS-TN)
1250	WTAE	PA PITTSBURGH - 1/22 2315 fair with ad for Newsline, News-Talk 1250 WTAE, Larry King show; over WXOX (HF-MI)
1260	WMUU	
	WEKZ	WI MONROE - 1/24 1740 with On and On by Anne Murray followed by female DJ with temp, TC, CL and mention of state nx at 4:55 - ad for heating and cooling biz in Monroe (REH-ON)

- 1280 WANS SC ANDERSON - 1/6 1832 fair with OLD, AM 1280 WANS slogan; not | FM (DS-TN) 1290 WIRL II. PEORIA - 1/4 1733 nx by male & female; fair - good over WFBQ #20 on 1290 (WPT-DC) KOIL NE: OMAHA - 1/5 2255 tair with Rock & Roll Oldies Show mixing with same on WIRL-who's who?; 1290 KOIL (HF-MI) 1300 WZZZ. NY FULTON - 1/24 1635 fair over WFRE, with PSA, ... to show support for our military sponsored by 227 Keepsakes at 202 From Street in Fulton and WZZZ - wx. 4cast and EZL/AC mx. (REH-QN), WDOC KY PRESTONBURG - 2/2 1813 briefly with ID, oldies ix, song Da Do Ron Ron, 1310 KY #4 from this QTH (LMc-NY) KNOX ND GRAND FORKS - 1/7 2218 at good level w/BKB game, mention of Gopher's Net, promo for a sportstalk pgm ...on 1310 KNOX & back - game (MC-QN) 1320 WQIK: FL JACKSQNVILLE - 1/6 1835 poor with C&W, several call mentions, pronto for something at Jacksonville Coliseum (DS-TN). 1330 KFH KS. WICHITA - 1/13 1823 fair with OLD, The Boxtops on KFH (DS-TN) KS WICHITA - 2/5 1914-1920 with OLD; fair at 1920 with Real ordies on KFH KFH (JB-TX) WFBC SC. GREENVILLE - 1/6 1840-1900 o/u unID taik (probably WVHI) with GOS; 1900 ID Carolina News/Talk WFBC Greenville - NBC Nx (DS-TN) H W. World AT ON OSHAWA - 1/5 2250 fair with Maple Leaf HKY and ads for Melody Homes in 1350 CKAR the Flying Dutchman Hotel, Dagmar's Skiing and Village Pump (HF-MI) WNNJ 1360 NJ NEWTON - 1/6 1655 fair under WDRC with ID, song Girls... by Cyndi Lauper (LMc-NY) WHBG VA HARRISONBURG - 1/27 1700 legal ID Your favorite country music in stereo, 1360 WHBG Harrisonburg, C&W mx (LMc-NY) GA JESUP - 1/14 1745 station employment ad; good (WPT-DC) KFRO TX LONGVIEW - 1/31 1907 ID then wx for TX and LA; new (MH-NE) [This is my #1 pest on 1370 -Ed.] KFON TX ROLLINGWOOD - 1/6 1853-1900 with Chicago-New Orleans FB on WWL network; 1900 ID KFON Sportsline 5 days a week on KFON Rollingwood/Austin (DS-TN) KFON TX ROLLINGWOOD - 1/25 1850 clobbering WSPD with sports TLK with call-in #s of 390-5366 and 832-1370 - promo asking businesses to call Marcie at 327-9595 for ad info [That's the business number for both KFON and KKMJ 95.5 -Ed.] - ad for Second Wave (computers) followed by traffic report on The Talk of Austin, KFON, also had lots of K-Phone non-IDs (REH-ON) WVMR WV FROST - 1/23 1640 fair under WELV/much noise with long list of ... supporters of WVMR (LMc-NY) MN WINONA - 1/24 1755 with wx for SE MN and western WI followed by contest promo (jackpot of \$32.23) - C&W mx; call itself Cagey Country, per call to stp., day power is still 1kw (DJ had no knowledge of CP for 4kw) [What do DJ's know??? -Hi Ed.]; add format and slogan to Log (REH-ON) WOC 1420 IA DAVENPORT - 1/5 2158 good with Newstalk AM 1420 WOC Davenport, Iowa, Iowa Hawkeyes BKB (HF-MI) USVW KY OWENSBORO - 1/13 1930 out of the mess just long enough for WVSI call ID and a syllable or two of Owensboro wx forecast (DS-TN) OH CLEVELAND - 1/6 1916 promo for some kind of salute sponsored by WHK and the East Ohio Gas Company, with address as in Log (DS-TN) 1430 WFXF IN INDIANAPOLIS - 1/21 2219 fair with ad for Charlie & Benney's Bar & Grill: Classic Rock-The Fox; Indiana University BKB; over/under CJCL (HF-MI) 1440 ME WESTBROOK - 1/4 2158 poor with Z-Rock WLPZ Westbrook, Maine, up briefly and gone (HF-MI) WRRO OH WARREN - 1/22 2334 poor with Solid Gold 1440 WRRO, ABC Nx @ 2340 KDNT TX DENTON - 1/6 1904 fair with Texas nx, Denton County forecast, Newstalk 1440 KDNT call ID (DS-TN) WWSC NY GLENS FALLS - 2/1 1730 fair, mixing with WKIP/GY din with local nx, Grand Union ad; not far, but rare here (LMc-NY)
- 1450 1460 WBRN MI BIG RAPIDS - 1/15 2035 fair with WBRN AM Stereo 1460, your favorite place
- in the country, over K.GGO (HF-MI) WHBC OH CANTON - 1/25 1615 good with son One More Night by Phil Collins, wx 4cast

15° at WHBC, ads for Jerry London's (?) Candy Store & Burger King (LMc-NY)

WPT-DC WILLIAM TOWNSHEND//Washington, DC//ICF-2010

SM-MA STAN MORSS//Boxford, MA//HQ180A

JB-TX JIM BOEHM//San Antonio, TX//Superadio II + MFJ Dual Tunable Audio Filter

SF-TN STEVE FRANCIS//Alcoa, TN//TRF

ES-AL EDWARD SOULE//Huntsville, AL/unID help

DLH-IN DAVID HASCALL/Fortville, IN//DX400 + Sanserino; Superadio

LMc-NY LAURA McCUSKER//Ravena, NY//

ED.-TX BILL HALE//San Marcos, TX//ICF-2010 barefoot

73. Self

#### ABBREVIATIONS AND SPECIAL SYMBOLS USED IN DDXD-E

| parallel with or to - to or into 500to the hour AC:Adult contemporary AP:Associated Press BBD:big band BRN:Business Radio Net C&W:country & western CHR:contemporary bit radio CID:code ID ContChr:contemporary Christian EZI:casy listening EE:English FF:French GOS:goopel IRN:Interstate Radio Net ja;jingle LSR:local sunrise LSR:local sunrise mx:music nx:news NPR:National Public Radio OC:open carrier PSRA:pre-sunrise authority PSSA:post-sunset authority QRM:man-made interference QRN:natural interference QTH:location REL-religious ROK:rock 'n' roll RS:regular schedule 5:stere SID:singing ID SRS:sunrise skip SS:Spanish SSB:Star Spangled Banner SSS:sunset skip TC:time check TZ:test tones 1/C urban contemporary UP:United Press International wx:weather

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#### DX TESTS!

700 KBYR AK Anchorage

2/4 0400-0430 Not Hrd Only KFAM & poss CKRD. (JW-OR) Only CKRD w/WLW nulled (WH-CO) Not heard in Topeka, either (pls-KS)

#### Midnight to Midday!

700 KFAM UT North Salt Lake City

2/20700 Poor w/fades ID, Nx, EZL Mx (JW-OR)

850 KHLO HI Hilo

2/3 0514 Poor w/ Call ID and pop Mx u/KOA. (JW-OR)

1190 CFSL SK Weyburn

2/6 0320 Star Country C&W Net, 0324 lcl Nx/ Wx/Sx. Fair w/KRDS nulled. (0W-CQ)

1230 KLAV NV Lost Wages

2/6 0210 Prgm of AA Mx; OM/YL in AA; 0259 EE ann prgm was from A & G Productions to EE ID "Broadcasting live from ... Landmark Hotel & Casino, this is KLAV Las Vegas" (0W-CO)

1230 KAAA AZ Kingman

2/6 0219 Promo lcl Nx & ABC Gulf updates, "Stay tuned to K triple A, your local information station" AZ # 54 (0W-CQ)

#### 1230 KFJB IA Marshalltown

2/6 0255 Radar Wx, Icl spot, OLD format "Turning back the hands of time, Super Gold Classics ... KFJB, Marshalltown" (0W-CO)

#### Midday to Midnight

680 KWKA NM Clovis

1/31 1950 OLD format (was C&W) "Classic 680" slogans; 1959 "KWKA Clovis-Portales"; MBSNx @ 2000. (0W-CO)

#### Contributors!

(0W-CO) John Wilkins Wheatfarms, CO - R-1000, 4.238' Anguilla Loop

(JW-OR) Jack Woods Waldport, OR - ICF-2010, SP-600, Martens Loop

(WH-CO) Wayne Heinen Auroara, CO - R-390A, 4 NRC loop

Wayne

## Bardeen, developer of transistor, dies

Madison native received 2 Nobel prizes for innovations

Boston, Mass —AP— John Bardeen, a two-time Nobel Prize winner and a co-inventor of the transistor, the building block of modern electronic equipment, has died of cardiac arrest at the age of 82.

Bardeen, a native of Madison, Wis., who was educated at the University of Wisconsin there, died Wednesday at Brigham and Women's Hospital a day after employation survey revealed he had line cancer.

after exploratory surgery revealed he had lung cancer. Bardeen carne inrough the surgery well and "was laughing and joking with nurses and orderies this morning," when he was guddenly stricken, said Catherine Foster, a spokeswoman for the University of Blinois in Champaign. Bardeen had been a professor of electrical engineering and physics at the university from 1951 to 1975.

Bardeen won the Nobel Prize in 1956 as co-inventor of the transistor, and again in 1972 as co-developer of the theory of superconductivity at low temperatures.

Electronics relied on the bulky and inefficient vacuum tube until Bardeen and two colleagues — Walter Brattain and William Shoeldey — developed the transistor in the late 1940s while working at Bell Laboratories. In a secret demonstration on Dec. 23, 1947, at the Bell Labs in Murray Hill, N.J., Bardeen and his colleagues amplified a human voice using a transistor, establishing the foundation of modern electronics.

Transistors amplify or switch electrical signals. Their importance grew as their size decreased. Today they are the core element of everything from missiles to televisions, telephones to computers.

In 1953, Sony Corp. obtained a transistor license from Western Electric Co. that led to its development of the world's first commercially successful transistor radio.

Sony profited hugely from Bardeen's work. In 1989, the company presented \$3 million to support a University of Itlinois feltowship in Bardeen's name, its largest guit ever to an American university.

Bardeen received bachelor's and master's degrees in electrical engineering from UW-Madison, where his father, Charles, was dean of the medical school.

In 1960, Bardeen was one of five people who received honorary degrees from UW. The group included Milwaukee native Golda Meir, who went on to become prime minister of Israel.

In 1988, Bardeen was awarded a gold medal from the Soviet Academy of Sciences, and just last September Life magazine named him one of the 100 most influential Americans of the 20th century.

The Milwaukee Journal
-via Mike Knitter

## NRC FM Radio Log, 1991 Editio

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#### The MWT-2 Regenerative Tuner ... by Mark Connelly, WAIION

The MWT-2 tuner is an updated version of the MWT-1 described in a 1965 article. The following prior works should be consulted in conjunction with this article:

Articles of direct relevance (\* = WRC / IRCA reprint)

\* The MWT-1: A Medium-Wave Tuner / Pre-selector with Regeneration Capability - Mark Connelly - 18 DEC 1985 (the predecessor of MWT-2)

The Dynamic Duo - Ken Cornell - Monitoring Times - FEB 1989 (important regenerative tuner background material)

\* Micro-MWDX-4A Loop-vs.-Wire Phaser - Mark Connelly - 15 MAR 1989 (Fig. 2 shows how to mount a transformer card similar to MWT-2 Option 4's card. Fig. 3 of that article shows how to mount the variable capacitor and vernier knob. The drawing after the hole list shows grounding hardware such as that used for MWT-2 G1, G2, G3, & G4.)

A list at the end of this article lists supplementary articles and publications of value to the DXer / builder.

Like the MWT-1, the MWT-2 can provide passive or active preselection as well as broadband variable attenuation. Passive tuning is used when local station strengths are very high (as in an urban area. More often, though, active tuning will be the mode of choice: it can offer improvements to both sensitivity and selectivity.

The baseline MWT-2 design offers performance similar to that of the WWT-1. Unlike MWT-1, it offers the ability to supply power to active whips such as the MFJ 1024. Indeed, the MWT-2 / MFJ 1024 combination is a potent antenna set-up for situations where use of a loop or longwire is not feasible (such as from a motel room when travelling) Additionally, the MWT-2 has been configured to allow the user to implement options for the following improvements over previous active tuners:

- extended frequency coverage (approx. 130-8750 kHz) with intermal coils and a jack to allow coils for other frequency ranges
- regeneration vernier (fine-adjust) control with the addition of another potentiometer
- 3. higher gain option (extra amplification stage) for lowsignal level work such as groundwave from nural locales, amountal DX, TA DX pre-sunset, TP DX post-sunrise, and DX using short antennae (or the output of a phasing system)
- broadband amplification function (using a modified function switch and an impedance transformer)

Documentation has been organized to track that of MWT-1 when possible. This allows the builder / DXer to make quick comparisons between the two units.

Organization of article

(Main article: standard MWT-2)

Table: 1: MWI-Z Controls and Input / Output Connectors

Table 2: Sh Bandswitch Settings Chart text: Building the MWT-2 Tuner

text: Operating the MW.T-2 Tune

Made (1): direct foud of antenna to receiver

Mode (2): passive tuning

Mode (3): simple (non-regen.) active tuning Mode (4): regenerative active tuning

Figure 1A: MWT-2 system schematic

Figure 1B: S1 bandswitch schematic

Figure 2: (M1) RFE-C regenerative front-end card schematic Figure 3: (M1) RFE-C regenerative front-end card assembly

Table 3: MWT-2 hole-drilling list Table 4: upper level parts list

Table 5: (M1) RFE-C regenerative front-end card parts list

Table 6: small hardware parts list

Table 7: wiring / component connections Table 8: control orientation conventions

(Appendix: options for the MWT-2)

text: Option 1 = frequency range extension

Table 9: S1 frequency ranges (Option 1) text: Option 2 = regeneration vernier pot.

text: Option 3 = higher gain

Table 10: (Ai) BBA-C broadband amplifier cand parts list text: Option 4 = broadband amplification function

Table 11: holes added to implement options

text: supplementary articles and publications

Figure 4: 12-position S1 bandswitch with added 37 externalcoil jack

Figure 5: (A1) BBA-C broadband amplifier card schematic

Figure 6: (A1) BBA-C broadband amplifier card assembly

Figure 7: Option 4 transformer card assembly

Figure 8: MWT-2 system schematic with Options 1, 2, 3, & 4

installed

#### 你你我你你你的话,我们就是我们的话,我们就是我们的,我们就是我们的,我们就是我们的,我们就是我们的,我们就会不会,我们就会不会,我们就会会会会会。"

#### Table 1: MWT-2 Controls and Input / Output Connectors

Controls		
location	designation	operational description
left side	₩1	input attenuator pot
top	C1	main tuning capacitor
top	Ŗ2	regeneration control pot
top	Š1	bandsw'itch
top	S2	function switch
top	S3	antenna length (coupling) switch
top	\$4	input mode switch

Input / Ostput Consectors location designation operational description / connector type: left site RF source input: BNC jack left site J2: wire antenna input tarkria jack left side J3 earth ground input banena jack DWC Pack right side .14 RF output right site J5 B+ in shono jeck right side .16 9V battery holder Keystone 1290

## Table 2: SI Bandswitch Settings Chart (Ranges are usually a bit greater than those shown.)

S1	St Knob	Min.	Max		Induct		
Position	Pointer	Freq.	Freq	Mair	o" L	"Tear	" L
22	"o'clock"	kHz	kHz	18	N/H	#	uH
=	=====	====:	rees	2==	2222	255	2522
1	9:30	130	187	L.1	4700	L7	10.00
2	10:30	1.87	280	L23	2200	LEB	430
3	11:30	405	590	L3	470	L9	100
4	12:30	590	870	L4	220	L10	47
5	1:30	870	1280	L5	100	LII	22
6	2:30	1280	1900	1.6	47	T.12	10

#### Building the MWT-2 Tuber:

The documentation (schematics, assembly drawings, parts lists, hole lists, etc.) serves as the starting point. The following procedure should serve as an outline for the builder.

 Gather all necessary parts (see Tables 4, 5, 6). Prepare work area with appropriate tools.

2. Drill out chassis box, in accordance with Table 3.

Assemble RFE-C front-end card per Figures 2 & 3 and Table
 0.5 inch spacers are mounted at each of the 4 corner holes.
 Set the completed RFE-C aside temporarily.

4. Mount 0.5" spacers for vernier knob, tap two 6-32 mounting holes in C1, mount C1, then install vernier knob. See Micro-MWDX-4A article to see how this is done. Consult hole list. Holes 5 through 9 of Micro-MWDX-4A serve the same purpose as Holes 1 through 5 of MWT-2.

 Install jacks, pots, and switches. Solder inductors onto S1 per Figure 1B and Table 2.

Mount RFE-C card inside chassis right side, per hole list (Table 3).

 Install wiring and other components per Figure 1A and Tables 4, 6, & 7.

8. Install knobs per Table 4.

9. Connect phono plug P1 to jack J5 to permit power to go to the unit. Install 9V battery in J6.

10. Place labels near controls and jacks. Test the unit (use the "Operating the MWT-2" section of this article as a guide).

#### Operating the MWT-2

Before operating any of the four modes, connections to/from the MMT-2 must be made. The antenna or other signal source may be connected to J1 or J2. Earth ground should be connected to J3 if the cable to the receiver will be longer than 10'/3 m. or if the receiver is not grounded. Earth ground may be an actual ground connection or a "dummy" ground provided by a spare longwire antenna. A 9V battery or AC adapter should be connected to J6. The RF-output coaxial cable (to the receiver input) should be connected to J4.

#### Mode (1): direct feed of aptenna to receiver

Set-up: The following controls are not used in Mode (1): C1, R2, S1, S3. Their positions are irrelevant. Set R1 initially to fully CCW (the switch on R1 takes the R1 // R4 attenuator out of the line). Set S2 to Bypass. Set S4 to "Float" unless an active antenna is being used - in that case, set S4 to "Power to Active Antenna".

Operate: With receiver un desired frequency, check that the wanted signal is of sufficient strength and has no spurious mixing signals or images from strong local stations. If spurs / images are present, adjust R1 motil they go away. If the wanted station is now too weak, a different operating mode (2, 3, or 4) is suggested.

#### Mode (2): passive tuning

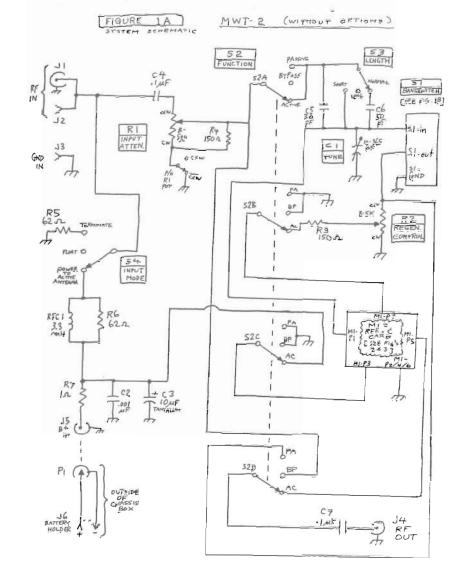
Set-up: B2 is not used in Mode (2). Its position is irrelevant. Set R1 initially to fully CCW. Set \$1 for operating frequency range desired, in accordance with Table 2. Set \$2 fully CCW = passive tuning position. Set \$3 to up = "normal" length position. Set \$4 to "Float" unless an active antenna is being used - in that case, set \$4 to "Power to Active Antenna".

Operate: Adjust C1 for maximum strength of the desired-frequency station. If overloading-maused spurious responses QEM the desired signal when C1 is properly peaked, set 33 to middle = "long" and re-peak C1. If, after having done that, spurs still exist; adjust R1 to make the spurs go away. Setting S4 to left = "Terminate" position may also help (if it had been on "Float"). Slight re-peaking of C1 may them be necessary.

Mode (3): simple (non-regen,) active tuning

Set-up: Set RI initially to fully CCW. Set R2 to fully CW. Set SI for operating frequency range desired, in accordance with Table 2. Set S2 fully CW = active tuning position. Set S3 to up = 'normal' length position (wire length greater than 10'/3 m.) or to down = "short" length position (antenna shorter than 10'). Set S4 to "Float" unless an active antenna is being used = in that case, set S4 to "Power to Active Antenna".

Operate: Adjust C1 for maximum strength of the desired-frequency station. If overloading-caused spurious responses QRM the desired signal when C1 is properly peaked, set S3 to the pext longest position (e.g. to "long" if it had been on "normal") and re-peak C1. If, after having done that, spurs still exist; adjust R1 to make the spurs go away. Setting S4 to left = "Terminate" position may also help (if it had been on "Float"). Slight re-peaking of C1 may then be pecessary.



L1 = 4.7 MH m LZ = 2.2 AMH m 13 = 470 MH SIA L4 = 220 MH SI-in ww L5 = 100 MH m L6 = 47 MH SI- out LB = 470 MH L9 = 100 MH SIB SI - GND 47MH LII = 22 MH L12 = 104H

FOR CONNECTIONS, SEE FIG. 1A & TABLE 7
FOR PARTS LIST, SEE TABLE 4.
FOR FREQUENCY RANGES, SEE TABLE 2.

Mode (4): regenerative active tuning

Perform all Mode (3) steps above. Bring R2 gradually CCW in small steps; after each step re-peak C1. An increase in signal level and tuning sharpness should be readily apparent. At the "regeneration threshold" the received audio gets muddy; beyond that threshold, oscillation occurs.

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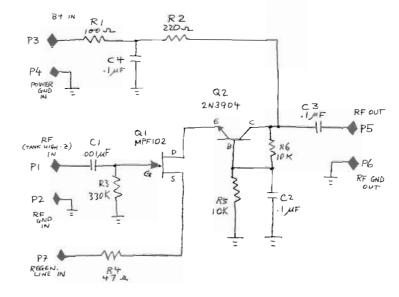
More members in the NRC means a larger *DX News* ... and more features and services for all members. You can help your club grow: just send the names and addresses of potential club members to the NRC - P. O. Box 5711 - Topeka, KS 66605 and we'll send them a current copy of *DX News*. Spread the word - the National Radio Club is on the grow!

MWT - 2 REGENERATIVE TUNER

FIGURE 2 RFE - C REGEN. FRONT-END CARD (MODIFIED KON CORNELL DESIGN)

FOR CONNECTIONS, SEE FIGURE IA.

(COMPONENT DESIGNATIONS ARE INDEPENDENT OF MWT-2 COMPONENTS IN MAIN ASSEMBLY)



NOTES

- = CIRCUIT - BOARD GROUND

FOR PARTS LIST, SEC TABLE 5

THIS IS "MI" OF MWT-2.

Table 3: MWT-2 hole-drilling list

- X = Horizontal distance, in inches, from the vertical centerline (YCL) on the side observed. Negative values of X are left of VCL, positive values of X are right of VCL.
- Y = Vertical distance, in inches, from the bottom horizontal edge of the side observed.
- D = Hole diameter in inches.

Hole loci are first marked on the box with a scriber and are then drilled with a .125" bit. Subsequently, as required, the holes are enlarged to the proper size by using progressively larger bits up to that corresponding to the final desired diameter

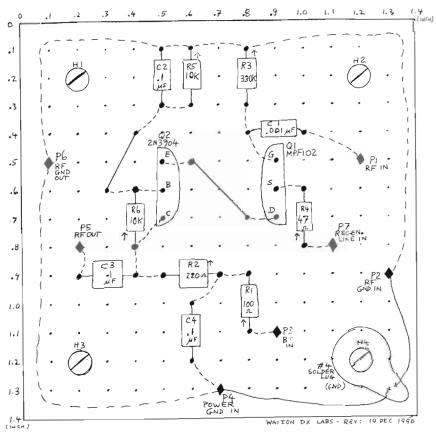
#### The Answer Man

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

MWT-2

FIGURE 3

RFE - C REGENERATIVE FRONT. END CARD : ASSEMBLY



#### NOTES

FOR SCHEMATIC : SEE FIGURE 2.

T = LONG - LEAD SIDE OF VERTICALLY - MOUNTED COMPONENT.

- = BUSS WIRE ON COMPONENT SIDE OF BOARD.

- - BUSS WIRE ON SOLDER SIDE OF BOARD.

#### 

#### LEFT SIDE

Hole #	Comp. Desig.	Description	Х	Y	D
				,	,
1	J3	GND In - black banana jack	-0.75	1.25	0.3125
2	J2	Wire Ant. In-red banana jack	-0.75	0.5	0.3125
3	G1	GND H/W - internal lug	0 0	1.125	0.125
4	J1	RF source in - BNC jack	0.0	0.5	0.375
5	R1	Input Atten Pot - shaft	1.25	0.625	0.3125
6	R1	Input Atten. Pot - tab	1.5625	0.625	0.144

#### TOP SIDE

Hole #	Comp. Desig.	Description	Х	Y	D
1	C1	Tuning cap mounting H/W 1	-1.963	3.0	0.144
2	C1	Tuning cap shaft	-1.5	2.75	0.5
3	C1	Tuning cap mounting H/W 2		3.0	0.144
4	-	C1's vernier knob - H/W 1	-2.14	2.125	0.125
4 5		C1's vernier knob - H/W 2	-0.86	2.125	0.125
6	R2	Regen. Control pot shaft	-1.875	0.625	0.3125
7	R2	Regen. Control pot tab	-1.5625	0.625	0.144
8	G2	GND H/W - internal lug	-1.25	1.125	0.125
9	S4	Input mode switch - shaft	-1.0	0.4375	0.25
10	54	Input mode switch - tab	-0.75	0.4375	0.144
11	S3	Length switch - shaft	-0.25	2.25	0.25
12	S3	Length switch - tab	-0.25	2.0	0.125
13	52	Function switch - shaft	0.0	0.875	0.375
14	\$2	Function switch - tab	0.0	0.375	0.144
15	SI	Bandswitch - shaft	1.0	2.25	0.375
16	S1	Bandswitch - tab	1.5	2.25	0.144
17	G3	GND H/W - internal lug	1.625	3.25	0.125

#### RIGHT SIDE

Hole #	Comp. Desig.	Description	Х	Y	D
1	J6	battery holder - H/W 1	-1.625	2.625	0.125
2	J6	battery holder - H/W 2	-1.625	1 75	0.125
3	G4	GND H/W - internal lug	0.0	1.125	0.125
4	J4	RF out - BNC jack	0.0	0.5	0.375
5	M1	Regen. Front End Card-H/W 3	0.625	1.375	0.125
6	M1	Regen. Front End Card-H/W 1	0.625	0.375	0.125
7	M1	Regen. Front End Card-H/W 4	1.625	1.375	0.125
8	M1	Regen. Front End Card-H/W 2	1.625	0.375	0.125
9	J5	B+ input - phono jack	1.125	2.125	0.25

#### Table 4: "upper level" parts list

Vendor codes:

RS = Radio Shack / Many locations worldwide MOU = Mouser Electronics / 11433 Woodside Ave. / Santer, CA 92071 RK = Radiokit / P. 0. Box 973 / Pelram, NF 03076

Iter	n Designator	Description/Walue V	endor	Vender Stock #	QTY
===:	=====		222	PREEDSERFEETE	===
1	<del>-</del>	chassis box	MOCU	537-TE-779	1
2	M1	RFE-C regenerative f	ront-	end card (see Table	5)
3	(for C1)	vernier knob	MOU	45KN 100	1
4	for R1, R2)	knob	MOU	4.5KN 013	2
5	(for S1, S2)	knob	RS	274-416	2
6	B1	9V alkaline battery		:23-553	1
7	C1 va	riable cap.,10-365pF	RK	BC-01	1
8	C2	capacitor, 0.001 uF	RS	272-126	1
9	C3	capacitor, 10uF tant	. MOU	581-10M35	1
10	C4, C7	capacitor, 0.1 uF		272-109	2
11	C5	capacitor, 30 pF	MOIJ	ME-232-1000-030	1
12	C6	capacitor, 50 pF	MOU	ME-232-1500-050	1
13	J1, J4	BNC jack	RS	278-105	2
14	J2	red banana jack	RS	274-662	1
1:5	J3	black banana jack	RS	274-662	1
1.6	J5	phono jack	RS	274-346	1
17	J6 bat	tery holder (Keystone	1290	MOU 534-1290	1
18	L.1	inductor, 4700 wife	MOU	ME434-1120-473K	1
19	L2	inductor, 2200 wff	MOU	ME434-1120-223K	1
20	L3, L8	inductor, 470 uH	MOU	43LR474	2
21	L4	inductor, 220 tH	MOU	43LR224	1
22	L5, L9	inductor, 100 uff.	MOU	43LR104	2

	Table 4	(continued)			
23	L6, L10	inductor, 47 uH	MOU	43LR475	2
24	L7	inductor, 1000 uH	MOU	43LR103	2
25	L11	inductor, 22 uH	MOU	43LR225	1
26	L12	inductor, 10 uH	MOU	43LR105	1
27	P1	phono plug	RS	274-339	ī
28	R1	pot.,500 ohm, linear	MOU	31CT205	1
29	R2	pot., 5K, linear		31CT305	î
30	R3, R4			271-013	2
31	R5, R6	resistor, 62 ohm		29SJ500-62	2
32	R7	resistor, 1 ohm			1
33	RFC1	inductor, 3300 uH	MOII	43LH233	- 2
34	S1	switch/2pole/6pos.rotary		10WW026	+
35	S2	switch/4pole/3pos.rotar	MOII		1
36	\$3,54	switch, SPDT, on-off-on	RS	275-325	2

Table 5: (M1) RFE-C regenerative front-end card parts list

See Table 4 for vendor codes.

Iter	m Designator	Description/Value V	endor		QTY
1	BD	perfboard(1.4"X1.4")	DC	070 1000 1	===
2	C1		RS	276-1396 (cut)	1
3	12.121 17.02 17.01	capacitor, 0.001 uF		272-126	1
		capacitor, 0.1 uF	RS	272-109	3
4	H1, HZ, H3, H4	screw, 4-40 X .25"	MOU	572-01880	4
5	H1, H2, H3, H4	spacer, 4-40 X .5"	MOU	534-1450C	4
6	H1, H2, H3	split lockwasher, #4	MOU	572-00649	3
7	H4	solder lug, #4	MOU	534-7311	2
8	P1, P2, P3, P4		1100	004 /011	1
		flea-clip for .042 ho	Te Mo	OT 574-T42 1/100	7
9	Q1	FET, MPF102	RS	276-2062	
10	Q2	transistor, 2N3904	MOU	And the second s	1
11	R1	resistor, 100 ohm		570-2N3904	1
12	R2		RS	274-1311	1
13		resistor, 220 ohm	RS	274-1313	1
	R3	resistor, 330K	MOU	29SJ250-330K	1
14	R4	resistor, 47 ohm	RS	271-009	10
15	R5, R6	resistor, 10K	RS	271-1335	2
16	M	buss wire		278-1341 approx	. 1'

#### Table 6: small hardware parts list

See Table 4 for vendor codes.

Note: Mounting hardware is supplied with the following components: J1, J2, J3, J4, J5, R1, R2, S1, S2, S3, S4.

Hardware is required by the following component designators C1, the vernier knob for C1, G1, G2, G3, G4, and M1. All required bardware is listed below:

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See? No problem!

#### Table 6 (continued)

Used on	Descri	ption/Value	Vendor	Vendor Stock #	6.11
	J6(2), screw,	4-40 X .25"	MOD		14
C1(2)		6-32 X .25"	MOU	572-01888	2
M1(4), C1	knob(2)split 1	cokwasher,	#4 MOU	572-00649	6
C1(4)	split !	ockwasher.	#6 MOU	572-00650	4
01-04(4)		lug, #4	MOU	534-7311	4
G1-G4(4)	hex nut	4-40	MOU	572-00486	4
Cl knob(2		4-40 X .5"	MOU	534-1450C	2

#### Table 7: wiring / component connections

Notes: I = insulated wire, approx. #22 AWG B = bare solid (buss) wire

> Lengths are maximum typical required amount; in actual practice, use the shortest length possible to minimize stray coupling.

From	To	Description
	EXCF==F==B========	5483FET=55
Je + terminal pin	P1 plus - center pin	2" I
J6 - terminal pin	Pl plug - shield pin	2" I
	Je + terminal pin	J0 + terminal pin P1 plus - center pin

wire #	From	To	Description
=====	\$=====================================	±x=x==================================	=========
3	J1	J2	1" B
4	J3	G1 internal GND lug	
5	RI switch (left)	GI internal GND lug	2 ' I
6	R1 switch (right)	R1 CW	0.5" B
	(R1 CW	R1 arm	R4]
7	R1 arm	S2A arm	3" I
8	S2A arm	S2D-ByPass	1" I
	[R1 CCW =	C4 side 1]	
9	C4 side 2	J1	2 I
10	C4 side 2	S4 arm	2" I
	[S4-Power to Active An	t. = (R6 & RFC1) side	11
11	(R6 & RFC1) side 2	S2C-ACtive	Z. I
	L54-Terminate	GS internal GMD INB	Roj
12	S2B-ByPass	G2 internal GND lug	2" I
13	52B-ByFass	S2B-PAssive	0.5" B
14	S2C-ByPass	G2 internal GND lug	2 I
15	S2C-EyPass	S2C-PAssive	0.5" B
	[R2 arn =	R3 side 1]	
16	R3 side 2	S2B-ACtive	3 I
	[R7 side 1 =	J5]	
1.00	[R7 side 2	G3 internal GND lug	C2 & C3]
17	R7 side 2	S2C-ACtive	5" I
18	S2C arm	M1-F3	3 I
19	S2B arm	M1-F7	3., I
20	S3 arm	S2A-ACtive	2" Ī
21	S2A-ACtive	S2A-Passive	1" I
22	M1-P5	S2D-ACtive	3 I
	[J4 =	C7 side 1]	
23	C7 side 2	S2D arm	2" I
24	R2 CCH	S2D-PAssive	3 I
25	S2D-PAssive	S1-Qut	1" I
26	SI-GND	G4 internal GND lug	2" I
27	Si-in	S3-short	1" I
28	S3-short	C1-stator	1" I
	[S3-short [S3-short	S3 arm S3-normal	C5]
			C6]

Wire S1-in, out, GND and coil connections per Figure 1B.

(Continued in next issue)

#### Dave Schmidt

P. O. Box 11502

Wilmington, DE 19850-3516

Times are local per Muse.

Thoughts from NRC members ... the opinions expressed in this column are those of the individual writer and do not necessarily reflect those of the editors, publishers, or the National Radio Club, Inc.

MIKE CSORBAY - RR #1 - CANFIELD, ON NOA 1CO Greetings to everyone and belated Happy New Year wishes to all. I'm back for my annual report (hi) so I guess I should re-introduce myself as well. I'm 27, single and have been DX'ing the MW & SW bands since 1979. I've been able to log 21 new stations since October which brings the total heard to 1270, call changes not counted here. In the DX derby this season, I've logged 3 from WI, 2 each from KY, NC & QC and singles from MN, SD, PA, AR, IL, IN, VT (WSYB-1380-Test), NY, NM, CT, NFLD (for prov. #9, still need BC) and Venezuela. I enjoyed the Musings section of Vol. 55, #13 very much which prompted me to get to the computer and type this preamble as well as some logs to our fearless DDXD-E editor. Rick Dau's Top 10 DX CATCHES caught my imagination, while I don't think I could come up with that many on such sort notice, I would rank #1)KPIK-1580-CO 2/3/81 on SSS, #2) KLVI-560-TX 12/23/80 in extremely auroral cx, #3) KAGY-1510-LA 11/81,  $\pm44$ ) WCCZ-1550-FL 9/86 &  $\pm5$ )CHCM-740 NFLD in 10/90 as tops so far, as I have the first 4 verified and still have my fingers crossed on #5 (they're getting sore, it's been 3 months!). I also enjoyed reading Jim Renfrew's mention of the ODXA DX Camp in Letchworth State Park, NY in Nov., as I attended that as well and enjoyed meeting out IDXD editor. I'm still trying for some good Int'l DX but not much luck with ID's so far this year although the Venezuelan on 760 popped through on 1/8 at 0330 UTC with mention of Puerto la Cruz but couldn't catch the slogan so not sure if its still 'R. Doble Q' or not. Locally, the Buffalo Bills/ Sabres/Bisons are back on WGR-550 this season, after about 7-8 years on WBEN-930. CHNR-1600 is now on the Telemedia Sports Network with Toronto Maple Leafs hockey as they joined the net. late in the fall as the Blue Jays threatened to win the AL East. Well, folks, I think that's about all for now, can't wait for the baseball season again! 73's!

ED MITKUS - RT2, BOX A-108 - ZIONVILLE, NC 28698
A few items here, 1/16 10P WAPE-690 L&C w/warning, running 50 kw day pattern, even Kerry knows they'll go to 50 kw for anything special. Also heard 880-6A 1/17 w/s/on at 5A, well before sunrise, w/news o/WCBS. Received a copy of the new AM log, ecellent with the larger type and cross references. I've researched and typed up a list of phone numbers of NC stations, those are sent to Mikee's Have also heard WTYN-1160 relaying Hendersonville-1450. Otherness...WNNL-910 in w/FM simulcast 12/29 3:30A. With a tad bit of luck, KKLL-1100 1/12 6:179 o/ 3WE w/Gospel tune and MO Highway Patrol PSA. And finally bagged WOXI-790 1/28 10:15p for #607 total heard here since '85. See ya!

MIKE HAWK (KBØGXE) - 10212 P St. - OMAHA, NE 68127-2130 Hello again! I recently attended a meeting of the Ralston Radio Club and passed out samples of DX NEWS to them. 2 seemed interested & hopefully will join! Latest news at home is the purchase of a Hammerlund HQ180A. It's in good shape, with only a few scrathes. The band selector doesn't work all the time, sometimes you have to jiggle it to get it to work. Compared to my R1000, it's about even, it has good selectivety and works a little better on the low BCB frequencies but it has a little more noise over the whole band then the R1000 has. For only \$125, it was a great bargain. It was purchased from former NRCer David Margritz. In other news, I am co-editing a column with Jack Woods for begineers. I like the joint editor concept, as does Jack, because you do not run out of ideas for columns as easy, you have someone to re-edit what you wrote and he is more knowledgable on the technical aspect of the hobby. Our first column should be out by late Feb./March, if not already! (Good luck, Mike!-DWS) It seems to be getting harder to get verifications anymore, since the season began, I am getting about a 60% return rate, and only around 40% (!) since late Nov. Hopefully, follow-ups will do a little better. When I started, I used to get about an 80% return and my reports were much worse! Total heard now is 1227 including call changes, 1189 excluding them. Recent veries: KSTL, KVOX, WRFA, WELO, KMBZ, KIKC, KOAQ, KRDS, KOKK, KVOO, KCKN, KFLT & WFELL. Some of my better logs recently are KJJR-880, WBIV-1060, KBEN-1450, WBBA-1580, WRIX-1020, CFYM-1210, & WELO-540. WELO was nice enough to verify and send my return postage back! 73's

JIM ROLLINS - 5582 ASCOT CT.,APT 121 - ALEXANDRIA, VA 22311 Having read recent articles in this and other publications concerning digital audio broadcasting including Paul's comment about its inevitability, I have this to say: The only technical aspect of MAB that interacts me is the sound guality and not that much. I would rather listen to AC on AW or FM than AS (I'm a big band fan) on DAB. The things that excitoes me about radio is the ability to hear Chicago or Detroit at night, to go the the oream (or Chesapeake Bay) and be able to listen to NYC or Hartford, or to the top of a mountain in WV and hear OW or

MI on FM. The sight of a radio tower or a directional array reaching toward the sky is a thrill for me. Maybe that's why I'm hoping the evolution to the new system will happen more the way Harry Hayes suggested IN & recent Musing. In any event, I'll probably be the last AM/FM listener on earth!

NEIL ZANK - 623 LYNCREST DRIVE - INCOLN, No 68510

One bit of activity which I forgot to comment on in my last weeding was that we enjoyed a nice for a few days before Christmas hosted by Ernie 'The M' Wesolowski in Onaha. Was an opportunity to meet newer NRCer Mike Hawk for the first time, and visit with older friends Wesolowski, McCoy, Dau, Charwick and sometime NRCer Mann. Carl Mann treated us to a mid evening tour of Kkws 105.9, studios located in the office by lighing next door to the resturable where we had dinner. A nice Christmas—new Years holiday was enjoyed here in Lincoln, even though it was the first one with neither of my folks living, my Dad passed away in late Aug. '90. A few more items of radio nature have been noted with my Walkman DX machine, on 1/24 WDUX-800 4:40-4:45P w/CW music. ID fighting 1: out w/CKLW/CHAB at the time. Same date, CHAM-820 5:01-5:15P w/news-sports-seather "Cham Country" slogans and CW music. 1/28 noted a little oddity on 1980 between 4:45-5P w/KNIM noted broadcasting Bingo games w/prizes of \$25 gift certificates from local businesses. Is that serving public convienence and necessity of whis? (No, it's called making a buck-hi-DWS) With this fare available, I might just have to fire up this old lonesome HQ180A sitting behind me as a write. 73's!

DAVE SCHWIDT - P. O. BOX 11502 - WILNINGTON, DE 19850
Busy schedule puts this in the mail on Monday PM 2/11, set11 lots of work going
on at this end with the addition of some additional work at wash-1330. Even
though they're a fulltimer, they've been running from 0600 til sunset or 2000
with a refigious format. Works out nice as it's co-located with WXCY-103.7
so I can hit both in the same day if needed. With Rick Dau's previous report
and Mikes (this issue), how about a Musing from you letting us know of your
best all time catches, 5 or so would be fine, we'll make it for the 3/18 issue.
That's tt til next week!

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