

DX News

Since 1933. We know radio.

Volume 59, No. 3 - October 21, 1991 (ISSN 0737-1659)



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CPC Test ...

KCRV-1370 - P. O. Box 9 - Carruthersville, MO 63680 will present a special DX Test Monday morning October 28 at 0615 ELT. The test will include tones, music, Morse code, and voice. Arranged for the NRC by the Colorado CPC Machine.

The CPC treasury is at an all-time low! After sending out 60 letters, we are in need of your stamps/checks (made payable to Jeff Tynan) to continue sending out letters for the first half of the DX season. Please send your contributions to Jeff Tynan - 10359 Severance Drive - Parker, CO 80134.

From the Publisher ... Check out the unique opportunity for the NRC on page 3. If you can help out, contact Mike Collins as soon as possible.

I'm geared up for Wayne and Jeff to push me clear off the front page with CPC tests by this time, so having all this front-page space to fill up with my drivel is a little frightening. So ... unless you want to continue reading my filler material, get on the ball and send Wayne and Jeff your CPC target list, along with enough stamps to cover their cost of mailing request letters.

I mailed copies of DXN to two more potential NRC members today, thanks to a tip from Don Trelford, one to a former member of about 15 years ago. And although the NRC continues to increase its membership (in both the NRC and the DX Audio Service), we still could use your help. If you can think of local radio personnel, for example, who've expressed an interest in DX'ing, or perhaps a former member who might join again, please send me their current address and I'll promptly send the current issue of DXN to them.

Support for the columns, as usual when we get back into the weeklies, is rather light, and so much of DXN this week and next will be devoted to lengthy technical articles. Although we have plenty of newspaper clippings on hand to fill as needed, we'd rather see news of your current DX. So ... if you're listening, send it in!

They joined ... Stephen Martin, Woodbridge, VA, and Elton Byington N2KST, Maspeth, NY.

Convention ... The Vintage Radio & Phonograph Society and the Antique Wireless Association will hold

their 16th annual convention in Irving, Texas November 8, 9, 10. Features of the convention include Denver broadcast veteran John Rayburn, technical talks, a contest, auction, and indoor flea market. The flyer states that "Convention '91 is a private function for VRPS and AWA members and invited guests", so for more info, send an SASE to Don Nordenholt, Registration Chairman - 1509 Cliffbrook Drive - Plano, TX 75075, plus \$13.50 in dues if you wish to join the VRPS. Advance registration is \$8.00, and the cost of the awards banquet is \$15.00. The event is being held at the Holiday Inn, Dallas/Fort Worth Airport South, 4440 W. Airport Frwy, Irving, TX 75062 (214) 399-1010. 73.

DX Time Machine

From the pages of DX News

50 years ago ... from the Oct. 15, 1941
DXN: Frank Lee, Wildwood, NY, reported that 2bc-850 was the loudest TP station on Oct 11.

25 years ago ... from the Oct. 15, 1966
DXN: Ernie Cooper's verie total was 3,526 ... Bernie Duffy, Staten Island, NY added WHYW-950 to his heard list.

10 years ago ... from the Oct. 26, 1981
DXN: Dan Bartek forwarded a newspaper clipping revealing plans for Radio Marti, to be used to broadcast to Cuba ... An article by an anonymous writer described the RAÇAL CA 3099A antenna, a "deployable monopole antenna for use after a nearby nuclear blast. The antenna is housed in a concrete bunker with a steel cover." It was designed to withstand a 10 megaton blast at two miles distance ... Mike Knitter was looking for a manual for a Scott Marine Radio, Model SLRM ... Michael Collins, Stamford, CT, discussed transmitter vs. city of license ... new member John Malicky reported in for the first time, with 726 stations logged ... and Ernie's veries were now at 4,205 AM, 142 FM.

AM Switch

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

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

CALL LETTER CHANGES
None!

APPLICATIONS/GRANTS FOR NEW STATIONS
None

APPLICATIONS FROM EXISTING FACILITIES
None

GRANTS TO EXISTING FACILITIES

1540 WABQ OH Cleveland: relocate transmitter site
1580 WCCF FL Punta Gorda: reduce power to 710 watts

OTHERNESS

600 KERB TX Kermit: silent station is ON THE AIR
720 WWDF MS Richland: new station is ON THE AIR
730 WKMW AL Madison: silent station is ON THE AIR
800 WDSC SC Dillon: silent station should be ON THE AIR by the time this reaches you according to NRC's Dave Schmidt who had the job of rebuilding this one.
820 WXJZ IL Chicago: silent station did not return in Sept as was previously announced. We also understand that this call (WXJZ) will NOT be used as it does not fit with their proposed all-sports format. They now are saying they'll return with a daytime-only operation in mid-October.
830 KSRT CA Orange: tests heard recently on this frequency with unmodulated carrier are believed to be this new station tuning up
950 WSPA SC Spartanburg: station is SILENT
1130 WAMG TN Gallatin: station is SILENT
1150 WYNE WI Kimberly: station is being purchased by the owner of WHBY-1230 kHz in Appleton, WI. The WHBY call and programming will be moved here, the license for the 1230 station will be surrendered to the FCC and WYNE will be gone for good.
1190 KHAD MO DeSoto: station is SILENT
1230 WHBY WI Appleton: see WYNE-1150 item above
1250 WKBR NH Manchester: silent station is ON THE AIR and now relays WNNH-1340 kHz
1280 CFYZ ON Toronto: has moved here from 530 kHz to make room for the CIAO move to 530 kHz. This is the TIS at Toronto's Pearson Airport but we included it here in case you might hear TIS-style info on this odd frequency.
1340 KICK MO Springfield: reported to have returned to the air in several sources, this one included, evidently has either gone SILENT again or never actually returned. Monitoring in Springfield as recently as 9-22 shows this frequency to be vacant.

WAMB
THE "MUSIC OF YOUR LIFE"
1160 AM
50,000 WATTS
24 HOURS

1510 WAHT PA Annville-Cleona: license of this silent station has been sold, new owners plan to return it to the air but no target date has been offered.
1550 KKLE KS Winfield: silent station is ON THE AIR
1560 WMOM MD LaPlata: silent as WSMO, station is ON THE AIR

THANKS: AL MERRIMAN, DAVE SCHMIDT, MIKE RIORDAN, HOWARD KEMP, KEN ONYSCHUK, JOHN BOWKER and M STREET JOURNAL

VACATION: We have one more week of vacation coming up so AM SWITCH will be missing from the next issue. We will return in the following issue with all accumulated information.

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

Wayne Heinen
NRC
4131 S. Andes Way
Aurora CO 80013

AM 610
WSNG

Dear Wayne:

I am a 20-year member of the NRC and am well aware that WSNG has not been widely heard, even in much of Connecticut and metro New York.

DXers as close as 38 miles have not heard WSNG, even though they've heard many hundreds of stations.

Our problem is that the recession has hit CT severely, and we at WSNG have had to make layoffs.

If the NRC would like to send a staffer or volunteer to WSNG that morning (Torrington is less than 2 hours from NYC and less than 3 from Boston) we could run programming and a tape of tones (which you offer) between 4 and 5 p.m.

Our news person is here and is extremely busy during that period.

We can switch between our day and night patterns from here at the station studio, and the NRC member could come here.

At 5 a.m. we carry CBS news and at 5:05 a.m. we carry Mutual's Good Morning America, until 5:55 a.m. There is local news at 5:30 and sponsored weather at 5:55 a.m. The 5 to 6 a.m. hour is heavily depended upon, and we would not be able to offer that hour. However you can have the 4 to 5 a.m. hour that morning.

We have had WSNG since September 1988, and in that time we have received only 1 reception report, from a DXer in upstate New York.

I don't know whether ESP exists, but I and my assistant Jerry Weise were just talking about the NRC and a possible test, the day before your letter arrived.

Our studio is on the 2nd floor of 8 Church Street, Torrington, corner of Main Street, less than a block up from City Hall across the street. This is off exit 44 of Route 8, and also a long city block from Route 202. To call me, you may telephone (203) 489-4181.

Sincerely,
Mike Collins

Domestic DX Digest - East

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

William Hale

734 Bursleson
San Marcos, TX 78666-4335

MEDIUM WAVE RAMBLINGS

- Well, well, well. Issue Number Three brings some old names out of the woodwork. Plus, some new blood. Welcome aboard John J. Varljen, Jr. from South Fork, PA which is just up the road from Johnstown. Glad to have another reporter from that part of the country. Report often, John.
- A small column this time due to an unexpected work-related out-of-town trip. All reports will see print... but may be a little late.

SPECIAL

- 550 WAME NC STATESVILLE - as per verbe from Jim McLunkin. WAME will be changing CL back to WDRV by the end of the year; WAME call to go to another str in their chain; slogan is still *55 DRV* with WAME used only at legal ID at :00; QSL soon!! (RJT-NC)
- 1160 WTYN NC TRYON - runs | WHKP-1450 Hendersonville, NC except for local programming 0800-1100 daily; slogan is *EZ Radio Group*, runs *AI Nx* and *Larry King* at night; 24-hr NSP; new address: 207 East Main, Brevard, NC 28712; v/s is Dave Abbey, OpsM (RJT-NC)
- 1240 WPNF NC BREVARD - runs | with WHKP Hendersonville, NC...etc etc etc; see 1160 | (RJT-NC)
- 1270 KEPS TX EAGLE PASS - now simulcasts with KINL-FM 92.7; EE to 2000, the Tejeño 'til Midnight; listen for *K-93* slogans [Ed.-TX]
- 1400 WYYR SC SPARTANBURG - 9/22 ON AIR FINALLY; ex:WKDY; runs 0600-2400 with OLD/AC/CHR/C&W Mon-Sat and GOS all day Sunday; live radio all the time (a rarity in these times); CNN Nx at :00 & :30; new address is P.O. Box 3554, 340 Garner Rd, Spartanburg, SC 29304 Tel: 803-573-1400; no verbe signer to report on as yet (RJT-NC) [340 is correct address, not 304 as in new Log - Ed.]
- 1600 WTZQ NC HENDERSONVILLE - SILENT since about 3/2/91; had money problems and was trying to return by 4/1/91 - so far not a peep out of them; I don't expect this to return in the near future (RJT-NC)

MIDNIGHT TO 0800 HOURS ELT

- 640 WFNC NC FAYETTEVILLE - 8/24 0055-0100 talk show, ads, ID, news (RH-NJ)
- 670 WIEZ PA LEWISTOWN - 9/21 0740 OLD, ID, Prego ad, female DJ; XLNT (RH-NJ)
- 830 CFJR ON BROCKVILLE - 9/21 0747 *104.5 FM* ID, *Favorites of the 60s, 70s & 80s* (RH-NJ)
- 990 WVSC PA SOMERSET - 9/14 0815 ID, ad for elderly, REL pgm (RH-NJ)
- 1060 WFLE KY FLEMINGSBURG - 9/28 0757-0804 over/under KYW; ad for Clairy Queen in downtown Flemingsburg, and mentions of *Lewis and Fleming Counties*, new (JV-PA)
- CJRP PQ QUEBEC - 9/22 0730 PCOP mx with FF DJ; no sign of KYW (RH-NJ)
- 1260 WNDR NY SYRACUSE - 9/28 0740 briefly dominant with local Syracuse sports -- C&W mx; new (JV-PA)
- WCHV VA CHARLOTTESVILLE - 9/28 0745 fair with WNDR QRM & GOS mx; #4 song this month is *I Can't Even Walk* (JV-PA)
- 1400 WILI CT WILLIMANTIC - 8/24 0035 *14 WIL* ID and some ads surfaced thru jumble (RH-NJ)
- 1410 WDOV DE DOVER - 9/13 0105 ID *Capital City's radio station for over 40 years*, jumble before and after (RH-NJ)
- 1470 CHOW ON WELLAND - 8/24 0025 C&W mx, talk of *Niagara*, ads for stores in Port Colburn; good; others under (RH-NC)

1600 TO 2400 HOURS ELT

- 620 WHEN NY SYRACUSE - 9/5 2230 end of Dodger's 5-1 victory over Pittsburgh; ID after game, CBS net; in WSKQ null (RH-NJ)
- 640 WHLO OH AKRON - 9/13 2249 IDs *WHLO 640 AM Stereo* and *WHLO Solid Rock*; REL mx, up-tempo (RH-NJ)
- 730 CHYR ON LEAMINGTON - 8/31 2225 C&W mx & ID mentioning Leamington location; usual CKAC playing hard-to-get; again; on 9/1 @ 2320, L&C with *Southern Ontario's C&W Giant* and *Star Country* IDs (RH-NJ)
- 910 CKLY ON LINDSAY - 9/6 2319 POP mx, female DJ, 324-9100 local tone for requests (RH-NJ)
- 920 KKNX ON WINGHAM - 9/26 1938 good with ads for *Cassidy Farm Machinery* and *Becker Shoes*; 92 CJCH ID (JV-PA)
- WOKY WI MILWAUKEE - 9/26 1949-2000 fair with BBD mx, wx by TV 6 meteorologist, ID *AM 920 WOKY Milwaukee*, new (JV-PA)
- CJCH NS HALIFAX - 9/26 2001 fair with ad for *Bailey Furniture and Appliances*; 92 CJCH ID; new (JV-PA)
- 950 WXLW IN INDIANAPOLIS - 9/22 2100-2130 all alone on frequency with CNN Headline Nx (perhaps new format?); legal ID at :00 & :30; new (RJT-NC)
- 1090 KAAV AR LITTLE ROCK - 9/27 2012 fair in WBAL, null, ad for tape of Sunday School Songs from KAAV, giving full station address (JV-PA)
- 1280 CJMS PQ MONTREAL - 9/6 2308 FF, ID jx; soft mx & mention of *Montreal*, way over SS WADQ, NYC (RH-NJ)
- 1290 CJBK ON LONDON - 9/6 2311 *Rock & Gold Oldies Show* with songs from; 1968; ad for Brian Finch Pontiac/Bulck (RH-NJ)
- 1500 KSTP MN ST. PAUL - 9/23 2013-2028 good over WTOP with Sports-Talk Show, ads for *Randy's Pizza Man*, *Hooked on Meth*, etc (JV-PA)
- 1570 CFOR ON ORILLA - 9/6 2328 with ID and C&W (RH-NJ)

REPORTERS

- RH-NJ RICH HARRISON/Grundig Satellit 3400 + SM-2 SpaceMagnet
- JV-PA JOHN J. VARLJEN/South Fork, PA/ICF-2010 + homemade 48" x 18" unamplified loop
- RJT-NC ROBERT TIARA/Hendersonville, NC//
- Ed.-TX Ye Editor/San Marcos, TX//



ABBREVIATIONS AND SPECIAL SYMBOLS USED IN DDXD-E

|| parallel with or to - :to or into :00: on the hour AC:Adult contemporary AP:Associated Press BBD:big band
BRN:Business Radio Net C&W:country & western CHR:contemporary hit radio CID:code ID CL:local letter
Cont:Contemporary Christian EZ:easy listening EE:English FF:French GOS:gospel IRN:Interstate Radio Net jx:jingle
LSR:local sunrise LSS:local sunset MLB:Major League Baseball mx:music nx:news NPR:National Public Radio
OC:open carrier pbp:play-by-play PSRA:pre-sunrise authority PSSA:post-sunset authority GRM:man-made interference
QRN:natural interference QTH:location REL:religious ROK:rock 'n' roll PS:program schedule S:stores 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 wx:weather

IN THE BEGINNING

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
1130, clear	WVOV	New York, N.Y.	1 kw	D.
	WJJD	T--Secaucus, N.J.		
	KSL	Mooschoent, Ill.	20 kw	S-KSL
		Salt Lake City, Utah	50 kw	U.
		T--Saltair,		
1440, clear	WAPI	Birmingham, Ala.	5 kw	Simultaneous, D. S-KVOO night.
	KVOO	Tulsa, Okla.	25 kw	Simultaneous, D. S-WAPI night.

73, Bill

6 International DX Digest

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

Here we go: East Coast TPs are reported by Ray Moore, Cesar Objio reports in from the Caribbean, pan-handle DX from Gerry Thomas, and a TA report from new member (and upstate neighbor) Jim Fedor. My own loggings from a near all-nighter on 10/4 show the dominant Carib and LA stations at the bottom of the band, as the upper half was pretty dead at the time.

All times UTC. Please submit in frequency order. Please credit NRC reporter or original sources when reprinting this information in other bulletins. Thanks. **JIM**

TRANS-PACIFIC

- 738 UNID SOUTH PACIFIC? Loops south of Australia. Carrier noted 9/10, 9/11, 9/12, 9/16, 9/27, 9/29 just before LSR. Have hopes of usable audio soon. Tahiti is now on 24 hrs and should be easy to check against 11827 kHz. [RSM-MA]
- 747 UNID SOUTH PACIFIC? Loops north of 738, south of Australia. Carrier noted 9/11, 9/12, 9/14, 9/19 same times as 738 above. [RSM-MA]
- 1566 UNID 1016 9/25. Strong carrier. [RSM-MA]
- 1575 UNID 1015 9/25. Strong carrier. Might have been able to pull audio from this one, but concentrated on 1620 instead. [RSM-MA]
- 1620 AUSTRALIA 1008-1032 9/25. Mostly men speaking w/definite Aussie accent. Which RPH is left here? Not even a carrier heard on 1629 this fall. Have also heard audio on this one 9/13, 9/16, and 9/21, but too weak to identify. Is Virginia Beach TIS still on here? [RSM-MA] (July DXOntario summarizes a letter from Graham Williamson of Queensland: "1PPP in Canberra is still operating on 1620 kHz. They do plan to move soon ... 7RPH-Hobart may still be active here too." Arthur Cushen on Media Network (9/13/90), as mentioned in the same article, says that 1PPP has already moved, but editor David M. Clark wonders if they may still be simulcasting on 1620. - that's the latest that I have, Ray; in any event, excellent work on your part to dig these TP signals out of the ether! - Jim)

Jim Renfrew
61 Wilcox Street
Rochester, NY 14607-3832

TRANS-ATLANTIC

- 765 SENEGAL 2240 9/24. FF male announcer w/long rambling talks in WABC splash // 4890 kHz. [JF-NY]
- 774t SPAIN 2350 9/24. SS male announcer w/rock mx (Tom Petty "Learning to Fly" etc.) // 855 both about the same signal level. [JF-NY]
- 838t SPAIN 2252 9/24. Rock mx, Rolling Stones "Angie", Pink Floyd, etc., 2300 time pips, 10 seconds of ESPN's sportscenter theme mx used in late 1980s, SS woman w/probable newscast. [JF]
- 855t SPAIN (see 774 item above)
- 891 ALGERIA 2311 9/24. In the clear before WLS fade-in with never-ending AA mx. [JF-NY] (Jim also heard occasional audio on 1035 and 1107. (My car radio tunes 10 kHz steps, but I heard hets on 890 and 980 later that same evening while driving west of Rochester - Jim)

PAN-AMERICAN

- 526 BAHAMAS ZLS 0212 9/11. Beacon here last 9 months. Read somewhere that this is a new Bahamian beacon (I think). [GT-FL] (you read it here in IDXD, they use 500 watts - Jim)
- 535 GRENADA St. George 0227 9/11. Male and female announcers in island EE, very poor level. [GT]
- 550 VENEZUELA Mundial 0749 10/4. Noted w/strong signal, "Mundial" IDs o/WGR and Rebelde. [JR-NY]
- 570 COLOMBIA R. Nacional, Bogotá 0057 9/20. W/program "El Bachillerato por Radio". This is a program for students who can't attend High School. Maybe this is a replacement for R. Sutatenza. Time pips on exact hour. [CO-DR]
- 580 PUERTO RICO WKAO, San Juan 0641 10/4. In well, but faded in and out w/Jamaica; mx items, call letter IDs. [JR-NY]
- 590 CUBA R. Reloj / R. Rebelde 0637 10/4. Noted both outlets on the same frequency, coming in at about the same strength. Reloj also noted on 760, 790, 910, 930, and 960. (960 the only new logging this entire night!) Reloj

also noted after 0800 (and not before) on 740 and 880, indicating the R. Progreso shifts to Reloj around this time. Other Rebelde outlets noted on 670, 620, 600, and 530. [JR-NY]

- 595 DOMINICA Roseau 0212 9/11. EE religious programming w/mention "I'd like to remind you that our new name is 'The Light of the World'", fair. [GT-FL]
- 610 TRINIDAD & TOBAGO R. 610, Port of Spain 0110 9/20. Good in EE w/local mx, not usually heard here. [CO-DR]
- 630t PUERTO RICO WQBS, San Juan 0325 10/6. Tentative w/mentions of PR in break between salsa tunes. Heavy domestic interference. [JR]
- 639* CUBA Pilon 0235 9/11. Presumed the R. Progreso outlet off frequency and hitting 640. The stronger CMBB was on 640.0 and // this weaker outlet. [GT-FL]
- 640 GUADELOUPE RFO, Point-a-Pitre 0628-0805 10/4. Tuned in at various times to hear program relayed from Paris (also // 5055 RFO Cayenne), several mentions of "R. France" at 0758, 4 pips at 0800 above FF talk, very good. Het reported by GT above also noted, along w/strong Porteñas (Venezuela) on different loop setting. [JR-NY]
- 650 DOMINICAN REPUBLIC R. Universal 0301 9/29. Presumed w/hot salsa mx u/WSM, and mentions of Santo Domingo. Pips on hour may have been this one, but not sure. Last heard 1983. [JR-NY]
- 670 VENEZUELA R. Rumbos 0340 10/6. Poor u/R. Rebelde w/door chimes, // 4970 SW. [JR-NY]
- 690 ANGUILLA Caribbean Beacon, The Valley 0106 9/20. Heard w/a religious program when local R. Guarachita is off the air (still on 90.1). [CO-DR] Heard w/Gene Scott program (send \$!) o/CBF 0620 10/4, // 1610. [JR-NY]
- 700 JAMAICA JBC Radio One 0656 10/4. Strong, IDing this way during call-in show. Again at 0307 10/5 with safe driving message, and AM/FM ID. [JR-NY]
- 720 NICARAGUA Managua 0027 9/3. R. Catolica on top and almost good w/American pop in SS. [GT-FL]
- 720 JAMAICA RJR 0658 10/4. Good, about even w/WGN, w/reggae mx show. [JR-NY]
- 730 COLOMBIA Melodia Bogotá AM 0434 9/8. Very good. IDing this way. Political ad for candidate in Cundinamarca department, then ad for "Solo Musica" (only music) for offices, etc., through radio, ("muzak"? - Jim) then "Exitos favoritos" meaning pop mx. [CD]
- 740 PUERTO RICO WIAC, San Juan 0630 9/30. Very good signal, alone on channel, w/mx, WIAC SIDS, UTC-4 TCs, message from Governor. [JR]
- 740 VENEZUELA R. Caroni, Pto. Ordaz 0802 10/4. Noted a single ID in mess created by WIAC and R. Progreso. WIAC quite strong all night long - a good chance for Puerto Rico with CBL off. [JR-NY]
- 750 JAMAICA JBC 0656 10/4. Weak u/WSB w/call-in show. [JR-NY]
- 760 COLOMBIA Barranquilla 0130 9/3. RCN noted in passing w/SID, dominant. [GT-FL]
- 770 COLOMBIA RCN, Bogotá 0806 10/4. Heard with mx // 760 RCN Barranquilla, u/WABC. Heard "RCN" ID previously at 0616. [JR]
- 780 VENEZUELA R. Coro 0614 10/4. Loud and clear o/WBBM w/mx and IDs between selections. And again 0400 10/6 w/lengthy promo and slogan, ID as "R. Coro AM". [JR-NY]
- 793v CUBA 0140 9/3. R. Progreso still drifting around here after almost a year; probably the one from 800. [GT-FL]
- 10 COLOMBIA CARACOL 0707 10/4. Loud and clear w/mx o/WGY // 6075 SW. [JR-NY]
- 325 ST. KITTS R. Paradise 0708 10/4. Noted w/woman shouting "I love you Jesus" over and over again. Not as strong as they used to be, when I used to note them year-round. [JR-NY]
- 330 VENEZUELA R. Sensación 0104 10/5. In the clear w/ID during sports event; WCCD nulled. [JR]
- 830 BELIZE R. Belize 0300 10/6. Excellent signal w/hot mx, nx and wx at 0300, then more mx, all



RADIO CLARIN

"LA QUE NO SE PIERDE EN EL CAMINO"

565-4355 - CABINA
565-7676
565-4515
567-6157
567-6882

50,000 VATTIOS
 LA MAS POTENTE

A. M. 860 F. M. 105.5

José Andrés Aybar Castellanos
 (Antigua Prol. México). Exq. Clarin, Santo Domingo

- w/woman DJ in EE. ID as "Radio Belize 92.7". So strong I thought it was R. Taino. [JR-NY]
- 850 JAMAICA Savannah-la-Mar 0145 9/3. JBC fair w/call-in requests (various reggae). [GT-FL]
- 850 COLOMBIA R. Recuerdos, Bogotá 0525 9/8. Heard here w/pop mx and ID "Lo nuevo y la música popular está en R. Recuerdos" (the new and popular mx is R. R.). Weak, this seems to be a move from 1310, but what about R. Caracol Bogotá w/50 kW? R. Recuerdos is only 15 kW. [CO-DR]
- 860 DOMINICAN REPUBLIC 0200 10/6. Poor u/CJBC, w/lively salsa mx, ID at 0200, and what sounded like sirens during various breaks. [JR-NY]
- 890+ COLOMBIA R. Galeón, Sta. Marta 0548 10/4. Slightly higher than 890, giving a loud growl against WLS, w/ID and electronic "wolf whistle". Subject to deep fade, or varying frequency. Also noted 0057 10/5 w/mentions of Santa Marta. [JR-NY]
- 895t SI. KITTS VON, Nevis 0158 10/5. Pop mx, and bits of EE audio, but not enough to hear details or ID. [JR-NY]
- 950 COLOMBIA Caracol, Pereira 0530 9/8. With nx, pip and ID, then ads for "El Colorado" oil for cars. "Noticias de Ultima Hour" continues. Heard this one due to local R. Popular off, perhaps because of one of the usual blackouts. [CO-DR]
- 1020 VENEZUELA R. Margarita, Ascunción 0510 10/4. Noted w/salsa mx, AST TCs and "en Margarita" IDs u/KDKA. [JR-NY]
- 1030t HAITI 4VEH, Cap Hatien 0935 10/4. Possibly them w/SS religious lesson, but too late to stay up longer! This was 2 days after the coup. [JR-NY]
- 1060 MEXICO XEEP, Mexico City 0714 9/28. "Lite" SS mx, // 6185 SW, very good u/KYW. XEX-730 was blasting in at the same time. [JR-NY]
- 1080 CUBA R. Cadena Habana, Guines 0329 10/5. Mx and ID "en la frecuencia popular, R. Cadena Habana." 1080 stronger than 1100. [JR-NY]
- 1100 CUBA R. Cadena Habana 0329 10/5. See 1080 item above. [JR-NY]
- 1210 VENEZUELA R. Anzoátegui, Barcelona 0538 9/8. Very good and many IDs and playing local mx, then ad for "El Informativo Oriental" and "Anzoátegui musical" local mx. [CO-DR]
- 1255t HONDURAS Danli 0222 9/2. SS male w/call-in show and soft LA mx at poor/fair level. A clear R. Latina ID, no QTH mentioned. [GT-FL] (very likely, a well-known split from last year - Jim)
- 1360 COLOMBIA Mar Caribe, Cartagena 0424 9/7. With this ID, then added "R. Reloj". Vallenata mx, then talk w/a boxer after the end of a fight. This seems to be a move from 870. Vallenata mx continues mostly w/accordion. Frequent IDs as "R. Reloj". [CO]
- 1380 COLOMBIA RCN, Tunja 0414 9/7. ID, some pop mx, and after that nx. [CO-DR]
- 1400 COLOMBIA Calarcá 0410 9/7. An ID was heard as "antena Dos" through merengue on another station. [CO]
- 1420 COLOMBIA R. Reloj, Manizales 0400 9/7. ID after playing a tango, then some nx amid QRM. After a couple of minutes another ID was heard "Bahía se oye mejor", which is R. Bahía, Cartagena. Also some nx after this, much better reception. [CO-DR]
- 1580 VENEZUELA R. Occidental, Maracaibo 0542 9/8. Very good w/ID. This is a new station here, not heard before, w/pop mx, [CO-DR]
- 1685 COLOMBIA MER Beacon noted here almost nightly at decent level. New Colombian? [GT-FL] (Colombian, yes; new, no! This should be MER, not MEK as you logged it. It's 1 kW. - Jim)

DOM. REP. FEATURE

Our man in Santo Domingo, César Objio, sent yellow page listings for "Radiodifusoras" from his local phone book. In weeks to come I will present a series of the the advertisement squares, which contain slogans, logos, schedules, telephone numbers, FM co-stations, addresses, etc. I will put "via CO" in the corner of each one so that you will know that it is current information, and not an old logo from the files. (Thank you, César!)

STATION NEWS

Thanks for bulletins from Scandanavian clubs UKVK (Umea Kortvagsklubb) and ARC (Arctic Radio Club). Also PLAY-DX from Italy.

CANARY ISLANDS R. Club Tenerife 1179 (ex 1314). (D. Houghton to WRTH 6/91 via HK via Distance in ARC)

CYPRUS: 1233 R. Canada Int. is hiring airtime on R. Monte Carlo East's Cyprus tx, beginning 9/5. RCI Arabic 2015-2030. [BDXC in ARC #5]

GREECE: 792 VDA Kavala is now EE 2200-0100 (1959), 0100-0700 (0159), 0330-0400 Romanian and Serbian. [BDXC/RP via DSWCI in ARC #5]

HAITI: Several days after the coup against the President, R. Habana reported (10/5) that stations in the capital have chosen to leave the air, because of military threats against them. R. Haiti Internationale was specifically named in the report. In light of the 1030 logging (above) heard 36 hrs previously, not sure if this now affects 4VEH and 4VEC 840, which are non-governmental, non-commercial evangelical religious stations in Cap Hatien, a city on the north shore of the island. [JR-NY]

IRAQ: Iraqi jammers active 24 hrs on 828, 972, and 1125. [R. Pankov via BE in ARC #5]

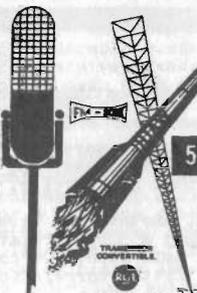
JORDAN: 855 855 JRT Amman 0400-1630, 1700-2100 in EE. [R. Pankov via BE in ARC #5]

PANAMA: 550 R. Verbo still inactive, 610 and 660 RPC Radio 24 hrs, 650 R. Mia 24 hrs ("R. Mia, Cadena Nacional"), 720 R. República on til 0100 (R. Republica, se siente), 740 La Exitosa Libre 24 hrs, 790 Southern Command Network s/off 0500 with Panamenian and US national anthems, 840 R. Nacional de Panamá inactive. [SDXL in ARC #5] 1015 R. Nacional has been off since Apr 22 earthquake, but repairs will soon be completed. [Edwards in WRTH LA-NL #11 via ARC #5]

POLAND: 225 Polskie R.'s main 2000 kW tx has been off the air following the collapse of the 646 meter mast (the world's tallest antenna). The old tx and mast is now being used w/much reduced coverage. [BDXC in ARC #5]

HIAW Radio Guarachita

"LA PODEROSA"



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- * Radio - Teatro.

TELEFONO MUSICAL:

5	4	1	-	3	4	5	6
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Servicios Públicos

541-2526

Prensa

541-2886

Publicidad

541-2885

Antena

596-7323

LA EMISORA GRANDE DE LA REPUBLICA DOMINICANA

ESTUDIOS: Autopista Duarte Km. 6 1/2 Santo Domingo.

YUGOSLAVIA: 1557 The 300 kW Tovarnik tx (1125 kHz) has moved to this frequency. The earlier Osijek 1557 tx was destroyed by the on-going fight in the area. [R. Pankov and BE in ARC #5] According to Dario Monferini Zagreb 1125 and 1134 are off the air. He encourages European readers to try for Spanish stations at sunset. [Play DX #660] (Due to civil conflict in Croatia - Jim)

CONTRIBUTORS

- [GT-FL] Gerry Thomas, Pensacola FL; R-70, FRG-7, 200' LW
- [JR-NY] Jim Fedor, Brewerton NY; Radio West modified R-70, R390A, 1000' beverage SE/NW
- [CO-DR] César Objio, Santo Domingo, Dominican Republic; TRF & DX-400 (both portables)
- [RSM-MA] Raymond S. Moore, Walpole MA; Homebuilt receiver, 3' passive loop
- [JR-NY] Jim Renfrew, Rochester NY; HD-150, SM-1 space magnet, Sony ICF-2010 w/LW

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580-2455

RESTAURACION 66, SANTIAGO RODRIGUEZ

Frequency Deviations

Raymond F. Cole

Rt. 3, Box 304

Cape Girardeau, MO 63701-9543

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Observations of measured frequency deviations and associated activities

The learning process is continuing, but slowly, since I have had very little spare time.

There are six or seven, or more, known fault lines mapped out under and near the city of Cape Girardeau, MO, and many have branches. My location is about two miles west of the city.

Using phone contact, another man five miles northeast of me, on the same frequencies gets about a 50% correlation with my deviations. Still another five miles due east gets about 80% correlation. A third, five miles southeast gets very little correlation.

The latter, quite often, on the same frequency, gets a "plus" or higher frequency reading while I am getting a "minus" or lower frequency reading.

Long ago I concluded that a "plus" indicates pressure and a "minus" indicates tension. So he might be at a location that is then under pressure while my location is under tension.

Long ago a well equipped ham and I tried various types of directional antennas in an effort to locate sources of the deviation causing "sharp spike" signals - to no avail - and had to conclude that they were coming from the ground below.

Long ago a retired chemist with an R-2000 on an inactive fault in Wisconsin was finding deviations and began logging what he found - rarely to 1 Khz. He gave me copies of his loggings.

Long ago a friend, now deceased, found deviations in extreme eastern Ohio, near Wheeling, W. Va.

Long ago another friend found them near St. Louis.

Some others have found none - even with excellent equipment. So I can now only presume that they are not over or close to a fault - or that their fault does not contain the quartzitic granite found everywhere here.

In order to assess local quake risks based on deviations, it now seems obvious to me that several years of loggings must be done and then very carefully compared with tremor records for that period - and the results will not be applicable to another location, even five miles away.

But risk estimates here at my location based on four years of monitoring records have proven more than reasonably accurate as judged by the tremors and micro-tremors occurring here when risk estimates are high, and the lack of occurrence when they are low.

About thirty people locally have varying degrees of knowledge of these estimates and results. They are on my call list for when risks are high, at their individual requests.

The Challenging Crystal Set

For hobbyists demanding the ultimate DX challenge, Ray Cole's publication detailing step-by-step procedures in building a crystal set is for you! Only \$3.00 ... order from the Publications Center.

The Broadcaster's Guide to DX

A tri-fold guide for use with reception reports explaining DX'ing, how the NRC was formed, and the importance of QSL's to DX'ers. Versions also available in Spanish and French. US\$1.50 for 20. Available from NRC Publications.

The RTL-1 Remotely-Tuned Loop ... by Mark Connelly

The RTL-1 is a remotely-tunable balanced loop antenna system. The RTL-1 amplifier box accommodates Palomar Engineers loop heads as well as those of a homebrew design (ferrite or air core). The RTL-1's remote-tuning capability is compatible with the MWT-2 Option 5 being used as a controller. Refer to my MWT-2 Option 5 article dated 05 JUN 1991. The loop head / loop amplifier assembly may be placed a considerable distance (e. g. 100 ft. / 30 m.) from the controller / receiver "shack" position with little degradation of performance. Gain with the Palomar medium wave loop head is as good as, or better than, the gain when using Palomar's Loop Amplifier box with the same loop head.

A feature of the RTL-1 is modularization: when a better varactor-circuit, front end, or output amplifier card is designed, the card can replace its corresponding earlier-version "building block" without the need for a complete electrical or mechanical design overhaul. Such cards are under development by me, as well as by others such as Dallas Lankford. The RTL-1 can be customized for better dynamic range or higher sensitivity or lower power consumption by modifying individual subassemblies. The RTL-1's Balanced Front End (BFE-A) card, for instance, can be modified to a lower gain BFE-B, using guidelines similar to those in Dallas Lankford's loop amp. improvement articles. This would typically be done if using a higher gain loop head than the (rather inefficient) Palomar model. The BFE-A schematic is accompanied by a table indicating how to modify it to be the lower gain BFE-B. The current BFE-A design is a variation on the differential balanced amp. used by Sanserino et al. Grounded-gate FET designs and an overhauled version of a balanced front-end originally used by Jim Hagan will likely be swapped into the RTL-1 "test bed" for evaluation. Similarly, a varactor card resembling the circuit described by Denzil Wraight 25 JUL 1991 could be swapped for VAR-A to reduce instances of intermodulation distortion (IMD).

The frequency range covered by a given medium wave loop head can be extended upwards by enabling a relay in the RTL-1. This relay shunts (parallels) the loop head with 78 uH. A head that normally covers 500 to 1200 kHz can be tuned up to at least 1900 kHz with the relay enabled. As varactor diodes have a lower (maximum C / minimum C) ratio than an air variable capacitor has, use of the relay is sometimes necessary for full medium wave band coverage. Shunting the loop head in this manner reduces gain about 5 dB, but this "necessary evil" seldom makes the difference between hearing or not hearing a given DX signal.

As mentioned earlier, other heads besides the Palomar types may be employed. Drawings supplied with this article show use with a 15-inch ferrite rod loop similar to that used in late '70s era Radio West loops.

Because a remotely-sited loop is generally set up in one position and not constantly moved about for nulling, head tiltability (and critical balancing of the front-end card) is not nearly as important as on an in-shack loop. Tilting and rotating of Palomar heads is, of course, possible; mobility of larger heads is left up to the ingenuity of the builder. Besides the 15-inch rod "loop board" to be described in this article, other mechanically-compatible boards that can be attached to the RTL-1 box could incorporate, for instance, a 1-foot square air core loop.

An obvious question, at this point, would be "How can I null anything with a remotely-sited loop?" Short of employing tilting and rotating servo-motors (a project not for the faint of heart), nulls are most readily obtained by phasing the remote loop against a varactor-tuned whip or against a second remote loop. The ideal set-up would be two remote loops at right angles and a remote whip. The DXer could then pick the pair of remote antennae that would throw the stiffest null on the "pest" station while simultaneously passing the greatest amount of desired DX station signal. Remote loop versus remote whip phasing is done here regularly; it works quite well, providing

a nulling scheme better suited to DXing from "field" sites (beaches, etc.) than longwires that can get in the way of vehicular and pedestrian traffic. A subsequent article on a Dual Controller / Phaser for two remotely-tuned antennae will go into this subject more deeply.

Besides remote loop operation, the RTL-1 may be used for remote whip and remote longwire operation in areas without strong local stations. The Radio Shack 20-008 whip works well. Whip / wire operation is discussed in the following section on control usage.

RTL-1 Control Usage

Although the RTL-1 is a remotely-controlled antenna system in most respects, three switches and one potentiometer reside on the RTL-1 box. These controls are, in typical circumstances, rarely adjusted from the operator's "normal" set-ups. If necessary, the RTL-1 box could be overhauled for completely automated operation; of course this would require a considerable increase in the complexity of both the RTL-1 box and the controller unit (e. g. MWT-2 Option 5). This article does not address that scenario.

S1 (Function Switch): This switch selects one of the two operating modes: Loop or Whip / Wire. In the Loop mode, a loop head coil is plugged into RTL-1 J1. The signal across the tank circuit formed by this coil and the varactors on the VAR-A card is amplified by the BFE-A card in a balanced in / unbalanced out configuration. The BFE-A's output is given a further boost by the BBA-C broadband amplifier card. In the Whip / Wire mode, a whip installed at J2 or a longwire installed at J3 is coupled to a tank circuit comprised of the VAR-A card varactors and an inductor selected by bandswitch S2. The signal thus developed is amplified by the BFE-A and BBA-C cards in an unbalanced in / out configuration. J1 should not have a loop head coil plugged into it if the Whip / Wire operating mode has been selected. In situations where a longwire causes overload, R1 may be used.

S2 (Bandswitch): This switch selects one of the twelve frequency ranges by selecting an inductor to place in parallel with the capacitance developed by the VAR-A varactor card. S2 is only used when S1 has been set to the Whip / Wire mode. See Table 3 of this article for approximate frequency ranges.

S3 (Q Switch): This switch selects Normal Q or Low Q. Normal Q is generally used because it provides the best sensitivity and selectivity. Low Q may be usable in some phasing applications to ensure more thorough nulling of a "pest" station's sidebands as well as its carrier.

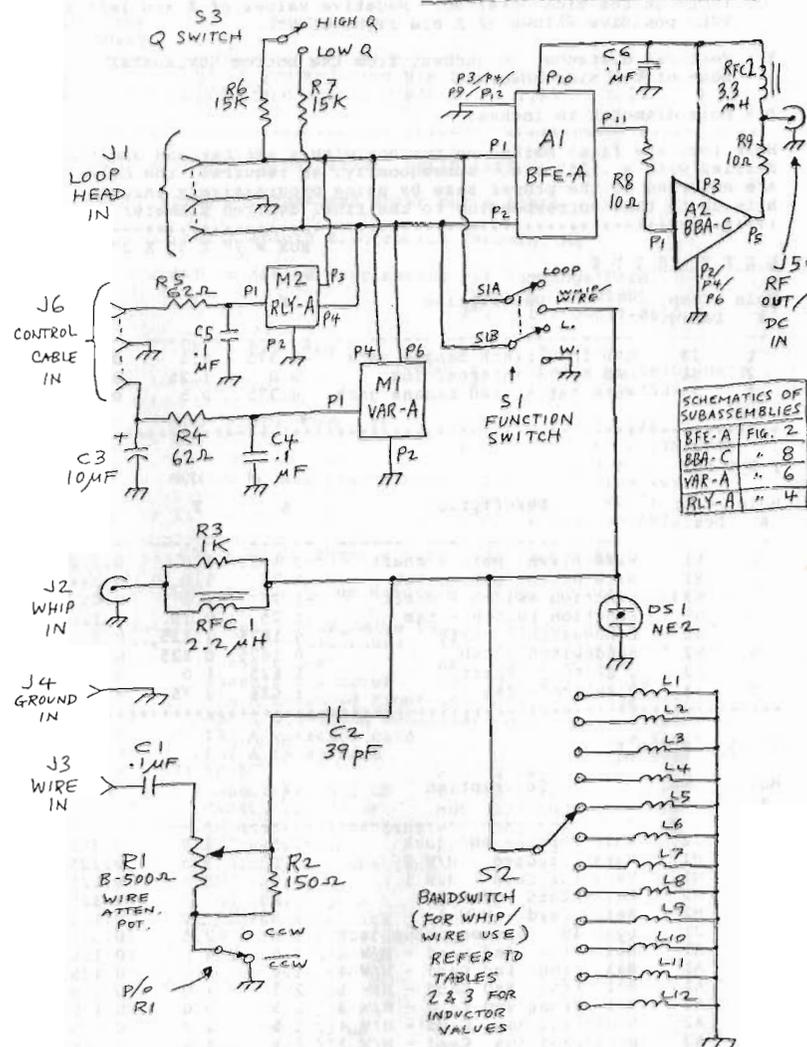
R1 (Wire Attenuator): When remotely-tuning a longwire aerial, use of this pot. may be necessary to prevent overloading of the RTL-1's amplifiers. This is likely to happen in urban areas. Set R1 so that wanted-frequency signals are at their best levels, consistent with the absence of objectionable spurious responses.

Building the RTL-1 Remotely Tuned Loop

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 parts lists to follow). Prepare work area with appropriate tools.
- Drill out chassis box, in accordance with Table 1.
- Assemble each of the four circuit card subassemblies - these are:
 - * BFE-A Balanced Front End Card (Fig's 2&3; Table 4)
 - * RLY-A Relay Card (Fig's 4&5; Table 6)
 - * VAR-A Varactor Card (Fig's 6&7; Table 7)
 - * BBA-C Broadband Amplifier Card (Fig's 8&9; Table 8)
- Mount each of the circuit cards at the hole locations noted in Table 1.

FIGURE 1

RTL-1 REMOTE LOOP
MAIN SCHEMATIC

5. Install jacks, pots, and switches. Solder inductors onto S1 per Figure 1 and Tables 2 & 3.

6. Install wiring and other components per Figures 1 and Tables 1 & 2. Install knobs on S1 and R1. Place labels near controls and jacks.

7. Connect controller (MWT-2 Option 5 or equivalent) to the RTL-1: control cable to J6, RF/power cable to J5. Connect controller output to the receiver.

8. Install Palomar medium wave loop head (or homebrew head - see appendix) at RTL-1 J1. The RTL-1 may now be tested and operated.

Table 1: RTL-1 hole-drilling list
 X = Horizontal distance, in inches, from the vertical centerline (VCL) 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.

Box = 7" X 5" X 3"

LEFT SIDE

Hole #	Comp. Desig.	Description	X	Y	D
1	J4	GND In - black banana jack	-0.375	0.5	0.3125
2	G1	GND H/W - internal lug	0.0	1.25	0.125
3	J3	Wire Ant. In-red banana jack	0.375	0.5	0.3125

FRONT SIDE

Hole #	Comp. Desig.	Description	X	Y	D
1	R1	Wire Atten. pot. - shaft	-2.0625	1.0	0.3125
2	R1	Wire Atten. pot. - tab	-1.75	1.0	0.144
3	S1	Function switch - shaft	-1.25	1.0	0.25
4	S1	Function switch - tab	-1.25	0.75	0.125
5	S2	Bandswitch - shaft	0.1875	1.125	0.375
6	S2	Bandswitch - tab	0.1875	0.625	0.144
7	S3	Q switch - shaft	1.625	1.0	0.25
8	S3	Q switch - tab	1.625	0.75	0.125

TOP SIDE

Hole #	Comp. Desig.	Description	X	Y	D
1	J2	Whip Input - BNC jack	-2.5	1.0	0.375
2	M1	Varactor Card - H/W 2	-2.0	3.5	0.125
3	M1	Varactor Card - H/W 1	-1.0	3.5	0.125
4	M2	Relay Card - H/W 2	-1.25	2.0	0.125
5	M2	Relay Card - H/W 1	-1.25	1.0	0.125
6	J1	Loop In. - stereo phone jack	0.0	2.5	0.375
7	A1	Bal. Front End Card - H/W 2	1.0	4.0	0.125
8	A1	Bal. Front End Card - H/W 4	1.0	3.0	0.125
9	A1	Bal. Front End Card - H/W 1	2.5	4.0	0.125
10	A1	Bal. Front End Card - H/W 3	2.5	3.0	0.125
11	A2	Broadband Amp. Card - H/W 4	1.5	2.0	0.125
12	A2	Broadband Amp. Card - H/W 3	1.5	1.0	0.125
13	A2	Broadband Amp. Card - H/W 2	2.5	2.0	0.125
14	A2	Broadband Amp. Card - H/W 1	2.5	1.0	0.125

RIGHT SIDE

Hole #	Comp. Desig.	Description	X	Y	D
1	G2	GND H/W - internal lug	0.0	1.125	0.125
2	J5	RF Out / DC In - BNC jack	0.0	0.5	0.375
3	J6	Control In-stereo phone jack	1.25	1.125	0.375

REAR SIDE

Hole #	Comp. Desig.	Description	X	Y	D
1	-	Loop Board mounting H/W 1	-2.25	1.25	0.25
2	-	Loop Board mounting H/W 2	2.25	1.25	0.25

Table 2: RTL-1 "upper level" parts list

Vendor codes for this and other parts lists:

- AB = Abbott Electronics /Woburn, MA
- ACT = Active Electronics /11 Cummings Park /Woburn, MA 01801 /Tel. 1-800-677-8899
- DK = Digi-Key /P. O. Box 677 /Thief River Falls, MN 56701-0677 /Tel. 1-800-344-4539
- MCL = Mini-Circuits / P. O. Box 350166 / Brooklyn, NY 11235-0003
- MOU = Mouser Electronics / 11433 Woodside Ave. / Santee, CA 92071 /Tel. 1-800-346-6873
- RS = Radio Shack / Many locations worldwide
- TVH = True-Value Hardware / Numerous USA locations

Item #	Designator	Description/Value	Vendor	Vendor Stock #	QTY
1	-	chassis box	AB	Bud # AC-429	1
2	-	chassis box cover	AB	Bud # BPA-1589	1
3	A1	BFE-A balanced front-end card		(see Table 4)	
4	A2	BBA-C broadband amplifier card		(see Table 8)	
5	M1	VAR-A varactor card		(see Table 7)	
6	M2	RLY-A relay card		(see Table 6)	
7	(for R1, S2)	knob	MOU	45KN013	2
8	C1,C4,C5,C6	capacitor, 0.1 uF	RS	272-109	4
9	C2	capacitor, 39 pF	MOU	232-1000-039	1
10	C3	capacitor, 10uF tant.	MOU	581-10M35	1
11	DS1	NE2 neon bulb	RS	272-1101	1
12	J1,J6	stereo headphone jack	RS	272-312	2
13	J2,J5	BNC jack	RS	278-105	2
14	J3	red banana jack	RS	274-662	1
15	J4	black banana jack	RS	274-662	1
16	L1	inductor, 10000 uH	MOU	434-1120-104K	1
17	L2	inductor, 3900 uH	MOU	434-1120-393K	1
18	L3	inductor, 1500 uH	MOU	434-1120-153K	1
19	L4	inductor, 560 uH	MOU	43LR564	1
20	L5	inductor, 220 uH	MOU	43LR224	1
21	L6	inductor, 82 uH	MOU	43LR825	1
22	L7	inductor, 33 uH	MOU	43LR335	1
23	L8	inductor, 12 uH	MOU	43LR125	1
24	L9	inductor, 4.7 uH	MOU	43LR476	1
25	L10	inductor, 1.8 uH	MOU	43LQ186	1
26	L11	inductor, 0.68 uH	MOU	43LR687	1
27	L12	inductor, 0.27 uH	DK	M8006	1
28	R1	pot., 500 ohm, linear	MOU	31CT205	1
29	R2	resistor, 150 ohm	RS	271-013	1
30	R3	resistor, 1K	RS	271-1321	1
31	R4,R5	resistor, 62 ohm	MOU	29SJ500-62	2
32	R6,R7	resistor, 15K	RS	271-1337	2
33	R8,R9	resistor, 10 ohm	RS	271-001	2
34	RFC1	inductor, 2.2 uH	MOU	43LR226	1
35	RFC2	inductor, 3300 uH	MOU	43LR233	1
36	S1	switch, DPDT, on-on	RS	275-614	1
37	S2	switch, 1pole/12pos. rotary	MOU	10WW112	1
38	S3	switch, SPDT, on-on	RS	275-662	1

Small hardware items (for A1, A2, G1, G2, M1, M2)

39	-	screw, 4-40 X .25"	MOU	572-01880	14
40	-	split lockwasher, #4	MOU	572-00649	12
41	-	solder lug, #4	MOU	534-7311	2
42	-	hex nut, 4-40	MOU	572-00486	2

Small hardware items (for mounting loop-holding boards)

Refer to Figures 10 and 11. These are "local hardware store" items. Comparable metric hardware may be substituted.

43	-	screw, 1/4-20X1.5"	TVH or Sears	2
44	-	split lockwasher, 1/4-20	TVH or Sears	2
45	-	flat washer, 1/4-20	TVH or Sears	2
46	-	hex nut, 1/4-20	TVH or Sears	4

Table 3: S2 frequency ranges (Whip / Wire operation)
(Ranges are usually a bit greater than those shown.)

S2 Position #	S2 Knob Pointer "o'clock"	Min. Freq. kHz	Max. Freq. kHz	Tank Inductor Values #	uH
1	6:00	90	140	L1	10000
2	7:00	135	180	L2	3900
3	8:00	165	230	L3	1500
4	9:00	200	340	L4	560
5	10:00	300	530	L5	220
6	11:00	400	800	L6	82
7	12:00	520	1300	L7	33
8	1:00	900	2100	L8	12
9	2:00	1400	3600	L9	4.7
10	3:00	2000	5000	L10	1.8
11	4:00	3500	8700	L11	0.68
12	5:00	4800	12000	L12	0.27

BFE-A (/BFE-B) Balanced Front-End Card
(refer to Fig's 2 & 3; Tables 4 & 5)

The input section (comprised of Q1, Q2, and ancillary components) converts the high-impedance balanced tank-circuit signal at P1 & P2 to a medium impedance unbalanced signal at P5 / P7. This signal is passed to the output section (Q3, T1, and other components) that acts to produce an output at P11 capable of driving loads in the 50 to 100 ohm range. DC power, applied at P10, is filtered by R7, C2, C3, R6, and C1.

Table 4: (A1) BFE-A balanced front-end card parts list
See Table 2 for vendor codes.

Item #	Designator	Description/Value	Vendor	Vendor Stock #	QTY
1	BD	perfboard(1.9"X1.4")	RS	276-1396 (cut)	1
2	C1, C4, C5, C6	capacitor, 0.1 uF	RS	272-109	4
3	C2	capacitor, 10uF tant.	MOU	581-10M35	1
4	C3	capacitor, 0.001 uF	RS	272-126	1
5	H1, H2, H3, H4	screw, 4-40 X .25"	MOU	572-01880	4
6	H1, H2, H3, H4	spacer, 4-40 X .5"	MOU	534-1450C	4
7	H1, H2, H3	split lockwasher, #4	MOU	572-00649	3
8	H4	solder lug, #4	MOU	534-7311	1
9	P1-P12	flea-clip for .042 hole	MOU	574-T42-1/100	12
10	Q1, Q2, Q3	FET, MPF102	RS	276-2062	3
11	R1, R2	resistor, 1 megohm	RS	271-1356	2
12	R3, R10	resistor, 1.2K	RS	271-024	2
13	R4, R5	resistor, 2.2K	RS	271-1325	2
14	R6, R7, R11	resistor, 5.1 ohm	MOU	29SJ500-5.1	3
15	R8, R9	resistor, 330K	MOU	29SJ250-330K	2
16	T1	RF transformer 9:1	MCL	T9-1-X65	1
17	W	buss wire	RS	278-1341	approx. 1'

FIGURE 2: BFE-A (BALANCED FRONT END CARD) SCHEMATIC

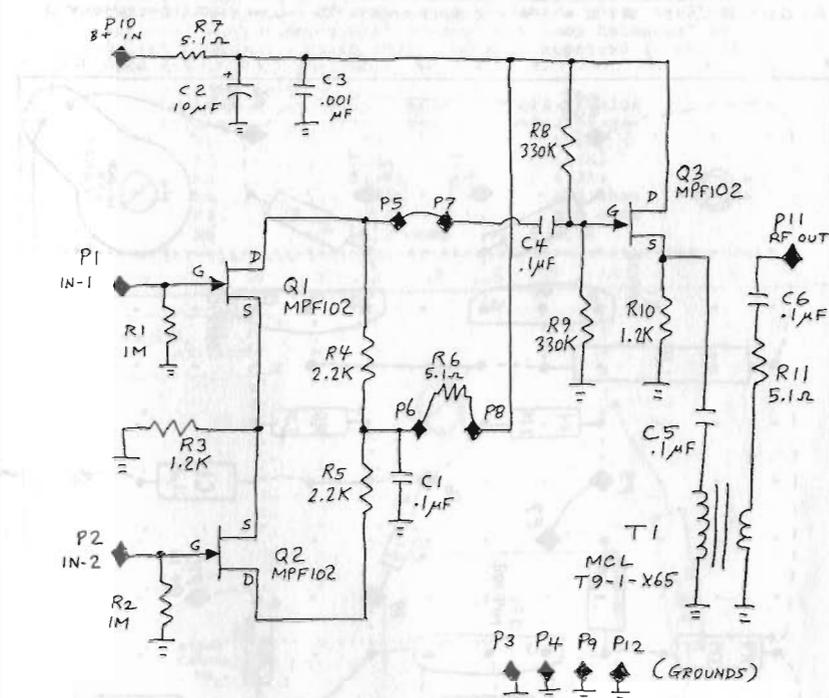
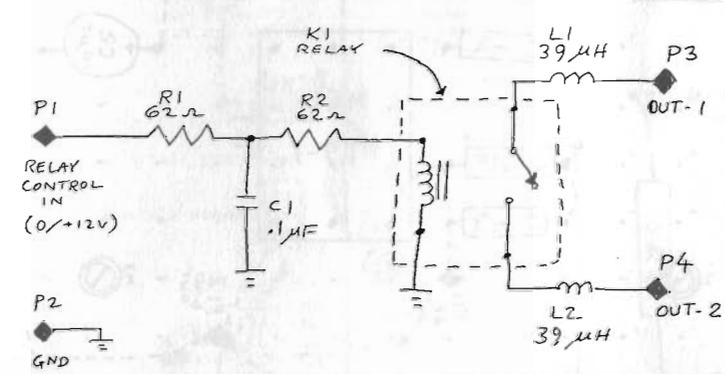


FIGURE 4 RLY-A RELAY CARD SCHEMATIC

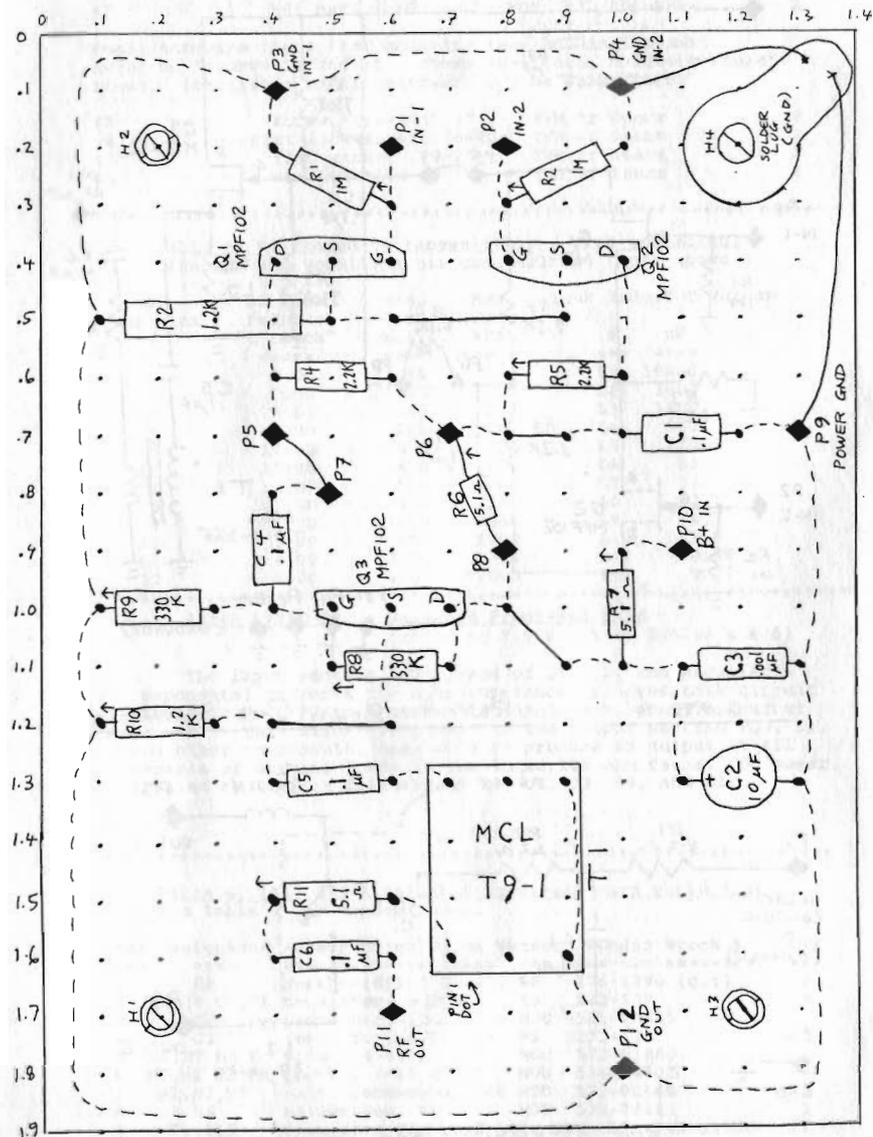


FOR ASSEMBLY, SEE FIGURE 5.
FOR PARTS LIST, SEE TABLE 6.

The Answer Man

Got a question about radio? Send it to NRC's Answer Man: 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!

FIGURE 3: BFE - A COMPONENTS LAYOUT (ASSEMBLY)



RLY-A Relay Card
(refer to Fig's 4 & 5; Table 6)

RLY-A applies, via relay K1, two 39 uH inductors - total inductance 78 uH - across the loop head (if in the Loop operating mode) or across the S2-selected inductor (if in the Whip / Wire operating mode). Disabling the relay removes this shunt inductance. The purpose of this circuit is to extend the frequency range of medium-wave loop heads upwards to provide full band coverage. It can do the same for Whip / Wire medium-wave operation when S2 is set to the 220 uH (L5) or 82 uH (L6) position.

Table 5: Modifying the BFE-A card to be a lower gain BFE-B (Of possible value if large loop heads are used: see the article "What's Wrong with Present-Day Loop Antennas" by Dallas Lankford - March 1991. Article appeared in NRC DX News and IRCA DX Monitor.)

Component	BFE-A value	BFE-B value
R1	1M	100K
R2	1M	100K
R3	1.2K	4.7K
R4	2.2K	470 ohms
R5	2.2K	470 ohms
R6	5.1 ohms	4.7K

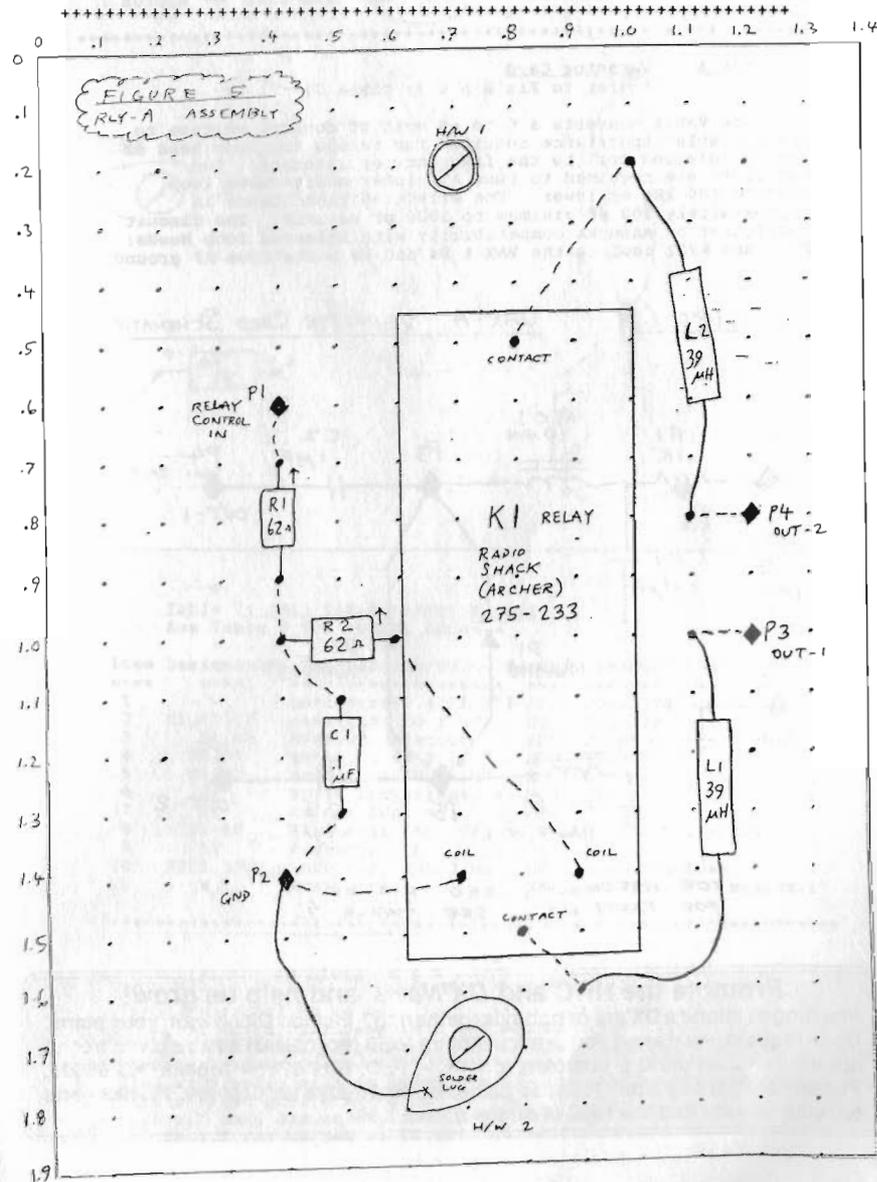


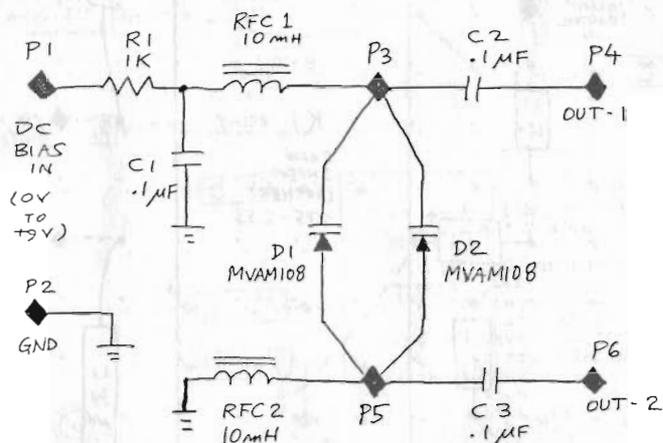
Table 6: (M2) RLY-A relay card
See Table 2 for vendor codes.

Item	Designator	Description/Value	Vendor	Vendor Stock #	QTY
1	-	perfboard(1.9"X1.4")	RS	276-1396 (cut)	1
2	C1	capacitor, 0.1 uF	RS	272-109	1
3	H1,H2	screw, 4-40 X .25"	MOU	572-01880	2
4	H1,H2	spacer, 4-40 X .5"	MOU	534-1450C	2
5	H1	split lockwasher, #4	MOU	572-00649	1
6	H1	solder lug, #4	MOU	534-7311	1
7	K1	relay (12V)	RS	275-233	1
8	L1,L2	inductor, 39 uH	MOU	43LS395	2
9	P1,P2,P3,P4	flea-clip for .042 hole	MOU	574-T42-1/100	4
10	R1,R2	resistor, 62 ohm	MOU	29SJ500-62	2
11	W	buss wire	RS	278-1341	approx.1'

VAR-A Varactor Card
(refer to Fig's 6 & 7; Table 7)

The VAR-A converts a 0 to +9 volt DC control voltage to the variable capacitance required for tuning the loop head or the S2-selected coil to the frequency of interest. Two varactors are required to tune a Palomar medium-wave loop head to 500 kHz or lower. The effective capacitance is approximately 100 pF minimum to 1000 pF maximum. The circuit configuration ensures compatibility with balanced loop heads: RFC1 and RFC2 isolate the VAR-A P4 and P6 ports from RF ground.

FIGURE 6 VAR-A VARACTOR CARD SCHEMATIC



FOR ASSEMBLY, SEE FIGURE 7.
FOR PARTS LIST, SEE TABLE 7.

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FIGURE 7

VAR-A VARACTOR CARD SUBASSEMBLY

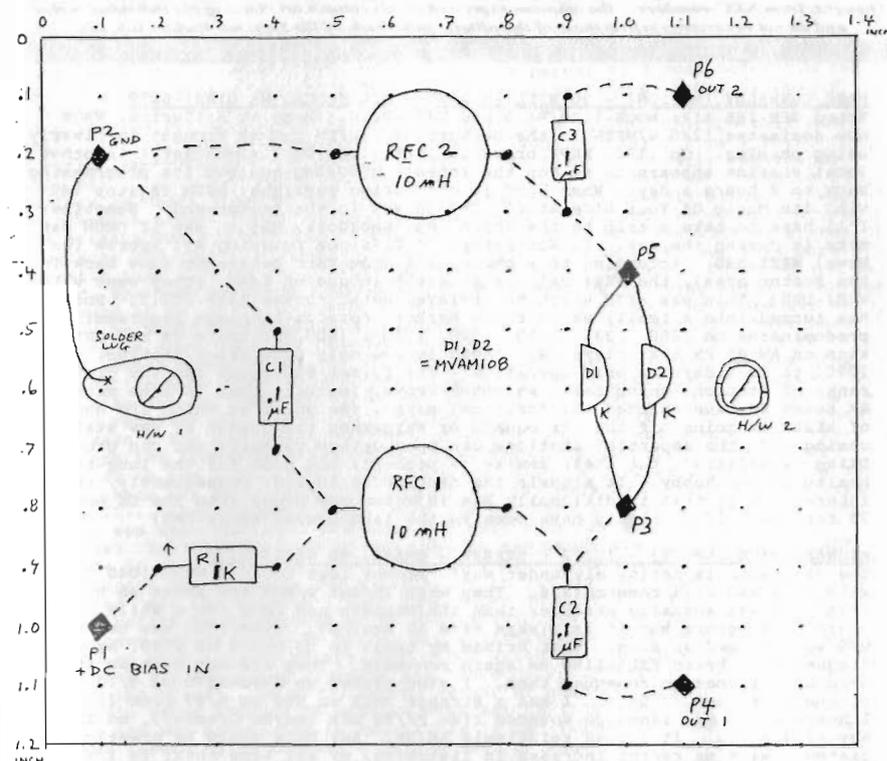


Table 7: (M1) VAR-A varactor card
See Table 2 for vendor codes.

Item	Designator	Description/Value	Vendor	Vendor Stock #	QTY
1	-	perfboard(1.4"X1.2")	RS	276-1396 (cut)	1
2	C1,C2,C3	capacitor, 0.1 uF	RS	272-109	3
3	D1,D2	MVAM108 varactor	ACT	2 10MOR	2
4	H1,H2	screw, 4-40 X .25"	MOU	572-01880	2
5	H1,H2	spacer, 4-40 X .5"	MOU	534-1450C	2
6	H1	split lockwasher, #4	MOU	572-00649	1
7	H1	solder lug, #4	MOU	534-7311	1
8	P1-P6	flea-clip for .042 hole	MOU	574-T42-1/100	6
9	R1	resistor, 1K	RS	271-1321	1
10	RFC1,RFC2	inductor, 10000 uH	MOU	434-1120-104K	2
11	W	buss wire	RS	278-1341	approx.1'

(Continued in next issue)

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Mail \$1.00 to NRC Publications - P. O. Box 164 - Mannsville, NY 13661-0164; ask for the Reprints Catalog.

Musings

of the Members

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.

Dave Schmidt

P. O. Box 11502

Wilmington, DE 19850-1502

Times are local per Muse.

MARK CONNELLY (WALTON) - 30 WILLIAM ROAD - BILLERICA, MA 01821-6079

Noted OFF THE AIR: WOCB-1240/94.9 and WJCC-1170. Here at Billerica, WWON now dominates 1240 w/WFTN in the background. WFTN can be brought in clearly using phasing. On 1170, WRPE prevails (with its 104.7 simulcast). Another local station appears to be "on the ropes", WLVG-740 has cut its programming back to 8 hours a day. When WLVG is off during daylight, WGSM is atop 740 with its Music Of Your Life stuff, CBL is way in the background. Sometime, I'll have to take a trip to the shore (eg: Rockport, MA) to see if CHCM can make it during the day. In Worcester, 1440 is now relaying All Sports (ex All News) WEEL-590. According to a phone call from Marc DeLorenzo (now back in the Boston area), the WZEI call is possibly in use on 1440. (They went with WVEI-DWS) This was WFTQ which had relayed metal rocker WAAP-107.3. Boston has turned into a really wacko radio market, foreign-language programming predominates on 1060, 1330, 1360, 1510, 1550 & 1600 but there is not ONE station on AM OR FM that plays CW! There is one only true black station, WILD-1090; it is a daytime only operation. The format weirdness and the growing ranks of stations going dark, as noted above, indicate that in some markets AM seems to have reached its 'critical mass', the point at which the number of stations going off the air equals or surpasses the number of new stations coming on. The departing stations can open up new channels and can provide DXing 'windfalls', but their demise is probably not good for the long-term health of the hobby. It signals the decline of AM and, consequently, the interest in it that traditionally has injected new blood into the DX hobby. 73 for now. (This should have been in the last issue, sorry-DWS)

MICHAEL HAWK (NØOSY) - 10212 P STREET - OMAHA, NE 68127-2130

The DX season is definitely under way! Recent logs include WHBO-1040 on 9/6 with ID's and area commercials. They were in/out w/WHO for about an hour. KMTA-1050 was actually stronger than the Mexican and CHUM for a while. I have heard them before but it is always nice to hear MT. WEAM-1580 was heard on 9/9 w/a chopped up s/on. That brings my total to 34 heard on 1580, my best frequency. I heard KJLA-1190 on again recently. They did not seem as strong here as I seemed to remember them. I also picked up KMYZ-1570 on 9/10 w/wx, ID and mentioned //104.5. I had a strange UNID on 990 on 8/27 from 2300-2315. I heard a strange language-sounded like FF/EE mix (maybe Creole?), no ID's of any kind heard. It looped relatively SE/NW. Any help would be greatly appreciated. With my recent increase in listening, my all time total is 1386 w/call changes, 1341 without. No veries have been received lately, which is probably because I haven't sent any reports in 2½ months. I hope everyone had fun at the convention. I called Ernie W. when he got back and it sounded like it was a success. Sorry I couldn't make it but if next years is relatively nearby, I should be able to get there. I also called Curne Chadwick and enjoyed a nice talk. That is all for now, 73's.

GEORGE MCLACHLAN - 207-1778 HENDERSON HIGHWAY - WINNIPEG, MB R2G-3T6

This first Musings has been prompted by the interest in the Drake R8. I've had a chance (and will have further opportunities) to use one and to make some comparisons with the MRD 535 and, for reference, an R7. So far there is no clear winner or loser, each has some good points and some not so good. MW performance seemed pretty much a toss up as far as I could tell but conditions haven't been what I would have liked and there weren't that many opportunities for interesting comparisons. I suspect that differences will only become apparent over time. In terms operating convenience either is better than the R7 but that was expected. The R8 has its well publicized quirks (like defaulting to questionable defaults like slow AGC at every opportunity) but the 535 has problems too. Memory management is poor and there is but one VFO. You can use the SWEEP limits for A/B comparisons but a dedicated A/B switch like just about everyone else, including the R8, has would be nice. Both run on 12 volts and while the specs for each say 2 amps, there is more that may be of interest to those who have to haul a battery. For comparison the R7 draws up to 1850 ma and an Icom R70 about 750. The 535 runs about 1300, 560 in the 'timer' mode and 3 ma (to run the clock) when 'off'. The R8 takes 1500 with its dial lights on bright, 1300 with them dimmed and 1050 with them off. The real surprise is the turning the R8 off (with the POWER switch) cuts power consumption to only 900 ma! Apparently 'off' for the R8 is like 'standby' or 'timer' on others - just about everything is kept running. A 3 position ON-OFF-TIMER switch like the others including the 535 have, would have been nice

but its becoming clear that you can't have everything. A conspiracy? Anyway, people with limited battery power may want to consider pulling the plug instead of just pushing the power button. You loose only the time of day, other settings are retained as much as they ever are with the R8. (Thanks for your report, George, and welcome to Musings! Report again soon!-DWS)

KARL JETER - 2115 SCARBROUGH ROAD - STONE MOUNTAIN, GA 30088

As I mailed in my renewal to begin my 19th year in the NRC, I thought a re-intro might be in order. I'm 38, am a single parent to 7 year old Kevin and self employed with a small engineering/drafting service at home. I really got started DXing seriously in 1969 while in high school in Conover, NC and also started collecting veries, the first being WCFL-1000 Chicago that same year. I first heard of the NRC, as many a fledgling DXer did back then, from a verie from WDEL-1150, signed by Joseph Jones (that 1970 verie remains my only DE!). However, I did not actually join until the fall of '73 while in college in Carrollton, GA and have been a member continuously since. I was the reprint-order-filler for many years (about 77-87) and the co-host of the '78 Atlanta NRC convention. My current totals are 1841/1446 with 44 states, 6 provinces and about 21 countries verified (it's probably obvious I am more a domestic than foreign DXer). By the way, I finally contacted Chuck Hutton in Madrid, Spain by telephone at his job back in May, he is doing well. I am not even sure if he is still a member nor if he is even DXing over there but he did say he would be back stateside for the holidays. Recently, I have been noticing an annoying 'buzz' during the evening/night whenever I tried to DX, and of course began to blame it all on the apartments that are now standing where my 'antenna farm' used to be. The noise would pretty much disappear during the day. I began an investigation and the first thing I did was get a battery receiver and turn off the main power to the house - the buzz stopped! So it wasn't the apartments but several night-lights I had bought recently. These are the type with a photo-cell that automatically turns them on/off, depending on the light. If anyone else is having a similar problem, look to see if there are any "Goodnight Lights" in use, made by Intermatic of Spring Grove, IL...then unplug them! (Send the FCC one, tell them about the problem and see what they do. But have you ever seen the spurs a "Touch Lamp" puts out? You have to look at the lamp to see where the "audio input" jack is since it puts out a carrier, in about 6 places on the dial-DWS) Not much DX to report but at least one super catch to get the DX season off to a good start and 'wet the whistle', KOKK-1210 noted on 9/25 6:58 AM w/ID and CW music just before being covered up by WSBI Static, TN (love that name-hi!) s/on. I have been trying every AM since, got a little more on 9/26 6:47 AM, I may have to go with a taped report. Only other worth mentioning was WHMT-1190 9/25 10:37-11PM w/WORO null'd w/oldies and 'Pure Gold 1190' ID's. Is this a new programming trend...on 9/27, tuning around at about 6:30PM, I was puzzled to hear audio of an Atlanta TV station newscast on 1100 khz. Curious, I stayed with it and was astonished to hear "This is Don Farmer (a local news anchor) and your listening to Channel 2 Action News on Country 11, WLBB". Now we have TV/radio simulcasts? (Yes, sure is, lots of that going on thru NC-DWS) Just received the new 1992 NRC AM LOG and it looks great! The type style is much easier to read than the last edition. Time to do some work so that will do it for now, 73's.

DAVE SCHMIDT - P O BOX 11502 - WILMINGTON, DE 19850-1502

Here's a shocker, the column is going out EARLY this time, and I hope to keep it that way. Again, please DOUBLE SPACE your reports, especially if your using a computer printer that likes to shrink things, my eyeballs start doing weird things! A little DX was done in the last few weeks with that going to Mr. Hale. In the next few issues of DX NEWS, lets start up some theme type Musings, like those using tube equipment (HQ180's, R390's, et al), those who have been with the NRC for 25 years (a reunion of types, say for those joining in 1963-64-65 era), a past editors issue, reintros, etc. Once I get the issue deadlines, we'll set it up. We'll even set up a date/issue dedicated to those who have heard and verified WRJM-1450! And to those who tried to find WNRG-640 at the past conventions! The sky is the limit on these! One more note, 1300-Baltimore is now WJFK, simulcast of WJFK-Washington, common ownership (Infinity). WLIP is still available via 101.9, I believe the AM was off a few days at the end of September while the change was being made. Do we still have any active members in and around the Baltimore area? 73's

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