



DX NEWS

*the magazine of the
National Radio Club*
— SINCE 1933 —

VOLUME 44: NO. 14

7 FEBRUARY 1977

Add to the list of people to whom logs were mailed and not received: Kramer, Clemmer, Pejše, Adelman, Lobel. As with the prior bunch, we have mailed a replacement copy of the Log from Mannsville, NY, via First Class Mail prior to the mailing of this bulletin. Therefore, they should arrive at about the same time. We apologise for all of this aggravation, which, we assure you is also aggravating to us. Contrary to some of the less polite notes we've received, mostly from non-members, gratefully, we do not intend, and never did, for there to be any delays initially, nor did we plan not to send Logs at all.

We have investigated the matter through the local postmaster here, who says that we would not be able to trace missing material unless they were certified, insured, or registered, and even then they guarantee nothing. It is highly likely that the increased early use of the mails in late November and early December due to the increased volume which would have normally gone UPS but for the strike caused these losses. Again, we ask that you NOT blame the Publications Center. In fact, the whole mess came about because HQ, rather than the Pub Ctr., had to ultimately deal with this. If your original log does come straggling in, and you also receive a replacement, return the 2nd copy to Ken Chatterton, RD #1, Mannsville, NY 13661, and we will refund your postage for doing so. As there should be no major tie-ups, and there is no need for speed, please send them book rate.

ON THE INSIDE.....

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NEW MEMBERS

- * Thomas L. Miller, Jr., P.O. Box 22, Lisle, IL 60535
- * John Winslow, 1106 Shasta Dr., Madison, WI 53704
- * Tex Stout, 9720 Thor Ave., Louisville, KY 40229
- * John Bronke, P.O. Box 86, Montville, NJ 07045

RENEWALS

T. Williamson, E. Morgan, J. Redovich, M. Hogan, M. Dince, M. McKenna, L. Pods, E. Moore.

NOTES &c FROM NJPC

Issue #12 was mailed on Tuesday instead of Monday as DXED didn't arrive until Thursday previous. Issue #13 smaller than normal due to lack of copy. PLEASE NOTE per publishing asked in last issue, that there WILL BE NO SLIP IN FEBRUARY this time!

The latest edition of the NRC Ham Ops list is now available. All those who sent an SASE for a copy should have received them. All others wanting one, send an SASE to HQ.

THE WORLD'S OLDEST AND LARGEST ALL MEDIUM-WAVE DX CLUB

SUNDAY	FEB.	13	- 0200-0300	* WNRI-1380	* Woonsocket, R.I.	1000	D	NRC
MONDAY		14	- 0000-0030	* WKXO-1500	* Berea, KY	250	D	NRC
			- 0100-0230	* WIVS- 850	* Crystal Lake, IL	500	D	NRC
MONDAY		21	- 0200-0300	* WDUZ-1400	* Green Bay, WI	1000/250	U	NNRC
			- 0230-0300	* KYMN-1080	* Northfield, MN	1000	D	NRC
MONDAY		28	- 0200-0400	* KAAA-1230	* Kingman, AZ	1000/250	U	NRC
MONDAY	MAR.	07	- 0200-0300	* WCFM-1430	* Ottawa, IL	500	U	GWDXA
SUNDAY		13	- 0200-0400	* CJGX- 940	* Yorkton, SA	10000	U	CJGX
MONDAY		14	- 0630-0655	* WOI - 640	* Ames, IA	5000	L	IRCA
MONDAY		21	- 0200-0300	* WIGM-1490	* Medford, WI	1000/250	U	NNRC

(please note that the NNRC-originated TESTS above may not appear. Most NNRC TESTS of the past few seasons have not.)

DETAILS:

- WNRI - TT, Code & voice IDs. Special mx. V/s: Craig Healy, 786 Diamond Hill Rd., 02895. Arr: RJE & Craig Healy.
- WKXO - 1 kHz. TT, code IDs, special mx. V/s: Chris Bobbitt, 322 Forest St., 40403. Arr: Bobbitt. (Test may run later - if not hrd at 0000, try again!)
- WIVS - Classical & organ mx. Voice & code IDs. Prepaid calls at (815)-459-7002 or (312)-782-7644. V/s: Art Reis, CE, 145 Victoria St., 60014. Arr: G. Semko.
- WDUZ - Code IDs. No other details. V/s: Steve Konopka, CE, Box 36, 54305. Arr: G. Davis III.
- KYMN - No pgm. details. V/s: Mike Wrubel, Op. Mgr., Box 201, 55057. Arr: N. Zank.
- KAAA - Full 1 kw on PoP, march mx, 700 Hz. code IDs. V/s: Lyle C. Henry (K700), CE 2534 Margaret St., 86401. Arr: RJE

Re WKXO above, ERC has requested that they run later to avoid QRM from WDEE/KSTP.

NOTES &c FROM NJPC

Charles Taylor has asked us to announce that the NERDS (Neptown Electromagnetic Radiation DX Society) will hold a pre-convention regional gettogether at his home at 936 N. Temple Ave., Indianapolis, 46201, on Feb. 26, 0700-2200 EST. All area DX'ers are invited. Prepayment of \$1 requested to help cover refreshments. Call (317)-635-2164 daily 2000-2200 EST for info.

UMDX (University of Manitoba DX Club) is offering a novel set of tapes to teach DX oriented Spanish. It is designed by DX'ers for DX'ers. Available on reel-to-reel at 3 3/4 or 7 1/2 ips, or on cassette. Please remit via Canadian funds or postal money order only. Reel tapes \$4 via parcel post, \$5 via air mail; cassettes \$4 via first class mail. Order from: Spanish Tapes, UMDX Club, Box 131, University Centre, Univ. of Manitoba, Winnipeg, Manitoba, CANADA R3T 2N2. Requests for info should be accompanied by an SASE.

RADIO NEDERLAND'S DX JUKE BOX program will initiate a seminar by Jim Vastenhoude on "Communications Systems", dealing with the ways different countries use the radio spectrum. Four lessons per set, starting 4/7/77. Info from: DX Juke Box, Radio Nederland, P.O. Box 222, Hilversum, HOLLAND.

Phone 703-354-2135 Before 2200 ELT * All Times Are GMT * Deadlines Are Friday *

New stations, changes, skeds, etc.

AUSTRALIA New stations and changes projected for 1977:

- 560 -2.. Tomerong, NSW, 1000 watts directional, ABC network
- 710 -2.. Campbelltown Community Radio Committee granted a limited commercial license, 500 watts non-directional
- 800 -2.. Moruya, NSW, 1000 watt ABC with directional antenna
- 950 -4.. Thursday Island, Northern Queensland, ABC, 2000 watt, non-directional
- 960 -2MW Murwillumbah to move here from 970 and increase power to 5000 watts
- 1030 -4MK Mackay to move here from 1380 and increase power to 5000 watts
- 1160 -7FG Fingal (St. Marys), Tasmania, 1000 watt directional, ABC
- 1240 -5AU Port Augusta moving here from 1450
- 1320 -2.. Wollongong, NSW 5000 watt commercial here with directional antenna. Along w/the 1350 listing, this license held up by a court writ action.
- 1350 -2.. Northwest Sydney, 5000 watt commercial w/directional antenna
- 1380 -2LT Lithgow to move here from 1370 and increase power to 5000 watts
- 1390 -4LM Mount Isa to move here from 1370
- 1530 -8AL Alice Springs to move here from 1380 and increase power to 2000 watts
- 1570 -7SH St. Helena, Tasmania, 100 watt non-directional, ABC (NZDXL)

CZECHOSLOVAKIA The new 1500 kw unit on 638 khz is on the air and being hrd in Sweden days with good signals. (Ericson)

IRAN Arbadil is now on 1313 khz, ex-1340. (MWC)

INTERNATIONAL WATERS The Mi Amigo/Caroline situation is as follows: on 1562 khz, R. Mi Amigo only from 0500-1800 in Dutch. On 1187 khz, R. Caroline, mostly 24 hours in English. (Ericson)

LIBYA The Mebo 2 was due to sail in early December to off the Libyan coast to broadcast Quadaffi propaganda. (MWC)

MOROCCO Casablanca is now on 1457 khz, ex-1484. (MWC)

ROMANIA R. Bucarest is to have a new 2000 kw transmitter on 539 khz. (MWC)

SUDAN Got a letter from Jim Johnson (W4JBZ). He's working on building a directional antenna in Sudan. 200 kw on 693 khz, no start date known. I don't have any more info, but he'll be on as ST2JJ/ø on 14207 khz from 11:30 PM to 1 AM daily. (Fox)

YUGOSLAVIA R. Belgrade on 683 khz is to have a total combined transmitter power of 3000 kw, making it the highest power in the world. (MWC)

Now, whats been heard.

- 529 -ALGERIA Ain Beida fair w/m in AA, 0534 1/23. (Connelly) // (Powis)
- 535 -GRENADA (Tentative) St. Georges. Weak to fair sigs w/m EE ancr, 0215 1/20.
- 539 -LIBYA Tripoli briefly good, w/AA f vocal, e/SAH, 0535 1/23. (Connelly)
- 540 -MEXICO XOMA San Luis Potosi, HLP 0240 on 11/18. (Hathaway)
- 545 -DOMINICA R. Jumbo IDs, Bongo mx, m FF ancr, strong sigs, 0145 1/20. (Powis)*
- OC 0950 till 1000 s/on w/local mx. (Hathaway)
- 548 -ALGERIA Oran fair (below normal though) w/f chanting, 2250 1/21. Good w/f AA chant, 0212 1/23. W/loud carrier but weak modulation! 0536 1/23. (Connelly)
- 550 -CUBA CMCY Havana 1/14 0545 fair, showing up lately, how much TNT to clear?
- 555 -ST KITTS Has anyone hrd this one lately? Absent the last couple (Rychalaky) of times I've checked despite strong sigs from 545, 595, etc. (ED)
- 590 -CUBA CMW Havana 1/24 0814 w/m/ancr and Cuban mx. ID R. Habana Cuba at 0825. R. Rebelde chimes and full ID at 0828. Atop channel most of the time. (Lobel)
- 600 -CUBA CMKV San German 0737 on 11/20. (Hathaway) // (Wilkinson)
- 625 -UNID Mystery - SS stn playing Latin and US recordings from 1111-1130 on 1/24. M/ancr saying "Atencion...Atencion.." several times, especially good at 1112.
- 630 -CUBA CMHQ Santa Clara 0745 12/20. (Hathaway)
- 638 -SPAIN La Coruña poor/fair, m in SS, slopped by pest WRKO 2252 1/21. Fair w/rock 0540 1/23. Heting CBN on car radio at 2015 1/23. (Connelly)

- 640 -GUADELOUPE Pointe-a-Pitre atop low growl from YVHQ/CBN; FF talk followed by Sinatra record, 2327 1/24. (Connolly)
- 647 -GUATEMALA TVM Guatemala City atop Cuban from 1131-1137 on 1/24 playing fine mariacha selections. KFI off at this time. (Wilkinson)
- 690 -ENGLAND Daventry absolutely blasting in on car radio on drive home from work EE talk, then cl ex, 2155 1/21. (Connolly) (Wilkinson)
- 690 -USSR Asiatic Russian w/fine volume fa 1156-1201 1/24. Usual ID at 1200.
- 705 -CUBA Havana 1/4 XL ex at 0600 w/R. Enciclopedia trash. (Rychalsky)
- 705 -HONDURAS Taped the a/off of HRAM 1/13 at 0303 w/calls, republia Honduras, Ided as ...Atlantico and LV de not Olancha. How is this LV de Olancha? Never seen their calls mentioned. (Hutton)
- 719 -PORTUGAL Norte fading up out of alop to good level 2255 1/21. (Connolly)
- 720 -CUBA Havana 1/4 0550 fair. So what else is new? (Rychalsky)
- 725 -COSTA RICA TILI San Jose R. Columbia ex at 0409 on 12/5. (Hathaway)
- 730 -SURINAM Paramaribo SRS strong w/a in non-European lang, 2257 1/21. (Connolly)
- 730 -MEXICO XEX recorded 1/13 far better than CFAC ever was (off?) (CFAC is on 960, ED). Many IDs, XEX and R, Mexicana. ID at 0558 and not 0600. (Rychalsky)
- 737 -SPAIN Barcelona audible w/rock, 0007 1/22. Good 0213 1/23. (Connolly)
- 743 -UNID Extremely strong bet on hi side of GRL on 1/19. No audio. The pitch of het said this was the frequency. (Hayes)
- 750 -JAPAN JOIB Sapporo 1/24 1220 w/JJ ex u/HJEM in SS. (Lobel)
- 750 -NICARAGUA YXK Managua v/ loud w/mx flashes fa 1202-1207 1/24. Frequent mention of Managua and Nicaragua. (Wilkinson)
- 755 -PORTUGAL Lisbon good w/some WJH alop, 2259 1/21. (Connolly)
- 760 -COLOMBIA NIAJ Barranquilla logged fa 1036-1037 1/24. Frequent mention of Colombia plus one of "R. Carracol Nacional". Report out. (Wilkinson) All they send is a pennant, no verio. (ED) * La Voz de Barranquilla, log #798 at 1034 on 12/25. (Hathaway)
- 764 -SENEGAL Dakar good w/FF talk, organ jazz, 2230 1/24. (Connolly)
- 770 -JAPAN JOIB Akita 1/24 1230 w/JJ //750. (Lobel)
- 773 -SPAIN Caceres thru WABC alop w/a in SS, 2302 1/21. Pair 0553 1/23. (Connolly)
- 780 -BRITISH VIRGIN ISLANDS Tortola SEVI, way o/WEHM w/susy insts, TO 7130, ad for boating supply/hardware place in Christiansted, St. Croix, 2332 1/24. (Con)
- 782 -PORTUGAL Miramar CSB9 to fair peaks w/uptempo ex, 0543 1/23. (Connolly)
- 795 -UNID carrier has been detected here. Not sure if its a TA. No audio yet, but had carrier around 0100 (no TF's on). Several nights. (Coleman)
- 797 -UNID Identical het to 743 (same pitch) on low side of GRLW at 0510 on 1/19. Extremely strong, no audio. These a real sytazy to me. 797 het appeared again on 1/20 evening but weaker. Anyone who had a radio on on 1/19 couldn't miss these. Maybe the Russians are up to something, hi. (Hayes) Most likely somebody on 770 putting out spurious sigs, both hets 27 khs from there. WABC
- 800 -MEXICO XEKKK Ciudad Juarez, 1/24 0840. So they finally got an area code 800 phone number! New number is (800) 325-6400. Question: Can the 800 numbers be called toll-free from Canada, too? (Lobel)
- 809 -GREAT BRITAIN BBC Synchron o/Spain SAN w/EE talk, WGY null'd, 2306 1/21. Not present on WGY on car radio in Rockport at 2000 (3 PM local time), 1/23. (Con)
- 810 -COLOMBIA R. Sutatenza, HJCY Bogota IA ex, a SS ancr, mentions of Colombia, dominant o/WGY 0345 1/22. (Powis) * Rnd w/strong sigs o/WGY at times. If you have 2 receivers, tune in the 60 meter band to 5095 khs, and you'll find that its duplicating 810 khs. 3/off around 0400. (Coleman)
- 820 -COLOMBIA HJED 1/14, faint at 0614, bomber at 0619, gone 0630 w/ID. (Rychalsky)
- 825 -COSTA RICA R. Titaia, San Jose, TICG extremely loud w/pop US ex starting at 0700 most evenings for past 2 weeks. Varied in 1968. (Wilkinson)
- 827 -MOROCO (?) Good 0005 1/24 w/drums, flutes, f in FF. (DeLorenzo)
- 830 -JAPAN JOIB Osaka 1/24 1238 //750/770. (Lobel)
- 834 -BRITISH B. Belize "Take it from love" (?? ED) comedy pgn (ex BBC), good sigs, 0235 1/22. (Powis) * 12/23 0400, ID, time and Inna carola, case in 59. (Wheeler)
- 844 -GILBERT ISLANDS R. Tarawa, xint w/fine fast Polynesian ex selections and ancrs starting at 0751 on 1/22. Also, v/ good at 0855 on 1/25 but v/ poor on AM of 1/27. (Wilkinson)
- 854 -PERU OAXMA Lima v/ loud w/fast Peruvian style ex starting at 0728 on 1/13 and good most evenings till 1/20. (Wilkinson) * Best ever 1/12 at 0504 w/full AM-SW freqs, ID. Totally readable. (Hutton)
- 880 -CUBA CHAF Pirar del Rio, R. Cadena Nacional, #800 1128 12/25. (Hathaway)
- 890 -SOUTH KOREA/JAPAN HLAB Pusan and JOHK Sendai alternating at fine volume from 1230 to 1300 1/24. Best Astana of this particular AM. (Wilkinson)

- 908 -ENGLAND BBC outlets poor in alop w/fragmentary EE talk, big het, 2309 1/21.
- 940 -YUKON TERRITORY YVWV Puntó Flajo, 0901 on 12/20. (Hathaway) (Connolly)
- 1010 -MEXICO XEHC Ciudad Obregon 1/24 0705 many "La Rancherito" IDs plus "XEHC 1010 khs" ID at 0727. New here. (Lobel)
- 1025 -UNID Someone ided twice as R. Zulu or some such, 0405 1/21. (Hutton)
- 1050 -MEXICO XEG Monterrey, RR, ex, 0706 12/28. (Hathaway)
- 1059 -CUBA Baracoa crossing KYW w/primitive sounding ex, 2352 1/24. (Connolly)
- 1063 -UNID 1/13 at 0325 w/standard LA fare, possible ID as R. Musical. (Hutton)
- 1110 -COLOMBIA Cali HJED in v/ briefly on 1/23 at 0719 w/R. Belo; ID thru YVHQ.
- VENEZUELA Valencia YVRI weak w/R. Mis IDs on 1/23 at 0700-0719. Has uptempo SS ex and some US rock selections. (Hayes, last 2)
- 1134 -UNID Pair sig nitely, loope LA, just out of reach at ID times. (Hutton)
- 1160 -COLOMBIA HJEL R. Aeropuerto good atop 0100 1/24. (DeLorenzo)
- 1165 -ANTIGUA Caribbean Radio Lighthouse fair in WQOP alop w/rcl pgn, time pipe, BBC ex; 2359 1/24 to 0001 1/25. (Connolly) * Xint w/rcl pgn 0105 1/24. (DeLorenzo)
- 1188 -GUATEMALA TUT fair w/SS ex, a vocal; R. Caroline reduced to weak het by surreal ex, 0004 1/25. (Connolly)
- 1178 -SWEDEN Horby, Dangerfield's tip on R. Sweden 1178 seems to be a mishearing as this morning Horby xstr signed on at 0455 GMT. WEkdays R. Sweden starts at that time. R. Sweden on the air 24 hours only on FM. There should be more stns using a silent night! (Ericson)
- 1190 -COLOMBIA Bogota HJUV in weak to fair w/CRYN null'd on 1/24, 0815. Sensationalist type format. R. Cordillera SID at 0830. (Hayes)
- UNID W/EL ex and a few SS vocals mixing w/HJCV, v/ strong on 1/24 at 0630-0630 tune cut. (Hayes) La Voz de la Costa noted AS on 1/24. (ED)
- 1200 -VENEZUELA Caracas YVCE 1/15 faint R. Tiespo ID at 0537. (Rychalsky)
- 1200 -UNID w/fragmentary ex, 2317, 1/21. Sounded like a Cuban Belo; Nacional outlet when noted at 0210, 1/23, but not sure. (Connolly)
- 1205 -CAYMAN ISLANDS R. Cayman fair w/mx //1555; France not noted - high end scribble for TAs, although low end was open, Cayman noted at 0208, 1/23. (Con)
- 1208 -CUBA noted w/talk, badly garbaging WQAU 2356 1/21. (Connolly)
- 1214 -ALBANIA good at a/on w/trumpet ID, ex, talk, 0900 1/23. (Connolly)
- GREAT BRITAIN BBC poor in WQAU alop w/hard-rock ex, 2358 1/21. Good on car radio in Rockport w/operatic male vocal, 2148, 1/23. (Connolly)
- 1286 -ISRAEL Dangerfield's unid 1286 at 0030 and 0330 can be Galeb Sahal in Israel that now is a nightly guest when Prague has signed off. They are changing their cloze down time very often due to xstr problems. (Ericson)
- 1300 -MEXICO XEUV Nogales 1/22 2335 w/mentions of Nogales and "XEW R. Trece" IDs. XEW uses this ID also; but I'm sure of XEW calls. XEW was null'd to get this one and different announcer. (Lobel)
- 1349 -FRANCE Nice poor w/FF talk and vocal, bad QM fa 1350, 0503 1/23. (Connolly)
- 1370 -MEXICO XEHC Mexicali 1/22 2305 strong suspect w/t/ancr in SS. KUB-1360 alop too much; no positive ID hnd. (Lobel)
- 1375 -ST PIERRE & MIQUELON weak w/mx, 1376 not noted, 0002, 1/22. (Connolly)
- 1394 -ALBANIA Durres fair w/f talking, 0516 1/23. Strong, badly jamming WPLM on car radio in Rockport, 2101 1/23. (Connolly)
- 1403 -GUINEA Conakry fair w/African ex and native talk (non-FF) 2218 1/24. (Con)
- 1466 -MOROCO Monte Carlo fair w/talk by f/s, 2247 1/21. Good a/choral ex, then GG talk, 0506 1/23. (Connolly)
- 1475 -MALAYSIA SABAH Quite loud w/good listening ex (no rock on this sta) fa 1249-1300 on 1/24. Signs off at this time. (Wilkinson) (Hayes)
- 1520 -COLOMBIA Barranquilla HJLQ v/ good w/WKSW off for the nite. Numerous R. Mi-muto IDs between songs, which were SS vocals. In on 1/24, 0630-0730 w/out.
- 1546 -UNID maybe Ukraine - opera noted weak here, 2248 1/21. (Connolly)
- 1549 -FRANCE Nice v/ strong w/a in FF and a little guitar ex 0611 1/23. (DeLorenzo)
- 1555 -CAYMAN ISLANDS R. Cayman fair w/soul ex 0005 1/22. Good (when //1205 noted) w/mx, 0208 1/23. (Connolly) * IDs, orchestral ex, old pop songs, BBC ex, 0300 1/19. (Powis)
- 1578 -PORTUGAL Porto fair w/a in FF and folk ex 0530 1/23. (DeLorenzo)
- 1580 -COLOMBIA Barranquilla HJQE xint alg at 0756-0800. R. Principe ID by f at 0757 and SID at 0800. No QM fa WELS who were on. Is HJQE only 1 kw? Didn't sound like it. (Hayes)

Received a report this time with some material over 2 months old, it wasn't used. Keep your info current, ancient history isn't of much use to anyone!

- 1586 -WEST GERMANY WDR Langenberg. 1/24 0509-0515 man speaking in FF, giving some kind of an editorial or the nx. 0515 a duet between m/f in GG. Held until 0521 when a local interference from a transformer forced it off the air w/its noise. Best was S7 down to S4. My 27th country hrd and 3rd European. 1st Germany. Several years ago received 2 Frenchmen on BCB. (Wheeler) * Probably the loudest European I ever hrd 0629 1/23 w/lively orchestral mx and soft voiced f in GG. (DeLorenzo) * Checking this on clock radio 1/19 and clearer than ever before. Mx pgm till 0650, f ancr till 0700. (Rychalsky)
- 1594 -UNID TAs. Someone here w/US rock 0640 1/23; 2nd audio noted but too weak on this graveyard; probably Portugal and ?? (DeLorenzo)
- 1595 -UNID Carrier detected here, for several nights, around 0100. No audio and fadey. (Coleman)

A couple of veries

- 575 -ALGERIA Super nothing verie folder w/no provisions to enter any info, similar to what Morocco has been sending for years. They did type a message on the back specifying Bechar on 575, but no other info. Too bad, Algeria has always had nice full data cards in the past. For tape, FF report and IRGs, almost 3 months via surface mail. (ED)
- 1555 -CAYMAN ISLANDS R. Cayman, v/1 received 12/3 for report of first day test transmission. Signer R.G. Dunlop. Was opened in dead letter office in Atlanta for some reason. (Coleman) Maybe somebody's trying to tell you something. (ED)

The people responsible for this mess

Bill COLEMAN - Rocky Mount, North Carolina FRG-7, 100' longwire
 Mark CONNELLY - Arlington, Massachusetts R390A, car radio, SM-2, whip
 Marc DELORENZO - Centerville, Massachusetts HQ-100, SM-2
 Bengt ERICSON - Vaxjo, Sweden
 Geoff FOX - Lindenwood, New Jersey
 Jack HATHAWAY - Champaign, Illinois
 Harry HAYES - Gouldsboro, Pennsylvania Zentih Trans-Oceanic, SM-2
 Chuch HUTTON - Decatur, Georgia R388, Sanserino loop
 Albert LOBEL - San Diego, California
 Warren POWIS - Falls Church, Virginia Eddystone 740, 40' wire on ground
 Konstantine RYCHALSKY - Bridgeport, Connecticut Various receivers
 Frank WHEELER - Erie, Pennsylvania S40B, SM-2
 Hank WILKINSON - Santa Rosa, California SP600, HQ-180, Sanserino loop
 MWC - Medium Wave Circle
 NZRDXL - New Zealand Radio DX League

Thats it for another thrilling edition of IDXD. Cx have not been good per comments from several - the little bit I've listened nothing of interest has been heard. 73

CADX GET-TOGETHER

The Fifth Annual Chicago Area DXers West Suburban Get-together will be held at the home of Karl Forth at 630 South Ardmore in Villa Park, Illinois from 6 pm Friday, February 18, to 6 pm Sunday, February 20, 1977. The "main event" of the GT will be Saturday night for those not able to stay overnight. The usual and traditional DX-oriented activities will be featured. There will be no refreshment charge.

Please call or write if you plan to attend. Villa Park is located 18 miles straight west of the loop. Ardmore Av. is 14400 W by Chicago street numbering standards, and 630 S. Ardmore is between Washington and Madison Sts. Call 312/833-3823 for further information and directions.

DOMESTIC X DIGEST

EDITOR:
 Eric C. Rittenhouse
 2345 Dwight Way #101
 Berkeley, CA 94704

Hi All,

DX looks kinda slim this week; this will be my shortest column thus far. Only one report was received here by the Wednesday deadline, so if your stuff doesn't appear this week, expect it in the next column...

RCs

3rd Fri 1260 WBBK GA BLAKELY, good w/DT, ID. (MPO-NC)
 1440 WCDL PA CARBONDALE, w/2 IDs. (MPO-NC)
 1570 WYHI FL FERNANDINA BEACH, fair w/DT, ID. (MPO)
 1580 WRDI NJ HAMMONTON, erratic FT, many IDs. (MPO-NC)
 1590 WERA NJ PLAINFIELD, tent w/wk TT off at right time. (MPO)

Also, from Joe Fela, a couple of additions to the FC list...

1st Mon 1440 KXIV AZ PHOENIX, 0245-0300 TT.
 1st Sun 1230 KSUN AZ BISBEE, 0205-0220 TT.

Joe also notes that KDXU-1450 listed 1st MM is now 0200-0215 (listed 0220-0235) except during the DST period when it will be conducted at 0215-0230 ELT.

TESTS:

860 KWHO UT SALT LAKE CITY, hrd by W'ski.
 1290 KUMA OR PENDLETON, hrd by Hanavan, not hrd by Starr, Arruda.
 1430 WVVX IL HIGHLAND PARK, not hrd by Arruda.
 1560 WSDL LA SLIDELL, hrd by Arruda, Wheeler, Starr.

SUNSET TO MIDNIGHT:

730 CHYR ON LEAMINGTON, 1/18 alone 1830 steady w/Garner Ted. (MPO)
 790 WGRA GA CAIRO, 1/19 s/off, no SSB. (MPO-NC) Time? ECR (MPO)
 WFUN FL SOUTH MIAMI, 1/19 after WGRA s/off w/wx, ID, EL mx.
 800 WMGY AL MONTGOMERY, 1/19 good 1758 w/s/off. (MPO-NC)
 830 KBOA MO KENNETT, 12/31 w/local nx, wx, ID 1735. (W'ski-WI)
 850 WIVK TN KNOXVILLE, 1/15 strong w/s/off o/WKIX/WEEU 1744. (RJE)
 KOA CO DENVER, 1/18 good w/WKIX/wJW w/bkb for state #29. (MPO)
 900 WLSI KY PIKEVILLE, 1/22 like local w/C&W 0517-0530 s/off by female, no SSB. (JS-OH)
 WJWL DE GEORGETOWN, 1/18 fair w/s/off w/"A.J.B." o/u CHML/CKTS 1759. (RJE-NJ)
 930 WJBY AL GADSDEN, 1/18 local school closings, jx ID 1755. (MPO)
 970 WESO MA SOUTHBRIDGE, 1/18 vy wk u/WWDJ w/s/off, FM promo 1742.
 WCHN NY NORWICH, 1/18 w/TC, temp, ID 1757 u/WWDJ. (RJE) (RJE)
 1000 WYOK GA SOPERTON, 1/18 vy gd w/s/off 1744. (MPO-NC)
 1090 WMTY SC GREENWOOD, 1/18 on top 1742 w/s/off. (MPO-NC)
 1260 WMUU SC GREENVILLE, 1/18 gd 1740 w/wx, local ment. (MPO-NC)
 1280 WROC NY ROCHESTER, 1/19 w/NY State nx 1711-16. Annc'd as "Nx Radio 1280", must be format change; Log sez "oldies",
 1520 WIDD TN ELIZABETHTOWN, 1/23 s/off 1730. (FW-PA) (RJE) ✓
 1540 WYRD NY EAST SYRACUSE, 1/18 promo 1754 1/18 o/u WRCP, new call.

1560 WTOD OH TOLEDO, 1/24 s/off 1729. (FAW-PA)
 1600 KGST CA FRESNO, 1/19 1954-1957 nx, wx in SS into s/off in
EE, no SSB. Poor to good w/KASH nulled. (NH-WA)

MIDNIGHT TO SUNRISE

930 WGNT WV HUNTINGTON, 1/15 ANing atop w/light pops 0250-0310+,
 NBC nx 0300. (JS-OH)
 WFMD MD FREDERICK, 1/15 out of CBS nx 0306 w/jx, still using
 this call. (JS-OH)
 1230 WHOP KY HOPKINSVILLE, 1/21 fr thru mess 0303 w/CBS nx into
 local stuff. (MPO-NC)
 1240 WIST NC CHARLOTTE, 1/24 atop 0320-0335+ w/rr. (JS-OH) (JS)
 1290 KOIL NE OMAHA, 1/17 evidently back, and w/NSP rr, AN this MM.
 1340 KIKO AZ MIAMI, 1/17 0330 w/ballad-type C&W, ID 0332. (BLH-CA)
 1350 KIVM HI LIHUE, 1/24 0327 w/MoR, ID as "You're listening to
 weekend Kauai, KIVM Lihue". KCKC, KGB-1360 off. (BLH)
 WSMB LA NEW ORLEANS, 1/24 9329 w/ID "WSMB New Orleans, it's
 time for nx headlines". O/KIVM, KGB-1360 off. (BLH-CA)
 1450 UNID ?? 1/10 who? At 0401, end of sked WDNG DX, code ID copied
 as "NRCTOTNMMWIRKWD?G TESTING"; WDNG sez it was not
 they; anybody get better copy than I did? (JS-OH)(JS)
 1470 WFAW PA FARRELL, has dropped AN for sure, off every night 0000.
 1530 WCKY OH CINCINNATI, 1/17 reported AN by Starr, Arruda.
 1600 WWRL NY NEW YORK CITY, 1/24 0100 s/off. (FAW-PA)

REPORTERZ:

RA	RAY ARRUDA	New Bedford, MA	SX-122, SM-1
RJE	RUSS EDMUNDS	Kinnelon, NJ	Radio
BLH	BRETT HANAVAN	Chula Vista, CA	HQ-180, Sanserino
NH	NANCY HARDY	Aberdeen, WA	HE-30, SM-1
MPO	MIKE O'SHEA	Mt. Airy, NC	TRF
JS	JERRY STARR	Ohio, USA	Radio, loop
W'ski	BOB WESOLOWSKI	Milwaukee, WI	Philco Console
FAW	FRANK WHEELER	Erie, PA	Radio, loop.

Awful short this week! You're just not trying people! How about 20
 reports for next week? PleaseECR.....

Continued from page 9

money. A simple R-C filter that passes 200-3000 cps was the difference between my
 totally readable tape of KREX 1100 and Karl Jeter's partially readable tape, recorded
 simultaneously off a Beverage. The spare parts filter eliminated the low grumble of
 LA hets on the channel that usually degrade DX on the channel here. The peak is just
 great for CW but many plans for a simple sharp filter have appeared in CQ and QST
 that would cost a fraction of the QF-1 cost.

The QF-1 that I used was borrowed from NRC'er Vern Shearer of Atlanta. Linda
 Brodsky had a chance to use the unit, and all of us were disappointed in the results
 using peak and lowpass functions, but pleased with the notch. No ID's jumping out
 of the mud and splatter, etc. If you want every last bit of DX technology buy the QF-1
 but there are things that should be bought first, like mechanical filters, second rx's,
 a good loop, or a noise blanker.

A Brief Review of the Autek QF-1 Audio Filter

Chuck Hutton

The QF-1 is Autek's most recent audio filter. It is vastly different from the old Q-
 Box that many NRC'ers are familiar with, in that it provides notch, lowpass, and peak
 functions. Each function is controlled by pots for frequency and selectivity. Only one
 function can be used at a time, making processing of DX tapes quite a chore if a lot
 of cleaning up needs to be done.

Electronically the QF-1 consists of an active filter section employing 4 dual op amps-
 3 747's and a 741- plus an audio power stage and power supply for operation from 117 VAC.
 Input and output impedances are not critical and in fact Autek claims they can be com-
 pletely ignored.

Autek supplies typical response curves with their fliers and also with the QF-1 in-
 struction booklet. Anyone interested in the measured performance can write Autek as
 the graphs are too numerous to reproduce here.

Now for performance evaluation. I tried out the peak function in three situations:
 processing of DX tapes, live listening, and down on 80 meters for CW. It proved almost
 worthless for processing of tapes, not making one of my tapes more readable. I tried
 all sorts of peak versus selectivity combinations but none of them seemed to be effec-
 tive in getting ID's to stand out. In live listening results were equally disappointing,
 but perhaps this was due to the fact that my rx has been extensively modified and
 there is little left for an audio filter to do in the area of cleaning up. On CW the QF-1
 performed most admirably. I tuned down to 80 meters on a weekend night after dinner
 and found the usual wall to wall packing of signals; with the selectivity control advanced
 almost fully and my rx filters in the sharpest position I could easily read one and only
 one signal at a time. If the selectivity control is rotated fully the filter has too much of
 the ringing sound associated with sharp filters, and fast CW can not be copied.

The notch function is perhaps the most useful and effective of all for DX use. A
 sharp notch can be adjusted to any frequency, allowing the removal of the last bit
 of a heterodyne or TVI buzz that a notch filter left. It is also useful in removing a
 second heterodyne if you are DX'ing in close quarters. The notch is sharp enough to
 have no degrading effects on adjacent audio frequencies.

The lowpass function has a variable cutoff from 200 cps to 2500 cps, just barely high
 enough for AM DX'ing. Reducing the lowpass cutoff point below 2500 cps drastically re-
 duces audio level and readability; tuning the lowpass frequency down only 10%-20%
 practically eliminates all audio.

My major criticism of the QF-1 is the quality of the audio. It distorts on high level
 peaks regardless of the input signal level and can drastically interfere with the ability
 to read a signal. Even with the controls set for highest lowpass frequency and no notch or
 peak the audio sounds tinny and distorted to some degree. Shot noise and sideband splatter
 produce a distortion that lasts up to a second after the noise peak.

Overall the QF-1 does not warrant the \$54 investment. If you need to notch out het-
 erodynes you are much better off using a crystal filter notch or a Q- multiplier, as this
 will remove the carrier and reduce possible distortion via demodulation against the in-
 terfering carrier. If the last traces of heterodynes remain after notching and need to be
 removed a cheap audio notch filter can be built; I whipped one up from my junk box
 but the cost in Radio Shack parts would be less than \$8. Certainly everyone should have
 some sort of bandpass audio filter but I think an acceptable job can be done for much less.

Product Review - McKay Dymek DR22 Receiver

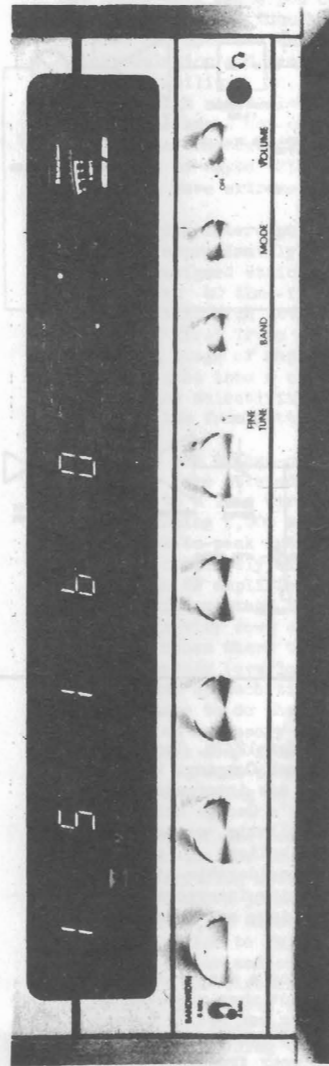
by Bob Foxworth

McKay Dymek Co. of Pomona, CA. has announced development and marketing of a new synthesized receiver, the DR-22. Present plans are for the first deliveries of the unit to be made in mid-February, 1977. We feel there will be enough interest in this new unit to warrant our preparing this summary of the receiver's features for the benefit and information of all DXers. As we have stated in the past, in a case such as this, where we have not had the opportunity to personally evaluate the performance of the set, we can simply provide the manufacturer's specifications and allow the reader to make his own choice as to whether he may wish to consider purchase of the unit, without any recommendation (for or against) from this reviewer, or this club itself.

A halftone photo of the front panel of the set (which is taken from the writeup appearing in the firm's newsletter, *Dymek News*, Vol. 2 No. 2) appears elsewhere. All other information herein is from the same source. We also are including the block diagram and specifications that were included in the article.

The price (as of this writing) is \$895. The receiver tunes continuously from 50 kHz to 29700 kHz, including all the Longwave, and Medium and High Frequency bands. Five front panel knobs set the frequency to the nearest 5 kHz interval, which is indicated on the front panel by 7-segment light emitting diodes (LEDs). In addition the last knob also operates as a fine-tune adjust over a +5 to -5 kHz range, allowing exact tuning to a desired frequency. However the right hand LED does not vary as the fine tune is adjusted, but reads either 0 or 5 depending on the synthesizer step, so some "english" is called for in determining exactly where the set is tuned. However, the "narrow" bandwidth setting, being 4 kHz wide at the -3 db point (per specs) would make the tuning broad enough so that the exactness of tuning is relatively uncritical. The "wide" bandwidth setting is listed as being 8 kHz at -3 db so this should make the DR-22 a set that will provide good high-fidelity audio (at least, as well as can be expected on SWBC etc.) and this also implies that it would be more difficult to separate weak signals from very close (in frequency) strong signals on this set than on others. There is a notch filter, but it operates at audio, not at IF, and is fixed at 5000 Hz which implies maximum usefulness on SWBC reception where channel allocations are generally 5 kHz apart, and where adjacent-channel signal levels are usually near those of the desired channel level. The Dymek write-up in fact emphasizes SWBC and hi-fi local AM reception, but it should be possible nevertheless to have good reception with clear, wideband audio on domestic (even-number) channels on the MF Broadcast band with the DR-22. This reviewer has often found that clarity and understanding is usually enhanced with wideband detection (where the signal/noise ratio permits) over that type of reception through crystal filters or mechanical filters. Of course, when copying in the presence of noise or sideband splash, or other forms of interference this is no longer true. The sensitivity in AM mode is listed as 2.5 microvolts through the entire range from 300 kHz to 29.7 MHz, although the specs do not specify how good the signal to noise ratio is at this figure. It is the reviewer's opinion that, while results would be good on domestic MF (and on HF) channels with moderate to strong signals and minimal to fair adjacent channel QRM, reception would be difficult of weak "splints" with the existing IF. If the signal were tapped out after the third L.O. at 455 kHz and run through a separate narrowband IF amplifier, it should be possible to get very good results in terms of selectivity, while existing wideband capability would be unaffected.

The front panel illustration shows, in the black window, 5 LEDs and 5 knobs to tune. There is a "band" knob which selects one of 5 options (.05-29.7 with preamp, then without preamp; "local"; 2.5-29.7 without preamp, then with preamp. See accompanying remarks for details. The "mode" switch selects AM, LSB and USB. To the right are the S-meter and volume control. There is also a "bandwidth" switch.



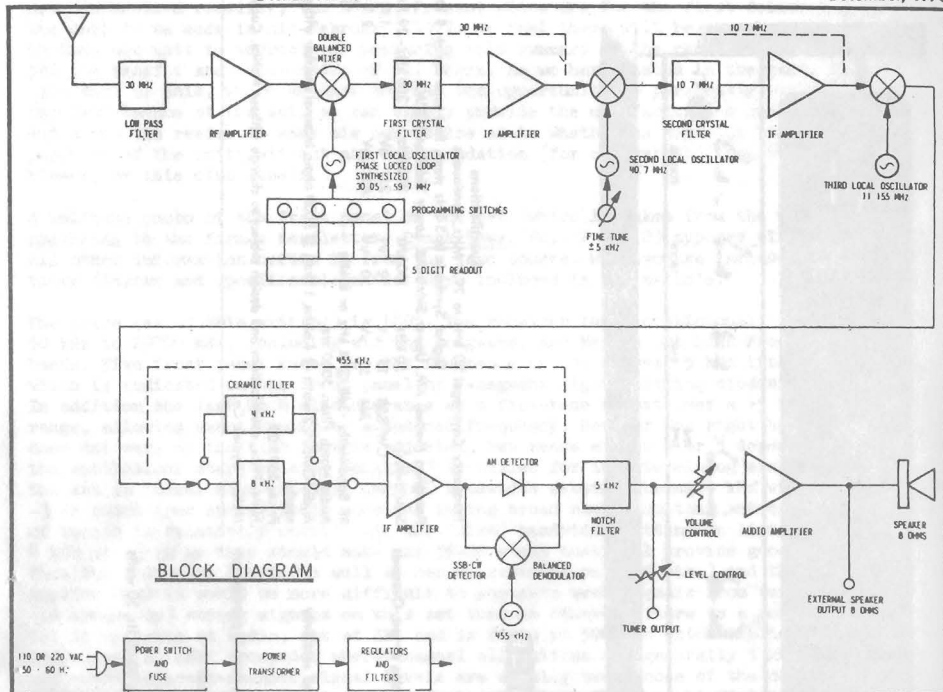
FEATURES, SPECS LISTED

Features

- Receives Long, Medium and Short Wave Bands
- Hi Fi, SWL, Commercial, Industrial and Governmental uses
- Extreme ease of tuning at all frequencies
- Tunes in international Short Wave broadcasts, CB, Ham Radio, Ships at sea, Overseas phone calls, Standard AM broadcasts and much more
- Solid State, Phase Locked, Digital Synthesis tuning
- Quartz crystal tuning accuracy at all frequencies
- No mechanical tuning dial error or backlash
- High level RF front end for excellent intermodulation rejection and sensitivity
- Full all wave continuous coverage 50 kHz to 29.7 MHz
- No crystals to buy
- Large LED frequency readout
- Crystal filters in first and second IF amplifiers and ceramic filter in third IF provide outstanding selectivity and intermodulation performance
- Designed for use with Hi Fi systems, or as a self contained receiver
- Receives AM, USB, LSB and CW
- Switch selectable 4 or 8 kHz RF bandwidth
- 5000 Hz audio heterodyne notch filter
- Built in power supply for 110-120 or 220-240 VAC switch selectable, 50-60 Hz, 30 watts
- First receiver of its class under \$2800.

Specifications

Frequency Coverage: 50 kHz to 29.7 MHz, continuous
 Digital Synthesis in 5 kHz steps, fine tune for ± 5 kHz
 Reception Modes: AM, Upper Sideband, Lower Sideband, CW
 Sensitivity: 50 kHz 200 kHz 300 kHz - 29.7 MHz
 CW, SSB 15 μ V 10 μ V 10 μ V
 AM 60 μ V 30 μ V 6.0 μ V
 RF Bandwidth: -3dB @ 4 kHz or 8 kHz
 Audio Notch Filter: 5000 Hz
 Audio Output: 2 watts @ 4 ohms, 1 Vrms @ 5000 ohms, Internal speaker with external connector
 Price: \$895.00
 Note: Price, specifications and design subject to change without Notice. Copyright © 1976 McKay Dymek Co.



BLOCK DIAGRAM

(The following remarks appeared verbatim in *Dymek News* for 12/76. They are authored by Paul Metsker, Chief Engineer for the McKay Dymek Company. We believe this will be of interest to many readers of *DX News* who are interested in following new developments in receiver design. The company's George McKay has given permission for us to describe the DR-22 in this bulletin, using material appearing in *Dymek News*. The preface says in part, "We believe ... the thinking of the engineer who designed it creates a document of considerable historical interest which can only underline the honesty and integrity incorporated in the receiver. Mr. Metsker's comments, taped in a casual setting, are reproduced here with only minimum editing")

Today sensitivity is no longer a real problem in designing a receiver. You can get sensitivity - very high sensitivity - very easily, but when you hook up a very sensitive receiver to a decent antenna, the receiver can easily be overloaded by stations on frequencies completely removed from the one you want to listen to, which can result in just hearing garbage on your frequency instead of the station you want.

Broadcast band signals are very strong; if you're living near a metropolis or something like that you might have several 50 to 100 millivolt signals coming in, and if the receiver can't handle those high level signals in the front end before they get to some selectivity, the receiver's usefulness is almost destroyed. On the short wave bands you can get 50 to 100 mv signals coming in from a decent long wire antenna. Even though the receiver has been designed for very high sensitivity, if care has not been taken to allow it to handle high level signals, it will develop intermodulation and cross modulation interference that will destroy a lot of your receiving ability. So, what we've done here, we've put extra care into the design to allow high signal level capability on adjacent frequencies. The first mixer is a double balanced hot-carrier diode mixer which is designed for power levels up to, I think the compression point is about +15 dBm, which allows a third-order intercept point of maybe +25 or so dBm, getting close to a decent fraction of a watt before you have extreme intermodulation.

A third-order intercept point is one good way of comparing receivers. Our DR22 should be approximately +25 or so dBm for the third-order intercept point; another receiver designed strictly for sensitivity might have a figure of -I've seen figures of -30, even -40 dBm--it'll be overloaded much sooner than our receiver will. We've got that high level first mixer, followed immediately by a crystal filter at the 30 MHz first IF to narrow down the passband as quickly as possible. After that, there is a stage of amplification at 30 MHz and then it's converted to 10.7 and immediately goes into a crystal filter before any more amplification, so that we get into as much selectivity as possible, as soon as possible, to prevent stages further down the line from getting overloaded.

So that is one thing--one of the outstanding features of the radio...I've had a (Brand X - name deleted in original copy-ed.) receiver, which costs like \$7,000, hooked up to a long wire antenna at my house, about one mile from KWOW here in Pomona, running 5,000 watts at 1600 kHz and delivering a signal of about 200 to 300 mv peak-to-peak into 50 ohms. Without any tuned circuit at the antenna, the receiver is completely wiped out. In our DR22 we've provided the capability of bypassing the RF amplifier so that we can feed directly into the mixer without having an RF amplifier stage that can get overloaded. By doing that we still have satisfactory sensitivity down on the broadcast band and I use the receiver with no preselector at my house where this much more expensive radio (although it's built well) is just completely (overloaded). The DR22 does not have a preselector which would have to be peaked up each time you changed frequency. We tried to build the radio so you wouldn't have to do that. Now for extreme situations we're going to build a preselector as an accessory so that if a listener is right on top of a station, let's say he is a block away from 5,000 watts or 10,000 watts or whatever, he can still use the radio. We want to have that out at the same time the radio comes out, approximately. I'm working on that as another side project.

One position of the band switch uses the RF amplifier with no antenna filtering (except for the low pass filter, which is always in the circuit, the low pass filter rejects everything above 30 MHz, to get rid of images and any other interference that may be above 30 megs). The next position is fully wideband, no filtering, and straight into the first mixer. The next two positions put a high pass filter into the antenna line to reject everything below 2.5 MHz; one of the two positions uses the RF amplifier and one does not. Then the fifth position puts a 30 db antenna attenuator in the circuit and runs the signal directly into the mixer. With so many functions on the band switch available, I think in better than 90% of the cases of use the listener won't need the preselector, so that's why we didn't put it in every radio, avoiding the extra cost when it won't really be needed.

Another big feature this radio has over conventional radios is phase lock loop tuning. On a conventional radio right now that you might pay several hundred

dollars for, you tune the thing with a mechanical tuning dial and some kind of pointer to indicate where you are; you'll likely have adjustments for both a coil and a capacitor; either one could get out of alignment and throw your dial off. Mechanical backlash can introduce error also, and with normal use you might not know where you are within 10 or 20 or 30 kHz depending on how often and how closely the unit is calibrated. Here in the DR22 all local oscillators are crystal controlled. In the first local oscillator the frequency is set with rotary switches which program digital information into the phase lock loop to set it to the exact frequency that you want, and your tuning accuracy is derived right from a crystal no matter where you are (tuned). The fine tuning control is on the second local oscillator allowing you to tune plus or minus 5 kHz from what the LED readouts say on the dial, for tuning in single sideband exactly or for tuning off to the side a little if you've got interference.

Then we come up to the switchable selectivity and we actually switch between two different ceramic filters; one of them is a four kHz bandwidth and the other is an 8 kHz bandwidth, depending on what you need. In congested short wave use you might need the four kHz filter, for broadcast band use you might want the 8 kHz to get more fidelity up to the maximum available. (This implies local station reception on broadcast band-ed. note). Then we come through and we have a balanced modulator sideband detector fed with, again, a crystal controlled local oscillator and switches for 455 plus or minus 2.8 kHz to get the upper and lower sidebands. We actually have four crystal controlled oscillators; if you count the sideband oscillator there are actually five crystals in the unit. We could have cheapened it by trying to go to say an LC oscillator for that sideband detector but again we'd lose quality. We'd lose stability that we get with the crystal. So that's what we went to.

So then, coming out of the detectors, both detectors come out to the tuner output, which is before the volume control. At that point you have the full audio response of the unit which gives bass response down to about 30 Hz and then the audio ... you know I let out the notch filter! Before the tuner output there is the five kHz audio notch to get rid of heterodynes on short wave. After that, we've got our tuner output so that you can hook it up to any type of power amp you've got and run it through your audio system, or record off it, or whatever you want to do. Then we go to the volume control and then to a two watt audio amplifier and built-in speaker. There is a switch on the rear panel to turn off the internal speaker, there are connections for an external speaker, and then it's got the headphone jack on the front ...it's a nice radio.

-Paul Metsker

* * *

The company's bulletin adds, "...advance orders are being accepted and filed in the order received. The DR22 can be reserved on a rent-to-own basis on (Dymek's) usual terms; however to hold one for purchase (Dymek) requests a deposit with order of 10% of the price, or, \$89.50." The rental scheme involves a initial payment of \$93.64 and 23 payments of \$46.82. Upon them making a final payment of \$46.82 the renter would purchase the receiver. Other Dymek equipment can also be purchased by a similar rental-to-own arrangement.

Readers who wish to obtain more information or place orders should NOT communicate with NRC but rather should contact the company directly. The address is: McKay Dymek Co., P.O. Box 2100, Pomona CA. 91766. They may be reached by toll-free tel. no. 800-854-7769 (except in California dial 800-472-1783). Material in this review presented solely for informational purposes. Neither this reviewer nor NRC receives any commission or other benefit therefrom for having presented this material, and assumes no liability for correctness thereof. We urge NRCers who may obtain one of these receivers to share his/her experiences with it with the club membership.

--Bob Foxworth 19 January 1977

dxchange



R. J. Edmunds
P.O. Box 127
Boonton, N.J. 07005

As announced, this edition of the column features all new items. If you advertised an item or items in the previous column, and wish it to appear in the next one, let me know.

WANTED:

Loop antenna or Space Magnet, preferably used, but will consider new. (Jim Ayers, 2847 Woodside Dr., Jackson, MS 39212)

FOR SALE:

(receivers)

Yaesu FRG-7. Mint condition, less than 2 months old. With manual and warranty cards. .5 to 30 MHz. Shipping paid, \$235. (Thomas W. Adams, P.O. Box 1165, Midland, MI 48640)

Drake SPR-4; mint condition, 1½ yrs. old; w/ xtals for amateur bands & SEC-4 calibrator. \$535 firm. (J. H. Ross, O.D.; Hunter Hills, Apt. F9, Flemington, NJ 08822, 201-782-0316)

(accessories)

Heath 6D-125 Q-Multiplier, fair condition, \$15 plus shipping. (David Ball, 62 Lexfield Ave., Downsview, Ontario, Canada, M3M 1M5)

Worcester SM-1 antenna. Needs work - does not tune properly. \$10. (Page Taylor, Box 282, Butler, N.J. 07405)

Ampex Micro 88 Stereo Cassette Recorder. 8 watts/channel, self-contained. \$100. (PT)

(ham gear)

National NCX-500; 80-10 meter transceiver. PEP-500w., SSB, 180w. CW, w/ homebrew power supply. \$200. (PT)

(books)

NRC Domestic Log, 3rd ed. Good cx. \$3.00 ppd. (Ball)

Communications Handbook, 1972-74, Good cx., \$1 ea. or 3 for \$2.50 ppd. (Ball)

Communications World magazine, Spring-Summer 1971, 72, 73, 74; Fall-Winter 1971, 73. \$1 ea. or \$5 for all 6, ppd. (Ball)

Understanding Amateur Radio. (ARRL). Good cx. \$2.50 ppd. (Ball)

How To Become A Radio Amateur (ARRL). Good cx. \$1 ppd. (Ball)

Learning the Radiotelegraph Code. (ARRL) Good cx., 50¢ ppd. (Ball)

Ham Handbook for Beginners, by M. Biback, VE3CSE. Good cx. \$3.50 ppd. (Ball)

FOR SALE: (cont'd)

(miscellaneous)

Realistic Patrolmen PRO-3 Monitor receiver. 30-50 MHz; 450-470 MHz., 152-174 MHz. in 3 bands. 5/15 kHz. selectivity switching, squeach. \$100. (PT)

FOR TRADE OR SALE:

Atwater Kent Model 35, ser. 982881, good cx; Atwater Kent Model 41, ser. 1564784, vy good cx; Atwater Kent Model 42, ser. unnr., poor cx; Unknown make and model 4-tube battery-operated radio w/ spkr, about 1925 vintage, good cx.; Temple dynamic speaker, Model 14, fair condition; Operadio 6 tube battery-operated radio w/ built-in spkr., good cx, abt. 1925 vint.; batch of tubes for the above; All but Operadio had tubes pulled, don't know what went where. Depending on value will trade all or part for HQ-180A or better. Prepaid calls or letters welcome. (Len Gaska, 1723 W. 9th St., Pomona, CA 91766. 714-622-1473 evenings or 714-629-5111 ext. 4838 days.)

FOR TRADE:

Old radio programs. Yours for mine. Send list of programs available. (Donald F. Birch, 4420 N. Newland Blvd., Tucson, AZ 85705)

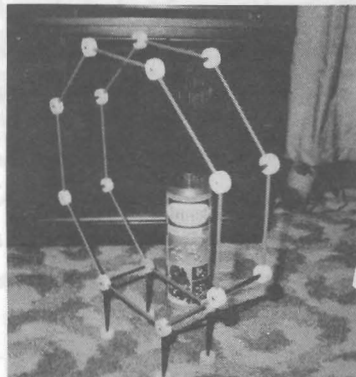
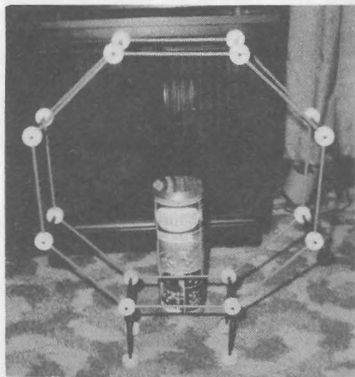
SERVICES:

Receiver alignments/repairs on Hammarlund equipment. Also repairs and alignment of FET Loop amplifiers. (Steve Bohac, 97 Shaler Ave., Fairview, NJ 07022)

Well, that wraps up another one. Next issue in 3-4 issues. We will run new items, and only those previously-run items for which we receive notification to re-run. We had hoped to run all ads 203x, but volume at present prohibits it unless we are sure the offers still stand. -

73's RJE

John Tull sends along photos of the frame for a real budget loop. It's constructed from a Tinkertoy Super Transit set (\$5.95 retail), and may be wound with 22 turns of wire and tuned with any 365 pf. variable capacitor. What more do you want?

**NRC MEMBERS**

AS OF NOV 15, 1976

ABRAHAM, Larry M.	3839 Sherman	Bridgeport MI48722
ADAMS, Thomas W.	P.O. Box 1165	Midland M I48460
ADAMSON, Clay F.	103 W. Main St., Bldg 9-Apt. 3	LeRoy NY14482
ADDISON, Larry E.	944 88th Lane	Coon Rapids MN55433
ADELMAN, Harry	7 Academy St.	Belleville NJ07109
ALBANESE, Michael J.	917 Rosehill Dr.	Altoona PA16602
ALISAUSKAS, Bill	6 Lawrence Av.	Hopatcong NJ07843
ALLAWAY, David	44 Orchard Farm Rd.	Port Washington N Y11050
ALLEN, Eugene S.	134 Bret Harte Way	Vallejo CA94590
ALLEN, Richard	RFD	Billings OK74630
ALLISON, Jim R.	R.R. #4	Pontiac I L61764
AMMONS, R.B.	411 Keith Av.	Missoula MT59801
ANASTASI, Brian J.	34 S. Policy Rd.	Salem NH03079
ANDERSON, Gordon L.	7706 Berchman Dr.	Dayton OH45424
ANDERSON, Roger A.	913 N. Larrimore St.	Arlington VA22205
ANDERSSON, Sigvard	Box 12030	S-600 12 Norrkoping, SWEDEN
ANDRES, William	10125 115th St.	Richmond Hill NY11419
ANDREWS, Kelly	3417 Chalfont Dr.	Richmond VA23224
ARIES, Constantine T.	27216 Cecile Av.	Dearborn Hts. MI48127
ARRUDA, Ray	48 Woodlawn	New Bedford MA02744
ASH, Saul	910 Meehan Av.	Far Rockaway NY11691
ATKINS, Gary	2200 W. Burnett	Louisville KY40210
AUGUSTINE, Calvin T.	3422 Brookside	Rapid City S D57701
AYERS, Jim	2847 W oodside Dr.	Jackson MS39212
AYRE, Miller H.	c/o Ayre's Ltd. Box 70 - Water St.	St. Johns NF CANADA
BAILEY, Carrol	92 Woodland Rd.	Holden MA01520
BAKER, Robert L.	1011 Westwood Dr.	Goshen IN46526
BALDWIN, John	918 1/2 Huron St.	Toledo OH43604
BALL, David R.	62 Lexfield Av.	Downsview ON M3M 1M5
BARBER, D.	Box 26	Edmonton AB T 5J 2G9
BARBER, Lance	315 Queenston St.	Winnipeg MB R 3N 0W9
BARNES, Clifford	4506 Maple	Bellaire TX77401
BARNES, Rodney E.	1703 Wilshire	Hutchinson KS67501
BARTEK, Daniel R. Jr.	4 Hanford Way	Fairport NY14450
BARTELS, Bill	3328 S. 84th St.	Milwaukee W I53227
BARTON, Park	26 Bellview Dr.	Tuscaloosa AL35401
BARTOS, Richard	692 Moore Av.	Campbell OH44405
BASEHORE, John	603 Shepardstown Rd.	Mechanicsburg PA17055
BATES, Edward J.	P.O. Box 8471	Fort Worth TX76112
BATES, Mike	16111 Black Oaks Lane	Wayzata MN55391
BAUGHMAN, David L.	511 N. 35th St.	Camden NJ08105
BAY, Milton	Route 1	Brooksville KY41004
BEAULIEU, Andre	5987 Boyer	Montreal PQ H2S 2H8
BECKER, Jack R.	3729 W. Douglas Av.	Milwaukee WI53209
BECKETT, Mike	FAA ATTN ASO-430, P.O. Box 20636	Atlanta GA30320
BELANGER, Darryl	P.O. Box 495	Swan River MB
BENKO, Tim	2748 179th St.	Lansing IL60438
BENNETT, Dave	3145 176th St.	Surrey BC V3S 4N8
BERGEN, P.C.	131 Union Blvd.	Kitchener ON N 2M 2S3
BERTONZ, George	9515 S. Kilbourn Av.	Oak Lawn IL60453
BEZILLA, Steve	307 2d Av.	Osceola Mills PA16666
BIERMANN, Dale	6635 College	Des Moines IA50311
BIGLEY, Artie	414 Rigsby	San Antonio TX78210

BIRCH, Donald E. 4420 N. Newland Blvd.
 BISCHOFF, Mike 420 Longfellow Av.
 BLACK, Ross 4276 W. 30th St.
 BLAKE, Jerry 2025 Klug Dr.
 BLAZEK, William M. 6200 Westchester Pk. Dr. Apt.
 BLOCHER, Harry 5801 W. 74th St.
 BLÖDORN, Rolf Postfach 26
 BLYSTONE, Frank A. 258 E. Judson Av.
 BOBBITT, Christopher K. 322 Forest St.
 BOERSMA, Philip 15570 Cleveland St.
 BOHAC, Steve 97 Shaler Av.
 BOILARD, Conrad 147 Pasco Rd.
 BOND, Jerry 143 Burwell Rd.
 BOOMER, Bruce 108 Norma Av.
 BOROWSKI, Elwood 2485 Parkview Place
 BOWKER, John D. 14 Canoe Brook Dr.
 BOWKER, John S. 14 Canoe Brook Dr.
 BOYD, H. Wesley 2699 Liberty St. Ext.
 BOYLE, John 586 Parkway
 BRAINERD, Sam 321 Stevens Circle #2-C
 BRASIER, Jeff 10341 Shirley Av.
 BRATTON, Tony P.O. Box 22
 BRAUNER, Joseph W. RD 1, Box 86
 BREDVOLD, Miles 1281 Lakeview Av.
 BREGER, Michael -- Astronomy Dept., Univ. of Texas
 BREVILLE, Walt 9127 Coral Dr.
 BRIGGS, Jonathan 41 Hartington Grove Cambridge, CBI 4VA ENGLAND
 BRIGGS, Richard K. 31 Lowell St.
 BRODEUR, Gary P.O. Box 231
 BRODSKY, Mrs. Linda 245-16 149th Av.
 BROWN, H. Bartlett 68 Hawthorne Av.
 BROWN, Kenneth G. Keats Circle
 BROWN, Warren Hillside Av.
 BROWNE, David 557 N. Madison Av.
 BROWNLESS, Ken 7 The Avenue
 BRUNER, J.R. 2345 Gay St.
 BUCH, J.D. 57 E. Main St.
 BUDA, David L. 18 Nutley Av.
 BUDESHEIM, Don Box 171
 BUEHLER, Louis 1123 Perry
 BUJAK, Francis 68 Bel-Aire Circle
 BULL, Thomas H. 2544 Naylor Rd. SE, Apt. 202
 BURKE, Lynn 479 Nelson Dr. #21
 BURNS, David 920A Maloney Rd., Dogue Creek
 CADMUS, Edward W. III 123 Somerset St.
 CALHOUN, Robert W. Box 94
 CALKIN, Gregg A. P.O. Box 1345
 CALLARMAN, John A. 1122 Maple
 CANTRELL, Gorman 1528 Hallam Dr.
 CARRINGTON, Gregory 110-F Jamestown Dr.
 CASEY, John 60 Walker St.
 CESSNA, John WBFD, Box 1
 CHATTERTON, Kenneth RD 2
 CHILDERS, Weldon Box 188
 CHRISTIAN, Ed 795 Lakeland
 CHRYSLER, Bill 156 Marple Rd.
 CIESLEWICZ, John RFD #2
 CLARK, Randy 800 N. Smith Rd. #7-0
 CLARK, Richard 621 N. Euclid Av.
 CLARKE, Dave 292 William St. E. #3

MEMBER LIST - Page 2

Tucson AZ85705
 Deerfield IL60015
 Cleveland OH44109
 Fort Wayne IN46808
 Apt. 1103 College Park MD20740
 Los Angeles CA90045
 6301 Allendorf, WEST GERMANY
 Youngstown OH44507
 Berea KY40403
 Spring Lake MI49456
 Fairview NJ07022
 Indian Orchard MA01051
 Rochester NY14617
 Nutter Fort WV26301
 Baldwin NY11510
 Princeton Jct., NJ08550
 Princeton Jct., NJ08550
 Girard OH44420
 S. San Francisco CA94080
 Aberdeen MD21001
 Northridge CA91324
 Manteca CA95336
 Punxsutawney PA15767
 Mendota Hts., MN55120
 Austin TX78712
 St. Louis MO63123
 Cambridge, CBI 4VA ENGLAND
 Asheville NC28803
 Placentia CA92670
 Rosedale NY11422
 Glen Ridge NJ07028
 Salisbury MD21801
 Ashaway RI02804
 Pasadena CA91101
 Clifton, York, ENGLAND
 Longmont CO80501
 Mt. Joy PA17552
 Nutley NJ07110
 Wembley AB T0H 3S0
 St. Charles MO63301
 Windsor Locks CT06096
 Washington DC20020
 Newport News VA23601
 Fort Belvoir VA22060
 New Brunswick NJ18910
 Gering NE69341
 Ottawa ON K1P 5R4
 Mt. Vernon IL62864
 Lakeland FL33803
 Pittsburgh PA15216
 Charlestown MA02129
 Bedford PA15522
 Mannsville NY13661
 Carbon Hill AL35549
 Grosse Pointe MI48230
 Haverford PA19041
 Denmark WI54208
 Bloomington IN47401
 Pittsburgh PA15206
 Oshawa ON L1G 1K8

CLEMENTS, H. John 9010 Tobias #258
 CLEMMER, John 2937 W. Gilbert
 COHEN, Jeff The Oaks, 1110 Tanbark Lane W.
 COLEMAN, Bill Jr. 114 Circle Drive
 COLLINS, Michael 2021 Main St.
 COLYARD, Robert W. 21 Spark Drive
 CONNELLY, Clifford C. Jr. 10042 Comanche Av.
 CONNELLY, Mark 52 Amsden St.
 CONNER, Charles c/o Dept. of Chemistry, W. Va. U.
 CONRAD, Jerry K. 1400 Greenwood St.
 COOK, George R. 1930 N. 4th St.
 COOLEY, William 1240 Salem Av.
 COOPER, Ernest R. 5 Anthony St.
 COOPER, Glenn 1 Station St., #2-7
 COOPER, Richard H. Box 223, Electric Printery
 COPELAND, Doug 408 Ravelston Av. W.
 COWLES, William Larry P.O. Box 743
 COX, Dr. Harold 80 Virginia Terrace
 CRABILL, Perry Jr. 5508 Volta Av.
 CRAIG, Cal 181 Oakhurst Dr.
 CRAIG, L.C. Route 5
 CRITCHETT, Jim 1635 Walbridge St.
 CROCKER, P.E. 39 W. Hill Rd.
 CROWDER, G. Paul P.O. Box 40411
 CRUSER, Eric W. One Lake Shore
 CURTIS, Robert A. 17 Cobbleview Dr.
 DABELSTEIN, Carl 8209 W. 78th
 DAILEY, Frank E. RFD #5 - Rte #12
 DANGERFIELD, Benjamin III Sproul Estates, 202 Governors Dr. Wallingford PA19086
 DAVENPORT, Alan 31 Madison Dr.
 DAVIS, Carl P.O. Box 6
 DEAN, Demis D. 7801 Taylorsville Rd.
 DEHAAN, Jakob 5814 Sagewood Dr.
 DeLEURERE, G. Harley P.O. Box 10
 DELLIT, Sam 23 Lorinya St., Mansfield
 DeLORENZO, Marc P.O. Box 466
 DICKERSON, Neil 426 State St.
 DICKTER, Dr. Richard M. 2313 - 76 Av.
 DILBECK, Mel 1523 18 Av.
 DILDINE, R. Stephen 1900 E. Eads St., Apt. 725
 DIMMICK, Robert 1107 Jackson St.
 DIONNE, Nelson 12 Sumner Rd.
 DIXON, James A. 13403 Cambria Farms Rd.
 DORLE, Jeanne C. 3093 Owasso Blvd W.
 DOYLE, William T. 1671 Grossmont View Dr.
 DRAESKE, G. L. 1599Angus Dr.
 DUCKWORTH, George G. 52 Erie Av., Apt. 19
 DULMAGE, Bill R.R. 3
 DUNN, David Paul 3226 Midvale Av.
 DUNN, Stanley 23 Scarlet Oak Rd.
 DUNNING, Dave 2-29 Hartley Place
 DuRANT, LTC. Henry L. c/o HQ USAINTA
 DURBIN, Dan 2711 Walnut Way
 DURNAVICH, Carl Sacred Heart Seminary - 3800 W. Division St. - Stone Park IL60165
 DUROCHER, Conrad R. Stone Productions - 437 Essex St. Saugus MA01906
 EAVES, Isaac 10113 Pillot St.
 ECKART, Garry C. 100 Erial Road
 ECKMAN, Richard 134C Baird, 3700 Spruce
 EDDIE, Richard 152 W. Rose
 EDDY, Robert Box 338

MEMBER LIST - Page 3

Panorama City CA91402
 Peoria IL61604
 Jackson MI49203
 Rocky Mount NC27801
 Stratford CT06497
 Bricktown NJ08723
 Chatsworth CA91311
 Arlington MA02174
 Morgantown WV26506
 Orlando FL32801
 Grand Junction CO81501
 Hagerstown MD21740
 Provincetown MA02657
 Hingham MA02043
 Kittanning PA16201
 Winnipeg MB R2C 1W4
 Tulare CA93274
 Forty Fort PA18704
 Bladensburg MD20710
 Munroe Falls OH44262
 Franklin TN37064
 Red Bluff CA96080
 Colonia NJ07067
 Nashville TN37204
 Lakehurst NJ08733
 Colchester VT05446
 Overland Park KS66204
 Preston CT06360
 Wallingford PA19086
 Ogdensburg NJ07439
 Westville IL61883
 Dayton OH45424
 Murray UT84107
 Hendricks WV26271
 Brisbane, AUSTRALIA 4122
 Centreville MA02632
 Sharptown MD21861
 Philadelphia PA19150
 San Francisco CA94122
 Arlington VA22202
 Easton PA18042
 Salem MA01970
 Phoenix MD21131
 St. Paul MN55112
 El Cajon CA92020
 Vancouver BC
 Rutherford NJ07070
 Colborne ON K0K 1S0
 Philadelphia PA19129
 Levittown PA19036
 Fairlawn NJ07410
 Ft. Meade MD20755
 Marion IN46952
 Stone Park IL60165
 Saugus MA01906
 Houston TX77029
 Clementon NJ08021
 Philadelphia PA19174
 Webster Groves MO63119
 Newport OH45768

EDMUNDS, Russell J. 48 Lakeside Trail East
 EILERS, Don RRI, Box 151
 EKONEN, Karl 17239 S. Carfax Av.
 ENGBERG, Curtis 80 Concord Road
 ENTINE, Dr. Gerald 6 Silver Lake Av.
 ERICKSON, Donald E. Century Print Shop - 6059 Essex St.
 ERICSON, Bengt Box 5050
 EVANS, Richard C. P. O. Box 392
 FADER, Eroc 23-35 Bell Blvd
 FAIN, Henry 4001 Havendale Dr.
 FAIT, Bill Box 753
 FALCONER, Jeff Box 63
 FARMERIE, W. T. 15165 Rue St. Hyacinthe
 FAWCETT, Tom 785 47th Av.
 FEIDT, William B. 8852 L Spiral Cut
 FELA, Joseph Jr. 150 Robert Place
 FELDMAN, David 16864 Shrewsbury
 FELDMAN, Sidney - Mastertone Studios, 130 W. 42nd St. - New York NY10036
 FELTZ, Terrence 3875 N. Humboldt Blvd #3
 FENDERSON, Gordon Jr. Smiwtheel Road
 FERGUSON, Dan Box 8452
 FERRELL, Oliver P. Box 239
 FINKLE, Phil 8913 Enfield Av.
 FISCHER, Dave Box 489
 FISCHER, Robert P. O. Box 8081
 FLAK, Capt. Daniel 33 Algonquin Road
 FLANAGAN, Pat 3068 Woodbine Place
 FLEISCHAKER, Ted 3023 Tremont Drive
 FLORA, Robert J. 386 Creed St.
 FOLTZ, Martin 211 Elvin Court
 FORTH, Karl D. 630 S. Ardmore
 FOWLER, Wayne General Delivery
 FOX, David E. 333 Douglass St.
 FOX, Geoff 121 Linden Hill Apts.
 FOX, Larry 38 Emerson Place
 FOXWORTH, Robert L. G. P. O. 2111
 FRANCIS, Stephen 1620 Lodge St.
 FRANEY, R. J. 7 Harding Lane
 FRANK, Wayne #305 - 111 24th Av. S.W.
 FRANKEL, Harlan 12-13 Granada Crescent
 FRANKLIN, Jerry P. O. Box 523
 FRANKLIN, Mark J. P. O. Box 1343
 FRANKLIN, Stephen E. 8750 Town & Country Blvd. Apt. E
 FRCHO, Richard 1208 Hulett St.
 FREEMAN, Clarence 505 Summit Court
 FREGEAU, Art 11 Hummingbird Dr.
 GALERSTEIN, Robert Ohio Univ., Ryors Hall, Rm. 111
 GANGLER, Jim 11727 Highview Av.
 GARCIA, Angel 32 Hillside Road
 GARCIA, Vicente P. O. Box 225
 GARDNER, Bill 1060-C Lunalilo
 GASKA, Leonard 1723 W. 9th St.
 GEARY, Kermit RFD 2 - Box 298
 GEHRINGER, Edward F. 30597 Lincolnshire E.
 GEORGE, Charles 6407 Howard
 GETZELMAN, Arnold 12831 112th Av.
 GIANNINI, Roger 1111 Forest Hills Dr.
 GIBLER, Alan 68 W. Main St.
 GLEASON, David F. Calle I, B-8, Torremolinos,
 GLOVER, Gene 40 Martin Circle

MEMBER LIST - Page 4

Kinnellon NJ07405
 New Prague MN56071
 Bellflower CA90706
 Wayland MA01778
 Newton MA021--
 St. - Riverside CA92504
 S-350 05 VAXJÖ, SWEDEN
 New Buffalo MI49117
 Bayside NY11360
 Nashville TN37207
 Willoughby OH44094
 Clinton ON
 Ste. Genevieve PQ H9H 1E7
 Lachine PQ H8T 2R2
 Columbia MD21045
 S. Plainfield NJ07080
 Livonia MI48154
 - New York NY10036
 Milwaukee WI
 Old Orchard Beach ME04064
 S. Charleston WV25303
 Park Ridge NJ07656
 Northridge CA91324
 Hickory NC28601
 Fairbanks AK99708
 Chelmsford MA01824
 Columbus OH43202
 Louisville KY40205
 Struthers OH44471
 Lansing MI48912
 Villa Park IL60801
 Webb A. F. B. TX79720
 Reading PA19601
 Lindenwold NJ08521
 Valley Stream NY11580
 New York NY10001
 Alcoa TN37701
 Binghamton NY13901
 Calgary AB T2S 0J8
 White Plains NY10603
 Fremont NE68021
 Minnetonka MN55343
 Apt. E Ellicott City MD21043
 Eastlake OH44094
 Yreka CA96097
 Northford CT06472
 111 Athens OH45701
 Wheaton MD20902
 Hackettstown NJ07840
 Green River UT84525
 Honolulu HI96822
 Pomona CA91766
 Walnutport PA18088
 Birmingham MI48010
 Dallas TX75227
 Youngtown AZ85363
 Belleville IL62221
 Madison OH44057
 Guaynabo PR00657
 Paducah KY42001

GOLDMAN, Kenneth 2391 Ross Rd.
 GONTER, Robert Box 555
 GOOD, Michael 413A Burton House, 410 Memorial Dr.
 GOODWATER, Glenn 1206 Terrace St.
 GRADIN, Dan 27540 S.E. Chase
 GRANT, Bill 67 Brattle St.
 GRAY, Myron 1460 Park St.
 GREEN, Ira 2350 Vera Av.
 GREENE, George 1527 Sunset Av.
 GREENBERG, Warren 145 Cottage Road
 GREENHILL, Terry J. 100 Hertingfordbury Rd.

GRIFFITHS, Bryan 17 Kirkland Blvd, Apt. 104
 GUALDA, Juan 677 S.W. 9th Av., #211
 GUDGEL, John E. 141 Fleetwood Terrace
 GUERIN, Michael 1334 W. Foothill, #15-D
 GUINEY, John Morse Rd. PO Box 93
 GUSTAFSON, Hilding M. 3416 Brendenwood Road
 GUTHRIE, James 1009-C Hill St.
 HACKETT, Robert E. 1931 Steves Av.
 HAFTER, Chuck P. O. Box 897
 HAGAN, James V. 896 Pt. Malabar Blvd
 HAGGETT, Daniel 89 Maple St.
 HALL, Albert E. 3044 Maine Av.
 HALL, W. Lee 1050 Pleasant Hill Rd., #J-110
 HALL-PATCH, Nick 3272 Alder St.
 HAMBLY, Chris 47 Chessel St.
 HAMMOND, Gerry V. 16-242 Inkerman St. E.
 HANAVAN, Brett L. 845 First Av.
 HANSCH, Ross 5013 Risser Road
 HANSEN, Christian P. - St. Joseph's Seminary, Dunwoodie
 HANSEN, Richard 647 Commercial St.
 HARDESTER, HM2 Michael S. USN-559-80-7072-Navy Det.

HARDISON, Gregory 1549 Knox Dr. SW R-6
 HARDY, Mr. & Mrs. William 2301 Pacific Av.
 HARLE, Paul 2505 Pennsylvania
 HARRIS, John College Hts, Box U-269
 HARRIS, Phil P. O. Box 49343
 HART, Francis J. III 25 Paulsen Drive
 HART, Paul K. 2595 Alpine Trail NE
 HARTLAGE, Wm. P. "Pat" 9200 Wendell Way
 HARVEY, Alvin 12 Hamlet St.
 HARVEY, Lawrence S. RFD 2, Box 263
 HATHAWAY, John D. 2109 Tamarack Court
 HAUSER, Glenn - c/o WUOT/U. of Tenn. - 232 C & E Bldg.
 HAVEMANN, Eric 71 Madison St.
 HAYES, Harry Star Route Box 226C
 HEALD, Rick 1581 20th Av.
 HEALY, Craig P. O. Box 182
 HEINEN, Wayne 2603 Paseo Road
 HEINZELMAN, John S. 310 E. Monroe St.
 HELMS, Harry 1781A Cedar Post Lane
 HENDRICKSON, David RD2 Box 131-02
 HERKIMER, James 3255 South Drive
 HERR, George 24 Yawl St.
 HICKS, James Alan 75 Commerce St.
 HIDDEN, Ms. Debra O. 7310 Autumnvale Drive
 HIGGS, William 1715 Rollinwood Dr., #F-1
 HILL, James S. 3801 Palos Verdes Dr. N

MEMBER LIST - Page 5

Palo Alto CA94303
 No. Amherst MA01059
 Cambridge MA02139
 Yakima WA93092
 Gresham OR97030
 Worcester MA01606
 Atlantic Beach NY11509
 Cincinnati OH45237
 Akron OH44301
 W. Roxbury MA02132
 Hertford, Hertfordshire SG14-2AL
 ENGLAND
 Kirkland PQ H9J 1N2
 Miami FL33130
 Williamsville NY14221
 Upland CA91786
 So. Royalston MA01374
 Rockford IL61107
 Philipsburg PA16866
 San Antonio CA78201
 Chapel Hill NC27514
 Palm Bay FL32905
 White River Junction VT05001
 Long Beach CA90806
 Nashville TN37214
 Victoria BC V8X 1P2
 Box Hill No, Vic. AUSTRALIA
 Listowel, ON N4W 2M9
 Chula Vista CA92011
 Madison WI53705
 Yonkers NY 10704
 E. Braintree MA02184
 - US Army Hospital
 APO San Francisco 96331
 Marietta GA30060
 Aberdeen WA98520
 Dubuque IA52001
 Bowling Green KY42101
 Atlanta GA30359
 Burlington MA01803
 Marietta GA30062
 Jeffersontown KY40299
 Lawrence MA01843
 Kingston NH03848
 Champaign IL61820
 - Knoxville TN37916
 Pequanock NJ07740
 Gouldsboro PA18424
 San Francisco CA94122
 Cumberland RI02864
 Colorado Springs CO80907
 Tomah WI54660
 Rock Hill SC29730
 Kingston NY12401
 Caledonia NY14423
 Marina Del Ray CA90291
 Perth Amboy NJ08861
 Orlando FL32807
 Alex andria VA22307
 Palos Verdes Estates CA90274

MEMBER LIST - Page 6

HLIVAK, Robert J. 1468 S. Carpenter Rd., Apt. 345 Brunswick OH44212
HOBSON, Alan 210 Alfred St. Apt. 3 Vanier ON K1L 6W4
HODGE, Allan M. 5852 Lomond Drive San Diego CA92120
HOFFMAN, Robert N. 507 Woods Edge, Weikel Rd. Lansdale PA19446
HOGAN, Michael 9224 Cottage Grove Av. Highland IN46322
HOHNSTEIN, William 2735 So. 19th St. Lincoln NE68502
HOLLAND, George Jr. - West End Fed. S & L, P.O. Box 8008 - Albany NY12203
HOLMES, Thomas 4032 Rutherford Dr. Charlotte NC28210
HOLT, Arthur H. 28 Glenwood Rd., RD #7 Bethlehem PA18015
HOOGERHEIDE, John - 105 Bayside Lane, Doe Valley Estates - Brandenburg KY40108
HOOVER, William 4512 Southern Dallas TX75205
HOPKINS, James 29 Grandview Av. Pitman NJ08071
HORIE, Roger S. 2071 Kaumana Drive Hilo HI96720
HORWATH, Ray 1604 Burry Circle Crest Hill IL60435
HOUGHTON, John 71 Winter Av. Scarborough ON M1K 4M2
HOUDEK, Gary R. R. Munden KS66959
HOWARD, Paul 714 S. Iowa St. La Porte TX77571
HUPKE, John J. Jr. 4826 Walsh Av. E. Chicago I 46312
HURLEY, Danny Route 1, Box 209 AB Jefferson NC28640
HUTCHINSON, William 2412 Ellis Road Baltimore MD21234
HUTTON, Charles 2114 Myrtle Lane #1 Decatur GA30033
HYDER, D. Todd 206 Timberlake Rd. #3 Johnson City TN37601
HYMES, Bob 120 Lynnhaven Drive N. Syracuse NY13212
IMPRESCIA, Alan 201 E. 17th St., Apt. 17C New York NY10003
JACOBS, Glenn 709 W. Taylor Taylor PA18577
JANECKO, John 62 S. Hills Terrace Brownsville PA15417
JARRETT, Dennis 1499 Shippan Av. Stamford CT06902
JEFFREY, W. A. Field Adv. Dept., Box 95 Cincinnati OH45201
JENSEN, Don 5204 70th St. Kenosha WI53140
JETER, Karl 2816 Frontier Tr. NE Atlanta GA30341
JOHNSON, Darrel G. Box 326 Wolverton MN56594
JOHNSON, M/Cpl. E.B. CFS Carp, Box 48 Carp ON
JOHNSON, Frank Hillside Home, Box 388 Belfast ME04915
JOHNSON, John 318 Washington St. Hoboken NJ07030
JOHNSON, Steve P. O. Box 145 Havre de Grace MD21078
JONES, Douglas & Larry 5555 Antoine Apt. 112 Houston TX77018
JONES, Harry W. 9612 Atwood Road Vienna VA22180
JONES, Joseph 1805 Hetering - Afton Wilmington DE19810
JOSEPH, William P. O. Box 316 Waterville ME04901
JOZWIAK, Leonard 5999 Yorkshire Av. Detroit MI48224
JUEN, Douglas R. 136 Roberts Dr. Apt. 1 No. Tonawanda NY14120
KALISZ, Paul 2321 Powell Av. Bronx NY10462
KARCHEVSKI, Robert P. O. Box 170 San Carlos CA94070
KASKEY, Don Hotel Raphael, 386 Geary Street San Francisco CA94102
KASS, George 30 Ivy Circle West Haven CT06516
KATES, Lawrence Box 1276 Rancho Santa Fe CA92067
KAUFMAN, Malcolm 32-14 73rd St. Jackson Heights NY11370
KAY, Jeffrey 12 Peveril Hill So. Toronto ON M6C 3A8
KEENEY, Rob 2500 W. 6th #124 Lawrence KS66044
KEIM, Alan 805 S. Greenwood Park Ridge IL60068
KEMP, Peter W. 13-B Fleetwood Av. Bethel CT06801
KENNEDY, Andre 2380 Base Line Rd. #904 Ottawa ON K2C 3J4
KENNEDY, Steve P. O. Box 520 Immokalee FL33934
KING, Michael J. 6541 Anvers Blvd. Jacksonville FL32210
KING, Robin J. Driesprong 23 NIBBIXWOUD NH, HOLLAND
KING, Robert 34 Perry Drive Needham MA02192
KING, Willard 4806 130th Place NE Marystown WA98270
KIOTIC, Richard Goshen Hill Road Lebanon CT06249
KIRSCHMER, Reno E. 116 E. Oak St. Villa Park IL60181
KISSACK, Harold 4124 Hoskins Road N. Vancouver BC V7K 2P5

MEMBER LIST - Page 7

KITT, Jeff P. O. Box 31 Neosho Rapids KS66864
KLEMP, David A. Box 253 Plantville CT06479
KLEPPINGER, Jeff 502 E. 2nd St. Northampton PA18067
KNITTER, Michael G. 275 Lee Drive Ellsworth AFB SD57706
KNOX, Robert S. - Physics Dept., Univ. of Rochester - Rochester NY14627
KOBIERECKI, Jerome J. Firelane 10, Box 121, Rte. 1 Menasha WI54952
KOCSAN, Ed 7 Brooklawn Drive Morris Plains NJ07950
KORINEK, Dave 505 Redondo Oceanside CA92054
KOSKE, Gerald 10204 Thayer Rd. RR #1 Ringwood IL60072
KOSNETT, Jeffrey 105 Lovell Drive Charleston WV25302
KOTFIS, John F. 290 Moon Clinton Road Coraopolis PA15108
KOWALSKI, Doug 2035 S. 58 St. West Allis WI53219
KOWALSKI, Ed 3300 Chesterfield Rd. Philadelphia PA19114
KREJNY, Edward L. 6538 Belmeadow Drive Cleveland OH44130
KRENZELOK, Albert Box 1179 APO San Francisco 96555
KRUSE, Leonard 1675 Glen Oak St. Dubuque IA52001
KWIATKOWSKI, Andrew 9624 Avenue M Chicago IL60617
LACKEY, William V. 504 W. Nettie Kingsville TX783 3
LAGATTUTA, Tony P. O. Box 6291 Portsmouth VA23703
LANGLEY, T. D. 61 Willow St. Pleasantville NY10570
LAZAR, Robert 406 Ogg West - Barr Madison WI53706
LEAMY, Bob 7011 Shaulis Dr. Reynoldsburg OH43068
LEEDOM, Samuel W. 965 Egypt Pike Chillicothe OH45601
LEGROS, James 6145 Stratford Drive Parma Heights OH44413
LEHR, Albert 1979 DeVaca Way Livermore CA94550
LESSING, Joel 1103 S. Lyman Oak Park IL60304
LEVINTOWN, Michael 1417 N St. NW #502 Washington DC20005
LEWIS, David 3429 Forest St. Kansas City MO64109
LEWIS, Michael E. 1450 W. Stone's Crossing Rd. Greenwood IN46142
LINDBLADE, Rolland 1017 N 90 St Apt #2 Omaha NE68114
LITTIK, Arnim Box 771 Port Elgin ON N0H 2C0
LOBEL, Albert S. 10514 Caminito Baywood San Diego CA92126
LONG, John J. 14 Linda Dr. Woolcott CT06716
LORD, Carleton 12 Lower Drive Corning NY14830
LOUNT, William 180 River Av. Patchogue NY11772
LOVELL, Jim 8021 Kensington Blvd. #15 Davison MI48423
LUCAS, Chris Hickory Ridge, Apt. 68 Danbury CT06810
LUTON, Relfe RFD 1 Box 334 Elizabeth City NC27909
LUTZ, Dan 417 Talbott Drive Wilmore KY40390
LYON, Ken 7728 Tonawanda Cr. Road Lockport NY14094
MacDONALD, John 5802 Dalglish Road Calgary AB
MacGILL, Leon 105 S. Hudson St. Arlington VA22204
MACKIE, Ken 3 Thompson Lane Durham NH03824
MADELEY, Wm. Martyn 1801 Thornwood Lane Northbrook IL60062
MAGUIRE, Norman 2877 Kalakaua Av. Honolulu HI96815
MAHONEY, Andrew RR 53, Box 400, Apt. E Terre Haute IN47805
MAHRENHOLZ, Bob 307 Old Fort St. Tullahoma TN37388
MAISTRIAUX, Alfred Av. Charles Woeste, 92 B-1090 Bruxelles, BELGIUM
MAIZELS, Albert D. DDS Columbia Med. Bldg., -304 Washington DC20006
MALONEY, Mike J. 1835 Eye St., NW Bartlesville OK74002
MARINKOVICH, Andrew 1500 S. Elm San Pedro CA90737
MATTHEWS, Thomas 2169 Balaria Dr. Chevy Chase MD20015
MATTSSON, Yngve 5310 Sunset Lane S 950 60 Overkalix SWEDEN
MAXHAM, Vernon Tansjarr San Francisco CA94114
MAY, Eugene W. Jr. 4664 18 St. #4 PO Box 582 Ann Arbor MI48107
MAYER, Alan 3119 Western Av. Park Forest IL60466
MAYHEW, Richard C. Apt. 9, 3660 Durocher St. Montreal PQ H2X 2E8
McBRIDE, David W. - Box 131, Univ. Cent. Bldg., U. of Manitoba, Winnipeg MB R3T 2N2
McCOLMAN, John C. 842 Moyer Road Newport News VA23602
McCOLL, Dan C. 727 Vincent Court Stevens Point WI54481

McCOURT, David RD #2
 McCOWN, Lowell Box 286
 McCOY, Robert W. 4105 Washington St.
 McCURDY, Dave 114 Prospect #4
 McDERMOTT, Hugh J. 6440 W. 64 Place
 McDONALD, Patrick 40013 Fairchild
 McINTOSH, Eric 5 Wilfred St.
 McKAY, George Jr. P.O. Box 2100
 McKENNA, Mike Box 426D RD #1
 McMURRAY, Duane 501 S. Main St.
 McNIFF, Joe 28 Hovey St.
 McWATERS, Robert J. Polygraphic Lane
 MEEHAN, Morton P.O. Box 664
 MENDELSON, Dr. Robert 46 Schenck Av. 1F
 MERILL, Frank Jr. 1560 Brooke Park Dr. #8
 MERRIMAN, Alan P.O. Box 6
 MESSENGER, R.G. 101 Thackeray Rd.
 MEYER, Herman 2849 N.W. 56th
 MICOHN, Alan 2580 Warrensville Road
 MICKUCKIS, Joseph 6913 Furman Parkway
 MILLER, Howard L. P.O. Box 29
 MILLER, John J. - Director Tech Ops - WCAU - City Line

MILLER, Timothy P. 410 Snyder Hall - URH
 MILNES, Donald P.O. Box 1332
 MINTHORN, Russel 816 S. Wisteria Dr.
 MITCHELL, James W. Jr. 12 Ninth St.
 MITOCK, Mike 975 Osborn Av.
 MOCKUS, Joseph 682 Riverview Dr. #83
 MOIR, Ben F. 3 Ingersoll Crescent
 MOLANDER, Kevin 5555 Banff Court
 MONFERINI, Dario Via Davanzati, 8
 MONG, Rolf Nonsfjellveien 26
 MOORE, Ernie 4 Ashmore St.
 MOORE, Ray 116 Walnut St.
 MOORE, Walter P.O. Box 783
 MORGAN, Harry 2105 Central Av.
 MORISSETTE, Yves 1290 Rue Crevier
 MORRIS, Jerry Rt. #1, Box 203
 MORRIS, Robert 818 W. 66th Av.
 MORSS, Stanwood R. RFD #3, Box 294
 MOUNT, Paul R. 471 Emerson Av.
 MOZLACK, Richard J. 157 E. Wedgewood Drive
 MURPHY, Wayne 1411 Phyllis Av.
 MURPHY, William MD 82 Marlborough St.
 MUSCO, Ronald 16 Chestnut Drive
 MYERS, Dan 309-R Hollywood Dr.
 MYERS, Levi 116 N. Queen St.
 MYERS, Michael E. 4148 Sheraton Drive
 NALL, R. J. "Jim" 1218 Innis Court #5
 NEAL, Robert Jr. Box 446
 NEEDLEMAN, Paul 98 Pierce St.
 NEIMANIS, Harold 169 Lincoln Blvd
 NELSON, Bob 2809 Cooper Lane
 NELSON, Dick 3470 Travis Av.
 NELSON, Kurt A. 71 Valley Drive
 NENSON, Bo 1:a Långgatan 19A
 NEUMANN, Greg 3200 S. Fulton Court
 NEVES, Jerry H. 3951 Colby Way
 NEWMAN, David 418 Pleasant St.
 NISSEN, Alan 21 Rosemary Drive

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 Auxier KY41602
 Lincoln NE68506
 Elmhurst IL60126
 Chicago IL60638
 Grissom AFB IN46971
 Invercargill, NEW ZEALAND
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 Kenmore NY14217
 Nashville TN37216
 Simi Valley CA93063
 Churchville PA18966
 S-891 00 Örnsköldsvik SWEDEN
 Denver CO80231
 San Bruno CA94066
 Weymouth MA02190
 Hazlet NJ07730

NORDQUIST, Fred 7945 Boxford Road
 NORTHUP, Richard 2346 S. Florence Av.
 NORTON, Thomas A. Box 32
 NOWAK, Robert 57 Beesely Av.
 OBJIO, Cesar Calle Enrique Henriquez #49-A
 O'CONNOR, Tom 1316 Lake St.
 OLDFIELD, John 325 E. 14th St.
 OLSON, Grant 112 Penmeadows Close S.E.
 O'NEILL, William C. 345 Grandin Av.
 ONYSCHUK, Ken 16771 Shea Av.
 ORLANDO, Dennis 5034 Sylvia Road
 OSBORN, Forest E. 202 N. Jackson
 OSBORNE, Jerry 763 Canterbury Av.
 O'SHEA, Mike - c/o Hayes Hardware - 819 W. Pine St.
 OWEN, Michael G. 7733 33rd Av. NW
 PAPPAS, Andrew 11421 S. Maplewood Av.
 PARILLO, John 400 S. Market St.
 PARKS, Jack 909 Jefferson St.
 PARRISH, Geoffrey L. 531 Woodvale Av.
 PAULSEN, Edward C. 6418 University Av. Apt. 3
 PAVKOVICH, Vince 3717 94th Av. W.
 PEGG, Robert Box 357, RD 3
 PEJZA, Fr. John 212 S. Carpenter Rd.
 PERGE, Joe 546 Oakwood Av.
 PESEK, James B. Rt. 1, Box 510
 PETERS, David A. Sr. 1317 Walter Av.
 PETERSON, John F. RFD 3, Box 97B
 PHILLIPS, Dan Rte. 1, Box 476
 PIETSCH, Bob 230 Winchester Court
 PIMPER, Dennis 540 N. 6th St. E.
 PISTEK, Richard T. 8559 S. Komensky Av.
 PITMAN, Brian 11 Regent St.
 PLAISANCE, S.F. 217 Country Club Road
 PLONKA, Joe Box 148
 PLUNKETT, Wayne 124 John St.
 PODA, Louis M. 395 Kling St.
 PODALL, Bertram A. 141-05 Pershing Crescent
 POLLOCK, Elliot 3014 W. Greenleaf Av.
 POLLARD, Frederick H. Star Rte 00864 Sierra Verde
 PONDER, Stephen H. P.O. Box 22635
 POOLE, Greg 1730 Belcher Circle
 PORTZER, Bruce 7021 Sandpoint Way NE Apt. 215
 POWIS, Warren 7011 Haycock Road
 PRITCHETT, Douglas S. Route 3, Box 205
 PURDY, Robert 816 Emerson St.
 QUINN, Dennis 25 Colton Drive
 RADER, Charles 22 Robert Street
 RADOVICH, Jack 674 9th St.
 RAMIREZ, Mike 5218 Roundtable
 RAND, Gary S. 1600 S. Sandhill Rd. SP 144
 RATTAY, Adolph 22 Andrea Blvd.
 REAMS, Gregory RR 5, Box 103
 REGNALL, Michael 1384 Adelaide S.E.
 REH, Charles 34 Garrison Av.
 RETZLAFF, Arnold 202 Taylor Road
 REYNOLDS, Bruce Rte #2
 REYNOLDS, Conrad 7010 Wildridge
 REYNOLDS, Don P.O. Box 784
 RHOADS, Robert 8637 E. Palo Verde
 RICHMAN, Richard WLFH - 431 S. 2d St.
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 Springfield MO65807
 Vineyard Haven MA02568
 Chicopee MA01013
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 Calgary AB T2A 3S2
 Azusa CA91702
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 Warrensburg MO64093
 Indianapolis IN46256
 Glendora CA91740
 Scottsdale AZ85253
 Little Falls NY13365
 Houston TX77071

RIDGE, John 674 E. 43d St.
 RIORDAN, Mike P. O. Box 1195
 RITAYIK, W. R. 1408 Valencia
 RITTENHOUSE, Eric 77 Linaria Way
 ROACH, B. M. 3 Fawlds Av., Sandrnohm
 ROBBINS, Marvin E. 5627 Ashley Oaks Dr. #33
 ROBERTS, Jeffrey 945 E. Moore St.
 ROBBIE, Harold 273 South St.
 ROBINETT, John 3919 S. W. 106th St.
 ROMAIN, Stewart & Bella 750 Donlon Place
 ROSENBLATT, Harvey M. D. 55 E. 8th St.
 ROSLOWSKI, Michael 3 Parmly St.
 ROSS, J. H. O. D. 37 Sharon Road
 ROUSE, John L. P. O. Drawer M
 RUBIN, Sheldon 10000 Rosewood Court
 RUGG, Andrew F. 668 de Gaspe, #408
 RUNDBAKEN, Sol 4715 Oakview Drive
 RUSSELL, Richard 36 Alice Av.
 RYCHALSKY, Konstantine 22 Carroll Court
 RYDEN, Lars Majvagen 6
 SABELLA, Roger Box 2072
 SAMPSON, John N. 52 Delwick Lane
 SANSERINO, Ralph 8422 Crane Circle
 SAYEN, Thomas 200 E. Montgomery, #1A
 SCHAFER, Howard F. 303 S. Spruce St.
 SCHATZ, Ronald F. Box 592814 AMF
 SCHEEL, Michael 4126 Nobis Drive
 SCHIEDERMEYER, Kevin 426 W. Belmont Av., Apt. 806
 SCHILLER, Ron B. 7657 La Bolsa Drive
 SCHMELZER, John Box 546
 SCHMIDT, Dave 42 Chelwynne Rd. - Castle Hills
 SCHNEITER, Wolfgang 6126 Fulton Av. #10
 SCHOOLS, Harry A. 1606 S. Newkirk St.
 SCHULTZ, William 1015 Pomona Drive
 SCRIMGEOUR, K. Gray 227 Hanna Road
 SEAVER, Randy 1154 Via Trieste
 SEELIGER, E. H. 3440 Johnette St.
 SEGALAS, Richard P. O. Box 26254
 SELLECK, Robert 18 Coleman St., #2-B
 SEMKO, George M. 46 Arcade Av.
 SHAKERIDGE, Gary 135 Mitchell Av.
 SHANK, E. M. 3344 Mentone Av. #2
 SHAPIRO, David YMCA Rm. 625, 1600 Louisiana
 SHAW, Stanford J. 12227 Tweed Lane
 SHEARER, Vernon H. 3442 Stratford Road N. E.
 SHEDD, Stan 1433 Fifth St. N. W.
 SHEEDY, J. Dan P. O. Box 31
 SHEPHERD, Prentiss Jr. 34 Granite St.
 SHETTER, E. P. 11772 Lake Shore Place
 SHIELS, John 3212 Chestnut St.
 SIBBITT, Ron 849 Devine, #12
 SIEGEL, Gary 2728 106th St.
 SILLIMAN, John 138 S. Bell-Wick Rd.
 SILVEIRA, J. F. Porto da R. Sto. Antonio 938 #2
 SIMKO, Dave 476 Idora Av.
 SIMPSON, Cary 601 5th St.
 SIMPSON, Scott 905 Applewood Road
 SKEATS, Terry C. 92 Dunbar Road, S.
 SKINNER, Pete 166 Pine St.
 SLOAN, John J. 5102 N. Acacia St.

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Brooklyn NY11203
 Goleta CA93017
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 Seattle WA98145
 W. Hempstead NY11552
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 Waterbury CT06705
 Bowie MD20715
 Oak Park MI48237
 Ile de Soeurs PQ H3E 1H9
 Savannah GA31405
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 17540 Jarfalla, SWEDEN
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 N. Palm Beach FL33408
 Murrysville PA15668
 Sarnia ON N7T 1X4
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 Porto Alegre, R. S. BRAZIL
 90 000
 Youngstown OH44511
 Tyrone PA16686
 Fort Wayne IN46825
 Waterloo ON N2L 2E5
 Dover MA02030
 San Gabriel CA91776

SMALL, Glenn 31 Candy Lane
 SMALL, R. J. 2421 E. Helen St.
 SMELTZER, Mike RD 1
 SMITH, Joseph Jr. 196 Ackley Av.
 SMITH, Lexington 55 East End Av. #4-G
 SNOW, Dr. James S. P. O. Box 746
 SOMMER, John 1022 Catalina
 SOULE, Edward 1500 Sparkman Drive #33E
 SOUZA, Robert W. 1085 Market Av. #4
 SPEAREL, Robert Jr. 5450 Pine St.
 SPELLMAN, Charles 5411 Walther Av.
 SPERRY, Ralph 320 Warner Hill Rd.
 SPITZER, Daniel 79 Irma Drive
 STAFF, Jack F. 1030 Cutspring Road
 STARR, Jerry 196 Fox St.
 STEELE, Sidney 2408 4th St.
 STEWARD, Harley E. 4220 French St.
 STEWART, James N. 1100 Westlawn
 STILES, Frank Box 1404, Hampshire College
 STILWELL, Mahlon F. 646 Ridgely Av.
 STOFKO, Stephen 14235 Ingleside Av.
 STOKER, Timothy CPO Box 1926, Wheaton College
 STONIER, Robert G. 144 S. Maple Av. #84
 STORMS, Donald C. 3475 Spring Valley Blvd.
 STRAUS, Elliot 1410 Bond St.
 STROHMAIER, Floyd 4110 40th Av. So.
 SULLIVAN, David Weinstein Hall #605, 5-11 University
 SULLIVAN, Phil 152 3d St.
 SUNDSTROM, Thomas R. P. O. Box 205
 SURINA, Mark RD #1, Box 60
 SWEANEY, Mary S. 4498 Silverado Trail, N.
 SWEARINGEN, Paul Route 1
 SWINGLEY, Phillip 415 S. Elm
 TAYLOR, Brent 61 Warren Av.
 TAYLOR, James O. 12311 Gratiot Av.
 TAYLOR, Page Box 282
 TAYLOR, Peter V. KFOG - 900 North Point
 THIEL, John F. RR #1
 THOMAS, William F. P. O. Box 341
 THOMPSON, Glenn L. 800 W. Buckeye St., Apt. 41
 TINSLEY, William W. 48 Midland Court
 TOMER, Randy P. O. Box 495
 TOPEL, John Box 550
 TROCHIMCZYK, Dr. Juergen Carnegie Inst. of Washington
 2801 Upton St. NW
 3003 Gleeson Lane
 P. O. Box 7134
 5539 Oak
 Box 103
 UERLING, Charles C. Jr. c/o Uerlings Furniture, Box 69
 VAN WORMER, Robert 804 7th St., N. W.
 VEIO, Ben 1466 Merry Lane

 VERNON, Brian 205 N. Piedmont St., Apt. 3
 VISSER, Dave Box 162
 VITTI, Rick 77 Richmond Hill Road
 VONDEREMBESE, Gene 31-50 30th St.
 WALDRON, Harry J. 201 Monroe Road
 WALKER, Ralph S. Jr. 4824 S. 1st St.
 WALKER, Robert C. Rt. 2, Box 17A
 WALLACE, Jim 4719 E. Broad St. Apt. D

MEMBER LIST - Page 11

Syosset NY11791
 Tucson AZ85719
 Wrightsville PA17368
 Johnson City NY13790
 New York NY10028
 Darien GA31305
 Fort Wayne IN46825
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 Morro Bay CA93442
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 Detroit MI48205
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 New Canaan CT06840
 Astoria NY11106
 Sarver PA16055
 Arlington VA22204
 Westport KY40077
 Whitehall OH43213

WALTERS, John H.	482 Cutler Av.	MEMBER LIST - Page 12
WARD, Henry	Box 1623	Maple Shade NJ08052
WARDELL, Paul	2104 SE 28th Place	Sherbrooke PQ J1H 5M4
WASHBURN, Charles	Gin Cove Road	Portland OR97214
WATERMAN, Sharon	83 College Highway	Perry ME04667
WATSON, George E.	2535 Maine Av.	Southwick MA01077
WATSON, J.M.	3513 W. 57th Place	Long Beach CA90806
WEEDEN, Hal	1008-17th Av.	Chicago IL60629
WEINSTEIN, Cecil R.	Box 52	W. Belmar NJ07719
WENDT, Watson	Star Route	Golden City MO64748
WESOLOWSKI, Ernest	1416 Pasadena Av.	Grand Rapids MN55744
WESOLOWSKI, Robert J.	1933 So. 33rd St.	Omaha NE68107
WHALEY, Brock H.	447 Joyce Terrace North	Milwaukee WI53215
WHATMOUGH, David	284 Main St. W.	St. Petersburg FL33701
WHEELER, Frank	6589 Wattsburg Rd.	Hamilton ON
WHELAN, Mike	1654 Bathurst St. #401	Erie PA16509
WHITE, Douglas Dell	6510 Woodward, #310	Toronto ON M5P 3J9
WHITE, Lewis	24 Park St. #2	Downers Grove IL60515
WHITE, Russell IV	1172 Troy-Schenectady Rd.	Franklin NH03235
WHITE, Thomas H.	1904 Jefferson Park Av., Apt. 42	Latham NY12110
WHITTAKER, Gary	400 Central Av., Apt. 11-P	Albany NY12206
WHITTIER, Harold A.	71 Spring St.	Foxboro MA02035
WILLIAMS, David	Box 615, Hwy 101	Easton OR97103
WILLIAMSON, Tom MD	13 Forest Hill Drive	Guelph ON
WILKINSON, Henry J.	5028 Maiden Lane	Santa Rosa CA95405
WILSON, John F.	305 S. Dupont Rd., Lancaster	Village
		Wilmington DE19805
WING, Ron	705 N. Emporia #2	Wichita KS67214
WINKELMAN, Bruce	3324 Kettering Place	Greensboro NC27410
WIRT, Rogert	37 Kilsyth Road	Brookline MA02146
WISEBLOOD, Steven C.	707 Loma Way	Santa Maria CA93454
WOLFF, Charles A. Jr.	2025 Francisco, Apt. 1	Berkeley CA94709
WOODWARD, Clayton	Box 695	Palmer AK99645
WOODWORTH, Harvey Jr.	142 Otsego Av.	San Francisco CA94112
WORCESTER, Joseph A.	RD 1	Frankfort NY13340
WRIGHT, Martin	1913 Jeanette Lane	Springfield IL62702
WYMAN, Edward - c/o E.	Giguere, 1716 Presque Isle	Marquette MI49855
YATES, J. O.	8615 Tanglewood Trail	Chagrin Falls OH44022
YINGLING, Tom	221 Pinewood Road	Baltimore MD21222
YOUNG, James & Karen	P.O. Box 576	Wrightwood CA92397
YURIGA, Martin A.	333 Roosevelt St.	Gary IN46404
ZACHS, Burton	1800 Engel Rd., Rm. 644	Lawrence KS66044
ZANK, Neil G.	2445 E St, Apt. 6	Lincoln NE68510

These members joined while the list-typing was in progress:

BARFIELD, C. L.	917 Fremont Av.	Pensacola FL32505
BROWN, Russ	3274 So. Lake Shore Drive	St. Joseph MI49085
CIESLEWICZ, Thomas J.	P.O. Box 104	Denmark WI54208
COOPER, Robert B.	816 W. Moulton St.	Pontiac IL61764
COTTRELL, Gordon H.	761 NE Meadow	Roseburg OR97470
GOLDSWORTHY, James F.	6 Campground Road	LeVale MD21502
WILLIAMS, Francis R. Jr.	P.O. Box 203, Rural Route	Norwood MO65717

The LADS have shown how to make good use of the membership list, finding nearby members, making contact, and forming an informal local DX organization. Try it! It's fun to meet DX'ers and compare notes on a one-to-one basis. Next thing you know, you'll be hosting a convention and maybe even publishing a bulletin!

musings of the members

editor: Ernest R. Cooper
5 Anthony St.
Provincetown, MA. 02657

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

JAMES E. CRITCHETT - 1635 Walbridge Street - Red Bluff, CA- 96080
For some reasons, previously unID stations are getting harder & harder to find. The total to 1/17 is 379. Tues. 1/4 on 540 @ 4am I heard KNOE ID, & @ 4:03 a CBC station, serviced from Vancouver, signed off, without a local ID. KORL-650 was my second Hawaiian, IDing @ 3:19 Wed. 1/5. At 4:20 CKPH-1430 IDed u/AN KARM. Thurs. 1/5 @ 3:40am CJGX, Yorkton, Sas. IDed (no KPRE). At 4:03 XEAI IDed as "Radio Ah Ee". Change of calls from XELZ-1440 (KPRO off @ 4:01). Fri. 1/7 was a Chicago morning here, w/WBBM-780 u/KCRL, WGN0720 u/KDWN. Ar 4:03 CKRM-980 IDed u/KFWB & CKNW for a pleasant surprise. Another Canadian surprise was CFRW-1470 Sat. 1/8 @ 4:05, u/CJVB. SM 1/9 brought the bad news on 1470 with the "Bib BC" at "Tj", XEBBC IDing @ 3:22, apparently on AN, SP unknown. But with 1040 WHO off, KHVH was my next Hawaiian @ 4:01. MM 1/10, KPNC-1560 went off, but I heard no WGLB Special from 3:09 on. KGU-760 was Hawaiian #4, w/KFMB off, & w/WJR, @ 4:01. At 7:16, KCTA-1030 s/on, as the "Gospel Giant of the Southwest." KGO-810 did not go off @ 8am, nor did they Sunday, so they are now NSP; goodbye KOMO & WGY. Sat. 1/15 was a foreign language morning, w/a possible VSZI-844 Tarawa @ 3:23, and HJDK-750 @ 3:35. No positiv ID, though. SM 1/16 @ 6:13 there was a TT w/XETRA-690, is CBU to blame? After many hours of listening to 1120 I finally IDed KMOX u/KPNW @ 3:11 MM 1/17. At 3:15 on 1290, KUMA IDed, mentioning 1290, 5,000w, MoR programming, 5:30am PST to midnight (?), on the air for test purposes. They gave details of their directional pattern. Already verified, so no report. I got up again to try for the f/c for KGEX-1480, but only KW-IZE heard, w/no tones, & no other programming heard. Finally, @ 7:30 on 1580, XEDM ICed at s/on (not 8am PST per Mex-glenn list). My first Red Bluff verie was from KQOT-1550, v/1. 73, all.

STEPHEN FRANCIS - 1620 Lodge Street - Alcoa, TN - 37701

The KOKO-1450 TEST on 12/27 was heard well here w/plenty of code & voice IDs, really a well-conducted TEST 1977 DXing: 1/3- No sign of KWHO-860; some weak TT heard u/WAAY during KOQT sked time but nothing else. WLAJ-1450 finally heard @ 12:30pm in WLAR null w/c/w; WLAJ & WLAR are exactly equidistant from here, but WLAR's always dominant. MM 1/10- WBUC-1460 TEST in fair u/WENS w/light cl mx; WDNG-1450 fair w/Glen Campbell records, not much stronger here than they are AN during the week. WOKJ-1550 noted AN, so long 1550. 1/13- Guinea-1403 produced audio (sitar-like instrument w/fast choral accompaniment) @ 1:47am for country #35. I've been hearing a rumble against 1400 almost nightly since mid-November but never really bothered to check it out until Conakry started getting reported so much recently. 1/14- 7:30am, WYOK-1000 @ s/on u/WCFL/WNOX splatter w/SSB for GA #150. MM 1/17- WSDL TEST in well w/c/w & mention of callers. WCKY-1530 noted AN, so long 1530. Hopefully this was a one-night only thing because of the WX lately in the East - I guess we'll find out next week. (Tune in next week at this same time and find out, hi -ERC) No sign of KUKA-1290 TEST u/WTOC/WHIO. 73s.

PHILIP BOERSMA - 15570 Cleveland Street - Spring Lake, MI - 49456

Hello again. First off, WCUZ-1230 is now on the A1 net, ex Mutual. To the DX: The only time I got to DX this past week was MM 1/17. So, 1/17: CKLM-1570 a surprise o/CHLO @ 2:15 w/usual FF & EE rr. At 2:30am, WGAF-910 in o/all w/slogan "WGAF, Radio 910, where the difference is the music!" At 2:40, I remembered the WSDL TEST was sked, so I whipped up to 1560, and there they were, heard clearly u/WQXR OC until the 3 s/off. They played c/w, gave out phone callers' names over the air, and mentioned IRCA. At 3:02am, I noticed WCKY still on RS. I wonder if that

(Boersma) means they've dropped or shortened their MM SP? At 3:09am, WUBE-1230 in good w/PSA & Cls. (?? -ERC) 3:11, WIST-1240 noted w/rr & promos. Oh yes, I did send a report to WSDL for their TEST, first report sent to a station in over two years. But then, 'twas the first TEST I heard in about two years, too, due to inactivity. 73s.

U. OF MANITOBA DX-SWL CLUB - Room 517 - Box 131 - University Centre -
Winnipeg, Manitoba - R3T 2N2

UMDX made another excursion into the flatlands of Manitoba with its kilometer of wire to try for MW DX, this time on Boxing Day, 12/26 to see how the Beverage antenna would work on a MM. Only four of us headed out this time but still managed to get the antenna up in less than two hours. (Thank goodness it wasn't much longer - the temperature was 20° below F.!) We also found out what caused our noise problem last time out - the blower unit on the furnace! But when you go to DX you expect hardships, so off went the furnace! But it was worth it, we beamed the antenna a little more to the E this time, about 135 degrees, roughly toward Caracas (vs. 175 degrees last time) and found the stations coming in were totally different. We were solid into Venezuela, Colombia, Cuba, etc. while the Guatemalans, Costa Ricans, El Salvadorians, etc. that we heard last time were absent or much weaker. Key loggings this time included R. Liberacion, Cuba-740, R. Columbia-1524, C.R., R. Melodia-735, Ecuador (tentative*), R. Reloj Nacional, Cuba-1560, R. Clarin-860 D.R., R. Cordillera, Colombia-1190, RCN-1030 (R. Pacifico?), Colombia-940, R. Punto Fino, Venezuela; R. Mil Viente-1010, Colombia; Caracol-850 (Emisoras Nuevo Mundo, Colombia), R. Reloj Nacional, Cuba-1270, Surinam-725, Ondas de los Medanos, Venezuela-660. Another interesting logging was WHO-1040 in Vietnamese with the "Voice of South East Asia" program. We'll be making another trip out to Delta Marsh this weekend & will try to send in a Musing with the results.

YNGVE MATSSON - Tansjävär - 950 60 Overkalix, Sweden

Happy New Year & greetings to you all. Several months now since my last Musing, so time for another here. This season with just fantastic NA CX many days here in Sweden. Sometimes one hardly believe the ears when 250w NA's are booming in with wonderful signals. I have been rather busy at the farm this Autumn, so I didn't have time for DXing all these fine openings, but three new states in USA reported & I guess about 40 reports out to NA until now this Winter. My verie total at the moment: USA 38/116 & Canada 11/64. Reports out to, for instance: KBOI-670 & KIDO-630 were my first ID loggings; KDAY-1580 CA; KIRO-710 WA; KNBR-680 CA; KSPQ-1230 WA (a very nice catch with only 250 watts!) (I'll drink to that! -ERC) They were heard 4/1/76 & 1/8/77 around 3am EST, all-NX. KRGO-1550 UT very strong sometimes, dominating the frequency; KSAL-1150 KS & KVGB-1590 KS were my first loggings from this state; KFI-640 CA; KLO-1430 UT; KRRW-680 AK this Winter the dominating station on this frequency with nice programs in EE & Eskimo; KXLY-920 WA; KGA-1510 WA; KGAR-1550 WA, a real surprise booming in with wonderful signals, just like a local many days here in N. Sweden. I heard them the first time 1/2, but probably heard for the first time after going AN around Christmas here. The pattern must really be in favour of us who get the signal from NW; KAAY-1090 AR was my first AR logging. I have for many years tried to catch this one with no luck, but now on 1/4 the station was very strong without QRM. KGLQ-1300 IA; KMO-1360 WA; KPNC-1560 CA; WMAQ-670 IL; WBBM-780 IL; WGN-720 IL; WDEE-1500 MI "Big D" IDs; WPOP-1410 CT; WGEE-1360 WI; WXCL-1350 IL; WSWW-1590 WI; GJFP-1400 PQ; CHEF-1450 PQ; CHFC-1230 MB "N. Manitoba Radio" CBC in Churchill! a v/e nice catch, only 250w, but booming in with wonderful signals several mornings our time. Sometimes s/off @ 2:05 EST. Around New Year several days heard also around 3 & 4:30am EST. WSWW was #6 heard on this wonderful frequency; WSAI-1360 OH; WISN-1130 WI; CKX-1150 MB; CHED-630 AB; CHWK-1270 BC & finally CKLG-730 BC. Veries received lately are: v/1- KBBQ-1590 WDEE-1500 KWVL-1330; KSPQ-1230 long & very nice letter; KRGO-1550 also nice letter, CHWK-1270 v/1 & v/q, CKLG-730 also, WBEM-780 v/1 & CM, also CKX-1150. v/q- KFQD-750, KNBR-680, VHPF-1230 & finally one of the best ever received QSLs since I started DXing, a nice v/1 from KTUF-1580 AZ (now KNIX). The report was from 1974 when I picked up one of their late night test calls, rather strong, so I guess AZ not would be almost impossible in Sweden as it is now if only they were AN!

DAVE SCHMIDT - 42 Chelwyne Road - Castle Hills - New Castle, DE - 19720

Here is another for the Master of the Keys! Things are moving along at a snail's pace this year for me with a few being heard every now & then. The latest: 12/20- WDCR-1340 TEST about 85% from 12:31-12:46am, code & TT mostly, some voice stuff also. 12/24- WIFM-1540 5:15-5:17pm, couple of minutes overboard w/an AM-FM s/off. 12/26- WGSW-970 2:18-2:36am w/NIS stuff, mostly over the Frenchie, WWSW off. This one is a good bet for those still needing Maine & can get rid of WAVE. 1/3, first of the year, WARR-1520 12:35-12:51am w/ET, giving WKBW a rough time. 1/10-WYNS-1150 3-3:13am on TEST w/TT. This was arranged by personal visit to the station, a very friendly place, so I hope many heard it. 1/13-WCLN-1170 5:09-5:18pm w/WWVA nulled. 1/17- WMIX-940 2:18-2:30am w/MoR, with very heavy WPEN splash noted. WSDL-1560 TEST 2:42-2:55am w/c/w, many IDs. WWCO-1240 3:13-3:25am w/loud ET-rr. Later on, WBBB-920 4:47-5pm w/rr and sports. Verie total is up to 849, adding v/q WMBS-590 w/CM & fact sheet, v/1 WICK-1400 after a f/up, & the famous Xerox letters from WZAM-1110 w/CM & fact sheet, WDCR-1340 w/SC & WGSW-970. WMBS & WICK make 118 verified for PA alone, how many for you, ERC? (206, in 44 years - ERC) If everything goes right, I hope to make it to Starr's get-together in YAD land, so beware, hi! Some new line noise has popped up again, & it's been too cold to get out to find it so I'll be getting on that one soon, I hope, hi For a residential area, this has to be one of the very worst I've seen for line noise problems. Till a few more hit the wire, 73s!

JOE W. BRAUNER - R.D. 1 - Box 86 - Punxsutawney, PA - 14767

New DX here is low in quantity but fair in quality. Since last Muse the following interesting stuff has been heard: New Years Day found CSB-5 coming in here for first time @ SSS, third new country this Winter. KWHO TEST was heard far under the Cuban, mx audible all the way but no voice, two Morse code IDs, made it easily, another boost for this method of IDing DX TESTS. Odd v/1 says "The Morse code IDs you heard were probably from us as we made code IDs at those times." Huh? 1/3- WIZO-1380 in well 5:45-6pm s/off. 1/9, finally after umpteen tries, KNIX poorly @ 7:45 s/off. 1/14- WLVL-1340 just made it w/5am s/on. 1/15, I tried for KWBC TEST, very weak TT w/breaks noted 1-1:14, no IDs heard, then WFXV hit 1560 like a hurricane with intermittent tests, for another new call change. The WSDL TEST in very good here on 1/17 for another call change. While waiting for it, a fast ET ID was heard @ 2:20 on 1560, call like KCWA??? No location given. KCJJ? (Like recent near foul-up w/ WOOZ {Double-U Double-Oh-Zee}. My guess is that most of the unlisted call we all hear are such departures from conventional IDs out here, WEND-1580 is often using "The new W-16" as an ID & some time ago WNCC-950 used a four-letter combo beginning with W as some sort of program ID. WVVA had its "party" on New Year's, off for a time that morning. Not much else of interest. On 1/10 KDKA & WCKY were AN, the latter again on 1/17 so maybe AN-7 now - rats. Anyone needing Nebraska, KFAB-1110 should be a "shoo-in" during WBT's SM SP. On 1/10, WNCC-1240 was topping the spot with Morse & voice IDs @ 1:15am. WSDL's TEST put another state total over the 100 mark for me. Good DX to all & 73.

CCNRAD R. DUROCHER - 437 Essex Street - Saugus, MA - 01906

As B.B.King would say, "I've paid my dues & it's time to Muse." 12/27- The old LW fell during one of our weekly snowstorms and got mangled by the plowing but CHTN was blasting in @ 6:45pm so the antenna stays where it is! I looked for Cayman on 1555, no luck, so I moved to 1550 and caught WVAB-VA s/off @ 5:15pm. This was fld by WSHN-MI s/off @ 5:30. 1/12- I finally managed a strong R. Jumbo-545 @ 6:02pm. A very strong Surinam-725 was in @ 6:15. On 750 @ 6:20, Nicaragua was slugging it out with WSB. I sure hated to leave home on this TA-potential evening I managed to pull in CMJN-780 Cuba @ 6:30 before leaving. 1/13- Constant female chanting on 530 @ 5:15-5:30pm - I think it may be Algeria on 529 (also my first TA!) I just want to say thanks to all the regular Musers and column reporters for keeping us part-time DXers informed. And a public thanks to ERC! Later. (Will I C U on April # 2? -ERC)

UP-COMING EVENTS - GET-TOGETHER AT ERNIE COOPER'S, 5 ANTHONY STREET, IN PROVINCETOWN ON 4/2, 11am-6pm. MINI-CONVENTION AT YAD-LAND 4/8-10, and of course, the B-I-G ANNUAL N.R.C. CONVENTION IN LINCOLN, SEPT. 2-3-4-5!

PAT HARTLAGE - 9200 Wendell Way - Jeffersontown, KY - 40299

1/19. Not too much is happening DX-wise here. Other things have been taking my time. New loggings: 1/2- WUBE-1230 @ 2:10am as new call (previously heard as WCPO). That same date @ 6:50pm, R. Cayman-1205 //--1555. Long heard, but for some reason not logged WOKK-910 added 1/4 @ 12:10am. 1/7- KMCW-1190 heard 6:10pm w/WOWO nulled and w/much QRM from KAYQ. KAYQ was previously logged on the Louisville beverage but this was the first time @ SSS. Added 1/9 were YVLB-1040 w/La Voz del Carabobo ID @ 2:54am, & CFCG-600 @ 4:07 giving local WX. Six new stations added: 1/10 AM beginning with WELI-960 TT @ 12:08. DX TESTS of WBUC-1460, WYNS-1150 & WDMG-1450 all heard. Local WXVW-1450 could be nulled enough during "Nitecaps" to pull decent audio from WDMG. At 2:50am, I was pleased to hear (and tape) "This is CHTN NX" on 1190, my first in PEI. Lastly CJBK-1290 heard w/WX @ 4:14am. Veries: v/1- KMCW, & v/q WELI. Anyone get a WBUC TEST verie yet? After I type this I'm sending out my first-ever CPC letter. How about youse guys out there? We here in Louisville are looking forward to April 1 and publishing DX NEWS. The fine job done by the NJPC will be hard to follow. That's it. 73.

LYNN BURKE - 479 Nelson Drive #21 - Newport News, VA - 23601

Unfortunately, I've been absent from these pages since my first Muse a year or so ago. Even worse, I've been somewhat inactive until this past week since September because of an increasing workload at the newspaper I work for. Of interest is WRNL-910 in Richmond, currently NIS, will remain all-NX when NIS is phased out. I heard today "All News Radio is here to stay!" The station will also broadcast Richmond Braves BB in the International League. I acquired an SPR-4 from Gilfer back in late Summer which I've enjoyed using. Totals are 719 heard, not a whole lot veried. As I write this, the temperature is about 10°, up from an all-time low of 5 earlier today. Where I grew up in Ohio, this would be a heat wave, but it's lovely here since there are no provisions for snow removal. Recent DX: 12/31- Trinida-730 up for ID & beginning of BBC NX relay @ 6pm before fading. 1/16- WMTS-810 s/off 6pm. 1/17- WHHH-1440 @ 12:05am w/AP NX & Ohio school closings. WPCF FL s/off @ 1 w/SSB. I would be interested in obtaining back issues of DX NEWS and DX Monitor. Please write if you want to dispose of some. 73s.

CECIL R. WEINSTEIN - Box 52 - Golden City, MO - 64748

I thought I better Muse since I haven't since I don't know when! First a re-intro, I am 24 years old, married & have one child. I work at a wire factory and just bought a house last Summer. I have DXed since 1968 on and off and at the present I'm trying to make a comeback. DX heard lately has been KMBZ, WWWE, KIXX, WTTI, WDMG all on 1/3 & last MM 1/17 I heard WSDL TEST which was just super! Plus WCKY & WH-T?? on 1290k. Last station I heard between 2:08 & 2:10am CST - HELP! Present RXes include TRF portable Craze SW-4A & Hallicrafters SX-117 with low frequency tuner plus an SM-2 antenna & a 60' LW. I've been thinking about buying an HQ? RX but the budget won't allow for at least two years I think. I hope to hear much more DX. 73.

MIKE O'SHEA - 819 West Pine Street - Mount Airy, NC - 27030

It's 1:17 here now, & due to all the snow we've been gettin' down here, I've only had school one day so far this month. This helps me to get some DXing done here & I've raised my totals to 323 stations, 28 states. Recent newies include: WGBF-1280 Evansville, IN, WMMT-1520 Garden City, GA, WLOP-1370 Jesup, GA; & WEIR-1430 Weirton, WV. DX this morning @ 8:25, KRKV-1540 Ft. Worth noted in pause in TX on local WIFM, Elkin, NC. Nothing else new in the Granite City, the home of Donna Fargo and Andy Griffith! As they say in McAlester, OK, KTMC - Keep The Musings Coming!

ERIC FADER - 23-35 Bell Boulevard - Bayside, NY - 11360

H1 group. I read Chris Hansen's 1/10 Musing as if in couplets. Fascinating, Chris! And another great Mothball job by Ron Schiller I can hear WOR-710 too, hi. Really interesting one-liners, Ron! A little DX done 1/22, Sat. AM, to the tune of three newies & a new country. First 1:40am, R. Maracaibo-740 w/a perfect signal, no QRM, w/typical mx, good ID @ 1:45. I thought I was back in the Republica Dominicana, hi. R. Clarin-860 also bombed in like a local. 1:44, 540 had a lk TT o/the SS mess.

(Fader, con'd). WKIX-850 heard w/ID from out of the 850 mess of local-like KCA/WJW/WHHD. Then the new country - Ecuador - in the form of an easy catch, R. Tropicana-540 o/the HJ & someone else, 2:30 & up, w/ID & location mentions. It's country #29. Lots of songs and announcements & mentioning Barranquilla & Maracaibo got me confused - I thought it was the HJ at first anyway. On 540, I always had a mess but never had the patience to stay around & try to pull an ID. I still need the YN there. Later, unnn KRMG-740 blasting in @ 3 w/UPI NX as I looked for needed WKIS u/the YV but was unsuccessful. Here's another AT-40 updater: From 1/23 these new to the "AT-40 family of stations" as Casey Kasem likes to say. KRIZ-1230 AZ, KERV-1230 TX, WSOY-1340 IL, WAZA-1360 GA, WVOT-1420 NC and WZIX-1440 TN. That about does it. More later. 73s.

MARK CONNELLY - 52 Amsden Street - Arlington, MA - 02174

I have somewhat neglected domestic DX in favour of TA's lately, but a few loggings have been made, to wit: WHLW-1170 w/Chicago record, ID o/a second station singing off which sounded like WWLE & mentioned NY, 6pm, 9/13. WHWB-1000 VT o/u WLMS, 5:58pm, 9/13. WNHV-910 atop WROC-WABI 5:56pm, 9/13. CKRS-590 suspected as the FF rocker u/WEEI, 7:10 pm, 10/4. CHRML likely the FFC dominating 1290 @ 11:08pm 10/23. WZAM-1110 V. good w/MoR, ID & s off for Carl Roman supply outlet, 4:54pm, 11/9. UHTN-1190 id now the normal dominant on the channel, o/WOWO/HJCV, after WKOX/WLIB/WANN s/off, as noted 5:03pm, 11/9. WHLO-640 noted behind CBN & Spain-638 het, 5:26pm, 11/9. CHR-1480 w/FF talk o/WSAR, 5:20pm 11/9. CBN was super-loud & alone on 640 w/the only QRM being from 638 @ 4:05pm, 11/25. CBNM-740 o/u WCAS & Spain-737 het, 4:29pm 11/25, from West Yarmouth. WAGM-950 o/u YVKG w/Joni Mitchell record, 6:46pm, 11/25. WVV-950 atop LA's w/muzak, then ID 12:30am 11/26. CHIN-1540 o/WPTR w/II talk, 4:35pm, 12/1. WBBB-920 NC @ s/off, mentioning Burlington, atop WJAR, 5:02pm 12/6. WAVA-780 VA dominant, hetted by Portugal-782, 4:40pm, 12/6. CHLT w/FF o/u WPRO & third station w/rr, CFCG?, 5:30pm, 12/6. CBI-1140 atop presumed Cuban jammer (sobbling het), CBC editorial @ 9:17pm, 12/7. CFBC/WPAT/WBEN flip-flopping dominance on 930, 1:32-1:37am, 12/19. WRC-980, o/usual CKGM, 11 pm, 12/22. WTS-1450 briefly atop the jumble w/Gordon Lightfoot song, WX (temperature -150), ID, 8:33pm, 12/31. WVAB-1550 w/local VA NX & WX, 5:02 pm, 1/6. WFLI-1070 w/Magic Market ad, Tiki Hut ad, & FB jersey promo, @ 5:24pm 1/6. WKDE-1000 s/off noted during AU CX, ID confused by announcer's Southern accent which made "E" sound like "A", 5:30pm, 1/6. WVN-1110 NH (new) on RS heard at Arlington w/stronger WHIM nulled, EZ mx, 10:45am 1/8. WCAS-740 w/SteelEye Span concert tape, 12:10-lpm, 1/12. CHIC-790 good w/WEAN nulled, 12:45am 1/16. Good DX to all in 1977! 73.

CURTIS D. ENGBERG - 80 Concord Road - Wayland, MA - 01778

The new year started off with a lot of SS receptions. 1/2- At 9pm one s/off on 1125 w/singing anthem, but unID. 1/3- At 6:10pm I noted many of the TA's back in along w/LA's. KRDL coming clearly u/WTIC, though far below. Then I got excellent reception of Haiti-1035 & Portugal-1034 easily separable & selectable w/loop, both so strong here there was little WBZ interference. 1/7- WRBX-1530 s/off strong @ 5:30. WHOA-870 in wall @ 7:45pm. 1/9- Portugal-755 as loud as ever noted @ 5:30 pm, other TA's excellent too. 1/17- WSDL-1560 TEST in very well, report sent. WOKJ-1550 even stronger as it should be. 1/22- Strong rr on 1582 @ 8:32pm cresting bad het above CBJ, I assume a pirate. Another pirate even stronger 1/23 noted from 7pm on about 1613, still going @ 2:15am 1/24 w/giveaway announcement for what sounded like WGRQ. I may have had wanted CKAP-580 w/wall-to-wall mx 1:50-2:00 when suddenly off w/no ID. Back to 1/23, I noted newie WVN-1110 & tried for WDJZ, but no luck. While waiting for their suspected s/off time I noted strong het developing and isolated Vatican-1529 very strong and clear by using notch on the HQ-180. Then I slipped down to 1525 @ 4:56pm just in time to get the last dozen bars of anthem before s/off, but too late to positively identify as China although it was clearer than when heard some time back. 73.

PAUL MOUNT - 471 Emerson Avenue - Teaneck, NJ - 07666

"Tell me, Muse, of the man of many radios, who has ridden for journeys after he had sacked Radio Shack's sacred store." Dear readers, thank you for such an epic request. I'll continue the morning of 10/4. This was the Canadian morning. Only WAKR on 1590, no KUUV. Now the big

(Mount) question mark. On 1530, I heard sports & then, an NIS voice said "It's 13 minutes past the hour." During the sports, WCKY had IDed. There was Update, re David Winter. At 4:14, "This is your news & information." 9s1c) They told the staff and engineer's names, & a TT loud in background. Then they told what's coming up, like NX & SX. "Next the news" preceeded some NIS mx. At 4:15, "This is Roy Knowles with your News & Information Service." They had NX about Ford & Carter. No TT here. A couple of minutes later nx about foreign ambassadors. WCKY IDed @ 4:17. The segment ended @ 4:20, & the nx now seemed to mention S. CA, which makes me think this was KFBK, although Sacramento isn't in S. CA. The NX involved drugs, so it could be an "IS feature. Dean Lewis IDed himself, either for the previous, or for something about back assistance. There was an NIS general ID coming up to 26 after, but no local ID. I seem to have nothing in the log for the next minute, then SX @ 4:27, about Brett & McRae. "It's 29 minutes past the hour" & NIS mx to someone telling what's among the major stories to be covered ahead. "All news, all day, every day, this is your news and information service", announcement, & a three-note logo folo to 4:30, where an ID would be perfect. Instead only silence, & nothing further heard until WCKY s/on. So, was this KFBK messing around, or part of the KRNK ET? I'd appreciate hearing from anyone & everyone having simultaneously logged this, or having any further info about this. Tape cassette available if you'd like to give that a try. 73. (Did you write to KFBK and/or KRNK? How else to tell? -ERC)

SAM DELLIT - 23 Lorinya Street - Mansfield, Brisbane, Australia, 4122

I've been fleecing info from the magazine for a few years now so I guess a Muse is called for. I am 23 years old and a student at the University of Queensland, about to start final year Electrical Engineering specializing in Communications/Electronics. I started DXing in 1967 but that was mainly SW. My interest in NA MW was generated when three years ago a group of Brisbane DXers "discovered" Coolum Beach as a DX location. It is a small holiday resort about 100 miles N of Brisbane with little man-made QRM, but more importantly an unobstructed horizon towards NA, along with a considerable degree of attenuation on Aussie signals due to high ridges immediately behind the beach to the N, W, & S. Over 100 stations on the NA continent have been heard from this location compared to perhaps 20 audible in the city of Brisbane. On my last trip to the beach I heard my first graveyard - KOMY-1340, Watsonville, CA, & my 24th state, KSTP, St. Paul. A strike by ABC stations coinciding with the MM 11/29 silent periods gave me KTRH, KXEL & KRXV. UNID Mexicans were also heard on 1550 & 1560 in the period 1300-1400z. (?? -ERC) Other reports out to W520, KDAY, KGBT, KGER, CKDA, CHUB, KGST, KXHI, KRXV, KXEL, KYOS, CJVB, KALI, XERF, KGEY, VOA-Marathon. I use a Drake SPR-4 RX & a 3' square unamplified loop aerial wound with coaxial cable outer sheath for high Q. 73s & good DX. (Welcome to the Musings, Sam, and we hope to hear much more from you with reception details, etc. - ERC)

NELSON DIONNE - K7UZX - 12 Sumner Road - Salem, MA - 01970

(Forwarded by Ron Musco) Hello - I hope you are fine - all OK here. I bought a used R390A-URR RX for Christmas in excellent shape - looks hardly used. I had an old Star Hallicrafters, good in its day. I can now receive TA & LA splits, like Morocco-818 5x9 (?? -ERC) 1059 Cuba 5x9, Antigua-1065 5x5, 1214 Albania 5x9xxxx, 1439 Luxembourg, fair, QRM from 1440. Monaco-1466 Yx4 Cayman Island-1555 3x3 to 5x8, & 1205 weak but very clear, Germany-1586 5x5. Also no IDs, Costa Rica-625 5x8, Colombia (I think)-725 (not Surinam), Ecuador-735, YSKL-765, R. Uno-775, Costa Rica?, 825, Costa Rica?, 1005 R. Colosal, 1176 R. Casino, 1188 R. Sonora, 1195 Ecuador, R. Paradise-1265 1/2, heard ID. 1375, R. Universal. These splits add about 10-12 more countries to my log of about 60, total, about 70. My LW came down during last ice and snow storm. With the antenna half buried in snow all I hear is Cuba & LA on almost all frequencies. I wish I could ID these stations. I have been a member for four years - I will have to write my first Muse soon - all we need is more time, ha ha. Lots of luck - keep that great magazine coming! (Hi, Nelson, Ron sent this to me to use as your first Musings, so welcome to the section, and please Muse often to the Provincetown address -ERC) PLEASE TUNE FOR ALL THE SPECIAL DX TESTS AND PLEASE ALSO SEND THE STATIONS A REPORT. IF YOU'RE UNABLE to hear them, please send them a thank-you note

CHAPTER XLI - THE PHILADELPHIA FIELD, Part 2, by BEN DANGERFIELD

WTEL, which is now 10,000 watts, has always been a foreign language specialist, mostly German, Polish and Greek, while WHAT eventually went into Negro programming. WCAM added Spanish and some Greek programs in more recent years. Oh yes, WTEL also has Spanish. On 1370 kc/s. WDAS replaced WELK very early in the 30's and had pop music as well as for eign programming - largely Italian and Irish. WDAS was the focal point of an interesting legal battle in the late 30's when the station was sued by Fred Waring who objected to free use of his records over the air. Other entertainers, including Benny Goodman, Guy Lombardo, and Hal Kemp, joined the battle, and eventually radio stations had to pay a royalty each time certain performers' records were used. In 1941, WDAS (always in West Philly) was shifted to 1400 kc/s. in he re-allocation, and in the postwar years moved to 1480 with increased power, also going into Negro programming. It was WDAS' Pat Stanton (of Irish Hour fame) who started his own station, WJMJ, about 1950. Originally WJMJ had requested 1530 kc/s., but WCKY blocked the application, claiming that daytime sky wave interference would result. After a long battle, WJMJ (whose call letters, I am told, stood for Jesus-Mary-Joseph), was assigned to 1540, where they are still, now known as WRCP, with country music. Back in the 1930's, again, it could be noted that New York City stations played a major part in the listening habits of Philadelphians. When Philly had only one station to provide NBC programs (at a time when NBC had a Red and a Blue Network), WJZ-760 (now WABC-770) was a regular in the Philadelphia area with a strong signal from its 30kw transmitter in Bound Brook, N.J. WJZ was the key station for NBC-Blue. WEAJ-660 (later WRCA, now WNBC) was NBC-Red, and put in a somewhat weaker but still good signal. WOR, which went to 50kw in 1935, was directional right into Philadelphia from its old Cartaret transmitter, always with a potent signal. To a lesser extent WABC-860 (now WCBS-880) was listened to in the Philadelphia area. And WNEW did, and still does, blanket the Philly area. The only other New Jersey station heard well in Philadelphia in the pre-war era was long-defunct WPG-1100, Atlantic City "World's Play Ground", which used 5,000 watts, but had to share the frequency with WLWL, New York. Perhaps other NRCers can add interesting tidbits to this description of Philadelphia radio as it once was. Oh - WRAX went off the air about 1937. THE END. NEXT WEEK: DICK NORTHUP RETURNS TO THIS COLUMN TO TELL US ABOUT THE EKKO STAMP NOBBY OF VERIFYING IN THE 1920's - in two parts.

ERNEST R. COOPER - 5 Anthony Street - Provincetown, MA - 02657

One verie, #4,022, v/q, Vatican-1529, country #78. So, to DX: Fri. 1/21- Unn WENE-1430 s/off-SSB w/AM & FM mention @ 1:02, atop. TTers on 1600 @ 1:08, 1260 @ 1:10, & 1330 @ 1:37. Germans on 1268 1358 and 1586 were in, also Slavic-sounding language on 1295, I think the BBC's European Service. 1/23- Low-TT on 1490 @ 12:57am. On 900, an FFC on RS @ 1:40 & on u/CHML/CKTS, I suspect CJEN, so we'll keep trying. I noted WPOP-1410 off today, CIGO atop. TT @ 2:18 on 540. SSS, Log on new WHPN-950 (ex-WHWV, Hyde Park, NY) 4:35-4:45 s/off, NIS, after local WRYT had s/off @ 4:30. MM 1/24- The SS on 1115 was on till 3 today as well as SM, but still unID here. Good news, WCKY was off today, as was WKBW, and WPOP till about 3am. We finally did something right, and decided to grab WVVV-TEST early, so I got on 1430 @ 1:16 and found CKFH-AN & a rocker, I thought WNJR, but Stan says 'twas WVAM, but I nuked them out and found WVVX' TEST @ 1:17, but at 1:20, on came local WWEL to test, and their ET was a dead likeness of what WVVX was doing, with sliding TTs, etc. so I imagine WVVX'll get some weird reports. Anyway, WWEL cleaned out 1430 here, & they were still on at 3:20am! I had to go back to my SM-2 again today as the Altazimuth went awry for the third time in its eight-month life. Otherness today; NIS on 1400 noted @ 3:42, I think it's WABY. On 1520 u/Minuto, an interview with a Marine from Long Island 1:35-1:55, unID - the station - and the Marine, hi. I heard CKFH say they carry Maple Leaf Hockey games. 1/25- Seml WEIM-1280 s/off w/no music, just "We'll See You in the morning!" and gone. WKBW off again, and this time u/Minuto was another SS. unID TT-1490 @ 1:39. 1/26- Again WKBW off. TT-1300 1:15 & on. And, hotcha - Hoible is now on WFEL-1390! Somebody u/Minuto today @ 1:26 with mail order commercials - hoped-for WGOR, or only KOMA? Cl mx on 860 at right angles to Clarin but they copped a Murphy @ ID time, natch.

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JACK HATHAWAY - 2109 Tamarack Court - Champaign, IL - 61820
11/1- WAKR-1590 1:01am, WVNA-1590 1:38, sent report #22
of the season; WNDE-1260 2:30; WPHB-1260 2:30 #783 heard, report #23, bad
QRM from WNDE; KLAD-960 3:15 TEST, #784, report #24, state #42; WMOG-1450
4; WHHY-1440 #25; WIL-1430 5:01, CKFH-1430 5:05; WDOO-1310 5:30; WIFE-1310
5:33am. 11/14- WLCY-1380 1:28am. 11/20- KSD-550 1:24; KLVI-560 1:39;
WAAX-570 2:02; WRTH-590 2:25; WMT-600 2:32; WDAF-610 2:46; WOR-710 3:59;
WSB-750 11:29pm, WABC-770 11:54. 11/21- WBBM-780 12:07am; CKLW-800 12:19,
WHAS-840 12:40; WWL-870 12:54; WGBS-880 12:58; KARN-920 1:21; KIOA-940 1:5
52; WSPA-950 2:11; WCFL-1000 2:34; CFRB-1010 2:45; WBZ-1030 2:51; KYW-1060
3:44; WOAI-1200 3:59. 11/24- WOG-1420 7:25pm; CKFH-1430 7:27. 11/25-
WLAC-1510 12:22am; WKBW-1520 12:24; WCKY-1530 12:33; WDXR-1560 12:45. 12/5
- KFI-640 3:05am; WNOX-990 3:15; WIBC-1070 3:19; KORG-1600 3:23; WHHY-1440
3:41; WILS-1320 4:02; KSD-550 4:46; WREC-600 5:18; WSGB-610 5:29; WIP-610
5:30; WRJZ-620 5:40am. 12/12- WKIS-740 4:09am; WSOY-1340 4:24; WREC-600
4:43; WNBC-660 6:01; CKAC-730 6:13 FF; CJBC-860 6:26 FF, 12/19- CBW-990
7:06pm; WWWE-1100 7:22; KYW-1060 7:30; CBE-1550 9, report #32. 12/20-
WDCR-1340 1:06am, first NH!, #794, #34, code ID & TT. WKIS-740 3:11; WGSB
-740 3:13-TEST, #795, #35; WECO-940 3:32 TEST, #793, #33, TT. 12/26- WLCY
-1380 4:01am; WSPD-1370 4:08; WKMI-1360 4:09; WGEZ-1360 4:01, #801; KRNT-
1350 4:31; WILS-1320 5:05, report #39. 12/27- WNOX-990 2:38am; WNN0-990
2:41 TEST #803, #31; KOKO-1450 3:05 TT, code IDs, TEST, #804, report #42;
WWSW-970 3:55, report #43; WMBI-1110 3:32pm; WLBH-1170 3:33; KSTL-690 3:49
WCAW-680 4:45; WPTP-680 5:51; WBBM-780 10:44. 12/28- WYDE-850 1:12am; WTAR
-790 3:23; WONE-980 3:52; WAAV-1550 4:19; KSD-550 11:17. 12/29- WIND-560
12:44am; WAAX-570 1:41; WRTH-590 2:27; KXOK-630 2:36; WNBC-660 3; KTRH-740
3:27; KRMG-740 3:30; WMC-790 4:40; WTAR-790 4:45; KOA-850 5; WGBS-880 5:09
CBM-940 5:56am. 12/31- WAKR-1590 4:59am; KXOL-1360 6:31pm, #807; WSOY-
1340 6:54. 1/1- WILS-1320 2:53am; WIBA-1310 2:59; WOOD-1300 3; WMAK-1300
3:03, report #46; WIRL-1290 3:33; WXYZ-1270 3:58; WNDE-1260 4:02; KVOO-
1170 4:36; KSL-1160 4:38; KRLD-1080 4:59; WIBC-1070 5:01, 1/2- KSD-550
1:47am; WKYX-570 2; WDAF-610 2:29; WSGN-610 2:32. Best 73 & DX.

RONALD F. SCHATZ - Box 592814 - Miami, FL - 33159
Howdy! Yes, it snowed here - darn So. Cal. WX, hi! My
move out of Florida is far from certain & hopefully won't take place at
all, we'll see. WFAB-990 is still on the air as of 1/21 & going strong.
A recent trip to Tampa-St. Pete revealed almost half the locals w/religion
-gospel formats - & it wasn't even Sunday! WSOL-1300 up there is SS after
noon & IDing as "La Latinissima". The new RFS Cuban station list for 1977
six pages long, is now available here for \$2 - that covers postage, Xerox-
ing, & exclusive use. A ain I must warn you that I seldom have a chance
to answer personal mail, & my time must be devoted to those activities
that help the most DXers - this includes DXing. Your best chance to reach
me is by phone - at AC305-945-4915 during reasonable hours. (Is AC Area
Code, or part of the number, Ron? -ERC) If the NJPC and the general mem-
bership would support an "Ask RFS" monthly column in DX NEWS, that might
solve the problem. Eric Fader: The name of the song is "De Belén", a
catchy Christmas tune that swept the Carib area last month. Congrats to
the new "LPC". I met most of the LADs in Columbus in '75 & I can vouch
for them without hesitation. Now, let me get back to work on the LA log!

73.
STAN MORSS - Route 3 - Bradford, MA - 01830
1/17- WSDL-TEST on 1560 fair for only log of the week. Veries
WRCN CKAP & Jumbo. 1/24- WVAM test & CKFH c/w killed any chance of hear-
ing WVVX-TEST. WKBW off, & R. Minute in clear on AN. 1600 had an Ala. AN
@ 2:15 - only ID I could get was much later, WEUP Huntsville - Ala. State
Employment PSA @ 2:15. WPOP off, but NIS still on top of 1410, KQV. 1270
had WTNT on top, so the day wouldn't be a total loss, I taped FF-speaking
R. Antilles on 740 @ 4:30am - R. Maracaibo took over @ 4:40, CBNM nulled
out. Tape and letter sent, thanks to ERC's call, Sunday PM.

JOHN OLDFIELD - 325 East 14th Street - North Vancouver, BC - V7L 2N7
Local CFVR-850 is still on 1240 (apparently due to KTAC
protection problems) but no long twins CHWK/CKGO. CFJC-910 Kamloops, BC
wants 550 10/5kw & also wants to drop all CBC when the CBC FM begins there.
CHO -1400 Stettler is on NSP //-mother GJDV-910/1340 CKBR twin. CHNC-610
wants 1150 5kw (ex-1450) for atwin at Gaspé. A probable CP was filed for
1360, 10kw, Walkerton-Hanover, Ont. CJWA-1240 Wawa may go-it-alone taking

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(Oldfield) CBC from the local LPRT. CJIC-CJNR-CKNR-CKNS now have the same
owner so there may be some changes there. CJAT-610 Trail, BC is not AN-//
CKEK/CFEK. It is off 4:02 daily, but was AN New Year's Eve-New Year's Day
1/1. CFKC-1340 Creston, BC is supposed to go separate programs until 8pm.
Harold Kissack (NRC) of NV was kind enough to perk up my set, & I now get
a few more regular daytimers including CJAV/CFVR-1240 & KGHO-1560. Noth-
ing new re DX although I day-DXed @ 2, Saturday. Strong ones all day:
CBK, CFRN, CFAC, CFBN, CBR, GJIB, KFBK, KTFW, KSL, KBOI, KOFI. Even KRGO/
KKHI/KGAR through local KOQT-1550. Many others are weaker, but I don't
count this as real day DX. It's more like a skip. KOQT has a poor signal
days here on the hill, & KGAR sifts through easily. KGAR's new N
pattern is fair, but others get through. Our one meager snowfall did
nothing to change fairly poor CX. You people in the E will be pleased to
hear that CBJ & CHML want 50kw.

CHRIS BOBBITT - 322 Forest Street - Berea, KY - 40403
Time now for my first regular sesquiennial introduction:
I'm 24, single, and have been interested in radio since 1952 when I shock-
ed my diapers off. My family has never had a TV, so I grew up with the
finer things in life - SW, FM, & of course, BCB. I've been DXing seri-
ously since 1965 w/a variety of All American Flivers and transistor porta-
bles. DX has included Cbl14, TIRICA, YNX, HJHJ, and other goodies. I am
a self-employed handweaver and so can alter my work sked to accommodate
MMs, SRS, SSS, mid-morning DX, etc. Two big news items I hope the mem-ber-
ship will note: WKXO TEST, MM 2/14, 12:01-??? on 1500 w/250w. The GM
says they've gotten only two reports ever (since 1971) so let's hear it!
All correct reports with return postage will be QSLed. Secondly, Berea
College Campus Radio, WDNA, is on the air with 100 milliwatts. Frequency
seems to be 549.900, so if you hear a het on 550k that's them. Sked is
6:45pm to midnight ELT, M,W,F,Sat. & Sunday with unusual mx, CBC, BB,
SBC documentaries, campus events, etc. The manager is Tom Wills & he will
QSL DX reports over two miles, hi. Their slogan is "WDNA, Heard Throug-
out the Civilized World." Draw your own conclusion. How about an NRC
monograph describing the more sophisticated receivers, standard & surplus,
their pros, cons, availability, prices, etc.? There are lots of us in
the sticks who have never seen anything more complicated than an old Phil-
co with ten light bulb-sized tubes and would like to know just what an HQ-
100, R-388, or SX-122 is and what it has to offer, where, and for how
much. Does anyone want to swap WDX cards? Mine, WDX4KWQ, have NRC logo
prominently displayed in living color. Best DX & a full mail box to all.
73. (Welcome to the NRC, Chris, and we hope you'll Muse OFTEN! -ERC)

MIKE O'SHEA - 148 West Wilson Street - Mount Airy, NC - 27030
Due to no school, I've continued to get a lot of DXing done
this past week with many new stations heard, so on to what's come across
the dials: 1/21- F/cs from WBEK-1260 GA (heard in my home town by George
Semko a while back but I never got 'em up there), WCDL-1440 PA, WRDI-1580
NJ & WYHI-1570 FL, all heard. KTRH-740 TX also noted AN w/Jepko, is this
a sked change? 1/22- WABD-1370 KY heard, KFLN-960 MT not heard. Also
this AM, two new states in the form of KKAA-1560 SD & KFI-640 CA. Totals
now 364/0, 33/0. Verie totals are embarrassing but I'm just now starting
to send out letters. From what ERC, JS, & others have been saying, re-
turns have been very poor this season. The only good news in this de-
partment is that, from reading an article the other day, it doesn't look
as if the U.S. Postal Service will raise their rates this year. Huzzah!
73s, and as they say here in Mt. Airy, "WSYD." "We Save You Dollars."
'Tis what WSYD really stands for! Bye.

DAVE KORINEK - 505 Redondo - Oceanside, CA - 92054
I went to local KUDE-1320 here in Oceanside & found that
CE Bill Martin is a very busy person. He maintains the fully automated
systems (that he installed in April '76) of KUDE-AM, & KJFM (ex-KUDE-FM)
on 102/1. Despite running those XRs, he also runs a small XR atop Mt.
San Marcos, in Vista, CA, that relays micro-wave. Those are among the
major reasons why he can hardly find time to answer what few reports he
does receive. But he says that any answered reports from KUDE will have
his v/s on it. So if you want a verie, it might take something out of
your bag of tricks to do it, hi. I received a v/l from KWHO-860 on their

editor: Norm Maguire

2877 Kalakaua Ave. Apt. 703

Honolulu, HI. 96815

##	DXer	Location	T.V.	CTYS	For.	North America	Best
60	A. Rugg	Quebec	1441	60	1247	1144 WKFE	1550
40	G. Allen	California	2871	64	539	335 WUMS	1560 5w
33	D. Reynolds	California	1360	81	478	270 R.Montserrat	885 250w
36	N. Maguire	Hawaii	2885	58	424	262 WXLQ	Bermuda 50w
51	R. Schiller	Texas	1935	85	350	228 ACE P.R.	1200 50w
39	C. Freeman*	California	1553	63	363	228 AFRS	Thule 1425 1kw
38	R. Anderson	Virginia	1448	105	514	227 AHD	P.R.
33	R. Sperry	Connecticut	1669	42	249	216 ACA	Canal Zone
31	F. Wheeler	Pennsylvania	1692	23	188	179 KFAR	Alaska 660 10kw
58	E. Wesolowski*	Nebraska	1786	24	156	141 ZEM-1	Bermuda
32	H. Wilkinson	California	390	69	366	124 St. Pierre	1375
58	B. Dangerfield	Pennsylvania	430	117	353	115 R. Antigua	644
64	B. Reynolds*	Missouri	1092	28	121	111 HON	Panama 1501
?	J. Kay	Ontario	151	3	107	106 WACD	1kw
?	R. Pistek	Illinois	1000	31	108	97 St. Vincent	705
58	R. Leamy	Ohio	314	47	114	84 R.Montserrat	885 250w
34	H. Gustafson	Illinois	847	104	301	67 WXL	850 1kw
61	A. Imprescia	New York	1444	64	135	66 CKRW	Y.T. 1kw
?	W. Powis*	New Zealand	242	20	181	51 KATZ	1600 1kw
39	H. Robie	Massachusetts	263	90	148	62 HOK	Panama 250w
70	K. Rychalsky	Connecticut	204	6	37	36 R.Belize	834
74	S. Waterman	Massachusetts	208	36	81	47 R. Anguilla	1505
73	P. Mount	New Jersey	212	6	24	22 WKAQ	580
69	R. Karchevski**	California	204	8	29	7 4VEF	Haiti 1035
76	C. Barnes*	Texas	10	1	0		
75	D. Bartek*	New York	23	?	?		
?	J. Falconer	Ontario	?	49	1175	?	

Welcome to Konstantine Rychalsky and Sharon Waterman. Note that I got two members listed below their proper position, sorry about that! ## = year started DXing; T.V. = Total veries. Finally thawing out after about a month in New Mexico. Next issue will feature Asiatic totals and best veries. Good DXing to you all. 73 and Aloha, Norm

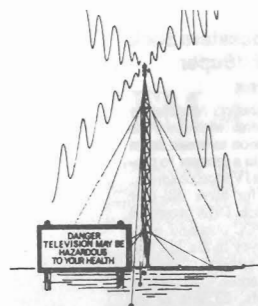
Continued from page 37

(Korinek) TEST of 1/3, sent on th 3rd, received on the 14th. Their signal during the TEST was dominating the channel down here. Some late veries here include: v/1's- typical R. Cayman letters from 1555 & 1205; KQHL-790, CKBI-900, KUPK-1050; KABQ-1350; KIDN-1350; WM00-1550; WDXR-1560; KHNY-1570; KVII-1600. Some v/qs include: XEMO-860; & KCRG-1600. Just think - one year ago I'd be monitoring 1550 around 1000 UT (?? -ERC) on say, the first MM of February, waiting for the inevitable signal of 4QD. and nobody even heard of this guy, KRGO. In fact, CBE & WOKJ were the big pests. But I guess that's one we'll have on those new 1980 DXers. You can have your ANers & NSPers. I just hope those Aussies get to testing their 9kHz spaced frequencies this Spring. Well, enough of the bull, don't expect to hear from me again until another station goes AN, which won't be long! 73s.

N I C E W O R K !

We wish to take this opportunity to commend JOE FELTA for another fine Frequency Check list, and DAN MYERS for his handling of the Flash-Alert card system which has netted many of us some nice DX catches.

Also, salutations to ERIC RITTENHOUSE for his fine handling of the "DOMESTIC DX DIGEST" section - it looks great, and contains much valuable DX material, of use to us all. We hope you will support Eric as you did WES BOYD, whose years of faithful service, along with JERRY STARR, were very much appreciated, and made for a very important part of DX NEWS.-ERC

**had your radiation dose today?**

WE'RE BEING INUNDATED by the kilogram per second with words on the state of our environment. There are arguments currently raging over health hazard threshold limits of potential carcinogens and teratogenic agents. And, at one extreme, failure to define a lower threshold limit for narcotics, in the light of our ability to analyze ultracate contaminants, makes anyone standing downwind of a hospital in danger of being nailed for unlawful drug abuse.

With all the more-or-less directed discussions about pollution of the environment, we haven't yet exhausted this resourceful snake-pit. However, there's a singular and peculiar phenomenon that is unique to the 20th century which hasn't yet been critically accused of being a pollutant.

Just to show where today's trend is heading—and, naturally, the point will eventually be raised—no one to my knowledge has indicted AM, FM, or TV broadcasts for polluting the environment. Of course, I hasten to add, there has been some outspoken comment on the content of the programing, but there has been very little said about our immersion in a continuum of coherent electromagnetic radiation 24 hours a day, year in and year out.

Throughout history mankind has survived and thrived in a natural and somewhat hostile world, where disease and deprivation, earthquakes and floods, have conditioned our species for each subsequent generation. However, up until this century we have not been asked to undergo continuous exposure to electromagnetic radiation where the broadcast spectrum of quarter- and half-wavelengths spans our growth cycle from infants to adults.

The radio energy contained in a thunderstorm or arriving from the sun is relatively insignificant compared to the man-made EM

radiation emanating from the Earth, which because of its size could pass for a first class quasar in radio-brightness. But does any of this radiation affect us or our environment?

Some preliminary information in hand is conflicting, because the subliminal broadcast energy we normally receive seems to have been salubrious to some, made others into nervous wrecks, and apparently had no effect on the rest of us. All of this unconfirmed.

One specific case from a Texas metropolis was brought to my attention about a year ago, where a person of unusual sensitivity was nervously affected in some urban areas and not in others. This peculiarity was traced in part to FM reception and the vagaries of signal strength throughout the city.

My rationale for this unique-appearing incident is that one point on a graph does not signify a trend; however, a single occurrence of a short-term or transient event, if observed at all, is usually the basis of study for its own sake, sometimes no matter how trivial.

This individual was most affected in a horizontal position, so it might be assumed that the body-antenna was receiving a planar wave, of the sort used for reception of FM or TV broadcasts. And, if we look at the spectrum of wavelengths normally found in a metropolitan area, the full, half-, and quarter-waves range from approximately 0.5 to 2 meters—the identical distribution of human height from new-born babes to mature adults.

The height of children will nominally be between 0.5 and 1.5 meters, which means that their body-antennae could be receptive to those wavelengths (full, half, and quarter) of 50 to about 600 MHz. This extends from the lower TV-FM channels well into the UHF region.

For adults whose heights range

INNOVATIVE NOTEBOOK

SCIENTIFIC SPECULATION BY JUENEMAN

from 1.5 to 2 meters there is a little more selectivity, confining them to the VHF band, and ranging from around 37 to 200 MHz. In addition, there are a couple of "windows" between the full, half, and quarter wavelengths which would effectively limit body-antenna reception to the lower and the upper VHF TV channels, but taking in the entire FM band from 88 to 108 MHz.

The AM radio band in the U.S. is nominally 550 to 1600 kHz, which give quarter-waves of 138 to 47 meters, seemingly far out of the running as far as body-antenna reception is concerned, but since they can be detected and modulated by miniscule galena (lead sulfide) crystals—as well as isolated instances of amalgamated tooth fillings—these cannot be discounted. And, at the opposite extreme, the wavelengths of UHF TV-FM broadcast energy through the microwave region might be received by arm and leg antennas down to the cellular level, taking in such things as fingernails and teeth on the way.

There are also areas within urban environments where broadcast energies are of a relatively high intensity, which may coexist alongside regions of "shadowed," low intensity. So, if anyone feels bothered by electromagnetic fields—barring 60 Hz house-current—then it might be to advantage to take along a signal-strength meter the next time you go house-hunting.

It may be that broadcast energy will have to be an accepted pollutant, at least until such time as all our communication needs are confined to cables or light-pipes, for there's about as much chance of stopping I Love Lucy reruns as there is of banning penicillin. There may be several alternative and perhaps more effective means of communication over the horizon, but until then we can bask in the "radio-active" wastes of 20th century civilization and take our daily dose of inspiring messages.

Have you had yours today? ■

Frederic B. Juenuman, director/research, INCA.

NIS outlets begin to sign with other news services

AP, CBS, NBC, Mutual radio and UPI Audio are beneficiaries

Subscribers to NBC's News and Information Service, which are facing NIS's demise on May 29 but want to remain all-news, are beginning to align themselves with other national radio-news services.

Although the plug will not be pulled on NIS for several months, some stations are already dropping the service, according to NIS's Jerry D. Coffin, who is coordinating subscriber transitions.

"We've been very flexible in letting stations out of our end of the contract," Mr. Coffin said.

Mr. Coffin said of the 62 former NIS stations, 43 have indicated they will remain all-news. But of those stations, he said, the "dominant" approach to the transition is to continue programming NIS material "right up until the end," while at the same time gradually phasing in material from other services as well.

By last week, many stations had signed with other news services. Among them:

AP Radio: KLYX(FM) Clear City, Tex.; WHPN(AM) Hyde Park, N.Y.; KYXI(AM) Oregon City, Ore.; WEAN(AM) Providence, R.I.; KFBK(AM) Sacramento, Calif.; WQSA(AM) Sarasota, Fla.; WNUS(AM) Springfield, Mass.; WRC(AM) Washington; WURL(AM) Winston-Salem, N.C.; WMAX(AM) Grand Rapids, Mich.; WPOP(AM) Hartford, Conn.

UPI Audio: WINZ(AM) Miami; WNWZ(FM) Rochester, N.Y.; WILM(AM) Wilmington, Del.; KASH(AM) Eugene, Ore.; KSPD(AM) Boise, Idaho.

NBC Radio: WWTG(AM) Minneapolis; KCNW(AM) Kansas City, Mo.; WPOM(AM) West Palm Beach, Fla.; KROW(AM) Salem, Ore.

CBS Radio: WINZ; WPOP; KASH; KOV(AM) Pittsburgh; WSTV(AM) Steubenville, Ohio. Mutual Broadcasting System: WPOW; WURL; KFBK(AM) Sacramento, Calif.; KCNW(AM) Fairway, Kan.; KXXA(AM) Little Rock, Ark.; WRIT(AM) Milwaukee; KSPD(AM) Spokane, Wash.; WRNL(AM).

Richmond, Va., KWNS(AM) Salt Lake City. Meanwhile, an all-news radio co-op that would provide feature material to stations is in the formative stage; a meeting is planned for next month by those involved (BROADCASTING, Jan. 24).

Daytime Broadcasters Seek Breakdown Of "Super Power" Stations

The Daytime Broadcasters Association (DBA) filed comments with the FCC urging the Commission to break down the Clear Channels in a manner to provide additional Class IV local channels.

Citing the need for more full-time local broadcast service, DBA presented an analysis of the FCC obtained Arbitron listenership survey of the 25 Class 1-A clear channel stations, "outside their home market areas." According to the DBA analysis, 23.36% of the AM broadcast spectrum was serving only 1.3% of their "wide area" potential listenership. Furthermore, according to the DBA, the distant "skipping" skywave is no longer an acceptable service to the distant listener. DBA went on to cite the absence of ascertainment procedure on such clear channel stations regarding their distant listeners and suggested that clear channels should not be protected beyond their "home market."

JANUARY, 1977—BM/E

CLIPPING CORNER

FM station plans progressing

Organizers plan to submit an FCC application within two weeks, as plans progress to create a 1000-watt FM stereo radio station in Provincetown.

Five local residents have incorporated to form Lower Cape Communications, Inc. and hope to form a non-commercial, non-profit, community-oriented broadcasting center here.

Mark Primack, president of the organization, said yesterday there are less than 30 comparable stations operating in the country. The FCC will probably take six months to evaluate the application, which is for a specific frequency on the educational band of the FM range, the lower frequency range on the radio dial.

Meanwhile, the group will start compiling ideas for community-spirited programming.

Paul Christo, technical director, thinks the station can broadcast for a minimum of 18 hours daily. Because of a favorable topography, Christo feels a 50 or 60-foot antenna could saturate the Lower Cape, reach Hyannis and possibly make it across the bay.

There are now two AM stations and five FM stations on the Cape.

In addition to Primack and Christo, the board of directors consists of Laurel Wimberg, Carol D'Amico, and Arne Manos.

The group wants to form a 30- or 40-member advisory council spanning all Provincetown groups to help form programming and other policy.

To finance the venture, the group hopes to attract federal and private foundation money to supplement fundraising pledges.

Hopefully, the idea can attract a volunteer staff to man the station. Equipment should cost about \$20,000. The operating budget depends on the cost of a site and the extent of help. The antenna itself will be a major expense.

Primack and Christo feel the Lower Cape has been neglected by the broadcast media, and that a radio station would provide a new media outlet for the town.

If the FCC approves the application by late summer, Christo thought the engineering could be ready for broadcasting by October.

Christo has considerable technical experience in the area. Primack studied broadcasting at Emerson College.

LETTERS TO THE EDITOR

Radio station

To the Editor:

I was very interested in the article on page 15 of the Jan. 20 Advocate about plans for a non-commercial FM station for Provincetown. It seems to me a commercial station would have much more chance for success than a non-commercial one. I am aware there are no available FM channels for commercial use in this area, but there are, it seems to me, at least three AM channels available.

1580 kilohertz could be utilized for a daytime-only station with 250 watts. In fact, some years ago this facility was granted an applicant in Gloucester, who never built the station. I believe the 540 frequency could also be used here for a 250-watt daytime.

And, if a full-time station is desired, the local frequency of 1450 could, I believe, accommodate a station in Provincetown to operate as most other stations on local AM channels do with 1000 watts days and 250 watts nights. I feel certain Provincetown can support such an enterprise and that it would be infinitely more successful than a non-commercial outlet.

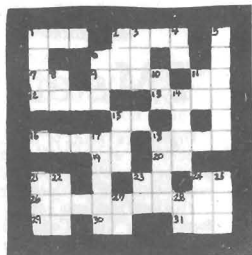
I recommend the Lower Cape communications group at least consider this suggestion.

Ernest R. Cooper, editor
National Radio Club's
"DX News"
Provincetown

CLIPPING CORNER

Submitted by Ernie Cooper

N R C D X
C R O S S W O R D



{Across}

1. Broadcasting organization in Germany on P.R. on 680
6. 1196 in Germany. Also ex-1180 in Florida
7. New Bedford, Mass DXer (abbrev)
9. Governing radio in France
11. Iraq, Egypt, Algeria use this (abbrev)
12. ex-KTUF city
13. Formerly French Somaliland "A---- & Issas"
15. Usually hrd on east coast on splits
16. Home of HCJB
18. DC area 1330 daytimer
19. Wire service.
20. Almost as bad as NSP.
21. DX always fades just before the " "
23. T/A's rarely hrd here but T/P's are.
24. Type of antenna. (abbrev)
26. Europe 1439 often mistaken for a tester.
29. Opposite FM.
30. WEVD/WPOW do this. (abbrev)
31. The "unknown DXer" who runs FAS [or] antenna arrangement for added protection nites.

{Down}

1. One who speaks AA (backwards)
2. NYC-710
3. Way of measuring how tall antennas are
4. Range of Hz that can be heard by human ear.
5. KYAK-KFAR-exist in this nonexistent state.
6. Voice (Spanish)
8. KLRA/KARK/KAAY state (abbrev)
10. Language at St Pierre & Miquellon (abbrev)
11. Winner of LADS DX quiz/wife of 7 across.
14. IDXD editor.
15. DC stn shares freq with WDEE & KSTP is W ---
17. Played repeatedly to hear DX a 2nd time.
18. A call that completely spells stn's city.
21. Urbana Illinois DX Test station W ---
22. A generic term for noise etc on open freq.
23. DDXD editor recently retired (initials) [or] a Greensboro NC DXer initials (backwards)
24. Argentine call.
25. Clear on 720.
27. KGHL state (abbrev)

V E R I E S I G N E R S

540	C BqK	J	Layton-Brown	D 1240	K V S O	P	Drake, PD	D
	K WqM T	B	Walsh, CE	D	K T A M	L	Henderson, CE	D
	K N O E	W	Murvin, PD	D 1260	K G B X	F	Urban, ACE	D
	W Y N N	JN	Maurer, P	E 1300	K V E T	CA	Cremer, TSu	D
550	K TqS A	T	Ortiz, E	D 1310	K F K A	R	Soares, AE	H
560	K W T O	M	Chaney, CE	D	W C A M	JA	Heal, TD	E
	K LqZ	G	Westerberg, E	D 1320	W KqP	P	GT Isleib, CE	E
570	W N A X	L	Edwards	H	K X Y Z	D	Kirby, CE	M
580	W K T Y	R	Topuka, GM	G 1330	K MmI L	E	Smitherman, Ptnr,	D
	C K A P	BN	Squirrel, M	J	K W W L	EM	Tink, Exec VP	H
	K AmL B	R	Richardson, E	D	W H O T	Jerry	Starr, Prod M	H
620	W HqJ B	RC	Habercost, CE	F 1340	W BmB Q	G	Weiss, ACE	A
640	W NmA D	R	Heiter, CE	D	W D C R	J	Roderick, TD	CE
650	W SqM		u/u	D	K A N D	D	Rushin, PD	D
660	W NqB C	K	Bruno, EngMgr	D 1350	K BmR X	CP	Mathis, CE	A
680	K K Y X	E	Pryor Jr., CE	D	C K L B	WC	Marchand, VP, DoE	A
690	K G G F	R	McBride, PD	D 1360	CmJ VeL	C	Thibodeau, PD	J
710	W HqB	CR	Nonsmaker, StuSu	D 1370	K F R O	JR	Curtis, P	D
	K GqN C	H	White, E	D 1380	C F D A	Francis	Bastien	G
	K IqR O	D	Hubert, CE	F 1400	K T E M	C	Schlieper, E	D
720	WqGmN	WR	Crane, CE	D	K G V L	L	Hackney, GM	D
740	K C M C	H	Cecil, GM	D 1430	WqT TmT	J	Perry, CE	A
750	K S E O	W	Coxsey, PD	D	W N J R	JS	Dixon, PD	H
760	W JqR		u/u	D 1440	K E Y S	M	Parsons, COP	D
770	K CqB		u/u	D 1450	K C Y L	S	Sampson	D
790	K F Y O	R	Hively, CE	D	K O K O	Bruce	Reynolds, A	E
	K GqH L	G	Stein, CE	F	W M V G	JS	Boone, CE	E
800	C KqL W	E	Butterbaugh, CE	D 1460	W A C O	J	Vinson, CE	D
810	W SmJ C	L	Cockrell	D	W M B A	RA	Pantaleo, CE	A
830	W CqC O		u/u	D	K R N Y	A	Brecht	A
840	W HqA S		u/u	D 1480	W I O S	RA	Van Buhler, CE	A
850	K CqA		u/u	D 1500	W D E E	CB	Roberts, ESu	G
860	K OmA M	J	Martin, CE	D 1510	K D K O	C	Mueller, Prod D	H
	K OrS E		u/u, CE	G 1520	W T G R	(W	Files, CE	B
900	K A L T	D	Wommack Jr., M	D	m	(WB	Thompson, GM	J
920	C JqC H	WS	Robuck, TSu	E	K OqM A	T	Riddlen, GM	D
960	K GmW A	RL	Miller, CE	D 1530	W CqK Y	JF	Ramsey, CE	D
	W BqO C		u/u	F 1540	K XqE L	A	Thill, CE(corctn)	D
980	W K L M	DT	Langley, SM	G	K P O L	FF	Cherny, CE	F
	K M B Z	EJ	Lanzrath, SupgE	D 1550	K R G O	Glenda	Guthrie	H
1000	W R N J	(LJ	Tighe Jr., P, GM	G	W M O O	WH	Goforth, GM	B
		(T	Kane, M	G 1540	C HmI N	S	Martak, E	A
1010	K X E N	B	Harville, GM	D 1560	W F X Y	CE	Owens, Consult	E I
1020	K B C Q	T	Rose, CE	D 1580	K T U F	C	Reno, E	H
1030	K TqW O	S	Broomell, CE	D	K G A F	Susan	Thompson, OM	D
	K C T A	NJ	Messer	D 1590	W A R V	u/u		G
1060	K HmY M	R	McClure, M	D	K B B Q	E	Spencer, CE, PD	H
1070	K NqX		u/u	D	K B U S	SF	Collins	D
	K FmD I	C	Koch, Corp.E	D	K VqG B	JB	Schwenson, E	D
1100	W WqE E	J	Scrattle, M, E	D	C R E D I T S			
1120	W U S T	G	Hess, CE	E A - G. Semko	F - J. Trochimczyk			
	K M O X	OT	Karl	D B - E. Straus	G - H. Hayes			
1130	K WqK H	F	Page, PD	D C - K Rychalsky	H - Y. Mattason			
1140	K O R C	D	Kincaid, M	D D - S. Ponder	I - C. Engberg			
1150	W JqO C	TE	Oliver, CE	D E - R. Arruda	J - E. Cooper			
	K I M M	BV	Bradfield, CE	F				
	C K X	S	Craig, P, GM	H This catches us up on all the v/s on				
1160	K SqL	P	Finley, CE	D hand, as of 1/27/77. Please, all you				
1170	K VqO O	D	Bahrnauer, E	D who are upholding the manly art of				
1230	K W T X	F	Fallon, GM	D verifying, send in your recent v/s,				
	K S P O	RB	Wheeler, P	D eliminating any which have been re-				
	C HcF C	D	MacIntosh, SupTech	D cently shown in this column. -ERC				