

DX Monitor

Devoted Exclusively to

Broadcast Band DXing

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DX Calendar

Sat Sept. 13 KLRR-1230, Leadville, CO, will test 0230-0300ELT. The first ten minutes of which will a scheduled frequency check take place. The test will include 1kc tones, voice and cw ID's (-.-/.-./.-./.-.). The 1000 watt transmitter will be used. Arra nged by Rob Harrington for IRCA. Before I totally forget, all reports should be directed toward; KLRR Arnold F. Olean CE, 520 West 6th St., Leadville, CO 80461.

Volume 18 Schedule

Schedule for DX Monitor Volume 18 is as follows:

Seattle Deadline			
Aug.30 1980*	18	Jan.17 1981	Jan.12 1981
		" 24	" 19
	20	" 31	" 26
Oct. 6	21	Feb. 7	Feb. 2
Oct. 11*	22	" 14	" 9
Oct. 20	23	" 21	" 14*
Oct. 27	24	". 28	" 23
Nov. 3	25	Mar. 7	Mar. 2
" 10	26	" 14	"9
" 17	27	" 21	" 16
" 22*	28	" 28	" 23
Dec. 1	29	Apr.11	Apr. 6
" 8	30	" 25	<u>"</u> 20
" 15	31	May 16	May 11
" 20*	32	Jun.13	Jun. 8
" 29	33	Jul.11	Jul. 6
Jan. 5	34	Aug. 8	Aug. 5
	Aug.30 1980* Sept.15 Sept.29 Oct. 6 Oct. 11* Oct. 20 Oct. 27 Nov. 3 " 10 " 17 " 22* Dec. 1 " 15 " 20* " 29	Aug.30 1980* 18 Sept.15 19 Sept.29 20 Oct. 6 21 Oct. 11* 22 Oct. 20 23 Oct. 27 24 Nov. 3 25 " 10 26 " 17 27 " 22* 28 Dec. 1 29 " 15 31 " 20* 32 " 29 33	Aug.30 1980* 18 Jan.17 1981 Sept.15 19 " 24 Sept.29 20 " 31 Oct. 6 21 Feb. 7 Oct. 11* 22 " 14 Oct. 20 23 " 21 Oct. 27 24 " 28 Nov. 3 25 Mar. 7 " 10 26 " 14 " 17 27 " 21 " 22* 28 " 28 Dec. 1 29 Apr.11 " 8 30 " 25 " 15 31 May 16 " 20* 32 Jun.13 " 29 33 Jul.11

Deadlines for receipt in Seattle are normally Mondays. * indicates Saturday deadline due to a holiday. The deadlines for #11 and #15 might be moved back to Monday, but for now, it will stay as is. Any changes will be noted in upcoming Issues.

In a note from Rob Harrington, he has been in contact with a DXer who said he works fora station in Buena Vista, CO; KJAE 530kHz. Even got a letter from the General Manager. Current information indicates no station here on 530. Any help out?

Foreign DX here in the Puget Sound since March has been virtually shutdown. very high sunspot counts are for the most part to blame. As this DX season moves into the fall/winter, we can only expect even more increased sunspot activity. This would seem to lead one to conclude that the Asians are going to get rare. But on the other hand, maybe that will open the channels to some great trans-equatorial DX. We can only hope and wait. (and DX) hi. 73'si....from....dave......

BROADCASTING INFORMATION Silver Springs, MD 20910

Greg Monti

```
call
         kHz
                    day/night
          550
570
600
                  500/
5000/
WDBM
                                    Statesville NC wants WDRV
KCNO
                                    Alturas CA wants 5000/2500
         570 5000/ Alturas on warts 5000, 200

600 5000/5000 Jacksonville FL wants WAIV

640 1000/1000 Akron OH now limited by KFI-640, wants 1000/500 fulltm

670 50000/25000 Boise ID wants 50000/50000

710 5000/500 Mayaguez PR wants 10000/500
WSNY
WHLO
KEOI
WKJB
                  5000/
                                   Alexandria VA wants WPLX
         730
WPIK
                                 Morrhead City NC granted WFTH
                1000/
WMBL
         740
         740
                    250/
                                  Harrogate TN granted construction permit
                    500/
KURM
         790
                                   Rogers AR wants 1000/
                  1000/1000 Watertown NY granted WTNY
WWNY
         790
          790
WTUG
                    250/
                                    Tuscaloosa AL wants WTSK
         810
         810 1000/ Rifle CO wants 2500/
820 10000/1000 Fairbanks AK wants 50000/50000
840 250/ Yabucoa PR granted 5000/50000
900 250/ Floydada TX granted KFBA
900 250/ Eddyville KY granted construction permit
930 500/ Milford DE granted WAFL
940 500/ Chiefland FL granted 1000/
960 1000/ Mount Pocono PA wants WPCN
                  1000/
KWSR
                                    Rifle CO wants 2500/
KFRB
WXEW
KFLP
new
WTHD 930
WLQH 940
new
KTRM 990 1000/1000 Beaumont TX wants KALO
appl 1000 1000/
                               Hayden CO
new 1010
                    250/
                                    Wickliffe KY granted construction permit
KIQI 1010 10000/
                                  San Fransisco CA granted Hayward CA and 50000/5000
WQIO 1060
WHYT 1110
KPOP 1110
WHLM 1110
KRGH 1130
                5000/ Canton OH wants 1070 kHz and 5000/500
5000/ Noblesville IN granted 1000/
5000/500 Roseville CA granted KFIP
1000/ Providence RI granted East Providence RI and 5000/
1000/ Memphis TX wants KLSR
new 1140
                  250/
                                   China Grove NC granted construction permit, wants WRNA
KMMZ 1140 5000/
                                   Greybull WY wants 10000/
KIIS 1150 5000/5000 Los Angeles CA granted KPRZ
KAYO 1150 5000/1000 Seattle WA granted KPRZ Seattle WA granted 5000/5000 Donelson TN wants 50000/WHIY 1190 1000/ Moulton AL wants 2500/
                             Moulton AL wants 2500/
Dunlap TN granted WSVC
Arlington TN application dismissed
                new 1190
appl 1220
WGUY 1250
WWOK 1260
WHEO 1270
                    500/
                                    Bangor ME granted Brewer ME and 5000/5000
WYND 1280
WMRO 1280
KVOX 1280
new 1280
new 1290
WKTX 1300
                  5000/5000 Hollywood FL granted WLQY
Venice FL worth 5000/
KWCK 1300
WADY 1320
WAMR 1320
WEVD 1330
KSKI 1340
WMBN 1340
WBRE 1340
                  5000/5000
1000/250
1000/250
1000/250
                                    New York NY wants WMNY
                                    Haley ID wants 1330 kHz and 5000/1000
                                    Petoskey MI granted WWPZ
                                    Wilkes Barre PA wants WKRZ
WLIQ 1360
KBCH 1380
                   5000/
                                    Mobile AL granted WPCY
Lincoln City OR wants 1400 kHz and 1000/250
                  1000/
                  5000/500 Logan UT granted KBLQ
5000/1000 Rocky Mount NC wants 5000/2500
1000/250 Jamestown ND granted KQDJ
KBLW 1390
WEED 1390
KEYJ 1400
KJCH 1410 500/500 Cleveland TX wants 1000/1000 KABR 1420 1000/ Aberdeen SD granted KDBQ Herkimer NY granted WRMV WEQC 1420 500/ Kalkaska MI granted WTGF Trenton CA
                                    Berlin NH granted construction permit
                                    Glens Falls NY wants 1230 kHz and 1000/250
                            Aberdeen SD granted KDBQ
Herkimer NY granted WRMV
Kalkaska MI granted WTGE
Trenton GA granted construction permit
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WKEX 1430
            1000/
                        Blacksburg VA wants 5000/5000
WKDH 1430
new 1440
                        Ashland VA wants WIVE
            1000/
            500/500
5000/
                        Elgin TX granted KELG
KOPA 1440
                        Scottsdale AZ wants KXAM
Jackson MI granted WXCM
WIBM 1450
            1000/250
     1470
            2500/
                        Sierra Vista AZ granted KSVA
new
KPHX 1480
            1000/
                        Phoenix AZ wants 1000/500
            1000/5000
KARO 1480
                        Vancouver WA wants 5000/5000
            5000/1000
KLEO 1480
                        Wichita KS wants KWKN
KGMR 1500
            1000/
                         Jacksonville AR wants KIEL
WCZY 1500 50000/5000
WKJR 1520 10000/
                        Detroit MI wants WLQV
                        Muskegon Heights MI wants 10000/500
appl 1530
new 1540
            1.000/
                        Hartselle AL
             250/
                        Guyama PR wants WBJA
             250/
     1580
                        Centreville MS wants WSSL
new
     1580
            1000/1000
new
                        Morovia PR granted construction permit and wants WGFE
             500/
KHEN 1590
                        Henryetta OK granted KGCG
             500/500
WJRO 1590
                        Glen Burnie MD granted 1000/1000
            1000/500
WGIV 1600
                        Charlotte NC granted 2500/1000
                             _ _ _ _ _ _ _ _ _ _ _
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The ABC/Contemporary network special ELVIS: MEMORIES, RADIO PROGRAMMING which drew a substantial audience from its first two airings NOTES will have another one on 8/16, on 560 stations....NBC moves from KIXI-910 to KAYO-1150 in Seattle; KAYO retains ABC/E and APR.... Mutual switched from $\underline{\text{KIRO-710}}$ to $\underline{\text{KVI-570}}$ there; KIRO retains CBS, APR, and UPI. KIRO, KAYO, and KVI are all talk stations...Larry King has picked up KSF0-560 San Francisco and KPNW-1120 Eugene OR...New ABC/C affiliates:

WMAK-1300 Nashville TN, KMJC-910 El Cajon CA...New to ABC/E: KLCM-1330

Lompoc CA...New to ABC/I: KELI-1430 Tulsa OK, WPCF-1290 Panama City FL,

KNOW-1490 Austin TX...Using ABC networks as an actuality service: WBZ-1030.

KRKE-610 Albuquerque NM is running talk in the evenings, followed by oldies overnight...KXKS-1190 Albuquerque NM is beautiful music...KEYH-850 Houston is all-Spanish with news blocks in drivetimes.... WMAK-1300 has switched from disco back to top 40....<u>WNIC-1310</u> Dearborn MI has switched from soft rock to talky MOR including LARRY KING....<u>KCBC-1390</u> Des Moines IA is on the MUSIC OF YOUR LIFE big bandwagon; same for KRS1-950 ST. Louis Park MN.... WWTC-1280 has switched from all-news to oldies in the Twin Cities...Rumor WMTC-1280 has switched from all-news to oldies in the Twin cities...kumor has it that KSTP-1500 may switch from top 40 to all-news...Canadian rumor: CBZ-970 and CBD-1110 in NB may be shut down soon if a new CBC FM transmitter proves successful there; same goes for CBH-860 ir Halifax...CHIC-790 Brampton ON has switched from disco to adult contemporary; calls are now CKMW....CJWM-1370 Saskatoon is country now...Rumor: CJOR-600 Vancouver EC may switch to alternative album rock...NBC's "The Source" network is firally claiming a flagship station: WNEW-FM-102.7 New York...DIR Broadcasting, a syndicator, has signed on with ABC Radio to produce music and non-music a syndicator, has signed on with ABC Radio to produce music and non-music programming for the network; DIR's hottest property currently is the weekly KING BISCUIT FLOWER HOUR rock concert series....425 stations reportedly aired the JOHNNY CASH SILVER ANNIVERSARY SPECIAL, fed 7/4 on Mutual.... The WALL STREET JOURNAL REPORT, consisting of 17, 2-minute broadcasts per day supported by national advertising is being distributed on AFR's satellite system; stations already carrying it include WMCA-570 New York, KQV-1410 Pittsburgh PA, WRC-980 Washington DC, WGST-920 Atlanta, and KDEN-1340 Denver....There's now a radio version of the syndicated MERV GRIFFIN TV show, consisting of "best-of" excerpts from 17 years of TV soundtracks.... MAKING MONEY WITH YOUR MOUTH was the recent title of a panel at a National Association of Broadcasters conference; panelists included Lan Ingram of WABC-770, Robert W. Morgan of KMFC-710 and Don Imus of WNEC-660....The editors of WASHINGTONIAN magazine recently voted LARRY KING as best radio call-in host in Washington; Shelley Tromberg of WRC-980 was voted worst; best country station was WFIK-730; meanwhile, readers of WASHINGTONIAN voted WMAL-630 best for jazz with Felix Crart 2100-0100. ABC Radio held a BEACH BOYS CONCERT on the Washington Monument grounds on 7/4; it was heard on WABC-770 and WIS-890, among others, and had an in-person attendance of 600,000, which ABC is claiming is a record for a single-station-promoted event; the single station is WRQX-107.3 Washington... <u>National Public Radio's satellite interconnection system is now complete.</u>
It is the first network to free itself from the Bell System and now feeds six channels of full-fidelity audio to its 200-odd member stations. means two mono and two stereo programs can be fed simultaneously. Of the 200-odd members, 17 are equipped with uplink transmitters capable of originating one stereo program at a time.... CBS will feed TELEVISION WATCHING: THE NEW SEASON, a series of reviews of the new shows to be fed the weekend of 8/30. Host will be Steven Scheuer, who also does his

regular TELEVISION WATCHING at 1125 ELT on CBS Radio....A CBS Radio analysis of the recent RADAR-21 research service survey shows that EM_radio has reached an overall share of 55 percent of the nation's listeners. Even morning drive time, traditionally a tough time for FM, now shows 46% of the listeners tuned to FM. In the 1900-2400 time slot, the FM share is greater than 60% seven days a week.

Sources: the 6/30 through 7/28 issues of <u>Broadcasting</u>, the 6/27 <u>Golden</u> West DX Association <u>Bulletin</u>, the 7/80 <u>Washingtonian</u>, and CBS press releases



from Rich Segalas
P.O. Box 26254
San Francisco, CA 94126

Robert J. Jacoby, 2243 Wellesley Avenue, Los Angeles, California 90064 (rejoin)
Per Kristian Bjoennes, N-6060 Hareid, NORWAY
David J. Ronneker, 212 Yale Avenue, San Antonio, Texas 78201
Alan Korwin, 750 Kappock Street, Riverdale, N.Y. 10463
Eric Cooper, 24191 Spartan, Mission Viejo, California 92691
Joseph Gnandt, 113-4th Avenue, Roebling, New Jersey 08554

RENEWALS AS OF 01 August 1980

Tim O'Hare, Patrick Martin, Bruce McFadden, Major Ron Hammer, Richard Eckman, Melvin Veldhuizen, Bob Padula, Karl Jeter, Gene Martin, Gary Parton, Walter P. Ortner, Dewaine Anderson, Dave Williams, Marc Bergman, Robert G. Stonier, Frank Merrill, Michael Bittner, R.G. Messenger, Yuuizi Shirahama, Mark Lewis, Tom Messer, David F. Leqler, O.P. Ferrell, Glenn Hauser, Robert Kramer

ADDRESS CHANGES

Donald C. Chepurna, 40 Rosemount Avenue, Waterbury, Connecticut 06708 John M. Sullivan, 5007 Tall Pines Court, Raleigh, North Carolina 27609 Father Jack Pejza, 3433 Somerset, Castro Valley, California 94546 Mike Endza 198 Carl Street, 8c, San Francisco, California 94117 Paul R. Mount, 471 Emerson, Teaneck, New Jersey 07666 Bruce E. McFadden 13628 So. Birch Street, Glenpool, Okla. 74033 Robert Kramer, 4639 N. Albany, Chicago, Illinois 60625 Rich Toebe, 556 Santander, San Ramon, California 94583 Brock H. Whaley, 1313 W. Pratt Blvd, Chicago, Illinois 60626

DON'T FORGET THAT ALL RENEWALS AND ADDRESS CHANGES SHOULD COME TO ME AT THE ABOVE ADDRESS.

Also, Phil says that New Member Packets are being revised. By the time you read this, the revisions will be at the printer and Phil will be out of town. When he returns, he will be mailing them out to everyone.

REMEMBER: THE IRCA CONVENTION WILL BE IN LOUISVILLE, KENTUCKY,.15-17 AUGUST 1980. Ted Fleischaker has a lot of things planned so come and join us for a good time. I understand that the Hyatt Regency will let us use the pool 24 hours a day, so we can have our 2:00 am swim party after the auction and business meeting.

FCC Delays Stereo AM

The Federal Communications Commission (FCC) is having second thoughts about a decision clearing the way for stereophonic AM broadcasts. The FCC has put on hold the monopoly it awarded two months ago to the Magnavox Consumer Electronics Corp. until new studies are made into the commission's decision to pick Magnavox's stereo AM system from among five proposed.

Results of the re-evaluation probably will be announced Aug. 1. Commission officials agreed the new study will delay the advent of stereo AM broadcasting, which has been sought by station owners clamoring to compete on an equal footing with stereo FM stations.

--- Knight-Ridder Newspapers

Eastern DX Roundup

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Upcoming deadlines: Saturday, August 23rd and Monday, September 8th
Announcement of new EDXR Editor: Bob Lazar has been selected as the new
 editor of EDXR, and his first column will appear next issue.
Bob's address is: Bob Lazar, 3837 Milan Dr., Apt. 1, Alexandria, VA 22305.
 Splatter:
"5 newies, four in one night on SSS, #4 on 1100, #11 on 1080, #14 on 950 and #9 on 930." Bill Townshend - DC
      "...was surprised to hear 'WOL Washington'". Mike Saltmarsh - NH
      "Farewell!" Bob Curtis - VT
  560
                   NY, Catskill 7/3 2020 Caught WCKL s/off at 20282, "This con-
                   cludes another broadcast day etc., "followed by NA.
                                                                                          (BC-VT)
                  ME, Portland 7/24 2032 rock mx in good w/QSB, ad for Marsh-
          WGAN
                  all's in South Portland.
                                                                                          (BC-VT
                  NY, New York 7/24 2035 in good w/talk show.
  570
          WMCA
                                                                                          (BC-VT)
                  MD, Baltimore 7/21 0033 250 Hz and 1500 Hz TTs, apparent
  600
         *WCAO*
                                                                                         (WPT-DC)
  610
          WGIR
                  NH, Manchester 4/27 1406-1407 Good-fair w/Red Sox game.
                                                                                      (MPS-NHnc)
  750
          WHEB
                  NH, Portsmouth 4/27 1407 Fair. M w/ID and car commercial.
                                                                                      (MPS-NHnc)
  790
          CKMW
                  ON, Brampton 6/24 0048 ID, mx and promos, OM DJ. (ex-CHIC).
                                                                                          (RR-ON)
                  NS, Halifax 6/25 0057-0102 Fair. M w/ID, wx 61°F. (MPS-NI VA, Lynchburg 7/7 2045 s/off by YL DJ w/ment of WGOL-FM on 98.3 mHz, no SSB. Fair in null of WFMD. #9 on 930. (WPT-DC VA, Smithfield 7/6 2032 s/off by OM, "Another day of Christians")
  920
          CJCH
                                                                                        (MPS-NH)
  930
          \mathtt{WLLL}
                                                                                        (WPT-DC)
  940
          WKGM
                                                                                         Chris-
                  tian programming" (ex-WEOO). Good. (WPT-DC)
PA, Barnesboro 7/6 2046 s/off by OM "WNCC serving Coal Coun-
  950
          MNCC
                  try". Fair o/WPEN. #14 on 950. (WPT-ME, Portland 4/27 1412 Very good, rr mx, M DJ. (MPS-NH DC, Washington 7/17 1745 knocked off by T/storm. DXing on
                                                                                        (WPT-DC)
  970
          WCSH
                                                                                      (MPS-NHnc)
  980
         (WRC)
                  freq prevented by heavy QRN. On again at 1927.
                                                                                        (WPT-DC)
1050
                  NH, Conway 4/27 1401, 1413-1420 XInt. UPI Nx, mx is a little
          WBNC
                  bit of everything. Studios look like a regular house from
                  outside. Ant is single tower and about 150 ft. high. North
                  Conway Bank spot, DJ is Greg Crystal. (MPS-NHnc) OH, Canton 7/6 2059 T40 mx w/YL DJ, s/off by OM. Fair in the
1060
          WQIO
                  null of KYW. #8 on 1060. (WPT-DC NY, Amherst 7/6 2102 end of rlgs pgm, s/off by OM w/ment of 1000 watt power. Fair in WTIC null. #11 on 1080. (WPT-DC PA, Bethlehem 7/6 2031 s/off by YL, no SSB, ment of 250
                                                                                        (WPT-DC)
1080
          WUFO
                                                                                        (WPT-DC)
250
1100
          WGPA
                  watts. Good. #4 on 1100. (WPT-DC)
ME, Lewiston 4/27 1510-1515 pop mx, M DJ, SID. Good(MPS-NHc)
NY, Middleton 7/10 0145-0155 Fair, pop mx, F DJ, SID and
furniture spot. Faded in and out of GY mess. (MPS-NH)
VA, Arlington 7/21 0028 ET'ing w/250Hz TT. (WPT-DC)
1240
          WCOU
1340
          WALL
1390
         *WEAM*
          WEGP
                  \overline{\text{ME}}, Presque Isle 6/25 0026-0029 wx, M DJ, phone # 768-5151
                  was mentioned. (MPS-NH)
PA, Lancaster 7/10 2010 pop mx, "WLAN, your summertime music station", "Right now it's 86° in Lancaster". Good. (BC-VT)
          WLAN
                  MA, Medford 7/5 2000 "1430 on your dial, WXKS, Medford".
1430
          WXKS
                  Poor with rather rapid QSB. (BC-VT DC, Washington 7/7 0258-0307 Fair-poor. Tuned to 1450 and I
                                                                                         (BC-VT)
1450
          WOL
                  was surprised to hear "WOL, Washington", ID by M, mx "Light
                  the Fire", not sure of title. Best GY so far.
                                                                                        (MPS-NH)
                  ME, South Paris 4/27 1530-1544 Good, pop mx, M DJ, SID & ID.
       t WOXO
                  Quite sure of call. Checked FM log and found a 'WOXO' in
                  Norway, which is right next to S. Paris. Either a call
                  change or simulcast using FM ID.
                                                                                       (MPS-NHc)
1590
          WGGO
                  NY, Salamanca 6/16 0324 ID, call, town & time by OM DJ. New.
                                                                                        (RR-ON)
1600
          WNEU
                  \underline{WV}, Wheeling 5/1 0620 wx, ID & tire ad. ID as "16 WNEU News".
                  New.
                                                                                         (RR-ON)
please add:
1140
          ????
                         3/2 1735-1805 CBM wrote me in reply to my request for
                  verification and told me there is no CBMI. They shut down
                               The pgm I heard was "Cross Country Check Up", so
this might have been CBI that I heard. (MPS-NH)
                                                                                        (MÝS-NH)
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PER THE LIST

MD, Salisbury 4/28 0021-0029 Good, TT, ID's every minute on

RR-ON Rob Ross, Box 4373, STN. C, London, ON N5W 5J2 National HRO, Realistic TRF & Panasonic RF-1115

MPS-NH Mike Saltmarsh, 33 Fowler St., Penacook, NH 03303 Mont'y Wards 1479, National NC-183 + longwire MPS-NHnc DX'ing at North Conway, NH Hitachi radio for Honda Civic

MPS-NHc DX'ing at Conway, NH rcvr the same WPT-DC Bill Townshend, 4500 Conn. Ave., NW, Washington, DC 20008

Realistic TRF

BC-VT Bob Curtis, 17 Cobbleview Dr., Colchester, VT 05446

Thanks to Mike Saltmarsh for the survey list.

If you care to check your logs there were very strong auroras on the evenings of June 18th and June 22nd.

This issue of EDXR completes exactly three years of my editing the column. If it reaches Seattle on time, I'll be pleased to say it has

been three years without missing a deadline.
I've really enjoyed editing the EDXR column. Having started in BCB DX'ing fifty seven years ago, when the hobby was truly in its infancy; it has certainly been a pleasant experience to take part in carrying on what may, at some future date, be called an 'ancient and honourable' hobby.

It's been particularly refreshing to receive DX reports from the young generation of DX'ers, and to observe their genuine enthusiasm for the hobby. Also, the occasional report from other 'old timers' reminded me that others have also retained their interest over the years.

Best wishes to Bob Lazar on his appointment as EDXR Editor, and many thanks to all the DX'ers all over Eastern DX-Land, who have helped sus-

tain the column.

Thanks to Bruce Portzer and the Seattle publishing group for all of their helpfulness on the column and getting out the DXM on schedule.

73 and good DX

Bob Curtis

presidents

Father Jack Pejza 108 Cole Street San Francisco, CA 94117

Effective August 1, my address will be 3433 Somerset Ave., Castro Valley, CA 94546. I will be on vacation during August, mostly in southern California, but I will be at this address off and on until next June.

Last Board action:

	111	14111	אוכו	I IUI	DF	ಎಎ	GΙ	
9.1.35	A	F	F	F	\mathbf{F}	F	F	Passed
9.1.36	F	F	F	F	F	F	F	Passed
9.1.37	F	F	F	F	F	F	F	Passed

9.1.35 Give a complimentary membership for one year to Al. "Jazzbeaux" Collins of KCO. (Submitted by Jef Jaisun). Al has done a great deal to promote the club and the use of loop antennas. The Seattle crew has indicated that about 1000 request for reprints have come in as a result of the publicity.

9.1.36 Approve the publishing of the 1980 IRCA Almanac. The previous edition of the Almanac was a roaring success.

9.1.37 Confirmation of Robert Kramer as CDXR Editor.

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URGENT PLEA!!! The club is badly in need of volunteers to handle the Sports Network replacing Bill Hardy and Conditions of Frequency lists formerly handled by Ralph Kemper. Remember that it is only through volunteer work that any of the work of IRCA gets done. Your help is vitally needed. No experience is needed; only the willingness to help the club and the ability to type. The former editors will be more than happy to give you all the information you need to get started. Write to me ASAP if you wish to help the club by volunteering for either of these positions.

73 de FJP

Robert Kramer 4639 N. Albany Chicago, IL 60625

CENTRAL X ROUNDUP

- UnIDeds, Special, Changes, et. al. 910 KO?? ?? 6/22, 0332, KORD ? "Big Country R. Network", F. Fender "Lazy Days & Lazy nights". RF-SA 1080 5/26, 0350-0403, poor U/KRID, talk show W/OM interviewing YL over phone UnIDed about U.S. political matters. RG-IL All da rest 580 CKY MB
- WINNIPEG, 6/22 R&R. RF-SA Time ? ed.
- 550 KYFR ND BISMARCK, 6/22 W/CFJC, 0335. RF-SA Opps, ed.
- 590 KHQ WA SPOKANE, 6/22 EZL-pop, new stn. RF-SA
- 680 SAN_FRANCISCO, 4/11, 0142, pop mx. RF-SA KNBR CA CJOB MB WINNIPEG , 6/22, new station. RF-SA Time ? Pgm details ? ed.
- 740 KCMC TX TEXARKANA, In very good on 6/30 at 0239 W/mx and stn promo for "Mother Earth on KCMC." SEM-TN
- 770 KOB NM ALBUQUERQUE, 6/22 0315, C&W. RF-SA
- RG-IL 920 WCST GA ATIANTA, 5/26, 0503-0508 fair W/nx & ID as "Atlanta's news station WDTS./
- 930 WGNT HUNTINGTON , 5/26, 0425 fair 0/U/WKY, W/soft rock & pop mx, local ads, many IDs, alsopromo that they carry Reds baseball games. RG-IL
- 940 XIMW MT. VERNON, In good on 6/28 at 0734 for several minutes with end of IL local nx, WX for Southern IL, and spot for sponser of "94 News". SEM-TN
- 1000 HORSESHOE BEND, In fair to good on 7/5 at 2130 with end of mx and S/Off KHAM heard. SEM-TN
- 1060 WNOE LA NEW ORLEANS, 3/31 0100 strong.. RF-SA.
- 1130 KY00 MO BOLIVAR, In weak on 7/1 W/full legal ID hrd at 1059. SEM-TN
- 1220 NEWBURGH, 6/23 0158, good O/U WGAR W/ET, TT, OC & ID, unn. KDF-IL WGNY NY
- 1270 WMLC MS MONTICELIO, In good on 7/6 at 0700 W/S/On hrd, SEM-TN
- 1370 KAWW AR HEBER SPRINGS, In good on 7/1 2120 W/mx & "Hear all the great hits on KAWW", then dropped out. SEM-TN.
- 1380 KRKO WA EVERETT, 6/22 0240, strong, EZL-pop, new stn. SEM-TN
- 1390 KKOA ND MINOT, 6/22 0235, clear, pop-rock, new stn. RF-SA.
- 1400 Santa FE , 5/26 0202-0230. On DX test, very strong most of the time, W/ KTRC NM many IDs hrd, TT. RH-CO
- 1410 CFUN BC VANCOUVER, 6/22 R&R RF-SA
- 1420 KXOW AR HOT SPRINGS, 6/24 0602, Gd W/TT ET, unn. KDF-IL
- 1440 KRDZ WRAY, 4/10 2030 S/Off W/male ancr, owned by KRDZ, INC, very weak sig. // CO
- 1450 GREELY, 5/18 2200, from C&W into ID by man as "KYOU Country", strong, hrd KYOU after KBBS early S/Off. GC-WY
- 1460 KRNY KEARNY, 5/12 2133 male ancr. W/Presidental primary results for NE, fading NE
- 1470 WMBD IL PEORIA, 5/3 0537 hrd promo for a special pgm on WMBD-TV, fading. KLIB LIBERAL, 4/20 2009 hrd CST men. W/Old R&R, S/Off at 2015, fading. GC-WY

- 1480 KLEO KS WICHITA, 5/26 0227 fair-poor U/O UnIDed C&W stn. W/R&R, IDs, WX RG-IL
 - KONI UT SPANISH FORKS, 2230 S/Off by male ancr W/men. of KTMP-FM, 106.5 came in strong after KRAE S/Off. GC-WY (No date, ed.)
- 1530 WVFC PA MCCONNELISBURG, 6/23 0240 fair TT ID & jingle conc. R/C. KDF-IL
- 1540 KZIA CA LOS ANGELES, 4/7 0245-0300 from tlk pgm into S/Off "This is KZIA in Los Angeles" hrd weakly after KXEL S/Off GC-WY
- 1550 WMIB CT WEST HARTFORD, 6/22 0235, poor-fair ID & address on DX. KDF-IL
- 1580 WVKO OH COLUMBUS, In weak but very clear on 7/18 at 2100 W/S/Off SEM-TN.
- 1600 KCRI AR WEST HELENA, In good on 6/28 at 1120 W/Mx, spot for Gibson's Pharm., mx, and ID before fading out at 1125. This is es-WKDL formerly in Clarksdale, MS. SEM-TN.

Some wool from the sheep to

GC-WY.... George Carter 1405 Stonegate Dr. Sheridan, WY 82801 RF-2600, 90 W

RF-SA.... Ralph Fidyk Gen. Del. Beatty, SA SØJ ØCØ DX-160

KDF-IL... Karl D. Forth 2714 N. Leclaire Chicago, IL 60639 HQ-160, loop, LW

RG-IL.... Rob Gerardi 1418 N. Lincoln Apt.D Benton, IL 62812 TRF

RH-CO.... Rob Harrington 3181 S. York Englewood, CO 80110 TRF, loop

SEM-TN... Sidney E. Marshall 7224 Pam Dr. Millington, TN 38053 RF-2200 SM-2

This issue I introduce a couple of new features to CDXR. The first is the DXer of the month award, which will be given each month to a DXer on the basis of his or her reports to DXM. The second is my riddles, if you solve it, you'll win a prize.

DXer of the Month (July 1980) Rob Gerardi

The riddle: After all this time I'm still around. Each issue there will be a new clue until someone solves it. Only reporters to DXM are eligible (reporters to other Roundup sections should send a carbon or photo copy of their report) to win the prize. The answer has something to do with DXing or AM broadcasting (as each riddle will)

Guidelines for reporting:

- Always double-space your reports.
- 2. Your initials must be on every item submitted or it won't be printed.
- If you use more than one sheet to report on, don't start an item on one page & continue it on the next.
- 4. Report date, time & some details. Some reports have been fairly neglictful about this.
- 5. When reporting UnIDed loggings, please report something unique about the station. Don't just mention a type of music. This could be any station on the frequency.

If some of your items weren't printed this time it was because you failed to follow the above guidelines (which I $\underline{\text{didn'}}$ invent). One reporter in both issues I have typed has not used his initials on one item. I hope this will change next time.

Since I recently took over this column, I guess an intro is in order. I am 27, single, and work as a clerk for the State of Illinois Dept. of Public Aid. I have a B.S. in Radio-TV from Southern Illinois University in Carbondale, hopefully some day an M.S. & Ph.D. as well. My BCB totals are 2765/1790 stns. 50/49 states, 10/10 provinces, & 31/17 countries. My main interest is domestic DX. I've been DXing BCB since 1970. I also DX TV & SWBC and serve as Eastern TV DX editor in the World TV-FM DX Association. Other interests include classical mx, jazz, collecting radio station junk (CMs & promotional stuff like tumper stickers tee shirts, etc.) & photography. I run the only photography service for TV DXers. If you are interested in TV DX & want to photograph it, even with a cheap instamatic camera, write me for details. Just recently moved into the apartment. So far the BCB setup not connected. Can't tell if it is any good or not. I'm right on the 1 tracks. My brother says they shouldn't cause any interference since they're DC. 73's.

Next deadline: 8/23. After that: 9/13,9/27 & weekly after that (for the time being Saturdays.).

Nancy Hardy 2301 Pacific Avenue Aberdeen, WA 98520

WESTERN DX ROUNDUP

All times are Eastern Local

Phone for hot WDXR tips: (206)532-6827 till 10:30pm(PLT)--no collect calls DEADLINES: Wed. Aug. 27, Thursdays 9/11, 9/25 & 10/2, Wed. Oct. 8 REPORTERS FOR THIS ISSUE: (JEC) James Critchett-1635 Walbridge St.-Red Bluff, CA 96080 SPR-4, Sanserino loop (NHP) Nick Hall-Patch-1538 Amphion Street-Victoria, BC V8R 4Z6 Transmogrified HRO, FET AA loop Bill Hardy-2301 Pacific Ave.-Aberdeen, WA 98520 (BH) FRG-7, SM-1 (JFJ) Joe Jergel-1507 California #337-San Francisco, CA 94109 Bruce Portzer-6546-19 NE-Seattle, WA 98115 HQ-180A, 4' loop (bp-UT) On a recent trip to Utah Robert Wien-1309 Dentwood Dr.-San Jose, CA 95118 (RW) GE long-range portable, SM-2 560 (KSF0) <u>CA</u>, San Francisco 6/7 noted off 0429; back on at 0526. (JFJ-CA)

KPQ <u>WA</u>, Wenatchee 6/7 0459-0500 weak w/wx, ID, & ABC nx. (JFJ-CA)

570 *KCNO* <u>CA</u>, Alturas 7/15 0410 strong w/TT, o/KLUB, KLAC & KVI. (RW-CA)

620 KNGS <u>CA</u>, Hanford 6/8 0758 strong w/EE relig. mx, ID at 0800, then ranchera mx. (JFJ-CA) NY, New York fair signal about equal w/thunderstorm static 0110 7/13. Rock mx & ID. This also noted 6/30, 7/5, 7/10 at about 0100. Unusual especially at this time of year. (NHP-BC) 660 WNBC 710 *KMPC* CA, Los Angeles 7/14 0324 good w/TT in KIRO null. (RW-CA)

KIRO WA, Seattle 7/4 0400 noted w/ID, way o/unID. KMPC off as well.

850 CKRD AB, Red Deer 6/9 MM 0722 strong in KOA null. (RW-CA) AE, Red Deer 0/9 MM 0/22 Strong in AUA null.

Central Alta. wx, ID, & mx (Elton John). (JFJ-CA)

870 *KIEV* CA, Glendale 6/27 0359 noted w/TT's o/u WWL. (RW-CA)

900 KNUI HI, Kahului 6/28 0810-0841 good at 0819 peak, slow fade-out; rr
mx, ID at 0821 "2:21, here at K-noo-ee Radio," promo. New.(RW)

940 (KFRE) CA, Fresno 6/30 0407 and 7/7 0511 noted totally off. (RW-CA)

980 *KFWB* CA, Los Angeles 7/14 0337 noted on rare SP w/TT, totally off

CA, Los Angeles 7/14 0337 noted on rare SP w/TT, totally off 900 ***RFWB CA, Los Angeles //I+ 0jj/ noted on rare SF W/TT, totally 0II later on w/only usual CKNW/CKRM, nothing else! (RW-CA)

990 ***KIS CA, Pittsburg noted on last 2 MM's, 7/14 & 7/21. Back to NSP?

1000 ***KOMO** WA, Seattle 7/7 0343 good w/TT. (RW-CA)

1020 ***KTNQ** CA, Los Angeles 6/28 0510 xlnt w/TT. (RW-CA)

1080 (KWJJ) OR, Portland 7/21 0315 off the air. Only KRLD noted. (bp-WA)

1110 ***KHAC** AZ, Window Rock 7/21 0805 tent. w/Bible broadcast, rooster crows. U/mess in CHQT null before KRLA fade-up. Hrd on f/c on 1300, still needed on 1110. (RW-CA)

CA, Roseville Wed 7/9 1959 ex-KPOP. (JEC-CA)

OR, Bend Tu 7/1 1000 CBS nx on the hour. (JEC-CA)

CA, Los Angeles Su 7/6 0710 new call, ex-KIIS. (JEC-CA) KPIP KBND 1150 KPRZ *KBAI* CA, Morro Bay 6/24 0401 strong w/OC, ID at 0409 "KBAI, Morro Bay, conducting xmtr tests," & at 0414 "K-bay, 1150, nighttime on the Gold Coast." (RW-CA)

1170 (KLOK) CA, San Jose 6/30 0437 noted w/annct. they'd be off the air for a few tech. adj., but would be back on "in a little while," then totally off. Lucky to tune in at just the right time! (RW) CA, Barstow 6/28 0130 well on top w/local spot, Calif. Angels 1230 KWTC post-game show. Rare here. (RW-CA) *KGFJ* CA, Los Angeles 6/30 MM 0523 strong ID "this is KGFJ, Los Angeles" twice. Couldn't detect OC due to KRDG & usual mess. CA, Bakersfield 6/10 0400-0402 weak w/fading. Mx, (JFJ-CA) ID at 0402 "AM 12-30, KGAM Bakersfield," & NBC. Back into mud. KGAM 1260 *KYA* CA, San Francisco 7/14 0335 noted testing w/FM simulcast. (RW-CA) 1300 KPTL NV, Carson City MM 7/21 0859 s/on, UPI nx. (JEC-CA) 1320 KXRO WA, Aberdeen 7/14 switched from an MOR to pop format, much "chicken rock," several old-fogie DJ's gone, new management & PD, hired KGHC-1560's morning jock, etc. Uses "Radio 1320" slogan a lot. Still NBC network, but is getting rid of some

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clutter. S/off still 0300 Tues.-Sat., 0230 Sun., 0200 MM, for
                 now anyway. (BH-WA)
                 WA, Raymond-South Bend per clipping in Aberdeen newspaper, the
1340 KAPA
                 new owner plans to ask FCC to switch from "SH" to "unlimited"
                 hours; new sked, if approved, would be 0900-0300, possibly by
                  this fall. Will have an MOR-pop-type format, and will join CBS
                 network. (BH-WA)
network. (Bn-WA)
1350 *KCKC* CA, San Bernadino 6/30 0321 testing w/C&W mx, probably 5 kw.
1370 (KEEN) CA, San Jose 6/26 0341 noted totally off for rare SP. (RW-CA)
                  UT, Salt Lake City 6/26 0357 good w/deep fades o/u XEHF, KWRM, unID EE in background. C&W mx, few ads, one readable ID,
        KS0P
                 UPI nx on hour. New. (RW-CA) CA, Turlock 6/24 0417 noted totally off. Seems to have a nightly
       SP during week, back on at 0600, but unsure. (RW-CA)
*KSLM* OR, Salem 7/14 0605 noted w/annct. of ET ing, o/KCRC. (RW-CA)
                UT, Logan now using this call, ex-KBLW. (bp-UT) +7/14 0701 noted w/s/on, call change ex-KBLW. KENN s/on in back-
         KBLQ
                  ground, KENN taking o/w/Navajo chants. (RW-CA)
                  BC, Nelson Sa 7/5 0040 CBS nx. (JEC-CA)

CA, Berkeley 6/30 0410 noted on, so was not a bi-weekly SP as
         CKKC
1400
          KRE
                  possibly suspected. (RW-CA)
1440 *KUHL* Santa Maria 7/14 0328 noted w/TT, OC, testing annot. at 0330. 1460 *KDON* CA, Salinas 6/25 0332 noted w/TT's, occas. totally (RW)
       *KTYM* CA, Salinas 0/20 0/32 noted w/TT's, occas. totally off. KENO/KMWX/KYSN/KEYC in. (RW-CA)

*KTYM* CA, Inglewood 6/25 0412 noted w/ID "This is KTYM, Inglewood, CA, testing xmtr & studio facilities." KDON still off. (RW)

*KELA WA, Centralia-Chehalis 7/21 0833 on top of mess w/"KELA Head-lines," in XEBBC null. Quite rare here. (RW-CA)

KDKO CO, Littleton MM 7/14 0632-0634 wx, "KDKO fun in the sun"
1470
       KELA
1510
                  slogan, rock mx. Fair to weak w/fading, KGA off. (JFJ-CA) OH, Cincinnati MM 7/14 weak w/KFBK off. 0556-0600 local ads,
1530
         WCKY
                  wx, ID, ABC nx. (JFJ-CA)
                  CA, Aptos-Capitola ex-KKAP 7/9 fair 2330-2332 s/off "We broad-
1540
         KMFO
                   cast from studios & offices at 519 Capitola Ave., Capitola...
                   AM radio 15-40, KMFO, Aptos-Capitola." Noticed fading in approx
                  2245 daily since. (JFJ-CA)
                  SD, Aberdeen MM 7/14 0614-0630 weight loss contest promo, C&W
1560
         KKAA
                  \overline{mx}, wx, PSA, "K-K-double-A" slogan, into nx at 0630. Weak to fair w/KPMC off. (JiJ-CA)
UNID's:
990 7/7 0600 SSB way u/CBW. Possibly KNIN, but their s/on is listed as
0630, not 0600. Other possibilities? (RW-CA)
1560 A test (?) here at 0640 7/21 looping approximately east. "phaser gun"
zip-zip-zip noises followed by a decay then more zips. No ID's. Any-
body else hear this or have I got a UFO in my radio? (NHP-BC)
REPORTERS TO WDXR VOLUME 17: (Total number of tips & number of issues)
18/2
                                                           27. Bill Nittler
28. Nancy Hardy
Herb Childs
30. Mark Soltys
      Mark McMillan 289/25
Bill Harms
                                                                                                          18/2
  1. Robert Wien
                                                                                                          15/10
15/3
14/2
13/3
  2.
                               236/20
  3. Bill Harms
                              213/17
200/31
99/7
89/7
  4. Steve Mittman
                                                            31. Ric Heald
  5. Bruce Portzer
                                                            32. Larry Godwin
33. Robert Lake
34. Mike Hardester
  Joe Jergel
                                                                                                           10/3
  7. Jef Jaisun
                               88/7
  8. Doug Nyholm
                                                                                                           10/1
                                80/10
  9. Albert Lobel
                                                                  Michael Dice
                                                                                                           9/1
1/3
1/3
1/3
1/3
1/1
1/1
1/1
1/1
1/1
                                                            36. Patrick Martin
37. Randy Miltier
 10. James Critchett 67/7
                                 56/7
 11. Rich Toebe
                                                            38. Pete Taylor
 12. W. George
                                                                  Chris Knight
               Elliott
                                                            40. Bill Block
                                 49/4
 13. Mark Bixby
                                41/10
39/11
                                                            Gary Parton
42. Jack Latteman
 14. Nick Hall-Patch
 15. Bill Hardy
                                                                  Raymond Martinez
                                 36/1
 16. Rob Gerardi
                                                            44. R. Colin Newell
                                 36/4
       Mort Meehan
                                                            45. Bob Hill
                                 33/1
32/4
 18. John Hart
                                                                   Becky Harms
 19. David Oliphant
                                                                   Jim Korn
                                 29/6
 20. Bradford Wall
                                                                   A.J. Rimmington
                                 29/1
       Ken Horne
                                                            49. Art Peterson
                                 24/6
 22. Randy Tomer
                                                                   Steve Grubb
       Doug Pifer 24/3
Mike Bernardin 24/4
Ralph Kemper 22/4
                                                                   Bob Yentema
                                                                   William Cowles
                                             Thanks to all our reporters to WDXR! O
  25. Ralph Kemper
                                 19/1
 26. Naoki Kanaya
```

the irca technical column Editor: Nick Hall-Patch

or: Nick Hall-Patch 1538 Amphion St. Victoria, B.C. V&R 476 Canada

Gerry Thomas has tried out a Realistic DX-302 on MW using a CB whip above the Radio Shack store. Sensitivity seemed OK and selectivity seemed sharp, particularly in the "narrow" position---quite a bit better than

other stock table radios. However, BCB spurs were apparent even using just the whip, and a 1450 local showed up on 2450 and 3450 kHz as well. Improvements in the DX-302 signal handling ability (according to Harold Sellers of AMARC DX Equipment Information Committee) involves application of more AGC voltage to the receiver's front end. Apparently, this hasn't quite filled the bill for BCB, though it might have made a difference on SW. As always, an in-depth review of the DX-302's BCB capabilities would be appreciated.

Book review: Practical RF Communications Data for Engineers and Technicians, by M. F. "Doug" De Maw, published by Howard W. Sams & Co. #21557

This book is divided into five sections. One covers inductors and transformers wound on ferrite and iron cores, and how to wind your own. The next discusses semiconductor and filter networks; the third concerns transistor circuit design with examples of oscillators and amplifiers; the fourth is a source of receiver design hints with many circuit examples. The fifth section discusses some unusual receiving and transmitting antennas which the author has experimented with.

Does this sound like something you'd never open, particularly as it's for "engineers and technicians"? Certainly, the book is not a basic introduction to circuit design, yet I have no formal training and found most of the book to be easy to understand and thought provoking. Mr. De Maw writes clearly and there is not a great deal of math, though it would be best to have some understanding of impedance, Ohm's law etc. before tackling this book.

The section on transformers can give you a good idea of how to wind and use your own inductors. The chapter on filter networks is probably most useful for a builder of transmitters, though there is a circuit for an AC line noise filter. The section on circuit design gave me a clearer understanding of class A amplifiers than I had before, and the VFO and buffer circuits could be useful for designing local oscillator and BFO circuits in your own receiver. The receiver section should be most useful to someone designing his own BCB receiver as it describes a superhet stage by stage with a number of different circuit examples for each stage. The author describes a few composite receivers, one of which is a BCB DX rig! None of these circuits are described completely--you would have to figure out physical circuit layout, shielding, and in some cases design your own transformers by referring to the first chapter. Finally, the antenna section includes some languantennas and amplifiers useful for MW as well as low noise antennas for higher frequencies. Most of the loops are quite different from anything described in club reprints. Again, physical details are left up to you.

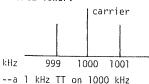
physical details are left up to you.

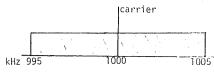
A good deal of practical information is packed into 250 pages, and the book features bibliographies at the end of each chapter to provide further information. Any MW DXer who tinkers with or builds his own equipment will find this book a useful addition to his bookshelf.

E.H. Grossman has been comparing the common envelope detector (found in most receivers) with a circuit known as a synchronous AM detector. Before describing such a detector.

let's run through a little background about AM signals and their detection.

An AM signal is composed of a number of different frequencies. The "carrier" is the central frequency, and is the one we refer to when we say that "station XXX is on 1000 kHz 1000 kHz is what the station's carrier frequency is, but no information (music, voice, tones, etc.) is actually conveyed on this signal. The "sidebands" carry the station's programming, and for any sound more complex than a simple test tone, the sidebands are a group of signals symmetrically arranged on either side of the carrier frequency. These sidebands correspond in frequency and strength with the audio imposed onto the carrier signal at the AM transmitter. A simple example: a 1000 Hertz test tone will turn up as two signals, one which is one kilohertz higher than the carrier, and one which is one kilohertz lower.





--complex sounds on 1000 kHz (sound has an upper limit of 5 kHz)

If the test tone is not pure, it may contain some weak energy at 2000 Hz. The 2000 Hz

energy will show up as signals 2 kHz above and below the carrier, and so on.

To extract audio from an AM signal, one ordinarily uses a rectifier (in the form of a diode, a bipolar transistor or an FET) followed by a capacitor. This is an "envelope detector" and it needs the carrier and both sidebands of an AM signal in order to produce the least distorted audio.

A "product detector" is a more complex and efficient circuit most often used for reception of single sideband (SSB) and code signals. A signal from an oscillator known as a beat frequency oscillator (BFO) is injected into this sort of detector. This signal takes the place of the missing carrier of an SSB signal. The output of the product detector is approximately equal to the product of the BFO and the RF signal applied to it—and this output is at audio frequencies. AM signals can be heard with such a detector, but only if the BFO frequency is adjusted so that it has the same frequency as the incoming carrier; a beat note between the carrier and BFO frequencies will obliterate the audio otherwise.

A distant AM signal can suffer from selective fading, i.e. its carrier and sidebands fade at different rates. But for the single diode or other envelope detector to yield undistorted audio, there must be a strong carrier present. If a selective fade weakens the carrier, you will be left with a jumble of noise, even though sidebands of the signal may

still be present.

A carrier generated in the receiver can be substituted for the weak received carrier to allow better readability of a weak AM transmission as well as one with selective fades. This is known as the "exalted carrier" technique. SWL's with good quality receivers can zero-beat the BFO with the AM signal's carrier (usually in a product detector), using the BFO as a carrier rather as in listening to a SSB transMission. However, MW DXers' experimentation with exalted carrier techniques seems to have centered around using a Q-Multiplier to peak the carrier in relation to the sidebands. See NRC reprint R2 "Single Sideband Reception of the BCB with Mechanical Filters" by Gordon Nelson or "Receiver Hot-Rodding Hints" by Ray Moore in the NRC Receiver Reference Manual for further information. Using this technique, one can hear reasonably undistorted audio using the carrier and only one sideband of an AM signal.

Exalted carrier reception sounds like a good idea, but the carrier generated in the receiver must be exactly the same frequency as the incoming carrier and it must stay that way while you're listening. This condition implies a great deal of stability in the local oscillator of the receiver as well as in the circuit supplying the internal carrier. Not only that, but one or the other of these circuits must have a control for some pretty fine tuning to get the internal carrier to the same frequency as the incoming carrier. Personally, I've not had a great deal of success using a Q-multiplier for exalted carrier reception due to these constraints and the limitations of my receiver.

What one really needs is a circuit that will sample the weak carrier of a received signal and generate a strong steady signal which is in phase with that carrier. A circuit called a "phase-locked loop" (PLL) will do this very job and PLL integrated circuits are

widely available.

After one obtains this strong steady signal from the PLL, it should be mixed with the desired DX signal. The desired signal will then beat with the output from the PLL (which matches exactly the carrier frequency of the desired signal) to yield audio. Such a circuit is known as a "phase-locked loop synchronous AM detector" and will allow detection if the carrier of the desired signal is strong enough to lock the PLL onto that frequency. In theory, a weaker signal can be copied with a synchronous detector than with an envelope detector, as noise does not affect the synchronous detector as much as it does the envelope detector. Audio from a weak noisy signal should theoretically be cleaner and more readable using a synchronous detector. A block diagram of such a detector might look like this:

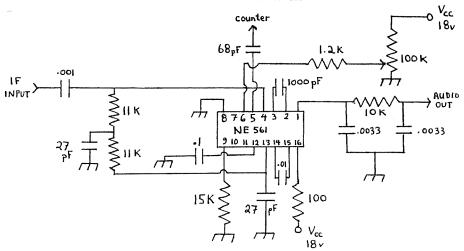
The Signetics NE561 is an integrated circuit which combines both a PLL and a multiplier (used as a product detector) in one package. 100 uV of IF output is all that is needed to lock the PLL in phase with the carrier. The circuit on the next page uses this IC as a synchronous AM detector.

The $100~k\Omega$ potentiometer adjusts the PLL output to the 455~kHz range so that it may lock onto an

receiver IF product detector output

available carrier from the receiver IF stages. Once adjusted, it can be left alone. The frequency counter output does not have to be used, but if you have a counter available, it will let you know when the PLL is near the 455 kHz range before a signal is applied to the IC, and will let you know if the carrier of a DX signal has "locked up" the PLL. The same things can be done simply by adjusting the pot while listening to the output. If the receiver in use doesn't have an "IF output", some circuit will have to be put together to

tap off signal from the receiver's IF strip and apply it to the 3 $k\Omega$ input of the NE561. A source follower or emitter follower should do the trick.



E.H. Grossman has experimented with a number of synchronous AM detector circuits and found that most of them are an improvement over the envelope detector at least some of the time when listening to weak or fadey signals. He feels that a circuit using XR215 PLL and XR2228 multiplier IC's is the best so far. I can send anyone interested a schematic of this (it's quite a bit more complex than the NE561 circuit), though I feel it would be best if you have some knowledge of the IC's and of synchronous AM detectors before rushing off to build one! EHG has found that even the simple NE561 circuit can make a difference to a weak noise-plagued signal, however, and I hope that this article will stimulate some of the more technically oriented to some experimentation.

ItoO KiloHertz EDITOR: 15 Donwoods Grove U.S.A. & Canada EDITOR: 15 Donwoods Grove EDITOR: 15 Donwoods Gro			10110110110110	
Miles DX'er & his/her location Miles Decatur AL 1963 Allen-Vallejo CA MIXAL Demopolis AL 1957 Allen-Vallejo CA FOR Wayne AL 790 Edmunds-Parsipanny NJ JILD Fairfield AL 663 Breger-Austin TX JILD Pairfield AL 2095 Allen-Vallejo CA Bytheway & Portzer-Seattle WA Bytheway & Portzer-Seat			1400 K	iloHertz / EDIMOD 15 Donwoods Grove
Miles DX'er & his/her location Miles Decatur AL 1963 Allen-Vallejo CA MIXAL Demopolis AL 1957 Allen-Vallejo CA FOR Wayne AL 790 Edmunds-Parsipanny NJ JILD Fairfield AL 663 Breger-Austin TX JILD Pairfield AL 2095 Allen-Vallejo CA Bytheway & Portzer-Seattle WA Bytheway & Portzer-Seat	Z_L0	ontinental QTH] [J.S.A.	& Canada// EDITUR! Toronto, Ontario, CANADA
MSL Decatur AL 1963 Allen-Vallejo CA Demopolis AL 1957 Allen-Vallejo CA Al				——————————————————————————————————————
Decatur AL Demopolis AL Allen-Vallejo CA Allen-Vallejo CA Nolan-Eugene OR Delta CO Debelstein-Omaha NE Demopolis AL Demunds-Parsipanny NJ Demopolis Al Demonic A D	Call	Station	Miles	DX'er & his/her location
Demopolis AL 1957 Fort Wayne AL 7790 Edmunds-Parsipanny NJ	MSL	Decatur AL		Allen-Valleio CA
Edmunds-Parsipanny NJ Edmu	IXAL			
FAIRT Field AL Opelika AL Opelika AK Sitka Allen-Vallejo CA Sitit Aklen-Vallejo CA Sitit Allen-Vallejo CA Sitit Akskey-Galva IA Sitit Allen-Vallejo CA Sitit Allen-Vallejo		Fort Wayne AL		Edmunds-Parsipanny N.I
JHO Opelika AL Sitka AK Sitka AK SIV: Phoenix AZ TUC: Tucson AZ VOY Yuma AZ ELD El Dorado AZ ELD El Dorado AZ ELD El Dorado AZ RE @ Berkeley CA SIY: San Luis Obispo CA SIY: San Luis Obispo CA SIY: San Luis Obispo CA SIX: S			663	Breger-Austin TX
Sitka AK Il Phoenix AZ TUC! Tucson AZ YOY Yuma AZ ELD El Dorado AZ ELD El Dorado AZ RE @ Berkeley CA MRFC! Indio CA QMS! Redding CA SLY! San Luis Obispo CA QIQ @ Santa Paula CA Truckee CA UKi Danon City CO ONG ONG Visalia CA REN CAN CAN CAN CAN CAN CAN CAN C				
TIUC! Tucson AZ VOY Yuma AZ ELD El Dorado AZ CLA Pine Bluff AZ RFC! Indio CA RFC! Indio CA QMS! Redding CA SLY! San Luis Obispo CA QQQ Santa Paula CA Truckee CA CKA CKA CKA CKA CKA CKA CKA				Allen-Valleio CA
TUC! Tucson AZ Yuma AZ ELD El Dorado AZ CLA Pine Bluff AZ RE @ Berkeley CA QMS! Redding CA SLY! San Luis Obispo CA QIQ @ Santa Paula CA TTUKE CA UKI UKI UKI AC ONG Visalia CA DITA Delta CO TTO TTO BZZ La Junta CO STC STC STAMFORD STC STAMFORD TILI Willimantic CT FOT Lauderdale FL FOT Lauderdale FL FOT Walton Beach FL SGC SGC SGA SGA SGA SGA Allen-Vallejo CA Alen-Vallejo CA Allen-Vallejo CA Allen-Vallejo CA Allen-Valleyo			1100	Hall-Patch-Victoria BC
NOY Yuma AZ ELD El Dorado AZ CLA Pine Bluff AZ RE @ Berkeley CA RFC ! Indio CA QMS ! Redding CA SLY ! San Luis Obispo CA QIQ @ Santa Paula CA TRT Truckee CA UKi Ukiah CA ONG Visalia CA REN Canon City CO DTA Delta CO DTA Delta CO STC Stamford CT LILI Willimantic CT FOrt Macgan CO STC Stamford CT LILI Willimantic CT FORT Banford FL SGC SGC SGC SGC SGC SGC SGC SGC SGA			1115	
ELD Drado AZ CIA Pine Bluff AZ CIA CIA Pine Bluff AZ CIA Pine Bluff AZ CIA			568	
RE @ Berkeley CA 1441 Kaksey-Galva IA RFC! Indio CA 1353 RSLY! San Luis Obispo CA 896 SLY! San Luis Obispo CA 896 RTRT Truckee CA 906 RTRT Truckee CA 575 RTRT Truckee CA 575 RTRT Truckee CA 576 ONG Visalia CA 1295 RLN Canon City CO 1030 RTRT FORT Morgan CO 1040 REL I Junta CO 1012 REZ La Junta CO 1014 REZ La Junta CO 1015 RET FORT Morgan CO 1040 RET Willimantic CT 536 RET Stamford CT 40 ROCORMACK-West Lafayette IN RES FORT Walton Beach FL 1361 RES FORT Walton Beach FL 1361 RES FORT Walton Beach FL 1361 RES Elberton FL 2422 REA Savannah GA 720 REMEWAY & Portzer-Seattle WA REY Mein-San Jose & Remington-Fairfay RE Wein-San Jose & Remington-Fairfay			912	Wheeler-Erie PA
RFC! Indio CA QMS! Redding CA SMS! Redding CA SMS! San Luis Obispo CA QIQ@ Santa Paula CA QIQ@ Santa Paula CA TRT Truckee CA UKiah CA ONG Visalia CA Canon City CO DTA Delta CO DTA Delta CO DTA Delta CO DTA DETE SZZ La Junta CO STC Stamford CT LILI Willimantic CT Fort Lauderdale FL SMC FORT Walton Beach FL SMC SGC SGC SGC SGC SGC SGA			659	Merrill-Milan MI
RFC! Indio CA QMS! Redding CA SSLY! San Luis Obispo CA QIQ@ Santa Paula CA QIQ@ Santa Paula CA Truckee CA UKi Ukiah CA ONG Visalia CA RLN Canon City CO DTA Delta CO DTA Delta CO DTA DELTA CO DTA DELTA DELTA CO DTA DELTA DELTA CO DTA DELTA D			1441	Kaksey-Galva IA
SLY! San Luis Obispo CA QIQ@Santa Paula CA Truckee CA TRT Truckee CA UKI Ukiah CA ONG Visalia CA CAND CA DELTA CAND COTA DELTA CAND COTA			1353	
QIQ @ Santa Paula CA 906 UKI Ukiah CA 575 UKI Ukiah CA 587 ONG Visalia CA 1295 Kaskey-Omaha NE FIN Canon City CO 1030 DTA Delta CO 667 BYTH Fort Morgan CO 1040 BZZ La Junta CO 1012 BZZ La Junta CO 1014 BZZ La Junta CO 1015 BZZ La Junta CO 1016 BZZ La Junta CO 1017 BZZ La Junta CO 1018 BZZ La Junta CO 1019 BZZ La Junta CO 1010 BZZ La Junta CO 1	QMS!	Redding CA	336	Wein-San Jose CA
## Santa Paula CA	SLY!	San Luis Obispo CA		Bytheway & Portzer-Seattle WA
UKIA CA UKiah CA UKiakey-Omaha NE UKiah CA	QIQ@	Santa Paula CA		
ORI OKIAN CA Visalia CA Visalia CA Canon City CO DTA Delta CO Fort Morgan CO STC Stamford CT Fort Lauderdale FL IRA Fort Walton Beach FL SGC SGC SGC SGC SGC SGA SGA SGA				Bytheway & Portzer-Seattle WA
VISAIIA CA Canon City CO DTA Delta CO FTM Fort Morgan CO La Junta CO Stamford CT FORT Lauderdale FL FORT Lauderdale FL FORT Fort Walton Beach FL SGC SGC Elberton FL SGC SGA Savannah GA SGA Savannah GA SCA SCA SCA SCA SCA SCA SCA SCA SCA SC				Bytheway & Portzer-Seattle WA
DTA Delta CO 667 Dabelstein-Omaha NE FORM Fort Morgan CO 1040 Nolan-Eugene OR La Junta CO 1012 Allen-Vallejo CA STC Stamford CT 40 Mount-Teaneck NJ LLI Willimantic CT 536 Seigel-Toledo OH FORT Lauderdale FL 1050 McCormack-West Lafayette IN LRA Fort Pierce FL 1361 Kaskey-Galva IA WUE Fort Walton Beach FL 831 Bright-Muscatine IN LRR Sanford FL 2422 Allen-Vallejo CA SGC Elberton FL 2494 Allen-Vallejo CA WEX Macon GA 938 Kaskey-Galva IA SGA Savannah GA 720 Edmunds-Parsipanny NJ LRT Jerome ID 535 Kamp & Wein-San Jose & Remington-Fairfay	JNG	Visalia CA		Kaskey-Omaha NE
Delta CO Firm Fort Morgan CO 1040 Nolan-Eugene OR 3ZZ La Junta CO Stamford CT 40 Mount-Teaneck NJ SILI Willimantic CT Fort Lauderdale FL 1050 McCormack-West Lafayette IN Kaskey-Galva IA NUE Fort Walton Beach FL SGC Elberton FL 3EC SEC Stamford FL SGC Elberton FL SGC STAMFORD SANCORD SA	イエン	Canon City CO		Nolan-Eugene OR
Allen-Vallejo CA Stamford CT Stamford CT FORT Lauderdale FL STL Fort Lauderdale FL STL Fort Wiltimantic CT STL Fort Lauderdale FL STL Fort Pierce FL STL Fort Walton Beach FL STL FORT Sanford FL STL STL STL STL STL STL STL STL STL ST				Dabelstein-Omaha NE
STC Stamford CT 40 Mount-Teaneck NJ ILI Willimantic CT 536 Seigel-Toledo OH FOTL Fort Lauderdale FL 1050 McCormack-West Lafayette IN IRA Fort Pierce FL 1361 Kaskey-Galva IA NUE Fort Walton Beach FL 831 Bright-Muscatine IN IRR Sanford FL 2422 Allen-Vallejo CA SGC Elberton FL 2194 Allen-Vallejo CA NEX Macon GA 938 Kaskey-Galva IA SGA Savannah GA 720 Edmunds-Parsipanny NJ IRT Jerome ID 535 Kamp & Wein-San Jose & Remington-Fairfax				
Willimantic CT 536 Seigel-Toledo OH FTL Fort Lauderdale FL 1050 McCormack-West Lafayette IN FAR Fort Pierce FL 1361 Kaskey-Galva IA WIE Fort Walton Beach FL 831 Bright-Muscatine IN FUR Sanford FL 2422 Allen-Vallejo CA FUR Macon GA 938 Kaskey-Galva IA FUR Macon GA 938 Kaskey-Galva IA FUR Savannah GA 720 Edmunds-Parsipanny NJ FUR Macon GA 938 Kaskey-Galva IA				Allen-Vallejo CA
FTL Fort Lauderdale FL 1050 McCormack-West Lafayette IN RA Fort Pierce FL 1361 Kaskey-Galva IA UE Fort Walton Beach FL 831 Bright-Muscatine IN RR Sanford FL 2422 Allen-Vallejo CA GC Elberton FL 2194 Allen-Vallejo CA UEX Macon GA 938 Kaskey-Galva IA GGA Savannah GA 720 Edmunds-Parsipanny NJ GGA Savannah GA 720 Edmunds-Parsipanny NJ RT Jerome ID 535 Kamp & Wein-San Jose & Remington-Fairfax				
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Fort Flerce FL 1361 Kaskey-Galva IA WILE Fort Walton Beach FL 831 Bright-Muscatine IN PRR Sanford FL 2422 Allen-Vallejo CA SGC Elberton FL 2194 Allen-Vallejo CA WEX Macon GA 938 Kaskey-Galva IA SGA Savannah GA 720 Edmunds-Parsipanny NJ RRT Jerome ID 535 Kamp & Wein-San Jose & Remington-Fairfax				McCormack-West Lafayette IN
FRR Sanford FL 2422 Allen-Vallejo CA SGC Elberton FL 2194 Allen-Vallejo CA NEX Macon GA 938 Kaskey-Galva IA SGA Savannah GA 720 Edmunds-Parsipanny NJ ART Jerome ID 535 Kamp & Wein-San Jose & Remington-Fairfax				Kaskey-Galva IA
GC Elberton FL 2194 Allen-Vallejo CA EX Macon GA 938 Kaskey-Galva IA GGA Savannah GA 720 Edmunds-Parsipanny NJ RT Jerome ID 535 Kamp & Wein-San Jose & Remington-Fairfax				Bright-Muscatine IN
NEX Macon GA 938 Kaskey-Galva IA GGA Savannah GA 720 Edmunds-Parsipanny NJ ART Jerome ID 535 Kamp & Wein-San Jose & Remington-Fairfax				Allen-Vallejo CA
GGA Savannah GA 720 Edmunds-Parsipanny NJ ART Jerome ID 535 Kamp & Wein-San Jose & Remington-Fairfax				
ART Jerome ID 535 Kamp & Wein-San Jose & Remington-Fairfax				
namp & wein-sair sose & Remington-rairiax				Edmunds-Parsipanny NJ
CA (a three way tie now!!!)	TITT.	gerome ID	535	Kamp & Wein-San Jose & Remington-Fairfax
				CA (a three way tie now!!!)

13

KRPL!	Moscow ID	1095	Kaskey-Galva IA
KTGO	Saint Anthony ID	683	Allen-Vallejo CA
KSPT	Sandpoint ID	759	Allen-Vallejo CA
INDIAG	Champaign II	ากลัง	Allen-Valleio CA
WDWSI	Champaign in	1000	Allen Vallejo CA
MGTT:	Garesburg IL	1/02	Atten-varie Omeha NE
WROZ	Evansville IN	504	Dabelstein-Omaha NE
WBAT	Marion IN	1869	Portzer-Seattle WA
KCOG	Centerville IA	. 836	Kemper-Grand Junction CO
KVFD	Fort Dodge IA	707	Wheeler-Erie PA
KVOE	Emporia KS	1410	Allen-Vallejo CA
KAYS	Have KS	1232	Allen-Valleio CA
MUAN	Camthiana VV	282	Zondlo-Hammond TN
MOIN	Elizabathtawa VV	611	Vocicor Colum TA
MIET	ETIZADethrown Ki	011	Naskey-Galva IA
WFPR	Hammond LA	00	Landry-Baton Rouge LA
KAOK	Lake Charles LA	1734	Allen-Vallejo CA
WRDO	Auguasta ME	1332	Dabelstein-Omaha NE
WWIN	Baltimore MD	544	McCormack-West Lafayette IN
WALE	Fall River MA	831	Evans-Gary IN
WLLH	Lowell MA	260	Edmunds-Parsipanny NJ
WHMP	Northhampton MA	135	Edmunds-Parsipanny NJ
MKMB	Battle Creek MI	305	Bright-Muscatine IA
MIXINI MIXINI	Datus of Con Mi	2067	Allen-Valleie CA
MOTE	Dectore MI	2007	Hitem-Vallejo on
WGON	Munsing Mi	557	Hogan-East Chicago IN
WSAM	Saginaw Mi	766	Markewicz-Winnipeg MB
WSJM	Saint Joseph MI	236	Bright-Muscatine IA
WTCM	Traverse City MI	511	Kaskey-Galva IA
KEYL	Long Prarie MI	357	Bright-Muscatine IA
KMHL	Marshall MN	600	Merrill-Milan MI
KEEY	Saint Paul MN	621	Belanger-Swan River MB
WHIR	Virginia MN	712	Wheeler-Erie PA
O TOW	Pooporillo MC	1876	Allen-Valleio CA
MDTL	DOUGATITE MP	70,0	Hagen Page Chicago TN
WMBC	Columbus M2	202	Hogan-East Chicago IN
WNAG	Grenada MS	768	Wheeler-Erie PA
WFOR	Hattiesburg MS	892	Wheeler-Erie PA
WJQS	Jackson MS	776	Kaskey-Omaha NE
KFRU	Columbia MO	1604	Allen-Vallejo CA
KJCF	Festus MO	506	Merrill-Toledo OH
KSIM	Sikastan MO	642	Breger-Austin TX
Kumc	Springfield MO	900	Markewicz-Winnipeg MB
KDDG	Door Todge MM	6/10	Belanger-Swan River MB
KUKU	Deer Louge Wr	3000	Allen Wellein CA
KXGN	Grendine Mi.	1002	Allen-Vallejo CA
KARR :	Great Falls MT	876	Allen-vaile jo CA
KBRB	Ainsworth NE	1062	Bytheway-Seattle WA
KCOW	Alliance NE	1048	Allen-Vallejo CA
KLIN	Lincoln NE	1351	Portzer-Seattle WA
KVEG	! Henderson NV	730	Nolan-Eugene OR
KWNR	Winnemucca NV	360	Nolan-Eugene OR
WBRT.	Berlin NH	170	Morby-Ballston Lake NY
WTST.	Hanover NH	270	Edmunds-Parsipanny NJ
MOND	Pleasantville M.T	1107	Kaskev-Galva TA
CINDW	Carta FF NM	14.66	Wheeler-Frie PA
KUNG	Mayth on	1.00	WINCOTCI DITTO III
rono	Moscow ID Saint Anthony ID Saint Anthony ID Sandpoint ID Champaign IL Galesburg IL Evansville IN Marion IN Centerville IA Fort Dodge IA Emporia KS Hays KS Cynthiana KY Elizabethtown KY Hammond LA Lake Charles LA Augusta ME Baltimore MD Fall River MA Lowell MA Northhampton MA Battle Creek MI Detroit MI Munsing MI Saginaw MI Saginaw MI Saint Joseph MI Traverse City MI Long Prarie MI Marshall MN Saint Paul MN Virginia MN Booneville MS Columbus MS Grenada MS Hattlesburg MS Jackson MS Columbia MO Festus MO Springfield MO Deer Lodge MT Glendive M	1460	Wheeler-Erie PA
tronsine	Consequences NM	1000	Gtown Anphond On
MITTA	Tucumcari NM	1205	Starr-Hubbard OH
		531 449	Merrill-Toledo OH
WYSL	Buffalo NY	449	Kramer-Chicago IL
WSLB	Ogdensburg NY	290	Wheeler-Erie PA
WBMA	Beaufort NC	80	Allinson-Wilmington NC
WCRG	Greensboro NC	440	Nancy Hardy-Fredonia NY
WLSE	Wallace NC	180	Singer-Richmond VA
WHCC	Waynesville NC	2165	Allen-Vallejo CA
WSMY	Weldon NC	463	Breger-Long Island NY
KEYJ	Jamestown ND	414	Dabelstein-Omaha NE
		677	Kaksev-Omaha NE
WMAN	Mansfield OH		
WPAY	Portsmouth OH	703	Kaskey-Galva IA
KWON	Bartlesville OK	702	Kemper-Grand Junction CO
KTMC	McAlester OK	1482	Allen-Vallejo_CA
KNOR	Norman OK	530	Kaskey-Galva IA
KNND	Cottage Grove OR	330	Hall-Patch-Victoria BC
KJDY	John Day OR	394	Hall-Patch-Victoria BC
WEST	Easton PA	69	Mount-Teaneck NJ
WJET	Erie PA	584	Eddie-Saint Louis MO
WJET 14	Erie PA	584	Eddie-Saint Louis MO

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552 Evans-East Chicago IN
449 Evans-Valpariso IN
2302 Allen-Vallejo CA
   WFEC Harrisburg PA
WWSF Loretto PA
    WKBI
                        Saint Mary's PA
                                                                                                          605 Evans-East Chicago IN
521 Evans-Valpariso IN
    WICK
                        Scranton PA
WGTN Georgetown SC 1088 Kaskey-Galva IA
KBJM Lemmon SD 391 Markewicz-Camp Morton MB
WJZM Clarksville TN 607 Kaskey-Galva IA
WHUB Cookesville TN 700 Kaskey-Galva IA
WHUB Cooper Hill TN 394 McCormack-West Lafayette IN
WKPT Kingsport TN 2163 Allen-Vallejo CA
WGAP Maryville TN 696 Kaskey-Galva IA
KRUN Ballinger TX 1310 Allen-Vallejo CA
WHAL Shelbyville TN 696 Kaskey-Galva IA
KRUN Ballinger TX 1310 Allen-Vallejo CA
WHAL Greenville TX 200 Bytheway & Portzer-Seattle WA
KILE Galveston TX 195 Moss-Austin TX
KGVL Greenville TX 1501 Allen-Vallejo CA
KYUN Pecos TX 1510 Bytheway & Portzer-Seattle WA
KEYE Perryton TX 1176 Allen-Vallejo CA
KVOP Plainview TX 1434 Portzer-Seattle WA
KDWT Stamford TX 1489 Portzer-Seattle WA
KTEM Temple TX
KTFS Texarkana TX 953 Wheeler-Erie PA
KVOU Uvalde TX 833 Eddie-Saint Louis MO
KIXX Provo UT 998 Markewicz-Camp Morton MB
WDOT Burlington VT 296 Edmunds-Red Bank NJ
WHLF South Boston VA 2380 Millar-Bellebue WA
WINC Winchester VA 310 Merrill-Toledo OH
KEDO Longview WA 550 Kaskey-Sacramento CA
KTNT Tacora WA
KTNT Tacora WA
                        Williamsport PA
    WRAK
                                                                                                       1917 Wheeler-Erie PA
                         Othello WA
    KRSC
   KTNT Tacoma WA 607 Kaskey-Sacramento CA
WRON Ronceverte WV 2254 Allen-Vallejo CA
WVRC Spencer WV
  WRON Ronceverte WV 2254 Allen-Vallejo CA
WYRC Spencer WV 250 Merrill-Milan MI
WKWK Wheeling WV 2206 Allen-Vallejo CA
WBTH Williamson WV 776 Kaskey-Galva IA
WATW Ashland WI 1689 Allen-Vallejo CA
WBIZ Eau Claire WI 600 Wheeler-Erie PA
WDUZ Green Bay WI 929 Sorenson-God's Narrows MB
WRJN Racine WI 695 Markewicz-Camp Morton MS
WRDB Reedsburg WI 335 Merrill-Toledo OH
WRIG Wausau WI 345 McCormack-West Lafayette IN
KATI Casper WY 907 Allen-Vallejo CA
KODI Cody WY 811 Markewicz-Camp Morton MB
                        Stettler AB 407 McMillan-Rathdrum ID
Burns Lake BC 520 Bytheway & Portzer-Seattle WA
Clearwater BC 590 Nolan-Eugene OR
Golden BC 630 Nolan-Eugene OR
Princeton BC 797 Belanger-Swan River MB
Collingwood ON 262 Merrill-Toledo OH
Lac Megantic PQ 340 Edmunds-Parsipanny NJ
Riviere Du Loup PQ 781 Merrill-Toledo OH
ROUND PO 270 Beaunegard-Notre Dame do la Me
    CHOA Stettler AB
   CFLD Burns Lake BC
CHNL1 Clearwater BC
    CKGR Golden BC
    CINL
    CKCB
    CKFL
    CJFP
                          Rouyn PQ
                                                                                                              270 Beauregard-Notre Dame de la Marie PQ
    CKRN
    CKSJ
                          St. Jovite PQ
                                                                                                                    25 Beauregard-Notre Dame de la Marie PO
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Notes: loggings denoted by a '!' were formerly records by Wood of Kailua HI, and loggings with a '@' belonged to Banks of New Zealand.

I'd like to take the time here to thank all of my contributors in the past season: Paul R. Mount, Mark E. McMillan, Bob Curtis, Ken Horne, Michael Jeziorski, Linda Sue Morby, Roy Millar, Sheldon Remington & Pete Nolan. A special thank you to Pete for correcting some glaring errors in the 1230 and 1240 columns. Let's here from everyone else out there, even if you are only correcting! OK, stay tuned for 1450 and 1490 in the fall, and tentative Canadian Graveyard summary in the winter. 73's and contribute!!

WESTERN SPOTLIGHT

Steve Mittman 2248 West 37th Street San Pedro, CA 90732

TEXAS

(Part 2) 1080 KRID <u>Dallas</u>, U2 50000/50000, Ai-Mutual. Occasionally w/KWJJ evenings if CFAX-1070 splat not too bad. (Hall-Patch) Sunday mornings w/KWJJ off, & u/KWJJ many evenings, especially when KWJJ breaks its regular C&W format for paid religion late evenings til midnight. (Hardy) A pest with WTIC. (Kramer) Heard easily at night and at SSS. Sometimes WTIC QRM is a problem, but other times KRLD comes in clear. V/q. (Lazar) Fair evenings with KNX-1070 somewhat nulled. (Mittman) Dominates SM's w/KWJJ off; sometimes hrd other nights w/KWJJ nulled. (Fortzer) Nightly pest year round. (Small) Regular nights to NW FL. (Thomas) Most common Texan. Nightly in KWJJ null after KSCO s/off, o/1 KSCO when they're on. KSCO has a horrendous signal here at night! (Wien) Bellville, D1 250, Mutual. 1090 KACO Heard on DX test. V/l. (Kramer) Plainview, D1 1000, Ai. 1090 KKYN Heard once in 1975 on emergency broadcast on a MM due to tornado warning. V/1. (Lazar) Heard on DX test and once at SSS. V/1. (Kramer) 1110 KDRY Alamo Heights, D1 1000. Occasionally at SSS. V/1. (Kramer) Cleburne, D1 250. 1120 KCLE Heard at 0800 through KMOX and XETR. (Small) Edna, D3 10000. 1130 KWBY Heard at s/on under KWKH. (Small) Memphis, D3 1000. Heard at 0800 through KWKH. (Small) KBGH 1130 1140 KORC Mineral Wells, D1 250. Heard at 0630 with KRAK nulled. (Small) Once to IL at SRS on 4.6 watt PSA power. (Kramer) (Excellent catch, Robert! -SMM) College Station, U2 1000/500. Heard on 1976 IRCA DX test, with XERM and KIIS. (Small) Frequently at SRS & aurora nights. C&W. V/1. (Kramer) WTAW 1150 Corpus Christi, D3 1000. Heard on old f/c. V/l. (Kramer) KCCT 1150 El Paso, D1 1000, Ae. (Ex-KIZZ) 1150 KISO Heard with both calls on old f/c, v/l's from both. (Kramer) Quanah, D1 500. 1150 KOLJ C&W. Once at SRS. Didn't answer my report. (Kramer) Dallas, U4 50000/5000, Ae. Sometimes heard SM's with KEX off. Sends a v/q. (Portzer) Sometimes in weak Sun. during KEX weekly SP 0500-0800. (Hardy 1190 KLIF Heard fairly often during WOWO MM SP w/variable reception quality. Also possible to hear at SSS. (Lazar) R&R. NSP. A pest MM's & SSS; occasionally through WOWO nights. V/1. (Kramer) Regular pest here. (Small) Heard once with KEZY off on a rare SP. (Mittman)

Regular nights to NW FL. (Thomas)

Regular nights, once during day to NW FL. (Thomas) Nightly through KLOK-1170 slop. (Wein)

1200 WOAI San Antonio, U1 50000/50000, CBS-NBC.

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Occasionally pushing past CKDA-1220 crud nights. (Hall-Patch)
             In nightly (off MM only). (Hardy)
Regular w/KEZY-1190 slop. (Mittman)
A pest. V/l. (Kramer)
             Easy to hear any night. V/f. (Lazar)
             A pest, except when they have basketball. (Small)
1220 KZEE
             Weatherford, D1 500.
Once at SSS. V/1. (Kramer)
             At s/on with XEB nulled. (Small)
1230
      KNUZ
             Houston, U1 1000/250, Ai.
             Once to Chicago during severe aurora. (Kramer)
1230
      KERV
             Kerrville, U1 1000/250.
             Heard on late (0200) with tornado advisory. (Small)
             Odessa, U1 1000/250.
1230
      KOZA
             Heard on f/c with KXO. (Small)
             Heard on r/c. (Kramer)
             Pampa, U1 1000/250, Ae.
1230
      KGRO
             Once on ET. (Kramer)
1240
      KVLF
             Alpine, U1 1000/250, Mutual.
             Heard on f/c with KSON. (Small)
1250
      KPAC
             Port Arthur, U2 5000/1000, CBS-Mutual.
             Heard at 0600 under WREN. (Small)
              Occasionally at SSS. V/1. (Kramer)
             Heard once or twice after MM s/on w/KYAC off. (Portzer)
             San Antonio, D1 1000.
SS, "R. Kuka" ID's. Hrd once w/KYAC (then KTW) off. (Portzer)
1250
       KAKY
              "R. Kuka" in SS during test; WREN nulled. (Small)
1250 KIKZ
              Seminole, D1 1000.
             Common almost any morning before KTMS s/on. Can even be hrd
              fairly well on 370 watt P.S.A. (Mittman) Once on SRS through WREN. (Wien)
             Heard on RS after s/on, with WREN. (Small)
1260 KSFL
             Diboll, D1 1000.
              Heard once or twice on MM's a few years ago w/KYAC (then KTW)
             off. Tougher now w/CFRN NSP. (Fortzer)
             Heard once poorly at SSS. (Lazar)
              Falfurrias, D1 500.
Heard on DX test.
1260
      KPS0
                                  V/l. (Kramer)
1260 KIXY
              San Angelo, D1 1000. (Ex-KWFR)
              (Same comments as for KSPL above.) (Portzer)
              Once on old f/c. V/ppc. (Kramer)
              On f/c. (Small)
1260 KTAE
              Taylor, D1 1000.
              (Same comments as for KSFL above.) (Portzer)
              At s/on with KYA & KGEX. (Small)
              Twice at SSS. V/1. (Kramer)
1260
      KTUE
              Tulia, D1 1000.
              SS programming.
                                 Once at SSS. Did not answer my reception
              report. (Kramer)
              S/on 30 minutes after KTAE same morning. (Small)
1270
      KFJZ
              Fort Worth, U3 5000/5000, UPI.
              A regular, strongest on channel. (Small)
              Was a MM regular before KCOK went AN MM. (Portzer) (@#$%-SMM)
              Was common on MM's w/1270 open, KCOK now NSF so that's another
              frequency gone to pot. (Wien)
              Hrd once w/KFRN-1280 off, & also once poorly w/KFRN on. Is probably next to impossible now w/KCOK NSP. (Mittman) Used to be a pest a few years back before WWCA/WXYZ/WHBF went NSP. Very rare now. V/q. (Kramer)
              Heard in 1975 and 1977 on MM's back in the days before WHBF
              went NSP. (Lazar)
              Irreg. nights to NW FL. (Thomas)
              Sometimes fair-to-poor MM's through CHWK OC.
                                                                 (I think KFJZ is
              off part of MM now, so would have to be after KFJZ s/on MM.)
              (Hardy)
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17

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1270
       KEPS
              Eagle Pass, D1 1000.
              Heard one MM at s/on. (Portzer)
              Abilene, D1 500. (Currently KEAN.)
Heard once on f/c. (Not on latest f/c list.) (Portzer)
1280
       KNIT
1290
       KWGH
               Big Lake, D1 1000.
               Local NSP KCUB off; heard at 0710. (Small)
              Weslaco, U2 5000/5000.
1290
       KRGV
              Logged w/KwGH (above) at same time. (Small)
Sometimes hrd MM's around 0600-0700 (before KGVO s/on). Pos-
               sible here only w/KMPS-1300 off (a rarity). (Portzer) Once at 0300 s/on MM. (Hall-Patch)
              Wichita Falls, U2 5000/1000.
1290
      KTRN
               (Same comments as for KRGV above.) (Portzer)
               Heard at SSS and in evening during severe aurora. Had to send
               follow-up report w/ppc to get verie. (Lazar)
               Frequently at SSS, and one night. (Kramer)
               Austin, U4 5000/1000.
1300
       KVET
               Rare nights, usually during aurora. V/l. (Kramer)
              Heard at 0545 with KCUB splash. (Small)
              Silsbee, D1 500.
Once at s/on through WTAQ OC. (Kramer)
1300
       KKAS
1310
       KZIP
               Amarillo, D1 1000, Ae.
               Twice at SRS & once at SSS. C&W. V/ppc. (Kramer)
1310
       KAAM
               Dallas, U2 5000/5000. (Ex-WRR.)
                    SSS & most nights. (Kramer)
               Occasionally on MM. "K-double A-M." (Hall-Patch)
               A regular, strongest on channel. (Small)
               Irreg. to NW FL as old WRR. Not yet logged as KAAM. (Thomas)
               Have only hrd this stn once--just after the call change. Mucho
               ORM. (Mittman)
               Was regular for years on MM when it was WRR.
                                                                      Unfortunately,
               KDIA/KLIX/KEIN are all AN MM now, so it's difficult now. (Hardy)
               Can be hrd often on MM's during WIBA SP mixing w/WIFE/CKOY.
               (Lazar)
               A few times in 1310 mess w/KDIA off; not hrd since call change.
               (Wien)
               "K-double A-M," sometimes hrd MM's w/assorted QRM. (Portzer)
1310
       KOYL
               Odessa, D1 1000, Ac-Ae.
               One of my strangest DX catches! Last Oct. I was going over an old tape I had made approx. 1 year earlier, when suddenly out popped a "Coil" ment and a "K-O-Y-L" SID! (Mittman) At 0800 through KAAM & KQXE (Granted KZZP.-SMM). (Small)
1310
               San Antonio, D3 5000, Ai.
       KBUC
               On test with KAAM nulled. (Small)
1320
       KVMC
               Colorado City, D1 1000.
               At s/on with KCPX and KXYZ. (Small)
1320
       KXYZ
               Houston, U2 5000/5000, Ae.
               Regular, strongest on channel with KCPX. (Small)
               Nightly to NW FL. Noted recently w/UPI Audio news and "Your
               constant Christian companion" slogan. (Thomas)
Very occasionally MM if CHQM off and KCPX nulled. (Hall-Patch)
              Heard occasionally at night w/heavy QRM. Sent me a v/f promising a v/q to come later, but it never came. (Lazar) I think they're C&W now, but they change formats so often, it's
               hard to keep up with it. Occasionally nights through WKTQ,
               WILS. (Kramer)
               Once or twice w/KCPX off. Once u/KCPX. KGNR now AN: makes
               things a bit more difficult. (Wein)
               Rare here w/CHQM NSP. Heard once in 1975 good o/KCPX w/CHQM
               off. (Hardy)
1330
       KMIL
               Cameron, D1 500.
               Once at s/off. V/l. (Kramer)
               Graham, D1 500, Mutual.
1330
       KSWA
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Once at s/off. V/l. (Kramer)

18

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Kingsville, D1 1000.
1330
      KINE
              Occasionally at SSS. V/1. (Kramer)
              On f/c. with KFH & KFAC nulled. (Small)
              Monahans, U2 5000/1000, Ac.
1330
      KVKM
              In well at s/on, with KFH. (Small)
Hrd once or twice at s/on before KUPL went NSP. (Portzer)
Used to be common in KFAC null. Now not hrd since KHYT went
              fulltime. (Mittman)
              Tyler, D1 1000.
1330
      KZAK
              Occ. at s/on in WEAW/WPRZ null. V/l. (Kramer)
              El Paso, U1 1000/250, Mutual.
1340
       KSET
              Usually on top of channel. (Small)
              Lubbock, U1 1000/250, Ac.
1340
       KLBK
              Hrd at 0330, w/XEAA nulled. (Small)
              Pampa, U1 1000/250, Mutual.
1340
       KPDN
              On test in graveyard QRM. (Small)
              Makes it occ. on their r/c.
                                              V/ppc. (Kramer)
              Port Arthur, U1 1000/250, Ac.
1340
       KOLE
              Hrd a couple times in 1975 on MM's both while testing and while
              on RS. V/1. (Lazar)
              Clarksville, D1 500.
1350
       KCAR
              A SRS & SSS pest. Gets out real well. V/l. (Kramer)
              Jasper, D1 1000.
1350
       KTXJ
              Once on an old f/c. V/l. (Kramer)
Heard on f/c. (Not on latest f/c list.) (Portzer)
              San Antonio, U2 5000/5000.
SS programming. Once at SSS & one night. (Kramer)
SS format. Hrd rarely, only when KRLC is off. (Portzer)
1350
       KCOR
              Heard EE ID between SS records at 0430. (Small)
              Amarillo, D1 500, Mutual. Once at s/off. (Kramer)
1360
       KOIZ
              Baytown, U4 1000/1000.
1360
       KBUK
              Irreg. to NW FL at SSS in WSAI null. (Thomas)
              Corpus Christi, U1 1000/1000, Ai.
1360
       KRYS
              Very occasionally on MM's. (Hall-Patch)
             Heard from time to time on MM's during WGEE SP & w/WSAI nulled.
               (Lazar)
              Rare MM's. (Portzer)
              Used to dominate nights when WBAY (now WGEE) went off every
              night. Now hrd at SSS & in aurora. V/1. (Kramer)
              At 0345 w/KXOL nulled. (Small)
              Fort Worth, U2 5000/1000.
1360
       KXOL
              Battles w/KGB for channel. (Small)
               Audible most MM's with KGB et al. (Portzer)
               Very occasionally on MM's. (Hall-Patch)
              C&W mx. Once at SSS & one night. (Kramer)
              \underline{Longview} , U2 1000/1000, Ai. Can occ. be pulled out from u/WSPD during the early morning
1370
       KFRO
               hours. (Lazar)
               At s/on, under KPOS, from MM SP. (Small)
               Once at SSS. (Kramer)
            + Occasionally to NW FL during WCOA SP. (Thomas)
               Post, D1 1000.
 1370
        KPOS
               Hrd a couple of MM's in the early 70's before KEEN/CHPQ went
               NSP. (Portzer)
               Easy at s/on. (Small)
               Brownwood, U1 1000/500, Ac.
Sometimes hrd around 0600-0700 if KRKO is off (not very often).
 1380
        KBWD
               (Portzer)
               Easy at s/on. (Small)
 1380
        KTSM El Paso, U1 5000/500, CBS-Mutual-NBC.
               Sometimes hrd w/KRKO off. (Portzer)
               Fairly regular on top w/KTOM. (Small)
               Fair through KTOM/KGER-1390 slop til 0200 s/off. (Mittman)
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1380
              Muleshoe, D1 1000.
       KMUL
              Hrd on RS at 0700 in heavy QRM. (Small) (Love that city's name,
              hi! -SMM)
1390
              Waxahachie, D3 500.
       KBEC
              At 0700 on RS w/KCRC and KENN, (Small)
              Corpus Christi, U1 1000/250.
Hrd a couple of MM's in early 70's on RS. Not likely w/several WC stns now NSP. Had SS & "Cah-Uno" ID's back then.
1400
       KUNO
              (Portzer)
1400
       KGVL
              Greenville, U1 1000/250.
              Used to come in regularly on old f/c. V/l. (Kramer)
1400
              Pecos. U1 1000/250.
       KIUN
             Heard on f/c. (Wien)
Heard one MM in 1969 at s/on. (Portzer)
              At s/on w/KVOY & KVEG. (Small)
             Perryton, U1 1000/250.
In RS at 0730 & heavy QRM. (Small)
1400
       KEYE
1400
       KVOP
             Plainview, U1 1000/250.
              On f/c; KVEG nulled. (Small)
             Hrd once on f/c. (Not on latest f/c list.) (Portzer)
1400
       KDWT
              Stamford, SH1 1000/250.
              ID popped out of mess early one evening. (Mittman)
             Hrd one MM in 1971 at s/on. Fat chance these days. (Portzer)
1410
       KBUD
             Athens, D1 1000.
             Hrd consecutive s/ons for this and KBAN on same morning.
              (Small)
              Once on ET & occasionally at SSS. V/1. (Kramer)
1410
       KBAN
             Bowie, D3 500.
              (Same comments as for KBUD above.) (Small)
1410
       KXIT
             Dalhart, D1 500.
             In RS at 0800. (Small)
             Occasionally on old f/c. V/l. (Kramer)
             Marshall, D3 500. (Ex-KDOX.)
Cccasionally at SSS. V/l for KDOX. Hasn't veried on KKYR call
1410
       KKYR
             letters. (Kramer)
1410
       KRIG
             Odessa, U2 1000/1000.
             A regular on this "open" channel. (Small) (Bite your tongue, or
            everyone will go NSP, hi. -SMM)
Occ. nights at s/off. Came in strong many times. V/l.
             (Kramer)
             Rock mx. Hrd during very rare (once every year or two or
             three...) CFUN SP's. (Portzer)
1410 KNAL
            Victoria, U2 500/500, Mutual.
Once on r/c w/cw ID's. V/l. (Kramer)
             Hrd once w/fair signals at SSS. (Lazar)
(End of Part 2.)
In the Spotlight:
Nick Hall-Patch
                    3272 Alder Street, Victoria, B.C. V8X 1P2 Canada
Bill Hardy
                    2301 Pacific Avenue, Aberdeen, WA 98520
                    3406 West Pierce, Chicago, IL 60651
Robert Kramer
Bob Lazar
                    3837 Milan Dr., Apt 1, Alexandria, VA 22305
                    (DX ing done in Madison, Wisconsin)
                    2248 West 37th Street, San Pedro, CA 90732 6546 19th Avenue Northeast, Seattle, WA 98115
Steve Mittman
Bruce Portzer
R. J. Small
                    2421 East Helen Street, Tucson, AZ 85719
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Yes, we are almost there, folks! We're about 2/3 of the way through! What Texas seems to lack in stars (i.e., "Lone Star," etc.), it sure seems to make up in stations, hi! Next time--Part 3. After that, Idaho. -SMM.

P.O. Box 2036, Pensacola, FL 32503 1309 Dentwood Drive, San Jose, CA 95118

Gerry Thomas Robert Wien

Terrain Charts For Propagation Predictions

Mark Connelly

Most DXers are aware that the presence of seawater or of mountains can significantly alter patterns of reception, especially reception of groundwave and very-low-angle skip signals (such as those from TA stations heard before East Coast sunset & those from TP stations heard after West Coast sunrise). Two equal-power omnidirectional co-channel groundwave stations the same distance from the DXer should have the same signal strength if the terrain to each station is identical. However, if one station is coming to the listener over salt water and the other is over lossy ground, the station with the over-water route will utterly overwhelm the other signal. Similarly, a station coming across flat farmland will easily dominate over a comparable station at the same distance but blocked by high mountains. In sizing-up the reception potentials of a given site, the DXer may want to prepare a chart of reception-enhancing and reception-diminishing terrain characteristics in the immediate vicinity of his location. I chose 40 miles as the maximum distance of interest; from empirical observations in this area, the presence of mountains or water in the direction of propagation has little effect beyond 40 miles. The curvature of the earth is appreciable beyond this cut-off point; even groundwave does not appear to be influenced by terrain which is more than 40-50 miles from the receiver and transmitter ends of a path, although very large mountains or bodies of water may still have a noticeable effect.

Such a chart should indicate bearing (degrees east of north) versus

Such a chart should indicate bearing (degrees east of north) versus distance (e. g. 0 to 40 miles). Potential DX targets may be listed for each 5° to 10° step in bearing. The line chart is developed by obtaining a map of the area, a drafting compass, and a protractor. Concentric circles may be drawn (for instance, every 3-mile distance multiple) by using the drafting compass. These are centered on the DXer's QTH. The protractor is used to scribe radial bearing lines every 15° starting from 0° (north). The polar plot thereby generated can be transformed into a linear plot on graph paper. The outlines of significant propagation-effecting terrain characteristics (mountains, ocean, etc.)can then be transferred to the linear chart. The sample chart accompanying this article shows the distances and bearings to the shoreline from my home in Billerica, MA. The land between here and the shore is relatively flat; soil is of the low-

conductivity variety associated with the coastal plain.

There is a definite signal drop-off observed as one travels inland away from the coast when the station of interest is arriving over the water. A squared-distance relationship appears to be operative here for a given increment of signal loss. In other words, if you lose 6 db. on an overwater signal (arriving at a 90° horizontal angle to the coast) by travelling 1 mile inland, you would have to travel 4 miles inland (2^2) for the next 6 db. drop, 9 miles for the next 6 db. drop, etc. In the above case, we are dealing with a distant over-water groundwave signal (e. g. Virginia heard from Nantucket, path distance about 500 miles). With such a signal, a change of 9 miles distance would result in a negligible change in signal strength <u>if there was no change in the medium over which the signal arrived</u>: signal strength at 500 miles over water roughly the same as signal strength at 509 miles over water. In the above discussion of signal loss resulting from a change in receiver-to-transmitter path from 500 miles over water to 500 miles over water + 9 miles over land (at the receiver end of the path), the signal loss can be attributed solely to the 9 miles over land, land having a far lower ground conductivity than seawater. It is not because of the mere change in distance from 500 to 509; it is because the change in medium over which the signal passes.

I should hasten to say that my observations are just that, observations. In a serious study of coastal-enhancement, propagation physics would have to be applied carefully. Many parameters have to be considered - among them: type of receiving antenna used, signal frequency, horizontal angle of the signal path to the coastline, overwater distance to the station, overland distance, water depth, ground conductivity on overland portions of the signal path, shoreline slope/elevation, weather effects, and the vertical arrival angle of skip signals. The comprehensive study of coastal vs. inland DXing has been given little serious scholarly attention in the "DX press". discussion in this article is an attempt to motivate more-knowledgeable propagation experts with appropriate physics backgrounds to come forth with accurate analyses of groundwave and skywave propagation and the effects of ground-conductivity variations along the transmitter-to-receiver path. It is known that a change from salt water to sandy soil along the signal route can cause errors in direction-finding attempts; refraction properties (similar to those encountered when light passes from water to air) might occur.

A full treatment of coastal-effects should certainly include loop-direction null data, a diagrammatic display showing signal drop-off (as a receiver is moved inland) of overwater groundwave signals from different distances & different horizontal angles to the shoreline, a signal-drop-off diagram for skip signals at different vertical arrival angles & at differing horizontal angles between path & shoreline, and a full analysis of sunset fade-in & surrise fade-out times for a variety of skip stations. Fade times for given stations should be compared at coastal & inland receiving sites. Signal drop-off studies should be done for groundwave & skip stations at several different frequencies (e. g. 550, 750, 950, 1150, 1350, & 1550 kHz.). Some theorists have mentioned a "focusing effect" at the land/sea boundary which intensifies overwater signals as they arrive at the shore; in other words, if you were to go a mile out to sea, a signal decrease may occur relative to the level of that distant signal noted on the beach. Another concept often bandied about is that a signal travels farther over shallow (sea) water than over deep water: no hard formulae have been put forth to support or to refute this.

With the growing popularity of daytime DXing, it's about time that someone published a definitive work on groundwave/low-angle skywave mechanics, with an emphasis on the influence of terrain-characteristics.

G.C. 42.5N/71.2W. COASTAL PROFILE CHART/ Billerica, MA. (Pinehurst section) D I S T A N C E, Km. 4.5 24.2 33.8 43.5 14.5 29.0 48.3 58.0 ▶64.4 19.3 38.6 9.7 0 DX Targets 15 Urumgi, China Bangladesh Nepal 30 Portsmouth -! India Salisbury Norway Poland 45 U. K. Plum I. France Italy 60 Cranes Beach Malta Spain Cape Ann 75 Portugal true north Morocco N. Salem Chad Marblehead Niger 90 Upper Volta Swampscott Mauritania degrees east of Lynn Senegal 105 Point of Pines Cape Verde I. Revere Beach Grover's Cliff Ascension I. 120 Deer I. Scituate Hull Logan Airport 135 Tristan da Squantum Brant Rock Cunha G z 150 Natal, Brazil Н œ Surinam ø 165 ଘ 360/0

. 33

12 15 18 21 24 27 30

DISTANCE, miles

EXTRATERRESTRIAL DX CIRCA 1924

or

"WILL WE TALK TO MARS IN AUGUST?"

by Thomas H. White

The greatest thrill for contemporary DXers comes when through their earphones drift sounds from a station on the opposite end of the globe. DXers were not so limited in the summer of 1924. August found many carefully making last minute adjustments, readying their sets for intercepting signals from the planet Mars. Some, thanks to stations like WHAS, would temporarily claim success.

The Mars of 1924 was far different from the vast desert, host to at best obscure bacteriological activity, which recent probes have reported. Most scientists believed some sort of life made its home on the orb; whether it was an animal form equal or superior to humans was the main order of speculation. Astronomer Percival Lowell was the United States' foremost proponent of the theory of advanced Martian life. Where other observers saw only vague lines on a smudgy sphere obscured by atmospheric turbulence, Lowell in a series of writings claimed to have mapped an intricate system of canals which irrigated the dying planet with water drawn from the polar icecaps. Any race capable of such a vast public works project would clearly possess a culture much older and wiser than its terrestrial counterpart. Communication with these beings promised great scientific revelations. However, if there was intelligent life on Mars, we had no known means of contacting it.

This is not to say no thought had been given to the problem. Flashing a series of bright lights towards the planet had been suggested by the early radio experimenter Telsa but never attempted. A New York Times editorial spoke approvingly of the suggestion that a proof of the Pythagorean proposition be carved on a vast scale on a Siberian plain. Not only would it be large enough for easy viewing, but the canal-digging Martians would be favorably impressed with our own engineering skills. (Unfortunately, this method would of course be terribly slow, and there was the danger of it degenerating into an exchange of mathematical proofs.) A Professor Goddard was was experimenting with rocketry which he claimed would one day link the planets, but his work was still literally barely getting off the ground.

But science marches on, and it seemed radio might just be what was needed. Millions had witnessed in their own living rooms the marvel of capturing voices from half a continent away. The previous November some had received transatlantic signals exchanged during the International Radio Week tests. Would not a Martian civilization, builders of a canal system far beyond the capabilities of man, be throughly versed in the mysteries of radio? On earlier close passes, perhaps for many thousands of years, had the Martians fruitlessly beamed signals to hail their backward neighbor? Earthlings now had the technology to receive signals across vast expanses of space. On August 23 Mars and Earth would be in "opposition", separated by 55.7 million kilometers, their closest point of approach since 1804. Perhaps this time the Martians would find us attentive.

In spite of extensive skepticism, plans were organized on various fronts. Apparently no attempt was made to transmit messages from this side of the divide. Powers were just too limited, and it was known the frequencies then in use would be absorbed and scattered by the Heavyside Layer (ionsphere) encircling our planet. (Still, no doubt many announcers found it humanly impossible not to coyly thank their "Martian listeners" for tuning in.) Martian outlets, it was hoped, were capable of much more powerful transmissions.

If there were any Martian signals to hear, it was our task to try our best to receive them. Every home that had a radio was a potential detector. Professor David Todd, former Amherst College astronomy department head, worked to organize a worldwide observance of broadcasting shutdowns to limit interference to the interplanetary signals. Major General Charles Saltzman responded with a limited endorsement, by ordering all American stations to monitor and report any unusual signals during the approach. Admiral Edward W. Eberlen, Chief of Naval Operations, quickly followed suit for his branch of the armed forces. Professor Todd had actually requested that all stations maintain a five minute silence each hour for a two day period. Only WRC in Washington, D. C. seems to have participated in this part of the plan, although representatives of other nations were reported "interested".

Interpretation of the signals also merited attention. It was possible a Martian broadcast would be a speech delivered in a distinctive although

unintelligible alien tongue. Or Earth could be serenaded with the strains of a lilting Martian tune. But most likely the transmission would be in code, similar to the Morse variety but based on a mathematical key. William F. Friedman, Chief of the Code Section in the Office of the Chief Signal Officer of the Army, announced his availability for interpreting any otherworldly codes. Friedman had already made his mark in the Teapot Dome scandal by deciphering a series of messages between two of the defendants.

Monitoring activities were to be centered around Saturday night's opposition, on the assumption the Martians would know we would know a special event was taking place. However, strange signals started being heard prior

to the closest approach of the planet.

Radio operators in Vancouver reported on Thursday they had been hearing a series of "four groups of dashes in groups of four", of origin and even form of transmission unidentified. A close watch was promised. Other reports filtered in of signals strange and unexplainable. In London a special twenty-four tube set picked up "harsh notes" of an unknown nature. (Some said it would have been odd only if a set of this complexity had not produced strange noises.) WOR engineers in Newark reported nearly the same sounds at nearly the same wavelength. A Bostonian noted a strange ringing, ending with an abrupt "zzzip".

Squarely into the midst of this activity stumbled WHAS of Louisville, Kentucky. By coincidence local maneuvers were scheduled during an evening of the opposition, as members of assorted militias would repel a mythical army

occupying the city. (Mars was, after all, the god of warfare.)

WHAS saw this as a splendid opposition to score a "first", for no radio correspondent had had occasion to ply his craft in a war zone, mythical or otherwise. The good citizens of Louisville were to be provided with up-to-the-minute reports of their coming liberation. However, a few far-flung radio fans would be listening with ears attuned to the heavens. Mislead by newspaper listings which reported WHAS carrying orchestra music, they would decide the odd noises emitted by their sets were coming from our friends in outer space.

WHAS's innovative program featured a remote broadcast, carried by telephone lines direct from the front. A Colonel Hamer provided commentary, but more important to our story was his setting. The microphone was located between two 3-inch field artillery pieces, firing in a alternating sequence four times a minute. Scattered small arms fire filled in the gaps between the main blasts. Because the Colonel's report ended a few minutes early, the program's close consisted exclusively of the sounds of the firing, unbroken by any announcements.

Imagine the reaction of a distant listener, searching for evidence of Mars, coming across this experimental offering. Each fifteen seconds a "bong!" sounded (this is how the artillery reports were reproduced, for their blasts froze the microphone). In between, in a strange code clearly not Morse, came seemingly random pulses. Could it be Mars? Could it be any-

thing but Mars??

Eventually the facts were sorted out. The operators of the London set decided they had logged nothing more exotic than "a combination of atmospherics and heterodyning". (RCA engineers calculated that for the signals noted in London to have originated from Mars a one-million-megawatt transmitter consuming the equivalent of 2.7 metric tons of coal hourly was required. The engineers suggested the Martians had better outlets for their talents and natural resources.) The Vancouver signals were identified as a new type of beacon developed to aid navigation in Washington state's inland waterways. WHAS even assumed a kind of pride about its role. Credo Harris, the station manager, overstates in his memoirs the extent of his station's influence, claiming it responsible for a number of reports which were clearly the result of other sources.

Obviously the red planet was not interested in talking to us. This could have been viewed as a setback, or merely as a first step, for as the $\underline{\text{New}}$ $\underline{\text{York}}$ $\underline{\text{Times}}$ noted, "...men would never cease trying to establish communication with Mars". Other methods would be tried. However, 82-year-old Camille Flammarion, French astronomer and staunch adherent of the life-on-Mars theory, was wide of the mark as he declared that although man would never establish links with Mars through the use of "flying machines", he would eventually attain success -- using mental telepathy.

Perhaps it is just as well Mars turned out to be radio-free. We're having enough trouble regulating stations on a global scale. Having to cooperate with other planets would be an additional burden to our already overtaxed al-

location schemes.

MIDDAY D X RECORD



the 30's

Gerry Thomas P.O.Box 2036 Pensacola, FL 32503

Typical summertime conditions are now in evidence around here but a few June days of abnormally low atmospheric noise allowed midday reception of some hitherto wintertime-only visitors (e.g., WSM-650, WLW-700)---I guess DX is possible just about anytime of the year! Here come the "30's"....

STN (QTH)	<u>PATH</u>	DX'ER (QTH)	DATE	DISTANCE	POWER
WQBS (PR) CKRC (MB) KIDD (CA)	Sea Land .Land+Sea. lor (Brmo han (CA). an (CA). tzer ^a (WA	.Taylor (Bermuda)	Yr Rnd Yr Rnd Winter	444 mi	10,000w 1,000w
WACE (MA) WARB (LA) CKLG (BC) CKDM (MB) KSVN (UT). Mee KULE (WA)Por	Sea Land+Sea Land+Sea Land han (CA) tzer (WA	730Taylor (Bermuda)Taylor (Bermuda)Thomas (FL)Portzer (WA)Alvi (SK)[539 mi] (1kw)).[224 mi] (1kw) A)[56 mi] (1kw)	Reg Reg Yr Rnd Yr Rnd .? KWRE (MO)Or KULE (WA)Ha		250w 250w 50,000w
WCCO (MN)	Land	.Taylor (Bermuda) .Alvi (SK) .Taylor (Bermuda) .Connelly ^b (MA)	Yr Rnd 1/80, Yr Rnd	788 m1 777 mi	50,000w
WPAT (NJ)	Sea		Yr Rnd Yr Rnd Yr Rnd CJCA (AB)A' WMGR (GA)TI	/93 m1	5,000w
		Onyschuk (IL)	2/78		
WNEW (NY)	Land+Sea	Taylor (Bermuda) Connelly ^C (NS) Thomas (FL) aPortzer (WA)	Yr Rnd ,8/75 Irreg	463 m1	50,000w
WESX (MA) KVAS (OR)	Sea Land.	Connelly ^c (NS)1230- Portzer (WA)	8/75	 270 mi 120 mi	1,000w 1,000w 25

Gerry Thomas, Pensacola, FL***FRG-7, Superadio, TRF/600' mini-Beverage, 4'loop, ferrite lp Bill Townshend, Washington, DC***TRF

A couple of items of note--***Mark Connelly's loggings of WINS-1010 and WOKW-1410 a couple of columns back were made from NS, not'MA. Other data were correct, just screwed up the super-scripts.

Charles Taylor, St. Davids, Bermuda***R390A/100' lw; SPR-4/SM-2

Pete Taylor, from San Francisco, CA***?????

made from NS, not'MA. Other data were correct, just screwed up the super-scripts.

***The winner of the second (and for the time being, final) T-shirt drawing was Nick
Hall-Patch. Let me know about color (It blue, yellow, tan, green, or white) & size,
Nick.

Since I have a little space left, let me share a few intriguing tidbits I've come across in my efforts to learn a little more about the factors governing MW signal propagation during daylight. The first concerns the existence of D-region patches capable of reflecting RF in the MW range. These irregularities have been noted by scientists to last an average of 40 minutes and should, one would think, provide some interesting DX to the DX'er lucky enough to encounter such. I've yet to luck-out but a couple of reports I've received suggest this kind of propagation. Secondly, in the early days of radar (when MW signals were being tried), the literature makes occasional mention of radar echoes, or "angels," from atmospheric irregularities (e.g., convective bubbles, temperature gradients, inversion layers, particulate concentrations, etc.). Many, many questions remain unanswered (and some questions, I'm sure, have yet to even be asked!) but, hopefully, as more DX'ers begin to monitor the band during daylight, we'll learn more about the variables relevant to midday DX. Until then, share your thoughts and loggings with this column. Best of DX and 73's....Gerry

1980 IRCA ALMANAC PROJECT PROGRESS REPORT #2 JULY 25, 1980

Project Coordinator: Bill Hardy - 2301 Pacific Ave. - Aberdeen, WA, 98520

• DEADLINE EXTENSION!! To avoid a publication conflict with the new IRCA Technical Handbook, the 1980 IRCA Almanac will be published in October. This extends the deadline for editors by 30 days.

Editors should plan to mail their typed copy for the Almanac so that

it arrives in Aberdeen no later than Tues., Sept. 30th.

Members may send in general information to Aberdeen through mid-September.

• AM-FM Simulcasts. Paul Mount has graciously volunteered to compile and edit the AM-FM section of the 1980 Almanac. Paul needs this info:

► AM stations simulcasting on FM at least some of the time. This includes "AM & FM" ID's you hear, and other obvious examples of FM programming on the AM station. Give the FM callsign, FM frequency if known, and the approximate percent of simulcasting if known.

► AM-FM combinations (co-owned) which you know do not simulcast.

▶ AM-FM combinations which you know are co-owned but you're not sure whether or not they simulcast. This includes FM promos heard on AM, sign-offs with "We invite you to tune to WXXX-FM at 98.3 on your FM dial," and the like.

Depending on the amount of information he receives in the second and third category, Paul might compile a separate listing for them. Please use his Teaneck address, as follows:

Paul Mount - 471 Emerson Avenue - Teaneck, NJ, 07666

<u>College football</u>. It looks like we <u>will</u> have a college sports listing in the 1980 Almanac. NRC member Dave Arbogast will be compiling a college football listing for that club, and will swap info with IRCA.

You may help make this listing more complete in several ways: Please tune around Saturday afternoons and evenings in September. Make note of the call letters, frequency, and team carried, for each station heard with college sports.

If you take a <u>big-city newspaper</u>, please clip out the listing of college football coverage for the day on radio (sports or radio-TV pages).

If you live near a college, check with their <u>athletic department</u> to

see if you can obtain the station listing for the football network.

If possible, get the names of the <u>announcers</u> as well.

Please send this information, as early as possible, to:

Dave Arbogast - 3851 Porter Road - Rootstown, OH, 44272 If you're sending other Almanac information to Bill Hardy, you may enclose it in the same envelope, and I'll forward it to Dave. (However, this could delay the information by up to a week.)

On Sundays, you might note any stations relaying NFL football from Oakland (relaying KGO-810) or St. Louis (KMOX-1120), in case the teams fail to supply lists. We're in good shape with most other NFL teams.

 Attention broadcasters: If you work at a station with any network affiliation, I'd like to hear from you soon. I wish to double-check, for accuracy, the format of the hourly newscasts of every network. Obviously, if you listen to such a newscast every hour as part of your job, you have an advantage over most IRCA members in knowing that network!!

I also plan to summarize the news, sports, and feature feed schedules of each network. Once again, if your station has a network, you can help!

Please write to me, Bill Hardy, at the address above. Thanks!





EASTERN new permanent address is: DX FORUM THE COLUMN OF THE 80's 201 836 113

Paul Mount 471 Emerson Avenue Teaneck, NJ 07666 201 836 1137

JOHN SULLIVAN 5007 Tall Pines Court Raleigh, NC 27609

May 19

Hello to all you fellow members. This is my first Forum so I will introduce myself. I am 14 years old and have been DXing since October of last fall. Right now I'm DXing with a regular table radio with an alarm clock, etc(Panasonic). My totals to date are:233 stations, 2 provinces, 28 states, and 7 countries. I am planning to buy either the Panasonic RF-2600 or RF-2200. After getting over 200 stations logged, I decided to try to get some QSL cards; I've got three so far: WBZ, WKIX, WOSU. Have not received WABC's QSL yet, it's been about 6 weeks now. Do they QSL? I've been doing a couple bandscans and just got WPEN over WSPA and WKAZ, and WLIB over WOWO. That makes my total 235. Another question, does a regular 4 foot loop antenna have to be used with a receiver with external antenna terminals? I've been taking SS in school, this should help with LA countries, got an A.forthis course. I'll say adiós from here and let the rest of the gang say something. 73 de JMS. (Welcome to the Forum John, sorry about misplacing this letter-PRM)

C.M. STANBURY II RR #1 Ridgeway, ON LOS 1NO "To the DX Forum"

Ref. Todd Skaine's May WDXF, the last time I checked with VOA(Circa 1975) they assured me that Marathon's power was still 50 kw. Since then no sig-nificant increase in signal strength has been reported. Meanwhile for those who are still mystified by the 1976/77 R. Million controversy, a complete overview of the whole Costa Rican scenario appears in my July S9 column. should be emphasized that this is a complete picture rather than the sort of over simplistic reports which have been appearing in Popular Electronics. Putting it succinctly, the column raises an intriguing question: how did an apparently right wing station (R. Million) become an apparently left wing station (R. Noticias del Continente)? On the other hand (if that's not mystery enough), an earlier article (by Roberto H. Iglesias in the January Review of International Broadcasting) indicates that the 1977 transfer of the license ("frequency permit") is illegal (-because it was not published in the official government bulletin. Best, (-) TAN

NIEL WOLFISH c/o Camp New Moon Baysville, ONT POB 1AO

June 11

Hello once again. I'm listing my temporary address until late August. I'll be 'working" once again this summer at the avove address. DX lately I havent done, mainly because I'm currently busy with final exams and a swimming instructor's course. In fact last time I listened was MM 6/2, w/good signals to the west but lotsa static. No QSL's lately, but an interesting promo find: WDIZ-FM in Winter Park FL sent a non-IRCA buddy of mine a ton of stuff, so now I have a WDIZ license plate (I mean plate!) and huge silver baloon. And in the 5/17 DXM I saw a Forum from new member Saul Chernos He asked a question directed at a particular Toronto member (not me, since I don't know Saul Chernos); I'll give my hearted attempt at an answer anyways. Didn't Jay Morris play Dennis the Menace? Pardon me if I'm wrong. (I think it was Jay North-PRM, and Jerry Mathers, as the Beaver, hi). don't suppose Mr. Norris was in IRCA was he? Weil 73's and have a nice summer.

NEIL KAZAROSS 30 King Phillip Rd. Pawtucket, RI 02861 401-722-3652 b4 2330pls

It's good to be an IRCA member. Credit for my membership should go to Elliot Strauss and Mark Connelly. DXY is an excellent publication now that it's bound together like DXY is. This being my first Forum I'll introduce it's bound together like DXN is. This being my first Forum I'll introduce myself. I'm 22, single (thank god) and a student at Union College in Schenectady NY. My other interests include backgammon & weightlifting, as well as chess, various sports, and war games. I've been a NRC member for three years. Since I bought an HQ180A in June '78 I've been mainly specializing in foreign DX as I could hear only a few splits on the TRF. I've since "graduated" to a R390A and don't expect to change until at least five years when hopefully technological improvement will result in a smaller, solid state and AC/DC rx that can at least match the superb BCB performance of the R390A. Peculiarly, lathough BCB involves about 90% of my DX efforts, I almost never listen to AM except for the sole purpose of DXing as I absolutely love heavy metal rock. Myabe DXing has ruined my ears, hi. My totals from RI include metal rock. Myabe DXing has ruined my ears, hi. My totals from RI include about 1184 stations from 86 countries, 42 states, & 9 provinces. I'll correspond w/anyone who writes ro calls, particularyy about TA & LA DX, Daytime DX waterpath DX & beverages (Heinekens & 4000 footers are my favorites, hi). Next time I'll discuss my beverages at my coastal QTH at my grandmother's summer home in Narragansett RI. 73's to all. (Welcome to first-time-reporter Neil-F) 28

Things have been busy here the last several months. The big even I suppose was my graduation from Bradley Univ. Several interesting trips were taken in the spring. One was to Dallas, TX in the early part of March for the NCAA tournament which Bradley played in. At spring break the last part of March, I also went south. I was in Memphis and Jackson TN to start and got some stickers. WDXI 1310 Jackson now carries Larry King. I stayed in Tupelo MS that night after a friendly visit at WBIP 1400 Booneville MS. WBIP is C&W/Var w/50's rock on Friday afternoons. The on to Vicksburg where I visited w/DXer Jim Ayers.

Jim works part-time at WQBC, which is now C+W. On to Houston TX for a visit w/DXer Conrad Durocher. I had a lot of fun visiting Gilley's, a huge niteclub where Conrad is based.

(He plays guiter for Mickey Gilley & Country singer) where Conrad is based. (He plays guitar for Mickey Gilley, a Country singer). Up to Dallas then, where I noted KXOL 1360 is on, contrary to some reports. For Format is C+W. The Fort'Worth 1540 stn is off. WBAP, KBOX, KXOL, KDNT, KJIM, KDDC(FM), KPLX(FM) and KSCS(FM) are now allplaying country in the Dallas/Fort Worth area. Back to Ms and then up to Bolivar TN for a visit w/Tim McVey before returning home. 3500+ miles in 11 days. I had a nice visit at WDLM 1130 Selmer Th. They are country as is WHHT 1590 Henderson TN. No new DX here; the static too bad. We've now had 10 days of 90°+; high has been 99°. Looks like I will probably be in LOUISVILLE for the convention. Hope to see you tere. The FCC sure blew the clear channel question. One last note: the stn on 1580 in Centreville MS is not on the air. Good DX and 73.

SUSAN SIRULNICK 223 Lakeview Terrace Teaneck NJ 07666

July 15

A tele-Forum to let you know I'm still alive and living in the beautiful east side of Teaneck, NJ. Haven't DXed in quite a while, but I've been busy, both attending college (Montclair State) and working. Also I went to summer school the first semester taking Intro to Business Management. While not going to school now, I am working as a STAR(We always knew you were, hi-PRM); that is a STore Activities Representative at the Hackensack McDonalds. Looks like the only convention I'll go to this year will be one in New York City but it's political rather than DX. Thanks for the support for veri- 73 fication signers; could use YOUR signers too for the next list. "Lets go Mets" MARK CONNELLY at "Summer DX HQ" 7 Trowbridge Path W. Yarmouth MA 02673 6/26

As eastern Long Island is a popular summer tourist area and beach resort, I thought that a daytime bandscan would be of value to DXers bound for that area this summer. This is a groundwave bandscan I made on a trip to Montauk Point at the easternmost end of Long Island. The car rx and a TRF that area this summer. This is a groundwave bandscan I nade on a trip to Montauk Point at the easternmost end of Long Island. The car rx and a TRF were used. Numbers in parentheses are signal strengths on a relative (1) weak to (10) very strong scale. WLIX-540 (2) WGNG-550 (4) WHYN-560 (5) WMCA-570 (5) WTAG-580(4 1/2) WEEE1-590(4) o/weak unID WICC-600(7) WSNG-610(1) WVNJ 620(3+) WPRO-630(7) WNBC-660(8) WRKO-680(5) WADS-690(5+) WOR-710(7) WACE 730(6) WGSM-740(4) WHEB-750(1+) WABC-770(8) WEAM-790(6) o/WTAR(2) WLAD-800(4) o/WCCM/WTWR(2) WGY-810(4+) WNYC-830(1+) WRYM-840(5+) WHDH-850(4) WTEL/WSBS-860(2+) WCBS-880(7) WJVIL/others(2+) WRCQ-910(6) WJAR-920(6) WPAT-930(5) WINE-940(3) WROL(4+)-950 WELI-960(7) WWDJ-970(6) WSUB-980 (6) WLKW-990(3) o/WNTY(3) WINS-1010(6) WBZ-1030(6+) WHN-1050(5+) WGTR 1060(2+) WTIC-1080(7) WILD-1090(2+) WHLI-1100(3) WHIM-1110(5) WNDW-1130 (s+) WCNX-1150(4) o/WHUE(3) WHLW/WKZE/WJMQ-1170(2) WLIB-1190(4) o/WKOX(1+) WCAU-1210(1+) WOMM-1220(6) o/WEIE(2+) WERI-1230(7) WOGS-1240(5+) WARE/WTM/unID-1250(3) WFMM-1260(5) o/WEZE(4) WSPR-1270(4) WADO-1280(3) o/WEIM (2) WCCC-1290(4) o/WIGE/WGII(2+) WAVZ-1300(6) WIHL-1310(6) WATR/WARA-1320 (2+) WEVD-1330(1) WHHC-1340(6) o/WMID/WNEH(3) WNIK-1350(5) o/WINY/WHWH/ others(3) WDRC-1360(5+) WARK-1370(4) WNVR-1380(3) o/WBIM/Others(3) WRIV-1390 (4+) WALE/WOND/WILL/others-1400(5) WPOP-1410(5) WLIS-1420(7) o/WBSM (5+) WXKS-1430(2) o/WIJR/WTTT(1) WBIS-1440(3) o/WFTQ(1+) WNAB-1450(5+) o/WIN/WKRI/others(4) WVOX-1460(3) o/WBET/others (2) WMIM-1470 (4) WSAR-14 80(5+) WJSS/others-1490(2) WFIF-1500(5+) WNLC-1510(9) WDJZ-1530(5) WABK 1560(7+) O/WPTR(2) WMLB-1550(3) WCXR-1560(1+) WRCN-1570(4+) WYFA-1560(2) WARV-1590(5) o/WORW-TT(1+) WLNG-1600(5) o/WIXY(2+). Connecticut coast stations were the strongest. Reception of southerly stations (Delmarva, south Jersey was not as good as it is from south-side Cape Cod QTH's such as Dennisport. I hope all of you have a good summer. 73. (see my Forum-Paul) JOHN M. SULLIVAN 5007 Tall Pines Court Raleigh NC 27609 5007 Tall Pines Court Raleigh NC 27609 JOHN M. SULLIVAN

Everyday I go to the mailbox it seems I get something to do w/radio, the 22nd it was DXM, the 23rd it was a verified letter from WTNT, today a note from this column's editor. I'm a diehard Red Sox fan, though most people go for the Braves or Orioles here. We also have a lot of Yankee fans who listen to about 60 games on pest WPTF. Talking about 'pests', I've got it pretty easy w/only 3, WPTF, WPJL, and NSP WKIX(I cry every night when I think of 73 the stations I could get, hi). Dddn't catch the WMLB Test despite open freq.

Summer static is in full swing now so serious DXing has been largely replaced by quick band checks of propagation cx and off-freq LA's. Early June, however, saw extremely low noise levels in this part of the country, so low, in fact, that mid-day groundwave reception was typical of winter cx. I recent-In fact, that mid-day groundwave reception was typical of winter cx. I recently spent a few days at a conference in Cazenovia, NY - just outside of Syracuse, and tried to give IRCAN Bill Regan a call but, alas, another unlisted number. By the way, I noticed that WKRT-120 in Cortland NY, just to keep DXers on their toes, IDs as "92 K-R-T!" As the new DX Season approaches, I find myself afflicted with my yearly itch to buy a new piece of radio gear. The Drak R7/DR7 is a possibility but I'm troubled by the fact that a lot of people seem to be unloading them after only a few weeks use, I wonder why? Has anyone had any exprenence with the Collins 51S-12 Or what about the Worcester MW-1 rx? I'd perience with the Collins 51S-1? Or what about the Worcester MW-1 rx? I'd like to get my hands on one of those but you never see them for sale. I had a chance accouple of weeks ago to briefly try the new DX-302 (in the store but hooked up to an external, mast-mounted CB antenna). Sensitivity was good, selectivity in the narrow mode seemed to be really excellent, but signal handling ability still seemed to be questionable because locals were audible outside the BCB (and I don't mean harmonics). For example, WBSR-1450 was loud and Clear on 450, 2450, and 3450 kHz if the pre-selector wasn't properly tuned. I must found out that the new Sony CRF-1 is being imported and will cost about \$1700 (gulp) and, contrary to rumor, the popular ICF-5900W is not being discontinued. (WKRT told me they use the slogan "Because 93 rhymes with K-R-T" -PRM) 32 W 31st St #7 New York, NY 10001 212 594 8498

BILL WURTZEL I've done some DXing and heard a few new stations. Like WHWH-1350 Princeton NJ, WMRF-1490 Lewiston PA, WWCO-1240 Waterbury CT, and a few more PA stns. One night I called up the DJ at WZIX-1350 York PA - the station was blasting One night I called up the DJ at WZIX-1350 York PA - the station was blasting in to the Big Apple, so I requested "Vagabond Moon" by Willie Nile. They didnt have it, nor Springsteen, so they played a Pat Benetar song. They were glad to hear from me. 47th St. Photo was selling a Pameonic RF-2600 for \$149.95 on sale Father's Day week. 3 months ago I got the RF-2900; I should have waited. Super-duper Ernie Cooper was here to visit Thursday the 19th. He looks great, with the the climate and current wake him look like a Glavaceter fishermer. must be the climate and sun that make him look like a Gloucester fisherman. How are the catches on the Cape, Ernie? He looks forward to the powerful Brazilians on 980, 1220, 860. (Once for a report that verifies, then they can disappear, hi-PRM) I have been writing lots of new songs and poetry, performing them at local readings, and submitting stuffs to magazines. Now that WITS-1510 Boston has the OK to use 50 KW nights, there goes 1510.

A new young DXer from Racine With less than 200 miles away There will be interference during the day Liked to dial his digital machine The readout went blank With 50 KW in Boston

When he picked up a tank And 10 KW in New London 1510 will draw Sherbrooke into the fray Now he's no longer making the scene:

PHILIP BOERSMA 15570 Cleveland St. Spring Lake MI 49456

A new trend in radio? In the last couple of months, three of my local AMs have discontinued all-night programming. WKBZ-850, WCUZ-1230, and WHTC-1450 had all ceased the routine. WKBZ dropped its all-night R&B show, now off 0100 to 0530; WCUZ now signs off at 0130, leaving the all-night C&W music to OloO to 0530; WCUZ now signs off at Ol3O, leaving the all-night C&W music to their FM, WCUZ-FM 101.3 And WHTC has opted to run Larry King only on the FM; the AM goes off at midnight. Meanwhile, all but 2 or 3 of my local FMs are all-night, many NSP. It seems that with most FMs having superior coverage at night compared to AM, it is financially more wise for the FMs to be AN and the AMs to s/off for 4 to 6 hours. In Grand Rapids, for example, the only all night AM station is WLAV-134O. Even WOOD-130O is off from Ol3O to 050O, yet their FM is NSP. There are no 24 hour AMs in Muskegon, but on FM, WQWQ and WMUS are both 24 hour. In other happenings, it seems WLRQ-149O is trying for a repeat performance of the "Summer of 78" when they were off for three months. As of this date, WLRQ has been off the air for at least three weeks. They may (again) be bankrupt. Since they unoladed the FM a couple af years ago, they just haven't had much success. WLRQ tried to program to Muskegon even though their haven't had much success. WLRQ tried to program to Muskegon even though their signal is inaudible in most central areas of the city. They had a teeny-bop T40 format with DJs that sounded like students at Whitehall high school (sounds like a station I worked at-PRM) and in no way served the Whitehall/Montague audience. No wonder they couldn't hack it financially. Perhaps WLRQ will be sold to more responsible owners who will program towards a local audience, the only way a small town station can possibly survive. 73s.

TIME IS RUNNING OUT - HAVE YOU MADE PLANS TO ATTEND OUR CONVENTION IN LOUISVILLE? HERE'S YOUR CHANCE TO SPEND SEVERAL DOLLARS FOR FREE ITEMS LIKE SURVEYS AND STI-CKERS AND ONE OR TWO FOR THINGS YOU NORMALLY PAY LOTS FOR LIKE DX PUBLICATIONS -AT THE AUCTION SATURDAY HIGHT, JUST ONE OF THE MANY FUN ATTIVITIES AT LOUISVILLE. BILL TOWNSHEND 4500 Conn Ave NW #901 Washington DC 20008 202-966-8046 Fri 7/18

Time for Forum #33. The heat plaguing the nations mid-section has finally reached the EC. Wed 7/16 103 and 102 F the next day (not to mention great FM cx-PRM) were followed by a cooling T storm which also knocked WHUR-FM 96.3 and WRC-AM-980 off the air but DXing while WRC was off amounted to zilch due to very heavy T-Storm QRN. I verified my daytime reception of WHAS and hope it wont still be hot there come conven-don time. Left the TRF at home and took the Belair rx on my Scandanavian trip. I did several LW and MW bandscans but nothing worth reporting. The Scandanavians really go in for long words, and I've been a long word fiend since I was 5 in 1931, when I found a 20 letter word; modest by Nordic + GG standards. Found a 35 letter jewel in the Viking Museum in Denmark. I was making snowballs at a Norweigian ski resort at 3500 feet. The Norwegians and Swedes go in for my kind of eating, 1 1/2 hours of non-stop smorgasbord on the overnight steamer to Finland from Sweden where the sky stayed light all "night". I flew nonstop from Helsinki to New York, Great Circle route, crossing the Arctic circle twice (67° N Latitude) and seeing the glaciers and pack ice with several large floes off the EC of Greenland. I did log five newies on SSS, four in one night since my return on 6/26. DXing isnt dead in summer; it only slows down, hi. See y'all in Derbytown 8/15, 16, 17. 73 and good DX. (Condensed-PRM). DXing isnt

ERNEST R. COOPER 5 Anthony Street Provincetown M 02657

7/24

BCB DX has not been so hot, but the weather sure has! However, we were not "blessed" with those over 100 temperatures like in Dallas, Memphis, St not "blessed" with those over 100 temperatures like in Dallas, Memphis, St. Louis, and even dear old ex-home town Brooklyn NY. The only recent verie came from the Voice of Cuba -600 for a six-month-old report, but it does not specify the calls, or power, or location, so I don't know if it is a new verie or not by my count - if this station is CMW, then it is not a new verie. Only a couple of reports have been sent out, too, on account of the extreme noise most mornings. This is by far the worst summer in my six h here on the cape for T-storm static - but we ourselves had had only two suc storms here! I'm longing for a quiet and Auroral morning to see if I can ID the SSes now ANing on 1325, 1425, and 1560, the latter with WCKY-like BFL mx, but SS announcements really has me stumped - it is NOT XEVIP. WZZD-990 is still using that call as heard on 7/23, no WWBJ yet. On 7/10 AM, aztester o/u/WCXY seemed to ID as WRCL, but I find nothing like that in my log. Anybody know who this could be? This was 12:37-1:12 s/off. I'm off to the WTFDA convention in Dunkirk for the August 1-3 weekend, and the IRCA bash in LEWEYVILLE for the Aug 14-17 weekend, and I hope to see a lot of lyou at these backarals! One report out to WFOFE-1500 Groonfield MA who Pro at these bacchanals! One report out, to WPOE-1520 Greenfield MA who promised to verify a month ago - but haven't yet. The FM has been quite interesting, about two dozen reports have been sent - but no even one verie back from them yet! Every one of them got return postage and a friendly letter - what is the matter with todays society anyway?

MOUNT 471 Emerson Ave Teaneck NJ 07666 201-836-1137 evenings 7/30

Hello every one, DX is good. Thanks for all the summer support in these four pages - it's a good thing I started typing last week, hi. Have had ni rour pages - it's a good thing I started typing last week, hi. have had hi nice phone chats with several DXers including one now in VA who used to live two blocks away though I never knew him - WTFDA member Mike Rosen. Others include LOUISVILLE convention host Ted Fleischaker, attendees of the GWDXA convention in Eugene (Messrs Nolan, Ryan, Strickert, Greene, Monti), Susan, BH, ERC, Chris Hansen, Bill W, Bill Bergadano, Eric Fader, Neil Zank, Bruce Portzer, and Joe Fela. You just can't keep this guy off the phone, hi; maybe it's a good thing he decided not to go to WTFDA after all. Attended a all-band GTG hosted by John "Cap" Kapinos last Sunday in Shrewsbury MA for my first weekend trip; driving up w/Chris Hansen. On the way up we saw a bumper sticker on a NY car that said "Honk if you know Bill W." We honked, bumper sticker on a MY car that said "Honk II you know bill ". We bumper sticker on a MY car that said "Honk II you know bill ". We bumper I kid you not! About 25 were in attendance including Mark Connelly, Bill Bailey, Tom Farmerie, Bill Grant, and Sam Barto who is hosting the NEADS convention in CT come September. There was a cookeut and an auction of T-Shirts, stickers, and mystery boxes. Your editor wound up with a box full and the said was a my said wor an Indonesian station guide as a door prize. On the or WCAL matches and won an Indonesian station guide as a door prize. On the way back the car overheated, so I want to be careful to take care of it so I can make the big trip to LOUISVILLE in mid-August. I mean, I'd hate to be stuck in some remote town like Nelsonville, Ohio! Neil Kazaross, thought we'd see you at Cap's? Mark, I DXed from Shelter Island on LI, 26 mi W of you, and also heard: WHPN-950(6), WKMB-1070(3) only 250 w from NJ!, WWCO-12 40(6), WSTC-1400(6), WNYG-1440(4), WGCH-1490(5), WTHE-1520(3), #E.appmox. Big nx in DX this summer was E skip on FM to NF(92.1) on 7/16 then a great spening to the upper Midwest 7/17 eve, adding new states on FM in MN, SD/N (needed on AM), NE, IA, and KS! Tnx again to Joe Fela for calls. CU in KY? of WCAL matches and won an Indonesian station guide as a door prize.

WESTERN DX FORUM



Editor: Ric Heald 1058 Sanchez Street San Francisco, CA 94114 USA

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1980 Deadlines-26 August, 10 & 24 September, 01 October Thereafter-Weekly, every Wednesday through 18 March 1981

sation last January, I gleaned a few morsels of intelligence, which led me to join the horizontal ranks of IRCA and to build a four-foot Wedge (a la Chas. R. Wolff). No variable tuning capcitors available in this area, so the slop-over will continue until I can finish the Wedge. (Any suggestions)? (Write: Zack Electronics, 1444 Market St., San Francisco, CA 94102 - (415) 626-1444. They're one of the oldest and finest electronic stores in Northern California-RtH). Consequently, no record keeping yet. It's hooked to a Sony Earth Orbiter (CRF 5100) which gives good to excellent results in my unsophisticated opinion.

Because this is my initial report to WDXF, a little past history is in order. I'm 73, 41 percent of it in the Navy, a RLS (Registered Land Surveyor) in fair weather. Affiliations with Navy communications limited to semaphore (daytime) and flashing light (night) until the advent of TBS, the grandfather of CB, in World War II. But I recall the spark gap transmitters on the old four-stack World War I destroyers; it was like riding out an electrical storm in a floating welding shop--blue fire and sparks

everywhere.

Have amassed a fine library of technical information ex Phil's Seattle Goodie Factory, which, if I live that long, may enable me to read and understand all the abbreviations, truncations and circumcisions which abound in the Monitor. With just over six months from which to judge, yours (ours) is a fine organization and one of which I am proud to be a greenhorn mem-

73 to all hands. (Welcome to exciting pages of WDXF, Richard. Always glad to get reports from the Midwest. Please report often-RtH).

ROB HARRINGTON, 3181 S. YORK ST., ENGLEWOOD, CO 80110 - 09 July 1980

I have just spoken with the chief engineer of KLDR 1090. They have been granted 24 hour operation which is targeted to begin in September or October, if they are lucky. The power will be 50 kw D, .5kw N U4. They are building a nine-tower array just west of Watkins, Colorado. The engineer mentioned that it will take a few months to get the system ready and tested. Their format will remain MoR and Oldies.

Just received my QSL from KTRC 1400. I heard the test here--quite strong. Was also heard in Omaha, Pueblo and San Jose. No other reports received

so far.

I will probably get back into the swing of BCB DX in September. I'm tak-

ing my usual summer break from DX'ing.

Local KIMN 950 was off the air this morning, 09 July. Were noted off at 0100, 0130, 0200 and 0230 MLT. Have no idea why they were off the air, but I did take the advantage of 950 being clear to try for KJR, but no luck. What is their nighttime pattern? (A fat figure eight, with about 60 percent of the signal to the NE and 40 percent to the SW, according to the NRC Night Pattern Book-RtH).

See you next month. And now 73 de Rob Harrington.

Like all DX clubs, IRCA depends entirely upon volunteers to accomplish its tasks. Editors and committee chairs dedicate a great deal of their own time and energy to make this a club which everyone is proud to belong to. The club can continue to grow and prosper only if its members are willing to chip in and share the work.

I would like to ask for volunteers to be willing to step in and help wherever necessary. For instance, Bill Hardy needs a great deal of help in putting the IRCA Almanac together. If you are willing to do some research, write letters, edit some of the material, write original articles, compile or type, or if you have access to a computer, your assistance will be appreciated.

From time to time, openings occur for editors or committee chairs in the club. For instance, currently replacements are needed for the Sports Network editor and for the Conditions of Frequencies list. If you would

be willing to volunteer your services, please contact me.
Rather than trying to search out volunteers when vacancies occur, I would like to have a file of names of volunteers to draw upon. IRCA has developed a reputation as one of the top-notch DX clubs in this country;

why not help to keep it that way by volunteering your services?

Along a different line, you'll note that my address above is new. I
won't actually be living there all the time, but this will be my mailing address from 01 August until next June. 73.

DAVE ROGERS, W.S.H., BOX 465, FORT SUPPLY, OK 73841 - 21 July 1980 Greetings. Just returned from vacationing in New Mexico and did a little DX'ing from there. Incidentally, I was married 12 July so am no longer a batchelor after 31 years and the trip was our honeymoon. (Now you'll have to get permission to DX, hi. Congrats, Dave-RtH).

Stayed in Taos for three nights. Went by local KKIT 1340 and talked to station personnel. They promised to verify all correct reports (he said they didn't get many). Also told us their r/c is the 3rd Wednesday 0230-0245 ELT. They broadcast in EE, SS and local Indian dialect.

KXRT (FM) studios are in Best Western Kachina Lodge, where we stayed.

They were off the air at the time, according to a DJ who happened to be there when we went by. They expected to be back on in a week or so, so should be broadcasting again by the time this is printed.

Only one report out recently to KHYM 1060 Gilmer, TX, heard on sunset

skip. No new veries to report.

KOB 770 seems to have a very good daytime coverage as they were picked up when we crossed from the Oklahoma Panhandle into New Mexico. Also listened to KIMX 1450, Clayton, NM and KRTN 1490 Raton, NM on the way. I did notice some dead spots in the mountains where no AM stations were audible in the daytime.

Hated to come back to this 110-degree Oklahoma heat! 73 and good DX to everyone. (It's been really hot here in S.F. too, 80!-hi-RtH).

and I've begun to observe that new foreign DX is much easier than new domestic DX.

This is a bit strange at first glance; foreign DX'ing has been considered a somewhat more difficult field unless you live on the Gulf Coast (or have a Beverage on the Atlantic or Pacific coasts). It's not so much that foreign DX has become easier (though the 9 kHz plan helped), it's just that fewer and fewer domestic channels yield much more than NSP regulars up to 1000mi/1600km away unless a great deal of time is spent hunting for silent periods and unusual propagation. With little time available for DX'ing, it's much easier and more productive to check the 9 kHz channels for carriers and the clear channels for Latins. With the FCC going for 9 kHz spacing and for filling up the clears with new stations, it appears that worthwhile foregin DX will all but disappear.

But meanwhile, Ric, you're right about good DX being possible in the summer. Logged 200-1575 this AM, 21 July, for the first time, with good high band DU conditions -- carriers on channels with stations listed under 5 kw. Would have been very interesting to have been out on the coast with a Beverage! 73. (That's what I've been saying for years, not even the thunderstorm_static of the mountains or desert is anywhere near accute as it

is back East-RtH).

88.4 degrees.

My tuning results on AM this summer were confined to two on two days, with KS00 1140 noted in well at 2210 ELT (heard before, but nice to hear again as South Dakota is a surprisingly hard-to-get state from here) on 11 June, one of the few staticless days that occur in summer. The other neat moment was about 0600 ELT 15 July on 1070 when KNX broke through despite greater than usual QRM from semi-local KHMO plus WIBC chiming in a bit, while messing with the TRF portable. KNX is, of course, not new, but an old friend welcomed again, especially at this time of year when they are rarely heard from.

FM DX has been real good, with the highlights of my first E-skip catches on 15 and 18 June from Key West, FL, Monterrey, NL, Mexico, Corpus Christi, TX, and Morningside, MD.

Also made my TX DX'ing debut these two days. Saw Corpus Christi, TX and

KYW Philadelphia, both on channel 3, from my country cabin 50mi/80km out where channels 3 and 6 are open on lower VHF.

Regarding my last forum about two broken down Space Magnets. I got one working again-apparently a new battery I had purchased recently for it was defective and another new battery made it work like new. The other one is very old and has been exposed to extremes of temperature and knocked around somewhat. I plan to bring it to one of the auctions. (Oh good, Erickson will be sure to buy it, hi. VISA, Don? Hi-RtH).

I'll be at both the Louisville and NRC's in Los Angeles (El Segundo). Wich one are you going to be at Ric? (I've been unemployed for nine months. Does that answer the question? Really wish I could go, but ... RtH). I am

looking forward to meeting new DX'ers as well as renewing old friendships. Until next time, 73.

so I thought I'd be sneaky and run this tidbit in DX Forum, hi. I'm sure

Ric can use the business, right? (Zzzzzzzz-RtH).

Anyway, most NFL teams will be back on the same flagships as in 1979.
The biggest exception is the New England Patriots switching to WEEI 590 after quite a few years on WBZ1030. CBS-owned WEEI, of course, also has the CBS NFL package on Monday nights, playoffs, Super Bowl, etc. Full NFL regional networks will appear in the IRCA Almanac, which we're now expecting to be off the press in October. Get your order in early and take advantage of the "pre-publication" rate!

Also, we are accepting info for the Almanac for at least another month. When you go on vacation, or over the Labor Day holiday, tune around for in-

fo to help make the Almanac more complete and accurate.

I'd be eternally grateful if some sports fan in the Oakland and/or St. Louis area could obtain the 1980 regional network for the NFL Raiders and Cardinals. If nothing else, tune around on Sunday 07 September and see who is carrying the KGO 810 and KMOX 1120 feeds.

On Saturday 06 September college football begins, and we'll want all the details of which stations have which teams. Send that info to Dave Arbogast, 3851 Porter Rd., Rootstown, OH 44272 (Dave is compiling a joint IRCA/NRC list), or to me if you prefer. If you can get a station listing from the atletic department of your nearby colleges, that's even better. Or, if nothing else, send in the Saturday clippings from your newspaper's sports or radio-TV page, if they list the radio stations carrying football. Thanks. 73 and good DX.

RIC HEALD, 1058 SANCHEZ ST., SAN FRANCISCO, CA 94114 Tele-Forum: (415)

the post office where one can go up to the windows hours after other stations have closed -- so why do they sit on the mail? Sorry gang, for the no-show. As you might have noticed, new deadline dates have been posted. They have been moved up to Wednesday, and if Rincon keeps up with their track record, I may move it up to Tuesday or Monday. And they have the nerve to ask for a 33.3% postal increase? I have always gone with the work ethic that you get increases commensurate with your ability and performance--it should be rolled back to the '50s level of 3¢, hi!
Bought (as sort of a birthday present to myself) Randy Tomer's SM-2.

Have been using it with the Hammarlund HQ129X--have noticed some differences, but what I've gained, I've lost in other areas. Can now get into 1300 and 1320 (local KDIA in on 1310), but have lost 1250 and 1270 to KYA 1260 slop. That's somewhat repeated all up and down the dial.

The garbage that all of us in San Francisco have been hearing on virtually every clear channel, and behind stations on other frequencies, seemed to disappear for a few days and now they are back. Seems to be a combination of KFAX/KGO/KABL/KEST. It's either from reradiation of those nine towers at the Bay Bridge (KDIA, KABL, KIQI), or KABL, and even KEST. I have noticed that when looping to KABL, the spurs from KGO/KFAX are the

loudest--a direct right angle to KGO/KFAX, or maximum null. Yet when I loop to KGO/KFAX, the spurs are gone. What raises my suspicions that it is KABL is that: Loud spur on 860 (960-910=860), it's always been there, but the level has greatly increased. When KIQI is on, KABL obilterates KPAY 1060. That harmonic is new, like in the last three months or so. I also heard them pop in and out (at night) on about 1005. That would be 960 plus my IF frequency. Also, that is a new one. I've also heard KABL on other frequencies that are not mathematically possible. Incidentally it makes no difference whether I use the Wedge or the SM-2. it makes no difference whether I use the Wedge or the SM-2.

Nick Hall-Patch is quite right. Summer DX (in a spur-free atmospherehi) is quite good. Sure, there are occasional thunderstorms over the ni) is quite good. Sure, there are occasional thunderstorms over the mountains and desert, <u>but</u>, set up your equipment along the East Coast in the summer and I'll guarentee you'll come running, not walking back home. Night after night, I remember Dr. Frank Field (WNBC-TV) showing the 50-mile-radius radar, and nightly, it seemed, there were several storms occurring simultaneously. Even the TV was affected!

Bill Hardy, is it true that if you don't get sports info soon that Nancy and Evelyn will release an army of angry penguins armed with super paisy light dimmers to sit on the front steps of all IRCA members?

noisy light dimmers to sit on the front steps of all IRCA members? Seriously folks, Bill really does need your help. Bill, how can we send in Raider info when they still don't know where they'll be playing, hi. If you own a Los Angeles Raiders t-shirt, folks, you have a collector's item. Angelinos, you'll get our team when you get the canal!!!

Enough rambling. Thanks all for this month's support. Glad to have the Midwestern forums. We could use a report from Utah, ahem! 73 de RtH..

scaping and farming this new one-acre parcel. I did fire up the "frog" and R. West loop last night and noticed all the New Zealand regulars to be fading in rather nicely. Funny how much your geographic location affects what's heard. Gene Allen expressed his difficulty in hearing Grass Valley and Madera on 1250 due to KYA splatter. Up here, KHOT was always a SSS regular and KNCO has been a total pest ever since they first came on. KTMS dominates 1250 at night, and when they're off I can null KYAC and get WREN Topeka. It's always nice to hear a 5 kw "W" station from the West Coast. (Remember when 5 kw "W's" used to be a pest on the WC MM's?-Rth). Mike Brooker commented on GE vs. Panasonic portables, and I've had the same experience. My GE TRF (not a Superadio) easts its six C-cells so fast that it's pretty much worthless as a portable, in my opinion. After one week-end's use on a camping trip the batteries are about 3/4 used up! In the RF-2200, however, a set of four D-cells last forever! Obviously, GE needs to go back to the drawing board. Recently I built the ground system described by Pat Martin in the 17 May DXM Technical column. I used 1 rigid copper pipe in five-foot lengths and they drove into the ground quite easily. I interconnected them with 4" copper tubing and soldered the connections with a propane torch. Nothing to it! Used \$20 worth of copper, though. A good ground will really improve longwire performance, as Pat stated, and also will reduce powerline hash substantially. Recently, I saw a new DX-200 at Radio Shack and gave it an unfair test by using 30 feet of antenna wire inside the store. I was not impressed. It barely received local stations, dial callibration was way off and its mechanical construction (dials, controls, etc.) was "junky." Certainly no comparison to an FRG-7 or R-1000. I would certainly avoid the DX-200; it's built to a price and the price is too cheap. 73 de RET.

volcano, but I do know that Radio Nederland has a very nice station. Facilities include a six-month-old 36-track studio for program production, four wire services and an impressive building to put it all in. DX team member William van Amstel gave me a one-hour tour, which was very nice of him. I left him a copy of the IRCA information brochure and a set of the infamous (shudder) wedge plans. Or as they are probably saying at publishing HQ right now, "Oh no, Mr. Phil!" More later. 73 de JJ. (Never mind the wedge plans. How many albums did you manage to peddle? Hi-RtH).

to distant radio stations on the AM broadcast band (510 to A non-profit organization devoted to the hobby of listening North American Radio Clubs. 1630 kHz). IRCA is a member of ANARC, the Association of

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