

dx monitor



The Magazine Of The
International Radio Club of America

VOLUME 16 NO. 2 WHOLE NO. 487 SEPTEMBER 22, 1978

FLASH TIPS

KNBR-680 will be off between 0400-0730 ELT for the "better part of a week... towards the end of Sept." See Matthew Shugart's tip in WDXR last issue for more info. This will be a rare opportunity opening up 680 and nearby frequencies on a weeknight! KNBR is normally NSP!
from Bill Hardy

PACIFIC NORTHWEST BEVERAGE DXPEDITION POSTPONED: Bill and Nancy Hardy regret to announce that the 2nd Annual Westport Beverage DXpeditions, scheduled for Oct.&Nov. along the Washington state coast (see p. 442, 4/1/78 DXM), have been indefinitely postponed. It seems that Bill's parents own the beach cabin that would be used, and they have rented it to somebody else for an indefinite time. Should the renters move out before the end of the 1978-79 DX season, Bill and Nancy will reschedule a Beverage Party and advise IRCA's of the new dates. They hope that no one who had planned to attend in Oct. or Nov. will be inconvenienced.
from Bill Hardy

A DX get together is currently being organized for DXers, SWlers, etc. in Central Pennsylvania, for some time at the end of September or in October. Interested DXers should contact Don Moore, 134 E. Foster Ave. #308, State College, PA 16801 or call (814)237-1766, no collect calls
from Don Moore

WCAW-680, Charleston, WV, 0300-0600 with 50,000 w on day DA, then 500 w PSA to SR during KNBR maintenance periods, "within 3 weeks" per KNBR. WCAW will test each day of maintenance period. Reports, including tapes to Michael J. Grady, Dir. of Eng., WCAW, P.O. Box 4318, Charleston, WV 25304. Prepaid calls to (304) 925-4986. Arr.:
Matthew Shugart for IRCA (REC'D 21 SEPTEMBER 1978)

THE 1978 IRCA FOREIGN LOG

Ten thousand little elves are busily preparing the 1978 IRCA Foreign Log. While they busily scurry about typing and proofreading it, we thought we'd tell you a little bit about it. This year's log will include:

- * More loggings than any previous edition. All of those massive DXWW columns from last season have been combined into a big fat listing.
- * An expanded propagation section. There will be a couple of feature articles and reports of actual reception conditions from last season.
- * A section on the new 9 kHz frequency plan which goes into effect later this year. This section will include articles on the impact on TA & TP DXing, plus listings of the new frequency assignments.
- * Other special feature articles, space and elves willing.

The log should be finished in a few weeks. In the meantime you can order your own personal copy at a prepublication price of \$4.00 until October 31. After Halloween the price will be \$4.50 for members and \$5.00 for nonmembers. To reserve your copy send check or money order to IRCA Goodie Factory, P.O. Box 17088, Seattle, WA 98107.

NEW MEMBERS

- IAN DONALD ROSS, 2 PRESTON ST., TIMARU, NEW ZEALAND
- Daniel C. Massey, ACU Station Box 6433, Abilene, TX 79601
- Elliott R. Strauss, 27 Devon Dr., West Orange, NJ 07052 (re-join)
- Peter Tworow, 21 Roseview Dr., NW, Calgary, Alberta, CANADA T2K 1N8
- Shaul Ceder, 1481 Egmont Pl., Far Rockaway, NY 11691 (rejoin)
- Thomas J. Pruden, 1316 Buchanan Dr., Santa Clara, CA 95051
- Steven D. Miller, 368 Quincy St., Boston, MA 02125
- Bill Higgs, Graham-McWhorter Research, P.O. Box 443, Alexandria, VA 22313
- William McMahon, 351 So. F. St., Oxnard, CA 93030
- PAUL BLAIR, 421 E. LAUREL DR., SALINAS, CA 93906

ADDRESS CHANGES

- MICHAEL G. WORST, 3155 FRENCH RD. #114, BRAUNTOWN, TX 77706
 - J.A. Markewicz, 212-524 North Oakbnd Dr., Duluth, MN 55811
 - Gene Rust, 3220 Ridgelake Lane, Plano, TX 75074
 - Bill Harms, Apt 2, 865 N 160 W, Provo, UT 84601
 - ERLAND CARLSON, 306-6155 CASSIE AVE., BURNABY, B.C., CANADA V5H 2W2
 - DAVID B. GIBSON, JR., 135 ONEIDA ST., PITTSBURGH, PA 15211
- RENEWALS AS OF 18 SEPTEMBER 1978

Jef Jaisun, Gary V. Jackson, Bill Dulmage

Bruce Portzer informed me last Friday that the new dues structure has get by the Board of Directors. Therefore, effective 1 October 1978, the dues for domestic members (U.S. and Canada) will be \$16.50. The dues for overseas members via Canada will be \$20.00; direct airmail to the Caribbean will be \$25.00, to the rest of the world will be \$30.00. The dues for trial memberships will be \$6.00.

Members who have already renewed will not be prorated to the new structure. You will receive the full number of issues entitled to you.

San Francisco, 21 September 1978

According to Bruce Black in the engineering department at KNBR, no date has been set yet for their maintenance period. He says that there has been construction problems at the transmitter site, so they're not ready yet. They will let us know when it will happen, but it may not be until after the rating period which starts in three weeks.

The Inside Story

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DX RECORDS

HEARD: Dr. Michel Breger
 VERIFIED: Steve Moss
 GRAVEYARD: Walter Kuenast

CENTEXDX: 7217 Creekside Drive, Austin, Tx 78752.

GRAVEYARD RECORDS

CONTINENTAL QTH - 1490

Call	Location	Miles	DXer-Location
WAJF	Decatur AL	1963	Allen, Vallejo CA
WHEB	Selma AL	2011	Allen, Vallejo CA
KCUZ	Clifton AZ	1374	Belanger, Swan River MB
KYCA	Prescott AZ	1784	Wheeler, Erie PA
LAIR	+Tucson AZ	1260	Portzer, Seattle WA
KXAR	Hope AR	638	Kaskey, Galva IA
KDRS	Paragould AR	1740	Allen, Vallejo CA
KOTN	Pine Bluff AR	1675	Allen, Vallejo CA
KARV	Russellville AR	575	Evans, Gary IN
KWAC	+Bakersfield CA	842	B Hardy, Aberdeen WA
KPAS	Banning CA	375	Harang, San Jose CA
KICO	Callexico CA	1292	Kaskey, Galva IA
KRKC	King City CA	165	Kaskey, Sacramento CA
KTOB	Petaluma CA	831	Kemper, Grand Jct. CO
KBLF	Red Bluff CA	575	Portzer, Seattle WA
KDB	=Santa Barbara	1418	Kaskey, Galva IA
KOWL	S. Lake Tahoe CA	1188	Kesteven, Edmonton AB
KSYC	Yreka CA	520	Horne, Vancouver BC
KBOL	Boulder CO	1168	Kesteven, Edmonton AB
KGUC	Gunnison CO	95	Kemper, Grand Jct. CO
KEPI	Manitou Sprgs CO	1120	Portzer-Christenson Seattle WA
WGCH	Greenwich CN	17	Howe, Great Neck NY
WTRL	+Bradenton FL	2396	Allen, Vallejo CA
WJBS	Deland FL	870	McCormack, W Lafayette IN
WMOG	Brunswick GA	1065	Kaskey, Omaha NE
WMJM	Cordele GA	980	Kaskey, Galva IA
WSNT	Sandersville GA	570	McCormack, W Lafayette IN
KCID	Caldwell ID	1069	Kaskey, Galva IA
WKRO	Cairo IL	881	Edmunds, Glen Rock NJ
WDAN	Danville IL	700	Edmunds, Glen Rock NJ
WESL	E. St. Louis IL	1758	Allen, Vallejo CA
WOPA	Oak Park IL	825	Markewicz, Winnipeg MB
WZOE	Princeton IL	258	Eddie, St. Louis MO
WKBV	Richmond IN	375	Bright, Muscatine IA
WNDU	South Bend IN	298	Bright, Muscatine IA
KBUR	Burlington IA	1680	Allen, Vallejo CA
WDBQ	Dubuque IA	1825	Allen, Vallejo CA
KBAB	Indianola IA	580	Robertson, Crosswell MI
KRIB	Mason City IA	1590	Allen, Vallejo CA
KTOP	Topeka KS	1431	Allen, Vallejo CA
WFKY	Frankfort KY	2058	Allen, Vallejo CA
WKAY	Glasgow KY	2025	Allen, Vallejo CA
WOMI	Owensboro KY	530	Kaskey, Omaha NE
WSIP	Paintsville KY	2175	Allen, Vallejo CA
WIKC	Bogalusa LA	943	Wheeler, Erie PA
KEUN	Eunice LA	1789	Allen, Vallejo CA
KRUS	Ruston LA	1788	Allen, Vallejo CA
WPOR	Portland ME	502	Wheeler, Erie PA
WTVL	Waterville ME	408	Edmunds, Parsippany NJ
WARK	Hagerstown MD	942	Kaskey, Galva IA
WHAU	Haverhill MA	1238	Kaskey, Galva IA
WMRC	Milford MA	36	Howe, Mansfield MA
WTXL	W. Springfield MA	289	Bailey, Williamsville NJ
WABJ	Adrian MI	900	Belanger, Winnipeg MB
WTIQ	Manistique MI	301	Heimbürger, Port Huron MI
WMPX	Midland MI	225	Evans, Gary IN
WLRC	Whitehall MI	382	Eddie, St. Louis MO
KXRA	Alexandria MN	1178	Edmunds, Parsippany NJ
KOZY	Grand Rapids MI	900	Sorensen, God's Nrws MB
WLOX	Biloxi MS	2410	Allen, Vallejo CA
WCLE	Cleveland MS	673	Kaskey, Galva IA
WHOC	Philadelphia MS	804	Wheeler, Erie PA
WTUP	Tupelo MS	550	Bright, Muscatine IA
WVIM	Vicksburg MS	1820	Allen, Vallejo CA
KDMO	Carthage MO	1533	Allen, Vallejo CA
KTFR	Rolla MO	381	Kaskey, Galva IA
KDRO	Sedalia MO	247	Bright, Muscatine IA
KDBM	+Dillon MT	650	Kaskey, Sacramento CA
KLNG	Omaha NE	1425	Allen, Vallejo CA

WEMJ	Laconia NH	845	Taaffe, Dayton IN
WUSS	Atlantic City NJ	574	Keleher, Fort Wayne IN
KRSN	Los Alamos NM	828	Allen, Vallejo CA
KRTN	Raton NM	825	Bright, Muscatine IA
WCSS	Amsterdam NY	267	Wolfish, Toronto ON
WETA	Batavia NY	144	Wheeler, Erie PA
WKNY	Kingston NY	374	Sorensen, Emsdale ON
WDLC	Port Jervis NY	715	McCormack, W Lafayette IN
WOLF	Syracuse NY	633	McCormack, W Lafayette IN
WSSB	Durham NC	537	McCormack, W Lafayette IN
WFIB	Fayetteville NC	600	Evans, Gary IN
WLOE	Eden NC	328	Wheeler, Erie PA
WRNB	New Bern NC	78	Allinson, Wilmington NC
WRMT	Rocky Mount NC	654	Hogan, East Chicago IN
WSTP	Salisbury NC	520	McCormack, W Lafayette IN
WSVM	Valdese NC	513	Wheeler, Erie PA
WHSI	Wilmington NC	605	Breger, Long Island NY
KNDC	Hettinger ND	1131	Allen, Vallejo CA
KOVC	Valley City ND	327	Kaskey, Galva IA
WBEX	Chillicothe OH	684	Kaskey, Galva IA
WJMO	Cleveland Hgts. OH	300	Taaffe, Dayton IN
WOHI	E. Liverpool OH	124	Wheeler, Erie PA
WWRN	Marion OH	1501	Allen, Vallejo CA
KWRW	Guthrie OK	45	Hauser, Enid OK
KBIX	Muskogee OK	480	Kaskey, Galva IA
KBKR	+Baker OR	473	Kaskey, Sacramento CA
KRNR	+Roseburg OR	430	Horne, Vancouver BC
KBZY	+Salem OR	454	Kaskey, Sacramento CA
WESB	Bradford PA	857	Kaskey, Galva IA
WAZL	+Hazleton PA	251	Wheeler, Erie PA
WARD	Johnstown PA	332	Breger, Long Island NY
WGAL	Lancaster PA	100	White, Arlington VA
WBCB	Levittown PA	681	Evans, Valparaiso IN
WMGW	Meadville PA	784	Kaskey, Galva IA
WNBT	Wellsboro PA	161	N Hardy, Fredonia NY
WSIB	Beaufort SC	897	Bright, Muscatine IA
WGCD	Chester SC	513	Wheeler, Erie PA
WMRB	Greenville SC	513	Wheeler, Erie PA
KORN	Mitchell SD	708	McCormack, W Lafayette IN
WOPI	Bristol TN	2125	Allen, Vallejo CA
WDXB	Chattanooga TN	761	Kaskey, Galva IA
WROL	Knoxville TN	563	Bright, Muscatine IA
WJJM	Lewisburg TN	1875	Allen, Vallejo CA
WDXL	Lexington TN	865	Sundstrom, Willington NJ
KNOW	Austin TX	775	Hauser, Denver CO
KIBL	Beeville TX	1500	Allen, Vallejo CA
KBST	Big Spring TX	1208	Allen, Vallejo CA
KHUZ	Borger TX	1124	Allen, Vallejo CA
KNEL	Brady TX	1285	Allen, Vallejo CA
KWMC	Del Rio TX	194	Moss, Austin TX
KSAM	Huntsville TX	1600	Allen, Vallejo CA
KVOZ	Laredo TX	1458	Allen, Vallejo CA
KPLT	Paris TX	1518	Allen, Vallejo CA
KDOK	Tyler TX	1581	Allen, Vallejo CA
KVVC	Vernon TX	1260	Allen, Vallejo CA
KVOC	Ogden UT	1008	Markewicz, Winnipeg MB
WKVT	Brattleboro VT	300	Jensen, Baltimore MD
WFAD	Middlebury VT	73	Morby, Ballston Lake NY
WIKI	Newport VT	146	Morby, Ballston Lake NY
WCVA	+Culpeper VA	212	Wheeler, Erie PA
WVEC	Hampton VA	400	Wheeler, Erie PA
WAYB	Waynesboro VA	491	McCormack, W Lafayette IN
KBRO	Bremerton WA	1368	Kaskey, Galva IA
KVAC	+Forks WA	677	Kaskey, Sacramento CA
KLOG	Kelso WA	603	Allen, Vallejo CA
KENE	Toppenish WA	677	Allen, Vallejo CA
KTEL	+Walla Walla WA	616	Allen, Vallejo CA
WXIT	Charleston WV	580	Bright, Muscatine IA
WLOH	Princeton WV	360	McCormack, W Lafayette IN
WGSB	Sutton WV	241	Wheeler, Erie PA
WGEZ	Beloit WI	360	Heimbürger, Port Huron MI
WLCC	LaCrosse WI	578	Belanger, Swan River MB
WIGM	Medford WI	1680	Allen, Vallejo CA
WOSH	Oshkosh WI	441	Wheeler, Erie PA
KLME	Laramie WY	775	Markewicz, Camp Morton MB
KRTR	Thermopolis WY	795	Allen, Vallejo CA
KGOS	Torrington WY	970	Allen, Vallejo CA

INTERNATIONAL QTH

Dr. Richard E. Wood (+) Kailua HI 11 stations
 Merv Branks (=) Invercargill NZ 1 station

Many thanks to the 25 DXers who have contributed to
 GYDXR during my first 30 months of editing this column.
 The next edition will include a listing of record
 totals by individual DXer, and a few rule changes.

73's til TA time rolls around + - - - - - Walter

**eastern dx
roundup**

Bob Curtis
17 Cobbleview Dr.
Colchester, VT 05446

DEADLINES: Mon. Sept. 25, Mon. October 9 and
Mondays thereafter.

All times are Eastern Local Time.

Splatter:

"Still managed to hear KFI in summer, thanks
to new TRF." Louis M. Poda - OH

"My farthest catch except from the South
Pacific. WCBS-880 heard in Reno, NV, 2,500
miles away." (see 880) Bill Townshend - DC
(ed: Bill's western loggings are under a
special listing.)

"First time I had ever heard WFAT."

(see 1620a) Bryan Lee - CT

*** ** ** ** **

640 KFI CA, Los Angeles 7/9 0505-0515 very
poor to poor. 3 rr songs in 5 minutes
ID at 0512. Male DJ talks for a min-
ute and then into song.
Also: 7/23 0530 very poor rr? Sub-
audible het from Cuba.
Also: 8/14 0150 fair w/religious pgm.
At 0200 nx about Santa Barbara earth-
quake, and a plea by the telephone co.
for people not to call into the area
because of overloaded lines. 66°
temp. and into talk show on Propos-
ition 5. (ed: not Proposition 13?)
Heard easily on TRF. Only problem was
WSM splash and once Cuba on top. Most-
ly just SAH flutter of 1/4 second.
(LMP-OH)

WHLO OH, Akron 8/9 0005 strong, steady test
tones heard few minutes till tune out.
Nothing heard 0040 or 0100 when check-
ed again. On 8/19 Ron Vereb Talk Show
mentioned "FCC check" "About 3 weeks
ago". During summer WHLO is almost
full time, signing on at 6:00 AM and
s/off at 11:00 PM (2300) for June and
July. In August it drops back to a 0630
s/on and 2245 s/off. Last year's sched-
ule: September s/on 0700 & s/off 2200,
October s/on 0730 & s/off 2115, Novem-
ber s/on 0715 & s/off 1945, December
s/on 0745 & s/off 1945. WHLO is mostly
talk. Toll free tel. no's (toll free
only for listed city) Area code 216:
Akron: 867-0640
Canton: 452-0640
Cleveland: 687-0640 (LMP-OH)

660 (WNBC) NY, New York 8/14 0100 Apparently off.
(LMP-OH)

670 (WMAQ) IL, Chicago 8/14 0100 Apparently off
about 1:00 AM (0100) (LMP-OH)

790 CFAN NB, Newcastle 8/16 2308-2316 CBC news
headlines read by CFAN newsman Jim
Stacy. Sports w/scores for the "New-
Castle Softball League" teams. Wx,
present temp-25°, JX ID. (BL-CT)

850 WJW OH, Cleveland has deleted their 1900-
2300 talk show with Carl Riese. New
format is "Beautiful Music for the
Summer". Sounds like FM and MOR.
(LMP-OH)

960 CHNS NS, Halifax 9/3 0014-0019 T-40 mx, ads
for the "Misty Moon" Night Club and
"Armdale (?) and Stridefield" Taxis.
JX ID, "Radio 96-C*H*N*S Remembers....
1968" and into a 1968 song. Good.
(BL-CT)

990 CBW MB, Winnipeg 9/2 2358 CBC sports with
ment of 'south of the border' item,
then "You're listening to CBC Radio in
Manitoba", time pip at midnight (BC-VT)

1160 KSL UT, Salt Lake City 8/14 0220 Fair vol-
ume, Night-Cap Show with man talking
about stamps. (LMP-OH)

1200 WOAI TX, San Antonio 8/6 0020 fair with
religious pgm. (LMP-OH)

1260 WBBG OH, Cleveland, ex-WMGC, ex-WIXY, ex-
WDOK (ed: how far back are we going?)
Effective 5/1/78 format change with
callsign change. Now calls itself
"Supertalk" and features talk show
hosts that are well known names in
Cleveland's radio-TV history, such as
Bill Gordon, Bill Randall, Merl Polis,
etc. Also has big bands Saturday night.
(LMP-OH)

music and a T-40 countdown, wx-17°C
present temp, plus sports wrapup.
Fair to poor. (BL-CT)
1350 WSLR OH, Akron 7/21 0100 off the air and
OC plus test tones. (LMP-OH)
1410 CFMB QU, Montreal 8/31 1506-1600 Mont-
real's foreign lang. stn in fair w/
Italian pgm, mx & commentary w/YL &
OM. (BC-VT)
1500 WTOP DC, Washington Effective Sept. 4th
WTOP, Washington's all-news station
has become 24 hrs daily. (WPT-DC)
1620a CLANDESTINE WFAT NY, New York 0118-0327
This is the first time I have ever
heard WFAT, and I have about 25
minutes of it recorded. The signal
was excellent. The guy said his
name was Larry McCrea (not sure of
spelling). He was having live call-
ins. ID's as "Free Speech Radio".
As would be expected, he has his
hands filled with lunatics calling
up, one guy claiming he was trying
to raise money for the "Alaskan
Foundation Society for the Human-
ities". The same guy called back 5
times, each time with a different
cause; raising money for WBAL-FM,
a message for "Sam", etc. The tel.
number was given out as (212) 664-
9979. I called it and it is real.
I talked with the guy for about a
minute. He mentioned that WFAT
will soon have a "bunch of QSL's"
to give out. Some interesting
things were obtained via the tel.
co.: exchange 664 is in Manhattan,
in Manhattan there is an L. McCrea
listed. A call to WFAT's phone #
before they are on the air (usual-
ly after 12:00 AM) shows that the
number is an open circuit. Inter-
esting, eh? (BL-CT)
(ed: due to length some minor edit-
ing was done on above item)

//////
SPECIAL LISTING OF LOGGINGS ON A TRIP WEST
from Bill Townshend-CO-ID-NV-OR-UT

period Aug. 9th -Aug. 25th, including the
IRCA Convention.
620 KTAR AZ, Phoenix 8/18 0222 nx w/ment of
Maricopa County, stock market rpt.
Good o/KGW (WPT-ID)
640 KFI CA, Los Angeles 8/23 1451 T-40 mx.
Fair at high noon. (WPT-NV-V)
700 WLW OH, Cincinnati 8/11 0441 c/w mx,
Time, ID. Fair (WPT-OR)
720 KDWN NV, Las Vegas 8/18 0216 Rosemary
Clooney song after rpt for place
on Las Vegas Strip. Good. (WPT-ID)
760 KFMB CA, San Diego 8/18 0212 T-40 mx w/
Fem voice after spot and ID. Good.
(WPT-ID)
770 KOB NM, Albuquerque 8/13 0417 c/w mx,
ID by OM. Good. (WPT-OR)
780 WBBM IL, Chicago 8/22 0356 nx, ID, time
stock market rpt. Fair. (WPT-NV-R)
820 WBAP TX, Fort Worth 8/12 0248 "All Nite
Open Road Show" talk show pgm.
Fair. (WPT-OR)
830 WCCO MN, Minneapolis 8/13 0407 nx, wx
rpt. (temp. 72° F/22°C). Fair.
(WPT-OR)
840 WHAS KY, Louisville 8/22 0406 nx, ment
of reporter telling WHAS news.
Fair after nulling KOA slop.
(WPT-NV-R)
850 KOA CO, Denver 8/11 0318 Talk show.
XInt. (WPT-OR)
870 WWL LA, New Orleans 8/11 0315 wx rpts
for Interstate Highways, c/w mx.
Pgm trucker oriented. Good (WPT-OR)
880 WCBS NY, New York 8/22 0421 wx rpt,
(temp. 69° F/21°C), nx w/OM/YL.
Fair-good. (WPT-NV-R)
890 WLS IL, Chicago 8/22 0411 T-40 mx.
Fair. (WPT-NV-R)
950 KIMN CO, Denver 8/17 0600 ID, then Bar-
bara Streisand song. Good. (WPT-ID)
980 KFMB CA, Los Angeles 8/14 0552 wx fcst
for San Gabriel Valley. Good.
(WPT-ID)
KMBZ MO, Kansas City 8/25 0159 ID,
post-game traffic rpt. Good (WPT-CO)

990 CBW MB, Winnipeg 8/25 0200 start of
CBC nx. Good. (WPT-CO)

1010 CBR AB, Calgary 8/20 0105 end of CBC
nx, ID. Good. (WPT-UT)

1020 KCBQ NM, Roswell 8/16 0107 T-40 rock mx
Good. (WPT-ID)

KDKA PA, Pittsburgh 8/25 0212 Talk show
Fair-good o/u KTNQ. (WPT-CO)

KTNQ CA, Los Angeles 8/25 0212 T-40
rock mx o/u KDKA. (WPT-CO)

1040 WHO IA, Des Moines 8/22 0507 c/w mx.
Good. (WPT-NV-R)

1060 CFCN AB, Calgary 8/23 0416 wx rpt,
Flash-flood warning for Calgary
area. Fair u/slight KNX slop.
(WPT-NV-V)

1080 KRLD TX, Dallas 8/17 0607 ID, time, mx.
Xlnt. (WPT-ID)

1100 WWWE OH, Cleveland 8/22 0441 wx fcst
For Ohio Valley area, T-40 mx.
Fair w/moderate XEPRS slop.
(WPT-NV-R)

1110 KFAB NE, Omaha 8/23 0423 ID, song by a
male vocal. Fair o/u KRLA.
(WPT-NV-V)

1120 KHOX MO, St. Louis 8/14 0600 wx rpt for
St. Louis (temp 71° F/22° C). Good.
(WPT-ID)

1130 CKWX BC, Vancouver 8/14 0601 wx rpt,
(temp 16° C/61° F). Good. (WPT-ID)

1150 KIIS CA, Los Angeles 8/14 0230 ID, Gos-
pel soul pgm. Fair. (WPT-ID)

1170 KVOO OK, Tulsa 8/25 0218 c/w version of
"Dream Lover". Xlnt. (WPT-CO)

1180 WHAM NY, Rochester 8/25 0217 wx rpt,
(temp 63° F/17° C). Fair. (WPT-CO)

1200 WOAI TX, San Antonio 8/22 0102 NBC nx.
Fair. (WPT-NV-R)

1210 WCAU PA, Philadelphia 8/23 0445 ID, PSM,
wx rpt (temp 69° F/21° C) Fair-good
w/moderate KLA V slop. (WPT-NV-V)

1220 CJOC AB, Lethbridge 8/25 0225 Auto deal-
er spot, c/w song by YL. Good.
(WPT-CO)

1460 KSO IA, Des Moines 8/25 0255 ID, c/w
mx. Signal local-likel (WPT-CO)

1500 KSTP MN, St. Paul 8/23 0451 wx fcst,
(temp 80° F/27° C) T-40 mx. Good to
fair. (WPT-NV-V)

1560 KPMC CA, Bakersfield 8/14 0203 tail-end
of rlg's pgm (sermon by OM). Good.
(WPT-ID)

1600 KWOW CA, Pomona 8/9 0211 ID, then "Summ-
er Days" from "Grease". Good.
(WPT-ID)

REPORTERS THIS ISSUE

BL-CT Bryan Lee, P.O. Box 69,
Brooklyn, CT 06234 TRF + longwire

LMP-OH Louis M. Poda, 395 Kling St.,
Akron, OH 44311 pocket portable,
TRF, Lafayette Guardian 7700

WPT-DC Bill Townshend, 4500 Conn. Ave., NW # 901,
Washington, DC 20008 TRF

WPT-CO DX'ing at Airport Holiday Inn, Denver, CO

WPT-ID DX'ing at Sun Valley Lodge, Sun Valley, ID

WPT-NV-R DX'ing at Downtown Holiday Inn, Reno, NV

WPT-NV-V DX'ing at Stardust Hotel, Las Vegas, NV

WPT-OR DX'ing at IRCA Convention in Portland, OR

WPT-UT DX'ing at Little America Hotel, Salt Lake
City, UT all w/TRF

BC-VT Bob Curtis, 17 Cobbleview Dr.,
Colchester, VT 05446 SP-600 + longwire

Thanks to Bill Townshend for an interesting
report of DX heard on his western trip.

73 and Good DX Bob Curtis

UNUSUAL AURORA

AN UNUSUAL SOLAR EVENT triggered one of the
most striking auroral displays of the decade
on Monday night, August 28th, delighting the
VHF/UHFers with a fine auroral opening but
flattening the lower frequency bands severely.
The source of the sudden upset was a large
filament of solar plasma observed on August 22
but which had disappeared from view by the
next day. The plasma filament, instead of
dissipating as such eruptions usually do, be-
came detached from the sun and was carried by
the solar wind to the Earth, where it arrived
at about 0245Z and triggered an ionospheric
storm. (from HR REPORT)

**central dx
roundup** Richard C. Evans
P.O. Box 1121
Havertown, Penn 19083

For those reporters living west of a line extending
north/south thru the Ind/Ohio state line and east
of the Rocky Mountains.

All CDXR reports go to: Bob Lazar
Apartment 208
511 West Doty Street
Madison, Wisconsin 53703

580 WIBW KS Topeka, 8/26 0100-0105, ID followed
by Herb Jepko Show. Caught this one
thru KALB s/off, SSB. Signal fair,
although broken by QRM. (JL)

770 WEW MO St. Louis, 8/31 2059-2100 s/off, some-
what garbled, but "...WEW, St. Louis,
portions recorded..." clearly hrd.
SSB, a vocal arrangement in key of C.
Signal very weak w/QRM/QRN. (JL)

990 WHOO FL Orlando, 8/24 0200-0210. AIR Mx, Wx,
MoR Mx, ID. Signal fighting a losing
battle w/QRM, mainly from WNOX. (JL)

1030 KCTA TX Corpus Christi, 8/15 1545-1550 ID in
EE; SS Mx, annts, Signal excellent,
some QRM. (JL)

1050 KVPI LA Ville Platte, 7/15 1612-1615. FF Mx,
PSA's also in FF. Splash from WNDE,
extra heavy QRN this afternoon. (JL)

1070*WHYZ*SC Greenville, 7/13 0115-0118 testing,
C&W Mx. Signal broken up by heavy
QRM. (JL)

1110 WFCG LA Franklinton, 6/15 1420-1425. Religious
Mx, Mx. Signal weak, w/l-second dips
and fades. Mod. QRM. (JL)

KPAL LA Pineville, 8/7 2057-2100. C&W Mx, then
ID and s/off. Signal barely audible,
w/QRM, QRN, and QSB. (JL)

KFAB NE Omaha, 8/25 0102-0106. NBC Mx, ID,
greyhound racing results. Signal
broken into little pieces by WBT,
but still readable. (JL)

1180 WHAM NY Rochester, 8/25 0945-0950 TC, anmt
for talk show "Opinion", then ID.
Signal undergoing QSB and "grizzly"
attack, but surprisingly good at
times. (JL)

1260 WIBV IL Belleville, 8/25 0030-0033, Wx, ID,
RR Mx. Signal fighting w/KGBX and
losing. (JL)

KGBX MO Springfield, 8/25 0025-0028 "Radio
1260-KGBX" ID, then RR Mx. Signal
occ. mixing w/WIBV. (JL)

1370 KSMY WY Cheyenne, (x-KVVO), Religious
programming. (BN)

1520 KOMA OK Oklahoma City, 8/4 0048-0054, ID,
RR Mx, adv. for RR concert, disco
outfits. QSB, QRN, distortion, but
signal fair. (JL)

1530 KVVO WY Cheyenne, (x-KRNY) back on the air
with these calls and return to C&W
Mx. On 0600-2400 according to bill-
boards. (BN)

1540 KGBC TX Galveston, 8/4 0005-0008. ID, disco
Mx. "The Super 1540" slogan. Ext.
heavy QRM, poss. from several stns. (JL)

1560 WDXR KY Paducah, 8/30 2257-2300. RR Mx, PSA
for Civil Air Patrol, ID, then NBC Mx,
Very poor signal - heavy QRM (including
"grizzly"), QSB. (JL)

KWCO OK Chickasha, 8/30 2200-2210 AIR Mx, adv.
for FM broadcasts o/KWCC-KXXX (FM), RR
Mx. Poor signal w/QSB, heavy QRM,
rapid flutter at times. (JL)

1590 WALG GA Albany, 8/4 0038-0041 ID, RR Mx. Signal
over/under KYOK. (JL)

KYOK TX Houston, 8/4 0010-0020. Coca-Cola jx,
adv. for disco cx at Sam Houston Colli-
seum, PSA for baby care info, disco
Mx. Signal o/u WALG. (JL)

A TIP OF THE HAT THIS WEEK TO:

JL - JOSEPH LANDRY, 11643 Baylor Drive,
Baton Rouge, Louisiana 70816
BN - BILL NITTLER, 603 West First Street,
McCook, Nebraska 69001

That's it for CDXR from this typewriter. I will forward all reports to Bob Lazar, but they may be delayed a week or so. My apologies to both Bill and John for my error in the August column in not changing the box number. Both had reports returned from "Box 392, Havertown". Oh well, it helped make this column a little bigger. Should be moving to Lansdale in a couple of weeks--notice given to this landlord already tho no apt. yet in Lansdale, as this one requires 60 days notice. Once I get there, I plan to work both SRS/SS and send reports to EDXR. Right now, the hour each way committing time plus the noise problem wipes out most interest in NX. Remember, all CDXR reports to Bob Lazar, who will definitely do a good job. 73.

 NANCY HARDY, Editor

2301 PACIFIC AVE.

ABERDEEN, WA 98520

western dx roundup

ALL TIMES ARE EASTERN LOCAL

Phone for hot WDXR tips: (206)532-6827 till 11:30pm(PLT) nightly--prepaid calls only

DEADLINES: Thursday Sept. 28, Thursday Oct. 12,
 Thursday Oct. 19, Thursday Oct. 26

REPORTERS FOR THIS ISSUE:

- (MB) Mark Bixby-1627 Highland Dr.-Newport FRG-7, 3' wedge Beach, CA 92660
- (DG) Dan Gradin-27540 SE Chase-Gresham, OR HQ-180, NRC loop 97030
- (NHP) Nick Hall-Patch-3272 Alder St.-Victoria, Transmogriified HRO, BC V8X 1P2 FET AA loop
- (BH) Bill Hardy-2301 Pacific Ave.-Aberdeen, WA FRG-7, SW-1 98520
- (WJH) Bill Harms-865 N-160 W #2-Provo, UT 84601 FRG-7, makeshift longwire & 3' wedge (WJH-WA) N. 2213 Vista Rd.-Spokane, WA FRG-7, 150' longwire & 3' loop 99206
- (JJ) Jef Jaisun-12860-136th Ave. NE-Kirkland, WA Hammarlund SP600, wedge 98033
- (bp) Bruce Portzer-6546-19th NE-Seattle, WA 98119 Bell telephone (hi)
- (MFS) Matthew Shugart-12561 Groveview St.-Garden Grove, CA 92640 Realistic TRF, Sony TFM-7400W
- (RW) Robert Wien-945 Desert Isle Dr.-San Jose, CA GE TRF long-range portable 95117
- *****
- 550 KOY AZ, Phoenix complete surprise 8/28 0352 into nx. Only station on channel at the time. (WJH-WA)
- 550 CFJC BC, Kamloops 0845 8/26 noted "JC - 55" jingle behind KARI talk. Fairish signal w/pop mx. (NHP-BC)
- 560 KLZ CO, Denver 8/28 0400 ID into nx. Easily manhandled KPQ. (WJH-WA)
- 640 (KFI) CA, Los Angeles has 1st MM SP 0700-0800 now. (MFS-CA)
 + 9/11 0312 off. (MB-CA)
- 650 KORL HI, Honolulu 8/25 0703 w/YL DJ. Poor, in & out o/WSM. Rare reception here. No other Hawaiians in. (RW-CA)
- 660 KOWH NE, Omaha 8/20 0703-0705 nx about Nebraska, wx & ID; promptly faded at 0705. (WJH-WA)
- 700 ?KBYP? AK, Anchorage 0825 8/26 must have been the one w/Alaska TC, and PSA for Alaska state something or other. Fair but fady. (NHP-BC)
- 710 (KPMC) CA, Los Angeles has been off every MM 0400-0600 since I started paying attention to such things. Usually leaves OC on & TT's frequently but other stations have made it through! Occasionally they have been known to stay off longer. Not "NSP" as listed in CoF list and NRC Log. (MFS-CA)
- 710 *WGBS* FL, Miami 9/4 0330 Tting u/unID Tter. ID--"This is WGBS Miami, Florida." Good signal. (DG-OR)
- 710 (KIRO) WA, Seattle per CE is off or ETing every other MM 0300-0800. Next one will be 10/2, then 10/16, 10/30, etc. (bp-WA)
- 770 ?*KXA*? WA, Seattle 9/4 0520 good w/TT which was burying KOB. (MB-CA)
- 790 (KABC) CA, Los Angeles 9/11 0315 off. Looks like they have either a 1st or 2nd MM quarterly SP. (MB-CA)

- 860 KWHO UT, Salt Lake City 8/20 0830 s/on announcement into mx. Fair signal. Promptly faded. (WJH-WA)
- 910 (KNEW) CA, Oakland 8/27 0610 totally off because all the DJ's were at a local educ. TV station to raise money, so they took night off. XEAO only thing there. (RW-CA)
- 910 ?KPOF? CO, Denver 9/3 0813 w/relig. program. (DG-OR)
- 910 KURY OR, Brookings 9/4 0901 s/on ID. Umm. (DG)
- 920 KVEC CA, San Luis Obispo 9/4 0900 clear ID then nx. (DG-OR)
- 920 KDHL MN, Fairbault 8/20 0726 popped in w/ID "You're listening to KDHL" into mx. Complete surprise. (WJH-WA)
- 920 KGAL OR, Lebanon ID into nx about Oregon 8/20 0740. Fair to good trying to dodge the QRM. (WJH-WA)
- 920 KVEL UT, Vernal ABC Information nx ID into "Master Control" program. 8/20 0803-0815. Should be widely heard. (WJH-WA)
 +9/4 0800 s/on ID, then gone. (DG-OR)
- 950 KBRJ ID, Boise 9/1 0830 s/on u/KJR, then into nx. (DG-OR)
- 960 KLAD OR, Klamath Falls 9/1 0916 ID u/KABL. New. (DG-OR)
- 980 CKRM SK, Regina 9/11 0328 poor in KFVB OC (which was noted totally off at 0409) w/spot for Itasca RV's. "RM-98" slogan at 0333. (MB-CA)
- 990 KTRM TX, Beaumont 8/27 0413 weak ID w/very poor signal. Lost after a minute or so, but no trace of KKIS. (DG-OR) (KKIS has weekly SP Sun.--NH)
- 1010 KXEG AZ, Tolleson 0100 8/31 "KXEG Tolleson Arizona, United States of America" ID between religion. Pretty big signal for 250 watts. Also noted w/C&W and "XEG-1010" ID 0428 9/4 MM. Another channel gone? (NHP-BC)
 +9/1 0307 (ex-KHGS, Phoenix) is now on RS, fulltime NSP as on MM also, ID's as "XEG-1010" & "Arizona's Gospel Giant," as well as "The Golden Gospel Machine." Great signal. Affiliated w/XEG-1050, hence call. Mx sort of gospel C&W, a new pest. (RW-CA)
 +9/11 0358 fair to good w/Arizona wx, 0359 spot by John Denver for the FEA about saving energy. 0400 SS-EE ID. Has apparently gone RS, so say good-bye to 1010. (MB-CA)
- 1010 *KCHJ* CA, Delano 8/27 0654 ET'ing again w/same Star Wars album & drum song as on five previous ET's. Poor to fair, occasional deep fades w/XEHL in there also. C3PO (one of Star Wars robots--NH) sounded just like a TT, hi. (RW-CA)
- 1020 (KTNQ) CA, Los Angeles is usually off a couple times a month but it's most unpredictable, Sun. morn or MM irreg. (MFS-CA)
- 1030 KTWO WY, Casper 9/4 AN for Jerry Lewis telethon. (RW-CA)
- 1040 KPOI HI, Honolulu 9/11 0737-0802 finally pulled this one out. Rock mx, several K-Poi ments. Weak in WHO null. (JJ-WA)
- 1040 *WHO* IA, Des Moines 9/3 0413 ID, strange 40's type dance mx, repeated & repeated "Program temporarily interrupted, please stand by," and off & on. (RW)
- 1050 KWSO CA, Wasco 9/10 2155 poor w/XED QRM. Had Carmel area nx, then local wx at 2156. Frequent mentions of Wasco. (MB)
- 1060 KKKQ AZ, Tempe "The new K-Q" noted here w/call change (ex-KUPD) 9/5 0044 w/rr mx. (WJH-UT)
- 1060 *KAMA* TX, El Paso 8/28 0234 o/KKKQ in KPAY null w/400 cycle tone, ID at 0240 then off. (RW-CA)
- 1070 (KNX) CA, Los Angeles is off the 2nd MM of each month till 0700 (don't know s/off time), not NSP as listed in CoF list. (MFS-CA)
 +9/11 0403 noted off early for regular 2nd MM ET/SP. (MB-CA)
- 1100 KFAX CA, San Francisco now seems to have nightly 0400 s/off. (RW-CA)

1130 KLEI HI, Kailua 9/4 0331 fair w/Hawaiian mx. (MB-CA)

1140 KMJJ NV, N. Las Vegas 9/4 0530 ID w/top 40 mx but signal poor to fair. (DG-OR) +9/4 0619 sounded like RS on 2500 w/DA, also noted Sat. night, maybe CP is on now. (RW-CA) +Dominate here on 1140 every night. Another channel gone. (WJH-UT)

KMJJ 8/28 0301 ET'ing again, but w/a much poorer signal than on previous ET's, maybe using 2500 watts future nighttime DA. ID w/mention of xmtr maintenance, another ID later as "KMJJ, the Magic 11." (RW-CA)

1170 (KLOK) CA, San Jose 8/28 0505-0600 totally off except for occasional OC's. (RW)

1170 KCBQ CA, San Diego 8/28 0711 ID w/top 40 mx u/KLOK (DG-OR)

1180 ?VOA? FL, Marathon Key 8/28 0515-0552 unID SS in there w/light instrumental mx, then what sounded like "Yankee Doodle" at 0530. Very poor w/much QRN. No sign of WHAM, male announcer, maybe HJOV, also? KLOK-1190 off. (RW-CA) ("Yankee Doodle" points to VOA, although they are supposedly off at this hour. Help?--NH)

1230 KIBS CA, Bishop 9/3 2323 blockbuster signal on skywave w/ad for Johnson's Supermart, SID "Country music is K-I-B-S, the greatest country in the world," similar jingle to KMAK-1340. (RW-CA)

1230 *KQIK* OR, Lakeview fair to good on f/c 0306 9/4 w/TT & code IDs. Near total null of CKDA-1220 made this possible. (NHP)

1240 KSMA CA, Santa Maria 9/4 0132 s/off ID then NA. (DG-OR)

1260 KVSP NM, Santa Fe 8/28 0740 clear ID w/nx. (DG-OR)

1270 KWRL NV, Sparks-Reno 9/11 0855 strong s/on w/SSB, Lord's Prayer, studio & xmtr addresses, "K-whirl time is 5:59." (JJ)

1290 (KMEN) CA, San Bernardino 8/28 0327 noted off. Only KCUB heard. (MB-CA)

1290 KOWB WY, Laramie 8/28 0735 SID then C&W mx. (DG-OR)

1300 *KPTL* NV, Carson City 9/4 0547 xlnt w/ID "This is KPTL, Carson City, conducting xmtr adjustment tests," into light instrumentals, tones later on. (RW-CA)

1300 KRVB OR, Medford 9/4 0549 noted w/ID, ment. of number in Medford to call to pledge money, 746-6696. Dominant on clear frequency w/KMPS off. Is this legal? (RW-CA) (Not if a "scheduled program." --NH)

1300 *KMPS* WA, Seattle 9/4 0550 off RS; ID by YL "This is KMPS, Seattle, testing." (RW-CA)

1310 KAAM TX, Sallas "13-K-double A-M" ID noted 0440 9/4. Seemed like rr & telethon programming but not sure as frequency was pretty messy. (NHP-BC)

1340 KBET NV, Reno 8/28 0549 ID w/C&W (DG-OR)

1340 KAPA WA, Raymond-South Bend 9/5 s/off ID 2130. (DG-OR)

1390 ?WFBL? NY, Syracuse 9/4 0435 garbled ID on tape, but too much KCEY to be sure. (DG-OR)

1390 KCEY CA, Turlock 9/4 AN for telethon. (RW)

1440 KUHL CA, Santa Maria 9/4 0402 noted on for telethon, frequent ID's "...on 5000 watt KUHL, Cool Radio, Santa Maria." (RW-CA)

1440 CFCP BC, Courtenay 9/4 0505 ID, on AN w/Rock Genesis program. (DG-OR)

1450 KONE NV, Reno 8/28 0509 several K-One IDs, C&W mx. (DG-OR)

1450 KEYY UT, Provo 8/28 0517 ID w/top 40 mx this auroral night. Good signal, o/u KONE. (DG-OR)

1460 KYSN CO, Colorado Springs ID into rr mx 9/5 0024, mixing w/KENO & CJMH. (WJH-UT)

1460 KENO NV, Las Vegas 9/5 0016 frequent "keno" ID, w/imitation Wolfman Jack announcer & top 40 mx. Good signal. KEYY-1450 slop 99% nulled. (WJH-UT)

1460 CJMH AB, Medicine Hat CBC South Alberta ID heard 9/5 0100 into a mx and talk program. (WJH-UT)

1470 KSEM WA, Moses Lake 0358 9/4 fair in CJVB OC w/rr & telethon, same as last Labor Day. (NHP-BC)

1490 KRNR OR, Roseburg 8/28 0306 great signal w/KXRX-1500 off, nice clear SID "When you listen to us, you feel good, KRNR," into wx for "North Town." (RW-CA) +9/13 2100 barely atop w/live ID they stole from KNX-1070; "Only one (inaudible) station has the worldwide facilities of CBS news. K-R-N-R, Roseburg, is the one." & into CBS mx. (BH-WA)

1540 (KPOL) CA, Los Angeles noted w/midweek SPS 9/7, 8, 9 at 0314, 0430 and 0355 respectively. (MB-CA)

1560 KWCO OK, Chickasha 9/4 0729 ID, good signal. (DG-OR)

September f/c's heard:

1st MM KVAC-1490 WA (DG-OR)
 KMTX-950 MT (DG-OR)
 KQIK-1230 OR (DG-OR) (NHP-BC)

September f/c's not heard:

1st MM KBFI-1450 ID (DG-OR)
 KMCL-1240 ID (DG-OR)

unID's:

870 unID 9/4 0256-0305 slow singing, female voice, maybe relig. w/WWL. Maybe male announced ID at 0300. Very weak. KAIM? (JJ-WA)

980 *unID* 8/28 0303-0305 unID TT loop ESE u/KFWB. ID at 0305 as "K??C (or E) conducting equipment tests," then off at 0305. (RW-CA)

1480 *unID* 9/2 0630-0645 unID TT u/KWIZ beginning 0630, ending 0645 w/no ID, looping ENE. KYOS also in there, so not them. A r/c? (RW-CA)

1480 unID Poor 9/4 0343 in KWIZ SP. At 0343 there was a PSA against child abuse, followed by a YL who read some fashion tips from Glamour magazine. At 0346, there was some pop mx. KWIZ killed my ears & any chances for an ID at 0357 w/a TT. (MB-CA)

1560 *unID* 9/8 0430 poor to fair w/OC & intermittent TT. KKAA heard underneath. Assumed gone by 0445 after 10 min. of OC. (MB-CA)

Thanks to the reporters this week who used the new WDXR format. Soon we'll begin the weekly issues, so be sure to keep track of the deadlines (they won't all be Thursdays--especially in December!!).

~~~~~ John Zondio  
**eastern dx forum** 6617 Maryland  
 ~~~~~ Hammond, IN 46323

John Clemmer-2937 W. Gilbert-Peoria, IL 61604
 I had a great time at the WTPDA convention in Louisville visiting with IRCAs Don Erickson, Rich Segalas, and Ted Fleischaker. Some decent DX lately thanks to WMBD and KYOK being off the air. See CDXR for details. I am going to submit a bid to host IRCA's convention in '79. It looks like St. Louis will host NRC's convention in '79. Since St. Louis and Peoria are so close (170 miles), it has been suggested that I have IRCA's convention the weekend of August 24-26. This is the weekend before Labor Day (the date of NRC's convention traditionally). I welcome all comments, suggestions about the date of the convention--- either August 10-12 or August 24-26. This was suggested in order to make it easier for everyone to attend both conventions and possibly save money on airline tickets, etc. Please let me know what you think about this. Good DX and 73.

Paul R. Mount-471 Emerson Ave.-Teaneck, NJ 07666-
 (201) 836-1137

I wouldn't have thought that the station on 1450 in Cranby PQ would give awards to listeners, much less distant listeners, but Susan S. won the CHEF award anyway. A trip to the midwest with my family gave me the chance to visit with and talk to several DXers, some old friends, some new ones. Friday, June 30, I visited George Greene and Dave Grim in Akron, staying at George's home. I got to hear some FL stations that Dave had heard earlier in the day. Visited the radio/TV facilities at Ashland College Saturday, then continued down I71 to Wyoming, a suburb north of Cincinnati. I've DXed so much from there that I keep a separate total from there.

Among the stations added this time were: KRLD, KATZ, WYXI Athens TN (and 3 others on 1390). Someone on 1400 using promos like "14 KTL", not IDed. WYXI is going to 2,500 watts day, and was testing using country music, giving phone #, should be on 2,500 by end of July (1390 kHz). I met ex-IRCA Fred Prechtel, who said that the last few DX seasons had had bad conditions, so he lost interest somewhat. We drove around Cincy on a deserted July 4. (continued next issue-jz)

Greg Monti-5 Hickory Road-Bayville, NY 11709
Made a brief examination of daytime DX on the south shore of Long Island. Actually, there was nothing special. Easily IDed were WTAR-790 and WVAB-1550, at about 350 miles each, but whaddya want for the Atlantic Ocean? I didn't really expect Washington or Baltimore because of their inland locations, but was hoping for WBAL-1090 at the very least. Forget it. WHLI-1100 is only a few miles away. They splatter a bit, too. WNBC-660 is splattering more than usual lately, and, believe it or not, it's more noticeable on the TRF than on some lesser receiver. KTNQ-1020 in Los Angeles is up for grabs. After all that trouble Storer had getting fulltime authorization and in developing a new format and hiring a new staff, they're giving up the ship. Rumors, nay - announcements, that KTNQ would go country (as KXAM) and that KGBS (FM) would go to top 40 (as KHTZ) are now back to the rumor stage. The FM may stay where it is after all. The top 40 competition among too many stations in the area will certainly be lessened with the disappearance of 10-Q. At the least there's KFI, KHJ, KIIS, KGIL (the AMers) doing that format. DX this summer: fair on AM, poor-to-fair on FM, nonexistent on TV. So much for warm weather. 73's and good DX to all.

Bill Wurtzel-32 W. 31st St., #7-New York, NY 10001- (212) 594-4892
As a new member of IRCA let me say a few words about myself. I've been DXing about 20 years. I have heard most of the clear channel stations across the USA and Canada up to the midwest. Have also heard Texas, Colorado, Utah, and Mexico. I'm a veteran from the U.S. Army on a disability, and a record collector. I also write a lot of poetry, comedy and songs and plan to sell some of the material or put some stage acts together. I like to make words rhyme, and turn out many limericks. I'm in NRC and the Brooklyn DX Club and MNRC. I recently heard a part of a minute of Radio Paradise on 1265 kHz the night of July 24 at 10:20pm on a small Panasonic portable model RF-513. There was mention of the Book of Proverbs, punishing children, and Back to the Bible. I have to use Madison Square Park at night to DX. I live in a 24 by 30 foot loft near the Empire State Building and my location is not the best to DX from. In May I hosted a get-together which brought 6 DXers here for lunch and getting acquainted. If any other members of IRCA are in my area or passing through, I'd like to meet you. It is well worth a visit to me and see a wall of records. I have around 5,000 of them. (continued next issue-jz)

Brian P. Sherwood-221 Larch-Elmhurst, IL 60126
Greetings. First, an apology due DKK: I'm sorry if my wrong choice of words offended you last Forum. What I meant was if IRCA had more sources of outside income, maybe dues wouldn't have to go up so much. Also, why not indent between paragraphs of articles instead of double-spacing. I noticed all the editors double-space except for bp. He triple-spaces. Save lotsa space, and still not have the kaliedoscope effect. Or, most obvious, why not transfer publishing to a cheaper location? This wouldn't work cuz too many members are content to sit on their butts and let the editors and publishing crew (both overworked and understaffed) do all the work. I'm talking to you whose only contribution in 10 years has been a Forum to brag about how you veried 50 states. Remember, there's labor involved in producing DXM. If you could find enough members who care (good luck trying) enough to do some work on DXM, transferring publishing might be possible. But everybody seems content to let 20 outta 400 do it. all. Support IRCA, it's your club!

~~~~~  
**eastern dx forum** John Zondlo  
~~~~~  
6617 Maryland
Hammond, IN 46323

David Fontanez - 87-17 97th Ave. (2R) - Ozone Park, NY 11416

Greetings from the Big Apple. Have logged 10 (ten) new stations this month, the highest for me since July 1975 (another summer month!). New ones here include KXEL-1540, WIBC-1070 and WNDR-1260 at 7AM. Also, a couple of regionals from VA. Not too shabby (for me anyhow)! Cx here are the pits now, ever since Sunday (Aug. 27). Not even WKBW is heard these days. I've noticed off and on heterodyning whistles on 1540 and 1580 along with WQXR's audio (they being on 1560). Some nights they're there, some nights they're not. They always appear together (whistle and audio), and when they do the whole band from 1530 to 1590 is fritzed. Oh, well.... By the way (Phil, that is), I just now saw the note you enclosed with my order 3 1/2 months ago, as it accidentally fell out of the envelope. Anyway, thanks Phil, I've received everything in good order. Now, can someone help me? I have in my possession a Hallicrafters S-38A. I need the schematic so I can replace a few missing parts and use it as an auxiliary receiver. If someone knows where I can get one, drop me a line. Hope to put up a nice longwire in next few weeks. More next time. Chow, good DX & 73.

Bill Wurtzel-32 W. 31st St. #7-New York, NY 10001 (212) 594-4892

(continued from last DXM) Here are two limericks about radios I wrote recently:
I just returned from a trip to Vienna
And was shampooing my hair with Henna
Listening to my radio
Which went dead, for someone had to go
Ahead, and swipe my outdoor antenna!
and
My radio picks up a lot of buzzing sounds
Like a bunch of yapping bloodhounds
As if it has a clearance
For all kinds of interference
So I threw it against the playground!
I have a lot more limericks which I will submit later on. In closing, I would like to say:
It makes me extremely happy
To join IRCA during the month of May!
By the way, I have a number of radios I DX on. Among them are the Grundig City Boy 1100, a Sony ICF-8000, a Realistic TRF, and the Radio Shack Astronaut 6-band. Hope some of you DXers out there can come by to visit. My address and phone number are on top.

Paul R. Mount-471 Emerson Ave.-Teaneck, NJ 07666- (201) 836-1137

(continued from last DXM) WNOP, 740 Newport KY broadcasts from orange tanks along the Ohio riverfront, visible from Riverfront Stadium. In Anchorage, near Louisville, Bob Walker came over with a box of goodies and we discussed geography, baseball, McDonald's, and frisbee technique. The next day Gary Atkins drove me around Louisville and we also walked around the Belvidere and River City Mall where WAKY has their studios. Then Ted Fleischaker took me to dinner and Fred Nordquist of Syracuse NY dropped by his house. Nice license plate. Friday I visited IU and Butler U on the way to Chicago. I took a train to IN to visit our editor John Zondlo. I got the complete tour of WJOB, in addition to the WTPDA National DX Monument in Hammond. Thanks to JZ for the lunch and other kindness. (Continued next issue-jz)

Dr. Richard E. Wood-Boyd Hall-Plymouth State College-Plymouth, NH 03264

Just back from a delightful two months in Europe. In Finland, I gave a "North American MW DX Quiz" to the annual DX camp of Suomen DX-Liitto, the Finnish DX League, at Orisberg, near Vaasa, and are they well-informed! May write an article or two for the Monitor on DX and DXers in Finland. Brought back a Selena portable bought from the Soviet trade delegation in Helsinki. May be unique among NA DXers. Now have a 400' longwire up; attached it to a phone pole, but the company took it off and attached it to a nearby tree with no audible loss. Cx 8/28 were auroral with Latins everywhere, yet CKAD 1350 Middleton NS was all alone 2000. You might add that one as a good bet for NS from the NY-NJ-New England area in Roger Morby's excellent list in the 8/5 Monitor. Speaking of excellent lists, Mark Connolly's November 1978 TA Plan Predictions in the 7/8 DXM is very helpful.

(although two frequencies, 765 and 1332, were inadvertently omitted). Noel Green, Blackpool, on BBC World Radio Club 8/30, reported excellent NA cxs from England 8/22-24, with WOAI, etc., heard. Not here, however. But 8/30 brought Morocco 1115 and on 8/31 VOA Munich 1196 was notably good, better than WDP 1586. FM and TV tropes have been outstanding lately, with lots of Canadians heard.

Michael Borner-1304 Airline Park Blvd.-Metairie, LA 70003

In late April I accompanied my wife, a teacher, on a chaperoning trip with high school seniors to Merida, Yucatan. I had nothing to do but enjoy the trip; the Mayan ruins are more impressive than any photos can show, and if you ever have the opportunity of seeing them, by all means go. Needless to say, I did not do much radio listening. My preoccupation is with FM radio, and apart from getting a McAllen TX FM stn, the only thing to be heard is XHGL "Stereo Maya" on 97.7, which is owned by the pioneer MW, XEZ, along with TV XHY-3 and XHTP-9. The night before I left, Susan pulled hotel duty and I did spend some time with MW on a small GE portable. Heard were KGBT 1530 Harlingen TX in SS, WUNI 1410 Mobile AL, WLCY 1380 Tampa FL, WLAC 1510 Nashville TN, 1320 KXYZ Houston TX, WFOA 1390 Gulfport MS with its new NBC affiliation, KRGV 1290 Weslaco TX, 1220 XEB Mexico City, WOAI 1200 San Antonio, KVOO 1190 Tulsa, 1070 KEMR Houston TX, 1040 WHO Des Moines IA, an unID with Jepko on 970/80, 960 WERC Birmingham AL, 890 WLS Chicago, 870 or 880 Cuba, apx 860 Guatemala--loud and clear. Strangely enough, I heard no other Central American station in our hotel. (continued next issue-jz)

**western
dx forum**

Rick Heald
1581 - 20th Avenue
San Francisco, CA 94122
Ph: (415) MOnrose 5-4201

DAI SYS-45 E. 16th AVE. #305-VANCOUVER, BC V5& 2T1

Greetings. I hope everyone is having a spiffy summer, I certainly am. I'd like to clear this Quebec issue up once and for all. I'm a Postal Employee, so you might call me an authority on the subject. The ONLY 2 letter abbrev. the Canadian Post Office officially recognizes for the Province of Quebec is "PQ". Technically if the Post Office wanted to get picky about it they could return mail destined for Quebec w/the wrong abbrev (although I doubt they would go to that extreme). Just the same, I think IRCA should immediately go back to the PQ abbrev. Just for the legality of it, if nothing else. Let's try to keep the pages of IRCA clear of Quebec vs Canada hassles, leave it to the politicians to figure out. How about it my fellow Canadian members? Especially you guys in Quebec who stirred this whole thing in the first place. (All further political discussions will be deleted-Rth). Summer DX is pretty bad this year so far, not a thing exciting logged at all. I'll try to make it to Portland. 73.

KARL RAYMOND-P.O. BOX 947-LAWDALE, CA. 90260

Hello again. Has anyone rcvd a verie from KXIV 1400 Phoenix for their extended FC on 3/6/78? After 3 mos I sent a duplicate report to the CE at his home in Tempe. No reply to this one either. I know they were delivered because they were not returned by the PO. Big nx around SoCal is according to last Sunday's L.A. Times, KTNQ will change call letters in early fall to KXAM and change format to to guess what Rick? That's right, Country & Western. Have done no DX'ing since my report for the Anniversary issue so will say "so long for now."

PAUL W PETERSKY-112 NE 50th ST-SEATTLE, WA 98105

Greetings! Since Feb, I've had numerous frustrations trying to coordinate my free time w/optimum cx and somehow I manage to tune at the height of some ungodly aurora. The only way I've enjoyed TP reception has been a vicarious experience via the Hall-Patch and Tomer reports, hi. I did hit one morning w/the usual 655 N. Korea, 830 Japan & China really weak on 1040, but that was about it. I've had some image problems w/the Sony ICF-5900W when I used it in conjunction w/the longwire and I don't know if it is my QTH or if Sony, like other manufacturers make a cheap shot at

the BCB. (Your latter theory would be a good bet-Rth) The SW bands are considerably better w/the dual conversion. If anybody else owns this rx, please drop me a line and give me your opinion of its merits, as I want to compile an accurate review. Jerry Robertson--I'd like to hear from you. Que pasa? I hope to meet some of you at the Portland Convention, providing I get back in time from CO. Keep tuning during the Summer. Even w/the QRN, you can get some good stuff. 73.

BILL MORIYAMA-2662 22nd AVE-SAN FRANCISCO-CA 94116

Heho, again. I'm finally writing after all these months of being a member (hate to be the type who, when you open the DXM every other year, there I am, hi). Well, in the past few months, I really didn't have much to talk about as any type of radio listening was ruined by noisy power lines. (It was so noisy that it drowned out the KNBR slop, hi). All that is gone now as we moved to an "RF quiet area". (Now I actually do some "serious" DX'ing). Picked up KRML Carmel on 7/15 around 7.30PM (that was the stn featured in "Play Misty for Me".) and when they signed off, in boomed KERN Bakersfield. 1M around 2.30AM, I tuned by 1310 (KDIA off) and got KQXE Mesa---might have been a Test or something as they went into and out of mx into a legal ID and to dead air. Rotated the TRF and got KBIN Great Falls. Glad to see a technical column. I'm a "transmogripher" of sorts & might be able to help and send in a few things, perhaps on noise reduction. Must've tried everything to cut that power line noise (short of chopping down the pole)...it was like trying to fend off a swarm of locusts w/a can of Raid...being some 20 ft from the pole didn't help much, either. Will get some DX reports out, too. Till then, 73. (Nice hearing from you neighbour, but please, my poor eyes, double space-Rth)

FRANK ADEN, JR-105 SW BROOK, #4-NEWPORT, OR 97365

As you can see, I'm now living in Newport, only 4 blocks from the Pacific Ocean. This should be an excellent location for BCB DX and I'm looking forward to this fall. Due to lack of support the Central Oregon Beverage Party has been cancelled. Former IRCA member Bill Frahm has found a vacated airstrip South of Boise so I may be attending a get-together there where some of the old Idaho DL Assoc members are planning a Beverage Party o/Labour Day. Bill also reports that between 40 to 50 KBCI/IRCA Convention QSLs had been mailed out. I'm looking forward to the IRCA Convention, but there is the possibility I will not be able to get the time off. 73.

GENE MARTIN-3303 E. AVANS AVE-DENVER, CO. 80210

Looking ahead to the promising TP prospects after Nov 23, maybe the major BCB stns in Australia and N. Z. should be sounded out as to whether they know what musical key their 6 pips on the hour are transmitted in. I suspect the chances are good that they have never given a thought to the question, and may be amazed to learn that pips are also musical notes. To review what I have picked up on the matter, 1971 pips from 3LO came in the key of G. Pips heard that same morning one hour later on 730, maybe 5CL, were in the key of C, Pips hrd this Summer from 3 R. Australia outlets came in F-sharp. I guess it's pretty clear that pips from ABC-Australia may be always 6 on the hour, but they probably vary from stn to stn as to the musical pitch. The only US stn I know of which ever transmitted pips on the hour was WLN back in the 30's & 40's. I don't know what key WLN's 6 pips were in, but I remember the stn's pages always pointed out the pip generating gizmo in master control as they escorted visitors around the 6 floors of Crosley Sq. This was a clock mechanism installed in a panel about 6x12". The pips were produced electronically, rather than musically and this is undoubtedly still the case for the single pip on the hour we hear on the radio & TV nets. It's even possible, I suppose, that a manufacturer of this pip making equipment for stns does not always turn out products that make the same pitch. The pitch may vary from one production run to the next one as manufacturing specifications may change. And stns probably install this equipment without ever giving a thought to what musical note is transmitted. 73.

DAVE ROGERS-BOX 74-BUFFALO, OK. 73834

Greetings. Just returned from a vacation in CO. and thought I would report DX there (or lack of it). We stayed at a lodge NW of Antonito, CO and in the daytime the AM dial was almost dead. KGIW 1450 Alamosa was the nearest stn and they were only fair (oddy, their FMR, KAIQ 93.5 put in a better signal). KIUP 930 Durango was also fair as was KSLV 1240 Monte Vista. Picked up a stn I think was in Pagosa Springs, CO. on 1400 giving location and ID'ing just as "R. 14". Not shown in 73-75 NRC log. The strongest stn in daytime was KOB 770 w/KAFE 810 also noted. Several stns were picked up on SSS not hrd in Buffalo including KUBC 580, KRKE 610, & KSTR 620. At night, the Denver stns were loud as were KVCQ 1170, KGYN 1210 & KOMA 1520. The mtns sure block out groundwave, I can receive several Denver stns in Buffalo (KLZ, KHON, KOA) in the daytime in Summer, but that's o/flat terrain. No Denver stns were heard in the daytime from the lodge on the car radio. Several stns were hrd on the road: KKIT 1340, KRTN 1490, KCRT 1240 and KFLJ 1380 (saw their studio & antenna from I-25). According to the logbook it would appear there isn't very much spacing between stns on GY channels in CO (like KSLV & KCRT are both on 1240 and are only about 90mi/144km apart on the map), but I guess they don't interfere w/each other. One new verie: a v/l & CM from KAYQ 1190 for a report of 1/20, v/l dated 3/20 & rcvd here 7/14! V/s is Benton Weiss, Tech. Director. The longest wait I've had on a verie was from KRQE 930, sent report in 1964, v/c rcvd in 1975 w/out a f/up! Can anyone best 11 yrs? I hope we can find some middle ground on bulletins so dues won't have to increase too much. 73 and Good DX.

BILL FARMS-N 2213 VISTA-SPOKANE, WA 99206

How are things going? I keep on hearing about the hot wx in TX, but we have the opposite. We've had 1 1/2" of rain since July 1 and today is July 18 and it's already the 3rd wettest July on record. It's raining right now to boot. Anyway, we've had a few mild thunderstorms, so it does cause a slight DX problem. Even so, I've still been logging stns left and right. My 450th stn entered mt shack in the form of KPUR 1440. My total for Spokane now stands at 452 total hrd. While my total isn't as high as others, I'm still storming up from the rear. I've logged over 200 new stns here in Spokane since last Sept. I just bought a "Frog" and built a Wedge right away. I can put large nulls on all of my locals w/the Wedge, but the gain is still nothing close to my lw. Like Bill Hardy, I've noticed more images all over my FRG-7 in the daytime. I hope it's not just the radio. I don't have any more to say, CUN Portland. 73 de WJH

MATTHEW F SHUGART-12561 GROVEVIEW ST-GARDEN GROVE, CA 92640

For those of you who have been known to complain about the horrid Summer cx, I'd like to announce that here they are among the best they've ever been! With 29 new stns this month, July is already my second-most productive month ever. Dec 77 ranks #1 w/37. Among my "milepost" accomplishments this month: Logging KS (fanfare pls) and logging #300. KS, so far my most elusive state, was finally bagged July 03 for state #30. KSAL 1150 was the one I hrd - I wasn't even going after them; I just noticed someone w/KIIS and knew it wasn't XERM. Also hrd KBUF 1050 the same morning. Everyone had told me KOAM 860 or WREN 1250 would be the best bet for KS, but I really think it has to be KBUF @ 5kw-D on a totally clear channel. (What do you think RTH?) (Still try for KOAM 860, easy as pie-RTH). Anyway, as it should be, #300 was also from KS: KNBI 1530 (ever hrd them?) (Oh, that pest, hi. Did a TEST for HRC 'bout 13 yrs ago-RTH). I still hear KOAM tho I did finally hear WREN w/a good signal. I guess this proves DX is unpredictable as it seems everyone else has hrd KOAM long before KSAL. (KSAL would probably be the best bet here if KIIS would ever blow a fuse or otherwise something else, hi. Speaking of blowing fuses or otherwise being silent, 3 related South-of-the-Border powerhouses (XETRA, XECP, XERPS) were all off Sat 7/22! Unfortunately, it was in midday so only thing new was a nice (?) signal from KNBR 680. (I also made the startling discovery that KFT slops 680 more than KMPC or maybe even more than XETRA). Top slop honours tho still seem to belong to KLAC, considering their lower power. XEPRS came on abruptly w/SS @ 3.59PM PDT when I

had the volume all the way up, hi. They must have gone off again as @ 6.31PM PDT they had an actual, official-sounding s/on anct. "XPRS returning to the air", as if this were an every-day happening. (I wish it were, hi). I was hoping for a shot at KNCR, (I had ~~lim~~ ~~to~~ ~~be~~ continued next issue-Rth)

GARY LARSON-2806 LINCOLN-BURBANK, CA. 91504

Greetings from Burbank again on this MM, the 24th of July. I'm at a place called Joy Mfg in LA where I usually work a couple days a week. I tried the band a little after midnight, but very little was hrd. I got little or no TVI, mainly because I didn't use AC. Gary Parton, formerly of San Mateo, CA, is now here in the San Fernando Valley, looking for an apt. and job. He might even try to work for the same co. I work for temporarily. Maybe he and I will come to SCADS next time in Orange CO. Been hearing that the wx lately in the desert areas in CA is pretty hot. Hope Mort in 29 Palms is getting through it OK. I'm typing this Forum on an IBM Selectric at Joy, so it is easier to get a Forum to DXM. I'm also using their letterhead and envelope. (look OK, RTH?) Gary P. loaned me an article from the LA Times Calendar mag. on SoCal morning radio personalities. Looks very interesting. Gary also brought back w/him, some cassettes of various Bay Area stns, and others that he taped on his way here on Hwy 101. Hrd one of KUIL 1440, where the DJ mentioned that they had 5kw of power. I hope to be bale to go up North in a few mos to help GP move some of his bulkier things to his new place, and while on the road coming South, I look forward to hearing many different stns. What was this I hrd about KTNQ changing calls to something else and going Country? Can't remember where I hrd it, but hope that whatever they do, they do it good. Enough this time, so happy DXing and 73.

MARK BIXBY-1627 HIGHLAND DR-NEWPORT BEACH, CA 92660

Lots of DX news this month, so let's get right down to business. My v/l for the 1610 low power US/Mexico border stn arrived in 7 days. Per the v/l, intended range is 5 mi using a 1/2 wavelength dipole and "if properly aligned it should transmit at 16 KHz (sic)". Also, per v/l, I'm the first person other than border travellers to acknowledge reception. (I think Father Jack and Mike Hardester might challenge that, hi-Rth) For a QSL, try this address: Manuel E. Garzon, Supervisory Customs Inspector, U.S. Customs Service, Office of the Asst. District Director (Border), San Ysidro, CA. 92073. Latest new DX around here includes KDKA, KUPL, KPRQ, & KEYY (these two made my whole MM, hi). KTNQ, KIEV, KPOL were all hrd w/unusual midweek ET/GPs and KFAC was hrd off for the first time ever on MM 7/10. The biggest mystery here in a long time can be found on approx 875. Audible from Local SS as late as 0400 BLT, this stn is EE, plays only C&W mx, has no detectable spots, gives wx and occasional rx. This is an apparently new stn as I first noted a het against WLL on 7/11. (Have you considered a "pirate"?-Rth). Due to Murphy's Law and extreme QRN, no ID has been hrd. See DXWV for more details. I've just developed a set of computer prgms to maintain a stations-heard list. You can list selected categories by frequency or by state. If anybody out there is interested or has developed other DX-related prgms, pls drop me a line. SASE appreciated but not necessary for reply. 73 from MB in NB.

MORTON D NEWMAN-7682 NORTH STAR AVE-TWENTYNINE PALMS, CA. 92277

July & Aug to date have been good in daylight but heavy w/static at night to discourage listening. It seems strange seeing lightning nightly to the East w/no rain or thunder, but I guess that's the desert. Las Vegas news from correspondent Rick Newman is that KBAM 1340 drops ABC for United Press. The new KMJJ 1140 will pick up ABC and move to new studios and XR site in N. Las Vegas and be required to give N. Las Vegas in its TD's. The stn will be 10kw day & 2.5kw night. KLUC, its parent, will remain FM only in Las Vegas. As I write this (8/9/78) 1140 still relays the the FM stereo KLUC and gives that call between each selection and on the hour briefly say KMJJ Las Vegas. So the move has not been made yet and 1140 is still daytime only. Rick Newman, IRCA member, is DJ on KBAM from 7PM-Midnight FLT. KCMJ 1010 Palm Springs now announces as studios in the Gene Autry Hotel, so they have moved from the crowded little house under the XR towers on the North end of Palm Springs. Gene

Autry Hotel is at 4200 E. Palm Canyon on the other end of town. 20 lines, so I guess I have no room left to comment on the protesters who fill space without any DX information. I can't understand why they are protesting as we never had it so good in IRCA. Guess they are Egocentrics. 73.

BILL HARDY-2301 PACIFIC AVE-ABERDEEN, WA 98520

This may be the shortest Forum report I ever write, as I'm at a loss for words. I've just returned from the Portland Convention. I'm very pleased and honoured that IRCA members have chosen me for this year's Ted Vasilopoulos Award. The award took me completely by surprise, because the other candidates for the award deserved it much more than I did and I had assumed that one of them would be the winner. The TVA is the greatest honour I have ever received from anywhere, and it means a lot because it came by vote of the members. To everyone, thank you very much for a moment I'll never forget. 73.

GARY LARSON-2806 LINCOLN-BURBANK, CA. 91504

Hi once again. Never thought this would happen, but on 8/18 at about 7.15AM PDT, KROQ 1500 started programming in SS. The studio is at the FM site, but there are plans to move. I think the offices for FM are used temporarily for AM and the number for info, I suppose, is still 578-0830. I imagine the new location for a sx will be Burbank, Glendale, or somewhere close to the XR. Was told owners are still George Cameron Communications. May even see if I could get an engineer job there. If anyone has info on the freq changes in LA (1020 & 740) write in and let us all know. I hear Bonneville may go to 1020 as KBRT. 73.

MARK BIXBY-1627 HIGHLAND DR-NEWPORT BEACH, CA. 92660

Hello again. Rth, did you catch the KNBR SP 7/30 0411 ELT? (#1÷)÷-Rth) While on the subject of extremely rare SPs, KCB was off at 0243 7/31. Alas, nothing was hrd during either one. KLAC on w/OC 8/14 for bi-annual Pop test--KLUB hrd underneath. Other DX around here includes a surprise logging of 1ZD, my first NZ stn. Hrd 8/7 while looking for Latins. My frog now has a 3 digit readout and 2.9 mechanical filter from Radio West. The filter enabled me for the first time to easily separate Fiji from WLS. I consider it to be a very worthwhile investment. My 875 station appears to have moved to 1180 which strongly implies TIQ. And finally, can anyone recommend a good preamp for my Wedge? 73 de MDB.

RICK HEALD-1581 20th AVE-SAN FRANCISCO, CA 94122

Tele-Forum: (415) Montrose 5-4201 to 2200 PLT ppd.

First, my apologies for last issue. Workload has been 3 times this Summer what it was last yr, but tapering off now, thank goodness. This has been one Summer I wish I got commissions rather than straight salary. Karl Forth, it's a known fact, San Francisco's cost of living is in the top 5 in the US, yes, it is expensive here. Rentals only 15% less than NYC, real estate, highest in nation, solid union town. Average plumber gets about 40 bucks an hour, etc. Down to business: 1) 20 line limit on all Forums. Was passed by BoD months ago, but now due to costs, and results of membership poll for dues increases, we must cut down. A line or two over, OK, beyond that, it will be continued next issue. 2) Double space, please. Really makes a difference on this end. 3) All times ELT. 4) One Forum per issue. One guy has been sending them once a week. Also had one guy send me 3 typewritten pages, yikes, hi. Onward...Looks like maybe a half-way decent TP season coming up. I've been noticing good HI reception, and frequent hets and some audio from Tarawa 844. 8/20 saw first new logging in ages. KQYX 1560 Joplin from 0724-0730EDT. And, first report to a stn in o/a yr, w/4 day response. V/s is Wm B Neal. Came as a complete surprise, and y'all can scratch the "p" by their power listing in VJ, they are 10kw now. This MM, 9/4, TTer on 1480 @ 0643, but like gangbusters, presume, KWUN Concord. KYA 1260 was off, hrd rocker there, but KYA put carrier back on at 0754 before I could get ID. Did ID, La Voz de Guatemala 840 w/KFI off, Cuba way under, then KFI back w/ ELT and ID @ 0705. KSOO 1140 and KGBT 1530, old standbys from yrs back also noted during this period. That is it for now. Ooops, almost forgot, Nancy Hardy has asked, and I agree, pls send your verie info to WDXF rather than WDXR. Tnx gang. See ya later. 73 de Rth..

western dx forum! Rick Heald
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Ph: (415) Montrose 5-4201

MATTHEW SHUGART-12561 GROVEVIEW ST-GARDEN GROVE, CA 92640
+++++
(Cont. from last DXM...) I heard on KPCC 1240 news that TWR is installing a 400kw MM XR in Sri Lanka to reach the Indian sub-continent and w/a potential to reach 1/4 of the world's population. I'd like some opinions on a couple of unIDs. One is 640 in SS, hrd w/KFI off (obviously) btwn 0710 and 0730 ELT. Would seem too late for Cuba since it was not noticed earlier and Cuban SR for the month (May) is about 0645. Ideas? (could still be Cuba-Rth). Also, who would be playing jazz w/virtually no breaks on a MM on 1540. could it be ZNS? The stn mentioned on 60 minutes @ 540 is indeed the parking lot audio of Dr. Schuller's Garden Grove Community Church, the same as seen on TV's "Hour of Power" syndicated prgm. It's almost impossible for me to hear 540 at home, less than 4mi/6.5km away. Rick (and others too), what is the best bet for AR and don't say KARW!! Finally, KTWO is indeed the stn that used to be KSPR. I still say they should have kept "KSPR" as it sounds out the city name, Casper. (I'm obsessed w/such cleverness in call letters, you know). I just don't see how they could let that one get away. (Now in Springfield, AR), kind of like Ray Kroo missing outfielder Ronald McDonald and letting him go to the yanks. I tell you, it's saoreligious! Better out myself off before this gets crazier, hi! 73 de MFS.

GARY LARSON-2806 N. LINCOLN-BURBANK, CA. 91504

+++++
Hello again. I tried going o/the band about 0730 this morning (09/11) and noted KFWB off & KUZZ 970 was in pretty good. Also on 09/11, while in Northridge, CA, I picked up KUHL 1440 in the late afternoon-early evening. Since KROQ 1500 has gone SS, I noticed lights at the base of the XR. Maybe they'll be making changes. Someone told me KBRT 740 was religious. I listened a couple days ago and they're still playing "Bright Music". 73.

RICHARD WRIGHT-5276 I ST-SACRAMENTO, CA. 95819

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This morning (09/04) I found a stranger on 1010 kHz which was IDing as "The new 24-hour XEG" and as "The Golden Gospel Machine". On the hour at 0500, 0600, & 0700 ELT, I mis-copied their formal ID as "XEG, callison, AZ, Estados Unidos de America (female SS)." "XEG, callison, AZ, USA (male EE)". Several times during the prgm, they promoted a "Special 90-minute Swap Shop", celebrating expansion to 24 hrs and a daytime power increase which is to be held next Sat. from 12 to 1.30pm MST. On one occasion they gave a phone number, so, on spec, I called the number this afternoon---and found myself on the air because the Swap Shop appears to be a daily prgm. The announcer was kind enough to give me the office number, which I promptly called. The chief engineer, Jack Stuart (also part owner and vice president) answered and asked me to call back collect on his private line. Stuart is a long-timer in the business and owns a string of religious stations in this country plus XEG (1050 in Monterrey, N.L. and XEPRS 1090 Rosarito, B.C.N.). His station that I was copying was formerly KHCS. Recently it was authorized to boost its daytime power from 500w to 1kw and to go unlimited w/250w at night. Their call letters were also changed to KXEG, picking up the Monterrey call letters which are famous among the radio preachers. (Line limit...cont. next issue-Rth).

RICK HEALD-1581 20th AVE-SAN FRANCISCO, CA. 94122

Tele-Forum: (415) Montrose 5-4201 to 2200 PLT ppd.
+++++
Howdy! First, my vacation dates will be week of 15 Oct and 12 Nov, therefore, no Forum deadlines for 19 Oct & 16 Nov. Wish I could take the 2 wks during summer, but in the travel industry, we gotta go in off season. Tnx to Richard Wright's tip re KXEG (above), I tuned in 10 Sep and took nice 1/2 hr report, letter in mail to KXEG, no return yet. Must be setting new record, 2 reception reports this year, hi! Then noticed good pacific ex on 11 Sep, HI very strong, then got my first DU break w/4YA 780 (an old favourite) w/nx at 0800 ELT, tuned down to 700, and yes, faint, but there, 2NR Grafton, along w/a Yank w/pop mx. Too late for WLM, that maybe KEYR as loop went NW, not thinking about the SE direction. Later,

what Kaskey has picked up, I too now have, a combo KSFO/KYA spur on 700. KYA was off at 0800, but later checked 700, found rock mx there, went up to 1260, and sure nuf, KYA. A new spur for the collection. KSFO 560 + 700= 1260 KYA! But it's nice to be getting ready for work @ 0900 ELT and listening to KPOI 1040. Funny, KHVH never came in very well, but KPOI sure does. Enjoyed visit from longtime N.Z., now Canadian theo Donnelly on 14 Sep, along w/his father visiting from N.Z. Arrived my place at 1SS, so demonstrated properties of the wedge loop to his father. He meanwhile remembered back to 1930 and listening to the world Olympics from N.Z. on KFI! Enjoyed phone call from Richard Eckman back in Aug while he was visiting the Santa Rosa area. That's it for now, next deadline, 28 SEP 78. See u in 14. 73 de Rth..

DX Worldwide



BRUCE PORTZER,
Editor

All times GMT/UTC
Deadline 9/28,10/12

6546 19th Avenue Northeast - Seattle, WA 98115 - 206-522-2521

ATLANTIC DX ROUNDUP

- 529 ALGERIA, Ain Beida, in noise, seemingly //stronger 548; SAH present 0029 8/25. (Connelly, MA)
- 539 ? UNID, maybe Libya, occasional African or AA sounding mx & screaming, mostly just het, 2355 8/24. (Connelly, MA)
- 575 ALGERIA, Bechar, at noise level w/occasional moaning 0015 8/27. (Connelly, MA)
- 584 SPAIN, Madrid, barely making it by WEEI slop & TV QRM on 582; SS talk by man, poor, 0014 8/27. SS mx, weak, 0324 8/28. (Connelly, MA)
- 611 MOROCCO, Sebba-Aioum, good w/fast AA male vocal w/wio-lins 0323 8/18. Man in AA loud, jamming 610, 0023 8/25. (Connelly, MA)
- 665 PORTUGAL, Lisboa, fair o/u QRN; romantic PP female vocal 0327 8/28. (Connelly, MA)
- 701 t ANDORRA, mellow pop mx, II or SS sounding vocal, poor-fair 2347-8/26. (Connelly, MA)
- 719 PORTUGAL, Norte, fair o/WOR slop. PP talk by woman, then interlude of piano mx 0326 8/18. Good w/man in PP 0003 8/25. (Connelly, MA)
- 737 SPAIN, Barcelona, poor-fair w/soft mx 0120 8/23. Female operatic vocal at low audio level on big carrier 2354 8/26. (Connelly, MA)
- 755 PORTUGAL, Lisboa, very good w/woman in PP, some WHEB disco-slop 0006 8/25. (Connelly, MA)
- 765 SENEGAL, Dakar, good w/jazz-style native mx & vocal 2328 8/21. Vernacular talk by man, mx fair in QRN 2335 8/26. (Connelly, MA)
- 782 PORTUGAL, Miramar, fair w/disco-rock w/female vocal, then man in PP 0048 8/23. Talk by man & vocal by woman good despite QRN 2356 8/26. (Connelly, MA)
- 818 MOROCCO, Rabat, loud w/AA moaning by man 0345 8/18. Good w/AA chanting o/low het, growl, 0016 8/25. (Connelly, MA)
- 827 MOROCCO, Oujda, poor w/woman in AA //818, atop tone-tester who occasionally let loose w/incoherent code-like sending; storm QRN a problem 0335 8/18. (Connelly)
- 827 ? UNID, meter pegging OC, SAH way u/ 0010 8/24. (Connelly)
- 845 ITALY, Roma, fair w/nx by man, WHDH muller 0002 8/27.
- 936 t MOROCCO, carrier in splash 0352 8/28. (Connelly, last 2)
- 1016 WEST GERMANY, Mainz-Wolfshelm, suspected w/man & woman in GG-sounding talk & bits of interspersed cl mx. Good carrier but bad WINS slop 0103 8/23. (Connelly)
- 1034 PORTUGAL, Porto Alto, to fair peaks w/man in PP 0036 8/27. (Connelly, MA)
- 1115 t MOROCCO, Ouarzazate/Tangier, poor w/female vocal, possibly AA 0402 8/28. (Connelly, MA)
+Azan (call to prayer) 8/30 0358. Believe Ramadan was just over then, but AN operation seems to be continuing. (Wood, NH) (How is that city's name pronounced? War-za-watt? bp)
- 1196 WEST GERMANY, Minchen, VOA, OC 0258, "This is the VOA, Washington, DC, signing on" 0259 1/2, into EE pgm 0300 8/31. Seems that listeners could be caught more effectively by using IS rather than OC before s/on. Fine level, better than WDR-1586. (Wood, NH) (I thought VOA stns normally used "Yankee Doodle" as a pre-s/on IS. Maybe there's been a policy change somewhere. bp)
- 1214 GREAT BRITAIN, SBC, poor in QRN w/pop mx w/male vocal 0033 8/27. (Connelly, MA)
- 1403 GUINEA, Conakry, very strong w/African mx during auroral ex 0046 8/29. Bodacious signal; native mx pgm w/no IDs or amnts 0359-0402 8/29. (Connelly, MA)
- 1578 t PORTUGAL, Canidelo, tentative per DF on TRF, noted w/orch mx occasionally surfacing through heavy slop/pro-nounced hat on CBJ-1580 0035 8/25. (Connelly, MA)

PAN AMERICAN DX ROUNDUP

- 540 NICARAGUA, Managua, YNOW, fair w/R. Corporación ID, then mellow SS vocal 0115 8/30. (Connelly, MA)
- 590 PUERTO RICO, San Juan, WKAQ, good 0323 8/28. Totally dominant w/ID jingle "WKAQ R. Reloj", then SS talk 0117 8/29. (Connelly, MA)
- 595 DOMINICA, Roseau, poor w/light Caribbean mx in CMW/WEET slop 0110 8/29. (Connelly, MA)
- 600 CUBA, San Germán, CMKV, Light opera //630/640, fair w/Colombia muller 0407 8/30. (Connelly, MA)
- 600 SURINAM, Paramaribo, noted w/Oriental-sounding talk (possibly a rigs pgm) o/Colombia/Cuba 0109 8/29.
- 630 CUBA, Santa Clara, CMHO, xlnr, way better than //640; SS light opera 0406 8/30. (Connelly, MA, last 2)
- 640 GUATEMALA, Guatemala, TGW, Marimba mx, then R. Nacional ID. More Marimba mx, OM ancr w/Godlike voice occasionally reading what sounded like poetry over mx. Then twice, "En Guatemala, TGW, LV de Pueblo". Some fading, mixing w/CMW, but otherwise good. Immediately after this, a rather effective jamming sig replaced programming. 8/26 0155. (Landry, IA)
- 640 SURINAM, Paramaribo, RAHDKA, w/exotic Mid-east style mx, then YL talk (Hindi?), just o/the pack. Guadeloupe/YVQO/CBN hiding in there (too early for Cuba) 0010 8/27. (Connelly, MA)
- 640 VENEZUELA, Puerto la Cruz, YVQO, good w/fast SS talk, Ondas Portefías ID 0001 8/28. (Connelly, MA)
- 650 DOMINICAN REPUBLIC, Santo Domingo, HIAT, rolling o/other IAs; exciting IA mx, then SS talk, ID "R. Universal, Santo Domingo" 0405 8/30. (Connelly, MA)
- 650 CUBA, Santiago, CMKU, R. Liberación, //640 1028 8/28 but way u/WSM. (Hutton, GA)
- 660 VENEZUELA, Coro, YVNA, to good peaks w/WNBC muller; pompous Horn fanfare, SS talk giving call letters, then Venezuelan NA was played 0356 8/30. (Connelly)
- 670 CUBA, San Pedro de Cacocum, CMKP, dominant w/R. Progreso ID, then jazz, 0328 8/28. (Connelly, MA)
- 675 COSTA RICA, San José, TICM, fair w/romantic SS mx, then reverberated "Sonora" ID; WRKO muller 0353 8/30. (Connelly, MA)
- 698 DOMINICAN REPUBLIC, Valverde, HIDD, noted w/SS rock 2343 8/26. (Connelly, MA)
- 700 COLOMBIA, Cali, HJGX, talk about Colombia by man & woman in SS, o/other IAs 0417 8/30. (Connelly, MA)
- 705 ST. VINCENT, Kingstown, fair w/woman in muffled EE, then soft instrumental mx 0106 8/29. (Connelly, MA)
- 710 VENEZUELA, Caracas, YVKY, o/u WOR w/R. Capital SID 0424 8/29. (Connelly, MA)
- 720 VENEZUELA, Porlamar, YVOE, good w/R. Visión ID, then Fast IA mx hotted by Portugal-719 2350 8/26. Loud & dominant 0122 8/29. (Connelly, MA)
- 725 COSTA RICA, San José, TILX, fair w/man in SS 0418 8/30. (Connelly, MA)
- 730 TRINIDAD, Port of Spain, rising above a cacophonous mess w/AA style mx, then EE amnt that it was a "pgm from the Islamic Cultural Institute of Trinidad & Tobago"; then ID in accented EE 0102 8/29. (Connelly)
- 740 MONTERRAT, Plymouth, R. Antilles, fair o/u WHEB slop w/Caribbean festive mx/steel drums, then man in FF, 0023-0027 8/29. Pgm similar to old "Jumbo-545".
- 750 VENEZUELA, Caracas, YVKS, R. Caracas, good w/SS ancr & US soul mx 0342 8/30. (Connelly, MA, last 2)
- 760 CUBA, Habana, CMCD, u/WJR w/usual Reloj pgm 0328 8/18.
- 760 t GUYANA, Georgetown, R. Demerara, suspected here w/song loosely based upon "Greensleeves", then accented EE talk 2359 8/28. (Connelly, MA, last 2)
- 770 COLOMBIA, Bogotá, HJKH, hrd w/Requedama mention in pack of IAs totally killing WABC 0126 8/29. (Connelly)
- 775 COSTA RICA, San José, TITW, poor-fair w/rock mx 0344 8/28. (Connelly, MA)
- 780 BRITISH VIRGIN ISLANDS, Roadtown, Tortola, ZBVI, blasting in w/disco-rock, give-talk ancr mentioning "the #1 spot for the entire eastern Caribbean", followed by bursts of Star Wars type raygun noises, then reggae mx 0015 8/29. (Connelly, MA)
- 780 CUBA, Camaguey, CMJN, good w/SS political talk, atop weak LA mx stn 0346 8/30. (Connelly, MA)
- 800 NETHERLANDS ANTILLES, Bonaire, PJB, "Trans World R." ID followed by EE rigs pgm featuring Salvation Army style trumpet mx. Good but mixing w/XEROK & CKIM at times, 8/24 0045. (Landry, IA)
- 805 +Local like signal w/EE talk 0347 8/30. (Connelly, MA)
- 805 ECUADOR, Quito, HCFVL, Canal Tropical, 8/28 1042-1052 fadeout w/numerous mentions of Quito, but no clear ID. (Hutton, GA)
- 810 CUBA, Camaguey, CMJE, R. Progreso in charge 1030 8/28 o/Sutatenza. (Hutton, GA)
- 810 PUERTO RICO, San Juan, WKVM, dominant w/2 KVM mentions, nightclub ads, then SS vocal 0427 8/30. (Connelly, MA)
- 820 CUBA, Habana, CMCA, IDed 8/28 1110 as "R. Ciudad de Habana". (Hutton, GA)

- 825 PANAMA, Macaracas, HUR56, R. Peninsula loud (audible in 1 kHz bandpass w/perfect clarity) 8/28 1052-1104. Most of that time was taken up by a long tamburito, interrupted at 1100 for a brief slogan ID. Freq announced as 830. (Hutton, GA)
- 825.8 ? UNID, weak mystery LA carrier again this season, noted 0520 9/3. Carrier on 825 at the same time. (Hall-Patch)
- 830 COLOMBIA, Medellin, HJDM, R. Visión, laid back Colombian mx 0337 9/1. (Baskind, MS)
- 830 VENEZUELA, San Antonio de los Altos, YVLT, xLnt w/fast LA mx, then R. Sensación ID 0419 8/29. Good w/"Summer Nights" from "Grease" 0428 8/30. (Connolly, MA)
+Clear ID & all alone 0102 8/30. (Wood, NH)
- 850 MEXICO, Mexicali, XEZF, ranchera mx; La Rancherita ID 1308 9/5. (Pejza, CA)
- 860 BRAZIL, Rio de Janeiro, ZYD68, R. Mundial, fair-poor 8/7 0700-0732. On top but it was rather poor. Two IDs but both weak. (Hutton, GA)
- 860 MEXICO, Tijuana, s/off 0808 9/4, carrier cut 0809. Mentioned s/on at 1200. (Pejza, CA) (Good catch, hi.bp)
- 860 DOMINICAN REPUBLIC, Santo Domingo, HILR, good w/R. Clarin ID, SS talk by man, 0429 8/30. (Connolly, MA)
- 860 PANAMA, Chitré, HOL55, R. Reforma, generally on top of domestics 1038-1112 8/28 w/frequent IDs. Wasn't there just before 1030 so listed s/on time must be correct. (Hutton, GA)
- 880 HONDURAS, Tegucigalpa, fine R. Honduras ID 0531 8/30 after instrumental "Bridge O/Troubled H₂O". Had presumed this was TGJ but call from another DXer set me straight. (Hall-Patch, BC)
+Dominant now that CMAF is off freq. EZL mx, local spots & freq "R. Honduras" IDs 0420 9/7. Local quality. (Thomas, FL)
+0418 9/9 w/ID "Este es...R. Honduras, Voz Oficial... Armadas...en 880 kHz...R. Honduras...en el corazon Central Americano". Het w/Cuba but still good. Must have increased power. (Baskind, MS)
- 883 CUBA, Pinar del Río, CMAF, R. Progreso has been around here lately putting a deafening het on 880. Like a local day & night 9/6. (Thomas, FL)
+9/11 w/good mx 0546, YL anc 0555. "R. Enciclopedia" ID 0633. (Bytheway, WA)
+9/11 0540-0603 w/usual syrupy glop mx & unreadable amts by sweet young thing in SS. No IDs hrd but format & receptions by others gave it away. (Portzer)
- 885 MONTSEHRAT, Plymouth, ZJB, here w/rhythmic Caribbean mx, weak as usual, 0033 8/29. (Connolly, MA)
- 890 COLOMBIA, Bogotá, HJCE, in w/LV de Bogotá jingles & ID atop WLS 0416 8/29. (Connolly, MA)
- 900 BARBADOS, Bridgetown, good w/EE discussion of European Economics Community, then R. Barbados ID by woman, followed by Muzak; mostly o/YVMD which could be hrd clearly behind 0022 8/30. (Connolly, MA)
- 900 VENEZUELA, Maracaibo, YVMD, dominant w/"R. Mara de Maracaibo" ID by woman, then mx 0341 8/29. (Connolly, MA)
- 914 SURINAM, Nieuw Nickerie, RANI, fair w/East Indian mx & talk 2338 8/28. (Connolly, MA)
- 919 COLOMBIA, Cartagena, HJAE, bombing WJAR out; boistrous "Emisor Fuentes" ID 0415 8/29. (Connolly, MA)
- 930 COLOMBIA, Bogotá, HJCS, R. Continental, about even w/ the ReLoj all 8/28 AM. (Hutton, GA)
- 944 HONDURAS, Tegucigalpa, HRYN, 0505 9/1 super loud w/automated MoR format. (Baskind, MS)
+R. Panamericana loudest ever hrd 0435 9/7 w/concertina mx & IDs. Very good level & clear. (Thomas, FL)
- 940 CUBA, R. ReLoj outlet here o/u CBM; usual nonstop SS mx & TCs 0345 8/29. WRTH lists CMHF Cienfuegos as only 940 Cuban. I cannot say for sure that this is the ReLoj outlet - signal seems too good for listed 1 kw.
- 950 VENEZUELA, Caracas, YVKG, loud w/R. Visión ID jingle. SS talk by man & woman, TC 8:40, 0040 8/29.
- 960 COLOMBIA, Magangué, HJHI, loud w/Sutatenza ID, TC, ads 0350 8/29. (Connolly, MA, last 3)
- 975 COSTA RICA, San José, TIRS, 0228 9/12 w/LA mx & ID o/weak carrier. (Baskind, MS)
- 980 COLOMBIA, Cali, HUES, R. El Sol, fair, no domestics readable 8/28 0700. ID & RCN promo - not a Todelar stn as per WRTH. (Hutton, GA)
- 990 VENEZUELA, Barquisimeto, YVTA, very good w/R. Tricolor jingle, SS talk & more IDs, 0403 8/29. (Connolly, MA)
- 990 MEXICO, Monterrey, XET, ID, Monterrey mentioned several times in promo. Quickly buried in QRM 8/24 0210. (Landry, LA)
- 995 HAITI, Port au Prince, hVCP5, R. Caique is now here from 990 per a friend in Florida. (Baskind, MS)
- 1000 CUBA, unlisted R. ReLoj all 8/28 AM, weak but louder than normally dominant LV de Cartagena. (Hutton, GA)
+Cuban march theme mx, SS talk, w/WCFE 0355 8/28.
- 1000 COLOMBIA, Cartagena, HJAJ, assumed here w/clear "RCN" ID (atop other LA w/lively mx) 0407 8/29. (Connolly, MA, last 2 items)
+"La Hora Nacional de RCN", time check, Bayer Aspirin ad, network pgm 0100 8/30. (Wood, NH)
- 1005 COLOMBIA, Neiva, HJJR, R. Colosal, many IDs, local ads 0100 8/30. (Wood, NH)
- 1010 COLOMBIA, Bogotá, HJCC, Emis. Mil Viente, superb 0700-0730 8/28, very loud w/nothing underneath. (Hutton, GA)
- 1021**** PARAGUAY, Asunción, ZPLH, R. Nanduti, poor-fair 8/7 0427-0440. Collected 3 IDs (one quite nice, clear one), a mention of Paraguay, and a reference to the "departamento filosofia de la Universidad Catolica". Readable on peaks only, a total of 3-4 minutes. Listed on 1020 w/5 kw. (Hutton, GA) (Very nice catch...bp)
- 1030 MEXICO, Mexico, DF, XEQR, ID "R. Centro", SS rr mx (!) good w/some QRM in WBZ null 9/4 0215. (Landry, LA)
- 1035 HAITI, Cap Haitien, hVEC, good w/organ mx, then EE talk, mentioning Evangelistic Voice of Haiti, then s/off 0030 8/28. (Connolly, MA)
- 1060 VENEZUELA, San Juan de los Morros, YVLN, poor in QRM w/man & woman in SS, Guarico mention, then mx 0007 8/31. (Connolly, MA)
- 1070 VENEZUELA, Maracaibo, YVMA, good o/rumble w/strident R. Zulia ID 0450 8/29. (Connolly, MA)
- 1091 COLOMBIA, Monteria, HJAW, jamming WBAL, romantic IA mx up well 0054 8/29. (Connolly, MA)
t +Putting het on KAAV, Colombian mx 0910 9/9. No ID hrd, assumed from frequency. (Baskind, MS)
- 1100 ANTIGUA, St. John's, ZDK, fair w/reggae mx 0053 8/29. (Connolly, MA)
- 1110 VENEZUELA, Carupano, YVQT, loud w/fast SS talk, Carupano mentions 0002 8/31. (Connolly, MA)
- 1125 COSTA RICA, San José, TISRHB, is now calling itself "Amigo". On the hour they also announce call letters plus AM & FM freqs. R. Elias ID has been dropped. Also gone are the hourly R. Super IDs reported last winter by Hutton. First noted 8/30 0130. (Stanbury, MA)
- 1180 VENEZUELA, Maturín, YVOR, atop w/man & woman in SS, talk mentioned socialism, then R. Maturín ID 2355 8/30. (Connolly, MA)
- 1190 COLOMBIA, Barranquilla, HJCT, briefly atop pack of LAs; Barranquilla mentions, then LV de la Costa ID 0447 8/29. (Connolly, MA)
- 1200 COLOMBIA, Riohacha, HJZW, booming in w/Almirante ID on car rx, Rte 28/Bass River Bridge, S. Yarmouth, MA. 2346 8/27. (Connolly, MA)
- 1200 VENEZUELA, Caracas, YVOZ, R. Tiempo, good w/SS talk, spoken & sung IDs 0456 8/29. (Connolly, MA)
- 1206 at HAITI, Port au Prince, hVDS, assumed the one here w/primitive sounding mx 042 8/25. (Connolly, MA)
t +Hrd from 0230 tunein 9/5 w/FF, believed to be R. Progres as rptd by others. Speech or commentary until 0300, then various pop mx. Couple of references to "progres" at 0312. (Stanbury, ON)
- 1223 a ECUADOR, Guayaquil, HCBJ2, R. El Mundo, easy listening automated LA format w/shouted reverberated screamed "El Mundo" IDs by YL between songs. Putting bad het on Cuba-1220. (Baskind, MS) (Great...here you read this tip to me over the phone and neither of us thinks to include the time and date... bp)

PACIFIC DX ROUNDUP

- 530 AUSTRALIA, Kempsey, 2KM, weak 1310 9/8 w/rock mx, ads, & mentions of Kempsey, then horse race results 1315. Mixing w/weaker EE stn during fades, possibly another Aussie. Xlnt by 1325. (Tomer, CA)
- 540 AUSTRALIA, Longreach, hQL, weak w/quiet jazz mx //890 1326 9/8, then faded completely. (Tomer, CA)
- 575 RSFSR, Khabarovsk, fair w/RR MoR mx 1320 9/10, quiet mx 1326, Midnight in Moscow IS 1330. (Tomer, CA)
- 584 RSFSR, Svobodnyy, weak w/quiet piano mx 1322 9/10 weak CC-sounding talk 1324, chime IS 1330. (Tomer, CA)
- 615 CHINA, Heilongjiang, mostly a carrier 9/10 but some weak CC talk 1323. (Tomer, CA)
- 635 NORTH KOREA, Chongjin, weak-fair 1325-1335 9/10 w/calm KK talk, orchestra & choir---almost sounding like a rgs service. Listed in WRTH as R. Pyongyang but was not //655. (Tomer, CA)
- 647 t RSFSR, Vladivostok, just a faint carrier 1235 8/25. (Hall-Patch, BC)
- 650 HAWAII, Honolulu, KORL, 1328 9/5 w/PSA for youth athletic pgm, TC. Fair. (Pejza, CA)
- 655 t NORTH KOREA, Pyongyang, fair carrier w/traces of audio 1234 8/25, also 1235 8/26. (Hall-Patch, BC)
+1335 9/10 was airing what had to be a Catholic mass, in the KK language. Now I think I've heard everything. (Tomer, CA) (That seems awfully unlikely, but then again stranger things have been heard on the radio.bp)
- 665 RSFSR, Komsomolsk, w/"blockbuster" carrier 1347 9/10, but no audio. This stn & 1376 seem to require quite strong carrier levels before audio can be detected. (Tomer, CA)
- 700 ALASKA, Anchorage, KBYR, 1225 8/26 noted w/pop mx, Alaskan TC & PSA for Alaska State ?? on how not to

get your car stolen. (Hall-Patch, BC) (You mean there's a correct way? bp)

- 700 AUSTRALIA, Grafton, 2NR, weak w/ABC nx 1313 9/8. (Tomer)
- 700 JAPAN, Hiroshima/Kitami, JOFB/JOKD, fair 1345 9/10 w/JJ talk, xlt 1407 w/EE pgm. (Tomer, CA)
- 725 N. KOREA, Kimchaek, running the religious sounding broadcast //655 1340 9/10, fair. (Tomer, CA)
- 750 ALASKA, Anchorage, KFQD, 8/20 1128-1130 fair-poor w/pop mx but alone; weak ID 1129. (B. Hardy, WA)
- 750 JAPAN, Sapporo, JOIB, really blasting in 1355 9/9, wiping out KXL. At 1358, KXL, JOIB, & the Aussie were all mixing equally. (Tomer, CA)
- 770 t AUSTRALIA, Melbourne, 310, quiet jazz 1333 9/5; DU accent on ancr. First time ever for this one. (Pejza)
- 770 JAPAN, Akita, JOUB, mighty strong 1350 9/9 w/JJ talk. (Tomer, CA)
- 780 t NEW ZEALAND, Dunedin, 4YA, 1302 8/23 w/nx; mention of Trade mission & Wellington. MoR afterwards till KRCL carrier 1310. First time hrd since 1968. (Pejza, CA)
- +Booming in 1245-1300. Nice R. NZ ID after 6 time pips then NZ mx. Mixture of programming from cl piano mx to US comedy. (Hall-Patch, BC)
- 820 AUSTRALIA, Glen Innes, 2GL, fair 1337 9/8 w/quiet jazz 77890. (Tomer, CA)
- 820 N. KOREA, Chongjin, fair w/KK ranting 1402 9/9 //655 & 850, but stronger at this time. (Tomer, CA)
- 830 HAWAII, Honolulu, KIKI, 0522 9/3 fair w/"7:22" TC & mentioning a show coming to Hawaii. (Hall-Patch, BC)
- 830 JAPAN, Osaka, JOBB, 8/23 1226 fair w/JJ man talking. (Pejza, CA)
- +1229 8/25 YL in JJ w/poor-good signal. KIKI about equal strength but mullied out. 1250 8/26 weak w/OM in JJ, KIKI mullied. (Hall-Patch, BC)
- 835 t CHINA, Nanchang, carrier looping TP noted 1228 8/25, 1252 8/26. (Hall-Patch, BC)
- 840 AUSTRALIA, Rockhampton, 4RK, fair w/quiet jazz 1336 9/8 77890. Better 1335 9/9 w/talk & quiet vocals.
- 840 JAPAN, Niigata, JOJK, weak w/JJ talk 1403 9/10.
- 850 N. KOREA, R. Pyongyang, good 1353 9/9 w/emphatic KK talk //655. (Tomer, CA, last 3)
- 864 INDONESIA, Cirebon, RRI, fair w/Indo talk 1345 9/9.
- 870 JAPAN, Kumamoto, JOGB, weak w/JJ talk 1210 9/1.
- 880 AUSTRALIA, Brisbane, 4BH, good w/ABC nx 1302 9/8, had jazz mx, then "Brisbane 880, 4BH" followed by nx.
- 890 AUSTRALIA, Adelaide, 5AN, good w/ABC nx 1302 9/8, had jazz mx by 1306. (Tomer, CA, last 4)
- 890 S. KOREA, Pusan, HLKB, likely the KK YL mixing briefly w/the Aussie 1406 9/9. (Tomer, CA)
- 973 ? UNID, weak carrier 1245 9/9, maybe USSR. (Tomer, CA)
- 1134 INDONESIA, Banjarmasin, assumed source of weak carrier 1245 9/9. (Tomer, CA)
- 1206 INDONESIA, Denpasar, RRI, only making it as weak-fair carrier 9/8, 9/9, 9/10 around 1330. (Tomer, CA)
- 1210 AUSTRALIA, Grafton, 2GF, hrd for first time w/weak pop mx, then wx 1340 9/8, followed by DU accented EE talk & spots. 2GF promo & ID 1348. Mixing w/a weaker stn that cl or EZL mx & seemingly DU accented EE talker, perhaps this could have been 4XO, Dunedin, or 2CC, Canberra? Anybody know their formats? (Tomer, CA)
- 1210 CHINA, Yenbien, weak but in the clear w/beautiful oriental style singing by YL 1310 9/9. Good 1316 9/10 w/KK talk. (Tomer, CA)
- 1376 RSFSR, Vladivostok, assumed source of good carrier 1317 9/10, some barely perceptible talk hrd. (Tomer)
- 1525 RSFSR, Khabarovsk, weak w/cl mx 1325 9/9. (Tomer)

VERIFICATION

- 680 PHILIPPINES, DZAS (FEBC), special 30th anniversary v/q w/all details but no signature. Also sked & booklets. Received per surface in 97 days. (Baker, S. Africa)

CONTRIBUTORS

- Denzil Baker, Box 47204, Greyville 4023, South Africa
- Chris Baskind, 603 Enger Drive, Pascagoula, MS 39567
- Modified TRF (Don't let him fool you. He modified the TRF by taking out the innards and putting in the innards from a R-390. Sure took a bit of cramming...bp)
- Phil Bytheway, c/o the IRCA Gooney Rancher Factory R-392, Wedge
- Mark Connelly, 7 Trowbridge Path, W. Yarmouth, MA 02673
- R-390A/URR, 2 phased 37 meter longwires
- Bill Hardy, 2301 Pacific Ave., Aberdeen WA 98520
- FRG-7, SM-1
- Chuck Hutton, 1035 Latham Rd., Decatur, GA 30033
- R-390A, HQ-129X, 1900' Beverage at 150'
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- SPR-4, Sanserino loop

- Me, my HQ-180A, and my loop
- C.M. Stanbury, Box 218, Crystal Beach, ON LOS 1B0
- HQ-200, 90' LW
- Gerry Thomas, 2355 W. Michigan Ave., #460, Pensacola, FL 32506
- Frog, loop, TRF
- Randy Tomer, Box 2674, McKinleyville, CA 95521
- HQ-180A, FRG-7, 670' antenna
- Dr. Richard E. Wood, Boyd Hall, Univ. of New Hampshire, Plymouth, NH 03264
- SPR-4, 400' LW NW-SE at Ashland, NH

Welcome to Joseph Landry this issue and a welcome back to Richard Wood after a long absence from BCB DXing. Looks like the DX is starting to roll in at a faster rate, so hopefully we'll have a decent season. Biggest thing to occur here lately was receiving a layoff notice at work, effective 9/29, due to some budget problems my employer, the City of Seattle, is having (so much for the safe secure world of civil service, hi). A quick job search has netted an offer from a local consulting firm but I'm also waiting to hear back from another firm I talked to before I know for sure who my next employer will be. As is probably mentioned elsewhere in this issue, the Foreign Log is in the midst of production right now. Not only will it have more tips than any previous log, but a big section on the 9 kHz frequency plan will be included, complete with pretty extensive assignment lists for both PA's and TP's. Get your orders in now folks! I'm near my 20 line limit on babble so will say 73 til next one.



 VERIFICATION Bob Lazar
 SIGNERS 511 W. Doty St., Apartment 208
 Madison, WI 53703

This will be the last edition of Verification Signers that I will be editing. I am giving up this column in order to take over CDXR. Please do not send in any Verie Signers until a new editor is announced. Please note my new address above which is now in effect.

- 560 WHBQ q Jim Lies, CE RAL
- 610 WIP q+cm C.D. Diugate, CE BL
- 750 WSB c George Fischer, PD BL
- 840 WHAS q unsigned RK
- 1000 WRAR l+misc Linda G. Williams, Traffic Mgr THW
- 1010 WBIX l G. Michael McCormick, CE SAM
- 1030 WBZ q unsigned RK
- 1070 WIBC q Bob Brockway, CE RK
- 1090 KNWS f Dave Dobs, CE SAM
- WBAL q Rowland Kraft, CE RK
- 1160 KSL q Russell _____?, Eng. BL
- 1170 WWSA q unsigned RK
- 1190 KPAR f Don Davis, Asst. Mgr. SAM
- WIXE l+stickers John Griffin, Ch. Operator SAM
- WOWO q Steven K. Moreen, CE RK
- 1250 WMTR f+cm Stuart Engelke, CE RK
- 1270 WXYZ f+cm Russell C. Harbaugh, CE RK
- 1340 WMIC l+sticker N.H. Rosenthal, CE RK
- 1370 WFEA f Peter Banks, Chief Operator RK
- 1410 KQV l Ted Ruscitti, Operations Mgr. THW
- WHAG l James L. Grant, CE THW
- 1450 WCTC f Clarence Dingman, CE RK
- 1460 WVOX l Ernest G. Sprance, Program Mgr. RK
- 1540 KXEL q Terry _____?, CE BL
- WADK l Robert J. Sullivan, TD BL
- WPTR q James J. Cruise, CE RK
- WRSW l+cm Robin R. Myers, Office Mgr. SAM
- 1550 KEDD l+cm Rhett A. Dowling, Ch. Operator SAM
- WXVA l+cm Tammy Webb, DX Reception Dept. BL
- 1580 WJVA q Jim Lies, CE RAL

THANKS TO THESE CONTRIBUTORS

- RK RONALD KIDA-Palisades Park, NJ
- BL BRIAN LEE-Brooklyn, CT
- SAM SCOTT A. MENTZER-Tyler town, MS
- THW THOMAS H. WHITE-Arlinton, VA
- RAL BOB LAZAR-Madison, WI

Well that wraps up this last edition of Verie Signers for me. I've enjoyed doing the column but I'm looking forward to the challenge of editing CDXR. My WHBQ verie took 19 months with no follow up, an example of how sometimes time is the key to getting a verie from a station. DX conditions seem to be good in my new apartment (when all the TV's are off that is) and I'm hoping to get some MM DX done this semester.



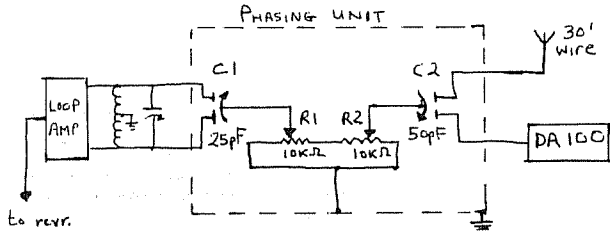
the irca technical column

Editor: Nick Hall-Patch
3272 Alder St.
Victoria, B.C.
Canada V8X 1P2

E.H. Grossman of Vancouver, B.C. has submitted an idea for an antenna system which allows effective nulls on BCB for those living in steel-reinforced buildings where a loop peaks everything in one direction. He cautions that this system is still experimental and that it can be a lot more difficult to null a signal with it than by using a simple loop antenna in a wood frame building. He says:

"From IRCA publications, I believed that with a good loop I could live across the road from WCCO's tower and listen to TA's, TP's and LA's on 830 whenever I pleased--my loops don't work like that--when I null a local all I hear is the same local. I live in an urban highrise and everything "nulls" in almost the same direction. My choice seemed to be give up DX'ing or try to solve the problem.

Since I put this little deal together, I've heard KOGO-600 through local CJOR, I've been able to listen to XETRA-690 through local CBU, KNX-1070 through semi-local CFXA & a variety of other things that have pleased me no end. I have 3 kinds of antennas--a Radio West ferrite loop, McKay Dymek DA100 and a piece of wire about 30' long, half strung on my balcony and the rest indoors. Here's what I did:



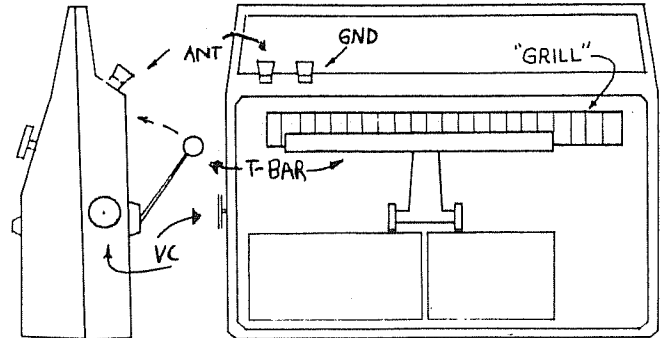
C1 and C2 are "differential" or "split-stator" variable capacitors, and are really larger than I would wish--they're all I had in my parts box. The one connected to the the loop antenna decreases the resonant frequency of the loop, and necessitated removal of a few turns from each side of the coil on the loop in order to tune the upper end of the BCB. The capacitors are mounted on perf board inside the metal case to isolate them from ground and have non-metallic shaft extenders to lower body capacitance effects. I stuck the DA100 out an open window (horizontally) and tied it in place with a shoelace through a couple of eye screws under the window sill.

My procedure in nulling a station is to tune the loop antenna to the frequency desired and position loop for best signal (do not tilt loop; rotate only). Then adjust the two capacitors and two potentiometers until a null is found--a fiddly procedure with four controls. Nulls may be deepened sometimes by rotating the loop a few degrees each way. Ease in finding nulls was improved somewhat by placing a pi network coupler (similar to one in the NRC Antenna book) between the DA100 and the 50pF differential capacitor and peaking the coupler at the same time as the loop. Then the output tuning of the coupler is used as well as the other four "phasing" controls (C1, C2, R1, R2) to find the deepest null."

EHG indicates that the 30' wire fed into the phasing unit omitting C2 and without the DA100 does work but signals obtained are weaker & nulls are harder to find. I wonder what another "shortwire" in place of the DA100 would do? This unit very vaguely resembles the "Pattern Controlled Loop for the MW DX'er" described by Gordon Nelson in NRC reprint #A14 and Ron Schatz' LSCA-1 and LSCA-2 (described in IRCA reprints A7 and A18 respectively). It would appear that a good bit of experimentation would be needed before a simple, easy-to-use unit of this nature could be developed (if indeed it is possible), but as EHG says, if you're willing to fiddle around with it the results could be well worthwhile.

Gerry Thomas and Charlie Barfield described a "Tilting T-bar antenna tuner for the Realistic TRF" in DX News of Sept. 4/78, and I feel that IRCAs who are not members of NRC should also get a look at this gem. With permission from Gerry, I'll paraphrase the article briefly. This tuner is somewhat similar to the one described in this column in July, but it uses a parallel rather than series tuned circuit and is built into and onto the TRF's cabinet. It uses one of the swing-away ferrite "T-bar" BCB antenna coils which are found on the back of many AM-FM stereo tuners. By using a swing-away coil, one is able to adjust the coupling between the antenna tuner and the internal antenna coil of the TRF. As the coil is swung away from the TRF, signal strength from the longwire drops (due to less coupling), but the sharpness of the antenna tuning increases--very useful next to your

local pest. The coil is resonated by a small 365pF variable capacitor which is fitted inside the TRF's case. Antenna and ground terminals are also fitted on the case. Even without a longwire attached, this tuner will boost signals on the low end of the band. Main problem at the moment is finding a cheap and reliable mail-order source of the "T-bar" ferrite coils. If you know of any, please write to Gerry (address below) or to me. Otherwise, we'll all have to stealthily remove loops from the backs of tuners in the local stereo shop, hi. Herewith is a diagram of Gerry and Charlie's design:



When one of these tuners is used, it helps to remove the winding on the TRF's internal ferrite core which is connected to the external antenna jack. This winding is reducing signal strength when a longwire is not attached. The old antenna jack could perhaps be used for tape output. For detailed instructions on constructing this tuner, please write to Gerry Thomas, 2355 W. Michigan Ave., #460, Pensacola, FL 32506 and enclose a SASE. This tuner has advantages over the one described in July--think I'll make one myself if I can find a core...
* * * *

Speaking of ferrite cores, Radio Shack apparently no longer sells the "loopstick" used in the July version of the TRF tuner. Is there any other outfit which still markets these antenna coils at a reasonable price? This question from Matthew Shugart who wants to make such a tuner.
* * * *

Finally, Gerry Thomas also mentions that the new Sony ICF-6700W has digital readout on Medium Wave as well as SW and FM and lists for around \$400. Does anybody have this receiver, and if so, what are your comments on it? Selectivity specs are pedestrian apparently, but maybe that could be improved. Gerry sends word that Sony and Panasonic products are often available at a discount from 47th St. Photo, 36 E. 19th St., New York, NY 10003. This place handles mail orders, so may be useful to those in smaller towns with higher prices.

Enough for now--see you next month with more transmogrified stuff. 73, NHP.



WEBB-1360 BROKE; GOES INTO RECEIVERSHIP James Brown, soul singer who has owned WEBB-1360 Baltimore, MD, for about

eight years, has agreed to place the station into receivership. Brown was faced with more than \$175,000 in debts at the Baltimore station and a contempt of court charge for failure to appear at a hearing last May after several creditors filed suit. The receiver, Leon B. Back, is a Baltimore-area theater owner who is a creditor and former owner of WEBB. He has the right to operate the station till it clears its debts, or if he feels it is necessary, he can sell it. One rumor is that WEBB would be sold to a Baltimore minority group which would take over in September. Other stations owned by James Brown are WJBE-1430 Knoxville, TN, and WRDW-1480 Augusta, GA. All three stations have soul formats; all but WRDW are daytimers. WJBE and WRDW are evidently uninvolved in the Baltimore hassle. WEBB-1360 might possibly be forced off the air before matters are resolved, although odds are that WEBB will keep on operating as usual till any sale is approved - if they don't, please keep us posted through the pages of DXM! --BH. (Based on 7/31/78 Broadcasting, used by permission.)

REFLECTIONS

NIGHTTIME MEDIUM WAVE PROPAGATION BY IONOSPHERIC REFRACTION
by Randy Seaver

1. INTRODUCTION

The propagation of medium frequency radio waves by ionospheric refraction commonly called "skywave" propagation, is a very complex subject that has baffled, confused and intrigued propagation experts and medium wave listeners/DXers alike since the 1920's. Even today, there is a considerable range of opinion concerning the question:

"Which ionospheric layers or regions refract medium frequency radio waves?"

The DX club technical literature presents a diverse array of opinion, including:

In G. Nelson's comprehensive article on "Medium Wave Propagation" (Reference 1), Figures 3a-1 and 3a-2 imply nighttime refraction form the F layer at an altitude of 300 kilometers. In the text, Nelson states:

"Most of this highly absorbing ionization (in the D and E layers) disappears as soon as the ionosphere is no longer in daylight...and this region rapidly becomes transparent to MW signals after local sunset."

G. Nelson's articles on "MW Signal Paths" (Reference 2) and "Geographical Patterns in BCB DX Reception during Periods of High Auroral Activity" (Reference 3) indicate partial reflection by the E layer and reflection by the F layer. G. Nelson's article on "Skyline Blockage" (Reference 4) discusses the "normal night E" and "sporadic E" regions and notes that the critical frequency of the night E layer often falls within the medium wave band.

Fr. Jack Pejza's excellent article, "A Beginner's Guide to the Ionosphere" (Reference 5), describes the composition of the ionosphere, discusses the refraction and absorption of radio waves by the ionosphere, and notes:

"Nighttime skywaves frequently penetrate the E layer and are reflected from the F layer, particularly at the high frequency end of the MW band, and at nearly vertical angles of incidence."

F. Dinning's article, "Factors Affecting Propagation of the Medium Frequency Broadcast Band" (Reference 6), states that the night E layer contributes to MW signal attenuation, while the F layer is responsible for nighttime MW propagation.

Finally R. Schatz's recent article on "Medium Wave Ionospheric Propagation" (Reference 7) claims that E layer reflection is responsible for most medium wave long distance propagation.

The serious reader is urged to read the referenced articles to ascertain the context of the above quotes, statements and inferences.

The many technical books available on the subject of ionospheric propagation generally derive the magnetoionic equations, describe the effects of solar radiation on the Earth's atmosphere (including the ionosphere), describe the influence of the ionosphere and the Earth's magnetic field on radio wave propagation, and develop methods of estimating radio wave signal strengths at a receiver remote from a transmitter. Two of the best books are K. Davies' "Ionospheric Radio Propagation" (Reference 8) and Y. Al'pert's "Radio Wave Propagation and the Ionosphere" (Reference 9). However, there is a notable lack of meaningful discussion in these sources that adequately describe medium wave propagation.

The technical journal and technical report literature contains more specialized and detailed information on a wide range of subjects, but there are relatively few articles and reports that treat medium wave propagation. Two particular reports, one by Barghausen, Finney and Fisher entitled "Radio Broadcasting on Medium Frequencies" (Reference 10) and the other by Grudinskaya entitled "Propagation of Radio Waves"

(Reference 11), state positively that the E region is responsible for long distance medium wave propagation.

The author has been researching the general field of radio wave ionospheric propagation for several years, with a special interest in the medium frequencies. The subject matter is very broad, quite complex, and difficult to simplify so that the average person can understand it. This article examines the available data and information in order to answer the relatively simple question posed in the first paragraph above. The discussion is as non-technical as possible; however, the use of several algebraic equations is necessary to illustrate several important points. The following sections describe the characteristics of the nighttime ionosphere that affect radio wave propagation, provide a general discussion of the refraction of radio waves, and present the simplified theory for the determination of the altitudes at which the refraction of medium frequency radio waves occur.

2. THE NIGHTTIME IONOSPHERE

Initially, we shall briefly discuss the ionospheric electron density distribution that occurs at night at the middle or low altitudes under quiet geomagnetic field conditions. This condition is of supreme interest to medium wave listeners/DXers. The electron density distribution in the ionosphere is of great importance because refraction and absorption of radio waves cannot occur without free electrons in the ionosphere.

Solar radiation produces ionization of molecules in the ionosphere such that there are some ions, some electrons, and many neutral molecules at altitudes above about 60 km. during the daylight hours. During the day, there are peak concentrations of electrons at altitudes of 60 to 80 km. (the D region), 90 to 120 km. (the E region), and 150 to 400 km. (the F region). At low altitudes, the ions and electrons recombine fairly rapidly after sunset, while at high altitudes (the F region) substantial numbers of electrons exist during the night. However, there are always some ions and electrons between 80 and 150 km. altitude even under equilibrium quiet night conditions. Figure 1 shows the variation in electron density distribution in the ionosphere for quiet night conditions; this data was obtained from a number of sources (mainly the Davies (Reference 8) and Al'pert (Reference 9) books) and collected in this figure. The figure indicates that a significant electron density exists between 80 and 90 km. altitude, that a peak electron density of 1,000 to 10,000 electrons per cubic centimeter exists at 100 to 110 km. altitude, and that the electron density increases to 100,000 to 1,000,000 electrons/cu. cm. at altitudes of 300 to 400 km. Figure 1 is intended to show only a range of typical quiet night electron density distributions with altitude; actual electron density distributions are often much different in form and peak level than the band shown in Figure 1, due to diurnal effects, geographic latitude, auroral activity, ionospheric winds, etc. A typical quiet night E-region electron density profile is also shown in Figure 1 (the line marked "C"). Note the irregularity of this profile and the several sub-peaks between 90 and 120 km. altitude.

Sporadic E layers frequently occur between altitudes of 90 and 120 km. The sporadic E layer electron density profile is characterized by a very sharp increase in the electron density with a peak electron density that can be many times that of the normal quiet night E-region electron density peak value. A typical sporadic E region electron density profile is shown in Figure 1 (the line marked "D"). At night, sporadic E with a peak electron density of 300,000 (or more) electrons/cu. cm. occurs in the equatorial zone approximately 10-30% of the time during the months of October through April, in the middle latitudes it occurs approximately 10-30% of the time during the months of May through September, and in the polar zone it occurs 30-70% of the time throughout the entire year.

VERIFYING YOUR RECEPTION REPORT OF



WHAM radio 1180

RUST COMMUNICATIONS GROUP, INC. • 350 EAST AVE.
ROCHESTER, NEW YORK 14604 • U.S.A.

JAN 9, 1978

Date-----

Time----- 1038P EST

Location- PORTSMOUTH, NEW HAMSHIRE.



CLASS 1A CLEAR CHANNEL • 50,000 WATTS • SINCE 1922

william rust stations

Thank you,
Albert Davis
Chief Engineer

Sources: Davies (Ref. 8) and Al'pert (Ref. 9)
 Notes: Lines A and B are approximate extent of quiet night low and middle latitude electron density profiles
 Line C is a typical E-region electron density profile
 Line D is a typical sporadic E electron density profile.

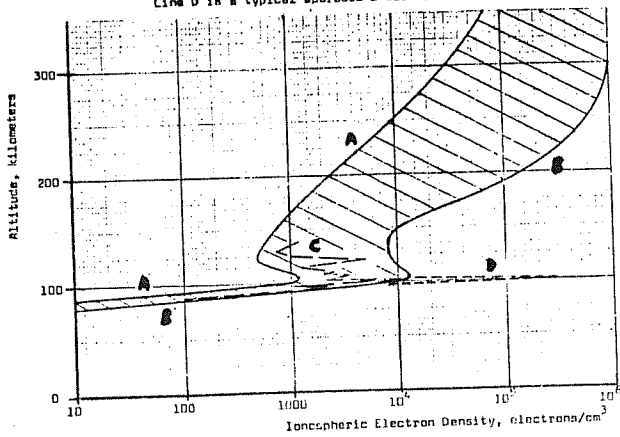


FIGURE 1. Typical Nighttime Ionospheric Electron Density Profiles

The electron density profile in the ionosphere can be measured in several ways. Rocket probes can measure the electron density as a function of altitude. Or, an ionosonde transmits a pulsed radio signal vertically over a wide range of frequencies and measures the time it takes to return each frequency back to Earth. The ionograms thus produced show the reflection heights of the signals versus frequency. The frequency below which the signals are returned from a given ionospheric region is called the critical frequency of that region. The higher the peak electron density in an ionospheric region, the higher the critical frequency of that region will be. For the normal quiet night E region, the critical frequency is usually in the range of 500 to 1,000 kHz, although occasionally the critical frequency can be as low as 250 kHz. Sporadic E critical frequencies are often 5,000 kHz and above. The critical frequency of the F region on a quiet night can be in the range 3,000 kHz to 10,000 kHz. The following sections will provide the equations that relate the critical frequency of an ionospheric region to the peak electron density of that region.

To summarize the most important points of information presented above:

- A significant electron density exists at night at E region altitudes (90 to 120 km.), with a peak electron density of 1,000 to 10,000 electrons per cubic cm. (E region critical frequency of 250 kHz to 1,000 kHz, approximately), or more.
- Above an altitude of about 150 km., the electron density continuously increases with altitude to a peak value of 100,000 to 1,000,000 electrons per cu. cm. at altitudes of 300 to 400 km. (F region), at night.
- Sporadic E conditions frequently exist at night and may have peak electron densities of 100,000 electrons per cu. cm., or more.
- The ionosphere should not be considered to be distinct layers with thin bands of electrons in each layer and with no electrons between layers, but rather as regions with a nearly continuous vertical electron density distribution from one region to the next.
- Experimental data, in the form of ionograms, indicate that the critical frequency for the normal quiet night E region is usually in the range of 500 to 1,000 kHz, in the lower part of the medium wave band; critical frequencies of the night F region can be in the range 3,000 to 10,000 kHz. It is very important to note that ionograms are generated using vertical transmissions.

For a more detailed discussion of the geochemical processes that occur in the ionosphere, and the daily, monthly and yearly variations of electron density that occur in the various ionospheric regions, the reader should consult the Nelson (Ref. 2), Pejza (Ref. 5), Davies (Ref. 8) or Al'pert (Ref. 9) works.

3. REFRACTION OF RADIO WAVES

Refraction is defined as the change in direction of a wave (light, radio, sound, water, etc.) passing from one medium to another, caused by the change in velocity of the wave going from one medium to another. For example, a straight stick appears bent when partly immersed in water and viewed at an angle to the water surface; a ray of light of a given wavelength, in passing from air to glass, is bent due to the different velocities of the wave in air and glass. The refractive index is a measure of the bending of a ray when it passes from one medium to another. Consequently, the refractive index of the ionosphere (a magneto-ionic medium) controls the path of a radio wave as it travels from one point to another; the presence of free electrons in the ionosphere changes the refractive index from the refractive index for the neutral atmosphere.

The classical equation that defines the refractive index of the ionosphere in the presence of a magnetic field is called the Appleton formula; the books by Davies (Ref. 8), Al'pert (Ref. 9), and Budden (Ref. 12) provide excellent derivations of the Appleton formula and describe the various simplifications that can be made to the formula. The full solution of the Appleton requires a digital computer program, because the effects of the Earth's magnetic field and electron collisions in the ionosphere greatly complicate the Appleton formula.

In order to present a greatly simplified description of ionospheric propagation, we shall assume that the effects of the Earth's magnetic field and the electron collision rate in the ionosphere (and therefore ionospheric absorption) are negligible, thereby reducing the full form of the Appleton formula to the equation:

$$\mu^2 = 1 - \frac{80.5 N}{(f_{kHz})^2} \quad (1)$$

where μ is the refractive index.
 N is the electron density in the ionosphere (electrons/cm³).
 f_{kHz} is the radio wave frequency (kHz).

Figure 2 shows a radio wave leaving the Earth's surface at an elevation angle, Δ , entering the ionosphere at an altitude h_0 (point "o"), being gradually refracted by the ionosphere, until the ray is parallel to the Earth's surface at point "r"; the ray is then gradually refracted back to Earth. From equation (1) above, we can see that at altitudes below the base of the ionosphere (i.e., no free electrons), the refractive index, μ , is 1.0; as the electron density increases, the refractive index decreases. At point "r", the electron density has increased to the level necessary to refract the wave back to Earth. The electron density required to refract the wave back to Earth can be estimated by applying Snell's Law to a spherical ionosphere. Simply stated, Snell's Law says that when a wave enters a region with a lower refractive index it is bent from the normal. The equation that relates the refractive index at point "r" on Figure 2 to the initial elevation angle, Δ , (see Davies (Ref. 8) or Al'pert (Ref. 9) for the derivation is:

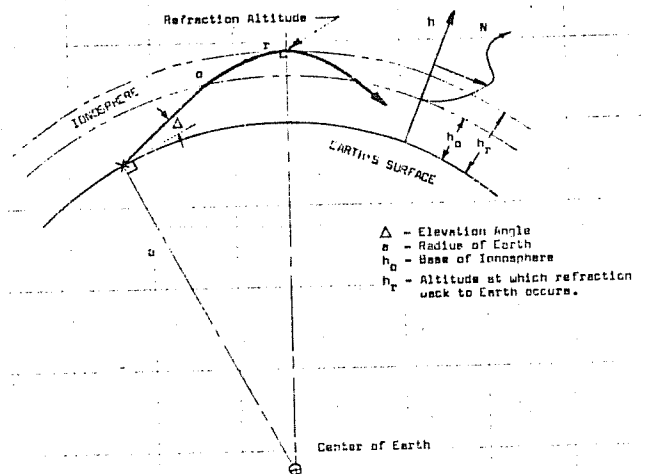


FIGURE 2. Ray Geometry with Oblique Incidence

$$\mu_r = \frac{a \cos \Delta}{a + h_r} \dots \dots \dots (2)$$

where μ_r is the refractive index when the ray is parallel to the Earth's surface (or 90 degrees to the normal to the Earth's surface).
 h_r is the altitude at which the ray is parallel to the Earth's surface. h_r is called the refraction altitude.
 s is the radius of the Earth (approximately 6370 km.).

Setting $\mu_r = \mu$ and substituting Equation (2) into the simplified Appleton formula (Equation (1)), we can obtain an equation relating the frequency at which refraction back to Earth occurs to the ionospheric electron density, for a given refraction altitude and ray elevation angle:

$$(f_{kHz})_c = \sqrt{\frac{90.5 N_r}{1 - \left(\frac{a \cos \Delta}{a + h_r}\right)^2}} \dots \dots \dots (3)$$

where $(f_{kHz})_c$ is the oblique critical frequency for refraction back to Earth at the altitude h_r .
 N_r is the electron density (electrons/cm³) in the ionosphere at the altitude h_r .
 Δ is the elevation angle of the ray at the Earth's surface.

If the peak electron density of an ionospheric layer is N_{peak} , occurring at an altitude h_{peak} , then the oblique critical frequency of that ionospheric layer can be found by substituting $N_r = N_{peak}$ and $h_r = h_{peak}$ into Equation (3) above. It is evident that the oblique critical frequency of an ionospheric layer is dependent upon the value of the elevation angle of the ray relative to the surface of the Earth. Radio waves at frequencies below the oblique critical frequency of an ionospheric region will therefore be refracted back to Earth by that region, while radio waves at frequencies above the oblique critical frequency of the ionospheric region will continue higher into the ionosphere until the waves encounter an electron density sufficient to refract the wave back to Earth.

4. MEDIUM WAVE REFRACTION ALTITUDES

In this section, we shall use the equations for the critical frequency of an ionospheric region developed in Section 3 above to determine the altitude at which refraction back to Earth occurs, assuming different values for the peak electron density in the ionospheric regions.

Initially, we shall consider the special case of radio waves propagated vertically ($\Delta=90$ degrees). While this case is of little practical use, it is of importance because it is the propagation mode by which ionograms are generated, and, therefore, the vertical critical frequencies of the various ionospheric regions are measured. The variation of vertical critical frequency with ionospheric electron density is shown in Figure 3 (this curve was calculated using Equation (3) and an elevation angle (Δ) of 90 degrees). The peak electron density in an ionospheric region can be easily deduced from an ionogram using Figure 3; for instance, if an ionogram indicated that the critical frequency of the nighttime E region was 500 kHz (a typical value), then Figure 3 indicates that the E region peak electron density would be about 3,100 electrons per cubic centimeter.

Table 1 provides five examples of the variation of the vertical critical frequency with the peak electron density in an ionospheric region, using the ionospheric density curves shown in Figure 1 and based on Equation (3).

TABLE 1-VERTICAL RAY PROPAGATION ($\Delta=90$ Degrees)

| Electron Density Profile file (from Figure 1) | Peak value of N (e/cu.cm.) | Critical Freq. (kHz) |
|---|----------------------------|----------------------|
| Quiet night E-region (100 km) | 1,000 | 286 |
| Quiet night E-region (100 km) | 10,000 | 897 |
| Sporadic E layer (100 km) | 350,000 | 5,308 |
| Typical night F-region (300 km) | 100,000 | 2,838 |
| Typical night F-region (300 km) | 1,000,000 | 8,973 |

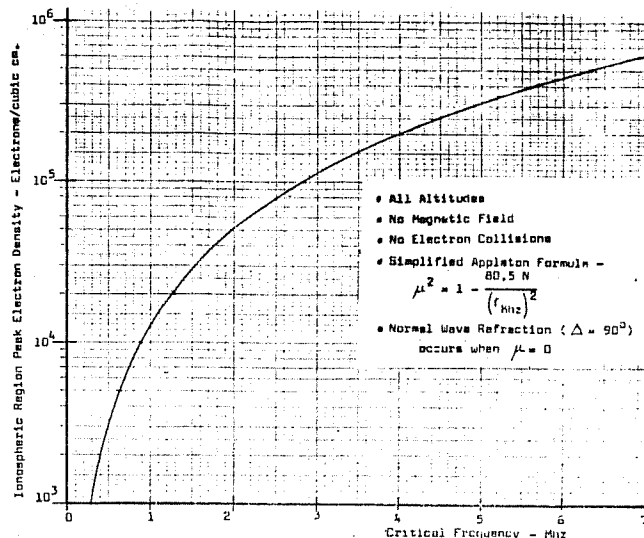


FIGURE 3. Normal Ray Critical Frequency

The data shown in Table 1 indicates that if the E-region peak electron density is 10,000 electrons per cu. cm. at an altitude of 100 km., then waves propagated vertically at frequencies below 897 kHz will be refracted back to Earth while waves with frequencies above 897 kHz will not be refracted back to Earth at an altitude of 100 km., but will continue upward until the electron density is great enough to refract the wave back to Earth. It is very important to note that radio waves may be refracted back to Earth from altitudes less than the altitude at which a peak electron density occurs. For instance, consider a radio wave with a frequency of 1,200 kHz; Figure 3 indicates that an electron density of about 18,000 electrons per cu. cm. is required to refract this vertical wave back to Earth; Figure 1 indicates that refraction back to Earth from a sporadic E layer or from the F-region (at altitudes ranging from 165 to 275 km. depending upon the electron density profile) is possible.

We shall now consider the general case of oblique ray propagation (i.e., an elevation angle less than 90 degrees), wherein the effects of elevation angle and altitude play a critical role in determination of the oblique critical frequency of an ionospheric region. Figure 4 shows the variation of the oblique ray critical frequency as a function of the elevation angle of the ray relative to the surface of the Earth for several values of ionospheric electron density, for an altitude of 100 km. This figure was generated using Equation (3); similar plots may be calculated for other altitudes.

Table 2 below considers the same five cases shown in Table 1 above, wherein the maximum electron density in an ionospheric region is known and the oblique critical frequency of that region is to be found; an elevation angle of 5 degrees to the Earth's surface was assumed for this case. Note also that the E-region values can be found from Figure 4, while the sporadic E layer and F-region values must be calculated from Equation (3).

TABLE 2-OBLIQUE RAY PROPAGATION ($\Delta=5$ Degrees)

| Electron Density Profile (from Figure 1) | Peak value of N (e/cu. cm.) | Critical Freq. (kHz) |
|--|-----------------------------|----------------------|
| Quiet night E-region (100 km) | 1,000 | 1,455 |
| Quiet night E-region (100 km) | 10,000 | 4,601 |
| Sporadic E layer (100 km) | 350,000 | 27,317 |
| Typical night F-region (300 km) | 100,000 | 14,549 |
| Typical night F-region (300 km) | 1,000,000 | 46,010 |

Comparison of the oblique ray critical frequencies of the E and F-regions of the ionosphere shown in Table 2 with the vertical ray critical frequencies of Table 1 demonstrates the dependence of the oblique critical frequency of an ionospheric region on the elevation angle of the ray relative to the Earth's surface and on the peak electron density of the ionospheric region. For example, if the peak electron density of the E-region is 10,000 electrons per cu. cm. at an altitude of 100 km., then the critical frequency of the E-region for vertically transmitted waves will be 897 kHz, while for waves with a 5 degree elevation angle the oblique critical frequency of the E-region will be 4,601 kHz. Therefore, waves transmitted at frequencies below 4,601 kHz at an elevation

angle of 5 degrees will be refracted back to Earth by an E-region with a peak electron density of 10,000 electrons per cu. cm., while waves at frequencies higher than 4,601 kHz will continue upward into the ionosphere until the electron density is great enough to refract the wave back to Earth.

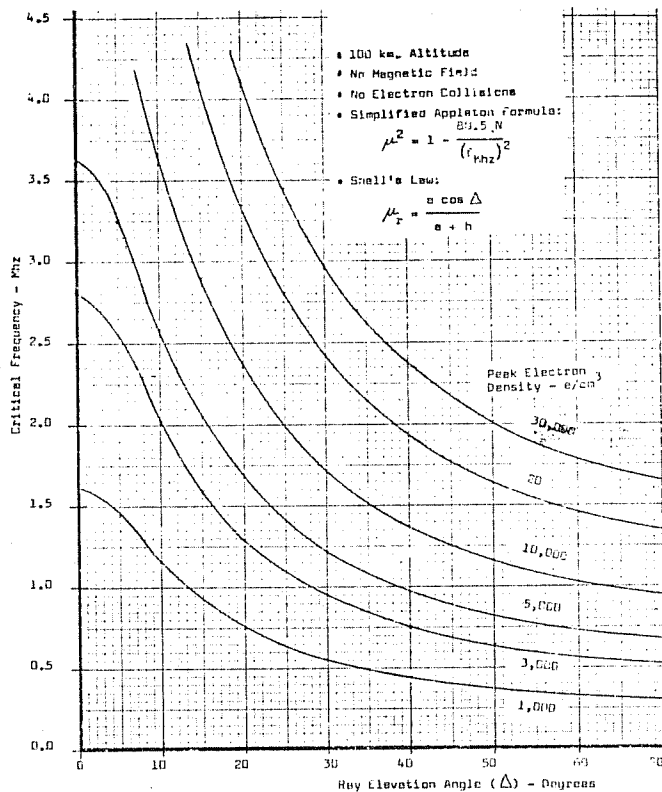


FIGURE 4. Unique Ray Critical Frequency

Figure 4 can be used in several other ways, such as:

1) Assume a wave frequency of 1,000 kHz and a minimum quiet night peak electron density of 1,000 electrons/cu. cm. at an altitude of 100 km. (E-region). Figure 4 shows that waves propagated at elevation angles below 13 degrees will be refracted back to Earth by this ionospheric region, while waves at elevation angles greater than 13 degrees will not be refracted back to Earth at this altitude, but will continue upward into the ionosphere until the electron density is great enough to cause refraction back to Earth. Similarly, consider an E-region peak electron density of 10,000 electrons/cu. cm. at an altitude of 100 km.; Figure 4 indicates that a wave of frequency of 1,000 kHz will be refracted back to Earth for elevation angles of 64 degrees or less, but for elevation angles greater than 64 degrees, the wave will continue upward into the ionosphere until the electron density is great enough to refract the wave back to Earth.

2) Assume a wave frequency of 1,000 kHz, and an elevation angle of 30 degrees at the Earth's surface. Figure 4 indicates that an electron density of 3,500 electrons/cu. cm. is required to refract this signal back to Earth. Figure 1 shows typical quiet night E and F-region electron density profiles. For the minimum electron density profile (Line A on Figure 1, with a peak E-region density of about 1,200 electrons/cu. cm.), the altitude at which 3,500 electrons/cu. cm. occurs is about 200 km. For the maximum electron density profile (line B on Figure 1 with a peak E-region electron density of 13,000 electrons/cu. cm.), the altitude at which refraction back to Earth occurs is about 95 km.

The examples provided above illustrate the dependency of medium wave refraction altitudes on the elevation angle of the ray relative to the Earth and on the peak electron density in the E-region of the ionosphere. The reader can, if he wishes work out any number of cases using different electron densities, elevation angles or frequencies to determine refraction altitudes with the aid of Figures 1, 3 and 4.

It is important to note that this discussion and the data presented herein are based on the simplified Appleton equation (Equation(1)), which assumes that the effects of the Earth's magnetic field and ionospheric absorption are negligible. In

reality, the Earth's magnetic field plays an important role in medium wave propagation and the assumption that its effects are negligible is not rigorous. Therefore, the data presented in this section should be considered approximate, but it does relatively easily illustrate the basic concepts that underlie medium frequency ionospheric propagation.

5. CONCLUSIONS

Certain general conclusions can be made at this time concerning nighttime medium wave ionospheric propagation based on the discussion and data presented above. These conclusions include:

1) The critical frequency of the night E-region (approximately 90 to 120 km. altitude), measured with a vertical transmission, is usually in the range of 500 to 1,000 kHz (corresponding to peak E-region electron densities of about 3,000 to 13,000 electrons per cu. cm., respectively), although it can be as low as 250 kHz (about 1,000 electrons per cu. cm.); nighttime sporadic E layers occur often, and can have critical frequencies of 5,000 kHz or more. The F-region (approximately 150 km. and above, with a peak value between 250 and 400 km.) usually has nighttime critical frequencies of 3,000 to 10,000 kHz (corresponding to peak F-region electron densities of 100,000 to 1,000,000 electrons per cubic cm., respectively), depending upon geographic latitude, season, and time of day.

2) Long distance, multi-hop medium wave propagation at night in the low and middle latitudes usually occurs over paths with low elevation angles and E-region refraction altitudes (i.e., 90 to 120 km.), because the oblique critical frequency of the E-region is usually greater than 1,600 kHz for paths with elevation angles less than 5 degrees. The exceptions to this rule might be high frequency (e.g., greater than 1,200 kHz), two or three hop paths with a low E-region peak electron density.

3) Short distance, single hop medium wave propagation at night may occur by either E-region or F-region refraction, depending upon the wave frequency, the elevation angle of the ray, and the E-region peak electron density. A wave at a high medium frequency and a high elevation angle will be more likely to penetrate the E-region and be refracted by the F-region than will a low frequency of low elevation angle wave.

4) When a medium frequency wave does penetrate the E-region and is refracted by the F-region of the ionosphere, the altitude at which refraction back to Earth occurs will be below the altitude at which the F-region peak electron density occurs, because the wave frequency is much less than the oblique critical frequency of the F-region.

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DX RECORDS

HEARD: Dr. Michel Breger
 VERIFIED: Steve Moss
 GRAVEYARD: Walter Kuenast

CENTEXDX: 7217 Creekside Drive, Austin, Tx 78752.

This will be my last column since CENTEXDX is moving on to other things. It has been a very pleasant three years with DX Records (and three years with DX Contests before that). Many thanks for your support.

HEARD RECORDS - SEPTEMBER, 1978

Following tradition I have had to drop all records which had not been updated for two years. If your record was left out, please update and send to my successor.

Domestic Heard Records

| NAME | TDH | S | P | TSH | BEST HEARD | YR |
|-------------------------|------|----|----|------|--------------|----|
| 1 F. Wheeler, PA | 2670 | 50 | 9 | 2824 | KFAR ALASKA | 30 |
| 2 R. Kramer, ILL | 2174 | 49 | 10 | 2276 | KEEN - 1370 | 70 |
| 3 B. Cartwright, PA | 1619 | 47 | 10 | 1813 | | 70 |
| 4 A. Kwiatkowski, ILL | 1426 | 49 | 9 | 1426 | KOXL-MT-1450 | 70 |
| 5 R. T. Pistek, ILL | 1316 | 50 | 10 | 1387 | ILL 101 STNS | 62 |
| 6 R. T. Eddie, MO | 1232 | 49 | 6 | 1302 | | 67 |
| 7 R. Arruda, MA | 1087 | 47 | 9 | 1087 | KOKO-MO-1450 | 63 |
| 8 R. Seaver, CA | 905 | 44 | 7 | 1358 | HAWAII 26 ST | 62 |
| 9 T. H. White, VA | 739 | 37 | 7 | 783 | PENNA 84 STN | 68 |
| 10 J. Ayers, MS | 719 | 36 | 6 | 831 | CHUB - BC | 74 |
| 11 R. Morby, NY | 681 | 38 | 8 | 747 | NY 129 STNS | 74 |
| 12 J.F.Orren, WA | 676 | 40 | 5 | 732 | CALIF 129 ST | 68 |
| 13 M. Breger, TX | 672 | 41 | 6 | 905 | TEXAS 180 ST | 72 |
| 14 B. Hardy, WA | 664 | 38 | 5 | 713 | KAJN-1560 | 60 |
| 15 N. Hardy, WA | 600 | 39 | 5 | 637 | WRIN-1560 | 73 |
| 16 M. Hogan, IN | 562 | 29 | 7 | 591 | ILL 68 STNS | 69 |
| 17 N. Hall-Patch, BC | 536 | 39 | 5 | 640 | CALIF 94 STN | 74 |
| 18 B. Walker, KY | 503 | 35 | 6 | 513 | KVPI-1050 | 74 |
| 19 G. Allinson, NC | 467 | 43 | 8 | 494 | | 73 |
| 20 G. Thomas, FL | 444 | 32 | 3 | 566 | | 76 |
| 21 P.R.Mount, NJ | 423 | 34 | 7 | 455 | NY 66 STNS | 73 |
| 22 N. Wolfish, ONT | 384 | 38 | 9 | 425 | WKDZ 1110 KY | 76 |
| 23 D. Davis, GA | 381 | 34 | 2 | 402 | | 76 |
| 24 D. Korinek, CA | 377 | 38 | 5 | 523 | | 76 |
| 25 F. McClelland, CA | 352 | 32 | 5 | 419 | KMVI-550-HAW | 72 |
| 26 R.S. Ross, ONT | 310 | 38 | 7 | 339 | | 76 |
| 27 P.A. Wolfe, CA | 273 | 32 | 4 | 308 | | 76 |
| 28 D. Beauregard, QUE | 252 | 31 | 8 | 293 | | 71 |
| 29 G. Monti, NY | 248 | 30 | 6 | 252 | | 76 |
| 30 H. Christianson, MAN | 243 | 32 | 5 | 243 | | 70 |
| 31 B.E. McFadden, OK | 211 | 32 | 4 | 211 | | |

A "d" after the number of states heard indicates that the District of Columbia has been heard. DC is not counted as a state in DXR.

Foreign Heard Records

| NAME | TFH | C | TSH | BEST | YR |
|------------------------|-----|----|------|----------------|----|
| 1 R. Seaver, CA | 485 | 61 | 1358 | TAHITI - 740 | 62 |
| 2 M. Breger, TX | 233 | 34 | 905 | SPAIN 638 | 72 |
| 3 B. L. Cartwright, PA | 194 | 34 | 1813 | | 70 |
| 4 F. Wheeler, PA | 154 | 26 | 2824 | 1YA 760 N.ZEAL | 30 |
| 5 D. Korinek, CA | 153 | 35 | 523 | GUINEA - 1403 | 76 |
| 6 N. Hall-Patch, BC | 123 | 29 | 640 | LENINGRAD 872 | 74 |
| 7 G. Thomas, FL | 122 | 23 | 566 | | 76 |
| 8 J. Ayers, MS | 112 | 3 | 831 | XEA - CAMPECHE | 74 |
| 9 R. Sanserino, CA | 110 | 38 | 110 | BBC - 1214 | |
| 10 R. Kramer, ILL | 102 | 32 | 2276 | | 70 |
| 11 B. Hardy, WA | 76 | 20 | 713 | FIJI - 891 | 60 |
| 12 R. T. Pistek, ILL | 73 | 36 | 1387 | ANDORRA - 818 | 62 |
| 13 R. T. Eddie, MO | 71 | 23 | 1302 | | 67 |
| 14 F. McClelland, CA | 68 | 5 | 419 | YNX 750 NICARA | 72 |
| 15 R. Morby, NY | 66 | 19 | 747 | SPAIN - 683 | 74 |
| 16 N. Hardy, WA | 65 | 19 | 637 | FIJI - 891 | 73 |
| 17 J. F. Orren, WA | 56 | 15 | 732 | CBL18-1180 | 68 |
| 18 T. H. White, VA | 44 | 19 | 783 | YVOZ - 1200 | 68 |
| 19 N. Wolfish, ONT | 41 | 15 | 425 | CMHQ - 630 | 76 |
| 20 P. A. Wolfe, CA | 41 | 14 | 308 | | 76 |
| 21 D. Beauregard, QUE | 41 | 16 | 293 | | 71 |
| 22 P. R. Mount, NJ | 32 | 13 | 455 | | 73 |
| 23 M. Hogan, IN | 29 | 10 | 591 | HJHJ - 600 | 69 |
| 24 R. S. Ross, ONT | 29 | 9 | 339 | | 76 |
| 25 G. Allinson, NC | 27 | 16 | 494 | | 73 |
| 26 D. Davis, GA | 21 | 18 | 402 | | 76 |

| | | | | | |
|-------------------------|----|---|-----|---------------|----|
| 27 B. Walker, KY | 10 | 7 | 513 | CAYMAN - 1555 | 74 |
| 28 G. Monti, NY | 4 | 3 | 252 | | 76 |
| 29 H. Christianson, MAN | 4 | 4 | 243 | PJB BONAIRE | 70 |

This time the many ties were resolved by looking at the overall total (TSH). My apologies to H. Christianson for having to guess/compute a few of the numbers from the given information.

auf wiedersehen for the last time centexdx ..michel

WHAS is a clear channel 50,000 watt radio broadcast facility on 840 KHZ on your dial. We hope you'll tune to Radio 84 often in the future.

WHAS RADIO 84
 LOUISVILLE, KENTUCKY

FCC MULLS PROPOSALS FOR 1979 WORLDWIDE RADIO ALLOCATIONS SUMMIT MEET

There hasn't been much said in DX Monitor about the upcoming World Administrative

Radio Conference (WARC), to be held in Geneva, Switzerland, in 1979. The FCC is now trying to determine what stance the U.S. should take at WARC.

The WARC will consider changes to previous international agreements covering which portions of the radio spectrum will be allocated to various radio services (such as broadcast, amateur, utility, two-way, etc.).

The FCC will be a key spokesman for U.S. policy at WARC. As of this July, the FCC has issued eight "WARC notices of inquiry," and the latest one includes comments from various interest groups on proposals to expand the AM broadcast band beyond its present 535-1605 boundaries.

In its fifth WARC notice of inquiry sometime back, the FCC proposed asking WARC to expand the broadcast band to 525-1805 kHz. Reaction to this proposal has been mixed.

The Clear Channel Broadcasting Service (CCBS), representing 16 of the 25 U.S. Class I-A clear-channel stations (namely, most of the I-A's that are not network-owned), endorsed a proposal to add 115-190, 525-535, and 1605-1860 kHz to the present AM broadcast service. CCBS cited the need for additional AM service.

The Corporation for Public Broadcasting (CPB), which funds educational radio and TV stations in the U.S., endorsed proposals for adding all of those frequencies except for 1605-1615, which are now in the Travelers' Information Service in the U.S. CPB noted that out of the 200-plus radio stations it helps fund, only 28 are AM, and CPB added that to provide adequate public radio, it needed some 500 public radio stations in the AM service. (The WARC "AM service working group" of the FCC said that the proposal to add 525-535 and 1605-1805 to the present AM band would make possible the addition of up to 1,400 AM stations in the U.S.)

However, the National Association of Broadcasters (NAB) said the expansion proposed by the FCC (namely, everything except 115-190 in the long-wave band) was "adequate."

The FCC has now tentatively withdrawn a proposal to make 115-190 kHz available for AM broadcasting in the Western Hemisphere (long-wave broadcasting is currently authorized only in the Eastern Hemisphere) largely because of complaints that broadcast service in that band would cause interference to power-line companies using very low and low radio frequencies. NAB was happy that the FCC withdrew the proposal for 115-190 kHz; but CCBS and CPB weren't so happy and urged the FCC to reconsider.

There is other dickerings going on for other parts of the radio spectrum, such as the UHF-TV band (channels 14 to 83) and various satellite frequencies. But since ours is a club covering primarily BCB (510 to 1630 kHz) and to a minor extent long-wave broadcasts below 510 kHz, we'll try to confine our reporting to frequencies below 2000 kHz or so. We do plan to keep you advised of what the FCC plans to request at the 1979 WARC meeting. And we'll tell you next year what action the WARC takes. If it should happen that the BCB is expanded above 1630 kHz, an amendment to our club By-Laws may be in order, to bring such new stations within the scope of our club. --Bill Hardy. (Based on info from 7/24/78 Broadcasting, used by permission.)

ADVISOR

TELE-AD: 714-566-0092
 TO 2145 + MM'S TO 0700
 PACIFIC LOCAL TIME!
 SASE REQ. FOR REPLY

EDITOR: ALBERT S. LOBEL
 10514 CAMINITO BAYWOOD
 SAN DIEGO CA USA 92126
 DEADLINE: LAST WEDNESDAY
 OF EACH MONTH

ONE CLOSING NOTE FROM YE' EDITOR:

Questions are sometimes received regarding rules for reporting to the Advisor. The answer is that there are no rules per se. The only thing I ask is that you please be legible. You need not type your ads; but, it would be much appreciated that you double space if you do type (this is not mandatory, however)! THANKX FOR YOUR SUPPORT!

The next edition of the Advisor will be on time -- I promise (hi!). Deadlines are the last Wednesday of each month.

NOTICES

THIS ADVISOR COLUMN IS BEING TYPED A LITTLE LATE DUE TO YE' EDITORS VACATION. SORRY ABOUT ANY INCONVENIENCE CAUSED!

This is the Advisor Anniversary Edition. No space will be taken up listing names of the outstanding contributors as previously done. Just want to say thankx to all who contributed. I look forward to another year as the Editor of the Advisor. Keep those ads coming!

One final note: Watch for new address. I am not moving (atleast not yet) but will soon be using another mailing address; i.e., a P.O. Box #.

& on to the ads for this edition!!

Look at this Special

Realistic DX-160 in mint condition. 1 year old but never used because I bought an HQ-180. \$120 plus shipping. DAN GRADIN, 27540 S.E. CHASE RD., GRESHAM OR 97030; PHONE: (503) 663-3292.

SALE

Heathkit GR-54 SW/AM reciever. Needs some work but in fair condition. AM antenna needs replacing. 10 years old. \$25.00 plus postage.
 ROBERT WIEN, 945 DESERT ISLE DRIVE, SAN JOSE CA 95117.

IRCA DX Monitors: Volumes 7 - 15 (July '69 to present). Each volume \$10.00 ppd.

+
 1973-74 & 1974-75 TV Factbook Service. \$4.00 ppd for both.

+
 1969 Fall Amateur Radio Callbook Handbook. \$2.00 ppd.

+
 One hundred different TV guides (Wisc.). \$10.00 plus postage. 1969, 1970, & 1971 Communications Handbooks. \$4.00 ppd.

+
 Two Hundred assorted WDUZ SC's 1976-78. \$6.00 ppd.

+
 Five Hundred TV, Movie & Radio newspaper clippings. \$5.00 plus postage.

+
 One Hundred Sunday TV Sections from Green Bay, Dallas, Cleveland and others. \$10.00 plus postage.

+
 One thousand SC's my choice. \$30.00 ppd.
 GARY NUTHALS, 1155 MATHER STREET, GREEN BAY WI 54303.

57 different DX Monitors from June 17, 1967 to March 8, 1969. \$20.00 ppd.

ADDITIONAL AD FROM GARY NUTHALS!

Receiver: R-309-A Collins. Mechanically and physically perfect.

+
 Misc: BC-221 Frequency Meter. Excellent condition w/ all calibration tables.

+
 S.K.L. Variable high and low pass audio filter. Ideal for cleaning up taped DX, removing HETS, noise, etc.

+
 Dumont 304H Scope. Complete with P-7 tube.

+
 Hewlett Packard HP-524B frequency counter.
 GLENN JACOBS, RD 1 BOX 354-A, MOSCOW PA 18444;
 PHONE: (717) 842-8245.

WANTED

Information on G.E. CRF conj.-range (?) portable. (1962) Anybody own one or have info. on it? Please contact me! Or do I own one and no-one else does?

+
 Station lists. Will trade my list of stations or copy coverage maps I have for your own list.

+
 Tape receptions of any Hawaiians or TP's. Will trade for bandsweeps from this area or for other items in above ads.
 ROBERT WIEN, 945 DESERT ISLE DRIVE, SAN JOSE CA 95117.

TRAVELERS STATION PLANNED
 FOR 1610 IN MOUNTAINS
 OF WASHINGTON STATE

Bruce Portzer passes along this information from the Washington State Department of

Transportation; That agency is planning a Travelers Information Service (TIS) station a few miles east of North Bend, WA, along Interstate 90. The station will be NSP on 1610 kHz, with reports of road conditions (especially around Snoqualmie Pass) during winter, and greetings to travelers during summer. Power will be 10 watts into a short, loaded vertical antenna. Not sure when it will hit the air. In late June the DOT's radio engineer told Bruce they would receive authorization very shortly and were getting ready to start construction. (typed by BH)

UNFINISHED BUSINESS

A few items from 8/21/78
Broadcasting (used by permission) that should be of interest to you.
KUPY-1450. The FCC has finally renewed the license of KUPY (ex-KAYE) Puyallup, WA, but says the station must be sold within six months. KAYE was designated for hearing back in 1970! Among the issues were the station's compliance with the FCC's Fairness Doctrine and personal-attack rules. Actually, neither of the two owners of KAYE (changed to KUPY in 1973) are still involved with the station. The FCC permitted its staff to approve the transfer of Jim Nicholls's share of the station to the other owner, Bud Blair. Blair died of a heart attack 3/31/78, and the licensee, Happy Valley Radio Inc., was transferred to his widow. The widow has already applied to assign the license to Shortleeve Broadcasting Company, owned by a Seattle advertising man and his wife. The sale would bring in \$235,000, plus \$85,000 for a "ten-year agreement not to compete." Mrs. Blair says the sale price would be used to reduce the station's \$421,000 in outstanding debts, so no wrongdoer would benefit.

KRLA-1110. This case drags on. KRLA Pasadena, CA, lost its license in 1962 on grounds of fraudulent contests and altering of program logs. Nonprofit Oak Knoll Broadcasting has operated the 1110 metro-L.A. facility since 8/1/64. Originally, 19 potential operators filed for KRLA's facilities; all but seven have now dropped out. Five of them had planned to merge into company 40% owned by applicant Western Broadcasting Company (headed by celebrities Bob Hope and Art Linkletter), 25% owned by Voice in Pasadena, 15% owned by Goodson-Todman (the game-show producers), 15% owned by Pasadena Broadcasting Company (based in Tacoma, WA), and 5% owned by Charles W. Jobbins. This plan called for paying "allowable expenses" to the other applicants who would drop out. But, in August the tentative agreement was shot down by Voice in Pasadena, which rejected it. The plan gave Western Broadcasting the potential of acquiring full ownership in three years for total outlay of some \$15 million. Initial FCC decision a few years back gave Western Broadcasting the facility (they were granted call letters KIGI that were never used), but other applicants took matter back to court. This 14-year-long struggle may still end up being settled by a merger agreement.

XEGM-950. Adolfo and Elias Liberman have appealed to the U.S. Court of Appeals in Washington, DC, asking them to review the FCC decision denying the Libermans authority to deliver programs by wireline from Los Angeles studios to XEGM Tijuana. (See 8/5/78 DXM, p. 569, "Tijuana Tidbits.") This will have the effect of allowing XEGM to keep doing live programming until the Appeals Court rules. -BH.

IRCA SPORTS NETWORKS

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

In response to our call in July DXM for what to include in IRCA Sports Networks, here's the consensus: American and National League baseball and NFL football have the most extensive regional networks. Major-league baseball, plus NBA basketball, NHL & WHA hockey, play the most night games. These will all be listed. As space permits and info is available, we'll also list NASL soccer and CFL football, plus flagships for college football and basketball (there are too many regional nets to spend more than one line per school). We will not do any high school sports, Little League baseball, etc. because you should be able to look up the city in an atlas. Other sports may be mentioned from time to time in a "running commentary" such as this one, but will only be printed if space permits.

In DX Monitor, we're going to go with skeleton listings of call letters and state, by frequency, with a few symbols for daytimers, FM simulcasts, and a few other special things. We'll leave out the city of license, since you can look that up in your NRC, VJ, or White's Log, or Broadcasting Yearbook.

Tentatively, full listings will be available later, showing all data for each team, including sponsors and cities of license, where it doesn't take up so much space in the club bulletin. Further details on these reprints will be forthcoming after I get all the bugs worked out. Watch for an announcement on that. Sponsors will be omitted from DXM to conserve space, but play-by-play and color announcers will be included since it only takes one or two lines to list them.

YOUR HELP is needed to fill in the gaps in these listings. There are some NFL teams that did not send listings for the regional networks. The NBA, NHL, and WHA seasons start in October, and I need to have station listings for them not later than 9/27/78. If you live in an NBA, NHL, or WHA city, please call or visit your local team or its flagship station by 9/20/78, ask for their regional network listing, plus announcers and sponsors if they know them, and send the info to Bill Hardy by the 9/27 deadline. Thanks!

College football. As space allows, it might help some DXers to get listings of the flagship stations for college football. Since there are hundreds of small schools with football teams, it would cost too much in postage to write each school for this info. There is no central clearinghouse for this information (if there is, please clue me in!). So, the only way we'll know this is if you IRCA members send in the flagship stations for the college teams in your local area. Preferably, this would be obtained by your actual radio monitoring, by checking your local newspaper, or by asking someone at the school's sports information office. However, info on 1977 carriage is better than no info at all. Please get this info to Bill Hardy as soon as possible, so that it will be of the most time value. A "partial" college football listing will appear as soon as we get enough info to list. A one-line listing is sufficient: "KOMO-1000, University of Washington," for instance. The same is true of college basketball; specify, please, which sport the station does.

One thing we can pass along now is the national network radio coverage of college football.

Notre Dame: Mutual Radio will do all eleven Fighting Irish games on nationwide radio for the 11th straight year.

Southwest Conference: Mutual Radio is taking over Southwest Conference football this year under a five-year contract that encompasses all nine SWC colleges and the entire SWC 63-game schedule. This brings to a close an era of 44 years (since 1934) that Exxon has held radio rights to SWC games; Mutual simply outbid Exxon this time. My info shows that SWC schools are Arkansas, Baylor, Houston, Rice, Southern Methodist (SMU), Texas, Texas A&M, Texas Christian, and Texas Tech.

Other Mutual coverage: Mutual plans to do ten major sectional and intersectional NCAA games during the regular season (they may be blacked out in the areas of the two teams involved). Among the 1978 games are Ohio State vs. Michigan and Southern Cal vs. UCLA.

Mutual Black Network: Plans to cover top black-college football games on 12 Saturday afternoons, plus the Gold Bowl on 12/2 (Central Intercollegiate Athletic Association winner vs. Mid-Eastern Athletic Conference winner).

Mutual post-season bowl games: Mutual will have nationwide coverage (except possibly in blackout areas) for seven post-season games: Hall of Fame Classic 12/20, Liberty Bowl 12/23, Gator Bowl 12/29, Orange Bowl 1/1/79, Sugar Bowl 1/1/79, East-West Shrine Game 1/6/79, and Senior Bowl 1/14/79.

CBS Radio bowl games: CBS Radio will carry the Sun Bowl 12/23/78, and the Cotton Bowl on 1/1/79.

NBC Radio bowl games: NBC Radio will carry the Fiesta Bowl 12/25/78, the Bluebonnet Bowl on 12/31/78, and the Rose Bowl on 1/1/79.

(Info on Mutual coverage is from 8/7/78 Broadcasting, used by permission. Information on CBS and NBC coverage came directly from the networks.)

"Beisbol" on 1420 kHz. If you hear a baseball game in Spanish on 1420, you have two possibilities.

Ken Carr advises that XEP-1420 in Ciudad Juarez, Chih., Mexico does SS broadcasts of the Juarez Indios of the Mexican League. One of the sponsors is Carta Blanca Cerveza (beer).

And Albert Lobel has previously noted that XEXX-1420 in Tijuana, BCN, Mexico does SS broadcasts of the San Diego Padres home games.

While on the topic of baseball in SS, Mike Endza notes that KOFY-1050 in San Mateo, CA, sometimes does weekend Oakland A's games in SS, sometimes tape-delayed and sometimes live. KOFY told Mike that this has been going on for years, off and on, with KBRG(FM) San Francisco also doing A's games in SS at times.

Upcoming on CBS Radio. The CBS Radio Network recently sent us a press release covering some play-by-play live sports they'll be doing. Details of CBS NFL football coverage appear elsewhere, as do bowl games CBS will do on radio. CBS has radio rights for the upcoming baseball playoffs in the American and National League, Oct. 3 to 8, and the World Series itself, Oct. 10 to 18. Other upcoming live sports coverage includes the Washington DC International Thoroughbred Race on 11/4, and the U.S. Open Tennis Championships which culminate Sun. 9/10 (the day before most of you read this, unfortunately, since the press release just barely missed my last deadline). In most cases, the regular CBS Radio Network lineup will have all this; the most recent DXM publication of the full CBS roster appeared 1/22/77, p. 219, although an updater has been sent to Bruce Goldsen and should appear soon.

IRCA SPORTS NETWORKS

As of 9/14/78 I have already learned of at least three changes in NBA basketball flagship stations for 1978-79, from those listed in 3/4/78 DXM, p. 374: Houston Rockets -- now KTRH-740 (ex KXYZ-1320) Kansas City Kings -- now KCKN-1340 (ex KMBZ-980) Portland Trail Blazers -- now KUPL-1330 (ex KYTE-970) Anyone knowing of other changes from 1977-78 is asked to please write immediately to Bill Hardy, 2301 Pacific Ave., Aberdeen, WA, 98520. The full NBA listing will appear later.



P.O. BOX 130
ROSEAU, MINNESOTA 56751

KOAD-1240 LOSES LICENSE RENEWAL The FCC unanimously decided in late July not to renew the license of Golden Broadcasting System Inc. to operate KOAD-1240 Lemoore, CA. The FCC cited KOAD's "misrepresentation" in the station's 1971 and 1974 renewal applications. KOAD is one of the few broadcast stations in the U.S. that is owned by blacks. Lemoore is in central California, not too far south of Fresno and west of the Hanford-Tulare-Visalia area. The only other station licensed to Lemoore is daytimer KLAN-1320. The FCC was concerned about losing minority ownership and about depriving Lemoore of one of its two stations. So, the FCC said it invited prospective applicants for the KOAD facility to file for regular or interim operating authority on 1240. So odds are the station will stay on the air till the matter is resolved. (Based on 7/31/78 Broadcasting, used by permission.)

**NATIONAL FOOTBALL LEAGUE
RADIO COVERAGE 1978**

Compiled by IRCA Sports Networks Editor Bill Hardy.
Information received thru 8/28/78 is included.

Sources: 8/7/78 issue of Broadcasting magazine
(used by permission); CBS Radio Network;
NFL teams; flagship stations.

NATIONAL NETWORK COVERAGE: A new arrangement for 1978. Basically, Mutual will cover Sunday afternoon games; CBS Radio will cover all other NFL games, plus the entire playoff schedule including the Super Bowl.

CBS Radio: All 16 Monday-night games, 9/4 thru 12/18. Four special night games on Sun. 9/24, Thurs. 10/26, Sun. 11/12, and Sun. 12/3. Two games Thanksgiving Day, Thurs. 11/23. Two games on each of two Saturdays, 12/9 and 12/16.

All post-season NFL games, including two playoffs per day on Sun. 12/24, Sat. 12/30, and Sun. 12/31; AFC & NFC Championship Games, both on Sun. 1/7/79; SUPER BOWL XIII from Miami, Sun. 1/21/79; Pro Bowl from Los Angeles, Mon. night 1/29/79.

Announcer crews:
Jack Buck (play-by-play) and Hank Stram (analysis) will handle 26 of the 36 broadcasts.

Lindsey Nelson (pbp) and Jim Kelly (anal) will do 7 games.
Don Klein (pbp) and Jim Kelly (anal) will do 3 games.

All broadcasts start on radio 10 minutes before listed TV start times.

Mutual Radio: Mutual will provide nationwide coverage of NFL games every Sunday afternoon at 1600 ELT, beginning 9/3 and ending 12/17/78. No further details are known.

Station lineups for above: CBS and Mutual affiliates get "right of first refusal" for NFL games from their respective networks. If the affiliate doesn't want the game, another station in the market may choose to take the feed. Experience has shown that CBS sports broadcasts tend to be heard mainly on CBS stations, but that sometimes the Mutual sports lineup varies substantially from the regular Mutual lineup.

Blackout restrictions: The CBS version of NFL games is "blackout" in the home cities and regional network areas of the two teams involved, except for the Championship Games where the blackout applies only to the two home cities. (The Pro Bowl is an all-star game, so there would be no blackout.) Mutual games probably have similar blackouts for the two teams playing.

REGIONAL NETWORK COVERAGE:

Symbols used: * Daytime-only station.
+ Has an FM station that will simulcast the games.
"Specified-Hours" station, that may stay on late for a nighttime game.
(pbp) Play-by-play announcer.
(anal) Analysis announcer.
Flagship station is underlined.
Other symbols will be explained as they occur.

ATLANTA FALCONS Bob Neal
630 WNEG-GA* 1340 WGAU-GA 1450 WBHF-GA
710 WUFF-GA* 1360 WAZA-GA* WKEU-GA
920 WGST-GA 1370 WLOP-GA* WMVG-GA
940 WMAZ-GA 1380 WGUS-SC* 1490 WMOG-GA
1100 WLBB-GA* 1390 WISK-GA* 1520 WXPQ-GA*
1130 WMGA-GA 1400 WJHO-AL 1530 WTTI-GA*
1240 WDUN-GA 1410 WLAG-GA 1590 WALG-GA
1290 WTOG-GA 1420 WROG-GA (no FM data available)
1300 WLOW-SC* WPEH-GA*

BALTIMORE COLTS Chuck Thompson (pbp), Vince Bagli (color)
680 WCBM-MD 1230 WCMD-MD 1430 WNAV-MD
910 WSBA-PA WNOR-VA 1450 WTHU-MD@
930 WFMD-MD 1240 WCEM-MD+ 1460 WEMD-MD+
960 WBOC-MD@ 1280 WBRX-PA* WPRW-VA
WFIR-VA WHVR-PA 1470 WTRR-MD**
970 WAMD-MD 1330 WASA-MD**+ 1530 WCTR-MD*
1010 WCST-WV**+ 1340 WEPM-WV@ 1590 WETT-MD
1050 WMSG-MD** 1390 WEAM-VA WCBG-PA@
1410 WDOV-DE (plus 4 FM's)

@ These stations are also on the Washington Redskins network. WASA-1330 is on three networks - Baltimore, Washington, and Philadelphia!

BUFFALO BILLS Al Meltzer (pbp), Ed Rutkowski (color), Rick Azar (color)
1240 WJTN-NY 1450 WHDE-NY 1520 WKBW-NY
1320 WHHO-NY* 1460 WWHB-NY 1590 WGGO-NY*
1410 WDOE-NY (no FM's)

CHICAGO BEARS
WBBM-780 (no regional network)

CINCINNATI BENGALS Phil Samp, Jimmy Crum
WLW-700 (except that some games will be on WUBE-1230 instead, because of conflicts with Cincinnati Reds baseball on WLW) (rest of network lineup unknown)

CLEVELAND BROWNS
WHK-1420 (rest of 53-station network lineup unknown)

DALLAS COWBOYS Verne Lundquist, Brad Sham, Frank Glierber
KRID-1080 (Mutual Southwest Radio Network will feed some 250 stations in nine states; exact station lineups are unknown at this time)

DENVER BRONCOS Bob Martin (pbp), Larry Zimmer (color)
(The following "Intermountain Network" listing is only preliminary.)
550 KRAI-CO 1240 KRDO-CO 1400 KDFA-CO
810 KWSR-CO* KPBC-WY KBZZ-CO
850 KOA--CO KASL-WY 1410 KCOL-CO
920 KLMR-CO KRAL-WY KAHL-NE
1030 Ktwo-WY 1260 KPOW-WY KWOY-WY
1060 KLMO-CO* 1290 KOWB-WY 1450 KGIW-CO
1140 KNAB-CO* 1340 KVRH-CO KYOU-CO
1230 KEXO-CO KSID-NE 1480 KPUB-CO*
KBRR-CO KBWR-WY 1490 KBOL-CO
KBCR-CO 1360 KICX-NE* KGUC-CO#
1380 KUVR-NE* KUGR-WY
1390 KENN-NM KGOS-WY
(plus 4 FM's)

DETROIT LIONS
590 WKZO-MI 1230 WS00-MI 1440 WRDD-MI
680 WDBC-MI 1240 WCBY-MI 1450 WATZ-MI
760 WJR--MI 1280 WFYC-MI* WHTC-MI
850 WKBZ-MI 1290 WHGR-MI WMIQ-MI
900 WATC-MI* 1300 WOOD-MI WKLA-MI
920 WMPL-MI* 1340 WMTE-MI WNBV-MI
930 WBGK-MI WMBN-MI 1480 WIOS-MI*
960 WHAK-MI* 1370 WWAM-MI+ 1490 WMPX-MI
970 WUPY-MI* 1380 WPLB-MI 1590 WTVB-MI+
1150 WCEN-MI 1400 WTCM-MI (plus 4 FM's)

GREEN BAY PACKERS Jim Irwin, Lionel Aldridge
WTMJ-620 (rest of 50-station network lineup unknown)

HOUSTON OILERS Ron Franklin, Ron Stone
(The following "Texas State Network" listing may possibly be augmented by additional "Oklahoma News Network" stations in that state.)
570 WFAA-TX 1230 KLVT-TX 1440 KEYS-TX
690 KPET-TX KGRO-TX 1450 KMBL-TX
740 KRMG-OK KSEY-TX KMHT-TX
KTRH-TX 1240 KXYL-TX KNET-TX
800 KDDE-TX* 1250 KPAC-TX KSNY-TX
910 KNAF-TX* 1260 KPSO-TX* 1490 KNEI-TX
KRIO-TX 1280 KTTX-TX** KSAM-TX
920 KYXX-TX KLEU-TX* 1500 KTXO-TX*
980 KFRD-TX* 1290 KIVY-TX* 1510 KMND-TX*
1010 KKIK-TX* 1330 KVKM-TX 1530 KGTM-TX*
1050 KPXE-TX* 1340 WAML-MS 1540 KGBC-TX
1060 KCLT-TX* KWKO-TX 1550 KWBC-TX*
1130 KBGH-TX* KAND-TX 1580 KTLU-TX*
1150 WTAW-TX% KLBK-TX 1590 KGAS-TX*
1200 WOAI-TX KTEO-TX 1600 KEXS-TX*
1220 KVLL-TX* 1390 KULP-TX** KXVI-TX*
1400 KDWT-TX# (plus 13 FM's)
% Daytimer with CP to go fulltime

KANSAS CITY CHIEFS Wayne Larrivee (pbp), Bruce Rice (color)

KCMO-810 (rest of 60-station regional network lineup in IA, KS, MN, MO, & NE unknown)

LOS ANGELES RAMS Al Wisk, Dick Bass, Steve Bailey
(Note: Three pre-season games will be carried on KLAG-570 rather than KMPC-710, because of conflicts with California Angels baseball on KMPC)
570 See above 1280 KFYV-CA 1440 KPRO-CA
710 KMPC-CA 1340 KFBR-AZ 1450 KOWN-CA+
920 KORK-NV KDOL-CA+ KTIP-CA
970 KCHV-CA KSF-CA 1560 KPNC-CA
1230 KWTC-CA 1400 KTUC-AZ
KXO--CA KVOY-AZ (plus 2 FM's)
KPRL-CA KAAP-CA
1240 KSMA-CA KONG-CA

MIAMI DOLPHINS Rick Weaver (pbp), Henry Barrow
 (color), Hang Goldberg (color)
 610 WIOD-FL 1230 WONN-FL 1400 WTRR-FL
 740 WKIS-FL 1240 WINK-FL 1490 WTRF-FL
 850 WEAT-FL 1250 WDAE-FL 1500 WKIZ-FL
 960 WJCM-FL* 1270 WNOG-FL 1600 WJNJ-FL**
 1060 WRMF-FL
 1150 WNDB-FL (plus 4 FM's)

MINNESOTA VIKINGS Ray Scott, Grady Alderman
 570 WNAX-SD 1250 KBRF-MN 1410 KRWB-MN
 710 WDSM-WI 1260 KROX-MN 1450 KBUN-MN
 830 WCCO-MN 1310 KNOX-ND WELY-MN
 930 KSDN-SD 1320 KOZY-MN KVCK-MT
 970 WDAY-ND 1340 KVBR-MN 1480 KSDR-SD*
 1220 KOUR-IA* KDLM-MN 1520 KLYX-SD*
 1230 KTRF-MN 1360 KEYZ-ND
 1240 WMFG-MN 1400 WHLB-MN+ (plus one FM)
 KPRM-MN KEYJ-ND

(Note: two additional stations are listed as "tentative" and may join up: 1490 KRIB-IA, and 1570 KQWC-IA*)

NEW ENGLAND PATRIOTS Gil Santos, Gino Cappelletti
 930 WNNH-NH 1230 WJOY-VT 1400 WIDE-ME
 1000 WHWB-VT* 1240 WSKI-VT WLPN-NH
 1030 WBZ--MA 1340 WFAU-ME 1450 WRKD-ME
 1080 WTIC-CT WBRK-MA 1490 WTVL-ME
 1110 WHIM-RI* WDCR-NH WNUS-MA
 1170 WVLC-MA* 1380 WOWW-CT (plus one FM)

NEW ORLEANS SAINTS Wayne Mack (pbp), Danny Abramowicz (color)
 710 WKRG-AL 1270 KVCL-LA* 1420 KPFL-LA
 810 WSJC-MS WVOM-MS* WIGG-MS*
 900 KREH-LA* WMLC-MS* 1430 KMRC-LA*
 1050 KLPL-LA* 1280 WGSO-LA 1440 KMLB-LA
 1080 WECP-MS* 1340 KRMD-LA 1450 WNAT-MS
 1110 KPAL-LA* WKCU-MS* 1470 WCHJ-MS*
 1230 WHSY-MS 1360 WFFF-MS* 1490 WIKO-LA
 1240 KASO-LA 1380 WNLA-MS* WLOX-MS
 WGRM-MS 1400 WFPR-LA WCLD-MS
 1250 WHNY-MS KAOK-LA 1510 KAGY-LA*
 1260 WGVN-MS* KWLA-LA
 WNSL-MS* WBIP-MS (plus 14 FM's)
 WNAG-MS

NEW YORK GIANTS Jim Gordon (pbp), Dick Lynch (color)
 WNEW-1130 (no regional network)

NEW YORK JETS
 WOR-710 (no regional network)

OAKLAND RAIDERS
 KGO-810 (rest of 13-station regional network lineup unknown)

PHILADELPHIA EAGLES Merrill Reese (pbp), Jim Barniak (color)
 590 WARM-PA 1260 WNRK-DE* 1440 WMVB-NJ**
 610 WIP--PA 1280 WBRX-PA* 1450 WILM-DE
 920 WTTM-NJ 1330 WASA-MD*@ 1480 WSHP-PA*
 940 WVLV-PA* 1360 WPPA-PA+ 1510 WJIC-NJ*
 1070 WKOK-PA+ 1400 WOND-NJ 1600 WPDC-PA**
 (plus one FM)

@ WASA-1330 is on three networks - Philadelphia, Baltimore, and Washington.

PITTSBURGH STEELERS Jack Fleming, Myron Cope
 WTAE-1250 (rest of 35-station regional network lineup unknown)

ST. LOUIS CARDINALS Bob Starr, Bill Wilkerson
 KMOX-1120 (rest of network lineup unknown)

SAN DIEGO CHARGERS Tom Kelly, John DeMott
 1130 KSDO-CA 1370 KWRM-CA
 1300 KROP-CA 1450 KOWN-CA (plus one FM)

SAN FRANCISCO 49ers (On KSFO-560:) Lon Simmons (pbp), Gene Nelson (anal)
 (On KGBS-740:) Don Klein (pbp)
 (Note: Games on 8/25, 9/24, and 10/1 will be carried on KCBS-740 rather than KSFO-560, because of conflicts with San Francisco Giants baseball on KSFO)
 560 KSFO-CA 970 KBEE-CA 1400 KQMS-CA
 580 KMJ--CA 980 KINS-CA KUKI-CA
 620 KWSN-CA* 990 KHVH-HI 1450 KVML-CA
 630 KOH--NV 1230 KDAC-CA 1490 KSYC-CA
 740 See above 1530 KFBK-CA
 (plus one FM)

SEATTLE SEAHAWKS Pete Gross (pbp), Don Heinrich (color), Wayne Cody (comments from the sidelines)
 560 KVOK-AK 1130 CKWX-BC 1370 KAST-OR
 KPQ--WA 1150 KNOI-WA* 1390 KSLM-OR
 610 KONA-WA 1170 KPUG-WA 1430 KBRC-WA
 630 KJNO-AK 1230 KIPW-AK 1450 KLAM-AK#

660 KFAR-AK KOZI-WA KONP-WA
 700 KBYR-AK 1240 KXLE-WA 1470 KSEM-WA
 710 KIRO-WA KGY--WA 1490 KVAC-WA
 850 KTCY-AK 1280 KIT--WA KLOG-WA
 920 KXLY-WA 1320 KXRO-WA KTEL-WA
 930 KTKN-AK 1340 KIHR-OR 1520 KYXI-OR
 (no FM's)

TAMPA BAY BUCCANEERS Dick Crippen, Dave Kocourek, Jack Harris
 WFLA-970 (rest of 32-station regional network lineup unknown)

WASHINGTON REDSKINS Dan Lovett, Sam Huff
 540 WDMV-MD* 1070 WINA-VA 1370 WKIK-MD
 550 WSVA-VA 1220 WISD-VA** 1400 WHLF-VA+
 630 WMAL-DC 1230 WCBP-NC WINC-VA+
 790 WSTG-VA* WFVA-VA+ 1450 WTHU-MD@
 910 WRNL-VA 1240 WJEJ-MD WFTR-VA
 930 WLLI-VA** WSSV-VA WREL-VA
 960 WBOC-MD@ 1250 WEER-VA** 1460 WRAD-VA+
 970 WANV-VA 1330 WASA-MD**@ 1470 WBIG-NC
 1000 WKDE-VA** 1340 WKEY-VA+ 1490 WOPI-TN
 1010 WCST-WV**@ WJMA-VA+ WVEC-VA+
 1060 WMAP-NC* WEPM-WV@ 1590 WCBG-PA@
 (plus 8 FM's)

@ These stations are also on the Baltimore Colts network. WASA-1330 is on three networks - Washington, Baltimore, and Philadelphia!

ADDITIONS, DELETIONS, AND OTHER CORRECTIONS ARE HEREBY REQUESTED FOR THIS LISTING. Especially needed are network lineups from Atlanta, Cincinnati, Cleveland, Dallas, Detroit, Green Bay, Kansas City, Oakland, Pittsburgh, St. Louis, and Tampa Bay. PLEASE SEND ALL NFL STATION INFO TO: Bill Hardy, 2301 Pacific Ave., Aberdeen, WA, 98520, as soon as possible. If needed, an updater will appear at a later date. Thank you. --BH.

Thanks also to Karl Jeter and Eddie Ryan.

1460 KROW

KTNQ-1020 FOR SALE! No, this isn't an "Ad-Visor" ad, hi - but Storer Broadcasting announced in early August that its 50kw fulltimer in Los Angeles, CA, KTNQ-1020, is on the selling block. Storer President Peter Storer estimates that KTNQ is worth between \$8 million and \$12 million. For now, there seem to be no plans to sell companion FM station KGBS (FM), which is modern country.

Storer Broadcasting bought the 1020 facility in 1959 and changed the call letters to KGBS (after George B. Storer, company founder; notice his initials also in Storer's WGBS-710 Miami, FL). KGBS was a 50kw "limited time" facility, operating basically as a daytimer, but also operating MM's 0000-0500 ELT during KDKA's silent period. KGBS was easily heard throughout the West on Sun. nite/MM operation. After many unsuccessful tries to go fulltime, Storer finally convinced the FCC in 1975 to let KGBS become a 50kw "unlimited time" facility (see "KGBS-1020 Fulltime - Maybe?" in the 5/10/75 DXM pp. 421-422, for more info; the fulltime application was approved in late summer 1975).

Storer had tried a number of formats through the years, including a try at adult-pop rock in the early 1970's that was highlighted by the phone-in show, "Bill Balance Feminine Forum," from 10am to 3pm weekdays. "Feminine Forum" was #1 rated in its time slot in 1972-73 and started a trend towards "topless radio," as it was sometimes called, among stations all over America during housewife hours. KGBS cleaned up the program in 1973, and later KGBS moved into a modern country format. The special "9pm Sunday to 2am Monday" hours included a variety of paid religious and public-service programs that didn't fit the daytime format of KGBS.

Before KGBS could go fulltime, Storer applied for new call letters KTNQ and announced a format change to top 40. The call and format change became effective 12/26/76, the day the station went unlimited time. (The old KGBS format moved to FM full time.) But the success Storer hoped would come to the old limited-time station once it went fulltime has been elusive, so now Storer has decided to offer "Ten-Q" for sale. If you have a few million lying around the house and would like to buy a 50kw station in a big city like L.A., you might contact Storer's broker, Ted Hepburn Co. (Based on 8/14/78 Broadcasting, used by permission; additional info by Bill Hardy.)

MICHAEL S. HARDESTER

Located between Colombia and Costa Rica is the Central American nation of Panama. As many know, Panama has been in the news in recent months owing to the Panama Canal treaties. While these treaties were being finalized, I was looking through the current World Radio TV Handbook when I came across mention of two (2) United States Department of Defense radio stations located in the Canal Zone area. In doing research, MSG Robert J. Foster, Jr., USA who is the Director of the Southern Command Network was able to provide information relating to the stations.

In 1963, the Caribbean Command (Caribbean Forces Network-CFN) became the United States Southern Command. Following in February of 1964, the unified command assumed operational command of the network from the Army element and has since been operated under the direction of the Public Affairs Officer of the U.S. Southern Command.

All studio facilities are located at Fort Clayton with differing transmitter sites. On the Pacific side of the Canal Zone, WACA20 operates on 790 kHz with 10 KW of power from Fort Clayton. The FM-Stereo outlet on 91.5 MHz and TV Channel 8 (5 Kw) emanate from Quarry Heights. On the Atlantic side, all transmission originate from Fort Davis. WACA on 1420 kHz has a power of 1 KW. The FM-Stereo operates on 98.3 MHz and TV Channel 8 has a power of 5 KW. **AC820**

The staff of the Southern Command Network averages around thirty in size with staff coming from the Army, Air Force and Navy. In addition to the AM, FM and TV outlets on each side of the Canal Zone, a weekly newspaper is also published. Should anyone be fortunate enough to log any of the Southern Command Network's transmission, their address is The Southern Command Network, Radio-TV, P.O. Drawer 919, APD New York, NY. 09827.

As a note, Mr. Foster is also an amateur radio operator with the call signs of KZ5BA, HP12RF and WB7QWG.

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THE INTERNATIONAL RADIO CLUB OF AMERICA

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

OFFICERS: President-Bruce Portzer, 6546 19th Ave N.E., Seattle, WA 98115 (206-522-2521). Secretary-Treasurer-Rich Segalas. Board of Directors-Gregg Allinson, Philip Bytheway, Dr. Larry Flegle, Bill Hardy, Rick Heald, Rob Keeney and Father Jack Pejza.

DX MONITOR: The official bulletin of IRCA, published 34 times a year; weekly from November to March, 3 times in April and October, and monthly from May to August.

MEMBERSHIP DUES: \$12.00 First Class to Canada and the U.S.A., Air Mail to Mexico. \$13.50 Air Mail to the rest of the world via Canada. Air Mail Direct from San Francisco: \$25.00 to Central America, Caribbean, Columbia and Venezuela; \$30.00 to the rest of the world. Sample copies, 50¢ or 3 International Reply Coupons. Make all checks and money orders payable to "I.R.C.A." Members outside the U.S.A., please use money orders payable in U.S. funds.

PUBLISHING STAFF: Editor-in-Chief-Donald Kasky; Publisher-Rich Segalas; Staff-Mike Endza, Nick Hall-Patch, Eloise Kasky, Larry Nebron, et al.....

Opinions appearing in DX FORUMS are those of the contributors and do not necessarily reflect those of IRCA, the publishing staff, or the DX FORUM editors.

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IRCA member Bill Hardy worked at the Southern Command Network (SCN) for seven months in 1969 while stationed in the Army there. He adds these comments to Mike's fine article: The AM stations are NSP with news on the hour and mostly AFRTS programming the rest of the time, except for one-to-two-hour blocks of local programming at various times of the day. Also, mail to SON may get there faster if you do not use the APO number but rather address your letters directly to The Southern Command Network, Radio-TV, P.O. Drawer 919, Fort Clayton, CANAL ZONE.

Geomagnetic Indices



Fredericksburg A-Indices

| | | | | | | | |
|-----------|----|----|----|----|----|----|-----|
| 6/19-6/25 | 20 | 12 | 25 | 13 | 16 | 21 | 22 |
| 6/26-7/ 2 | 39 | 17 | 13 | 29 | 27 | 6 | 6 |
| 7/ 3-7/ 9 | 12 | 63 | 36 | 14 | 13 | 15 | 10 |
| 7/10-7/16 | 9 | 7 | 5 | 22 | 44 | 9 | 5 |
| 7/17-7/23 | 4 | 17 | 14 | 6 | 8 | 8 | 9 |
| 7/24-7/30 | 5 | 7 | 5 | 2 | 8 | 3 | 2 |
| 7/31-8/ 6 | 2 | 3 | 3 | 15 | 25 | 24 | 19 |
| 8/ 7-8/13 | 9 | 6 | 7 | 4 | 10 | 23 | (6) |
| 8/14-8/20 | 8 | 3 | 3 | 9 | 16 | 11 | 3 |
| 8/21-8/27 | 4 | 3 | 2 | 4 | 9 | 2 | 28 |

The A-index value for 8/13 is uncertain due to a missing K-index value...Regular bi-weekly A/K indices report will resume in September...The Ottawa 10.7 cm solar flux reached its lowest levels since January 1978 during the last few days of August...A major storm commenced on 8/28 with aurora visible in such places as Santa Fe, NM & Boulder, CO as well as in New England.



First Class

Dave Williams 2
Box 615, Hwy. 101
Astoria, OR 97103