

80/
7-79 5-81
80



GERMANY



ANGLI



BELGIA



CROILANDIA



CHINENSES



IAVANI



GUINEENES



PERUVIANI



MAGALLANIC



HISPANI



GALLI



ITALI



IRCA FOREIGN LOG

Ninth Edition

INTRODUCTION

It was almost ten years ago that the first IRCA Foreign Log was published. The Foreign Log was first thought of by Father Jack Pejza, then the editor of "DX Worldwide", IRCA's foreign DX column. The log, a listing of all the DX Worldwide tips from the 1971-72 DX season, was an immediate success and many subsequent editions of the log have been published.

This edition of the log has been developed under a slightly different philosophy than previous editions. The information reported to DX Worldwide between July 1979 and May 1981 has been boiled down into brief summaries telling where a particular station has been heard, when it has been heard, it's programming, method of identifying, sign-on and signoff times, and other useful information. Nearly every foreign medium wave station which has been heard in North America recently is listed (or at least every one that has been noted in the pages of DX Worldwide). In addition, information from other clubs, such as the Arctic DX Club and the New Zealand DX League, has been incorporated into the log. Lists of stations in Mexico, China, and South Korea have also been added --- these lists appeared in the pages of IRCA's "DX Monitor" during the 1980-81 season, and have been updated to include recent changes.

The all-new approach to the IRCA Foreign Log should make this edition the best and most useful of the foreign logs. We sincerely hope you find it to be one of your most useful DX references.

This edition of the IRCA FOREIGN LOG is dedicated to the memories of two long-time IRCA members:

PERCY R. KESTEVAN
and
JAMES CRITCHETT

Percy was President of IRCA when the first IRCA Foreign Log was published in 1971. For many years he was one of the club's most active members.

Jim's interests in Broadcast Band DXing spanned several decades, beginning in the 1930's and lasting until shortly before his death earlier this year.

Percy and Jim were mainly interested in DXing domestic stations, but their enthusiasm and contributions to the hobby will make them long remembered by both domestic and foreign DXers.

TABLE OF CONTENTS

ASIA AND THE PACIFIC

Station Listings	2
Unidentified Loggings	17
Medium Wave Stations in China	18
Medium Wave Stations in South Korea	23
Information from Other Sources	26
Notes on TP and DU Networks	29
American Country Countdown Station List	29
American Top Forty Station List	30

LATIN AMERICA AND THE CARIBBEAN

Station Listings	31
Latin American Units	50
Latin American Currency, Anthems, and Independence Days	51
Information from Other Sources	52
Medium Wave Stations In Mexico	57

EUROPE, AFRICA, & THE MIDDLE EAST

Station Listings	69
Information from Other Sources	83
Sunrise/Sunset Times for TA DXers	90

VERIFICATIONS

GREAT CIRCLE BEARINGS & DISTANCES FROM ATLANTA, BOSTON,
CHICAGO, DENVER, HOUSTON, LOS ANGELES, AND SEATTLE

CROSS REFERENCE LIST (By Country)	94
CONTRIBUTORS	106
ABBREVIATIONS	108
TIME CONVERSION CHART	110
WORLD TIME ZONE MAP	111
ABOUT THE IRCA	112
	Inside Back Cover

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ASIA & THE PACIFIC

(Editor's Note: "Pacific coast" in these loggings refers to the DXer on the Pacific shore-usually Patrick Martin, plus the odd Beverage expedition. "WC" refers to about 200 miles inland in BC, WA, OR, and CA.)

- 155 USSR, Khabarovsk. First and Second programs. 1252 3/17/80; 0955 10/21; 0855
11/4. (RET-CA)
- 173 USSR, Yakutsk. First Program. 1035 3/15/80. (RET-CA)
- 182 USSR, Petropavlovsk-Kamchatskiy. First and Second programs. 1033 3/15/80 //173;
1000 10/21 //155; 0856 11/4 not //191. (RET-CA)
- 191 USSR, Blagoveshchensk. First and Second programs. 1000 10/21/80 //155; 0854
11/4. (RET-CA)
- 200 USSR, Irkutsk. First Program. 0853 11/4 //182. (RET-CA)
- 236 USSR, Magadan. First and Second Programs. 1016 3/15/80 RR vocal- another RR
underneath; 1020 10/21 //155; 1050 11/4. (RET-CA)
- 245 USSR, Vladivostok. First and Second Programs. 1020 3/15/80; 1003 10/21 //155;
1052 11/4. (RET-CA)
- 272 USSR, Birobidzhan. First Program 1004 10/21/80 //155. (RET-CA)
- 531 Australia, Dalwallinn, 6DL. ABC-3. 1422 10/7/80 //6140 SW. (NHP-Bev)
- 531 Australia, Kempsey, 2KM (calls became 2MC in February 1981). "Mid-Coast R."
Noted year-round with pop mx, ads, 0830-1400. (PM-OR) t 0939 2/24/80 (RET-CA)
1005 8/3/80; 0910 11/16. (Bev-CA)
- 531 Australia, Warragul, 3UL t 1410 10/22/79, spot mentioning Melbourne. (PM-OR)
- 531 Japan, Morioka, JOQG. NHK-1. Noted fall and spring on WC during good TP open-
ings, 0830-1500 s/off. 1104 3/24/80 (WJH-UT)
- 540 Australia, Longreach, 4QL. ABC-3. t 0935 2/24/80 (RET-CA); 1202 8/8/79, 1235
6/5/80, 1400 10/19/80. (PM-OR)
- 540 China, CPBS-1, 1403 10/28/79. (DW-OR)
- 549 Australia, Orange, 2CR. ABC-3. 1204 8/8/79, 1325 9/18/80, 1200 6/9/80. (PM-OR)
- 549 USSR, Vladivostok. Second Program. t 1357 10/31/79 w/opera. (BP-WA)
- 550 Alaska, Anchorage, KENI. 0928 12/3/80 w/rock and R. 55 IDs. (PM-OR)
- 550 Hawaii, Wailuku, KMVI. From 0630 on, a regular on the Pacific coast, occasion-
ally inland w/domestics. Rock mx, "Rock of the '80s" ID noted.
- 558 Australia, Gympie, 4GY, 1235 8/7/79, 1406 9/19/79, pop music and spots. (PM-OR)
- 558 Fiji, Suva, R. Fiji 1, 0825 11/2/80, 0845 3/2/81. (PM-OR)
- 558 Japan, Kobe, JOCR. 1425 9/26/80, 1300 10/12, 1338 11/12, ads, JJ mx. (PM-OR)
t 1345 9/29/80. (DW-OR)
- 558 South Korea, Pohang, HL.., KBS. Occasionally on WC during good TP openings,
1400-1530 in fall.
- 567 Australia, Julia Creek, 4JK. ABC-3. 1200 9/18/79, 1210 10/14/80, 1252 10/24.
(PM-OR)
- 567 Japan, Sapporo, JOIK. NHK-1. Fall and spring on WC during good TP openings
0830-1430.

- 67 South Korea, Jeonju, HLKF. KBS. 1515 12/22/80. (PM-OR)
- 67 New Zealand, Wellington, 2YA. National Program, R. New Zealand. Heard year round 0930-1400 on WC, but only during better DU openings- a poor signal for 100 kw.
- 576 Australia, Sydney, 2FC. ABC-2. Year-round 1000-1330 on Pacific coast, but rare inland. 1400 9/27/79. (NHP-BC)
- 576 USSR, Khabarovsk/Petropavlovsk-Kamchatskiy. Second Program. Noted on WC during autumn TP openings //4485 and 7320 SW.
- 585 China, CPBS-1. t₁₃₄₉ 9/29/79. (DW-OR) t₁₂₃₄ 11/5/79. (GJ-CA)
- 585 Japan, Kushiro, JOPG. NHK-1. t₁₄₀₆ 11/16/80, JJ talk, weak. (Bev-CA)
- 585 North Korea, Pyongyang. 1446 10/28/79, //657; 1450 11/12/79. (PM-OR)
- 585 Papua-New Guinea, Port Moresby, 1000 3/2/81, pidgin, EE, ID, pipe, //864 but weaker. (PM-OR)
- 585 USSR, Svobodniy, Foreign Service. 1030-1500 during autumn TP openings on WC, usually heard in CC. Carries "Peace and Progress" CC programs also, see WRTH for details.
- 590 Hawaii, Honolulu, KSSK (ex-KGMB; call change December 1980), IDs as "K-59" and "Radio 50" with rock mx. 1300 8/9/79; 0830 12/3/80, 0845 12/20. (PM-OR) 0949 3/2/81 w/"Weekly Top 30". (BP-WA)
- 594 Australia, Horsham, 3WV. ABC-3. 1257 8/0/79; 1335 9/19; 1257 2/9/80; 1006 4/13; 1100 6/7. (PM-OR)
- 594 China, unknown location. 1435 10/17/79. (PM-OR)
- 594 Japan, Tokyo, JOAK. NHK-1. Noted 1200-1500 fall and spring in Pacific Northwest. Also 1343 11/13/80. (WJH-JT)
- 603 Australia, Hobart, 7ZL. ABC-2. 1200 2/9/80 //594, 1205 6/9/80 local weather. (PM-OR)
- 603 Japan, Okayama, JOKK. NHK-1. t₁₄₃₂ 12/4/79 noted //594. 1 kw station in Mayoro also listed. (PM-OR)
- 603 South Korea, Seoul, HLSA. KBS. KK noted 1417 10/5/79; 1507 10/27; 1535 12/22. (PM-OR). 1403 11/1/79 //5587 (BP-WA) No 1980 or 1981 loggings.
- 612 Australia, Brisbane, 4WR. ABC-1. Noted year round 0830-1300. Local ID and promo for 4QC-792 have been noted. (PM-OR). Also 1015 9/29/80. (AWP-CA)
- 612 Japan, Fukuoka, JOLK. NHK-1. 1235 10/11/80. (PM-OR)
- 620 Hawaii, Hilo, KIPA. Regular after 0600; sometimes o/domestics, often w/jazz. (PM-OR)
- 621 Australia, Melbourne, 3AR. ABC-2. 1300 8/10/79, 1315 9/19/79, poor. (PM-OR) 1415 10/7/79 //9680 SW. (NHP-Bev)
- 630 Alaska, Juneau, KJNO. 0605 8/18/80. Atop channel w/CBS nx, ID. Rare. (BP-WA)
- 630 Australia, Townsville, 4QN. ABC-3. 1300 6/16, 6/20/80 after KIDO fade out. (PM-OR)
- 630 New Zealand, Napier, 2YZ. National Program, R. New Zealand. 1242 6/14/80. (PM-OR)
- 639 Australia, Crystal Brook, 5CK. 1258 8/10/79 w/4MS; 1426 9/19/79 s/off. (PM-OR)
- 639 Australia, Mossman, 4MS. ABC-3. 1401 9/19/79; ABC nx and s/off. (PM-OR)
- 639 Fiji, Lautoka, R. Fiji 1. Noted occasionally in fall and winter in Pacific Northwest 0800-1100 s/off w/KFI-640 nulled.
- 639 China, Beijin, CPBS-1. 1306 10/26/79 //6665. (BP-WA). 1526 12/16/79. (DW-OR)

- 639 North Korea/South Korea (?) 1522 12/22/79. Two KK stations, one with man yelling, other more commercial sounding. (PM-OR)
- 639 New Zealand, Alexandra, NW. Community Net, R. New Zealand. 1300 6/17/80 w/KFI fading, 1005 11/2/80. (PM-OR)
- 648 Australia, Tamworth, 2NU. ABC-3. 1234 8/11/79; 1401 9/19 s/off; 1200 many mornings, 6/80 // ABC-1 and ABC-3. (PM-OR). 1000 10/8/79 (DN-CA). 0800 8/3/80 (Bev-CA)
- 648 China, Huizhou. 1515 10/28/79; 1345 10/19/80. (PM-OR)
- 648 Japan, Toyama, JOIG. NHK-1. 1345 9/29/79; 0959 3/6/80; 1110 3/20 u/USSR. (PM-OR)
- 648 USSR, Iman. Foreign Service. Widely heard on WC during TP openings in fall of 1979 and 1980; spring of 1980. Usually CC or KK programming. Noted 1447 12/22/79 w/RR //576, a domestic outlet. Also 1100 2/25/80 excellent, 1110 3/24/80. (WJH-UT)
- 650 Alaska, Anchorage, KYAK. Country music format. Occasionally noted on Pacific coast during fall 1980 TP openings, between 0430-0900. Also 0825 3/17/80. (PM-OR). 1331 9/24/80 (BP-WA). 0723 11/17/80 in WSM null. (RW-CA)
- 650 Hawaii, Honolulu, KCRL. Rock mx w/"Coral 65" IDs until about June 1980. Since then has been "K-65" and "Music of Your Life" laid back oldies format. Fairly common fall through spring on WC from before 0730 to local sunrise. Year round on Pacific coast. Also 1110 10/1/79 (WJH-UT); 1329 10/22/79 (RT-NV); 1140 4/14/80 (CK-AZ); 1230 10/9/80 (GM-CO); 1034 1/17/80, 1027 2/22 (DM-AB)
- 657 Australia, Byrock, 2BY. ABC-3. 1401 9/19/79 s/off. (PM-OR). 1331 9/17/80 //6090 SW (NHP-BC); 1114 9/26/80 (JKL-WA)
- 657 Japan, Obihiro, JOOG. NHK-1. 1500 10/24/79 (PM-OR). 0903 10/23 JJ talk. (RT-CA)
- 657 North Korea, Kangnam. R. Pyongyang. Military mx and announcers shouting in KK are typical. This was noted about 200 Hz high in 1979; has been heard //585 as well as 2850, 3320, and 6400 SW. Often heard on WC during fall TP openings, and in spring 1980. Also 1358 11/3/79 (RT-NV); 1025 2/28/80, 1105 3/24 (WJH-UT); and 1215 3/10/80 (MM-ID).
- 657 New Zealand, Wellington, ZYC. Concert Program, R. New Zealand. Often noted on WC between 0900-1200 s/off; fall through spring; summer reception possible. Also 0900 11/15/80 (GM-CO).
- 660 Alaska, Fairbanks, KFAR. Has been heard w/rock mx. Heard during TP openings in Pacific Northwest 0600-1000, but also in January of 1979 and 1980 when little other TP activity noted. Also 1506 10/18/79 (DN-OR); 0754 3/7/80. (RET-CA).
- 666 China, possibly Dehua. 1328 9/12/79 (DW-OR); 1420 11/12/80 (PM-OR).
- 666 Japan, Osaka, JOBK. NHK-1. Noted on WC during reasonable TP openings. Also 1103 3/24/80 and 1347 11/13/80. (WJH-UT)
- 666 New Caledonia, Noumea, R. Noumea. Often noted on Pacific coast w/audio (FF announcers, often with jazz), from 0830, but has poor signal due to low modulation. Usually noted only as a carrier further inland on WC. S/off listed as 1000, but has been heard as late as 1300, and leaves carrier on after s/off. 0942 2/19/80 //7170 SW. (NHP-BC); 1300 10/6/80, carrier (GM-CO).
- 666 USSR, Kamchatka-na-Imure. First program. Heard on WC during good TP openings 1030-1400. Noted //4485 and 5015 SW. Also noted 1400 9/29/79 with Foreign Service and Kremlin Bells IS. (DW-OR)
- 670 Alaska, Dillingham, KDLG. National Public Radio and community-oriented programming; w/KBOI off air. 0800 3/17/80, 0715 12/29 (PM-OR), 0700 9/22/80 (BB-OR); 1320 9/24/80 u/KBOI (BP-WA); 1015 1/26/81 (RET-CA).
- 675 Australia, Albury, 200, ABC-3. 0700 3/18/79; 1100 6/8/80. (PM-OR).

- 675 China, location unknown. 1438 10/17/79. *FM-OR). 1510 11/3/79 (DW-OR)
- 675 Japan, Hakodate/Yamaguchi, JOVK/JOUG. NHK-1. 1400 9/27/79. (PM-OR)
- 675 New Zealand, Christchurch, 3YA. National Program, R. New Zealand. 1208 8/7/79, 1417 9/27; 1234 6/11/80. (PM-OR)
- 684 Australia, Kempsey, 2KP. ABC-3. 1238 8/7/79; 1246 6/12/80 w/KNER fading out. (PM-OR)
- 684 China, unknown location. 1337 9/12/79. (DW-OR)
- 684 Fiji, Labasa, R. Fiji 1. 0750 1/31/80, but noted on other dates. (PM-OR)
- 690 Hawaii, Honolulu, KKUA. Rock mx. Usually necessary for XETRA to be off or nulled. 0937 11/3/79. (BP-WA). 1110 1/8/80 (JKL-WA). 1300 many mornings in June 1980 w/CBU. (PM-OR)
- 693 Australia, Brisbane, 4KU. t₁₁₁₆ 4/15/80; t₁₂₃₄ 6/14, light pop mx, DU accented man; too much XETRA. (PM-OR)
- 693 Japan, Tokyo, JOAB. NHK-2. Heard on WC during reasonable TP openings, 1030-1400. Main problem is XETRA-690 splatter. Also 1400 3/4/80 (RT-NV). 1214 3/24/80 1317 11/13/80 best JJ at this time. (WJH-UT)
- 700 Alaska, Anchorage, KBYR. Pop mx, "7-oh-KBYR" IDs noted Sept. 1980. Heard from 0800-1500 in Pacific Northwest during good TP or Alaskan openings. Also 0430 10/30/80. (PM-OR)
- 702 Australia, Sydney, 2HL. ABC-1. Often noted around 1200 any morning on Pacific coast. Possible year-round further inland with carrier, often w/audio fall and spring, from 0900-1300. Also 1202 9/26/79 (LBG-OO), 1220 2/25/80 (MM-ID).
- 702 China, unknown location. 1523 10/27/79; 1523 12/21/79; 1320 1/9/80 (PM-OR). 1505 11/3/79 (DW-OR)
- 702 Japan, Hiroshima/Kitami, JOFB/JOKD. NHK-2. Fairly easy during TP openings to Pacific Northwest 0830-1430. Also 0935 2/25/80; 0850 10/23 (RET-CA); 1000 2/29/80 (MM-ID); 1310 3/12/80; 1148 3/24 (WJH-UT); 1310 11/9/80 (DV-CA)
- 702 Japan, Kitami, JOKD. 1359 11/14/80 w/call letter ID before NHK pips. (PM-OR)
- 702 North Korea, Chongjin. 1454 11/12/79 //657. (PM-OR)
- 711 Australia, Launceston, 7NT. ABC-3. 1356 9/22/79 w/ABC s/off; 1402 9/28 s/off; 1123 1/8/80; 1103 2/20; 1302 8/12/80 local nx. (PM-OR)
- 711 Fiji, Suva, R. Fiji 2. Was common on Pacific coast from 0730-1100 s/off. Occasional audio inland in Pacific Northwest w/KIRO off. 1010 12/24/79 (BP-WA) 0920 2/4/80 carrier (WJH-UT). 0740 10/13/80 (NHP-BC). This station has moved to 774 kHz as of mid-December 1980.
- 720 Australia, Atherton, 4AT. ABC-3. 1330 9/21/79; 1210 6/8/80 local wx. (PM-OR)
- 720 China, Beijing. CPBS-2. 1309 10/26/79 //7770. (BP-WA)
- 720 Hawaii, Eleele, KUAI. Regular, but extra strong o/KDWN 0810 12/16/80 (PM-OR). 0931 12/9/80 w/KDWN off (RT-CA). 1000 1/23/81 s/off w/KDWN. (FJP-CA)
- 720 Japan, Fukuoka, JOIL. 1415 9/29/79 pop mx. (PM-OR)
- 720 New Zealand, Invercargill, 4YZ. National Program, R. New Zealand. 1215 6/14/80, 1005 3/2/81 after KUAI off. (PM-OR)
- 720 USSR, Yuzhno-Sakhalinsk. Foreign Service. 1330-1405 9/13 and 9/14/79 EE, 1400 9/29/79. (PM-OR). 1430 11/1/79 Peace and Progress IS, then off?; 1425 12/2/79 JJ (DW-OR). 1400 9/27/80 Kremlin Bells IS (NHP-BC). All w/KDWN having faded out w/sunrise.
- 729 Australia, Adelaide, 5CL. ABC-2. 1235 8/11/79; 1345 9/22; 1235 2/9/80; 1200 6/7 o/CLKG. (PM-OR)

- 738 Australia, Grafton, 2NR. ABC-3. 1226 2/9/80; 1246 6/15. (PM-OR) 0950 2/24/80 (DAP-CA). 1042 2/24/80 (RET-CA). 0819 8/3/80, 0957 11/16. (Bev-CA)
- 738 Society Islands, Papeete. Fairly common in Pacific Northwest and northern California August through April from 0500. Regular s/off 0730 w/FF National Anthem, but to 0900 on local Saturday night. Noted //6135, 11825 and 15170 SW. Also 0730 2/4/79 (WJH-UT); 0610 12/20/8- steady signal, stronger than KCBS-740. (WJH-UT-Bev)
- 747 Australia, Toowoomba, 4S. ABC-3. Fairly common year round from 0800-1400 on Pacific coast; audio less frequent inland. Also 1045 2/22/80 w/JOIB. (WJH-UT) 1031 3/12/80 (MM-ID); 1030 2/22/81 (DM-AB)
- 747 Japan, Sapporo, JOIB. NHK-2. Probably the easiest Asian to hear on the west coast, often with fine signals when no other TPs noted, as early as 0650. Also 1200 9/24/79 (LBC-CO); t1348 11/3/79 (RT-NV); 1258 11/18/79 (CK-AZ); 1400 2/20/80; 1012 3/24 (WJH-UT); 1015 10/29/80; 0700 11/17 (GM-CO); 1200 2/22/81 (DM-AB)
- 747 South Korea, Kwangju, HLKH. KBS. t1210 11/9/80 woman talking u/JOIB. (DV-CA) 1245 3/27/80 u/JCIB (PM-OR)
- 750 Alaska, Anchorage, KFQD. Has been noted w/pop, oldies, and country mx. Heard from 0500 during Alaskan openings in Pacific northwest. Also 1052 2/22/80 0823 3/7 (RET-CA); 0648 3/12/80 in WSB null (RT-NV). KXL, Portland, OR is now fulltime, which may limit future receptions of KFQD on the WC.
- 756 Australia, Taree, 2TR, ABC-3. 1209 8/12/79; 1345 9/20/79 briefly o/1YA. (PM-OR)
- 756 China, unknown location. CPBS-1. Noted during good TP openings in Pacific Northwest from 1030-1300, //7770 SW. Also 1050 11/19/80 (RET-CA).
- 756 Japan, Kumamoto, JOGK. NHK-1. 1139 10/27/79 //666 (PB-WA) t1220 3/13/80 (JKL-WA)
- 756 South Korea, Daejon, HLCQ. t1205 10/20/79; t1200 10/26, pop mx, KK, ..- pips. (BP-WA) (HLSR also listed here.)
- 756 New Zealand, Auckland, 1YA. National Program, R. New Zealand. Fairly common on WC year round, as early as 0600 in August. Noted //11945 SW on occasion. Also 1200 7/29/79 (BP et al-ID); 1013 2/18/80 //6015 SW (WJH-UT)
- 760 Hawaii, Honolulu, KGU. A pest (PM-OR). 0820 11/12/80 (RW-CA); 1155 11/24/80 (DAP-CA)
- 765 Australia, Bega, 2BE. 1336 9/21/79 rock mx; 1154 6/13/80. (PM-OR)
- 765 New Zealand, Hastings, 22K. R. New Zealand, noted w/concert Program 0745-1200, may be independent of nets after 1200. Common on Pacific coast from 0800. Also 1016 1/20/80 (BP-WA); 0949 2/24/80 (RET-CA)
- 774 Australia, Melbourne, 3LO. ABC-1. Common on Pacific coast as early as 0700 in August. Also heard inland in Pacific Northwest; has been noted //6150 SW. Also 1020 3/12/80. (MM-ID)
- 774 Australia, Townsville, 4TO. Often o/3LO on Pacific coast; pop mx, Macquarie national news. Also t1018 9/26/80 w/DU accented man and pop mx; 3LO usually jazz at this time. (JKL-WA)
- 774 Fiji, Suva, R. Fiji 2 (from 711 kHz). Often noted on Pacific coast. Also 0820 12/20/80 (WJH-UT-Bev); 1102 1/12/80 (BP-WA); 1045 1/12/81 (RET-CA); 1100 2/16/81. Six longish pips, R. Fiji mx, s/off w/local anthem and God Save the Queen. (NHP-BC)
- 774 Japan, Akita, JOUR. NHK-2. One of the common JJ stations on the WC, as early as 0800. Also 1230 2/25/80 (MM-ID); 0803 10/23/80 (GM-CO)
- 780 Alaska, Nome, KNOM. "Yours for Western Alaska" has been noted c/C&W mx and extensive wx forecasts. Heard in Pacific Northwest (particularly the coast) from 0730-0900 during good Alaska openings w/KCRL off.
- 783 China, location unknown. 1300 10/26/79 CC pips. (NHP-BC); 1500 11/3/79 (DW-OR)

- 783 North Korea, Pyongyang. 1507 10/17/79; 1500 12/3; 1507 12/20 (PM-OR). 1055
 11/19/80 (RET-CA); 1203 11/13/80 (WJH-UT)
- 783 New Zealand, Wellington, ZYB. National Program, R. New Zealand. Only on air
 when ZIA-567 running Parliament broadcasts. 1121 6/14/80; 0955 12/5/80. (PM-OR)
- 783 USSR, Spassk Dalniy. First Program. 1425 3/4/80 (DW-OR). 1349 9/24/80 //4485.
 (NHP-BC)
- 790 Alaska, Glenallen, KCAM. 0730 9/26/80 w/"Night Sounds" religious program.
 (PM-OR)
- 790 Hawaii, Kealakekua, KKON. t0745 4/20/80 Polynesian accented woman; t0733 1/3/81
 "wx for Big Island" briefly over jumble. (PM-OR)
- 792 Australia, Brisbane, 4QG. ABC-2. Often noted on Pacific coast, 0900-1400.
 Sometimes mentions 4QR. Not heard inland.
- 792 South Korea, Seoul, HLKJ. 1355 9/28/79 KK (PM-OR)
- 800 Alaska, Juneau, KINY. 0715 9/26/80 pop mx. (PM-OR)
- 801 Australia, Sydney, ZEA. 1345 9/30/79 (PM-OR). Now on 1386kHz.
- 801 Malaysia, Kudat Sabah. 1250-1300 6/7/80 //1475 w/US rock, pips and mx. KPDQ-
 800 sloop. (PM-OR)
- 810 Japan, Tokyo, Far East Network 1400 9/14/80 (PM-OR)
- 819 Australia, Glen Innes, 2GL. ABC-3. Common w/1YZ, 0800 on. (PM-OR). Also 0930
 2/24/80 (RET-CA); 1340 9/16/80 //828. (NHP-BC)
- 819 Japan, Nagano/Oita, JONK/JOIP. NHK-1. 1500 12/7/79. (DW-OR)
- 819 North Korea, Chongin. Noted in Pacific Northwest during good TP openings 1230-
 1515, and //2850 and 11350 SW. Also 1110 10/30/79 (DK-WA); 1105 2/22/80
 (RET-CA)
- 819 South Korea, Gwanju, HLCN. 1245 10/30/80 w/N. Norean. (PM-OR)
- 819 New Zealand, Rotorua, 1YZ. National Program, R. New Zealand. Carrier often noted
 on WC, audio not uncommon as early as 0830. Also t1037 8/19/79, het (GM-CO)
 t1205 2/11/80, het (CK-AZ)
- 828 Australia, Nambour, 4NA. Noted in June 1980, country rock mixing w/3GI. (PM-OR)
- 828 Australia, Sale, 3GI. ABC-3. Common on Pacific Coast 1000-1400. Also 1307
 9/14/79 (NHP-BC); t1215 3/31/80 (FJP-CA); 1200 10/27/80 (BP-WA)
- 828 China, Beijing and ?. 1433 11/3/79 2 stations (DW-OR); 1314 10/26/79 (DK-WA)
 1126 3/18/80; 1304 10/30 not //756 (PM-OR); 1311 9/28/80 (BP-WA) all with
 JOBB.
- 828 Japan, Osaka, JOBB. NHK-2. One of the most common JJ stations on WC, fall and
 spring during even weak TP openings, as early as 0900. Also 1300 10/5/79
 (LBC-CO); t1230 10/17/79 (JK-TX); 0950 2/29/80 (MM-ID); 1014 3/24/80 (WJH-UT).
- 828 Philippine Islands, Cayugan de Oro, DXCC. "R. Mindanao Network, DXCC, Cayagan
 de Oro, 8-2-8" ID and pop mx, best after JOBB s/off at 1500. 1512 11/18/80
 (PM-OR); 1505 11/16/80; 1502:45 11/20 through JOBB (BP-WA); t1330 12/9/80
 pop mx, unID language u/JOBB (RET-CA)
- 837 Australia, Rockhampton, 4RK. ABC-3. Noted 1030-1400 year round on Pacific
 coast. Has been heard inland.
- 837 China, Wuhan, CPBS-1. 1430 11/3/79 (DW-OR); 1300 9/24/80 //7770 (BP-WA); 1300
 10/30/80 //756 (PM-OR); 1238 9/26/80 not //7770. (JKL-WA).
- 837 Japan, Niigata, JOQK. NHK-1. Heard on WC during good TP openings 0800-1500
 s/off; sometimes at good strength. Also 1101 3/24/80, 1340 11/13. (WJH-UT).

- 837 South Korea, Seoul, HLKY. 1045 3/24/80 "CBS, HLKY" ID. (WJH-UT).
- 837 Niue Island, Alofi. ^t0800 1/4/81, possible s/off preceded by drums and woman in unID language. (PM-OR).
- 837 New Zealand, Whangarei/Kaitaia, 1YX/1YK. National Program, R. New Zealand, although sometimes rebroadcasts Concert Program. Fairly common on Pacific coast from 0800 on. Het heard inland.
- 837 USSR, Spassk Dalniy, Second Program. 1110 10/21/80. (RET-CA)
- 840 China, location unknown. 1447 10/17/80.CC (PM-OR)
- 846 Australia, Canberra, 2CY. ABC-2. Noted yaar round on Pacific coast, as early as 0800 w/Kiribati. Not noted inland.
- 846 China, Fujian? 1200 11/2/80; 1445 11/15 (PM-OR); 1130 10/28/80 (DV-CA)
- 846 Japan, Koriyama, JOCP. NHK-1. 1447 11/15/80 (PM-OR). 1338 11/13/80; 1320 11/20 o/u DXRV. (WJH-UT)
- 846 Kiribati, Bairiki, T~~3~~K1. Fairly common fall through spring on WC (very common on Pacific Coast) as early as 0730. However, low modulation means that audio is not often noted inland— seems best January–February until 1000 s/off. Also t0930 2/4/80 carrier (WJH-UT); 0740 12/20/80 (WJH-UT-Bev)
- 846 Philippine Islands, Manila, DXRV. 1359 11/20/80, Tagalog, "R. Veritas Asia" ID; ^t1350 11/13/80. (WJH-UT)
- 855 Australia, Maryborough/Eidsvold, 4QB/4QO. ABC-3. Often noted year round on Pacific coast as early as 0900. Also ^t0920 2/28/80 (RET-CA); ^t1140 11/20/80 (DV-CA)
- 855 China, Shanghai, CPBS-2. 1140 11/1/79; 1100 11/17/80 (AWP-CA); 1321 9/24/80 //7770 SW (BP-WA); 1115 11/17/80 (DV-CA)
- 855 North Korea, Sangwon. 1103 10/30/79 //657 (DK-WA); 1502 12/3/79 //783; ^t0950 3/6/80 (PM-OR); 1340 11/9/80; 1115 11/17 (DV-CA).
- 864 Australia, Hobart, 7HO. Pop musix, "8-6-4 7-H-O" jingles. Heard on Pacific coast 1030-1430 fairly often year round.
- 864 Australia, Toowoomba, 4QR. 1030 11/2/80; 0934 12/16/80 pop mx and ID. (PM-OR)
- 864 Cook Islands, Rarotonga, ZK2ZC ^t0815 12/10/79; weak with Polynesian mx; off at 0828? (PM-OR)
- 864 Japan, Fukui, JOPR. ^t1100 11/13/80, "...R" ID u/JOQF. (PM-OR)
- 864 Japan, Matsumoto, JOSO. 1500 12/1/79 EE call ID, 1400 3/28/80 (PM-OR); 1355 12/3/79 jingle ID. (DV-OR).
- 864 Japan, Muroran, JOQF. 1300 10/3/80; 1100 11/13, both times with call letter IDs (PM-OR)
- 864 Japan, Muroran/Asahikawa, JOQF/JOHE. 1306 9/26/80 relaying JOHR-1287; 1213 11/17/80. (BP-WA); 1200 11/17/80, JOHR ID (AWP-CA); ^t1020 11/15/80 DJs in JJ. (RET-CA).
- 864 Japan, unknown. 1528 12/7/79; 1056 2/2/80 w/JJ. (DW-OR)
- 864 North Korea, Shinjuju, ^t1400 12/2/79 KK; ^t0953 3/6/80, not //855. (PM-OR).
- 864 South Korea, Gangneung, HLKR. KBS. ^t1400 10/19/79 KBS pips; 1340 9/24/80 //3930 SW (NHP-BC); 1403 10/31/79; 1400 9/23/80 (BP-WA); 1100 11/1/79 KBS pips; 1200 11/17/80 (AWP-CA).
- 864 New Zealand, Invercargill, 4ZA. Community Net, R. New Zealand. 0815-1115, noted in the spring on Pacific coast.
- 864 Papua-New Guinea, Madang, 10/14 and 10/15/79, 1401 s/off w/National Anthem //4890 SW; ^t1202 1/8/80; 1002 3/2/81. (PM-OR)

- 870 Hawaii, Honolulu, KAIM. 0730 1/20/80 o/u WNL (BP-WA); 0930 2/4/80 in WNL null (NHP-BC); 0904 11/16/80 w/WNL (Bev-CA); 0700 1/15/81 (RT-CA)
- 873 Australia, Sydney, 2GB. Usually tele-talk, but sometimes pop mx. Heard from 0900 throughout the year on Pacific coast. Also 1159 10/22/79 (DK-WA)
- 873 China, location unknown. 0923 2/23/80 (RET-CA); 1135 3/18/80; 1400 10/31/80 CPBS ID but not //756 (PM-OR); 1128 9/28/80 "...Renmin Guangbo Dientai" no SW ?? (BP-WA); all heard w/JOGB.
- 873 Japan, Kumamoto, JOKB. NHK-2. Heard as early as 0800 on WC, but more common 1200-1400 during food fall '79 and '80, and spring '80 TP openings. Also 1400 11/18/79 (CK-AZ); 1113 3/24/80 (WJH-UT).
- 873 New Zealand, Ashburton, 3ZE. Community Net/National Program, R. New Zealand. 10844 4/2/80, pop mx u/2GB (PM-OR).
- 875a North Korea, Wonsan(?). [874] 1355 11/1/79 (BP-WA); [875] 1137 3/18/80 (PM-OR); 1246 9/26/80 (BP-WA); [876] 1309 3/27/80 (PM-OR).
- 875 China, Fujian(?) 1330 11/5/79 CC ID. (DW-OR)
- 882 Australia, Brisbane, 4BH. "Beautiful music", call IDs. From 0830-1445 on Pacific coast, a strong year round regular often over IYC; one of the easiest Aussies. (PM-OR). Also 1154 8/9/79 (DK-WA); 0926 2/24/80; 1405 12/12 ID at end of nx; 1515 1/13/81, easiest Aussie. (RET-CA).
- 882 China, Fuzhou. 1440 10/27/79 //702; 1330 9/20/80 w/ID (PM-OR); t 1414 10/31 (BP-WA).
- 882 Japan, Shizuoka, JOPK. NHK-1. 1400 10/8/79 //891 (DW-OR); 1315 10/26/79; 1400 11/1/79; (BP-WA); 1500 11/12/79; 1334 9/20 u/China (PM-OR).
- 882 North Korea, Wonsan. 1448 10/28/79 (PM-OR).
- 882 South Korea, Daejeon, HLKI. 1341 9/26/80, //HLKR-864. (BP-WA).
- 882 Mongolia, Ulan Bator. 1400 10/2/80. Classical mx, chimes, and UnID language. IDed by hearing same chimes on 4995 SW at 1400 10/26/80. (NHP-BC)
- 882 New Zealand, Auckland, IYC. Concert Program, R. New Zealand. Heard fairly often on WC from 0800-1200 s/off during fair DU openings fall through spring. Also summer on the coast. Also 1200 8/4/79 s/off (LBG-CO).
- 882 Philippine Islands, Manila, DWIZ. 1526 11/22/80 "WIZ" jingle in EE, EZL. (PM-OR).
- 882 USSR, none listed. 1230 10/21, CC? and Kremlin Bell IS (BW-CA). [Ed. note: Mongolia relays R. Moscow at this time.]
- 890 Alaska, Adak, AFRS. 1351 4/3/80 "This is the Alaska Forces Sattelite Network" and nx (DW, OR); 0910 1/26/81 C&W mx (RET-CA).
- 891 Australia, Adelaide, 5AN. ABC-1. Heard on Pacific coast 0800-1300 fall and spring; but after Fiji s/off at 1100. Also 1046 10/22/79 (DK-WA); 1410 9/5/80 (RET-CA).
- 891 Fiji, Lautoka, R. Fiji 2. Noted as early as 0700 fall through spring, fairly common during Pacific openings on WC. Also 0950 2/21/80 (MM-ID).
- 891 Japan, Sendai, JOHK. NHK-1. Heard on WC during good fall and spring TP openings, usually 1230-1500 s/off. Also 1300 10/21/79 (LBG-CO); 1135 3/24/80 (WJH-UT); 0803 3/29/80 (PM-OR).
- 891 North Korea, Gimhae(?) 1530 12/4/79 similar KK shouting to 783. (PM-OR).
- 891 South Korea, Busan, HLKB. 1358 9/26/79; 1400 3/28/80 (PM-OR); 1214 11/12/79 (BP-WA); 1400 11/5/79 call ID in EE and pips (RT-NV); 1000 2/22/80 (WJH-UT).
- 891 New Zealand, Wellington, 2XW. "R. Windy" 1227 6/10/80 u/5AN w/rock. (PM-OR).

- 900 Hawaii, Kahului, KNUI. Rock mx, "K-900", "K-nooey" slogans. Fairly common on Pacific coast w/CJVI. Not noted inland.
- 918 Australia, Cooma/Charleville, 2XL/4VL. One or other these with rock mx 1247 6/17/80 (PM-OR).
- 927 Australia, Gladstone, 4CD. 1340 3/3/81 C&W, spots, 4CD jingle; has Macquarie national nx. (PM-OR).
- 927 Fiji, Sigatoka, R. Fiji 2. 0731 1/28/80; 1140 2/3/80; 0800 12/14/80. (PM-OR).
- 936 Australia, Townsville, 4AY. Pop mx, spots. 1439 11/25/79; 1050 12/24; 1238 1/8/80; 1223 6/18/80. (PM-OR).
- 936 China, Hefei(?), 1445 10/27/79 //882, 702; 1206 11/2/80, no //. (PM-OR).
- 940 Hawaii, Waipahu, KDEO. 0645 1/4/81 talk show, call ID. (PM-OR).
- 945 Solomon Islands, Gizo. //1035 kHz. Fairly rare fall through spring 0800-1100. (PM-OR).
- 954 Australia, Sydney, 2UE. Pop mx, teletalk. Occasionally heard 1000-1200 fall through spring and in June 1980. (PM-OR).
- 954 Japan, Tokyo, JOKR. JJ pop mx. 1400 11/6/79; 1038 3/3/80; 1018 3/19; 1253 3/27* 1430 10/20; 1350 11/12; (PM-OR); 1425 9/25/80 (RET-CA).
- 963 China, Chifeng. ^t1208 10/28/79 CC (DK-WA); ^t1342 9/23/80, harp mx and off? no SW // (BP-WA).
- 963 Japan, NHK-1 synchros. 1400 9/25/80 NHK pips. (BP-WA).
- 963 New Zealand, Christchurch, 3YC. ^t0907 2/7/80; all morning 6/17/80 //882, 657. (PM-OR).
- 963 USSR, none listed. 1300 11/3/80. Home Service IS and RR. (PM-OR).
- 970 Hawaii, Hilo, KPUA. 0645 12/17/80 rock mx; 0745 1/3/81; 0745 1/31. (PM-OR).
- 972 South Korea, Seoul, HLCA. KBS. Heard on WC during good TP openings; has been heard w/JJ and KK and playing both pop and oriental mx. Heard //6015 but not with 3939 or 6135.
- 972 USSR, Uzhno-Sakhalinsk. Listed as First Program to 1400, Second program after 1400. 1409 10/21/79; 1100 3/6/80; 1015 3/19; 1258 11/3/80 //963. (PM-OR).
- 990 Hawaii, Honolulu, KHVN. 0921 1/20/80, CBS nx feature (BP-WA); 0659 1/28/80 (PM-OR); 0900 11/10/80 ABC nx. (RET-CA).
- 995 China, location unknown. 1007 3/18/80 Home Service. (PM-OR).
- 999 Japan, Hachinobe, JOT-1. NHK-1. 1000 3/24/80, EE call letters. (PM-OR).
- 1008 Australia, Brisbane, 4IP. Rock mx, hyped DJs, "4IP" jingle. Fairly common year round from 0800 on Pacific coast. Also 0940 2/25/80 (MM-ID).
- 1008 Japan, Osaka, JONR. JJ pop mx, ads. Heard in Pacific Northwest during good TP openings, 0830-1400. Also ^t0925 1/29/80 (RET-CA); 1052 3/12/80 (MM-ID).
- 1008 New Zealand, Tauranga, 1ZD. Community net, R. New Zealand. Fairly common on WC during DU openings as early as 0730. Also 0926 2/27/80 (MM-ID).
- 1008 USSR, Magadan. First program(?) 0922 3/5/80 w/RR; 1011 3/18 not //972; 0824 3/25/80 (PM-OR). 1108 9/27/80 //4485; 1108 11/17 (BP-WA); 0925 12/8/80. (RET-CA).
- 1017 Australia, Sydney, 2KY. Only heard on Pacific coast where it is a year-round regular. As early as 0830; has lots of racind results and pop mx.
- 1017 China, Changchun. Foreign Service. 1525 10/18/79; ^t1000 3/5/80 s/on? (DW-OR); 1510 1/28/79 JJ lessons; 1012 3/21/80 (PM-OR).

- 1017 Japan, Fukuoka, JOLB. NHK-2. Noted on WC during good TP openings, as early as 1000.
- 1017 South Korea, Andong, HLAW. 1357 9/24/80, KK, 3 and one pips mixing with JOLB. (BP-WA)
- 1017 Tonga, Nuku'alofa, A3Z. Carrier noted on WC evenings as early as 0630. Audio traces frequently by 1000 s/off; good audio is less usual. Island nx and local languages predominate; Australian BC nx at 0700. Regular audio on Pacific coast. Also 0717 11/26/79 poor audio, fair carrier, only on 240° Pacific. Beverage. (CH-GA). t₀₈₂₆ 2/4/80 (GM-CO); 0723 2/13/80 (WJH-UT); 0830 2/27/80 (MM-ID).
- 1026 Australia, Mackay, 4MK. Most regular DU year round on Pacific coast. Heard as early as 0730 to 1405 listed s/off. Has been heard w/soff at 1301 on 11/4 and 11/22/79 however. Pop mx and ads. Also 1319 9/25/79 (NHP-BC); 1218 2/25/80 ((JJ-WA)).
- 1026 Australia, Melbourne, 3DB. Regular on Pacific coast most of year after 4MK s/off. Features rock mx and "DB" jingles.
- 1026 New Zealand, Whangerei/Kaitaia, 1ZN/1ZK. Community net, R. New Zealand. Has been heard on Pacific coast, summer and winter, as early as 0815.
- 1026 Solomon Islands, Honiara, H4B1. 0840 10/1/79 (BP-WA); 0934 12/10/79 (PM-OR); t₀₉₄₅ 2/24/80 (RET-CA). This station is now on 1035 kHz.
- 1035 China, unknown location(s). 1336 10/18/79 (DW-OR); 1417 10/31/79 (BP-WA); 1130 11/1/79 (AMP-CA); 1500 9/17/80 (RET-CA); 1330 10/30 (PM-OR).
- 1035 Japan, NHK-2 synchros. 1340 11/1/79 //747 (BP-WA); 1500 12/2/79 (DW-OR).
- 1035 North Korea, Phylen, t₁₄₄₇ 10/18/79 KK (DW-OR).
- 1035 South Korea, Pohang, HLCP. KBS. 1456 12/6/79 (PM-OR); 1000 3/17/80; 1450 9/17/80 (RET-CA); 1200 11/??/80 (DV-CA).
- 1035 New Zealand, Wellington, 22B. Community net, R. New Zealand. Heard on WC during spring DU openings from about 1000. Heard summer and winter on coast as early as 0730.
- 1035 Solomon Islands, Honiara. Heard from early December 1980, as early as 0700; weaker than Tonga, Fiji or Kiribati. Has EE/Pidgin nx at 5 minutes before the hour, and IDs a couple of minutes before the hour (PM-OR); 0750 1/5/81 //5020; 1050 1/17/81. (RET-CA).
- 1040 Hawaii, Honolulu, KPOI. "K-poy 100" slogan have been heard; automated rock oldies as of early 1980. 0540 8/29/79 (BP-ID); 1030 11/17/79; 0711 1/20/80 (BP-WA); 0623 11/16 (Bev-CA).
- 1044 Australia, Crystal Brook, 5PI. 1418 2/8/80 //1323?; t₁₂₀₆ 6/18/80. (PM-OR).
- 1044 China, Changzhou Foreign Service. Fairly easy on WC during good TP openings; usually JJ but has been heard w/CC. Has been heard as early as 1015, //7480 and 11515 SW. Also 1424 11/5/79 (RT-NV); 1255 10/19/79 (LBG-CO).
- 1044 New Zealand, Dunedin, 4ZB. Community net, R. New Zealand. Noted fall through spring on WC during reasonable DU conditions as early as 0930. Pacific coast logins as early as 0730. Also 1000 2/27/80 (MM-ID).
- 1053 Indonesia, Jayapura, RRI. t₁₁₄₇ 4/28/80 unID language mixing w/New Zealand. (PM-OR).
- 1053 Japan, Nagoya, JOAR. Heard in Pacific Northwest infrequently during good TP openings from 1000-1515 with pop mx and JJ talk.
- 1053 New Zealand, New Plymouth, 22P. Community Net, R. New Zealand. 0822 2/9/80; 0849 4/4; some mornings June 1980; 0908 12/15. (PM-OR).
- 1062 Western Samoa, Apia. t₁₀₀₂ 12/15/80, man in EE? (PM-OR).
- 1071 Australia, Maryborough, 3CV. 1350 8/21/79 pop mx w/KNK fading out; 1100 6/17/80. (PM-OR).

- 1080 Alaska, Anchorage, KANC. 0755 3/17 o/KWJJ w/C&W mx (PM-OR); 1030 9/1/80 Alaska R. nx (BP-WA).
- 1080 Hawaii, Honolulu, KIOE. Heard on Pacific coast in winter 1980, 0730-1100 w/talk shows.
- 1080 New Zealand, Auckland, 1ZB, Community Net., R. New Zealand. ^t0800 2/9/80; 1200 6/25; 0915 2/16/81 (PM-OR).
- 1098 Marshall Islands, Majuro, WSZO. 1200 3/5/81 Marshallese, EE ID at s/off. Island song, then off. (PM-OR).
- 1098 New Zealand, Christchurch, 3ZB. Community net, R. New Zealand. 1159 6/19/80 (PM-OR).
- 1107 Australia, Sydney, 2UW. Heard often on Pacific coast, year round after 0930 w/pop mx.
- 1107 Japan, JOBW/JOCF/JOMR. All three fighting it out 1326 9/30/79, (PM-OR).
- 1107 South Korea, Pohang, HLAV. 1340 9/9/79; 1327 9/30. (PM-OR).
- 1110 Hawaii, Kihei, WHEI. 0650 11/15/79 MoR clusters, "K=11" (PM-OR); 0815 11/26/79 "K-lay" (RET-CA).
- 1116 Australia, Brisbane, 4BC. Rock mx, ads, "yow-me-4BC" jingles. Year round on Pacific coast, as early as 1000.
- 1116 China, unknown location. 1318 10/19/70 //7770 (BP-WA); ^t1050 11/5/79 (AWP-CA)
- 1116 Japan, Matsuyama, JOAF. 1037 3/3/80 (PM-OR).
- 1116 Japan, Niigata, JODR. 1315 9/27/79 mentions of Niigata. (PM-OR).
- 1116 North Korea, Pukchang. 1522 11/8/79 KK. (PM-OR).
- 1116 New Zealand, Nelson, 2XX. National Program, R. New Zealand. ^t0954 4/3/80 pop mx u/4BC. (PM-OR).
- 1120 American Samoa, Pago Pago, WVUV. 0800-0900 1/29/81, Samoan, w/KPNW off. (PM-OR).
- 1125 New Hebrides, Port Vila. ^t0915 1/2/80; ^t0845 12/16/80 drum mx, man yelling. (PM-OR).
- 1125 USSR, Yerofey Pavlovich. Second Program. 1100 3/21/80. 6 pips, RR, American pop mx. (PM, OR).
- 1130 Hawaii, Kailua, KLEI. 0740 11/15/79 EZL (PM-OR).
- 1134 Japan, Tokyo, JOQR. Heard on Pacific coast as early as 0945 during TP openings. Has EE lessons, but is not NHK.
- 1134 South Korea, Kimpo, HL.. 1416 3/30/80 KK (PM-OR).
- 1143 Japan, Kyoto, JOBR. 1119 3/3/80. (PM-OR).
- 1143 South Korea, Cheju, HL.. KBS. This station heard widely in Pacific Northwest during fall '79 and spring '80 TP openings, but there were no loggings at all since 3/31/80. Noted as early as 1030, heard //6135, call ID for HLSA heard once, and maybe HLAA. Also 1200 9/12/79; 1200 10/19/79 (LBG-CO); 1035 3/24/80. (WJH-UT).
- 1143 New Zealand, Hamilton, 1IW. National Program, R. New Zealand. 1126 6/4/80. (PM-OR).
- 1143 Philippine Islands, Poro, Voice of America. 1245 8/13/79 Vietnamese (PM-OR); ^t1050 10/15 Tagalog (DK-WA); ^t1130 11/4; 1300 11/12 (GJ-CA); 1323 11/16/79 EE (RET-CA).
- 1152 Australia, Wagga Wagga, 2WG. ^t1323 2/6/80, DU talk and pop mx, not //NZ. (PM-OR).

- 1152 Japan, Kushiro/Kochi, JOPC/JORB. NHK-2, 1045 3/25/80. (PM-OR).
- 1152 New Zealand, Timaru, 3ZC. Community net, R. New Zealand. 0911 12/15/80. (PM-OR).
- 1161 Australia, Fingal, 7FG. ABC-3. 1358 9/?/79, s/off 1401 after Tasmanian nx. (PM, OR).
- 1161 New Zealand, Wellington, 22M. 1152 6/25/80, rock mx "Zed M" jingle (PM-OR).
- 1170 Hawaii, Honolulu, KOHO. 0715 11/15/79; 0730 4/20/80. (PM-OR). 0920 1/12/81 (RET-CA) [KOHO may be easier in California. Ed.]
- 1179 Australia, Melbourne, 3KZ. ^t1017 4/2/80 pop mx; 1107 4/28 DU announcements. (PM-OR).
- 1179 Japan, Osaka, JOOR. ^t1156 11/12/79 JJ (BP-WA); 1427 11/9/79 JJ pops; 1128 3/3/80 (PM-OR); 1040 3/12/80 (MM-ID); 1454 9/16/80 (RET-CA).
- 1188 Australia, Inverell, 2NZ. 1003 2/9/80; 1036 4/27/80, both times with "Back to the Bible," 1009 2/16/81 pop mx, "2NZ" ID (PM-OR).
- 1188 China, unknown location. 1116 11/4/79 CC (DK-WA); 1132 11/17/80 (DV-CA).
- 1188 Japan, Kitami, JOKP. NHK-1. Heard on WC during good TP openings, once as early as 0830.
- 1188 South Korea, Inchon, HLKX. ^t1130 12/2/79 religion (BP-WA); 1100 10/27/80 chimes on hour— Team R. (AWP-CA).
- 1188 Wallis Island, Uvea. ^t0809 9/26/79 island mx; 1146 7/6/80 Samoan(?) (PM-OR).
- 1197 Australia, Adelaide, 5KA. ^t1020 2/9/80 u/4GG. (PM-OR).
- 1197 Australia, Surfers Paradise, 4GC. 1300 8/12 Macquarie nx, s/off; 1019 2/9/80; 1200 10/29; 1039 2/16/81 (PM-OR).
- 1197 Japan, several private stations. 0945 3/3/80 (PM-OR); 1125 11/17/80 (DV-CA); 0830 12/29/80 (RET-CA).
- 1197 Japan, Kumamoto, JOBF. 1400 11/15/80 call letter ID. (PM-OR).
- 1197 New Zealand, Whangarei, 2ZW. Community Net, R. New Zealand. 0745 4/5/80; 1200 10/29/80. (PM-OR).
- 1206 Australia, Canberra, 2CC. 1309 8/12/79 jazz, ads (PM-OR).
- 1206 Australia, Grafton, 2GF. One of stronger DUs on Pacific coast now, as early as 0930, fall through spring w/pop mx and "2GF" IDs. Also 0958 2/25/80 (MM-ID); 0645 3/3/80 (WJH-UT); 0730 9/1/80 (DN-CA); 1150 12/18/80 (DV-CA).
- 1206 China, Yanji. Heard during good TP openings on WC as early as 1030. Usually KK, but CC and JJ have been heard also. 1000 2/25/80; 1231 3/12; 1119 3/24; 1215 11/13/80 (WJH-UT); Has been heard //9900 until 1055.
- 1206 Fiji, Sigatoka, R. Fiji 1. 0655 11/14/79; 0935 1/3/80; 1403 4/3; 1025 12/13/80 (PM-OR).
- 1206 New Zealand, Dunedin, 4XO. 1043 4/3/80 (PM-OR); noted AM of 11/16 (Bev-CA)
- 1210 Hawaii, Honolulu, KZOO. "The Cherry Blossom Station" 0645 11/13/79 JJ; 0400 1/30/81 early for this (PM-OR); 0830 11/23/79; 0706 8/25/80 (RET-CA).
- 1215 New Zealand, Kaikohe, 1ZE. Community Net, R. New Zealand. 1155 8/3/79; 0919 4/3/80; 1019 4/27 (PM-OR).
- 1224 Australia, Sydney, 2WS. 0854 2/26/80 pop mx, poor. (PM-OR).
- 1224 Australia, Melbourne, 3EA, ^t1104 3/4/80, Classical mx faded up. (PM-OR).
- 1224 South Korea, Suweon, HLSA. KBS. 1100 8/3/80. (Bev-CA).

- 1224 Marshall Islands, Kwajalein. AFRS. 0900 2/26/80 American announcer; 0815 11/2 MoR; 1117 12/14; 1104 3/4/81 US network mx. (PM-OR).
- 1233 Australia, Newcastle, 2NC. ABC-1. 1232 2.21.80. (PM-OR).
- 1233 Japan, JORG and JOUR. Mixing 0953 3/3/80. (PM-OR).
- 1242 Japan, Tokyo, JOLF. Heard during good TP conditions in the Pacific Northwest, w/JJ and pop mx. One tone marks the hour, once heard preceded by 3 electronic cuckoos, (another station?). As early as 1100. Also 1338 9/16/80 (RET-CA); 1242 11/13/80 (WJH-UT).
- 1250 Alaska, Homer, KBBI. 0758 9/22/80 (BP-WA). 1003 11/24/80, jazz and classical mx. S/off by woman. (PM-OR).
- 1251 China, unknown location, CPBS-2. 1135 10/26/79 //7770; 1056 11/12/79. (BP-WA).
- 1251 USSR, Vladivostok. Listed as Foreign Service, but heard 0945 3/22/80 w/RR. (PM-OR).
- 1251 Western Samoa, t0800 2/9/81 "jungle mx", no ID. (PM-OR).
- 1269 Australia. Sydney, 2SM. t1050 2/16/81 pop mx, quick paced announcer, no ID. (PM-OR).
- 1270 Hawaii, Honolulu, KNDI. 0728 11/26/79 Polynesian mx (PM-OR).
- 1278 Japan, Fukuoka, JOFR. 1417 10/5/79 JJ. (PM-OR).
- 1278 New Zealand, Napier, 2ZG. Community Net, R. New Zealand. 0833 2/26/80; 1100 11/12. (PM-OR).
- 1287 Australia, Tamworth, 2TM. t1238 2/6/80 C&W, spots, one mentioning Tamworth?; t1018 2/16 (PM-OR).
- 1287 China, unknown location. 1043 11/6/79 CC. (DK-WA).
- 1287 Japan, Sapporo, JOHR. Heard as early as 0900 on WC during good TP conditions, usually rock mx w/EE call letters noted on hour, but once heard w/classical mx.
- 1296 Australia, Brisbane, 4BK. Noted as early as 0815 w/pop and rock mx fall thru spring, but one of the rarer Brisbane stations. "4BK Music" jingle (PM-OR).
- 1296 Japan, Matsue, JCTK. NHK-1. 1407 10/6/79; 1245 11/16/79. (PM-OR).
- 1296 New Zealand, Hamilton, 1ZH. Community Net, R. New Zealand. 0815 2/26/80; 0925 4/3; 1117 11/2; 1147 12/14/80. (PM-OR).
- 1305 South Korea, Uljin, HLSV. KBS. 1355 10/6/79 weak KK (PM-OR).
- 1314 Australia, Wollongong, 2WL. 1307 9/22/79 pop mx; 1146 10/29/80 (PM-OR).
- 1314 Japan, Osaka, JOUF. 1435 10/6/79 pop mx; 1345 3/28/80; 1400 11/11/80. (PM-OR).
- 1314 New Zealand, Gisborne, 2TW. National Program, R. New Zealand. t1200 10/29/80 (PM-OR).
- 1323 China, Changchun? 1347 10/6/79 (PM-OR).
- 1323 Fiji, Rakiraki, R. Fiji 1. Heard as early as 0700 fall through spring, though not a regular. Also 0710 8/3/80 (Bev-CA).
- 1323 New Zealand, Christchurch, 3ZM. t0900 4/5 headline nx. (PM-OR).
- 1332 Australia, Bunderberg, 4BU. 1226 6/23/80 "EU" jingles. (PM-OR).
- 1332 Japan, Nagoya, JOSF. 1300 11/12/79 JJ pops, "Tokai" ID; 1330 3/28/80 (PM-OR).
- 1359 Western Samoa, t0957 2/9/80 Island mx in 1360 slop (PM-OR).

- 1377 China, location unknown. 1207 3/21/80 CC. (PM-OR).
- 1377 Japan, Yamaguchi, JOUC (plus JOAC, JOTZ). NHK-2. ^t1047 3/3/80; 1220 11/2-80 (PM-OR); 1050 3/3/80 //to and stronger than 774. (NHP-BC).
- 1377 USSR, Vladivostok. Second Program. 1129 10/26/79 Mayak IS (BP-WA); 1237 11/7/80 (PM-OR).
- 1386 Australia, Adelaide, 5AA. ^t1020 2/20/80, EZL u/2EA (PM-OR).
- 1386 Australia, Sydney, 2EA. Ethnic programs w/European languages. 1015 2/20/80; ^t0930 11/2; 0956 12/13; 1350 1/14/81; 1300 2/16; 0815 3/2/81 (PM-OR).
- 1386 Japan, Kagoshima/Kanazawa/Okayama, JOHC/JOJB/JOKB. NHK-2. Heard in Pacific Northwest during good TP openings, as early as 1000.
- 1386 Phoenix Islands, Canton Island, WXLE. Regular after 1200 (PM-OR). 1112 10/8/79 (BP-WA). This station is now off the air.
- 1404 Western Samoa, Apia, 2AP. Infrequently heard on Pacific coast, 0800-1000, winter and spring. Samoan language broadcasts, island mx.
- 1413 Australia, Newcastle, 2KO. 1134 2/16/81; 1117 3/7/81 2KO jingles, IDs, and rock mx. (PM-OR).
- 1420 Hawaii, Honolulu, KCCN. 0829 11/26/79 Hawaiian mx, ID. (PM-OR).
- 1422 Japan, Yokahama, JORF. ^t1040 3/20/80 pop mx, JJ (PM-OR).
- 1440 Japan, Sapporo, JOWF. 1048 3/21/80 pop mx, JJ (PM-OR).
- 1440 North Korea, Nampo. ^t1048 3/21/80 KK u/JOWF. (PM-OR).
- 1449 New Zealand, Palmerston North, ZYM. National Program, R. New Zealand. ^t0811 4/4/80 pop mx. (PM-OR).
- 1458 Australia, Muswellbrook, 2NM. ^t1311 9/22/79; ^t1017 2/26 pop mx (PM-OR).
- 1467 Fiji, Rakiraki, R. Fiji 2. 0730 11/2/80 (PM-OR).
- 1467 Japan, NHK-2 synchros. ^t1200 10/27/80 NHK pips (AWP-CA); 0840 11/10/80 //774 (RET-CA).
- 1467 USSR, (?) 1225 11/3/80 woman in RR, not // to anything. (PM-OR).
- 1475 Malaysia, Kota Kinabalu. ^t1110 3/18/80 carrier (JKL-WA); 1242 4/14/80 usually best in spring (BP-WA); 1255 6/7/80 US rock, woman announcer (PM-OR); ^t1257 11/13/80 Beatles mx (WJH-UT); 1032 12/29/80 s/on chimes. (NHP-BC).
- 1476 China, unknown location, CPBS-2. 1130 9/14/80 ID (BP-WA); 1300 10/3/80 5 long pips, CC talk o/USSR (NHP-BC); 1223 11/9/80 (DV-CA); 1100 9/26/80 (JKL-WA). USSR also broadcast in CC on this frequency.
- 1476 New Zealand, Auckland, 1XA. "R. Hauraki", clusters of rock mx, few announcements. Heard as early as 0815, year round on Pacific coast; also ^t1242 4/14/80 (BP-WA); ^t0917 2/16/81 (NHP-BC).
- 1476 USSR, Vladivostok, Foreign Service w/GC and KK. Usually a bad hum noted between this and China in fall 1980, so one is off channel. Previous to 1980, this s/on at 1430, but in 1980 was noted on WC during good TP openings as early as 1000. Also 1237 3/9/80 (MM-ID).
- 1485 Australia, Three ABC-3 stations listed, though in different states. 1200 6/7/80 ABC pips and nx. (PM-OR).
- 1485 Australia, Wollongong or Brisbane. 1117 2/16/81 foreign language during DU conditions. (PM-OR).
- 1485 Japan, Hachinohe, JOGO. ^t0938 3/3/80 JJ (PM-OR).
- 1485 New Zealand, Twizel, 3ZO. National Program/Community net, R. New Zealand. 1155 7/16/80 w/National program; only 100 w. (PM-OR).

- 1491 Australis, Albury, 2AY. 1100 6/22/80 nx (PM-OR).
- 1494 Papua New Guinea, Wabag. ^t1016 3/6/81, possibly in pidgin. (PM-OR).
- 1500 Hawaii, Honolulu, KUMU. 0930 4/19/80 (PM-OR); 1219 11/16/80 BFL mx (Bev-CA).
- 1503 Australia, Melbourne, 3AK. 1336 9/22/79 ads, BFL mx; ^t1107 2/20/80 EZL mx (PM-OR); 1100 10/8/79 pips, tones. (BP-WA).
- 1503 Japan, Akita, JOUK. 1500 11/11/79; 1044 3/3/80 (PM-OR); 0949 11/19/79; 1007 12/31/79 w/JJ (BP-WA); 0820 11/10/80 (RET-CA).
- 1512 Australis, Newcastle, 2NA. 1201 7/29/79 (NHP-BC); 1000 2/14 and 2/16/81 (PM-OR).
- 1512 Japan, Matsuyama, JOZB. NHK-2. 0930 3/3/80. (PM-OR).
- 1530 Australis, Moree, 2VM. 1300 2/16/81 pop mx, Macquarie nx; KFBK off. (PM-OR).
- 1539 Australis, Sydney, 2JJ. 1200 7/14/80 rock mx and "2 double J" jingle (PM)
- 1540 Hawaii, Honolulu, KISA. 0800 4/7 through 10/80. s/off w/Poly-Oriental theme (PM-OR).
- 1548 Australia, Emerald, 4QD. ABC-3. As early as 0915 on Pacific coast year round. Also 1300 7/29/79 DU talk, 5 pips. (NHP-BC).
- 1548 Thailand, Bangkok. ^t1320 3/29/80 o/u 4QD w/Asian mx and unID language. (PM-OR).
- 1557 Australia, Taree, 2RE. Soft EZL 1206 6/?/80; 1150 10/19/80; 1035 11/1; 1100 1/10/80 (PM-OR); ^t all AM 11/16/80 (Bev-CA).
- 1557 New Zealand, Hawera, 2ZH. Community net, R. New Zealand. 0824 4/1/80; 1206 s/off 6/??/80; 1035 11/1/80; 1150 10/19/80 (PM-OR).
- 1566 Australia, Wangaratta, 3NE. 1207 6/15/80 pop mx, ads; 1330 9/14; 0943 12/17 (PM-OR); 1300 8/27/80 (NHP-BC).
- 1566 South Korea, Cheju Island, formerly HLDA- now HLAZ. Perhaps the best all-round TP heard on the WC; noted August through April as early as 0915 w/religious broadcasts in JJ, KK, CC, EE and RR. Can often be the only TP heard. Also 1305 10/19/79 (LBG-CO); 1304 1/21/80 (MM-ID); 1342 1/24/80; 1410 2/20; 1105 8/15 (WJH-UT); 1208 11/17/80 (GM-CO).
- 1575 Australia, Wollongong, 200. "Two double O" jingles and IDs; pop mx. Noted on Pacific coast fall through spring as early as 0930. Also 1200 7/21/80 (NHP-BC).
- 1575 China, Wenzhou. ^t1515 11/22/79, choral "International", woman in CC, garbled ID, then carrier off. (NHP-BC); 1250-1305 11/2/80 (PM-OR); 1415 11/9/80 (DV-CA).
- 1575 Thailand, Ban Pachi, Voice of America. Heard on WC during good TP conditions in fall 1979 w/broadcasts in Lao, Khmer, and EE; "Yankee Doodle" IS and VoA IDs in EE. Generally heard 1225 to past 1400. Occasionally noted when TP conditions are generally poor, e.g., 1555 1/20/80 (DW-OR); 1513 2/7/80 (NHP-BC); 1240 2/9/80 (MM-ID). Also heard 1250 11/2/80 (PM-OR); and has been noted //9630 SW.
- 1575 USSR, Yuzhno-Sakhalinsk (?). 1300 11/2 weak IS behind VoA and CC. (PM-OR).
- 1584 Australia, Newcastle, 2EA translator. 1223 6/16/80 w/Greek mx; only 200 w. (PM-OR).
- 1584 Australia, St. Helen's, 7SH. ABC-3. 1350-1400 9/22/79 //7FG-1161. 100 watts. (PM-OR).
- 1593 New Zealand, Manukau, 1XP. "R. Pacific" noted w/teletalk and pop mx, occasionally on Pacific coast, during fall and winter, as early as 1015.

UNIDENTIFIED STATIONS

Although a great many unidentified stations looping DU or TP were noted in the pages of DX Monitor, many were only carriers, or otherwise had too little detail to ever identify them. A few of the more intriguing mysteries follow:

- 648 1330 9/24/80 Oriental talk w/USSR. (BP-WA).
- 657 To 0740 11/15/80. Just a carrier, but due north Murmansk rather than TP? (GM-CO).
- 837 1600 1/24/81. SS sounding language; similar stations on 777, 828, 882; gone by 1603. Philippines? (PM-OR).
- 882 1458 11/17/79. RR, anthem, seemed to be s/off (DW-OR). [Ed. note: Mongolia s/off at 1500.]
- 890 1505 9/15/80. AP radio nx. Probably AFRS-Adak. (RET-CA).
- 1026 1505 11/25/79 rock mx w/3DB. 4MK and other DUs should be off at this time. (PM-OR).
- 1107 1253 9/26/80. Two stations: one CG, other w/KK or JJ. (BP-WA).
- 1323 0917 2/26/80. Hyped DU announcer and rock mx; no IDs. (PM-OR).
- 1404 0940-1000 11/10/80. Muzak, talk at 1000 but unreadable, fade by 1010. Apia? (GM-CO).
- 1521 1207 11/13/80. A carrier, but looping almost due north Urumqui? (WJH-UT).



"GOSPEL STATION AT THE TOP OF THE NATION"

Explanation of symbols and abbreviations used in the Chinese Station List

Freq: "*" means a Chinese station has been hr'd on that frequency in N. America
"a" means the station may vary a few kilohertz off frequency

City: "near" means a station is audible during the day in that city. It's likely within a 150 mile radius of that location.

Pgm: C1:Central People's Broadcasting Station (CPBS), 1st Pgm; C2:CPBS,2nd Pgm; F1: Fujian Front Station (FFS), 1st pgm; F2: FFS, 2nd Pgm; FS: Foreign Service; HP: Hainan PBS; L: Local PBS; L1,L2: Local PBS, 1st pgm, 2nd Pgm, etc; MS: CPBS Minority Service; P: Provincial (or AR) PBS; P1, P2: Provincial PBS, 1st & 2nd Pgms; TS: Taiwan Service; YP: Yanbian PBS; ZP: Zhoushan (Island) PBS

Schedule: Times are UTC; I & E means "Internationale" & "East is Red", respectively, are played at that s/on or s/off; N: No anthem is played at that s/on or s/off; NA: station plays neither anthem; LL: station carries EE, JJ, and/or FF language lessons.

Parallels: (1) all C1 stations on the list, plus 5860 5880 6665 6750 7095 7504 9064 9080 11302 11330; (2) 603 630 678 720 747 855 882 897 899 1251 4250 5075 5163 6345 7190 7770 8320 9020 9775 10260 11040 11505 12200 15030; (3) 594 693 750 792 909 927 1035 1089 1116 1224 1431 1512 2360 3360 3820 4770 9170 11000 11100; (4) 666 846 1016 1266 2340 3640 4045 4530 5040 5240 5265 5900 6765 7504 7850; (5) 819 954 1008 1377 1539 3200 3300 3400 4380 4840 5170 5770 5900 7025 8195; (6) 720 918 1044 3960 4960 7480 7475 4785 6000 (7) 531 576 810 846 864 963 985 1134 1323 1404 1431 1476 2475 4785 6000 6620; (8) 612 963 1089 1260 3930 4830; (9) 738 1107 1485 1530 2960 3310

AM STATIONS IN CHINA

<u>Freq</u>	<u>Province</u>	<u>City</u>	<u>Pgm</u>	<u>Schedule</u>	<u>Parallels</u>
531	Zhejiang	Hangzhou	P1	2100-0515 0845-1500	(?)
	Unknown		C1	2000-1735	(1)
540	---	Shanghai	C1	2000-1735	(1)
	Various		C1	2000-1735	(1)
549	Fujian	Zhangzhou	C1?		
	Unknown		C1	2000-1735	(1)
558	Fujian	Jianyang	P1	2050-0530 0750-1600	783 1071 2340 5040
	Xinjiang		P2	2230-0200 0330-0700	630 675 685 702 738
560	Unknown	near Hangzhou	C1	2000-1735	(1)
567	Hebei	various	C1	2000-1735	(1)
576	Yunnan	Quibei	P1	2150-0600 0920-1605N	990 2460 4760
585	Zhejiang		P1	2100-0515 0845-1500	(?)
593	Unknown	near Beijing	C1	2000-1735	(1)
594*	Zhejiang	Wencheng	TS	2000-0610(0700Su) 0830-1900	(3)
	Guangdong?		C1	2000-0600 -1735	619 902 1201 1341
	Shandong	Jinan	P	0845-1510 2055-0630	918 1485 1548 2350
	Xizang	Lhasa	P	2230-0645 1000-1545	4750 5935 7170
603	---	Beijing?	C2	2200-1600	(2)
612	Liaoning		P	2040-0540 0740-1500	(8)
	Fujian		P1	2050-0530 0750-1600	558 783 2340 5040
619	Guangdong?		C1	-0600	594 902 1201 1341
621	Heilongjiang	Harbin	P1	2040-0630(0510Th) 0830-1530(KK 0300-0400)	900 3340 5950 4840 1341
	Unknown		FS	RR: 1500-1800	1521 7140 9725
	Unknown(s)		C1	2000-1735	(1)
630	Xinjiang		P2	2200-1600	558 675 685 702 738
	Unknown		C2	2200-1600	(2)
635	Urumqi		P1		
	Unknown		C1	2000-1735	(1)
639	---	Beijing	C1	2000-1735	(1)
	Unknown		TS	2000-0610(0700Su) 0830-1900	(3)
648	Guangdong	Guangzhou	P1	2045-2400 0250-1530	sometimes (1)
657	Henan	Zhengzhou	P1	2120-1400 0350-1515	1332
*	Unknown		C1	2000-1735	(1)
660	Unknown		C1	2000-1735	(1)
666	Fujian	Dehua	F1	1000-1800 2100-0500	(4)
	Anhui	Heifei	P	2100-1400	
675	Nei Monggol	Hohhot	P1	2145-0100 0200-0555 0900-1525(1545SaS)NA	765 1188 3970 4895 4068 6840
	Xinjiang		P2	2230-0200 0330-0700	702 685 738 558 630
676	Unknown		C1	2000-1735	(1)
678	Unknown		C2	2200-1600	(2)
684*	Hebei	Tangshan			1278
	Guangdong	Haikou			
	Zhejiang	Dinghai	ZP	2135-0415	
685	Xinjiang		P2	2230-0200 0330-0700	675 702 738 558 630
693					
	Shaanxi	Xian	P	0900-1520I 2120-0820	6176
	Unknown		TS	2000-0610(0700) 0830-1900	(3)
702	Fujian		TS?	-1658	936 1476
	Jiangsu	Nanjing	P	2050-1450I 2050-2400	1314 1413(some FS?)
	Xinjiang		P2	2230-0200 0330-0700	675 685 558 630 738
711	Qinghai	Gonghe	C2	2200-1600	(2)
720*	---	Beijing	FS	JJ:2130-2200 0930-1530(6)	
	Unknown		C2?	-0600 0915-1600	855 1044(sometimes)
723	Unknown	Jian	P	0855-1620I 0200- EELL 1422? 5020?	
729	Jiangxi		C1	2000-1735	(1)
	Unknown		C1	2000-1735	(1)
735	Guangdong	Guangzhou	P	2000-0530 0850-1530	(9)
738	Jilin	Changchun	C2	2200-1600	(2)
747	Unknown	near Beijing	TS	2000-0610(0700) 0830-1900	(3)
750	Fujian		C1	2000-1735	(1)
756*	Unknown		P1	2145-0100 0300-0555 0900-1525(1545SaSu)NA	675 1188 3970 4068 4895 6840
765	Nei Monggol		P1	0750-0530 0750-1600	558 882 1071 4975 2340 5040 7165
774	Hubei	Wuhan	P	2115-2350 0200-0600	1278
783	Fujian		P1	0840-1535	
	Hebei	Baoding	P		

<u>req</u>	<u>Province</u>	<u>City</u>	<u>Pgm</u>	<u>Schedule</u>	<u>Parallels</u>
792	---	Shanghai	L2	2100-1600	
	Guangxi	Nanning	P1	0845-1600E 2100-0530	4915 1071 1440
	Unknown		TS	2000-0610(0700Su)	0830-1900 (3)
801	Guangdong	Beijing?	P2	2100-0600N E0900-1540	1062 (Cantonese)
	---		C1	2000-1735	(1)
805	Unknown		C1	2000-1735	(1)
810	Zhejiang	Hangzhou	P1	2100-0515 0845-1500	(7)
819	Fujian		F2	0330(1000Wed)-1730	
	Shanxi	Taiyuan	P	2100-0035 0230-0635	1269 846
	Unknown	near Guangzhou		0900-1510 EELL 2155	
828*	---	Beijing	L		
837*	Hubei	Wuhan	C1	2000-1735	(1)
	Qinghai	Xining	LorP	2100-0100 0900-1520	3950 4940 6255
846	Fujian		F1	1000-1800 2100-0500	(4)
	Guangdong	Huizhou	P2	2130-2350 0950-1530	1161 1224
	Shanxi		P	2100-0035 0330-0635	1269 819
	Zhejiang		P1	0900-1510 2100-0515 0845-1500	(7)
855*	---	near Hangzhou	C2	2200-1600	(2)
864	Zhejiang	Shanghai	P1	2100-0515 0845-1500	(7)
	Unknown		C1	2000-1735	(1)
873*	Gansu	Lanzhou	P	2120-0600 0920-1600	4865 5970 6155 7325
	Hubei	Wenchang	L		
	Jiangsu	Nanjing	P2		
	Unknown		C1	2000-1735	(1)
882	Fujian	Fuzhou	P1	2050-0530 0750-1600NA	558 783 1071 5040
	Xinjiang		P2	2230-0200 0330-0700	630 et al/2340 7163
	Nei Monggol	Hohot	L1		
	Unknown		C2	2200-1600	(2)
891	Liaoning	Dandong	P	2050-0020 0250-0530	
	Ningxia	Yinchuan		0810-1435 2210-0150 0350-0600	1287 4830
	Shandong	Jinan	P	0920-1535 2055-0020 0250-0530	
				0810-1510	1404 2350
897	Guangdong		C2	2200-1600	(2)
899	Unknown	near Beijing	C2	2200-1600	(2)
900	Heilongjiang		P1	2040-0630(0510Th) 0830-1530(KK 0300-0400)	621 3340 4840 5950 1341
902a	Guangdong	Guangzhou	C1	2000-0600 -1735	(1)
909	---	Tianjin	L1	2130-0600 0730-1515	
	Zhejiang	Wencheng	TS	2000-0610(0700Su)	0830-1900 (3)
913	Unknown	near Hong Kong			
918	Shandong	Weifang	P	0845-1510 2055-0630	594 1441 1485 1548
	Jiangsu		FS	JJ: 2130-2200 0930-1530(6)	
927	---	Beijing	P	2250-1600N 2130-0020 0150-0620	2250-1600N 1026 3260 7275
	Guizhou			0850-1605 EELL	
932	Unknown	near Hong Kong			
936	Anhui	Hefei		2050-0530 0730-1500	1395 1494
	Fujian			-1658	702 1476
	Jiangsu?		C1	2000-1735	(1)
	Unknown	near Beijing			
940	Unknown		F2	0330(1000Wed)-1730	(5)
954	Fujian	Hainan Island	HP	2100-0100 0250-0600	1188
	Guangdong			0900-1500 EELL, some	Hainanese
				-1430(1400Su)	
958	---	Tianjin	L		
960	Unknown		C1	2000-1735	(1)
	Xizang	Lhasa	P2	2230-0645 1000-1600	3917 4035 5240
				Tibetan	5995 9490 9680
963*	Liaoning	Chifeng	P	2040-0100 0250-0540	612 1089 1260
	Zhejiang			0720-1500	3930 4830
972	Henan	Zhengzhou	P1	2100-0515 0845-1500	(7)
981	Fujian	Fuzhou	P2	2150-0515 0925-1500	2200, some (1)
	Unknown		P2		(1)
985	Zhejiang		C1	2000-1735	(7)
990	---	Shanghai	P1	2100-0515 0845-1500	2030-1500, EELL
	Yunnan	Kunming	L1	2150-0600 0920-1605	576 2460 4760
	Xinjiang		P1	0500-0230 0530-0700	0530-0700 (Kazakh 1200-1730)
					954 972 909

<u>Freq</u>	<u>Province</u>	<u>City</u>	<u>Pgm</u>	<u>Schedule</u>	<u>Parallels</u>
995*	Unknown				
999	Guangdong	Guangzhou	L	2100-1605 EE/JJLL	
	Xinjiang		P2	2230-0200 0330-0700	702 675 685 et al
	Unknown		C1	2000-1735	(1)
1008	Fujian		F2	0330(1000Wed)-1230	(5)
1016	Fujian		F1	2100-0500 1000-1800	(4)
1017*	Jilin	Changchun	FS	KK:1100-1500	4620 5975 6955
	Unknown	near Beijing	C1	2000-1735	(1)
1026	---	Beijing	L	EE/FFLL	
	Guizhou		P	2130-0020 0150-0620 0850-1605 EELL	927 3260 7275
1035*	Unknown	near Beijing	C1	2000-1735	(1)
	Unknown		TS	2000-0610(0700Su) 0830-1900	(3)
1044	Jiangsu	Changzhou	FS	JJ:2130-2200 0930-1530	(6)
1053*	Yunnan	Dongchuan	C1/2 when not FS		(1) (2)
	Unknown		L		
1062	Guangdong	Guangzhou	C1	2000-1735	(1)
1069	Unknown		P2	2100-0600 E0900-1540	801 Cantonese
1071	Fujian		C1	2000-1735	(1)
	Guangxi		P1	2000-0530 0750-1600	558 882 5040 7165
	----	Tianjin	P1	0845-1600E 2100-0530	792 1440 4915
1080	Guangdong	Shantou	L2	0955-1735 2150-0840	(1, when //c1)
	Zhejiang		L	2110-1505	
1089	Liaoning	near Hangzhou	P1	2100-0515 0845-1500	(7)
	Sichuan	Shenyang	P	0720-1500 2040-0540	(8)
	Unknown	Chengdu	P2	2220-0530 0900-1300	5900
1098a	----	Shanghai	TS	2000-0610(0700Su) 0830-1900	(3)
1107	Jilin	Hunjiang	L	1100- Cultural Pgms	
			P	2050-0530 0850-1505	(9)
1116*	Guangdong	Mei Xian			
	Jilin	Antu			
	Sichuan	Chengdu	P1	2120-0800 0920-1505	3245
	Unknown		C2	2200-1600	(2)
	Unknown		TS	2000-0610(0700Su) 0830-1900	(3)
1125*	Unknown		C1	2000-1735	(1)
1134	Zhejiang	Linhai	P1	2100-0515 0845-1500	(?)
1135	Unknown		C1	2000-1735	(1)
1143	Nei Monggol	Dongsheng	P		
1148	Zhejiang	near Hangzhou	P1	2100-0515 0845-1500	(7)
1152	Hunan	Changsha	P	2105-1605	1161 1233 1584 1591 /4990
	Jilin	Tongjiao	L	2045-0020 0250-1435	
	Liaoning	Luda	M	Mongolian:1200-1255	6430 8565
	Unknown	Luda??	P2	2130-2350 0950-1530	5010
1161	Guangxi	Nanning	P	2105-1605	1152 1233 1584 1591 /4990
	Hunan				
	Unknown	near Beijing			
	Unknown	near Hong Kong			
	Unknown		C1	2000-1735	(1)
1170	Unknown		C1	2000-1735	(1)
1179	Hubei		P	2100-0610 0850-1605	774 1404 3940 4890
	Unknown		C1	2000-1735	(1)
1188	Guangdong	Hainan Island	HP	2100-0100 0250-0600	954
	Nei Monggol			0900-1500 EELL, some	Hainanese
	Yunnan	Kunming	P1	2145-0100 0200-0555 0900-1525(1545SaSu)NA	675 765 3970 4068 4895 6840
			FS	Lao:1100-1130 Thai:1130-1200 Cambodian:1200-1300 Thai:1330-1430 Lao:1430-1500	11980 15115 9460 12450 1296 9440 11455 9460 11990 5220 11980 15115
1197	Unknown	near Beijing	C1	2000-1735	(1)
1201	Guangdong	Guangzhou	C1	-0600 -1735	(1)
1203	Unknown	near Hong Kong			
1206*	Jilin	Yanji	YP	2030-2340 0230-0540 0830-1430, mostly in KK	
			M	KK:1000-1055 0400-0455	8565 9900
	Yunnan	Kunming	FS	EE:1800-1900	12450
1215	Unknown	near Beijing		Hindi:1500-1800	11455 12450

Freq	Province	City	Perm	Schedule	Parallels
1224	Guangxi	Beihai	L	2215-2350 0245-0455 1015-1500 (some Guangxi PBS relays)	8743
	Sichuan	Chengdu	P		
	Unknown		TS	2000-0610(0700Su) 0830-1900	(3)
	Unknown	near Beijing			
1233	Hunan	Changsha	P	2105-1605I	1152 1161 1584 1591 4990
	Unknown		C1	2000-1735	(1)
1238	Unknown		P	2155-0100 0955-1600	
1242	Yunnan	Kunming	MS	2230-1510 (Mongolian)	3950 4940 6500
1251*	Qinghai	Xining	C2	2200-1600	(2)
	Unknown		FS	Mongolian: 2300	
	Unknown		P	0720-1500 2040-0100	(8)
1260	Liaoning	Fuxin shi	C1	2000-1735	(1)
	Unknown		F1	1000-0500	(4)
1266	Fujian	Dehua	P	2100-0035 0330-0635	846 819
1269	Shanxi	Taiyuan		0900-1510	
	Unknown	near Beijing		EELL 2215	
1278	Hebei	Shijiazhuang	P	2115-2350 1200-0600 0840-1535	783
	Zhejiang?		P	2210-0350 0920-0600	891 4830
1287*	Ningxia	Yinchuan	C1	2200-1735	(1)
	Unknown		L4	2155-2330 0025-0200 0355-0530 0755-1430	
1296	----	Shanghai		EE//FF/JJ LL <u>only</u>	
	Liaoning	Benxi			
	Sichuan	Xian			
	Yunnan	Kunming	FS	Bengali:1500-1600 Cambodian:1030-1130 1230-1300 1400-1500 FF:1300-1400	9965 12450 9440 11455 11695 15125 9440 11455 11695
	Unknown		C1	2000-1735	(1)
1302	Unknown		P	2050-1450I EELL	702 1413
1314	Jiangsu	xuzhou			
	Sichuan	Chongqing	FS	Mongolian:1200-1255	5145 5850 6555
	Unknown		L		
1323	Hunan	Changsha	P1	2100-0515 0845-1500	(?)
	Zhejiang	Ningbo	L		
	Jilin	Changchun	P1	2120-1400 0350-1515	657
1332	Henan	Luoyang	C1	2000-1735	(1)
	Unknown		FS	Tagalog:1200-1230 Vietnamese:1230-1430	6520 8240 15250 9945 11725
1341	Guangdong	Guangzhou		Tagalog:1430-1500	5420 6520 11445
	Heilongjiang		P1	2040-0630 0830-1530	621 et al
	Unknown		C1	2000-1735	(1)
1350	Guangdong?	Kunming	C1	2000-1735	(1)
	Yunnan		L	2215-2400 0345-0600 0955-1520; may have some P1 or P2	
	Unknown		C1	2000-1735	(1)
1359	Unknown	near Hangzhou	C1	2000-1735	(1)
1363	Unknown		C1	2000-1735	(1)
1369	Unknown		C1	2000-1735	(1)
1377*	Fujian	Dehua	F2	0400-2100	(5)
	Shandong	Qingdao	L	2100-0030 0255-0630	0855-1500
1386	----	Tianjin	L3	0950-1500 0130-0515	
1395	Anhui		P	2050-0530 0730-1500	936
	Unknown		C1	2000-1735	(1)
1404	Hubei	Yichang	P	2100-0610 0850-1605	774 1179 3940 4980
	Liaoning	Dandong	P	2050-0020 0250-0530	891
	Shandong	Jinan		0810-1435	
	Shandong		P	2050-0020 0250-0530	891 2350
	Zhejiang		P1	2100-0515 0845-1500	(?)
1408	Unknown		C1	2000-1735	(1)
1413	Jiangsu	Lianyungang	P	2050-0000 0030- 0900-1450I some FS/C1/C2	702 1314
	Unknown		C1	2000-1735	(1)
1415	Jiangxi		P	-1435	729? 5020?
1422	Sichuan	Zigong	L	0920- 2120-0500 -1435I(In Amoy)	

<u>Freq</u>	<u>Province</u>	<u>City</u>	<u>Pgm</u>	<u>Schedule</u>	<u>Parallels</u>
1431a	----	Shanghai	L3	2155-2300 0025-0130 0355-0500 0700-0900 0950-1455 Cultural Pgms & LL	
	Heilongjiang	Hailar	P		
	Zhejiang		P1	2100-0515 0845-1500 (7)	
	Unknown		TS	2000-0610(0700Su) 0830-1900 (3)	
1437a	Jilin?		TS	some C1 also (1) (3)	
1440	Guangxi	Liu zhou	P1	0845-1600E 2100-0530 792 1071 4915	
	Unknown	Liuzhou?	MS	Mongolian: 1200-1255 6430 8565	
1441	Shandong	Yantai?	P	-1510 594 918 1441 1548 2350	
1449	Jiangxi	Jingdezhen?	P		
1453	Unknown		C1	2000-1753 (1)	
1458	Nei Monggol	Huhot	MS	Mongolian: 0500-0555 4070 6974	
			FS	RR: 1600-1755 621 1521	
			P2	2130-0050 0230-0500 1548 0900-1600(Mongolian)	
1467	Fujian		P2		
	Unknown	near Beijing			
1476*	Fujian	Wencheng			
	Hebei	Huangshi	L	-1658 702 936	
	---	Beijing	L	EE/FF/JJ LL only	
	Zhejiang	Ningbo	P1	2100-0515 0845-1515 (7)	
	Unknown		C2	2200-1600 (2)	
1485	Jilin		P	2000-0530 0850-1505 (9) /1548 2350	
	Shandong		P	0845-1510 2055-0630 594 918 1441	
	Gansu		P	2050-0100 0250-0500 873 et al	
1494	Anhui	Hefei	P	0730-1500 936	
	Honan	Zhangzhou			
	Fujian	Sanming			
	Jilin	Tongliao			
1503	Hunan	Xiangtan	P/L	2130-2330 0320-0500	
	Jilin	Liaoyuan		0950-1520	
	Liaoning	Liaoyang	P		
	Zhejiang		P1	0920I-1510 2100-0515 (7)	
	Guangxi			2130-2350(partial sked)	
1511	Heilongjiang	Hailar	L	2150-2400 0950-1500 4750?	
1512	* Unknown		TS	2000-0610(0700Su) 0830-1900 (3)	
1521	Xinjiang	Urumqi	FS	Russian: 1000-0255 7140 9725	
1530 a	Jilin		P	2000-0530 0845-1505 (9)	
	Shanxi			-1535	
	Zhejiang	Hangzhou	P2	2110-0030 0250-1505	
1539	Fujian	Dehua	F2	0330(1000Wed)-1730 (5) /1548 2350	
1548	Shandong	Rushan		0845-1510 2055-0630 594 918 1441	
	Nei Monggol		P2	see 1458 1458 et al	
	Unknown	near Beijing	I1		
1557*	Fujian	Fuzhou			
1566	Guangdong	Ya Xian			
1570	Henan		P		
1575	Gansu	Yumen shi	L	2050-1510I 2415, some (1)	
	Zhejiang	Wenzhou	C1	2000-1735 (1)	
	Unknown		P	2105-1605 1152 1161 1233	
1584	Hunan			1591 4990	
			P	2105-1605 1152 1161 1233	
1591	Hunan	Pingdingshan?	P	1584 4990	
1593	Hebei	Jingshan			
	Xinjiang	Urumqi	L	2155-2315 0325-0435	
1602	Jiangsu	Hongze	C1	0910-1330 (some Jiangsu PBS Pgms) (1)	
	Unknown		P	2105-1605 1152 et al	
	Hunan				

AM STATIONS IN SOUTH KOREA

NOTES ON THE STATION LIST

Freq.: in Kilohertz.

"+": denotes reception has been reported in North America.

Power: in Kilowatts.

Prgrm.: KBS1 - Korean Broadcasting System Channel 1; KBS2 - Korean Broadcasting System Channel 2; KBS3 - Social Education Program 1; KBS4 - Social Education Program 2; KBS? - Korean Broadcasting System Station, but exact program is unknown; TBC - Dongyang Broadcasting Co.; SBC - Seo Hae Broadcasting Co.; MBC - Mun Hwa Broadcasting Co.; DHS - Dong A Broadcasting System; CBS - Christian Broadcasting System; FES - Far East Broadcasting Station; JBC - Jeon Il Broadcasting Co.; AFKN - American Forces Korean Network.

Schedule: times in UTC (GMT)

"*": denotes a KBS Radio Korea Broadcast.

Language - EE - English; CC - Chinese (Probably Mandarin); JJ - Japanese;

KK - Korean; RR - Russian; Mo - Mongolian.

Parallels - (1) - May relay HLKA using 711 on MW and 3930 on SW, many of these stations are direct relays of HLKA, while others may relay HLKA only a portion of the time and broadcast their own local programming the rest of the time; (2) - Relayed on SW on 2510 Khz, 2000 - 0000 and 0600 - 1800 and 5975 Khz, 0000 - 0600, may be relayed by 3930 Khz at times; (3) - Reportedly parallel to SW as follows: Radio Korea broadcasts - 1100-1400 on 6135, 6165, 7275, and 7550 Khz; Social Education Broadcasts - 0900-1100 and 1400-0500 on 6015 and 6135 Khz.

Remarks - AFKN station's nicknames are listed where known.

As this list was compiled by using bits and pieces of various lists and from monitor reports, errors are bound to appear. Any and all corrections to this list are appreciated by the author.

Freq.	Call	Power	Location	Prgrm.	Schedule	Parallels / Remarks
540	HLSM	10	Jangcheung	KBS1	2000-1500	(1)
540	HLSN	1	Jangsu	KBS1	2000-1500	(1)
540	HL CZ	10	Hongseung	KBS1	2000-1500	(1)
540	HL SC	1	Jeomcheon	KBS1	2000-1500	(1)
549	-	5	Seoul	AFKN	24 hr	"Vagabond"
558+	-	250	Pohang	KBS2	0500-0000	
567+	HLKF	100	Jeonju	KBS1	2000-1700	(1)
576	-	5	Munsan-Ni	AFKN	24 hr	"Indianhead"
585	-	5	Daegu	AFKN	24 hr	"Kilroy"
594	HLAG	10	Yeongju	KBS1	2000-1500	(1)
603+	HLSA	500	Suweon (Nam-yang)	KBS2	0500-0000	(2)
					*1100-1130 EE	
					*2330-0000 EE	
621	HLSJ	1	Hwangji	KBS1	2000-1800	(1)
621	HL CF	10	Seogwipo	KBS1	2000-1800	(1)
621	HLAY	1	Yeongdong	KBS1	2000-1800	(1)
630	HL CY	10	Yeosu	KBS1	2000-1800	(1)
639+	HL KC	50	Seoul	KBS	2000-1700	
648	HISL	1	boseong	KBS1	2000-1600	(1)
657+	HL KM	50	Chuncheon	KBS1	2000-1800	(1)
675	-	1	Jinbu	KBS1	2000-1800	(1)
675	HL AS	10	Kunsan	KBS	2000-1600	
711+	HL KA	500	Seoul (Sorae)	KBS1	2000-1800	(1)
738+	HL KG	100	Daegu	KBS1	2000-1800	(2)
747+	HL KH	100	Kwangju	KBS1	2000-1800	(1)
756+	-	100	Suweon (Nam-yang)	KBS?	0100-0500 0900-2100 *0900-0930 CC *0930-1000 EE *2000-2030 CC *2030-2100 EE	

<u>Freq</u>	<u>Call</u>	<u>Power</u>	<u>Location</u>	<u>Prog</u>	<u>Schedule</u>	<u>Parallels / Remarks</u>
765	HL CQ	50	Daejeon	MBC	2000-1700	
774	HL AJ	10	Jeju	MBC	2000-1600	
774	HL AN	10	Chuncheon	MBC	2000-1600	
783	HL CV	1	Yeongweol	KBS1	2000-1600	
783	-	5	Pusan	AFKN	24 hr	(1)
792+	HL KJ	50	Seoul	KBS	2000-1700	"Homesteader"
810	HL CT	20	Daegu	MBC	2000-1700	
819	HL CN	20	Kwangju	MBC	2000-1700	
837+	HL KY	50	Seoul	CBS	1900-1705	
846	HL AU	10	Ulsan	MBC	2000-1530	
846	HL SY	5	Yangu	KBS1	2000-1800	
855+	HL CX	10	Jeonju	MBC	2000-1600	(1)
864+	HL KR	100	Kangneung	KBS1	2000-1600	(1)
882+	HL KI	20	Daejeon	KBS1	2000-1700	(1)
891+	HL KB	250	Pusan (Kim-hae)	KBS1	2000-1800	(1)
900	HL KV	50	Seoul		*1500-1600 JJ	
909	-	10	Gumi	MBC	1900-1700	
918	-	50	Yeonacheon	KBS1	2000-1800	(1)
927	HL SU	1	Hadong	KBS1	2000-1500	(1)
927	HL QD	1	Hongcheon	KBS1	2000-1800	(1)
927	HL DB	10	Buyeo	KBS1	2000-1800	(1)
936	HL KD	10	Masan	KBS1	2000-1800	(1)
954-	-	1	Boeun	KBS1	2000-1800	(1)
963	HL KS	10	Jeju	KBS1	2000-1800	(1)
963	HL CR	10	Andong	KBS1	2000-1800	(1)
972+	HL CA	500/1500	Kimjae	KBS3	0900-0500	(2)
					*1100-1200 JJ	
					*1200-1230 KK	
					*1230-1330 JJ	
990	HL AP	10	Masan	MBC	*1330-1400 KK	
999	HL CL	10	Kwangju	CBS	2000-1600	
1008	HL CS	50	Seokcho	KBS1	2000-1800	
1017+	HL AW	10	Andong	MBC	2000-1525	(1)
1026	HL CG	1	Hwacheon	KBS1	2000-1600	
1026	HL KW	1	Geochang	KBS1	2000-1700	(1)
1035+	HL CP	10	Pohang	KBS1	2000-1600	(1)
1044-	-	1	Chuncheon	AFKN	24 hr	(1)
1062	HL KQ	50/10	Cheongju	KBS1	2000-1800	
1080	HL AT	10	Yeosu	MBC	2000-1610	(1)
1089	HL CH	10	Chungju	KBS1	2000-1800	
1098	HL CJ	20	Jinju	KBS1	2000-1500	(1)
1107	HL AV	10	Pomang	MBC	2000-1555	(1)
1116	HL CI	1	Sancheog	KBS1	2000-1500	
1134	-	100/50	Kimpo	KBS1	2000-1500	(1)
1143+	-	100/50	Jeju	KBS2	0500-0000	(1)
1152	HL CW	10	Weonju	KBS1	2000-1800	
1152	-	0.25	Kwangju	AFKN	24 hr	(1)
1161	HL KU	20	Pusan	MBC	2000-1700	"Comet" relay
1161	-	0.25	Uijeongbu	AFKN	24 hr	
1170	HL SR	500	Seosan	KBS1	1000-0500	"Vagabond" relay
					*1000-1030 EE	Uses(3) but all of
					*1030-1100 CC	schedule not known.
					*1100-1200 JJ	
					*1200-1230 KK	
					*1230-1330 JJ	
1188+	HL KX	50	Seoul	FBS	*1330-1400 KK	
					2030-0100 (0200) Sun KK	
					0700-1100 EE	
					1100-1230 KK	
					1230-1400 RR	
					1400-1445 CC	
					1445-1500 Mo	
1197	-	1	Tongduch'eon	AFKN	24 hr	
1206	HL SW	1	Jeonseon	KBS1	2000-1600	"Tomahawk"
1206	HL QR	1	Cheongsong	KBS1	2000-1600	(1)
1215	HL CD	10	Jeocheon	KBS1	2000-1500	(1)
1215+	HL AK	10	Jinju	MBC	2000-1500	(1)
1224+	HL AA	10	Kwangju	KBS	2000-1700	
1233	HL QG	1	Yeongyang	KBS1	2000-1800	(1)

<u>Freq</u>	<u>Call</u>	<u>Power</u>	<u>Location</u>	<u>Prgrm</u>	<u>Schedule</u>	<u>Parallels/Remarks</u>
1242	HLSB	10	Weonju	MBC	????-????	
1251	HLKT	10	Daegu	CBS	2000-1600	
1260	HLKI	10	Kamweon	KBS1	2000-1500	(1)
1269	-	10	Yangju	KBS1	2000-1500	(1)
1269	HLSI	10	Kurye	KBS1	2000-1500	(1)
1278	-	1	Papcheon	KBS1	2000-1800	(1)
1287	HLAX	1	Cheongju	MBC	1900-1600	
1287	HLAF	10	Kangneung	MBC	2000-1500	
1305	HLSV	10	Ulgin	KBS1	2000-1600	(1)
1314	HLCM	10	Iri	CBS	2000-1530	
1323	HLQJ	1	Yeongkwang	KBS1	2000-1800	(1)
1332	HLAO	10	Chungju	MBC	2000-1550	
1341	-	10	Kimpo	KBS1	2000-1500	(1)
1350	HLAQ	1	Samcheog	MBC	2000-1500	
1359	-	1	Oean	AFKN	24 hr	"Comet"
1368	HLKO	1	Muju	KBS1	2000-1500	(1)
1386	HLAM	10	Mogpo	MBC	2000-1500	
1395	HLCO	10	Cheolweon	KBS1	2000-1800	(1)
1404	HLKP	10	Pusan	CBS	2000-1600	
1440	-	0.25	Weonju	AFKN	24 hr	
1440	-	1	Kunsan	AFKN	24 hr	
1440	-	0.25	Masan	AFKN	24 hr	
1440	-	1	Camp Hum-phreys (Pyongtaek)	AFKN	24 hr	
1449	HLQB	10	Ulsan	KBS1	2000-1800	(1) // HLKB - 891? *1500-1600 JJ?
1458	HLSH	1	Hamyang	KBS1	2000-1500	(1)
1458	-	1	Bongwha	KBS1	2000-1800	(1)
1467	HLKN	50	Mogpo	KBS1	2000-1800	(1)
1495	-	1	Gomju	KBS1	2000-1800	(1)
1485	HLDF	1	Gomeung	KBS1	2000-1800	(1)
1503	HLSK	1	Kimcheon	KBS1	2000-1500	(1) Could be (2) "Homesteader" relay
1512	-	0.25	Chinhae	AFKN	24 hr	
1512	-	0.10	Kwangcheon	AFKN	24 hr	
1512	-	0.25	Pohang	AFKN	24 hr	"Kilroy" relay (1)
1539	HLQC	1	Daejeong(Gosan)	KBS1	2000-1800	
1566+	HLAZ	250	Jeju	FEBC	2000-2030 EE 2030-2100 KK 2100-2230 CC 0955-1230 KK 1230-1330 JJ 1330-1500 CC 1500-1745 RR	
	exHLDA					
1584	HLDC	1	Damyang	KBS1	2000-1800	(1)

FINAL NOTE

The sources for this article are the 1981 WRTH, the FERC log, the DXWW columns in the DXM, and personal correspondance with other DXers. I wish to personally thank Nick Hall-Patch, Mike Hardester, Pat Martin, and Bruce Portzer for the information they provided and my wife, Becky, for her help in assembling the article.

Please send any comments, corrections, and criticisms to the author at University Station, P.O. Box 7428, Provo, UT 84602. They will all be appreciated.

February 7, 1981



Alaska. According to a recent verie, KBBI-1250 is on daily 1600-1005. Format features many kinds of music, drama, news, etc. with heavy emphasis on NPR programs. (Portzer)

Australia. 2EA-801 500 watts is expected to move to 1386 early in the new year, with 5 kw. Two translators are also proposed for this station, each of 100 watts; one at Broadmeadow, Newcastle, and the other at Wollongong. 2CT-1602 is not relaying 2EA but is using their transcribed programs. 3EA-1116 is expected to go to 1224 in the New Year with 5 kw from a new site at Campbellfield. 2ST-1215 may have their new translator, 2ST-999 Nowra, in operation by December from the Burraroo site, with 350 watts. 2MG Mudgee-1449 is now 5 kw. 2NX Newcastle-1341 has increased power to 5 kw. 2KO-1413 Newcastle, has increased power to 5/2 kw. Fulltime 5 kw is expected in 11/79). 4TI-1062 Thursday Island, new, with 2 kw.

Proposed new ABC stations: Innisfail, Qld, 1035 khz with 10 kw. Cootamundra, NSW 711 khz with 10 kw. Wangaratta, Vic., 756 with 10 kw. Albury/Wodonga, NSW/Vic, pilot for ABC Second Country Network; frequency not announced; Pemberton, WA; Bridgeton WA; Mt. Tom Price WA, 567 with 100 kw; Paraburdoo, WA, 567 khz with 100 watts; Pannavonica, WA 567 with 100 watts.

Proposed changes: 4T0, Townsville-774 to go to 5 kw with new site. 3B0-945 Bendigo now 24 hours; 8AL-1377 power increase to 2 kw. (DX Post 9,10,11/79)

New radio for the Print Handicapped in Melbourne is 3RPH, testing on 1705 khz 1000-1200 with 500 watts. Address: P.O. Box 123, Hampton, Victoria. (SCDX 7/15) 2EA-repeater at Newcastle on 1584 opened on 8/29 with 100 watts. Second station on 1485 at Wollongong opened on 8/30. Both heard on regular programs s/off at 1400 with only IDs as 2EA Sydney 801 khz.

The Australian Broadcasting Tribunal reports that 124 commercial stations are on the air. Nineteen lost money. Fifty-three were 24 hours a day. The Emerald Broadcasting Company hasn't proceeded with its commercial station in Emerald, Qld. even though a license was issued in December 1977. (NZDXT 11/80,

Brunei. English service on 711 and 792 is from 1458-1630 and 1900-2100. The Malay Service on 594 and 675 is from 1400-2200. (NZDXT 5/79)

Christmas Island. According to information from the Asst. Broadcasting Officer, CIBS is using 2 x 130 watt solid state transmitters to give a 250 watt output, with a third 130 watt unit as a standby. The old 500 watt tube transmitter has been taken out of service. (NZDXT 7/79) VLU2 is operated by the Australian Department of Home Affairs in EE, CC, and Malay. On 0600-2100 local time, and 0800-2100 Sundays. (NZDX 7/79)

<u>Fiji.</u>	Suva (Naula Rewa)	558 khz	10 kw	F. Fiji I;	774 khz	10 kw	R. Fiji II
Lautoka	639	10	"	891	10	"	
Labasa	684	2.5	"	810	2.5	"	
Sigatoka	1206	2.5	"	927	2.5	"	
Raki Raki	1323	2.5	"	1467	2.5	"	

Radio Fiji I carries English and Fijian. Radio Fiji II carries English and Hindi. At 1900 GMT, R. Australia news, 2000 BBC, 0130 VOA, 0700 "Fiji and the World" news; 0900 R. Australia. (DX Post 10/79)

Hong Kong. BFBS has apparently dropped the use of its 1251 outlet. RTHK1 operates on 783. RTHK3 operates on 567. The commercial service operates on 864 (Chinese 1) 675 (Chinese 2) and 1044 (English). Radio Television Hong Kong has gone 24 hours.

Indonesia. Commercial stations are allowed to broadcast only between 2200-1700. R. Veritas is on 725 ex 730. R. Suara Pembangunan 1045 has power of 500 w. R. Univ. Muhammadiyah 1105 is 250 watts. R. Pasopati 1185 has power of 500 watts. (WRTH Newsletter via NZDXT 7/79)

Japan. Identifying Japanese commercial stations can be difficult. Mostly they carry modern music (little traditional music), with jingles and recorded ads and promos usually for 3 minutes either side of the hour and half-hour as well as every 10 or so minutes during programs. IDs vary from station to station, as do formats.

Usual IDs:

954 JOKR	TBS Radio	1278 JOFR	RMB Radio
1008 JONR	"ABC" jingles	1314 JOUF	JOUF jingles
1134 JOJR	Bungo Hoso	1332 JOSF	Tokai Radio
1242 JOLF	Nihon Hoso	1413 JOIF	KBC

Time signals on the hour; most popular is 3 short and 1 long tone. Some use 2 short and one long and some only a single tone. (NZDXR 12/80)

Kampuchea (Cambodia) The International Service has not been heard by BBC Monitoring Service on announced frequency of 1360 or SW //s. Voice of the Kampuchean People's domestic service is on 917 //6090 and 9695. (SCDX 7/24) External Service began on July 20 on 1360. (BBC Monitoring Service via SCDX 8/7) 0000-0200 and 1300-1500 in several languages.

Cambodia. The External Service broadcasts on 1350; EE 1200-1215; FF 1215-1230. IDs as The Voice of the People of Kampuchea. (SCDX 10/7)

Korea, South. According to the Japanese paper "Asahi Shimbun" the South Korean government stated that the mass media will be reorganized at the end of 1980 or early in 1981. Two commercial stations, HLKC-639 and HLKJ-792, are combined and absorbed by the KBS. There will be three networks: KBS, MBC and CBS. HLAZ will not be reorganized.

The Korean Army will use HLD. calls. HLDA to HLZ will be used by the Army principally. This is why HLDA-FEBC Cheju Island changed its calls to HLZ. But some KBS stations are still using HLD. calls. (Daisuke Kawaguchi, Aomori, Japan)

Laos. National Radio of Laos has been noted with domestic service on 640 (10 kw Vientiane); 740 with 10 kw; 765 and 930. External service on 1030 from Vientiane with 10 kw; and Regional service from Pakse on 1370 with 10 kw. Information on other regional stations unavailable. (Arctic 8/1)

Laos. National Radio from Vientiane broadcasts the External Service on 1030 and Home Service on 640. (SCDX 9/30)

Laos. National Radio of Laos announced a new service called the "Entertainment Program for Promoting Patriotism and Revolutionary Enthusiasm" every Sat. and Sun on 1030 khz. This channel used other times for National Radio of Laos' external service. Regular domestic service on 640 khz at 2200-0200, 0330-0700 and 0900-1600. (BBCMS via NZDXT 12)

Laos. The first Broadcasting Station of Vientiane City began on 1200 khz on 11/6. (Arctic 12/5)

Macau. 735 is the frequency for Emissora Vila Verde for 1st program in CC. CC program 2 is on 858. (Arctic 7/4) Government stations are on 900 and 1197. Commercial outlets on 735 and 858. (NZDXT July)

Malaysia. Two 50 kw MW transmitters in Pahang and Kelantan provinces are now being planned. (Arctic 5/31)

Mariana Islands. KSAI, Saipan, now broadcasts on 936. KJQR, listed on 1350, is not on the air. WSZE, The Voice of Mariana Islands, is now on 1053 with 10 kw. (SCDX 8/28)

New Hebrides. Port Vila is now on 1125, with FF to 1-00 and then local language to s/off at 1100. Presumed ex 1422 since this frequency is no longer heard. (DX Post 11/79)

New Zealand. ZZE Ashburton should be operating on 873 before Christmas. (NZDXT 11/79) New Zealand. Radio Hauraki 1XA has filed for a change of frequency to 1107. Radio Rhema plans to change frequency in August to 1467 with 2 kw. BCNZ has been testing from Brooklands, Christchurch on 1170, 1359, 1368, and 1377. (NZDXT 8/79) BCNZ is also applying for stations in New Plymouth, Taupo, Kaikohe, Kaitaia, Hawera, and Turangi, presumably as relays of the National programme. (NZDXT 6/79)

New Zealand. Radio Rhema 2KG-1503 Wellington is on the air relaying Christchurch 3XG. 2XS Palmerston North will operate on 828 24 hours. 4XA Alexandra began on 531 with 2 kw. Most programs are relayed from 4XO Dunedin. Three other relays are in progress: 4XQ Queenstown-1359 1 kw (should be on by Sept. 1); 4XW Wanaka-1359 100 watts and 4XC Cromwell-1359 also 100 watts. A private commercial station has been approved for Invercargill on 1224. Radio New Zealand has been given a green light for a mini-station in Gore to have local programs and carry YC program, with 5 kw on 558. Te Anau will get a relay of 4ZA on 1548. Radio Rhema will change frequency to either 1404 or 1503. (NZDXT August)

New Zealand. 2XS Palmerston North will be on the air early in 1981, no freq. Radio Rhema-603 Auckland has calls of 1KG. A new frequency of 1503 has not yet been assigned. 2 kw. The ZB and ZM stations have been given permission to go 24 hours. Silent periods for RNZ stations: First Monday each month: 1YA, 3YZ/3YW, 4YZ. Tuesday following first Monday: 2YW. Wednesday following first Mon. 2YA, 1YZ. Tuesday following first Monday: 4YW. Wednesday following 3rd Mon: 1ZU, 1YE. Tues. following 3rd Mon: 1YK, 1ZO. 4th Mon. each month: 1YA, 2YM, 3ZE. Tuesday following 4th Mon: 1YK, 1YW, 1ZA/ZT, 2ZY. (NZDXT 9 and 10/80) following 4th Mon: 1YK, 1YW, 1ZA/ZT, 2ZY. (NZDXT 9 and 10/80) New Zealand. A pirate station has been heard in Dunedin on 1305 using calls of 4ZF Radio Freedom Dunedin. Foveaux Radio will be on 1224 as 4IX. The Kempsey station 2KM-531 has changed calls to 2MC. (NZDXT 12/80)

Niue Island. Station ZK2ZN operates on 837 with 250 watts on the following schedule: Tues-Sun 0500-0815, Tue-Sat 1630-1930; Sun 1700-2300; Tues-Sun. 2230-0030. (Arthur Cushing in NZDXT 3/80)

Norfolk Island. MW signals on 1566 have been noted in New Zealand at 0600 with a relay of news from R. Australia. Power is 50 watts. (NZDXT 5/79)

Papua-New Guinea. Upgrading is planned to R. New Ireland on 2428 from 2 kw to 2 x 5 kw and on 1107 khz. A further 2 kw transmitter is planned for Rabaul to cover the eastern side of the province. Upgrading is planned for 1978-82; it is assumed SW will be discontinued. (WRTH Newsletter New station called Radio West Sepik opened 12/4 with 10 kw on 1593. (SCDX via Arctic) A new station has been testing on 1494 with 10 kw from Enga announcing in EE and Pidgine. (NZDXT August)

Philippines. Information differing from WRTH:
558 DZXL replaces DZHP 1170. 990 DWJJ ex DWRT.
1470 DWRF replaces DWRB 1476. 1555 DYLA ex 1548. Hasn't moved onto frequency assigned by Geneva Plan. S/off 1500. (WRTH Newsletter via NZDXT 7/79)

Samoa, American. WVUV-1120 has requested 650 kw, 10 kw-U. Translated, I guess it means they want to move from 1116 or 1125 wherever they are to 648. This was in Broadcasting, but was listed in Leone, Georgia, if can believe that! (Pete Taylor)

American Samoa. Quality Media Corp. has applied for a 500 watt full time station on 585 khz from Pago Pago. Format would be religious. Company is out of Columbus, GA. (Broadcasting 11/10 via Pete Taylor)

Singapore. R. Singapore has been announcing itself since 2/1 as Singapore Broadcasting Corporation. (BBCMS via Arctic 3/7)

Solomon Islands. SIBC is planning a 5 kw station on 1386 in 1980 from Kijakira. Another station is planned for Graciosa Bay with 2 kw. (Arctic 12/28)

Taiwan. The Voice of Asia has been heard on 5980 khz //621. The program uses the same interval signal as the Voice of Free China. 1130-1358 in English, Indonesian, and Mandarin; 1400-1700 in Mandarin, Thai, and Indonesian. (SCDX 7/3)

Some MW stations have begun 9 khz separation. Fu Hsing BC is heard on 594, 819, and 1008. (Arctic 5/31)

Taiwan. International Community Radio in Taipei (ICRT)-1550, was off daytimes in November to install new towers. ICRT, a former AFRTS station, has an AFRTS-style format with somewhat less public affairs. News broadcasts sponsored by various businesses. (SWNS) Taiwan. The BBC, Voice of Free China, broadcasts to the mainland of China in standard CC on 750, 900 and 1100 and 1200 from 2045-0100; 900 and 1200 from 0100-0345; 750, 900, 1100 and 1200 from 0345-0700; 750, 900, 1100 from 0700-1000, 1045-1600; 750, 900, 1100 and 1200 from 1600-1900. (NZDXT 11/80)

Thailand. Radio Thailand has announced that a new 10 kw transmitter has been brought into operation "on the AM band," from Maha Sarakham province. Since June, Radio Hanoi has been attacking Thailand, accusing them of violating Cambodian territory. Thailand will reorganize the Voice of Free Asia to counter the propaganda offensive. (Arctic 11/7)

Thailand. The Radio and TV Administration Board has approved the move of Radio Thailand's two 500 kw transmitters on 891 from Tambon Salaya to Tambon Neng Khae in the Samaburi province. (Arctic 5 Radio Thailand, Khon Kaen-648 suffers from strong interference from a Laotian station on 640; has requested a frequency change. (BBCMS via Arctic 10/5)

Trust Territories of the Pacific. KSAI-940, Saipan, nominal frequency of 936. WSZE is still on 1050, Saipan, nominal frequency of 1053. WSZC, Truk, is on 1602, ex 1300. (Arctic 12/28)

Vietnam. Two 1000kw MW transmitters on 680 and 1050 are being built with Soviet aid for VRTC's Project 273. Hanoi is heard with domestic service on 680 and 1050. External service on 1010. Ho Chi Minh City (Saigon) on 610, 820 and 870. Quang Nam Da Nang on 600. Nghia Binh on 745. (Arctic 8/1)

Wallis Islands. A new station has been heard in NZ testing on 1188. The station is located in Uvea and uses 1 kw. Tests in FF and Wallisean with limited hours. Has been noted around 0600 to 1000 s/off. (NZDXT 9/79)

Notes on TP and DU Networks

by Patrick Martin & Nick Hall-Patch

Various state-run networks are referred to in the TP listings in this volume. Here are some descriptions of these networks.

Australia: The Australian Broadcasting Commission (ABC) networks 1, 2, and 3, seem to run in parallel according to time zones. Quite frequently, 2BL and 4QR will be parallel with 3LO, but 5AN will be separate, although all are in the first network. Net 2 (classical) is the same way, with 4QG, 2FC, 7ZL all in parallel with 3AR; again 5CL is separate. 2, 3, 4 and 7 calls are all in the same time zone, but 5 calls (South Australia) are in a separate time zone. 6 calls (Western Australia) seem to have programs that are two hours removed from the rest. Nets 1 and 3 stations have sometimes been noted in parallel in the same time zone. Six pips mark the hour.

Japan: The Japanese state networks are Nippon Hoso Kyokai (NHK) one and two. NHK-1 normally carries traditional JJ music, some JJ pop music, and talk. This is more of a "home service" than NHK-2; it is less apt to carry news every hour, as the #2 net does. NHK-2 carries language lessons in EE, SS, GG, CC etc., and has a more international flavor to its programming. NHK-2 normally IDs on the hour before the time pips (...—), while NHK-1 IDs after the pips. Both nets sign off with the Japanese national anthem and music box chimes at 1500 UT.

New Zealand: There are three R. New Zealand networks. Net 1 or the National Programme consists of national news or sports and weather on the hour. It runs a lot of public affairs programming, talk shows etc. This is the "YA" net (1YA, 2YA etc.). It also runs the Maori program in the Maori language nightly at 7 PM New Zealand time.

Net 2, or the Concert Programme is mostly classical and opera, with some educational programs during the day. The 3rd net, the Commercial or Community Net, runs rock and pop music, like the "Tonight Show" with Wayne Mowaye (Mō-wāyē), from 1900 to 2400 New Zealand time. The Tonight Show has about 3 or 4 minutes of news on the hour, followed by a district to district weathercast. Moway normally starts either with the southern tip of the South Island (Invercargill), or the northern tip of the North Island (Kaitaia). Weather is also given on the half hour during the Tonight Show.

Both the National Net and the Community Net are 24 hours now; the Concert Net still signs off at 2400 New Zealand time. Several stations run other programming after 2400 NZT. I have heard 1YZ-819 with both the National and Concert Programme. All three nets have 6 time pips on the hour.

USSR: First program, for the far eastern regions of the country--a good SW parallel is 5015 kHz. Programming includes lots of RR talk, and a variety of music from classical to light jazz and pop. Six pips on the hour. A chime is often heard on the hour--four ascending chords, a space, and four descending chords. At 1400 UT, a peal of bells has been noted, followed by a single tolling bell and the Soviet anthem.

Second (Mayak)--also a domestic program; more music than the first program, and seems to have more pop music. Six pips on the hour, and "Midnight in Moscow" chimes (music is in the WRTH). Chimes often heard on half hour also. A good SW parallel is 4485 kHz.

Foreign services--various languages and programming. "Kremlin Bells" chimes is best bet for identification on hour and half hour, and the music can be found in the WRTH.

AMERICAN COUNTRY COUNTDOWN

"American Country Countdown" is a weekly program featuring the most popular country music records in the U.S. It is carried by several hundred stations, including the following. For a list of the U.S. & Canadian stations carrying the program, consult the IRCA Almanac. This list copyright 1981 by Watermark, Inc. and used by permission.

531 4XA	New Zealand	0600-0900Mon	1017 2KY	Australia	0530-0830Su
783 6VA	Australia	1200-1500Mon	1206 2GF	Australia	0800-1100Su
927 3UZ	Australia	0400-0700Sun	1287 2TM	Australia	1300-2400T/W/Th
963 4WK	Australia	2300Fr-0200Sun	1521 2QN	Australia	0400-1700Sa
981 3HA	Australia	2200Sa-0100Sun	1566 3NE	Australia	0900-1200Su

AMERICAN TOP FORTY STATION LIST

American Top-40 is a countdown of the biggest-selling records in the U.S. Aired weekly, the show is hosted by Casey Kasem. AT-40 is broadcast over several hundred stations in the U.S. and Canada, as well as the following foreign stations. For a list of American stations carrying the program, consult the IRCA Almanac. This list copyright by Watermark, Inc. and used by permission.

610	KUAM	Guam	0300-0700Su
610	R610	Trinidad	1700-2100Su
720	DYEZ	Philippines	
720	BCR	South Africa	Su
765	2BE	Australia	0300-0700Sa
783	6VA	Australia	1200-1600Fr
783	4TO	Australia	0500-0900Sa
801	5RM	Australia	2330Fr-0330Sa
828	4NA	Australia	2300Sa-0300Su
846	2ZD	New Zealand	0300-0700Su
864	6AM	Australia	0800-1200Su
870	WHDQ	Puerto Rico	1600-2000Su
882	3YB	Australia	0000-0400Su
927	4CD	Australia	0000-0400Su
927	2ZA	New Zealand	0100-0500Su
954	1XZ	New Zealand	0500-0900Su 0900-1000Tu/W/Th
970	WSTX	Virgin Islands	1900-2300Su
972	2MW	Australia	2300Sa-0300Su
981	6KG	Australia	1100-1400Th
990	6PM	Australia	0800-1200Su
990	DWWJ	Philippines	0400-0800Su
1008	6GE	Australia	0200-0600Sa
1008	7EX	Australia	0500-0900Su
1026	3DB	Australia	1000-1400Su
1026	6NW	Australia	0400-0800Sa
1026	1ZN	New Zealand	0100-0500Su
1044	ComR	Hong Kong	0800-1200Su
1053	2CA	Australia	0400-0800Sa
1060	7HT	Australia	0230-0630Su
1080	2MO	Australia	0300-0700Sa
1107	2UH	Australia	2200Sa-0200Su
1120	WVUV	American Samoa	0000-0300Su
1134	2AD	Australia	2300Sa-0300Su
1152	2WG	Australia	0900-1300Sa
1152	3ZC	New Zealand	0100-0500Su
1206	4XO	New Zealand	0600-1000M
1242	3TR	Australia	0600-1000Su
1242	5Au	Australia	0000-0400Sa
1242	4AK	Australia	0900-1300Th
1242	1XX	New Zealand	0300-0700Su 0800-1200Tu
1260	3XA	New Zealand	0400-0800Su
1270	IGCQ	Guatemala	2100Su-0100Mo
1314	2WL	Australia	0800-1200Su
1332	4BU	Australia	0300-0700Su 0830-1230We
1350	1ZC	New Zealand	0700-0800M/Tu/W/Th
1359	2LF	Australia	1000-1400Sa/Su
1413	2KO	Australia	0800-1200Su
1422	JÖRF	Japan	
1449	2WG	Australia	1000-1400Sa/Su
1476	1XA	New Zealand	2100Sa-0100Su
1494	1ZA	New Zealand	0700-0800M/T/W/Th
1503	2BS	Australia	1000-1400Sa/Su
1512	1ZU	New Zealand	2100Sa-0100Su
1530	CX50	Uruguay	
1557	2RE	Australia	0300-0700Su(Summer) 0500-0900Su(Winter)

LATIN AMERICA

- 525 a COSTA RICA, Cartago, TICAL. Noted on WC and in NE U.S. 0420-0800 fall and winter w/"R. Rumbos" IDs, and once with call ID. Frequency varies; noted on 527 in October-November 1979.
- 535 GRENADA, Mourne Rouge, R. Free Grenada. Heard occasionally in NE U.S. 2230-0400 fall through spring; noted //15045 SW. Also 0138 11/11/80 (RG-IL). 0405 s/off 8/13/80 (GT-FL).
- 540 COLOMBIA, Bogotá, HJKA. 0700 10/29/79, calls, RCN ID (ERS-NJ) 0759 1/22/80 (NHP-BC).
- 540 ECUADOR, Guayaquil, HCFA2. 0800 1/22/80, call and "R. Tropicana" ID (NHP-BC). 0900 1/18/81, MoR SS mx (JJ-WA).
- 540 MEXICO, San Luis Potosí, XEWA. Pretty much a nightly regular in the west and midwest. Also t0540 4/5/80 (MC-MA).
- 540 NICARAGUA, Managua, YNOW. 1055 12/31/79. "R. Corporacion"; 6/22/80 noted on 543.2 kHz, back on 540 kHz at s/off 0445 6/26/80 (GT-FL). 0958 1/7/81, s/on "su Corporacion" (JJ-WA).
- 540 VENEZUELA, Rosario, YVOV. Heard 0530 0800 in winter in eastern U.S. and Canada. "R. Perija" slogan. Also 0719 1/3/80 (CK-AZ).
- 541 a DOMINICAN REPUBLIC, Santo Domingo, HISM. Assigned to 540 kHz, heard on this channel and 542 since November 1979 w/"A-B-C" IDs and jingles; "R. Nacional" also. Heard in NE U.S. 2300-0600 fall and winter w/SS and American pop mx.
- 544 v COSTA RICA, San Jose, TISBJ. 0455 11/28 and 11/30/79. "Libertad" spoken over SS ballads (GT-FL).
- 550 CUBA, Pinar del Rio, CMAN. R. Rebelde and La Voz de Cuba relay. Voice of Cuba EE programs heard also. Noted 0100-0700 fall and winter in eastern U.S. Also 0732 3/21/80 (SMM-CA).
- 550 VENEZUELA, Caracas, YVKE. 0705 9/24/79, LA mx (ERS-NJ). 0414 10/8/80, "R. Mundial" (Kaz-NY). 0600 2/8/81, LA disco (MC-MA).
- 555 NICARAGUA, Chinandega, YNS. t0245 9/27/79; 0230 1/9/80. (GT-FL).
- 555 ST. KITTS, Basseterre, ZIZ. 0445 8/17/79 OC; 2353 9/22 Carib-bean mx; 2304 1/19/80, BBC nx; 0025 10/21 t0127 1/13/80 (BC-VT).
- 560 JAMAICA, Kingston, JBC-1. t0517 10/28/80; 0700 11/21, "R. One" ID, "JBC news" (Kaz-NY).
- 570 CUBA, Santa Clara, CMHI. R. Rebelde. 2230 11/17/79, //590 and 600 kHz (Kaz-MC-RI). 2300 1/4/80; 0423 10/19, auroral cx (MC-MA). 0302 12/22/80 (MZ-CT).
- 570 EL SALVADOR, San Salvador, YSKT. 0603 10/8/79, "R. Cadena Central" full info s/off (GT-FL).
- 570 VENEZUELA, Villa de Cura, YVLX. 0346 9/14/80, Rumbos program, doorbell chimes w/WMCA; 0423 10/19 (MC-MA). 0401 10/8/80, //670, poor for 200 kw (Kaz-NY).
- 575 COSTA RICA, San José, TIKN. Heard in eastern U.S. and Canada 0000-0600 s/off, early to late fall w/classical mx and opera. Also 0150 2/10/81 (DHM-PA).
- 580 CUBA, Baracoa, CMKF. R. Rebelde. 2100 11/11/79 after local WGAC s/off (RW-GA). 0626 1/4/80 (GT-FL). 0535 11/16/80, //590; 0525 2/7/81 (MC-MA).

- 580 MEXICO, Chihuahua, XEFI. 1213 10/2/79, "R. Mexicana" (LBG-CO).
1138 10/6/79 (RG-IL).
- 580 PUERTO RICO, San Juan, WKAQ. Heard occasionally in NE U.S.
2315-0600 fall and winter w/"WKAQ" and "R. Reloj" IDs and
jingles.
- 590 CUBA, San German, CMKV. 0503 8/16/79--off channel? 0356
10/11/80 o/semi-local (MC-MA). t0810 8/14/79 (SMM-CA)
0653 1/17/80 (DY-MI).
- 595 DOMINICA, Roseau. Occasionally heard in eastern U.S. in winter
0015-0230 s/off, w/Caribbean mx.
- 600 COLOMBIA, Barranquilla, HJHJ. "R. Libertad". Heard occasionally
in NE U.S. 0415-0715 fall and winter w/Cuban and domestics.
- 600 CUBA, San Antonio de las Vegas, CMW. R. Rebelde and La Voz de
Cuba. Often heard in eastern and central U.S. 0000-1100 fall
through spring. Noted w/R. Moscow and Voice of Cuba programs
in EE from February 1980. Also 0700 9/21/79, KOGO off (SMM-CA).
t0700 11/13/79 (RT-NV). t1037 1/18/81 (DM-AB).
- 600 MEXICO, Torreón, XEDN. 1200-1300 9/21/79, IDs, jingles. KOGO
off (SMM-CA).
- 600 SURINAM, Paramaribo, R. Paramaribo. 2355 9/22/79 Hindi talk and
mx; 0036 2/10/80 (MC-MA).
- 610 COLOMBIA, Bogotá, HJKL. 0525 10/18/79, "R. Suceso--RCN";
0617 2/8/81 (MC-MA).
- 610 CUBA, Trinidad, CMHV. 0512 10/20/80, //550, 570, 600 (WPT-DC)
0502 11/19/80, chimes IS (Kaz-NY).
- 610 HONDURAS, Tegucigalpa, HRLP. 0420 10/11/79, "R. America, esta
es R. Libertad." (GT-FL).
- 615 ECUADOR, Quito, HCMJ1. 0402 3/29/80, "Gran Colombia" (Kaz-b-RI).
- 620 COLOMBIA, Cali, HJEL. 0552 10/8/80, u/WSUN (Kaz-NY).
- 620 CUBA, Moa, CMDQ. 0642 10/11/80, //580, 720; 0900 11/22, Voz
de Cuba chimes //630 (Kaz-NY).
- 620 DOMINICAN REPUBLIC, Santo Domingo, HISD. 0323 10/8/80, "Radio-
television Dominicana", semi-auroral cx; 0010 10/17; 0435 10/28;
t0030 1/20/81 (Kaz-NY).
- 620 MEXICO, Chihuahua, XEBU. 1215 10/2/79, "la B-U". S/on? (LBG-CO).
- 620 NICARAGUA, Managua, YNGR (formerly YNM). Occasionally noted
fall through spring 0400-0630 in NE U.S. w/"La Voz de Nicaragua"
IDs. Also, 0302 11/30/80 (BP-WA-bev).
- 625.2 COSTA RICA, San José, TIJC. 0458 10/6/79 "R. Cucú" and cuckoo
sounds (GT-FL) t0605 2/10/80 (MC-MA).
- 630 CUBA, Santa Clara, CMHQ. 0509 8/16/79; 0815 1/20/80 o/WPRO,
//640. (MC-MA) 0212 9/16/79 o/domestics (WPT-DE), all
evening 11/17/79 (Kaz-MC-RI). This station also noted on
622.9, 623 and 624 kHz in NE U.S. and Canada, 0500-0700, December
19-28, 1980.
- 630 PUERTO RICO, San Juan, WQBS. 0435 11/27/80, "Salsa sesenta y
tres" ID w/Cuba; 0619 12/27; 0627 2/8/81 (MC-MA). Dominating
12/19/80 w/Cuba off channel (DY-CT).
- 640 COLOMBIA, Santa Marta, HJBZ. 0504 10/14/79, "RCN" ID in CMQ
null; 0520 11/27/80; 0520 2/7/81 (MC-MA). 0603 10/8/80
u/CMQ (Kaz-NY),

- 640 CUBA, La Habana, CMQ. Regular in eastern and central U.S. w/"R. Liberacion" and "La Voz de Cuba" programming. Also 0400 10/24/79 and 0500 11/18/80, distinctive chimes in KFI null (NHP-BC).
- 640 CUBA, Guantanamo, CMDW. t0435 10/28/80. R. Liberacion much weaker than at 0400--CMQ off, leaving this? (Kaz-NY).
- 640 GUADELOUPE. Arnouville. Noted occasionally 2230-0100 fall and winter in NE U.S. w/FF programming. Also 0930 3/17/80 (Kaz-RI).
- 640 GUATEMALA, Guatemala City, TGW. "La Voz de Guatemala", noted //6180 SW. 1108 10/23/79 (NW-ON). 1230 12/7/79, marimba mx, ID, KFI off (JRF-CA). 1136 12/31/79, KFI nulled (BP-WA). 0600 11/30/80, fanfare, chimes (GT-FL).
- 640 NICARAGUA, Managua, YNSDR or YNFDR. 0605 11/30/80, mention of call letters (GT-FL).
- 640 SURINAM, Paramaribo, RADIIKA. Hindi talk, oriental sounding mx, "R. Radika" IDs. 2255 9/22/79; 2319 10/13; 2256 1/4/80 (MC-MA). 0900 10/26/79 (CH-GA).
- 640 VENEZUELA, Puerto la Cruz, YVQO. "Ondas Portenias". Occasionally heard in NE U.S. w/CMQ QRM, from 2230-0400 s/off, fall and winter.
- 650 COLOMBIA, Bogota, HJJX. 0814 1/20/80, Colombian folk mx (MC-MA).
- 650 DOMINICAN REPUBLIC, Santo Domingo, HIAT. "R. Universal", noted w/rock and uptempo LA mx. Heard occasionally by MC-MA 2230 to 0645 fall and early winter. Also 0432 10/28/80, "R. Libertad, Santo Domingo en la Republica Dominicana" (Kaz-NY).
- 650 MEXICO, Los Mochis, XETNT. "R. Seisenta Cinco" IDs and ranchera mx 1155 10/2/79 (LBG-CO). 1200 12/3/79 (JFJ-CA). 0150 10/24/80 (RT-CA).
- 655 EL SALVADOR, San Salvador, YSS. "R. Nacional de El Salvador", usually heard w/sedate mx. Noted on WC fall through spring after 1000 s/on, and 0230 to 0455 s/off. It appears that hours have been expanded recently. Also t0452 11/25/80 (MS-NY). 0146 2/10/81 (DHM-PA).
- 660 COLOMBIA, Cali, HJJM. "R. Uno", RCN net. 0707 9/24/79 (ERS-NJ). 0830 11/10/80 (GM-CO). 0657 11/28/80 (MC-MA). 0929 1/5/81 (NHP-BC). Also noted on 663.5 kHz 0600 10/26/80 w/distorted audio, no real carrier. (GM-CO).
- 660 CUBA, Santa Clara, CMHG. R. Progreso. 0229 10/8/79 o/HRN (LBG-CO). 0514 10/14/79 o/WNBC, //670, 690 (MC-MA).
- 660 t HAITI, Port-au-Prince, 4VI. 1040 11/3/80, man in FF; 0500 11/28/80, bits of s/off my man in FF (NHP-BC).
- 660 HONDURAS, Tegucigalpa, HRN. 0407 9/19/79, "HRN, La Voz de Honduras" (LBG-CO).
- 660 MEXICO, Ciudad Delicias, XEACB. Call IDs and "R. 6-60". 0200 9/28/79, s/off, countdown in EE from 10 to 1, followed by explosion (LBG-CO). 0200 10/5/80 and 0200 10/17/80, s/off (GM-CO).
- 660 MEXICO, Mexico City, XERPM. Formerly "La Voz de la Gran Ciudad", now "Seis-sesenta, la tropical de oro". Heard in western and central U.S. and Canada 0300-0800 s/off, fall through spring. Also 0647 1/7/80 (DY-CT).
- 660 NICARAGUA, Managua, YNAM. 0440 10/11/79. "R. Nacional" IDs (GT-FL).

- 660 ST. LUCIA, Babonneau, R. St. Lucia. 0945 10/24/80, u/CMHG
w/ accented EE (RG-IL)
- 660 VENEZUELA, Coro, YVNA. "Ondas de los Medanos". Noted on WC
after 0857 s/on 1/19 and 1/26/81. Also 0324 11/18/79 (Kaz-MC-RI)
- 670 CUBA, San Pedro de Cacocum, CMKP. R. Progreso. 0305 9/3/79
u/WMAQ (WPT-MO). 0319 11/18, //690 (Kaz-MC-RI). 0615 12/17/79,
weak for 150 kw (GT-FL). 0709 12/29/80, //880 (NHP-BC)
- 670 GUATEMALA, Guatemala City, TGRT. t0402 9/22/79, nx (LBG-CO).
- 670 MEXICO, Matamoros, XETOR. "R. Ranchito", "X-E-Tor". 1223
9/29/79; 1201 10/2 s/on (LBG-CO).
- 670 VENEZUELA, Caracas, YVLL. "Rumbos de Venezuela". 0457 8/17/79
u/Cuba; 0457 4/5/80; 0349 6/29; 0414 10/18 (MC-MA)
- 675 COSTA RICA, San José, TICN. "R. Sonora". Noted throughout
U.S. 0315-0945 fall through spring. Perhaps AN now.
- 680 COLOMBIA, Zambrano, HJBU. t0055 10/15/80, Colombia mentions,
o/domestics (Kaz-NY).
- 680 CUBA, CMHN or CMDB?? R. Progreso outlet noted evening of
12/22/80 (DY-CT)
- 680 MEXICO, Chihuahua, XEFO. 1101 12/10/79, LA ballads, ID (BW-CA).
- 680 PUERTO RICO, San Juan, WAPA. 0715 9/24/79, LA pop, "Wa-pa"
IDs (ERS-NJ). 0349 10/28/80, only station on channel (MC-MA).
- 690 COLOMBIA, Bogotá, HJCZ. "La Voz de Colombia". 0055 10/15/80
u/CFB (Kaz-NY). 0601 10/19/80 (MC-MA).
- 690 CUBA, La Habana, CMBC. R. Progreso. 0523 8/16/79, //670 (MC-MA)
0319 11/18/79 (Kaz-MC-RI). 1018 12/19/80. KNBR-680 and XETRA
off (RW-CA). 1032 1/18/81 (DM-AB).
- 690 MEXICO, Mexico City, XEN. t0501 2/17/80, through WTIX (MW-TX).
- 690 MEXICO, Tijuana, XETRA. EE programming. Local-like on WC;
formerly "Extra" muzak, now "Mighty 6-90" rock. Also 0753
2/15/81 (BWh-IL).
- 699 DOMINICAN REPUBLIC, Valverde, HIDC, (nominally 700 kHz). 2300
1/19/80 (MC-MA). t0043 3/29/80 (Kaz-b-RI).
- 700 COLOMBIA, Cali, HJCX. "R. Sutatenza"; noted //810. Heard
in midwest and NE U.S. 0100-0930 in fall and winter. Also
0353 6/28/80 (MC-MA).
- 700 COSTA RICA, San José, TIHB. "R. Reloj de Costa Rica" and call
letter IDs. SW parallels on 4832 and 6006 kHz. Heard on WC
and SW U.S. 0400-0930 fall and winter. Also 0812 1/20/80 (MC-MA)
t0655 11/21/80 (Kaz-NY).
- 700 CUBA, Ciego de Avila, CMJT. 0512 7/7/80, //690 (Kaz-RI).
- 700 ECUADOR, Guayaquil, HCPS2. 0653 9/22/79, "R. Sucre" ID (LBG-CO)
0700 10/18/80 (GM-CO).
- 700 GUATEMALA, Guatemala City, TGHR. 0045 11/16/79, lively LA mx,
"R. Mundial" IDs. WLW knocked down by aurora (Kaz-RI).
- 700 JAMAICA, Montego Bay. "JBC Radio One", "Montego Bay on 700",
//750. Heard occasionally in eastern U.S. and Colorado 2215-0600
(sometimes on past 0500 listed s/off w/cricket), and at 0930
s/on in fall and winter. Also 0600 10/1/79, WLW off (RAL-WI).
0700 1/22/80 (NHP-BC).
- 700 MEXICO, Guadalajara, XEDKR. 1230 10/5/79, s/on, "R. Ambiente
desde Guadalajara" (LBG-CO).

- 700 VENEZUELA, Maracaibo, YVMH. 0050 8/17/79, "R. Popular" (MC-MA).
0325 10/8/80 (Kaz-NY). 0107 2/26/81, o/WLW briefly (DHM-PA).
- 705 HONDURAS, HRAM. La Voz de Olanco. t0320 9/29/79 (GT-FL).
- 705 ST. VINCENT, Kingstown. Heard occasionally in eastern U.S.
0000-0545 (listed s/off 0300) fall and winter. Leaves OC on
after s/off.
- 710 MEXICO, Cuahutemoc, XEDP. 1156 9/29/79 (LBG-CO). 1230 2/18/81
"R. Cuahutemoc" (JJ-WA).
- 710 MEXICO, Guayamas, XEPS. 0515 1/17/80, "R. Amistad"
u/KMPC (RT-CA).
- 710 MEXICO, Mexico City, XEMP. t0759 10/1/79, s/off. Time correct,
but no ID (BP-WA).
- 710 VENEZUELA, Caracas, YVKY. "R. Capital". Heard occasionally
in NE U.S. 2230 to 0600 s/off, fall and winter, w/WOR.
- 714.2 ECUADOR, Portoviejo, HCGB4. 0250 11/27/80. Often there w/mx
to 0200, talk after. "R. La Voz de Portoviejo", "R. Ecuador"
IDs (GT-FL).
- 720 COLOMBIA, Barranquilla, HJAN. 0455 10/27/79, "Emisoras Unidas",
WGN QRM (NW-ON). 0440 2/7/81 (MC-MA).
- 720 CUBA, Colón, CMGN. R. Rebelde and La Voz de Cuba. Heard in
central and eastern U.S. 0100-0630 fall through spring w/WGN.
Also 0829 8/13/79, KDWN off (RW-CA). 0520 10/24/80 (WJH-UT).
1020 12/7/80 (RT-CA). 1015 1/18/81 (DM-AB).
- 720 CUBA, location unknown, "R. Reloj". 0620 10/18/79, u/CMGN;
0610 12/24/80 (Kaz-RI). 0559 11/28/79; 0440 2/7/80 (MC-MA).
- 720 JAMAICA, Kingston, RJR. 0550 2/7/81 o/CMGN w/soul mx (MC-MA).
- 720 PANAMA, Chitré, HOB50. 1001 1/12/80, "R. Republica", heard
w/KDWN off (RT-NV).
- 720 VENEZUELA, Porlamar, YVOE. 2251 10/13/79 (MC-MA).
- 725 COSTA RICA, San José, TILX. "R. Columbia" (pronounced Colombia)
Heard throughout the U.S. 0115-0830 fall and winter w/LA mx.
- 725 SURINAM, Paramaribo, PZX26. "Stichting Radio Omroep Surinam".
Asian mx, odd sounding Dutch talk, //4850 SW. Heard w/TILX
in eastern U.S. and Canada 2200 to past listed 0330 s/off
fall and winter. Also t0042 10/19/79 (JK-TX).
0327 3/13/80 (NHP-BC). 0845 10/24/80 (WJH-UT).
- 730 COLOMBIA, Bogotá, HJCU. "R. Melodía", call IDs. Heard occasion-
ally in NE U.S. as well as California and Colorado, fall and
winter 0100-0800. Also 0353 6/29/80 (MC-MA).
- 730 CUBA, Holguín, CMKJ. R. Liberación. 2243 11/6/80; 0443
2/7/81 (MC-MA).
- 730 GUATEMALA, Guatemala City, TGN. 2303 12/2/79, rosary in EE,
then SS (WPT-DC).
- 730 MEXICO, Mexico City, XEX. "La X de México". Widely heard away
from Canadian QRM.
- 735 ECUADOR, Quito, HCGB1. "R. Melodía". Heard occasionally in
eastern U.S. 0330-0615 fall through spring. Once heard w/0556
s/off. Also 0343 12/29/79 (WJH-UT).
- 740 COLOMBIA, Valledupar, HJNS. R. Guatapuri; Todelar net. 0520
8/17/79; 0630 12/23; 0443 2/7/81 (MC-MA).

- 740 CUBA, Camagüey, CMJL. R. Liberación, 0632 12/16/79 (MB-ON).
0029 10/21/80; 0443 2/7/81, //730 (MC-MA).
- 740 MONTSERRAT, Plymouth, R. Antilles. 2230 1/4/80, FF, heard in auroral conditions (MC-MA).
- 740 PUERTO RICO, San Juan, WIAC. 0626 11/21/80, "??? en San Juan" jingle; runs AN some nights (Kaz-NY).
- 750 COLOMBIA, Medéllin, HJDK. 0552 2/10/80, Caracol (MC-MA).
- 750 JAMAICA, Port Maria, JBC-1. 0648 1/22/80, //700 kHz, o/WSB and YNX (NHP-BC).
- 750 NICARAGUA, Managua, YNX. "R. Sandino". Fairly regular in west and central U.S. (KXL now fouls up Pacific NW reception); not as regular in east w/other LA QRM and WSB. Noted fall through spring 0100 through 1230, though s/off has been noted at 0615.
- 750 VENEZUELA, Caracas, YVKS. "R. Caracas", "La Emisora en Caracas". Heard in NE U.S. w/rock mx, 2300-0100 fall and winter. Also 0200 1/13/80 u/WSB (RG-IL).
- 755.3 COSTA RICA, San José, TIRA. 0407 12/29/79, relatively rare (GT-FL).
- 760 COLOMBIA, Barranquilla, HJAJ. "La Voz de Barranquilla", RCN. This was noted varying between 760 and 761 kHz up to the end of November 1979. Heard frequently in eastern U.S. 0000-0645 fall and winter. Also 0400 9/22/79; on 761 kHz (LBG-CO). 1029 4/20/80 (CK-AZ). 0456 6/28/80 (MC-MA). 0600 10/24/80 u/Cuba (RG-IL). 0728 12/17/80 (RT-CA).
- 760 CUBA, La Habana, CMCD. R. Reloj. Often heard in central and eastern U.S. 2330-1145 fall and winter. Also 1015 1/18/81 (DM-AB).
- 760 MEXICO, Mexico City, XEABC. "R. ABC Internacional". 0730 8/10/79 (BP-TX). 0732 1/20/80, u/KFMB (RT-NV). 0640 3/22/80 (JA-SK).
- 760 PANAMA, Panama City, HOXO. "La Voz del Istmo" 1108 2/16/80, KFMB off (RT-CA).
- 765 EL SALVADOR, Usulután, YSKLD. "R. Universal", "Cadena Central", "K-L" IDs. 0335 9/29/79, opera //760 and 770 kHz; 0315 6/28/80 (GT-FL). 0235 1/19/80 (MM-ID). 0230 2/17/80 (MW-TX). 0325 11/1/80 (RG-IL).
- 770 COLOMBIA, Bogotá, HJKH. "R. Tequendama". Noted in NE U.S. w/WABC off or aurorally attenuated.
- 770 CUBA, Las Mercedes, CMKB. 0305 11/11/79 o/u WABC (WPT-DC).
- 770 EL SALVADOR, San Salvador, YSKL. 0230 2/17/80 (MW-TX).
- 770 JAMAICA, Spur Tree. 0500 2/7/81, "RJR" ID, o/WABC, HJKH (MC-MA).
- 770 PANAMA, Chitré, HOL47. Formerly R. Libertad; now "R. Nacional de Panamá". Heard in NE U.S. w/WABC off or subdued by aurora. 0610 2/10/80; 0646 2/8/81 (MC-MA). 0800 12/15/80 (Kaz-RI). 0640 12/15/80 (DY-CT).
- 775 COSTA RICA, San José, TIW. "R. Uno" IDs in between, and over rock songs. Often noted in eastern U.S. 0400-0800 fall through spring. Also 0525 1/20/80 (MM-ID). 0555 10/24/80, big signal for two weeks previous. Power increase? (RG-IL).
- 780 BRITISH VIRGIN ISLANDS, Roadtown, ZBV1. "ZBV1 Tortola" w/disco, reggae and wild DJs. Noted fall and winter 2300-0100; s/off noted 0400 10/13/79 (MC-MA).

- 780 COLOMBIA, Cali, HJZG. 0500 10/19/80, "Todelar", "Sonorama"
IDs u/Cuba (MC-MA).
- 780 CUBA, Camagüey, CMJN. R. Rebelde and La Voz de Cuba. Noted on
WC w/KCRL off; eastern U.S. in spite of WBBM. 0436 11/10/79;
0448 2/7/81 (MC-MA). 0900 12/23/79 (BP-WA). 1001
1/22/80 (MM-ID). 0806 12/20/80 (RT-CA).
- 790 MEXICO, Villahermosa, XEVA. 0520 8/10/80, "R. Tabasco". LA
instrumentals (GT-FL).
- 800 ECUADOR, Guayaquil, HCDE2. 0247 2/28/81, o/u TWR/XEROK/CKLW,
"R. Bolivar" ID (DHH-PA).
- 800 MEXICO, Ciudad Juarez, XEROK. 0833 12/2/79, EE "Country
80" (JFJ-CA). 0820 2/25/80, SS, "R. Cañon" (NHP-BC). Widely
heard in U.S. and Canada.
- 800 NETHERLANDS ANTILLES, Bonaire, PJB. Trans World Radio. Widely
heard in U.S. and Canada, away from Canadian stations. EE
religion 0230-0505, then SS religion until 0545.
- 800 PANAMA, Chitré. 0546 2/10/80, "La Exitosa--Numero Uno"
o/Canadians (MC-MA).
- 800 VENEZUELA, Maracaibo, YVTB (formerly on 980 kHz). 0510 10/19/80
"R. Exitos" briefly o/PJB; 0630 12/27/80; 2329 2/7/81 (MC-MA).
- 805 ECUADOR, Quito, HCFV1. t0633 12/15/79 (GT-FL).
- 810 BAHAMAS, Freeport, ZNS-3. "ZNS" and "R. 8-10" IDs, EE program-
ming. Heard in eastern U.S. and Canada 2300-0745, fall through
spring, w/WGY off or attenuated by aurora.
- 810 COLOMBIA, Bogotá, HJCY. "R. Sutatenza", has been noted //700
and to 5095 SW. Heard across U.S. and in eastern Canada 0045
to 0410 fall through spring depending on domestic interference.
Also 1000 1/22/80 (MM-ID).
- 810 MEXICO, Ciudad Obregón, XERSV. "R. Alegria", 1309
10/26/79 (RT-NV). 1311 3/2/80 w/KGO off (BP-WA).
- 810 MEXICO, Tampico, XEFW. 0430 10/6/80, "Voz....de Tampico (SC-ON).
- 810 PUERTO RICO, San Juan, WKVM. 0130 11/18/79 (Kaz-MC-RI).
- 815 ECUADOR, location unknown. 0503 12/2/80, s/off w/Ecuadorian
national anthem. "R. ????" two or three syllables. On past
0500 12/14; undermodulated (GT-FL).
- 820 COLOMBIA, Cali, HJED. "La Voz de Rio Cauca", Caracol net.
Heard occasionally in eastern U.S. and Canada in winter 0300
to 0700. Also 0650 3/16/80, WBAP off (RT-NV)
- 820 CUBA, Bayamo, CMDT. R. Progreso, occasionally noted //670 and
690, fall and winter 0330-0700 (MC-MA).
- 820 CUBA, La Habana, CMCA. "R. Ciudad de Habana". 0145
11/18/79 (Kaz-MC-RI). 0457 3/29/80 (Kaz-b-RI). 0958 4/19/80
TT, then s/on; WBAP off (CK-AZ). Also noted around 823 kHz
in May and June 1980 (GT-FL).
- 820 SURINAM, Paramaribo. "R. Apintie", Dutch and oriental languages.
0334 9/23/79; 0005 6/29/80 w/T40 mx and DD (MC-MA).
- 820 VENEZUELA, Upata, YVSH. All AM 10/6/80, "R. Guyama" (SC-ON).
- 825 COSTA RICA, San José, TIOS. U.S. and LA pop mx format
w/"Titania" voiced over each record by woman. Heard often across
U.S. and Canada, 0300-0815 fall through spring.

- 825 PANAMA, Macaracas, HOR56. "R. Peninsula"; rustic repetitive mx. 0407 10/13/79; 0742 1/20/80; 0335 6/29; 0513 10/19 (MC-MA). 0101 3/29/79 (Kaz-b-RI).
- 825 ST. KITTS, Basseterre. "R. Paradise" moved to 825 from 1265 at the end of September 1980, and has been noted across U.S. and Canada w/EE religious programs, fall and winter 2200 to 0400 s/off (s/off once noted at 0427 12/27/80) and from 0900 s/on.
- 830 COLOMBIA, Medellin, HJDM. 0744 1/20/80, "R. Vision", LA mx (MC-MA).
- 830 DOMINICAN REPUBLIC, Santo Domingo, HIJB. "HIJB, Mas Musica" jingles; uptempo Latin and U.S. rock mx. Heard in NE U.S. 0030-0700 fall and winter. Also 0600 1/22/80; 0548 3/28; 0502 11/16; all o/u WCCO (NHP-BC).
- 830 ECUADOR, Guayaquil, HCRH2. "R. Huancvilca", formerly on 605 kHz. 0728 11/27/80 (MC-MA). 0735 11/30/80 (BP-WA-bev).
- 830 MEXICO, Culiacán, XEVQ. "R. V-Q". Occasionally heard in SW U.S. after 1300 s/on and before 0200 s/off, fall and winter.
- 830 MEXICO, Mexico City, XELA. 0042 1/13/80, ballads (RG-IL).
- 830 VENEZUELA, San Antonio de Las Vegas, YVLT. "R. Sensación". Usually dominant in Cape Cod; also heard 0030-0430 fall and winter in NE U.S. Also 0458 11/15/80 s/off w/ID and anthem (NW-ON). 0501 11/19/80 s/off (NHP-BC). 0632 12/27/80, on late (MC-MA).
- 834 BELIZE, Belize. R. Belize. Heard throughout U.S. and Canada in EE and SS, fall through spring 0030-0510 (approximate) s/off w/prayer, anthem and God Save the Queen. Also 0820 9/22/80, on late (BP-WA). 0610 10/20/80 s/off (RET-CA). 1210 12/7/80, Sunday s/on (GT-FL).
- 840 COLOMBIA, Santa Marta, HJBI. "Ondas del Caribe" and call letter IDs. Heard in SW U.S. fall and winter 0130-0500 s/off (approximately), and from 1045 (approximate) s/on. Also 0505 1/26/80, s/off (MM-ID). 0457 12/22/80 s/off (NW-ON). 0350 12/24/80 (MB-ON).
- 840 CUBA, Santa Clara, CMHW. 0450 2/7/81, Cuban anthem (MC-MA).
- 840 EL SALVADOR, San Salvador, YSF. t0530 10/19/80, "R. ??? en El Salvador", poor. R. Vanguardia listed (MC-MA).
- 840 HAITI, Cap Haitien, 4VEF. "R. 4VEH" 0020 10/17/80, Creole FF, island mx (Kaz-NY).
- 840 MEXICO, Celaya, XEFG. 1202 9/28/79, s/on (LBG-CO).
- 840 PANAMA, Panama City, HOL80. Formerly R. Libertad, now "R. Nacional de Panamá" 0300 1/18/80 (MM-ID). t0715 10/26/80 (RET-CA). 0701 2/8/81 (MC-MA). 0607 2/18/81 (NHP-BC).
- 840 ST. LUCIA, Castries. "R. Caribe". 2312 10/15/80, FF (Kaz-NY). 2345 2/7/81 (MC-MA).
- 840 VENEZUELA, Barquisimeto, YVMY. "R. Juventud". 0210 11/13/80 //4900 SW (DHH-PA).
- 850 GUATEMALA, Guatemala City, TGW. 0625 1/2/81, "R. Cires", SS (RK-IL).
- 850 MEXICO, Mexicali, XEZF. 1255 8/20/79, "La Rancharita Contenta", after KOA fade out (RW-CA). 1338 12/13/79; 1420 12/18 (JFJ-CA).
- 854 PERU, Lima, OAX4A. "R. Nacional". 0315 1/24/80 (MM-ID). 0507 7/7/80, WHDH-850 off briefly (Kaz-RI). t0547 2/16/81, carrier (MS-NY).

- 860 BRAZIL, Rio de Janeiro, ZYJ459. 0555 8/16/79, Mundial IDs, PP, disco (MC-MA).
- 860 CUBA, Ciego de Avila, CMJY. R. Reloj. 0600 10/20/80 w/PJC-2 (SC-ON). 0612 12/21/80 (DY-CT).
- 860 DOMINICAN REPUBLIC, Santo Domingo, HILR. "Clarín" and "R. Clarín--el corazon del pueblo" IDs. Heard in eastern U.S. fall 1979 through spring 1980, 0530-0800. Also 1004 2/16/81 (RT-CA).
- 860 MEXICO, Ciudad Juarez, XERPN. 1340 12/29/79, "Más musica R-P-N" (RW-CA). 1259 2/16/81 (RT-CA).
- 860 MEXICO, Culicán, XENW. 1155 9/25/79 "NW en Culicán" (LBG-CO).
- 860 MEXICO, Mexico City, XEUN. 0700 10/27/79, s/off o/XEMO, "R. Universidad" (MB-ON).
- 860 MEXICO, Tijuana, XEMO. Formerly EE religion, now SS programming. Widely heard evenings in the west. Also 0720 3/31/80 (RG-IL).
- 860 NETHERLANDS ANTILLES, Curacao, PJC-2. Moved from 850 kHz, but still uses "Ocho cincuenta" singing IDs; perhaps has raised power. Programming in Papamieto; 0700 s/off. Noted fairly often in NE U.S. and Ontario, fall of 1980 from 0300-0700.
- 860 PANAMA, Chitré, HOL55. 0055 11/18/79, "R. Reforma" (Kaz-MC-RI).
- 870 COLOMBIA, Ibagué, HJLA. 0403 11/17/80 after YVMP s/off, call letter ID (MC-MA).
- 870 CUBA, Sancti-Spiritus, CMHB. R. Progreso. 0608 10/8/80 u/WWL, //880 (Kaz-NY). 0716 11/27/80, //670, 690, 880, o/WWL (MC-MA).
- 870 HONDURAS, location unknown. 0357 2/11/80, "R. Honduras", u/WWL, //880, 890 (CK-CO).
- 870 PUERTO RICO, San Juan, WHOA. "R. Whoa", now SS, formerly EE programming. Heard occasionally 2315-0400 s/off in NE U.S. fall and winter.
- 870 VENEZUELA, Barquisimeto, YVMP. 0358 11/17/80, s/off w/Venezuelan anthem, o/WWL (MC-MA).
- 875 COSTA RICA, Liberia, TIGPH. 0420 10/13/79 (MC-MA). 0252 11/18/79 (Kaz-MC-RI). t0600 11/15/80 (NHP-BC). t0113 12/22/80; t0720 1/19/81 (RET-CA).
- 880 CUBA, Pinar del Rio, CMAF. R. Progreso. Noted throughout U.S. and Canada, fall through spring 0400-1030, depending on domestic interference.
- 880 GUATEMALA, Guatemala City, TGJ. "R. Nuevo Mundo". t0457 10/8/79, s/off (LBG-CO). 0700 1/16/80, s/off u/WCBS (DY-MI). 0500 10/26/80 (DHM-PA). 0310 11/30/80 (PM-OR). 0510 1/1/81 (RT-CA).
- 880 HONDURAS, Tegucigalpa, HRU. "R. Honduras". 0450 10/26/80 (DHM-PA). 0400 2/11/81 u/KRVN (CK-CO).
- 880 MEXICO, Los Mochis, XEPNK. "Canal Ochenta y ocho" IDs and jingles. Noted 0100-0300 s/off in California. Also 1320 11/16/80 (RW-CA). 1323 11/30/80 (BP-WA-bev). 0157 2/12/81 (CK-CO).
- 880 PERU, Lima, OBZ4N. 0824 12/26/80, LA mx, comedy; 0930 2/16/81, "R. Union" (RT-CA).
- 880 VENEZUELA, Caracas, YVKU. t0044 2/8/81, w/Venezuela mentions (MC-MA).
- 885 MONTSERRAT, Plymouth, ZJB. Heard occasionally w/reggae mx and accented EE in NE U.S. 2300-0200 fall and winter.

- 890 COLOMBIA, Bogotá, HJCE. "La Voz de Bogota", Todelar net, w/3-note NBC style chimes ascending, then descending. Heard across U.S. and Canada 2330-0930 fall through spring, w/WLS off or causing interference.
- 890 DOMINICAN REPUBLIC, Santo Domingo, HIPJ. "R. Continental" and "R. Nacional" IDs heard. Noted occasionally in NE U.S. 2300-0530 fall and winter. Also 0658 1/5/81 (RK-IL).
- 890 GUATEMALA, Escuintla, TGHU. Possibly the one 0320 11/30/80 //TGJ-8 BO w/ball game and "R. Nuevo Mundo" IDs (PM-OR).
- 890 HONDURAS, Tegucigalpa, HRGLL. "R. Honduras". Heard on west coast 0230-0645 between mid-November and mid-December 1980. Also 0310 6/28/80, soft ballads (GT-FL). 0303 10/10/80, w/WLS nulled (GM-CO).
- 890 PANAMA, David. 0500 6/28/80, "R. Nacional"; s/off 0512, "La Voz de ??" (GT-FL).
- 895 HAITI, Port-au-Prince, 4VRMN. R. Nouveau-Monde. 2337 10/18/79, FF (GT-FL). 0301 11/18/79, tropical mx (Kaz-MC-RI). This station has now returned to 910 kHz according to Chuck Hutton in DX News.
- 900 BARBADOS, Bridgetown. "R. Barbados"; accented EE; has BBC nx. 0009 9/23/79, o/CKTS; 2352 2/7/81 (MC-MA). 2305 10/15/80 (Kaz-NY).
- 900 GUATEMALA, Puerto Barrios, TGMA. 1050 2/18/80, ID. XEW off (MW-TX).
- 900 MEXICO, Mexico City, XEW. "La Voz de America Latina" and call letter IDs. 0626 2/10/80; 0542 11/16; 0558 2/7/81 (MC-MA). This station is widely heard in the west and central U.S. away from Canadian QRM.
- 904.8 EL SALVADOR, San Salvador, YSQJ. 0603 11/22/79, s/off w/national anthem; 11/23, "Radiopolis" IDs; 0340 11/27/80, het from 905 kHz (GT-FL).
- 910 COLOMBIA, Medellín, HJDO. t0155 11/13/80, Colombian accordian mx and Colombia mentions u/YVRQ (Kaz-NY).
- 910 MEXICO, Mexicali, XEAQ. 0509 11/30/80, "R. Mexicana" (BP-WA-bev)
- 910 VENEZUELA, Maiquetia, YVRQ. "R. Aeropuerto". 0605 8/16/79; 0502 11/18/80, s/off w/Venezuelan anthem; 2359 2/7/81 (MC-MA). 2345 10/15/80 (Kaz-NY).
- 914 SURINAM, Nieuw Nickerie, RANI. Heard w/Hindi mx. 2312 10/18/79; 1002 12/7/80 (GT-FL). t2250 1/4/80, het; 0040 2/8/81, louder than WHJJ-920 (MC-MA). 2305-0046 12/21/80; 0100 2/7/81, s/off (MS-NY).
- 920 COLOMBIA, Cartagena, HJAE. Emisora Fuentes. 0333 11/21/79, w/Cuba; local phased out (CH-GA). 0152 11/13/80 (Kaz-NY).
- 920 CUBA, Varadero. R. Reloj. 0627 12/25/79, dominant (GT-FL). 0915 2/7/80 (PRM-OH).
- 925 COSTA RICA, San José, TICM. 0425 10/13/79, U.S. pop mx, "Juvenil" reverb ID by man (MC-MA).
- 925 GUATEMALA, San Pedro Carcha, TGJL. t0652 10/21/79, Guatemala mentioned (GT-FL).
- 930 CUBA, Matanzas. 0635 10/27/80, "R. Reloj" (WPT-DC).
- 930 DOMINICAN REPUBLIC, Santiago, HICK. 0252 10/26/80, "Ondas del Yague" o/u WSCI (DHM-PA).

- 930 MONTSERRAT, R. Antilles. 2322 10/15/80, EE w/ID; rare because of directional antenna (Kaz-NY).
- 930 NICARAGUA, Managua, YNW. t0247 10/26/80, ads, mentions of "en Managua" (DHM-PA).
- 930 VENEZUELA, Maracay, YVLI. 2331 10/15, singing ID, o/u Montserrat (Kaz-NY).
- 940 CUBA, location unknown. "R. Reloj". Heard in eastern U.S. and Canada 0330-0730, fall and winter.
- 940 MEXICO, Mexico City, XEQ. "La Q de Mexico", "La Q Mexicana" and call letter IDs. 0232 8/10/79 (BP-TX). 0436 10/13/79; 0613 9/28/80 (MC-MA). 0704 12/25/79 (MB-ON). 0130 3/10/80 u/CBM (RG-IL). 0600 3/24/80, o/CBM, s/off w/anthem (LM-NY).
- 940 VENEZUELA, Punto Fijo, YVNW. "R. Punto Fijo" 0004 9/28/79; 2250 11/17/80 (MC-MA). 0700 12/25/79 u/XEQ (MB-ON).
- 944 HONDURAS, Tegucigalpa, HRYW. R. Panamericana. 0404 9/29/79, usual woman DJ and MoR (GT-FL). 0431 10/13/79 (MC-MA). 0305 11/18/79 (Kaz-MC-RI). 0430 10/28/80; 1222 11/13 (Kaz-NY).
- 945 ECUADOR, Guayaquil, HCDA2. t0726 1/20/80, rock mx & SAH (MC-MA).
- 950 DOMINICAN REPUBLIC, Santo Domingo, HIG. "R. Popular". 0609 12/21/80 (DY-CT). 2228 12/24/80 (DGM-PA).
- 950 MEXICO, Nueva Rosita, XEYJ. 1023 2/18/80 (MW-TX).
- 950 VENEZUELA, Caracas, YVKG. 0428 11/10/79, "R. Vision" during aurora (MC-MA). 0945 12/31/79, w/domestics (MB-ON).
- 960 COLOMBIA, Magangue, HJHN. "R. Sutatenza", noted //1010 kHz. Heard in eastern U.S. and Canada 0130-0500 fall and winter, during auroral conditions.
- 960 Dominican Republic, Puerto Plata, HIFF. 0120 11/18/79 o/HJHN and WELI; "transmitiendo desde Puerto Plata" (Kaz-MC-RI).
- 975 ECUADOR, Guayaquil, HCAW2. 0523 11/19/80, "Pacifico" ID, moderate LA mx (GT-FL).
- 980 MEXICO, Cosamaloapan, XEQC. 0300 10/26/80, "R. Romance", light instrumental mx; dominant (DGM-PA).
- 980 MEXICO, Sonora, XEFQ. 0555-0640 12/19/80, "la F-Q", o/u KFWB w/EZL mx (RW-CA).
- 990 MEXICO, Mexicali, XECL. Regular during evenings on WC w/call IDs and "R. Mexicali" slogans. U.S. rock and SS DJ.
- 990 MEXICO, Monterrey, XET. "La Gran T de Monterrey" and call IDs; ranchera mx. Heard occasionally throughout U.S. and Canada 0700-0100, fall through spring, depending on domestic QRM.
- 990 VENEZUELA, Barquisimeto, YVTA. "R. Tricolor", "Mundial Tricolor" IDs. 0719 1/20/80; 0705 11/27; 0710 12/27; 0717 2/8/81 (MC-MA).
- 995 ECUADOR, Guayaquil, HCEW2. "Frequencia mil, la Romantica de Guayaquil" with LA ballads. Heard 0415-1015 fall and winter in NE and NW U.S. Also 0712 10/8/79 (GT-FL).
- 1000 BRAZIL, São Paulo, ZYK522. t0708 12/21/80, PP talk (MC-MA).
- 1000 COLOMBIA, Cartagena, HJAQ. "La Voz de Cartagena", R. Suceso/RCN. Fairly common throughout U.S. and Canada with domestic interference off or reduced by aurora. 0000-1100 fall through spring. Also 0602 6/29/80 (MC-MA).
- 1000 COLOMBIA, Manizales, HJHF. t0804 12/15/80, mentions of Manizales. Usually HJAQ after KOMO s/off (RT-CA).

- 1000 HONDURAS, Tegucigalpa. R. Union listed. t0813 2/23/81. "Esta es la R. ??cion en Tegucigalpa" noted twice, romantica mx, u/WCFL TTs and XEOY (RG-IL).
- 1000 MEXICO, Ciudad Juarez, XEFV. 1203 1/26/81 (JJ-WA).
- 1000 MEXICO, Mexico City, XEOY. "R. Mil" or singing ID "Es R. Mil" w/four note whistle IS; call ID also noted. 0534 9/22/79 (LBG-CO). 1105 12/1/80 w/HJAQ (NHP-BC). 0755 12/20/80 u/KOMO (RT-CA). 0445 1/29/81 w/KOMO (PM-OR).
- 1000 U.S. VIRGIN ISLANDS, Charlotte Amalie, WVVI. t1004 1/19/81, CBS nx; 1030 1/26/81, singing ID (RK-IL).
- 1000 VENEZUELA, Morón, YVNM. t0451 10/18/80, possible "Mundial Mil" ID; 0552 12/27/80, festive SS pop mx, ID (MC-MA).
- 1005 COLOMBIA, Neiva, HJJR. "R. Colosal" //4945 SW. Heard in western and NE U.S. 0200-1000 fall 1979 through spring 1980; also February 1981 in NE U.S. This station was on its nominal frequency of 1010 during fall of 1980.
- 1005.9 CUBA, location unknown. "R. Musical Nacional"; a drifter. 0240-0402 1/26/81 (MS-Kaz-NY). 0150 2/1/81 (MS-NY). Perhaps back on channel now.
- 1010 COLOMBIA, Barranquilla, HJOP. "R. Sutatenza". Heard occasionally in NE U.S. w/WINS interference, fall and winter 1980-1. Also 0956 1/26/81, dominant (NHP-BC).
- 1010 COLOMBIA, Bogotá, HJCC. 0659 11/27/80, "R. Mil Veinte, HJCC Bogotá" ID (MC-MA).
- 1010 MEXICO, Esperanza, XEEB. 0740 12/27/80, call ID o/KXEG (RT-CA).
- 1010 MEXICO, Guadalajara, XEHL. "H-L", "La Fabulosa H-L" and call IDs. 0816 3/22/80 (JA-SK). 0610 11/24/80 (PM-OR). Fairly common in western U.S. and Canada.
- 1010 MEXICO, Torreón, XEVK. "R. Felicidad" and call IDs. 0356 2/12/80 (CK-AZ). 1210 1/26/81 (BP-WA). 1215 1/26/81 (JJ-WA).
- 1010 MEXICO, Ures, XEXN. 1033 2/23/81, mariachi song, drum roll, call and location ID, o/XEHL, KXEG. An ET? (BP-WA).
- 1010 VENEZUELA, Ciudad Bolívar, YVQE. t0330-0402 11/13/80, possible mentions of R. Mundial and R. Bolívar way u/WINS; mellow LA mx (Kaz-NY).
- 1015 EL SALVADOR, San Salvador, YSC. 0600-0700 9/22/79, "YSC, R. Internacional" (LBG-CO). 0425 9/29/79 (GT-FL). t0450 10/18/79 (MC-MA).
- 1020 COLOMBIA, Monteria, HJZD. 0149 2/8/81, "R. Panzenu", Colombian accordian mx, ads (MC-MA) also heard (DHM-PA).
- 1020 VENEZUELA, La Asunción, YVRS. "Mundial Margarita" IDs and disco mx. Heard in NE U.S. 2300-0730 fall through spring.
- 1025 COLOMBIA, Ibagué, HJFT. 0905 3/10/80 (MM-ID).
- 1025 COSTA RICA, San José, TIAC. "R. Fides" 1200 1/28/80 (GM-CO). t1053 1/18/81 (DHM-PA). 1112 1/26/81; t1108 2/23 (BP-WA).
- 1030 COLOMBIA, Cali, HJER. "R. Pacifico", RCN. 0719 8/18/80, WBZ nulled, no XEQR (BP-WA). 0940 10/27/80 (NHP-BC). 0241 11/13/80 (Kaz-NY).
- 1030 MEXICO, Mexico City, XEQR. "R. Centro". 0830 11/12/79 o/u WBZ (RT-NV). 1022 1/7/80 (CK-AZ). Heard fairly widely in west w/KTWO off.

- 1035 HAITI, Cap Haitien, 4VEC. "4VEH" IDs. EE and SS religion, //9770 and 11835 SW. Heard in eastern U.S. and Canada 2300 to 0000 s/off. Also 0155 11/4/79, on late? (CMS-ON). 1034 12/31/79, SS (GT-FL). 1020 2/11/80, SS (NHP-BC). t1054 1/18/81 (DM-AB).
- 1040 COLOMBIA, Barranquilla, HJAI. "La Voz Tropical", Caracol net. Heard 0430-0700 fall and winter (MC-MA). 0630 1/6/80 (DY-MI). 0335 12/21/80, LA mx (NW-ON). 0257 1/26/81 (MS-Kaz-NY).
- 1040 COLOMBIA, Bogotá, HJCJ. "R. Super". 0630 1/6/80, WHO off (DY-MI). 0649 2/9/80 (MC-MA). Also heard by RT-NV.
- 1040 CUBA, La Fé, Isla de la Juventud. 0300 1/26/81, 3 pips w/last one prolonged (MS-Kaz-NY). 0800 2/16/81 w/WHO (RG-IL). 2323 2/16/81, "R. Caribe desde la Isla de la Juventud" (DHH-PA). 2318 2/16/81, "R. Victoria"--different station? (DHH-PA).
- 1040 MEXICO, Coatepec, XEGR. 0930 10/13/80, ranchero mx, ID (RG-IL).
- 1045 PANAMA, Las Tablas, HOJ2. Ondas del Canajagua. 2330 10/11/79 (Cartwright-PA). 0034 11/16/79 (MC-MA). 0028 12/23/80 (Kaz-RI).
- 1050 COLOMBIA, Arauca, HJLZ. t0439 2/8/81, "La Voz de ??" and Caracol IDs (MC-MA).
- 1050 MEXICO, Mexicali, XED. 1125 3/17/80, "La Gran D de Mexicali" (NHP-BC). 0301 2/11/81 (CK-CO).
- 1050 MEXICO, Monterrey, XEG. Heard throughout U.S. and Canada depending on domestic interference. Seems to have SS to 0530, EE religion afterwards. Gene Martin feels that the SS broadcast may use a lower power. Has been noted w/"R. Melodia" jingle during SS programming.
- 1055 COLOMBIA, Espinal, HJFZ. "La Voz del Centro", RCN. 0431 10/8/79 (LBG-CO). 0650 2/9/80 (MC-MA). 0346 3/29/80 (Kaz-b-RI). 0450 11/19/80 (GT-FL). 0127 12/23 (Kaz-RI).
- 1059 CUBA, Baracoa. 0330 11/15/79, "R. Revolución", MoR, t0635 11/27/80, het on 1060 (MC-MA). 0440 11/27/80 (GT-FL).
- 1060 MEXICO, Mexico City, XEEP. 1214 12/31/79, "R. Educación" in CFCN null (BP-WA).
- 1070 ARGENTINA, Buenos Aires, LR1. "R. Mundo", 0810-0900 6/9/80 w/KNX off (SMM-CA).
- 1070 COLOMBIA, Barranquilla, HJAG. "Emisora Atlantico", 4 note electronic IS. Has been noted varying from 1069.8 to 1071 kHz. Heard in NE U.S. 0430-0715 fall and winter. Also 0515 12/22/80 (NW-ON).
- 1070 VENEZUELA, La Guaria, YVKW. 0855 11/28/80, s/on w/Venezuelan anthem, "R. Mil Setenta" ID and circus mx. Clobbered by HJAG s/on (Kaz-RI).
- 1070 VENEZUELA, Maracaibo, YVMA. "R. Mundial Zulia", R. Cadena Mundial net. Heard by MC-MA 0145-0700 fall and winter. Also 0700 10/15/79 (ERS-NJ). 0616 4/6/80 (MC-MA).
- 1075 COSTA RICA, San José, TIFC. Faro del Caribe. Noted //5055 SW. Heard occasionally in NE U.S. 0130-0400 (listed s/off), fall through spring. EE preacher heard 0357 9/23/79 (MC-MA). 0250 1/23/80 (WJH-UT). 1100-15 12/7/80, SS (GT-FL).
- 1080 COLOMBIA, Medellin, HJDZ. t0042 12/12/80, Caracol mention? (MC-MA).
- 1080 HAITI, Port-au-Prince, 4VRD. 0152 12/4/80, FF (MC-MA).
- 1080 MEXICO, Ciudad Morelos, XEDY. 0246 11/27/79, calls, "Sonora" IDs (BW-CA).

- 1080 VENEZUELA, Barcelona, YVQJ. "R. Barcelona". 0059 10/11/79, disco; 0141 2/8/81, pop (MC-MA) 0333 10/8/80, LA mx, "Rumbo" nx, doorbell chimes (Kaz-NY). t0242 12/30/80 (MZ-CT). 0102 2/5/81 (DHM-PA).
- 1090 COLOMBIA, Cucuta, HJBC. t0522 2/10/80 o/WBAL w/Cucuta mentions; 0528 11/28 "Caracol"; 0524 12/15/80, through WBAL, on 1089 kHz (MC-MA).
- 1090 MEXICO, Rosarito, XEPRS. A regular on WC, even near KING. EE programming, lots of ads, "Express" IDs. Also SS 1100-1430.
- 1090 VENEZUELA, Caracas, YVSZ. "Exitos Mil Noventa". 0630 10/19/80, U.S. soul mx, mellow instrumentals (MC-MA). 0920 11/28/80, o/WBAL, disco (Kaz-RI). 0526 1/26/81, WBAL off (MS-Kaz-NY).
- 1091.5 COLOMBIA, Monteria, HJAW. 0345 9/23/79, disco, La Voz de Monteria (MC-MA).
- 1100 ANTIGUA, St. John's, ZDK. "The big 11 in Antigua", EE talk, reggae, calypso mx, BBC nx. 2311 2/5/80 (WPT-FL). 0402 9/14/80; 2327 10/9; 2217 11/3; 2256 12/26 (MC-MA).
- 1100 COLOMBIA, Barranquilla, HJAT. "R. Reloj" and call IDs, Caracol net. Heard in eastern U.S. and Canada o/u WWWE, in MI and IL w/WWWE off. 2330-0700 fall through spring. Also t0823 10/13/80, R. Reloj ID in KFAX null (NHP-BC). Call letters are best ID on this, as HJCN, Bogota is also R. Reloj and Caracol. HJAT is on the Caribbean coast with higher power, making it more likely.
- 1110 COLOMBIA, Cali, HJEW. 0800 2/10/80, "R. Reloj" and call ID. WBT off (RAL-VA).
- 1110 COLOMBIA, Sincelejo, HJZE. 0000 1/20/80, "R. Piragua" (MC-MA).
- 1110 CUBA, Moa. "Patria o Muerte" slogan, 0459 2/8/81 (MC-MA).
- 1110 MEXICO, Mexico City, XERED. 0630 10/28/79, "R. Cadena", U.S. and LA pop mx (ERS-NJ).
- 1110 MEXICO, Rio Bravo, XEOQ. 1821 2/a7/80, "R. Juventud" (MW-TX).
- 1110 VENEZUELA, Carúpano, YVQT. "R. Carúpano", Rumbos net ID w/doorbell chimes also. Heard occasionally 0100-0400 s/off, in fall w/WBT (MC-MA).
- 1110 VENEZUELA, Valencia, YVRX. 0538 10/13/79, "R. Mia", LA vocals (MC-MA).
- 1120 CUBA, Artemisa, CMCM. R. Cadena Habana. 0050 2/5/81, //1160, ballads, woman DJ (DHM-PA).
- 1120 DOMINICAN REPUBLIC, Santo Domingo, HICN. 2340 9/22/79; 2340 1/19/80, "R. Antillas" jingle; 0501 2/8/81 (MC-MA).
- 1120 VENEZUELA, Maracaibo, YVMF. 0450 11/26/80, singing ID, s/off w/national anthem (NW-ON).
- 1124.6 COSTA RICA, San José, TISRHB. Heard in NE U.S. w/SS and U.S. pop mx. 0345-0615 fall and winter. Also 0344 3/29/80 (Kaz-b-RI) t0450 12/26/80; 0315 2/27/81 (DV-CA). 0420 11/26/80 (GT-FL).
- 1130 BRAZIL, Rio de Janeiro, ZYK470. t2337 9/22/79, PP w/some reverb, through WNEW (MC-MA).
- 1130 COLOMBIA, Barranquilla, HJAC. "Emissor Rio-Mar", Todelar net. Heard occasionally in NE U.S. 0400-0730 fall and winter. Also 0512 1/7/80, WNEW null (NW-ON). 06j7 3/24/80 (ERS-NJ).
- 1130 DOMINICAN REPUBLIC, Santo Domingo, HIRL. 0510 11/18/79, "R. Exitos" o/WNEW (Kaz-MC-RI)

- 1135 GUATEMALA, Retalhuleu, TGVR. "La Voz de la Costa Sur", 0313 2/18/80 (MW-TX).
- 1140 COLOMBIA, Cartagena, HJKO. "La Voz de Victoria". 0440 2/10/80; 0359 11/27, o/u WRVA (MC-MA).
- 1140 MEXICO, Monterrey, XEMR. "La Nueva MR". 0835 8/10/79 (BP-TX). 0852 1/7/80 (BP-WA). 0318 2/11/81 (CK-CO).
- 1150 CUBA, Media Luna. t0210 10/8/80 (Kaz-NY). 0529 12/27/80 (MC-MA)
- 1150 DOMINICAN REPUBLIC, Santo Domingo, HIAS. t2232 2/5/80 (WPT-FL).
- 1150 MEXICO, Mexicali, XERM. 1259 11/30/80, "R. Sensación" (BP-WA-bev)
- 1150 VENEZUELA, Punto Fijo, YVMN. "Ondas del Caribe", Rumbos-Mundial net nx. Heard occasionally in NE U.S. w/domestic interference. 2315-0630 fall and winter.
- 1155 EL SALVADOR, San Miguel, YSCF. "Ondas Orientales", w/rock mx. Heard occasionally in NE U.S. 0415-0630 in fall 1979. Also 0342 3/29/80 (Kaz-b-RI). 0440 9/29/79, on 1155.2 kHz; 0553 10/14/79 (GT-FL).
- 1160 COLOMBIA, Barranquilla, HJBL. "R. Aeropuerto", w/LA mx. 0343 8/16/79; 0454 2/10/80; 0400 11/27 (MC-MA). 2335 11/17/79 (Kaz-MC-RI). 0217 1/23/80 (CMS-ON).
- 1160 COLOMBIA, Montería, HJAZ. "La Voz de Sinu", Todelar. Heard w/Colombian accordian mx. 0521 10/13/79; 0530 12/27/80 (MC-MA). 0530 10/28/80 (Kaz-NY).
- 1160 CUBA, Madruga. "R. Cadena Habana". 0429 1/27/80 (CMS-ON). 0430 11/13/80; 2307 12/26 (MC-MA). 0117 2/5/81 (DHM-PA).
- 1160 DOMINICAN REPUBLIC, Santo Domingo, HIBG. "Radiolandia". 0457 9/23/79; 0657 1/20/80; 0521 2/8/81 (MC-MA). t0500 12/20/80 (MS-NY).
- 1160 EL SALVADOR, San Salvador, YSMN. 0446 2/10/80, "R. Libertad" (MC-MA).
- 1165 ANTIGUA, St. John's. Caribbean Lighthouse Radio. Heard in eastern U.S. 2300-0215 s/off fall and winter. Also 0437 12/16/80, on late? (DY-CT).
- 1170 COLOMBIA, Cartagena, HJNW. "La Voz de Heroica". 0417 10/14/79, accordian mx; 0502 2/10/80 (MC-MA).
- 1170 HAITI, Port-au-Prince, 4VRS. t2322 9/22/79; 0100 10/15/80; 2305 12/26/80 (MC-MA). 2227 2/5/80, accented FF (WPT-DC).
1175. 8 COSTA RICA, Limón, TIQ. 0550 10/14/79, disco (GT-FL).
- 1180 COLOMBIA, ??? 0600 10/19/79, Colombian national anthem (Kaz-RI) Three listed, all 24 hours.
- 1180 CUBA, La Fé. R. Reloj. 1033 7/31/79 (LBG-CO). 0403 10/14/79; 0607 11/27/80, u/WHAM; 0626 1/28/81, WHAM off (MC-MA).
- 1180 DOMINICAN REPUBLIC, Santo Domingo, HIBE. 2217 11/14/80, ad for Santo Domingo store (MC-MA).
- 1180 GUATEMALA, Guatemala City, TGT. "R. Sonora" singing IDs. 0537 10/26/80; 0323 2/10/81, w/WHAM (DHM-PA).
- 1180 VENEZUELA, Ciudad Ojeda, YVNJ. "R. Petrolera". 0614 2/9/79; 0445 11/13/80, o/Cuba, WHAM nulled (MC-MA).
- 1190 COLOMBIA, Barranquilla, HJCT. "La Voz de Costa". 0447 11/13/80, WOWO null (MC-MA). 0057 2/26/81, w/WOWO (DHM-PA).

- 1190 COLOMBIA, Bogotá, HJCV. ^t0528 10/27/80, Colombian mx (WPT-DC).
0601 11/27/80, Todelar ID (MC-MA).
- 1190 MEXICO, Ciudad Juarez, XEPZ. 1123 2/24/80, "R. Norteña" (BP-WA)
- 1190 MEXICO, Guadalajara, XEWK. 1112 1/26/81 (AWP-CA). This station no longer relays XEW, but is still part of the network.
- 1200 COLOMBIA, Cali, HJNF. "R. Super". 0830 3/31/80, WOAI off (SMM-CA). 0738 12/17/80, o/WOAI (RT-CA).
- 1200 COLOMBIA, Sogamoso, HJLR. 0018 10/14/79, "Emisor la Villa del Sol en Colombia", briefly (MC-MA).
- 1200 CUBA, Santiago de Cuba. "R. Revolución". 0410 1/18/80 (CMS-ON) 0425 11/13/80; 0458 12/27; 0500 2/14/81 (MC-MA). 0601 12/16/80 (DY-CT).
- 1200 PANAMA, Chitré. "Onda Tropical", pop mx, 0850 12/17/79 (BP-WA). 0556 2/9/80 (MC-MA).
- 1200 VENEZUELA, Caracas, YVOZ. "R. Tiempo". 0728 8/27/79 (DK-WA). 0818 10/22/79 (SMM-CA). 1015 1/7/80 (CK-AZ). 0502 12/13/80 (MZ-CT).
- 1200 VENEZUELA, Santa Barbara del Zulia, YVWA. 2253 11/6/80 "Somos ondas del Escalante" (MC-MA).
****A Venezuelan s/off w/national anthem noted 0457 1/26/81 (MS-Kaz-NY). 0500 2/14/81 (MC-MA). Which of the above is it?
- 1205 CAYMAN ISLANDS, Georgetown. Best in eastern U.S., but heard in ID and CO; tentatively in WA, OR, CA, and AB. Heard //1555 kHz 0000-0430 s/off w/God Save the Queen. Sometimes leaves OC on after s/off. S/on at 1100.
- 1210 COLOMBIA, Pereira, HJFF. 0600 6/3/80, call ID, ads, LA mx (SMM-CA).
- 1210 CUBA, location unknown. R. Reloj. Heard throughout U.S. and in eastern Canada, 2345-1045 fall and winter; WCAU QRM in east.
- 1210 DOMINICA, Roseau. 2330 10/14/80, FF, pop mx (Kaz-NY). 2240 11/29/80 (Kaz-RI).
- 1210 GUATEMALA, Guatemala City, TGGMX. 0830 8/10/79, "R. Rumbos" (BP-TX). 1015 8/6/79 "La Bandera"; 0430 10/7 (LBG-CO).
- 1210 VENEZUELA, Barcelona, YVQZ. ^t1000 11/28/80, Venezuelan anthem, s/on? YVMN heard earlier (Kaz-RI).
- 1210 VENEZUELA, Coro, YVMN. "R. Coro" IDs and jingles. Heard in NE U.S. 2300-0930 fall and winter w/WCAU QRM. Also 0443 9/22/79 (LBG-CO). 0835 12/26/80 (RT-CA). 0835 1/20/81 (PM-OR).
- 1220 BRAZIL, Rio de Janeiro, ZYJ458. ^t0605 11/18/79, PP talk o/Canadian and LAs (Kaz-MC-RI). 0117 2/8/81 (MC-MA).
- 1220 ♦ CUBA, España Republicana. "R. Veintiseis". 0352 11/18/79 (Kaz-MC-RI). 2340 2/7/81, LA mx, no WGAR (DHM-PA).
- 1220 COLOMBIA, Barranquilla, HJVF. 2301 12/23/80, "R. Visión" (Kaz-RI)
- 1230 MEXICO, Ensenada, XESCT. 1905 3/2/80. Midday w/KGFJ nulled (SMM-CA).
- 1239 CUBA, Matanzas. R. Veintiseis here, fall 1979 (CH-GA).
- 1240 BAHAMAS, Nassau, ZNS-2. 1815 2/5/80 (WPT-FL).

- 1250 COLOMBIA, Bogotá, HJCA. 1025 1/5/81 w/KTMS. "R. Capital" ID, 3 chimes (JJ-WA).
- 1250 MEXICO, Hermosillo, XEDL. 0722 8/20/79. KYAC off. R. Capital (BP-WA).
- 1255 HONDURAS, El Paraíso, HRIC. Deduced to be this, not Ecuador. GMT-6 TCs, "R. Latina" ID, bells from 'Cathedral in Danlí' on hour. Quick s/off 0400, no national anthem. From 0300 to 0400, a request program--EE rock and LA pop mx (GT-FL).
- 1260 CUBA, Sancti Spiritus. R. Reloj. 0545 12/24/80, //1270, u/WEZE (Kaz-RI). 0547 1/3/81 (WPT-DC).
- 1260 MEXICO, Mexico City, XEL. 0730 8/6/79, "R. Capital" (SMM-CA). 0530 10/27/80, briefly on top (DHM-PA). t0559 1/2/81, mention of Mexico (WPT-DC).
- 1265 ST. KITTS, Basseterre. R. Paradise. 2356 10/10/79 (MC-MA). This station is on 825 kHz as of September 1980.
- 1270 CUBA, Camagüey. R. Reloj. Heard occasionally in NE U.S. 2330-0800 fall and winter, depending on auroral conditions and domestic interference.
- 1280 MEXICO, Chihuahua, XEBW. 1210 10/7/79, mention of Chihuahua, SS mx (SMM-CA).
- 1290 VENEZUELA, Puerto Cabello, YVLF. t0110 2/8/81, "en Puerto Cabello" noted (DHM-PA).
- 1300 MEXICO, Ciudad Juarez, XEP. 0818 12/10/79, SS MoR, call ID (BW-CA). 0112 11/23/80, "R. Trece" and CST TCs, KMPS off (BP-WA).
- 1310 COLOMBIA, (six listed). t0538 1/8/81, Colombian accordian mx (MC-MA).
- 1310 CUBA, Cienfuegos. R. Reloj. 0700 11/18/79, noted //1270 (Kaz-MC-RI).
- 1315 DOMINICAN REPUBLIC, Bani, R. Bani. 0311 6/4/80 (GT-FL).
- 1325 HAITI, Port-au-Prince, 4VJCD. Was on this channel until summer 1980, but is now back on 1330 kHz. Heard w/both FF and SS. 0250 2/17/80, 3 time pips at 0301 (MW-TX). Nightly (CMS-ON). 0500 3/9/80 w/anthem; 0457 4/5, pips, anthem (MC-MA). 0502 3/22/80 Haitian anthem, weak (NHP-BC). 0310 6/2/80 (GT-FL).
- 1329.5 COLOMBIA, Cartagena, HJAD. "R. Vigia". 0555 11/18/79, LA mx (Kaz-MC-RI).
- 1338 HONDURAS, San Pedro Sula, HRHG. "R. El Mundo" on this channel from May 1980. 0415 11/19/80 (GT-FL).
- 1340 COLOMBIA, Bogotá, HJFB. t0540-0720 12/24/80. "R. Suceso" and tentative "La Voz del la Sabana"; also "R. S----", multi-syllabic ID (Kaz-RI).
- 1340 MEXICO, Mexicali, XEAA. "R. Doble A" 0851 12/1/80 (NHP-BC). Dominant here and NSP. "La Musica doble A" (RW-CA).
- 1350 VENEZUELA, Caja Seca, YVTL; or Cumarebo, YVTJ. Both are "R. Vision" 0413 12/24/80 (WPT-DC). 0113 2/8/81, "R. Visión" w/LA mx and circus style electronic organ o/WNIS (MC-MA).
- 1360 COLOMBIA, Pereira, HJRA. t0546 2/8/81, possible "Ecos de Risaralda" ID; too much WDRC (MC-MA).
- 1360 VENEZUELA, El Mojan, YVTI. 0003 12/24/80, call letter ID o/domestics (CMS-ON). 0535 12/24/80, "Catumbo Internacional" singing ID equal to WDRC (Kaz-RI).

- 1365 HAITI, Ciudad Danli, HRTR. t0347 11/18/79, weak SS (Kaz-MC-RI).
Not noted November 1980; not here anymore? (GT-FL).
- 1370 MEXICO, Mexicali, XEHG. 0405 11/30/80, "R. ----ena H-G"
noted (BP-WA-bev).
- 1385 HAITI, Port-au-Prince, 4VARH(?). 0002 10/19/79, weak (GT-FL).
t1103 1/18/81 (DM-AB).
- 1390 MEXICO, Chihuahua, XEV. "R. Fiesta". 0912 2/11/80 (BP-WA).
0927 3/10/80 (NHP-BC). 1210 3/15/80 (JFJ-CA).
- 1400 COLOMBIA, Barranquilla, HJAS. t0532 1/14/80, Colombian
accordian mx, no ID (WPT-DC) t0709-36 12/24/80 "Universal"
tentative (Kaz-RI).
- 1430 CUBA, R. Surcos. 0007 10/14/79 o/domestics (MC-MA).
- 1470 MEXICO, Los Mochis, XECU. "La Rancherita" and call letter IDs.
1055 2/2/81; 0900 2/15; 0929 2/23. NSP? (BP-WA).
- 1470 MEXICO, Tijuana, XEBBC. 1258 1/5/81, s/on (FJP-CA).
- 1475.7 HAITI, Port-au-Prince, 4VEA. t0147 5/20/80, island mx,
possible FF by man (GT-FL).
- 1483.2 COLOMBIA, Pacho, HJHQ. 1020 12/7/80, "R. Futurama" ID and
male singing (GT-FL).
- 1500 COLOMBIA, Aguachica, HJMP. t0432 11/20/79 "La Voz ----"
and Colombian time check, and nx (CK-AZ).
- 1500 MEXICO, Mexico City, XERH. "R-H" IDs. 0650 10/15/79,
ballads (ERS-NJ). 0539 11/19/79 (NW-ON). 0541
3/24/80 (Kaz-b-RI). 0850 10/27/80 (NHP-BC). 0515 12/15/80,
WTOP off (MC-MA).
- 1505 ANGUILLA, The Valley. 0005 10/14/79, Caribbean mx (MC-MA).
t1028 12/31/79, carrier, s/on 1030 but no ID due to noise (GT-FL)
0153 12/23/80 (Kaz-RI). 2305 1/25/81 (MS-Kaz-NY).
- 1511.2 DOMINICAN REPUBLIC, Santo Domingo, HIBL. 0230-50 7/24/80,
"R. Pueblo" through WLAC slop; 0352 11/19/80 (GT-FL).
- 1520 COLOMBIA, Barranquilla, HJLQ. "R. Minuto", rustic accordian
mx w/~~WKEW~~ nulled or aurorally attenuated. 0000-0128 12/3/80;
0010 12/16 (Kaz-RI). 0105 2/8/81 (MC-MA).
- 1520 MEXICO, San Luis Rio Colorado, XEEH. "R. Sonora" and call
letter IDs. 0350 9/18/79 o/KOMA (LBG-CO). 0442 11/20/80 (CK-AZ)
- 1524.5 COSTA RICA, Turrialba, TIJJC. "R. Columbia", noted //725 kHz.
0528 10/14/79; 0340 11/19/80 (GT-FL). 0045 12/23/80 (Kaz-RI).
- 1530 CUBA, Morón. "R. Morón" 0002 10/14/79 o/domestics (MC-MA).
0457 10/20/80 (WPT-DC).
- 1530 DOMINICAN REPUBLIC, Santiago, HIJN. "R. Acción". 0842 2/11/80,
WCKY off (PRM-OH). 0702 3/24/80 (Kaz-b-RI).
- 1530 MEXICO, Mexico City, XEUR. "R. Onda" IDs w/seagulls in back-
ground, "XEUR, la reine del ritmo tropical" 1238-59 1/5/81,
through KFBK OC (RW-CA).
- 1540 BAHAMAS, Nassau, ZNS-1. 2310-30 10/13/79, ads and announcements
in EE (MB-ON). 0005 12/16/80 o/WPTR (Kaz-RI).
- 1550 COLOMBIA, Barranquilla, HJCB. "La Voz de Porteña" and call
letter IDs. RCN. Heard occasionally in NE U.S. 0100-0930 fall
and winter. Also 0830 11/28/80 and on 12/24 (MB-ON).

- 1555 CAYMAN ISLANDS, Georgetown, R. Cayman. Heard in NE U.S. 0000 to 0430 s/off fall and winter. Also t1057 1/5/81 s/on, too much splash for ID (NHP-BC).
- 1560 CUBA, Cárdenas. R. Reloj. 0850 10/15/79 (ERS-NJ).
- 1560 MEXICO, Ixtlan de Rio, XERIO. 1155-1207 3/2/81, ranchero mx, "X-E-Rio" IDs (BP-WA).
- 1560 MEXICO, Mexico City, XEVIP. 0606 11/22/79, s/off SS and EE (WPT-DC). 0600 7/7/80 u/WQXR OC, CBS nx (Kaz-RI). This station is now XEFAJ, located in San Rafael Chamapa; SS w/"R. 15-60" IDs and "Musica ranchera" plugs per logging by JJ-WA
- 1570 MEXICO, Ciudad Acuña, XERF. SS to 1230 10/5/79, EE afterwards (LBG-CO). 0710 10/29/79, U.S. rock and EE (ERS-NJ). This is widely heard nights in U.S.
- 1571 DOMINICAN REPUBLIC, Santo Domingo, HIAJ. 2320 2/6/81, "R. Reloj" jingles (MS-NY).
- 1578v CUBA, Santa Cruz del Sur. "R. Cadena Agramonte". Heard in eastern U.S. and Canada, varying from 1577 to 1579.2 kHz, 0000-0500 fall and winter.
- 1580 ANTIGUA, new Voice of America relay here, first noted operating in late March, 1981. Heard good-poor throughout much of the eastern and midwestern U.S. and Canada, with some co-channel interference from domestic stations. Currently on 0000-0400 in EE.
- 1580 COLOMBIA, Barranquilla, HJQZ. "R. Principe". Heard occasionally in NE U.S. w/CBJ off or attenuated, 0000-0700 fall and winter. Also 2251 10/27/80, faded to CBJ (NW-ON).
- 1580 MEXICO, Hermosillo, XEDM. "La Grande de Sonora". Fairly regular in western and central U.S. and Canada w/domestic interference. Ranchera mx and SS talk. 0640 10/15/79; 0630 10/22 (ERS-NJ). 0608 7/7/80 (Kaz-RI). 0455 11/19/80 (Kaz-NY).
- 1595 HAITI, Cap Haitien. R. 4VEH. t0011 3/6/80, carrier (MC-MA).
- 1608 MEXICO, Hermosillo, XEDM. Strong distorted spur, 0500 3/31/80 (SMM-CA)
- 1610 ANGUILLA, Caribbean Beacon, new station, began operation in early April 1981. Religious programming, 0406 s/off 5/9/81. Announces power as 50kw but sounds weaker, also says they have outlets on 690 (not heard) and 100.1 FM. Good signal in most of eastern North America, has been heard as far west as southern Calif.
- 1613 GUATEMALA, Rabinal. Radiobeacon "RAB" in modulated code (... . _ . . .) Heard occasionally throughout U.S. and Canada 0045-0930 in winter.
- 1668 h BELIZE, R. Belize. 0405 1/23 and 24/80, 2nd harmonic (CMS-ON).
- 1675a ECUADOR, Esmeraldes. Radiobeacon ESM, (. . . . _ _) not on 1690 (CMS-ON)
- 1690 COLOMBIA, Medellín. Radiobeacon MDE (---) 0740 2/4/80 (BP-WA)
- 1715 COLOMBIA, Puerto Asis. Radiobeacon SIS (.) 0413 12/29/80 (CMS-ON).
- 1720 h MEXICO, Tenosique, XEZK. 0158 12/18/79, s/off. 2nd harmonic (CMS-ON).
- 1730 ECUADOR, Lago Agrio. Radiobeacon LAG (. . . . _ _ .) 0440 1/9/80, not just daytime (CMS-ON).

Latin American UnIDs

A great many Latin unIDs have been noted by IRCA members over the past couple of seasons, as well as carriers on peculiar split frequencies which looped towards Latin America. A good many of these have been drifters so are omitted from the sampling below. Most of those listed were noted with slogans, s/off or fade out times, or some other peculiarity which may help to identify them at a later date, or at least establish a tentative reception.

- 590 MEXICO, ??, XERC. 1155 1/2/81. This call heard here but no such listing (RK-IL). XEFD? --ed
- 595 Dutch heard, looped south, heard from 0100 11/25/80, peaked 0300, gone by 0400. Mention of 49 meter band; not Dominica per phone call (MS-NY)
- 700 1224 10/1/79, Mexican w/CST TC and "R. Variedades" ID (LBG-CO).
- 700 0630 9/24/80; clock chimes in style of Big Ben (GM-CO).
- 700 0947 10/20/80; "R. Pinta" or similar ID (GM-CO).
- 710 0907 10/13/80; 1027 11/27/80; "R. Reloj" spoken and sung IDs during KIRO SP (NHP-BC).
- 714 1052 10/4/80--a het; 1015 11/16/80, unreadable SS looping SE. Faded at 1055, sunrise? (GM-CO).
- 740 0530 10/15 and 10/16/80; SS w/GMT -4 TCs and "La Musica de Campesina". Puerto Rico or Venezuela per TCs (Kaz-NY).
- 760 1304 2/8/80. A Mexican s/on; "R. Colosal" and XE(W?)? call letters (GM-CO).
- 780 1210 1/28/80; a Mexican in WBBM null; "la musica ranchera" (GM-CO)
- 790 0742 11/27/80. Excited SS talk, cuckoo sounds (MC-MA). Also heard by Kaz-RI, GT-FL, ERC-MA.
- 800 1100 1/18/81. "Programa campesina", big chime at 1127 (JJ-WA).
- 815 0458-0500 9/22/79, s/off w/short song--anthem? (LBG-CO). 0735 2/22/80, SS w/KGO QRM (DAP-CA). Carriers: 0423 10/18/80 (MC-MA) 0732 11/30/80 (BP-WA-bev). 0740 11/30/80 (NHP-BC).
- 820 0335 11/9/80. SS mx, which Mexican? (DV-CA). 1336 12/29/80, SS, XEBA? (RW-CA).
- 820 1100 10/31/80 u/WBAP and Cuba. S. American mx; chimes and "Tres Radio Unqua" (?) on hour (RG-IL).
- 830 1128 11/22/79. "R. Catenta"(?) (CK-AZ).
- 830 1010 2/23/80. "Ochenta tres" jingle; subdued mx and announcer (RG-IL).
- 840 0524 6/29/80. PP talk briefly o/WHAS. Brazil? (MC-MA).
- 880 0558 9/22/79. S/off u/Cuban; unfamiliar anthem. "Emisora Oficial" (LBG-CO).
- 880 1034 1/26/81. Bouncy pop mx, "R. Colosal"(?); also heard "Uno-el", "RP". R. Union? (JJ-WA).
- 885 2330 1/17/81. SS talk and singing. Montserrat is EE...(MS-NY).
- 905 0551 10/19/80. Sedate mx, shouted ID, a single word. Radiopolis in El Salvador? (MC-MA).
- 960 0320 1/13/80. U.S. pop mx and SS talk. "R. Ornamente"? (RG-IL).
- 1070 0715 11/26/79. "R. Nacional" (CH-GA).
- 1100 0700 10/20/80. u/HJAT, "R. Bronte"(?) (RG-IL).

1110 0619 4/6/80. "R. Tiempo", "R. Reloj", "en el corazon de Argentina" (MC-MA).
 1144 0125 1/3/81. LA mx--El Salvador? (MS-NY).
 1170 0940 2/16/80. Tropical mx, and "R. Tres" (?) mention (RG-IL).
 1175 1030, gone by 1040 12/7/80. NBC like chimes (Todelar?), "R. Villa, La Voz de Bastia Nacional" (GT-FL).
 1190 1142 9/23/79; 1127 12/2/79, "Once Noventa, R. Moderna" (BP-WA)
 +1112 3/2/80 "Once Noventa", mariachi mx, Bogotá mentions (BP-WA)
 1210 2350 1/19/80, accented FF (MC-MA) Dominica?
 1255 0316 11/28/79, festive LA mx, "La Voz de ??" Ecuador? (GT-FL).
 1295 0413 11/27/80, SS male singing, R. Plaza in Nicaragua? (GT-FL).
 1330 0545 12/24/80. GMT-5 TC; HJAD? (Kaz-RI).
 1456 0058 10/14/80. Caribbean EE, not Haiti per SW parallel on 6030 kHz (GT-FL).
 1460 0430-0600 2/9/80, "R. Sensación" u/KENO, KDON (RT-NV).
 +0958 2/12/80, "R. Sensación" Mexican? (RW-CA).
 1532.6 0300-0400 s/off 2/16/81. SS, U.S. rock songs (MS-NY).
 1550 0122 10/11/79, Caribbean mx (MC-MA).
 +2300 12/14/80. BBC-style 6 pips noted; 2205 12/16/80, British accented woman. Turks and Caicos not here, so who? (Kaz-RI).
 1620a Beacon noted, October 1979 .-. (CMS-ON).

Currency. It is possible to go some way toward IDing an unknown LA station by noting the money used in ads. The various currencies now in use are:

Argentina.....peso	Brazil....cruzeiro	Colombia...peso	Ecuador...sucre
Bolivia.....peso	Chile....escudo	Costa Rica..colon	Guatemala.quetzal
Honduras....lempira	Paraguay....guarani	Uruguay....peso	
Mexico.....peso	Peru.....sol	Venezuela..bolivar	
Nicaragua...cordoba	Salvador...colon		

National Anthems

Some LA stations sign-off with the NA. Care should be taken, however, as some close with a march or martial music which sounds like an anthem, but may not be so. Often the words "Himno Nacional" or the title of the anthem can be heard during the closing announcements. The titles of LA anthems are:

Argentina...Oid, Morals el grito sagrado Libertad		
Bolivia.....Bolivianos, el hado propicio	Honduras....Tu bandera, tu bandera es un	
Brazil.....Ouviram do Ipiranga Margenes	lampo de cielo	
Chile.....Chiles to celo azulado pura	Mexico.....Mexicanos al grito de guerra	
Costa Rica..Noble Patria	Nicaragua...Salve a ti Nicaragua	
Dom. Rep....Quisqueyanos Valientes	Peru.....Somos Libros	
Ecuador....Salva oh Patria	Paraguay....A los pueblos de America	
Guatemala...Guatemala Feliz	Salvador....Saludemos la Patria	
	Uruguay....Orientales, la Patria o la tumba	
	Venezuela...Gloria al bravo pueblo	

Independence Days

On these days it is quite possible for the stations to stay on later than usual, perhaps even AN.

February 27	Dominican Republic		Sept. 7	Brazil
May 14	Paraguay	July 29	Peru	Sept. 15 Costa Rica
July 5	Venezuela	August 6	Bolivia	El Salvador
July 9	Argentina	August 10	Ecuador	Guatemala
July 20	Colombia	August 25	Uruguay	Honduras
				Nicaragua
			Sept. 16	Mexico
			Sept. 18	Chile

Fiesta Days

Roman Catholic religious holidays should be watched, especially for religious stations staying on late, as well as certain fiesta days such as Boliver's birthday on July 24 and Columbus day celebrated throughout LA on October 12.

(All the above from DSWCI via Arctic 8/2)

Argentina. There are indications that the government will again enforce a regulation on percentages of local and foreign music.

- 620 LV14 R. Joaquin V. Gonzalez plans to increase power to 25 kw.
- 670 LRA52 R. Nacional, Chos Malal s/off 0300.
- 960 LRA6 R. Nacional, Mendoza 0900-0500.
- 1120 LV19 R. Malargue ex R. Municipal de Malargue. Part of the Cadena Argentina de Radio difusion.
- 1370 LRA54 R. Nacional, Ingeniero Jacobacci 1800-0100.
- 1440 LRA53 R. Nacional, San Martin de los Andes s/off 0200.
- 1470 LT43 R. Mocovi uses 1 kw.
- 1510 LV21 R. Cahmpaqui 1000-0300. 1 kw.
- 1520 LV24 R. Manantiales 0900-0500, 1 kw.
- 1530 LW5 R. Libertador General San Martin 0900-0400, 5 kw. (Arctic 9/21)
- 560 LT15 R. del Litoral Sat 0800-0500; other days 0800-0400.
- 580 LW1 R. Univ. Nac. de Cordoba Sun-Fri 0850-0600. Sat. till 0700.
- 590 LV12 R. Independencia 24 hours.
- 780 LU14 R. Provincia de Santa Cruz Mon-Fri. 0930-0500; Sat and Sun. till 0700.
- 1090 LV5 R. Sarmiento 24 hours.
- 1130 LRA21R. Nacional, Santiago del Estero now 10 kw.
- 1230 LT2 R. General San Martin Sun 0850-0400; other days 0850-0600.
- 1300 LT11 R. General Francisco Ramirez 0830-0400.
- 1450 LU15 R. Viedma s/off 0400.
- 1550 LT40 R. La Voz de La Paz now uses 2.5 kw; s/off 0300.
- 580 LU20 R. Chubut uses 15 kw; 0930-0330.
- 710 LS1 R. Municipal de la Ciudad de Buenos Aires 0830-0430 with 50 kw.
- 1190 LW3 R. Congreso closed down July 20.
- 1270 LS11 R. Provincia de Buenos Aires uses 50/10 kw.

(Arctic 7/13, 8/2, 8/24).

Radio Nacional de Buenos Aires, LRA31-870 seems to be new 0900-0300. (SCDX10/16

Bolivia. CP159-870 R. 21 de Diciembre, Catavi is new on MW. CP68-1310 R. Cochabamba ex R. San Rafael. On July 29 the army took control of R. 21 de Diciembre, La Voz del Minero and R. La Voz de Llallagua. The Minister of Press and Information has said that 90% of Bolivian stations were not functioning according to the law. A National Radio Network to broadcast information controlled by the government has been set up. Stations have been authorized to resume their music and commercial programs, but are under obligation to join the network. R. Fides has been shut down indefinitely for broadcasting "aggressive and disrespectful opinions against the state's high powers and other institutions as well as inciting the disruption of internal peace." Observations have indicated that whenever the government controlled National Radio Network has cut into other stations, it has done so without any prior notification and with no discernable schedule.

Bolivia. La Voz de Cobre has been granted a license to operate a station is Corocoro. Radio Panamericana-580 has been authorized to change its name to La Voz del Cobre. CP192-920 R. Esperanza ex 1360 now on 1000-1400 and 2200-0300. CP40-1250 and CP61-1450 each 5 kw. CP3-1390 R. Nacional de Bolivia now uses 5 kw. (Arctic

Bolivia. 850 CP188 R. Warnes, Warnes ex 810. 860 CP8 R. Nueva America is now on nominal frequency ex 840. Often IDs as Radio Nueva America. CP20-900 R. El Condor, La Paz has been missing from WRTA. CP83-915 R. Norte de Montero ex 1115. CP32, R. Santa Cruz, Santa Cruz-960. CP145 R. Metropolitana is still on 980 although announcing 930 khz, the official frequency. CP43, R. Pirai, Santa Cruz-1000. CP139, Radiodifusora La Luz ex Radio La Luz, Santa Cruz-1050. CP137, R. Stentor, ex 1530, now 1370. CP179, R. El Espectador, Santa Cruz most likely new name for R. Guapay-1520. (Arctic 10/19)

Bolivia. A new station, Radiodifusora 22 de Julio, Ciudad Magdalena, cerca de San Ramon, Dept. de Beni, opened May 27. Frequencies on MW and SW unknown. (R.F. Aragao, via SCDX 8/21)

- 1300 CP29 R. Fides 1000-0330.
- 1310 CP68 R. San Rafael licensed to 1300 here to avoid Brazilian interference.
- 1450 CP190 R. Aroma, Correo Central, Tarata, new.
- 1530 CP116 R. Dif. Cosmos s/off 0500.
- 1450 CP190 R. Aroma 300 watts.
- 1390 CP3 R. Nacional 0800-0400 with 3 kw. (Arctic 7/13, 8/2, 8/24)
- 600 CP190 R. Aclo 0930-1210 and 2030-2330 with 10 kw.
- 640 CP159 R. Huayna Potosi ex CP 157 0900-0200.
- 720 CP148 R. Yungas 0900-1700 and 2100-2330 with 1.5 kw.
- 730 CP165 R. Mensaje 0930-1230 and 2300-0200.
- 1420 CP49 R. Centro 1000-0230 with 10 kw. (Arctic 9/21)

Brazil. ZYK270-620 R. Pelotense will increase to 10/1. ZYJ451-710 R. Dif. Carioca ex 720 with 10/.25. ZYJ478-760 R. Federal now uses 25/1 kw. ZYH589-810 R. Verdes Mares has gotten permission to go to 50/5 kw. ZYK687-840 R. Bandeirantes has permission to use 50 kw fulltime. ZYH592-860 R. Hoje ex 1520 R. Iracema de Fortaleza, Maranguape now can use 10/.25. ZYK201-570 R. Caicara now can use 50/10. ZYH...-1010 R. O Povo, Fortaleza new with 50 kw. ZYK531-1020 R. Educ. de Limeira ex 1010. ZYH708-1080 R. Capital can use 50/10. ZYJ245-1080 R. Cult. Norte Paranaense ex 1470. ZYL...-1080 R. Em. Lagoa da Prata ex 1480. ZYH455-1090 R. Jornal de Ilheus ex 1420. ZYK249-1170 R. Itai ex 880 with 10/2. ZYK233-1250 R. Dif. Caxiense can use 10/.25. ZYJ235-1300 Soc. R. Princese can use 10/.25 kw. ZYK260-1330 R. Independente can use 5/.25 kw. ZYJ265-1360 R. Pato Branco ex 1520 (10/.25). ZYK691-1410 R. America can use 50/10. ZYI...-1440 R. Bela Vista ex 1490. (Arctic Brazil. ZYK277-640 R. Dif. Portoalegrense now uses 50/10 kw. ZYK691-1410 R. America plans to increase power to 50 kw. ZYH707-980 R. Nacional de Brasilia uses 600 kw at various times during the day, e.g., whenever there is soccer on 11780 and 15445. Brazil. ZYK240-1010 R. União ex União R. Clube now uses 50 kw. R. Tabajara ZYI786-1110 now uses this call. ZYL-1560 R. Treze de Junho, Mantena is now on the air. ZYK670-1570 is on the air. (Arctic 9/12) R. Inconfidencia-1330 with 5 kw in Umuarama is new. (SCDX 9/9)

Brazil. Radiobras, the government broadcasting agency, plans to have all their MW stations on 980 and 1130 only. R. Nacional will soon become a national coverage station, with just separate local outlets for news, weather, traffic, etc. R. Nacional do Rio de Janeiro and Brasilia will operate during the day on 1130 and 980 respectively; only Brasilia will remain on at night with 600 kw, programming originating in Rio. At present both stations are on 24 hours. R. Ipanema in Rio is presently on 980. Incidentally, R. Nacional is the only station in Rio playing exclusively Brazilian music. All other stations seem to play more US and British pop music. (Arctic 12/14)

Cayman Islands. Radio Cayman now operates 1100-1430 and 1700-0430 (Sun. 1100-1330). The station has received over 400 reception reports. QSL letter and tourist brochures are sent in return. (Arctic 9/21)

Chile.

820 CA82 R. Nacional de Chile ex R. Regional.
840 CA84 R. Pampa ex 820.
840 CD84 R. Santa Maria, Coyhaique new with 10 kw.
1330 CB133 R. Panamericana 1030-0700.
1330 CD133 R. Vicente Perez Rosales ex R. Regional 1100-0400.
1340 CA134 R. Nacional de Chile ex R. El Toco, 1 kw.
1360 CA136 R. Continente ex R. Freirina.
1450 CD145 R. Arauco, Angol, new 0.25 kw.
1470 CB147 R. Sargento Aldea ex 1570.
1480 CB148 R. Chena, ex 1250, 1100-0300.
1490 CA149 R. Alicante, El Salvador, new 1 kw.
1510` CD151 R. Teniente Merino ex 1580. (Arctic 9/21)

Chile. R. Vicente Perez Rosales-1330 CD133 is off; a new station in the city will be on the same frequency. CA134-1340 R. El Toco ex R. Nacional de Chile ex R. El Toco. CC135-1350 R. Central ex CC156-1560 now uses 1 kw. CA140-1400 R. Doña Inez de Suarez has lost its license. A new 1 kw station in Concepcion will use the frequ. CB106-1060 R. Mineria now uses 100 kw. CB82-820 R. Manu-Kena, Isla de Pascua (Easter Island) uses 1 kw. (Arctic)

Colombia. The new network Grupo Radial Colombiano now consists of: HJEL-620, R. Ciudad de Cali; HJLT-1550, R. Farallones; HJC0-1130, Em. Eldorado; HJFA-1340 (reported on 1480), R. Olimpica de Barranquilla; HJQZ-1580, R. Principe; R. Olimpica de Cartagena (unknown frequency); R. Sintonia de Manizales (HJNL, R. Sintonia, Villa Maria?).

Colombia. HJNQ R. Almirante ex HJZW. HJFO-1390 La Voz de los Andes now uses 5 kw. Radio Sistema Federal now consists of HJNZ-1440 R. Popular, HJDN-1530 La Voz del Cine; HJXZ-1560 Emisora El Poblado (ex Nuevo Medellin) and HJIP-1590 La Voz de la Musica (ex 1570). Grupo Radial Colombiana (CRC) is led by HJEL-620 R. Ciudad de Cali. Other stations are HJCO-1130 Em. Eldorado; HJTI-1130 R. Tonchala; HJLM-1380 R. Rombos; HJNL-1450 R. Sintonia; HJHH-1450 R. Oriente, HJHK-1510, R. Panamericana (ex La Voz Panamericana); HJLT-1550 R. Color; and HJ.. R. Farallones — FM). HJOV-1180 R. Cultural Surcolombiana ex R. Surcolombiana. HJMC-1290 Em. de la Fundacion Carvajal ex R. Libertador. HJHK-1510 R. Panamericana ex La Voz Panamericana. HJZU-1340 R. Nanino ex 1340. HJNQ-780 R. Almirante has been heard here, ex 1200 or a relay? HJDT-1180 R. Nutibara has been heard here ex 1170. (Arctic 4/18 to 8/15)

Colombia. HJFY R. Avenida-1390 ex 1370 has been heard in Scandinavia by several. (Arctic 12/14)

Colombia. HJNS-740 R. Guatasuri now uses 50 kw. HJLB-1170 Em. Meridiano 70 now uses 10 kw. HJEQ-1370 La Voz del Cauca uses 5 kw per RCN. HJTZ-1480 R. Palonegro uses 5 kw per RCN. HJLP-1560 R. Espacial is on 24 hours with 5 kw per RCN. Cadena Radio Super has reported that the government has annulled the decree prohibiting private stations from transferring licenses to one another. The decree prohibiting the inheritance of stations has also been revoked. Transfers, all requiring government approval, could take place only if ten years had passed since the license was granted. Ministerial approval was also needed for any changes in the administrative control of the concession of radio frequencies. (Arctic 8/29, 9/12, 10/10) Radiodifusora Nacional is carried by 550 in Medellin, 560 in Tunja, 570 in El Rosal (Bogota), 680 in Zambrano, 1000 in Manizales, and SW. (SCDX 10/7) Colombia. Radio Cadena Nacional has signed a contract with Harris Corporation for \$800,000 worth of equipment, including 13 ten kw. AM transmitters. HJBZ-1090 Ondas del Riohacha ex 1440. HJZY-1390 R. Lemas ex 1385. (Arctic 11/21)

790	HJBW	Emisora de Atalaya ex R. Atalaya.
1060	HJGU	R. Bucarica ex Armonias del Bucarica.
1090	HJBC	La Voz de Cucuta now uses 15 kw.
1100	HJGI	Em. Jose Antonio Galan ex 1360.
1110	HJZE	R. Piragua uses 20 kw per Dave Gleason.
1200	HJZW	R. Almirante uses 30 kw per Cesar Objio. Sometimes IDs as La Voz del Oriente.
1260	HJDV	R. Cacique uses 10 kw.
1400	HJAS	R. Universal ex Em. Variedades.
1480	HJTZ	R. Palonegro located in Bucaramanga; transmitters in Lebrija.
1570	HJHF	R. Andina unknown in Giron; probably not on yet.
550	HJ..	R. Dif. Nacional de Colombia ex R. Nacional.
570	HJND	R. Dif. Nacional de Colombia ex R. Nacional.
580	HJHG	R. Dif. Nacional de Colombia ex R. Nacional.
680	HJBU	R. Dif. Nacional de Colombia ex R. Nacional.
1000	HJHF	R. Dif. Nacional de Colombia ex R. Nacional.
1170	HJJY	R. Lemaya 1000-0300 with 10 kw.
1230	HJBR	R. Unica 1100-0600 with 15 kw.
1250	HJCA	R. Capital uses 15 kw.
1330	HJNR	R. Guamenta ex 1420, 0900-0400 with 10 kw.
1340	HJFA	R. Olimpica ex 1480 per Richard Clark; back on nominal frequency.
1510	HJBV	R. Canoa; assigned to 1540 ex 1510.
1520	HJLS	R. Popayan 24 hours with 5 kw.
1530	HLGD	Reina de Colombia 0830-0300 with 5 kw.
1550	HJZI	R. Fantasia now 15 kw. (Arctic 7/13, 8/24)
1390	HJ..	R. Universal, Barranquilla seems to be new station heard around 0400. (E.T. Filho, Brazil, via SCDX 8/7)

Costa Rica. TILX-725 now 20 kw. TIRA-755 La Voz de la America Latina now 10 kw. TICM-900 R. Metropolis ex Estacion M. There is a new station on 1025 besides R. Fides, TICAC. The new station is somehow connected with R. Fides and is called R. Talamanca, in Amubra, Talamanca. Cultural, directed to Indians in the area. TICA-1160 R. Columbia, Puntarenas is now 3 kw. TIBSB-1200 R. Original, Curridabat ex Radio BB. TILQA-1500 Radio Cina, Ciudad Quesada has this new prefix. TIFQ-1560 R. Nicoya has 5 kw. The government is studying legislation to set up small stations on 1600 kHz in rural areas. (Arctic 9/26)

975	TIRS	ABC Radio, San Jose, ex Radio Centroamericana.
1200	TIBB	Radio Original, San Jose, ex Radio BB.
1500	TIASF	R. Cima, San Carlos
1560	TIFQ	R. Nicoya, Nicoya, 5 kw.
1580	TIMS	R. Liberia, Liberia, 1kw. (Arctic 9/21)

Cuba.

570	CM..	R. Rebelde, Isla de Pinos, 10 kw	1140 CMCH R. Cadena Habana, La Habana here ex 790
580	CMAN	R. Rebelde, Pinar del Rio ex 550	1140 CMJK R. Camaguey is gone.
600	CMW	R. Rebelde now used for EE pgms.	1160 CM.. R. Cadena Habana QTH is San Nicolaus
670	CMKP	R. Progreso, San Pedro de Cacocum in WRTH should simply be Cacocum	1200 CM.. R. Guanabo, new, here
850	CMDF	R. Manzanillo here ex 1590	1260 CMAX Reloj Nacional QTH is La Palma
920	CMGB	Reloj Nacional, Cardenas ex 1560	1270 CMGH R. Victoria de Giron, Torriente, ex R. 26
1030	CMAJ	R. Guama WRH is La Palma	1310 CM.. Dobleve QTH is Sagua La Grande
1050	CMKT	R. Victoria QTH is simply Victoria	1330 CMCE R. Artemisa believed here ex 1160
1070	CMKS	R. Popular //1060 from Baracoa, CMDX ex 1419 khz.	1450 CMJD R. Maboa QTH is Amancio
1110	CM..	R. Angulo QTH is Moa	1460 CMBG R. Popular, La Habana
1120	CM..	R. Cadena Habana new outlet from Artemisa	1578 CM.. R. Cadena Agramonte QTH is Santa Cruz del Sur
(Ron Schatz, NRC via Arctic 3/22.)			

Honduras. UNESCO has given the Secretariat of Culture and Tourism a station which will be able to be heard by population living on borders with El Salvador and Guatemala. R. Honduras plans new MW transmitters and relay stations in Juticalpa, Nacaome, and Nueva Ocotepeque, and repair of relays in La Ceiba, San Pedro Sula and Santa Rosa de Copan. (Arctic 3/7)

650 HRVW La Vox de Centroamericana, San Pedro Sula ex 1195, ex 1190. 50 kw, 1100-0600.
1190 HRJS R. Eco, San Pedro Sula ex 740. Power increase to 10 kw, 1100-0600.
1240 HRZC R. Monumental, Tegucigalpa, ex 1230, 1 kw, 1200-0400.
1450 HRRD R. San Isidro now 2 kw. (Arctic 9/21)

Netherlands Antilles. PJC9-1500 Radio Hoyer, Willemstad has a new transmitter of 3 kw, ex 1 kw. (Arctic 5/30) PJD2-1300 is now Sunshine Radio, Philipsburg. (Arctic 10/19)

Nicaragua. Radio Sandino, YNX-750 ex Estacion Equis, Managua, has announced the formation of a Sandinist Broadcasting System with the following stations: Radio Venceremos, Leon (ex Radio Ondas Populares); Radio 19 de Julio, Chinandega; R. Insurreccion, Matagalpa (ex R. Monumental); R. Pancasan, Jinotega; R. Revolucion, Chontales; R. Liberacion, Esteli; Radio Libertad, Jinotepe; and Radio Sonido Popular, Santa Teresa. A newsprogram entitled "El Atabal Sandinista" is carried by the network. (Arctic 11/16) Frequencies for the various stations not given. Ed.

Nicaragua. Official state voice is now called La Voz de Nicaragua, rather than Radiodifusora Nacional de Nicaragua. Station is now repairing damaged equipment. Plans to set up a 10 kw transmitter on the Atlantic coast to improve coverage there. Also plans to send in English. Can be heard on 620//5950//11740. (SCDX 10/2, 10/9)

Nicaragua. Radio Sandino has said that a new local station in Ocotal has begun. R. Zinica in Bluefields will begin on MW to improve coverage on the Atlantic coast. (Arctic 9/ Radio Deportes-680 might be forced to cease operation because of lack of funds. It would need more support in the form of ads or aid from the Sandinist Communications Network. (Arctic 5/30) YNCR-620 La Vox de Nicaragua, Managua ex YNM. (Arctic 5/19) Telecommunications magazine for April included an article on Voz Educativa Regional in Puerto Cabezas near the Caribbean coast. The station has been on the air since May 1979 with 2.5 kw into a vertical antenna made of water pipe. Frequency is apparently 1580. Station is on the air 9 hours a day with "3 hours off in the morning for programming and news-gathering." Programs are aired in EE, SS, and Miskito. Has been heard as far away as Lempira, Honduras (90 miles) and Bluefields, Nicaragua (140 miles). Article indicates that 30% of their potential audience have AM radios and 90% have accesss to radios. Programming is about 40% educational, 60% popular. (Portzer)

Panamá. HO...-800 R. La Existosa, Chitré now 10 kw. HOF-965 Onda Popular, Panama, unheard since 6/80. HOS56-980 R. Mía, David now 10 kw. HOF2-1020 Onda Popular, Colón unheard since 6/80. (Arctic 10/24) HO...570 R. Uno, Panamá new. HO...-630 R. Provincias, Chitré, new, 10 kw. HOC-810 R. Mundial, Panamá ex R. Latina. HOS56-930 R. Mía, Los Santos, ex 920. HOU4-990 ABC Radio, Panamá. HO..1400 La Voz del Tonosi, Tonosi, new. (Arctic 11/21)

Panama. HOB33-810 RPC Radio, Bocas del Toro ex 660, //610. HOL81-890, R. Guaymi David ex 870 (SER); HO...-910, R. Urraca, Santiago de Veraguas (SER); HO...-910 R. Libertad, Bocas del Toro. HOL47-770 Servicio Nacional de Radiodifusion Razuero, Chitre is on 24 hours. HOK36-1000 R. Poderosa, Chocle, ex 1020. (Arctic 7/4, 8/1)

Panama. ABC Radio, San Miguelito-990 is now conducting regular programs from 1045-0500. (Arctic 5/31)
720 HOB50 R. Republica, Chitre, now 10 kw.
740 HON26 R. Cristal, David, with 5 kw.
1025 HOU La Voz del Baru, David now has 5 kw.
1060 HO... R. Victoria, new reported here. More information needed.
1200 HOOT69 Onda Tropical heard on 1197; 5 kw, 1000-0400. (Arctic 9/21)
570 HO.. New commercial local station heard testing here at 0230. (Manuel Varela, Perejil, Pana ma, via SCDX 8/28)
940 HOX R. TV-2, Panama announced it would be 24 hours as of 6/1 instead of 1130-05. (Arctic 8/24)

Paraguay

780 ZP70 R. Primero de Marzo operates 1000-0700.
820 ZP27 R. Mbaracayu is here on its official frequency, ex 805. (Arctic 7/13, 8/2)
730 ZP7 R. Guarani uses slogan "La Voz de la Raza."
780 ZP70 R. Primero de Marzo temporarily uses 10/5 kw. Official power is 25/5. "La Radio Total."
890 ZP16 R. Presidente Stroessner: 25 kw 0900-1200; 1 kw 1200-2100; 25 kw 2100-0425.
1120 ZP24 R. Nuevo Mundo now uses 10 kw. S/on 1000.
1200 ZP11 R. Charitas will use 10 kw from November. (Arctic 9/21)

Peru

740 OAX6C R. Continental broadcasts 24 hours.
900 OBX4X R. El Sol broadcasts 1200-0545.
580 OAX2E R. Maranon ex 1180, 1100-0300 except Sundays 1100-2000. 10 kw.
1260 OBX6D R. Mundial 1000-0500, 1 kw. (Arctic 7/13, 8/24)
OCX4D on 1471 ex 1470, R. Huancayo. (Arctic 5/31)

Puerto Rico. The number one station in P.R. is WKAQ-580 with 10.1% of the audience. Number two is WQII with 8.2%. WQBS-630 and WAPA-680 are now AN7 with disco. WOSO-1030 is now off nights for economic reasons. (Arctic 5/31)

St. Kitts. ZIZ-555, Basseterre IDs as "This is ZIZ, St. Kitts" or "ZIZ Radio 5-55, the voice of the Eastern Caribbean." (Arctic 11/16)

St. Lucia. Radio St. Lucia-625 has a relay here with 1 kw. Future plans are 10 kw on 625. (Arctic 11/16)

Surinam. A common practice for all stations is a 15-30 minute delay from official scheduled programs.

725 PZX26 Stichting R. Omroep Suriname 0930-0430 (Sat 0930-0630). Will introduce a 24 hour weekend service shortly. Has a warm-up period of about 30 minutes before official s/on; non-stop music in this period. (Arctic 7/13)

Uruguay

Three new transmitters are being constructed to improve the output of SODRE, 200 kw for 650 khz; two of 50 kw for CX26 on 1050 and CX38 on 1290. (SCDX 8/21)

770 CX12 R. Oriental operates Mon-Sat 0745-0300; Sun 0900-0300.

810 CX14 R. El Espectador will increase power in the future.

850 CX16 R. Carve 0900-0500.

1010 CX24 R. El Tiempo 0900-0300.

1170 CX32 Radiomundo s/off 0500.

1330 CX40 R. Fenix 0900-0600.

1490 CX149 Bc. Agradecida 0700-0200.

610 CX4 R. Rural uses 25 kw, 0930-0200.

970 CX22 R. Universal now uses 10 kw.

1130 CW31 R. Salto 1100-0300.

1320 CW39 La Voz de Paysandu 0900-0400 with 2 kw.

1370 CX32 Em. Ciudad de Montevideo 1000-0500. (Arctic 7/13, 8/2, 8/24)

1210 CX34 R. Artigas still inactive.

1370 CX42 Em Ciudad de Montevideo now affiliated with ANDEBU.

1450 CW145 R. Arapey still inactive.

1490 CX48 R. Acuario still inactive.

1540 CX154 R. Olímar still inactive. (Arctic 9/21)

Uruguay. All private stations except CX6, CX26, and CX38 S.D.D.R.E., CX146 R. José Batlle y Ordóñez, CX40 R. Fénix, CX160 R. Litoral and CX121 Dif. Soriano are affiliated with ANDEBU. All ANDEBU affiliated stations carry a program daily 1448-1500. CW145-1450 R. Arapey is closed. CX157-1570 R. Canelones is active, despite early reports of its shutdown. The same is true for CW159-1590, Lascano. (Arctic 8/29)

Venezuela. La Voz de Venezuela, according to a press release, will be one of Latin America's principal stations and the most important one in Venezuela. The station will be located on the Paraguana peninsula at Cape San Ramon and Punta Tomatey. Transmitters are already in Punto Fijo, to cover the entire country during daytime with 1000 kw; at night broadcasts will be directed toward the Caribbean, Central America, and Andean pact countries.

R. Aeropuerto-910 YVRQ will probably increase its power to 50 kw in the near future.

(ARctic 11/16) R. Republica-1120 ex 1310. (Arctic 3/7)

Venezuela. R. Nacional de Venezuela operates the following stations: 630 Caracas Canal Ligera, 710 Maracay, 770 Carabobo, 1050 Caracas Canal Música Clásica, 1120 Estado Apure, 1310 Barcelona and 1500 Barquisimeto. YVJR-1130 R. Melodía ex 1600. YVZJ-1400 ex R. Juvenil, now R. 1400. YVFR-1440 R. Orituco ex YVRF.

(Arctic 9/; YVNB-820 La Voz de la Sierra, Churuguara used to be on 1280, but seems to have moved here. Power is said to be 1 kw. YVLF-1290, R. Puerto Cabello now uses this slogan again according to several listeners. (Arctic 12/14)

Venezuela. Venezuelan news agency reported that the Director of R. Nacional had announced that a single organization made up of R. Nacional, R. Contíente, the cultural radio stations, and La Voz de Venezuela would be created to present the country's image, with emphasis on education and information. Equipment for La Voz de Venezuela is already in Paraguana, Falcon State. Transmitter is being built now. (ARctic 5/31)

YVKU R. Libertador 880 ex 870; YVJC R. Fantasia ex R. Independencia. (NZDX 6/79)

AM STATIONS IN MEXICO

This list includes all AM stations in operation, authorized, or under construction as of September 1, 1981.

The list is organized as follows. Column 1: frequency. Column 2: call letters; all Mexican AM calls begin with the letters YE, which have been left off this list in order to save space. Column 3: City, names in parentheses are transmitter locations, if different from the studio location; abbreviations: Cd=Ciudad, Pte=Puerto. Column 4: Estado (state) AGS-Aguascalientes, BC-Baja California, RCS-Baja California Sur, Camp-Campeche, CHIS-Chiapas, CHIH-Chihuahua, COAH-Coahuila, COL-Colima, DF-Distrito Federal, Dgo-Durango, Gto-Guanajuato, GRO-Guerrero, HGO-Hidalgo, JAL-Jalisco, MEX-Mexico, MIC-Michoacan, MOR-Morelos, NAY-Nayarit, NL-Nuevo Leon, OAX-Oaxaca, PUE-Puebla, QRO-Queretaro, QRO-Quintana Roo, SLP-San Luis Potosi, SIN-Sinaloa, SON-Sonora, TAB-Tabasco, TAM-Tamaulipas, TLX-Tlaxcala, VER-Veracruz, YUC-Yucatan, ZAC-Zacatecas. Columns 5 & 6: day and night power, respectively, in kilowatts. Column 7: slogan(s): LV-La Voz, R-Radio, MX-Musica, EMIS-Emisora, STN-Estacion. Column 8: miscellaneous information, including: Schedules: times are in UTC, AN indicates 24 hour operation, zeros have generally been omitted (i.e. 12-6=1200-0600) in order to save space, "s/on" & "off" times in HC may be an hour later during the summer due to daylight saving time.

Facilities: most stations are nondirectional (R1/U1) except as follows - U3-daytime only with directional array, U2-nondirectional days/directional nights, U3-directional day/night with same pattern, U4-directional day/night with different patterns, U5-directional days/nondirectional nights, N2-nighttime only with directional array.

Construction Permits: UC means the station is under construction and not yet on the air; CR means the station is planning to change freq, power, or antenna, to that indicated; PU means the station is currently operating with the frequency or power indicated.

Shortwave Parallelis: indicated by "SW" followed by the freq in KHz.

Verifications: VI-letter, VU-card, VP-prepared card; the absence of this notation doesn't mean the station doesn't answer reception reports, and the presence of it doesn't mean it will answer your report, but it does indicate the station has verified for someone recently.

Formats: organized in to the following broad categories:

FZ="Easy"-may include soft instrumentals, romantic vocals(in EE or SS), light classics, etc.

UP="Up-tempo"-generally aimed at teens and/or young adults, can include juvenil and rock mx (in FE or SS), up-tempo pops, soul, disco, etc.

EC=Educational/Cultural-noncommercial format, generally operated by a university or local government, can include classical/folk/jazz mx, discussion pmms, etc., similar to their US & Canadian counterparts.

PA=Ranchera mx, possibly with folk or nortena mx thrown in.

TR-Tropical mx

MZ=Mexican mx, almost exclusively Mexican artists or styles(Mariachi, Nortena, ranchera, and local or regional music)

VA="News", predominantly news, sports, novelas (soap operas), discussion, telephone talk, etc. May include several hours a day of music, but the main emphasis is on the spoken word.

EE-English language full or part time; includes-XETRA-690(FE rock full-time), XEG-1050(soul/gospel mx 0500-0900), XEPRS-1090(rock oldies 0200-1100), XAFR-1570(religious/gospel programs every evening).

Networks: "S-Notisistema, RCN-Radio Cadena Nacional, RPM-Radio Programas de Mexico.

540 AM Monterrey	NI	.5	.5	LV de America Latina	rXEW-900
540 AM San Luis Potosi	SIP	150	150	LVde America Latina	rXEW-900,VQ,11-7
550 PL Cd Guanutenoc	Chih	.5	.15	R Exitio	12-6
550 ACU Acapulco	Gro	.5	.25	La Maquina Musical	12-6
550 GUZ Cd Guzman	Jal	.25	.25	La Cotorra de su R	12-6,NS,TR
550 INC Irapic	Nay	10	.15	R Atlan	U5,EC
550 UC Tehuantepec	Oax	1	.25	R Felicidad	12-5,TR
550 KL Jalapa	Ver	1	.25	R Moderna	13-4,EZ
550 QW Merida	Yuc	5	.35	La Poderosa	1130-330,RA

560 HA	Tecate	BC	.25	.25	
560 UC	Mexico	DF	1	.5 R Chapultepec	12-7
560 QRA	Chetumal	JR	.2		
560 YD	Huatahampa	Son	1	1.5	
570 TJ	Torrecon	Coah	1	.25 P Romantica	1245-6
570 LQ	Morelia	Mich	1	1 La Iluressa	12-6
570 BJB	Monterrey	NL	5	.25 La Dona de la mx Nortena	12-6,PA
570 QA	Oaxaca	Uax	5	.25 R Oaxaca	12-5
570 VJP	Villa de Juarez	Pue	.25		
570 NZ	Culiacaan	Sin	1	.25 Super sonido	13-7,JP
570 VX	Comalcalco	Tab	1	.25 R Chontalpa	12-4
580 UF	Fuxtila Gutierrez	Chis	5	.2 R Internaciona	12-6
580 FT	Chihuaua	Chih	5	.25 P Mexicana	AN,VP,RA
580 BH	Piedras Negras	Coah	5	.25 La Rancherita del Aire	12-5,PA,VI
580 AV	Guadalajara	Jal	10	1 Canal 5,R Guadalajara	12-6
580 YT	Cancun	GR	1	R Emisoras Peninsulares	12-4
580 HP	Cd Victoria	Iams	1	.15 P Exitos	12-4
580 DZ	Cordoba	Ver	1	.45 P Ondas	12-4
590 PH	Mexico	DF	5	5 La Pantera,P 5-90	12-6,UP
590 E	Durango	Dgo	1	.15 R Valerades,R Durango	
590 HQ	Hermosillo	Son	1.5	1.5 P Hermosillo, H-Q	RA, RPM
590 FD	Rio Bravo	Iams	5	.25	
600 PAC	Palenque	Chis	.5	.1	
600 DN	Torrecon	Coah	1	1 P-N,La Rancherita	12-5,ME
600 GTU	Guanajuato	Gto	.25	.25 P Capital	13-1,UP
600 BB	Acapulco	Gro	5	1 PCN de Acapulco	12-4,RCN
600 TA	Zitacuaro	Mich	.5	.15 LV de Zitacuaro	13-4
600 MN	Monterrey	NL	.5	R Sensacion	EZ
600 Z	Merida	Yuc	5	1 P 600.La Stn de Robie Impacto	12-4
610 BX	Sabinas	Coah	.5		11-6
610 UF	Uruapan	Mich	5	1 P Uruapan	12-6
610 KZ	Tlancantepec	Dax	5	.5 LV del Istmo	12-3
610 GS	Guasave	Sin	1	.5 La G-S,R Alegría,R Guasave	1230-6
610 CV	Cd Valles	SIP	1	.25	12-5
610 JA	Jalapa	Ver	1	.5 R Fiesta	12-5,IR
610 EL	Fresnillo	Zac	1	.15 R Progreso	12-6,UA
620 BH	Chihuaua	Chih	5	.25 La Nortenita,La B-U	12-7,ME,VL
620 NK	Mexico	DF	10	5 R 6-20	13-7,EZ
620 CK	Durango	Dgo	1	.5 R Exitos	13-5
620 GN	Tepic	Nay	1	.25 XE-doble=0,Onda	620 13-R,NS
620 KY	Pto Carrilic	GR	1	.25	
620 ACM	Villahermosa	Tab	5	.1 P Pueblo	12-0,UP,US
620 GH	Rio Bravo	Iams	.25	G-H	11-
630 IS	Tapachula	Chis	1	.5 P Tapachula	12-3
630 ACA	Acapulco	Gro	5	.25 LV de Acapulco,P ACA	12-4,RCN
630 JR	Guadalajara	Jal	1	.5 Rdifs Culturales	EC
630 FR	Monterrey	Mich	5	1 La Stn que da las Noticias	12-6,IVX
630 IK	Mazatlan	Sin	5	.25 La I-K en Mazatlan	13-5,UP,VL
630 FX	Guaymas	Son	1	.25 Canal 63	13-7
630 FU	Cosamaloapan	Ver	5	.75 LV Amigadela Cuenca del Papaloapan	12-5
640 WM	San Cristobal Las Casas	Chis	1	R 640	
640 EMM	Salamanca	Gto	1		D3,CP1210
650 SJ	Pto Vallarta	Jal	.25	R Paraíso,X-dorie-E-J	12-1,CP740
650 ZM	Zamora	Mich	5	R Amistad	1230-1
650 INT	Los Mochis	Sin	1	P 65	13-3,RA,VL
650 VG	Herida	Iuc	.25		D3,UC
660 ACB	Cd Delicias	Chih	1	R 6-60	13-2,VL
660 RPM	Mexico	DF	50	5 La Tropicana de Oro	12-8,TR,VL,U2
660 WX	Durango	Dgo	.25		UC
660 YG	Matias Romero	Gax	.25	F 6-60	1130-1
670 TOR	Torrecon	Coah	1	P Fanchito,X-E-Tor	12-1,RA
670 IS	Cd Guzman	Jal	5	Onda 6-70	12-1,NS,PA
680 KQ	Tapachula	Chis	5	.5 R Soconusco	12-5
680 FO	Chihuaua	Chih	1	P Sensacion,La F-O	11-3
680 LG	Leon	Gto	10	5 L-G,La Grande	AN,U2
680 NF	Tepic	Nay	.25		IC
680 FJ	Teziutlan	Pue	1	.1 P Teziutlan	12-4
680 JRD	Guasave	Sin	1	P Bonita,Oro,R Favorita	12-6,ME,CPU2
680 LV	Hermosillo	Son	.25		
690 TPA	Tijuana	BC	50	50 Mighty 690	EE,UP,AN,U4,VQ
690 N	Mexico	DF	20	5 P Mundo	
690 RG	Monterrey	NI	.5	.2 P 6-90	12-6,CP2.5/.5
690 TRW	Progreso	Yuc	50	50	U4,UC
690 MA	Fresnillo	Zac	5	.25 R Optimista	12-5

700 DN	Moraleon	Gto	.25			
700 DKR	Guadalajara	Jal	1	Super Sambrosa	12-1,UP,RPM	
700 VC	Cordoba	Ver	.5	P Cordobesa	13-1	
710 DN	Tuxtla Gutierrez	Chis	3	1 La Nueva XEON	AN,ME	
710 CD	Cd Cuauhtemoc	Chih	5	La Grande,R Cuahutemoc	12-	
710 PO	Munizquez	Coah	.1	La Sta Gue piensa joven	AN,US	
710 RT	Colima	Col	.2	P Juventud	11-b	
710 MP	Mexico	DF	.5	La Sta con Ritmo	12-B,VL	
710 KH	Acanulco	Gro	.15	R Paraíso,R Kuku	12-3,RCN	
710 RK	Irapuato	Nay	.19	P Tepic	13-5	
710 PPU	Oaxaca	Oax	.5	P Variedades	AN	
710 BL	Culiacan	Sin	.25	P Bol,La Pancherita	13-7,RA	
710 PS	Guaymas (Empalme)	Son	1	25 R Amistad	13-7,VL	
730 X	Mexico	DF	100	100 P 73, La Equis	AN,U3,VL,NX	
740 LTZ	Aguascalientes	Ags	1	P Regional	13-4,ME	
740 BJ	Pto Vallarta	Jal	.1	R Paraíso,X-doble	E,J PO650	
740 FZ	Monterrey	SL	.5	P Kono	12-130,UP	
740 ED	Losochis(Topoloapanco)	Sin	.25	.25 La Zeta	13-7,UP	
740 KV	Villahermosa	Tam	.25	R Sensacion	AN	
750 KPK	Acapulco (Las Cruces)	Gro	10	P Koko	12-1	
750 JF	Loma Bonita	Ver	.5	P Loma	TR	
750 RA	San Cristobal de las Casas	Chis	5		12-4	
760 ARC	Hericolllos Reyes,Mex	DF	.25	5 R ABC International	AN,NX,VP,U4	
760 JGU	Durango	Dgo	1	P Capital	1230-0045,RCN	
760 ZZ	Guadalajara	Jal	5	Onda 76,Mx de Corazon	NS,VL	
760 CO	San Luis Potosi	SIP	.25	La Pantera	12-1	
770 HF	San Francisco del Oro	Chih	.5	R Frisco	13-2	
770 MI	Arauacan	Mich	1	P Tropical	12-1	
770 JK	Tamazunchale	SIP	1			
780 ZH	Celaya	Gto	.5	R Mundo	VL,UP	
790 XY	Cd Altamirano	Gro	1	LV del Balsas	PO1590	
790 LN	Autlan de Navarro	Jal	5	R Autlan,R Costa		
780 CNY	Coatzintla	Ver	.25			
790 BT	Aguascalientes	Ags	1	.25 La B-1	12-4	
790 SU	Mexicali	BC	1	P Exitos,R 7-90,Mx Moderna		
790 NT	La Paz	Ags	.5	.75 P La Paz	13-7,RPM	
790 RDC	Chihuahua	Chih	.5	.4 P Panchito	AN,VL	
790 RC	Mexico	DF	10	1 P Exitos	AN,UP	
790 GZ	Gomez Palacio	Dgo	1	.25 La Pantera	AN,UP	
790 LN	Linares	SL	1	P Linares	12-1,RA,CP1/.1	
790 VA	Villahermosa	Tam	.5	.25 R Tabasco,La Emis del Hogar	11-6,EZ	
790 FF	Nuevo Laredo	Tam	1	.5 Campeona en Auditorio	12-2,RPM	
800 AM	Izcalli	BC	1	.5 P 80,Unida Ranchera	14-0905,PA	
800 KTK	Cd Juarez	Chih	50	150 P Canon	AN,VQ	
800 ZV	Illescas	Gro	1	LV de la Montana		
800 AM	Ucician	Jal	1	Se Mejor Amigo		
810 IN	Cintalapa	Chis	1	.25 P Variedades	12-4	
810 UF	Tapachula	Chis	1	.15 P Amistad	12-3	
810 IM	Saltillo	Coah	.5	P Capital		
810 AGR	Acaulco	Gro	1	.15	UC	
810 UX	Tuxpan	Nay	10	.25	13-b	
810 RSV	Cd Ixmiquilpan	Son	5	.25 P Alegría	13-2,U2	
810 FI	Peyrosa	Tam	.5	P Impulsora,Canal 91	11-,IR,RPM	
810 FA	Famlico	Tam	50	50 P 80	12-4,U2	
810 GT	Huamantla	Tlax	.5	P Huamantla	12-1	
820 ESC	Francisco Escarceada	Camp	.75			
820 SR	Santa Barbara	Chih	1	R Mexicana	13-2,ME	
820 BS	Guadalajara	Jal	1	El Gallito de 82	CP10/D3,NS,RA	
820 KG	Corioba	Ver	1	R Variedades	13-1,UP	
830 LA	Mexico	DF	10	10 Buena Mx en Mexico	12-6,EZ,U4	
830 VG	Culiacan (Avolato)	Sin	1	La V-U,La Frecuencia de Oro	13-2	
830 JA	Zacatecas	Zac	1			
840 CJC	Campeche	Camp	.5		PO1580	
840 IN	Tuxtla Gutierrez	Chis	10		temporarily off	
840 FG	Celaya	Gto	1	R Juventud	11-130,UP	
840 TFY	Tepic	Nay	.5		UC	
840 MY	Cd Morelia	Tam	1	P Tamaulipas,R Tropical	12-1,TR	
850 ZF	Mexicali	BC	.5	La Rancherita Contenta	13-3,RA	
850 H	Chihuahua	Chih	5	La M,R Caribe	12-2,IR	
850 ZR	Zaragoza	Coah	.25	Z-R, Canal 85		
850 MA	Guadalajara	Jal	1	R Felicidad	12-1,PA	
850 JS	Hermosillo	Son	1	1 P Univ de Sonora	15-2,SW6115,VQEC	
850 IQ	Orizaba	Ver	10	10 P Orizaba	U2	

860 PLA	Aguascalientes	Ags	1	R Mexicana	12-4, RA, CP4/1/U2
860 MN	Tijuana	BC	5	5 P 86,Mx Moderna	AN, UP, VQ
860 ZDL	Cd Juarez	Chih	1	.5 P Zol	11-7, U2
860 AL	Manzanillo	Col	5	.5 La Onda de la Juventud	12-6, U5
860 JN	Mexico	DF	45	25 R Universidad	-7, U4, SW9600, VL, EC
860 DU	Durango	Ego	5	.5 D-ll, la que te Gusta	13-7, RCN
860 NL	Monterrey	NL	5	2 Canal 86,R Recuerdo	11-6, EZ, U2
860 NW	Culiacan	Sin	1	.25 La Mejor Stn del Cuadrante	12-7, ME
860 ZX	Tenosique	Tab	1	.15 Voz del Usumacinta	12-2
860 TW	Tamico	Iams	1	R Fiesta	12-1
870 AMU	Irapuato	Gto	1	Su Gallo, El Favorito	D3
870 LY	Morelia	Mich	1	L-Y,La Y,R Moderna	12-130
870 ACC	Pto Escondido	Oax	.25	IV del Puerto	13-1, CP, 5
870 NH	Mazatlan	Sin	1		UC
880 AAA	Guadalajara (Zapopan)	Jal	10	R Bonita	1230-0030, RA, VL
880 PNK	Los Mochis	Sin	5	Canal 98	12-3
880 EM	Rio Verde	SLP	1	La Rancherita	13-24
880 YR	Villahermosa	Tab	5		PO1340
900 W	Mexico	DF	250	250 LV de America Latina	AN, SW6165, NX
900 WR	VeraCruz	Ver	50	10 LV de America Latina	1XEW
910 AO	Mexicali	BC	1	.25 R Mexicana	AM, ME
910 ACN	Leon	Gto	.5	.1 R Universo	
910 MST	Mascota	Jal	.5	.25	DC
910 HO	Cd Moregon	Son	1	.25 P Centro	AN, RA, VL
920 VV	Tuxtla Gutierrez	Chis	5	.25 R Espectaculo	12-6
920 QM	Chihuahua	Chih	1	.1 La Divertida	12-7, LZ
920 OF	Monclova(Cd Frontera)	Coah	1	.25	12-6, ME
920 MJ	Piedras Negras	Coah	1	.25 R Popular Fronteriza	12-5
920 TAA	Torreon	Coah	.5	.2 P Exitos	AN
920 LT	Guadalajara	Jal	1	.25 Onda 92	AN, NS, UP, CP10/10
920 DK	Monterrey	NL	1	.25 El Riodazo Mexicana	12-6, RA, VL
920 CO	Culiacan	Sin	5	.1 R Culiacan, R C-Q	13-6, VL
920 BM	San Luis Potosi	SLP	5	.1 La Rancherita	12-5, RA, VQ
920 BH	Hermosillo	Son	5	.1 La H-R 9-20, R Moderna	13-6, RPM
930 KLA	Santa Rosalia	BCS	1		D3
930 GFM	Toluca	Mex	2		UC, N2, days on 1800
930 U	Veracruz	Ver	5	1 La 7, R Nucleo Oro	1130-6, SW6020, VG
930 IH	Fresnillo	Zac	5	.2 Nueva Dimension en Radio	12-5
940 NV	Mexicali	BC	1	Onda 94	15-3, RA
940 J	Mexico	DF	100	100 La w de Mexico	11-8, VQ
940 PKG	Reynosa	Iams	1	R Alegría	1230-1, UP, RPM
950 CAA	Aguascalientes	Ags	1	.1 P Calvillo, La doble A	12-4
950 GH	Tijuana	BC	10	10 P 95	II4
950 MAS	Cd del Carmen	Camp	1	.25	12-2, RCN
950 FA	Chihuahua	Chih	.5	.25 La Nueva F-A, R Kama	AN
950 LT	Nueva Rosita	Coah	10	10 R 95, LV de Amistad	AN, UP, U2, VI, CP, 5, .25
950 FY	Celaya (Cortazar)	Gto	.5		
950 RN	Montemorelos	NL	1	.18 R Naranjera	12-1
950 ZP	Oaxaca	Oax	1	.1 P Capital	U3, PD1120
950 DPF	El Fuerte	Sin	1	.5 P Centro	13-2, CP5/.5
950 CC	Cd Camargo	Chih	.25	.1 X-E-Doble-C	13-4
960 KS	Saltillo	Coah	1	.1	13-5, RA
960 CS	Manzanillo	Co	1	.2 La Grande	12-6
960 UQ	Zinuatanejo	Gro	1	.25 R Zinuatanejo	13-1
960 HK	Guadalajara	Jal	1	.25 LV de Guadalajara, E-H-K 1045-645, VL	
960 VM	Morelia	Mich	.5	.2 R Capital	12-6
960 PNU	Chetumal	GR	1	.5 La Pirata del Caribe	12-5, RPM
960 CZ	San Luis Potosi	SLP	.5	.25 R Felicidad	12-5
960 IZ	Cd Moregon	Son	1	.5 P T-Q	13-7
960 K	Nuevo Laredo	Iams	5	1 El Progenero del Bravo 1130-4, VL	
960 GR	Coatzacoalcos	Ver	1	.5 R Fiesta	12-6
960 QZ	Jalapa	Ver	1	.25 Un Sol de Alegría, Canal 96	12-6
970 J	Cd Juarez	Chih	10	5 R Mexicana, La J	AN, ME, VL
970 JX	Monclova	Coah	.5	.15 R Novedades, La Campeona	
970 DF	Mexico	DF	10	5 La stn del Distrito Federal	AN, U2, VL
970 UG	Guanajuato	Gto	.5	R Univ de Guanajuato EC	
970 CJ	Amatzinac	Mich	.5	.25 P Apatzingan	12-4
970 VOX	Mazatlan	Sin	.5	.25 R Voz,LV de Nuestra Mx	13-9, ME
970 EZ	Caborca	Son	.5	.1	14-6, RPM
970 VT	Villahermosa	Tab	5	.4 P Fiesta	11-5, IP
970 bJ	Cd Victoria	Iams	1	.2 Canal 97	12-445
970 U	Matamoros	Iams	1	.1 R Gallito	11-6, VL
970 "H	Merida	Yuc	1	.1 La Romantica	AN

980 ER	CD Cuauhtemoc	Chih	1	.2	R Formula	13-4, IDs as 990
980 RD	Nueva Rosita	Coah	5	.5	P N=R, La N=R	12-6, VL
980 JT	San Pedro de las Colonias	Coah	.5	.5		
980 LC	La Piedad	Mich	.5	.2	Canal 98	1230-5
980 XT	Lepic	Nay	1	1	X-T Internacional	13-6
980 UG	Queretaro	Gto	1	.15	Canal 98	12-4, U5
980 FG	Candrea	Son	1	.5	La F-U, LV de la Cd del Cobre	13-7
980 AE	Navajoa	Son	1	.25	La Favorita, La K-E	12-7
980 TM	Tampico	Tams	10	1	P Tampico	12-6, RPM, U5
980 QD	Cosamaloapan	Ver	5	5	P Romance	12-4, EZ, U2
980 JS	Fresnillo	Zac	1	1	Pomance en Radio	U2, PO1470
990 CL	Mexicali	BC	5	5	P Mexicali, Stn de Mas Exitos	13-5, UP
990 HZ	La Paz	BCS	1	.25	El Sonido de Nuestro Mundo	13-7, VL
990 EG	Tuxtla Gutierrez	Chiapas	10	10	La Grande de Suroeste	AN, U2
990 AC	Cd Guzman	Jal	1	.1	Mx de Peque	AN, NS
990 L	Monterrey	MJL	50	50	La T Grande	U2, AN, VP
990 LU	Uaxaca	Oax	1	.25	R Alegria	PO1160
990 UT	Tezuitlan	Pue	1	.2	P Impacto	12-4
990 JM	Valleolid	Yuc	1	.25	Canal 9-90, Radio 99	
1000 PV	Cd Juarez	Chih	1	1	R Rancherita	12-2, RA
1000 BY	Mexico	DF	10	10	R Mil	11-8, U2, SW6010
1000 JV	Hatimoros	Iams	.5			D3
1010 IX	Ensenada	BC	1	.25	R Variedades	AN
1010 LD	Chihuahua	Chih	1	1	El Lobo	
1010 TX	Unive Cases Grandes	Chih	1	.25	LV de la Sierra Madre	12-4
1010 AH	Ct Acuna	Coah	.5	.25	R Centro	13-6
1010 JK	Isla de Leon	Coah	5	1	R Felicidad	12-5
1010 BH	Guadalajara	Jal	10	5	Mx de Pegue, Ondal 1010	AN, NS, CPS0/5, VQ
1010 JS	Culiacan	Sin	5	.25	W-S-R Capital, R Fiesta	13-7
1010 EH	Cd Morenones(Fseveranza)	Son	.5	.25	La Rancherita	13-8, RA
1010 AH	Ures	Son	.5	.2	R Ures	13-3
1010 FM	Veracruz	Ver	1	.2	P Moderna	12-6, CPS5/1/U2
1020 XL	Patzcuaro	Mich	1	1	La Princesa del Lago	13-24
1020 LM	Uaxachte	Jax	2			UC
1020 JM	Chetumal	QR	1	1	P Continental, P Chetumal	
1020 KH	Queretaro	Gto	.5			
1020 SPA	NAC ISpania	Tab	1	.1		
1020 LD	Aldia	Ver	1	1	R Alamo	
1030 QD	Mexico	DF	10	5	P Centro, Canal 103	AN, VL
1030 VP	Acapulco	Gto	1.5			UC
1030 UT	Lagos de Moreno	Jal	1	1	P 10-30	13-1, RA
1030 VP	Ixtlan del Rio	Nay	.25			
1040 JV	Colima	Col	.25			
1040 SB	Salamanca	Gto	1			
1040 SB	Guanajuato (Zanoman)	Jal	5	1	Subsonido, Triple B	1230-0030, D3, UP
1040 JAG	Jalpan	Gto	.25			
1040 JU	Jalapa	Ver	1	1	La Pantera	13-1
1050 D	Mexicali	BC	10	1	La Grande D de Mexicali	AN, VL
1050 G	Monterrey	MJL	100	100	R Melodia, Gospel Giant	VQ, AN, TR/EE
1060 EP	Mexico	DF	50	50	P Educacion	EC, U2, VL, AN, SW6185
1070 ZD	Guerrero Negro	BC	1			
1070 LT	Cd del Carmen	Cerro	1	.25		12-4, RCN
1070 SP	Guadalajara(Izar'na)	Jal	10	1	R Juventud	13-7, UP, U2, VL
1070 JY	Izucar	Pue	1	.25	P Fiesta	12-6
1070 ST	San Luis Potosi	SIP	.25			
1070 JT	Minatitlan	Ver	.5	.1		11-6
1090 DC	Aguascalientes	AGS	.25			
1090 BY	Mexicali (Cd Morelos)	BC	.5	1	Canal 10-80, R Morelos	15-3
1090 DR	Pachuca	Chiapas	1.5	.15		
1090 JT	Cd Juanutepec	Chih	1			
1090 CH	Irapuato	Gto	1	1	Canal 10-80, R Juvenil	13-1, NS, UP
1090 AK	Pozza Rica	Ver	.5	1	P Mundo	12-2
1090 PRS	Bosquito	BC	50	50	Express	EE/UP, U2, AN, ME
1090 LR	La Barca	Jal	.25	1	P La Barca	13-3
1090 AL	Monterrey	MJL	1	.25	La U de Mexico, R A-U	12-6
1090 HP	Puebla	EUE	.5	.25	R Variedades	12-8
1090 WI	Nuevo Laredo	Tams	1	1	P Canon, La International	11-, VL, U2
1090 MCA	Panuco	Ver	5	1	La Emis de las Huastecas	13-1
1090 JD	Veracruz	Ver	3	1	R Juventud	13-1, UP, U2
1100 BV	Mexico	Gto	.5	1	R Alegria	
1100 BN	Perez	Ver	1	1	Canal 11	12-1

1110 TAK	Tapachula	Chis .75			
1110 JRP	Cd Juarez	Chih 1.5	La Campeona	12-2,UP	
1110 ES	Chihuahua	Chih 1	R Alegría	12-2	
1110 PU	Monclova	Coah .25			
1110 RFD	Mexico	DF .50	R Red,R Cadena	1145-7,NX,RPM,U2,VL	
1110 LFO	Leon	Gto .5	La Rancherita	13-1,RA,CPS/.25	
1110 PVJ	Pto Vallarta	Jal 1			
1110 VS	Hermosillo (Seris)	Son .25	R Variedades	13-3	
1110 SON	Navojoa	Son 1			
1110 JAC	Cardenas	Tam 1 .1		12-24	
1110 OO	Rio Bravo	Tam 1	La Tropical D-Q	-3	
1120 UNO	Guadalajara	Jal 1	R Centro,R Exitos	12-1	
1120 ZR	Oaxaca	Oax .5	R Capital	12-1,EZ	
1120 GV	Vilte de Pueblo	Oro .5	SonoImagen		
1120 TR	Cd Valles	SLP 1	R Panoramica	12-1	
1120 ZAZ	Zacatecas	Zac .25			
1130 EA	Cd Cuautitlán	Chih 1			
1130 CHG	Chilpancingo	Gro 1			
1130 FN	Uruapan	Mich 1	R Moderna	13-1	
1130 EF	Compostela	Nay 1	R Exitos,La E-F	12-2,VL	
1130 MOS	Los Mochis	Sin .5			
1130 HN	Noáles	Son 1	Padiorama	13-3	
1130 ZL	Jalapa	Ver 10 10	P Alegría	12-6,U2	
1140 XF	Leon	Gto 5	R Bajío	12-1	
1140 LAI	Morelia	Mich .25			
1140 MR	Monterrey	NL .50	La Nueva M-R	112,AN,UP	
1140 IF	Tuxtla Gutiérrez	Pue 1			
1150 RM	Mexicali	BC 1 .5	R Sensacion	AN?,U2	
1150 JS	Hidalgo de Parral	Chih 1 .5	P Panchito	1245-5	
1150 BF	San Pedro de las Colonias	Coah 1 .25	P Amistad	13-2	
1150 JP	Mexico	DF 10 10	P Variedades	AN,U2	
1150 AH	Guadalajara	Jal 1 .13	P Metropolt	AN,NS	
1150 XP	Ixtapa	Oax .5	P Tuxtepec	13-1,CPI/.1	
1150 SN	Cd Morelos	Son 5 .3	R Mexicana		
1150 RTA	Macuspana	Tam 1		12-5	
1150 IVR	Ixtapan	Ver 1			
1150 RPF	Mérida	Yuc 1 .35	Noble R-F,Onda 115	12-6,UP	
1150 XZ	Zacatecas	Zac 1 .2	R 11-50	12-5,RCN	
1160 VW	Acambaro	Gto 1	P Acamaro	13-130	
1160 IW	Uruapan	Mich 1		RCN	
1160 III	Oaxaca	Oax .5	R Alegría	12-0030	
1160 GI	Izamal	SLP .5			
1160 BE	Perote	Ver 1	P Perote	12-1	
1170 JVA	Acuascalientes	Ado 1	P Uva	MS,UP	
1170 MDA	Monclova	Coah .5			
1170 YL	Iguala	Gro .50	10	U4,UC	
1170 LP	La Piedad	Mich 2 .5	.1 Onda 11-70		
1170 CO	Puebla	Pue 1 .35	La Divertida, 11-70	12-6	
1170 RB	Cancún	BC 5 .1	La Onda Musical del Caribe		
1170 LR	Caborca	Son .25			
1170 RH	Heroisliche	Son 1			
1170 RT	Reynosa	Tam 5 .25	P Grande	1230-1,RA,RPM,VL	
1170 ZS	Coatzacoalcos	Ver .5 .25	P Felicidad,P Hit	11-6,VL	
1170 CH	Kapantla	Ver .25	P Internacional		
1190 FR	Mexico	DF 1 1	P Felicidad	12-9,UP	
1180 XV	Huatusco	Ver 1	P Accion	12-1	
1190 MRC	Mexicali	BC .5	P Variedades	13-6,UP	
1190 GJ	Atlixco	Chis .25			
1190 PZ	Cd Juarez	Chih 1	P Mortena	12-3	
1190 PK	Pachuca	Hgo .5	La Divertida,R Fiesta	12-1	
1190 WK	Guadalajara	Jal 50 50	La W de Guadalajara 11-7		
1190 SNL	Cd Midalgo	Mich .5		13-1	
1190 DN	Cuernavaca (Xoxocotla)	Mor 1	Provencia de Mexico	13-1,RA	
1190 CT	Monterrey	NL .5	Canal 11-90	CP.5/.2,ME	
1190 IV	Oaxaca	Oax .5		HC	
1190 VN	Noáles	Son .5			
1190 INT	Tambico	Tam 5			
1200 ITC	Celaya	Gto .25			
1200 ZI	Zacapu	Mich 1	Canal Festivo 120	12-1	
1200 WT	Culiécan	Sin .25		UC	
1200 PW	Poza Rica	Ver .25	Canal Tropical	12-2,IR	
1210 EMM	Salamanca	Gto .25		PO640	
1220 B	Mexico	DF 100 100	La B Grande	AN,ME,VL	
1230 SCL	Ensenada	BC 1 .25			

1230 EP	Jalisco	Zac	.1 .25	R Alegría	PO1590
1240 LM	Tuxila Gutierrez	Chis	.1 .25	P Chiapas	12-5
1240 BN	Cd Felicias	Chih	.1 .25	B-N,La Onda Feliz	13-4,RA
1240 AG	Ch. Juarez	Chih	.25 .25	La G Grande	AN,RKN
1240 VM	Piedras Negras	Coah	.25 .25	Canal 124	AN
1240 IC	Torreón	Coah	.3 .25	R Mayran	13-5,EZ
1240 RZ	León	Gto	.1 .25	P Amistad	12-6
1240 PMA	Atoyac de Alvarez	Gto	.3 .25	P Atoyac de Alvarez	
1240 EPA	Metella	Mich	.3 .25	R Ranchito	13-1,RA
1240 SI	Santiago Ixquitlán	Nay	.1 .3	S-T,R Afiración	13-5
1240 LZ	Monterrey	NL	.3 .25	R Éxitos	12-6
1240 CE	Uaxaca	Oax	.5 .25	R Felicidad	1130-6,ME
1240 HG	Huachinango	Fue	.1 .2	El Circuito de la Sierra	13-4
1240 NEF1	Los Mochis	Sin	.1 .25	R Peña	
1240 IF	San Blas	Sin	.1 .25		
1240 BG	Guámaras	Son	.1 .2	B-Q,La Chica Alegría	13-5
1240 CG	Nojales	Son	.1 .25	C-G,R Mexicana	13-7,ME,VL
1240 S	Tampico	Tam	.1 .25	R Jet	12-6,UP,RPM
1240 UV	Orizaba	Ver	.25 .25	O-V,R Moderna	13-4,UP
1240 AO	Merida	Yuc	.1 .25	Su Pantera	1130-6,SW6105,VL
1240 PC	Zacatecas	Zac	.1 .15	Sonido Estrella	11-8,EZ
1250 NG	Arriaga	Chis	.1 .25		
1250 AT	Hidalgo de Parral	Chih	.1	P Onda	13-3
1250 SC	Satínas	Coah	.1	P 12-50	
1250 ST	Saltillo	Coah	.5	P Saltillo	12-6,ME
1250 FT	Tixtla	Gro	.1	LV de Guerrero	12-5
1250 DK	Guanajuato	Jal	.5	1 Super Novelas,D-K	12-7,EZ,RPM
1250 ZT	Puebla	Fue	.5	1 La Maquinaria Musical	12-6,UP
1250 JN	Chetumal	QR	.25 .25		
1250 JX	Querétaro	Gto	.1 .25	R Dolar	12-4
1250 DL	Hermosillo	Son	.5 .25	D-L	13-5,RKN
1250 IR	Veracruz	Ver	.5 .25	P Jarocna	1130-6
1260 DG	Jilurada	Chih	.1 .25	P Ranchita	13-3,ME
1260 MF	Monclova	Coah	.25 .25	M-F,R Fiesta	12-6
1260 L	México	DF	.10 .5	R Capital	12-9,UP,U2
1260 ZH	Salamanca	Gto	.5 .25		
1260 R	Linares	NL	.1 .25		12-1
1260 SA	Culiacán	Sin	.5 .25	La S-A,R Acción	13-5,EZ,VL
1260 AP	Cd Valles	SIP	.1 .25	R Panchera	13-1,RA
1260 MW	San Luis Rio Colorado	Son	.1 .25	P Éxitos	PO1270
1260 MTV	Minatitlán	Ver	.1 .25		UC
1270 AZ	Ixtlán	EC	.5 .5	La Mx de Romantica,Z-13	14-8,EZ
1270 OH	Cd Camargo	Chih	.1 .15	R Canargo	13-1
1270 WN	Intérn (Gómez Palacio)	Coah	.5 .25	P Gallito,R Éxitos	12-8
1270 HP	Ururado	Gto	.5 .25		
1270 KPL	Lerdo	Gto	.5 .15	F1 Gallito de su R	AN,US,NS
1270 QH	Ixmiquilpan	Hgo	.1 .1		
1270 ZU	Zacapu	Mich	.5 .25	R Caravana	13-4,EZ
1270 AX	Caxela	Oax	.5 .25	P Fiesta	12-4
1270 NX	Mazetlán	Sin	.25 .25	Subersonido	AN,UP,CP1290
1270 GL	Navojoa	Son	.5 .25	La Triunfadora	12-7,RA
1270 NY	Nogales	Son	.1 .25	R Geny	12-7
1270 IW	San Luis Rio Colorado	Son	.1 .1	P Exitos	13-2,U2,CP1260
1270 VHT	Villahermosa	Tab	.5 .15		
1270 EPI	Parrico (Cd Hadero)	Tam	.5 .2	R Ranchito	AN,RA,RPM,US,VP
1270 PV	Ezapantla	Ver	.1 .25	P Alegría	12-3
1270 IW	Mérida (Uman)	Yuc	.25 .5	R Human	12-4
1280 CAM	Camerene	Camp	.1 .2	LV de las Murallas	12-5,RPM
1280 KY	Kuintla	Chis	.1 .1	LV de la Costa de Chiapas	12-4
1280 BW	Chiapas	Chih	.6 .25	Canal 12-80	AN
1280 UU	Colima	Col	.1 .15	P Colima	11-5,RKN
1280 SQ	San Miguel de Allende	Gto	.5 .25	R San Miguel	12-3
1280 RP	Guadalajara	Jal	.1 .25	P Variedades	
1280 AW	Ménterrey	NL	.5 .5	P A-W,Mx Inolvidable	AN,VP
1280 EG	Puebla	Pue	.1 .25	R Alegría	12-7,U4
1280 HS	Los Mochis	Sin	.25 .25	P Ambiente,La Nueva Onda	13-6
1280 AG	Cordoba	Ver	.1 .1	P Juventud	12-4,UP
1280 UK	Zacatecas	Zac	.5 .25	Onda Juvenil	13-4,RKN
1290 TH	Fallizada	Camp	.25 .1	P 12-90	12-4
1290 DR	Jonála	Chis	.5 .25	P Centro	
1290 UA	México	DF	.10 .1	P Trece	AN
1290 RF	Salvatierra	Gto	.1 .25	R Exitos	RKN
1290 IX	Jiquilpan	Mich	.1 .1	La Fiera de la Juventud	13-2,EZ
1290 NX	Mazatlán	Sin	.10 .25	Superonido	PO1270
1290 IY	Río Verde	SIP	.25 .25	R Juventud	12-22
1290 AP	Cd Laredo	Son	.1 .1	Nueva Imagen	13-5

1300 P Cd Juarez	Chih	1 .5 R Trece	AN,VL
1300 SW Cd Madera	Chih	1 R Madera	13-1
1300 APA Nueva Rosita	Coan	1 .1	
1300 XY Leon	Gto	1 Serenata Trece	13-1EZ,CP10/1/U3
1300 KW Morelia	Mich	.5 .5 R Felicidad	12-4,MF
1300 JT Cuauhnahuac	Sin	1 .25 La Nueva J-L,R Guamuchil	12-5
1300 XW Nogales	Son	1 .1 R Trece,R Sensacion	13-9
1300 LF Tamapico	Tams	1 .15 R Trece	12-6,U3
1300 HU Martinez de la Torre	Ver	1 .1 R Tropical	12-6,RCN,US
1300 GA San Andres Tuxtla	Ver	.5 .5	
1310 C Iijuana	BC	.25 .25 R Exitos	14-9,RPM
1310 LPZ Cd Paz	BCS	10 P Variedades	D3
1310 IMP Tapachula	Chis	1	UC
1310 RU Chihuahua	Chir	1 .25 P Universidad	EC
1310 JPZ Torreon	Coah	10 .25	
1310 HJ Petatlan	Gro	.25 .25 R Petatlan	
1310 TTA Guadalajara	Jal	1 .25 La Cotorra Tropical	AN,CP5/.25,NS,TR
1310 VR Monterrey	NL	.5 .25 R Tropical	12-6,IR
1310 MFL Puebla	Pue	.5 .1 R Hit	1130-S
1310 PD San Luis Potosi	SLP	.5 .25 P=O Radiorama	12-5
1310 FH Agua Prieta	Son	1 Feh,P Plan	14-3,VL,CP1/.1
1310 AM Matamoros	Tams	5 .25 La M Grande,R Mar	AN,VL
1310 HV Veracruz	Ver	1 .1 R Tropical,H-V	AN,TR,RPM
1310 UP Tizimin	Yuc	1 .25 La Rancherita,R Tizimin	12-5,RA
1320 NW Aguascalientes	Ags	1 .25	
1320 SR Santa Rosalia	BCS	.5 .25	13-
1320 UT Comitan	Chis	1 .5 P Comitan	12-4
1320 JI Cd Jimenez	Chih	1 .25	13-2
1320 CM Mexico	DF	10 1 R Sensacion,Canal	132 AN
1320 CY Tuxtla Gutierrez	Hgo	1 .25	12-1
1320 NT Nueva Italia	Mich	1 .25 La Rancherita Bonita RA	
1320 SF Montemorelos	LJ	1 .1	
1320 UH Tuxpan	Oax	1 .1 R Panepoapan	12-4
1320 HY Corregidora	UP	1	CP5/.1/US
1320 KJ Azatlan	Sin	5 .5 P Mazatlan,R-J	13-5,RA,VL
1330 AG Monclova(Cd Frontera)	Coah	1 .25	AN
1330 AJ Saltillo	Coah	.5 .1 R Bonita	12-6
1330 BN Irapuato	Oto	5 1 P Variedades	11-6,U2
1330 AH Uchitlan	Oax	.5 .5 R Hit	1130-630
1330 HV Izucar de Matamoros	Pue	.5 P Trace,Alma Musical	17-4
1330 UAS Culiacan	Sin	5 .5 P Universidad	12,EC,CP5/1
1330 RD Parrico (Cd Madero)	Tams	1 .1 P Mexicana,R Sensacion	AN,ME,HPM,VP
1330 JZ Martinez de la Torre	Ver	1 .1 P Veracruzana	12-6
1330 FC Verida	Yuc	5 .1 El Faculoso Canal	130 12-4
1340 AP Mexicali	DF	1 .25 R Doble A	AN
1340 BC Cd del Carmen	Camp	.25 .25	
1340 JK Cd Delicias	Chih	1 .25 R Amistad	13-5,UP
1340 RC Cd Ujinaca	Chih	1 .1 P Juvenil,La Pantera	13-5
1340 DH Cd Acuna	Coah	.5 .25 P Amistad,P Hoy	12-6
1340 CI Escarulco	Gro	1 .25	
1340 JR Tulancingo	Hgo	.25 .25 La Divertida	12-6
1340 UT Guadalajara	Jal	1 .25 R Parchito	12-t,RPM
1340 RLK Atlecomulco	Mex	.5 P Exitos	12-4,RA
1340 CP Morelia	Mich	.25 .25 Canal 134,P Variedades	12-530
1340 JC Cuernavaca	Mor	.5 .25 P Capital	12-6
1340 ZP Santiago Ixquintla	Nay	.25 .2 La Z-E,La Cotorra	13-1,NS,TR
1340 NV Monterrey	NL	1 .25 R Alegría	AN,EZ
1340 PK Pto Angel	Oax	.5 .2 IV de Andel	13-1,IR,CP1/.2
1340 LH Cd Serden	Pue	.25 .25 Canal Esmeralda	13-2
1340 DE Escuinapa	Sin	1 .1 La Perla Camaronera	13-2
1340 CW Los Mochis	Sin	1 .2 R Variedades	13-5
1340 ST San Luis Potosi	SLP	.5 .25 P Variedades	12-4,CP1/.25
1340 OS Cd Morelos	Son	.25 .25 P Hits	13-7,UP
1340 YR Villahermosa (Tepapa)	Tab	.5 .15 P Trece	11-3,CP880
1340 RPV Cd Victoria	Tams	1 .25 La V	13-2,ME
1340 MT Matamoros	Tams	1 .25 PCN de Matamoros	12-3,HCN
1340 BK Nuevo Laredo	Tams	.5 .25 Canal 134,El Nortenazo	12-6,ME
1340 UH Coatzacoalcos	Ver	1 .25 R Amistad	12-6
1340 BY Tuxpan	Ver	.25 .1 P Nivel del Mar	12-4,RPM
1350 XS Tzajalon	Chis	.5	
1350 TO Ferreon	Coah	.5 .5 P Laguna	AN,EZ
1350 JK Mexico	DF	1 La Hora Exacta	AN,NX,SW9555
1350 JY El Grullo	Jal	1 .1	13-1
1350 VM Mazatlan	Sin	.65 .13 P Alegría	1230-7,ME
1350 IV Naco	Son	1 El Heraldo de la Frontera	13-2,RCN
1350 LBL San Luis Rio Colorado	Son	.5 P Centro	13-2,VL,FZ
1350 ZD Cd Camargo	Tams	.25 .25 P 13-50,P Camargo	12-4,RA

1360	UD	Tuxtla Gutierrez	Chis	1	.5		11-7,CP3/.5
1360	DI	Chihuahua	Chih	1	.2	La Pantera	AN,UP
1360	IK	Piedras Negras	Coah	.5	.25	R Alegria	
1360	LS	Amneria	Col	1	.25	R Felicidad	14-2,RCN
1360	MAC	Huanzalillo	Col	.5			
1360	Y	Celaya	Gto	1	.25	R Celaya	13-1
1360	KF	Iguala	Gro	1	.5	R F-R Independiente	12-5,RCN,VQ
1360	QY	Toluca	Mex	.5	.5	R Toluca	U4
1360	VAL	Cd Valles	SIP	5			
1360	VSS	Villa de Seris	Son	1			
1360	AGV	Cd Mendoza	Ver	.25			
1360	PBF	Hartinez de la Torre	Ver	.5	.1		UC
1360	DQ	San Andres Tuxtla	Ver	1	.1	R Alegria	12-6
1360	UL	Progreso	Yuc	.5	.25	La Barracuda del Cuadrante	12-5,ME
1360	XM	Jerez	Zac	1	.1	R Jerez	12-4
1370	UAA	Anuascalientes	Ags	.5			UC
1370	HG	Mexicali	BC	.5		R Reina H-G,P	13-70 -5
1370	A	Campeche	Camp	1	1	R Variedades	12-4,VL
1370	RPU	Durango	Lgo	1	.1	P Sensacion	13-5
1370	JE	Dolores Hidalgo	Gto	.5		R Libertad	13-1
1370	PJ	Guadalajara	Jal	1	.5	R Capital	12-6
1370	SV	Morelia	Mich	.5		R Nicoley	
1370	MHN	Monterrey	NL	10	10		UC,U2
1370	PA	Euztla	Pue	5	1	La Poblanita	11-6,ME,U2
1370	DRS	Cd Obregon	Son	10	5		U2
1370	HF	Nogales	Son	5	.5	P Variedades,H-F	AN,ME
1370	GNK	Nuevo Laredo	Tams	.25		R Ritmo	12-1,ME
1380	KT	Tecate	BC	.25	.1	13-80	15-6
1380	PAB	La Paz	ECS	.25	.25		
1380	VD	Cd Allende	Coah	.5	.1	R Allende	12-4,CP1/1/U2
1380	RS	Torreón	Coah	.5	.25	La Divertida,Orda	13-80 13-4,UP
1380	CM	Mexico	DF	5	.5	R Eco,P Mx Bonita	12-8,EZ,VQ
1380	FAC	Salvatierra	Gto	1		R Salvatierra	
1380	APM	Apaztingan	Mich	1	.1		
1380	PIC	Tepic	Nay	1	.5		UC
1380	SMR	San Luis Potosi	SLP	1			
1380	GW	Cd Victoria	Tams	5	.15	R 13-80	12-4
1380	YH	Cosamaloapan	Ver	1	1		U2
1380	TD	Jalapa (Naolinco)	Ver	.5		R Naolinco	
1390	SX	Tuxtla Gutierrez	Chis	5			
1390	V	Chihuahua	Chih	1	.5	P Fiesta	AN?,VP,UP
1390	IY	Tecman	Col	5	.25	R Tecoman	13-4
1390	RW	Teor	Gto	10	.25	La Divertida,R-W	AN,NS
1390	ZG	Ixmiquilpan	Hgo	.5			
1390	AH	Mixquiahuala	Hgo	.1			
1390	JC	Pto Morelos	Son	.5		La Reina del Mar	RPM
1390	XD	Cd Mante	Tams	5	.1	R Diferente	12-6
1390	OP	Feyrosa	Tams	1	1	R Reynosa,R Gallito	11-6,UP,VL
1390	TL	Iuxpan	Ver	5	1	UV de las Huastecas	12-4,ME,RPM
1390	RUI	Merida	Yuc	10	1	R Univ de Yucutan	U2,PO1400,EC
1400	AC	Aguascalientes	Ags	.5	.2	P Aguascalientes	13-6
1400	PF	Ensenada	BC	1	.25	R Onda	1330-7,RPM
1400	GD	Hidalgo de Parral	Chih	1	.25	R Novedades	12-5
1400	APU	Ahuau Posita	Coah	1	.15		
1400	DE	Saltillo	Coah	1	.25	P Futurama,La Divertida	
1400	KJ	Acapulco	Gro	.5	.25	R Alegria	12-4
1400	QJ	Tamazula	Jal	1			
1400	XI	Ixtapan de la Sal	Mex	.25	.25	Le I de Ixtapan	12-4,RPM
1400	UJ	Lazaro Cardenas	Mich	1	.1	P Horizonte	12-4
1400	I	Morelia	Mich	1	.25	La Nueva I	1130-6
1400	LH	Acaponeta	Nay	1	.25		
1400	NAY	Ahuacatlan	Nay	1	.2	R Romantica	NS,EZ
1400	LR	Lineres	NL	.25	.25		
1400	SH	Sabines Hidalgo	NL	1	.1	R Alegria	12-6
1400	UBJ	Oaxaca	Oax	1	.2	R Univ Benito Juarez	EC
1400	FS	Izucar de Matamoros	Pue	.35	.1		
1400	VI	San Juan del Rio	Oro	1	.2	R Complacencias	13-3
1400	EX	Ciliacan (El Dorado)	Sin	.25	.15	R Felicidad,La Reina del Pacifico	
1400	WU	Matenhuatl	SLP	.25	.2		
1400	PB	Hermosillo	Son	.5	.2	R Pitic	13-8,UP
1400	NAS	Navejosa	Son	.5	.2		
1400	AB	Santa Ana	Son	1	.25		14-5
1400	TO	Tampico	Tams	1	.25	T=O,R Rama	AN,VL
1400	PG	Veracruz	Ver	.25	.25		
1400	RUY	Merida	Yuc	1	.25	R Univ de Yucatan	CP1390,EC

1410 YD	Torreón	Coah	.1	R Ambiente	13-4,TR
1410 BS	Méjico	DF	.5	1 R Sinfonola	12-8,RA
1410 KR	Guadalajara	Jal	.25	Canal 14-10	AN,VL
1410 CF	Los Mochis	Sin	.5	R Impacto,Canal 14-10	13-6
1410 IR	Cd Valles	SLP	.5		
1410 TAB	Villahermosa	Tab	.5	R Tab, La Juvenil	12-4,UP,RPM
1410 MD	Cd Victoria	Tams	.15		UC
1410 AS	Nuevo Laredo	Tams	.25	R Juventud	12-4,UP
1410 RFC	Córdoba	Ver	.5		
1420 KA	San José del Campos	BC	.25	.25	UC
1420 XX	Tijuana	BC	1	1 Doble X,R Ranchita	13-8,RA
1420 F	Cd Juárez	Chih	.5	.5 R Cumbia	11-6,IR
1420 WF	Irapuato	Gto	10	.5 La Primerísima	11-5,NS
1420 RD	Pachuca	Hgo	1	.25 P Mundo	
1420 WP	Sayula	Jal	.5	P Mexicana,Canal 14-20	12-24
1420 WF	Cuernavaca	Mor	.5	.25 P Fiesta	12-8
1420 H	Monterrey	NL	1	1 R Tropical	12-5,IR
1420 WJ	Tehuacán	Pue	.25	R Popular	12-6
1420 EW	Matamoros	Tams	1	1 E-W,LV del Bajo Bravo	12-6,RA,US
1420 GF	Gutiérrez Zamora	Ver	.5	.1 R Fiesta	12-3
1420 JV	Jaltipan	Ver	1	.25	12-1,IR
1420 EY	Jalpa	Zac	.25	R Jalpa,Canal 1420	
1430 RAC	Campeche	Camp	1	.25	12-5
1430 IA	Cd Alfonso	Coah	1	.25	
1430 SHT	Saltillo	Coah	.5		
1430 CDC	Colima	Col	1.5	.1	
1430 VMA	Acapulco	Gro	1		UC
1430 IG	Iguala	Gro	1	.1 R Iguala,RCN de Iguala	12-5
1430 MTJ	Mascota	Jal	1		
1430 CA	Ixtapetec	Oax	1	.2 R Amistad	12-2
1430 GX	Cd Obregón	Son	.5	.5 O-X 14-30	12-7,UP
1430 WD	Cd Miguel Alemán	Tams	2	.25 W-D,La Grande	12-4
1430 TT	Tlaxcala	Tlax	.5	Orgullosamente Tlaxcalteca	13-1
1430 TI	Tempoal	Ver	1	R Tempozal	12-1,RPM
1430 LI	Veracruz	Ver	5	.25 R Onda	12-6,UP,RPM
1440 VSD	Cd Constitución	BCS	1	.15 La Señal del Progreso	13-7
1440 FCD	Cd Camargo	Chih	5	1	
1440 AI	Méjico	DF	10	1 R A-I,Canal Tropical,Canal 144	AN,TR
1440 CCC	Guadalajara (Tonala)	Jal	5	P Ritmo	1230-0130,D3,TR,VL
1440 URM	Uríaspan	Mich	5		
1440 HW	Rosario	Sin	.25	.25 H-W	13-2
1440 EC	Tlaxcoyán	Ver	.25		
1450 YZ	Aquascalientes	Ags	.25	.25 R Variedades	12-4,NS
1450 SS	Ersenada	BC	.25	.25 R Fiesta	14-8
1450 APE	Ojinaga	Chih	1	.25	
1450 BP	Gómez Palacio	Dgo	1	.25 LV de la Laguna	AN
1450 RY	Arcelia	Gro	1	.1 La Poderosa Voz del Sur	12-3,RA
1450 JTF	Zacualco de Torres	Jal	1	.25 LV dela Provincia Jalisciense	12-4
1450 GC	Sanuayo	Mich	1	.25 R Impacto	12-5
1450 ID	Tecuája	Nay	.25	.25 T-D,P 14-50	13-1
1450 JK	Monterrey	NL	1	.25 R Fantasia	12-6
1450 TFP	Pinotepa	Oax	.5		
1450 XD	Atlixco	Fue	.5	.25 R Sensacion	11-6
1450 NA	Querétaro	Gro	1	.25 R Alegría	12-4
1450 IE	Matehuala	SLP	.1	.2 R Alegría	1230-130
1450 DJ	Magdalena	Son	1	.25 P Clave	RCN
1450 CR	San Luis Rio Colorado	Son	.25	.25 R Ranchito	13-7,RA
1450 CM	Cd Mante	Tams	1	.25 R Romantica	12-4,ME
1450 VH	Vallehermosa	Tams	1	.25	
1450 KW	Minatitlán	Ver	1	.25 R Mina,Onda 14-50	11-6
1450 PP	Orizaba	Ver	1	.25 R Don Pepe,LV de Orizaba	
1450 JD	Poza Rica	Ver	1	.25 R Tropicana	12-6
1450 PY	Merida	Yuc	1	.25 Su Amiga	12-5,IR,VL
1450 ZG	Río Grande	Zac	1	.25 Canal 145	12-4,RCN
1460 UT	Cd del Carmen	Camp	.25		
1460 FEC	Reforma	Chis	.5		
1460 XC	Cd Juárez	Chih	1	1 R Sensacion	AN,ME,VL
1460 PD	Nueva Rosita	Coah	1		
1460 HE	Atotonilco	Jal	.5	.1 LV de Jalisco	12-130,ME
1460 LX	Zitacuaro	Mich	10	10 Habla Michoacan	13-3,U2
1460 KC	Oaxaca	Dax	1	.1 R Exitos	12-6
1460 CPQ	Francisco Carrillo	QR	1		
1460 XQ	San Luis Potosí	SLP	1	.25 R Univ Potosina	SW6045,EC
1460 HX	Cd Obregón	Son	.25	R Exitos	13-5
1460 OLA	Tampico (Altamira)	Tams	1	1 R Ola,La Ola Tropical	12-4,TR,RPM
1460 JH	Jalapa	Ver	.5	R Sonido Musical	

1470	BBC	Tijuana	BC	5	5	Mx de RCN	13-8, VL,RCN
1470	BAL	Becal	Camp	1			
1470	AY	Parras	Coah	.25			
1470	DS	Colima	Col	.2	R Juventud	13-4,CPS/5/U2	
1470	SM	Mexico	DF	10	5 R Formula	AN,VL,EZ	
1470	CAV	Durango	Ego	.25	R Internacional	13-5,RCN	
1470	YA	Irapuato	Gto	1	La Mejor Musical	13-1,NS	
1470	CII	Los Mochis	Sin	.25	La Rancherita	AN,RA	
1470	ACE	Mazatlan	Sin	.1	R Exitos,Sonido Disco	AN,UP,VL	
1470	UK	Caborca	Son	.5	R Melodia	14-6	
1470	HT	Cd Miquel Aleman	Tams	.25	R 14-70,La Consentida	12-430	
1470	QS	Fresnillo	Zac	1	Romance en Radio	EZ,CPP980	
1480	HM	Cd Delicias	Chih	1	H-M R Delicias	13-1,UP	
1480	XII	Monclova(Cd Frontera)	Coah	.1	R Variedades	AN	
1480	MC	Salvatierra	Gto	.25			
1480	GX	San Luis de la Paz	Gto	.5	.1 R La Paz	13-1	
1480	XC	Taxco	Gro	1	.13 LV del Plata	12-5	
1480	ZJ	Guadalajara (Zapopan)	Jal	.5	.2 R Selecciones	11-7,CP1/.2,VL	
1480	IP	Uruapan	Mich	.5			
1480	IKR	Monterrey	NL	.5	.5 T-K-R,La Nortena	12-6,ME	
1490	OU	Huajuapan de Leon	Oax	.5	Rajo el Cielo de la Mixteca	12-24	
1490	CCQ	Cancun	UR	.25			
1490	NS	Navojoa	Son	1	1 N-S, La Rancherita	14-3,RA	
1490	PK	Puza Rica	Ver	10	.5 R Mexicana	12-6,ME	
1490	RM	Aguascalientes	AGS	1	.25 La R-O,R San Marcos	12-4,EZ	
1490	IR	Ideas Santos	BCS	.25			
1490	MK	Huixtla	Chis	1	.25 R Progreso Huixtla	12-24,ME	
1490	CJC	Cd Juarez	Chih	.5	.25 La Pantera	AN	
1490	HES	Chihuahua	Chih	1	.25		
1490	HPC	Hidalgo de Parral	Chih	1	.25		
1490	ED	Amete	Jal	1	.25 XEED Contigo	12-4	
1490	CH	Toluca	Mex	.25	.25 La Primera en el Estado	11-5	
1490	KN	Huejamo	Mich	1	.25 R K-N	13-1	
1490	GT	Zamora	Mich	1	.25 R Alegría	12-5	
1490	SK	Ruiz	Nay	.25	.25 R Sintonola	13-3	
1490	PNP	Puheria	Fue	.5	.25 R Mundo,R Pop	1230-630	
1490	AE	Queretaro	Gro	1	.2 X-E,R Capital	12-b	
1490	FF	Matenhuala	SUP	1	.25		
1490	AQ	Aqua Prieta	Son	1	.25 Canal 14-90		
1490	DP	Guaymas	Son	1	.25	12-5,RPM	
1490	GG	Cd Mante	Tams	.25	.1		
1490	MS	Matamoros	Tams	1	.25 R Mexicana,La Nueva	M-S AN,ME	
1490	AR	Tampico	Tams	1	.5	ME	
1490	VZ	Acatucan	Ver	1	.2 R Sensacion	12-6	
1490	ME	Valladolid	Yuc	.5	.25 R Valladolid	12-4,TR	
1500	EBC	Ensenada	FC	.5		UC	
1500	JQ	Parras	Coah	.25	R Canon		
1500	RH	Mexico	DF	20	20 La R-H,Tropical Grande	AN,VL,TR,U2	
1500	FL	Guanajuato	Gto	.25	R Santa Fe		
1500	NP	Ocotlan	Jal	.5		UC	
1500	UV	Villahermosa	Tab	.25	.5		
1500	GN	Piedras Negras	Ver	.25	R Triunfadora	12-1	
1510	UF	Celaya (Cortazar)	Gto	5	Radiorama 151	12-130,D3	
1510	LW	Cd Guzman	Jal	1	R Felicidad	RCN,CPS/5/U2	
1510	GI	Monterrey	NL	10		D3,UC	
1510	KI	Navojoa	Son	.5			
1510	JFM	Veracruz (Cd Cardel)	Ver	.5	Canal 151,R Veracruz	12-3	
1510	YO	Fresnillo	Zac	1	.5 Canal 1510,R Fresnillo	12-8,RCN,ME,U2	
1520	VJC	Villa Union	Coah	1	V-U-C,R Alegría		
1520	GAJ	Guadalajara	Jal	1		UC	
1520	CGP	Morrilia	Mich	.5	R Triunfadora	12-130,RPM	
1520	SZ	Cholula	Pue	.25			
1520	ATP	Tenucan	Pue	.25		UC	
1520	EH	San Luis Rio Colorado	Son	1	P Sonora Internacional,R Exitos	12-1	
1520	ZO	Huimanguillo	Tab	1	.1 R Futurama,La Ranchera,Canal 152	12-1	
1520	IP	Cd Mante (El Limon)	Tams	1	1 La Divertida	1130-2,ME	
1520	VO	San Rafael	Ver	1	R San Rafael	13-1,RCN	
1530	UR	Mexico (Texcoco,Mex)	DF	5	5 R Onda	AN,U3,TR	
1530	SD	Leor (Silaao)	Gto	1	.1 R Variedades	13-4	
1530	XY	Cd Altamirano	Gro	.5	LV del Balsas	13-1,CP780	
1530	ZYB	Oaxaca	Uax	.5		UC	

1540	VF	Villaflores	Chis	.5	R Villaflores	
1540	DCH	Cd Delicias	Chin	1		
1540	DRD	Durango	Dgo	.25		
1540	NC	Celaya	Gto	1	.25 LV Musical	12-5
1540	QZ	San Juan de los Lagos	Jal	1		13-1
1540	IC	Guernavaca	Mor	1	1	U4
1540	STN	Sta Catarina	NL	5		
1540	EN	Chetumal	QR	.25		
1540	HOS	Hermosillo	Son	5	5	
1540	AVR	Alvarado	Ver	5	1	ME,U2
1540	PAV	Panuco	Ver	3		
1540	GP	Poza Rica	Ver	1		
1540	YK	Motul	Yuc	.5	R Motul	12-24,ME,CP1/.1
1550	BG	Tijuana	BC	1	1 15-50	-8,UP
1550	ZAJ	Guadalajara (Zapopan)	Jal	.5		UC
1550	DV	El Oro	Mex	.5		
1550	TAM	Cd Victoria	Iams	.5		UC
1550	NU	Nuevo Laredo	Iams	5	La Rancherita Contenta 1130-1,RA	
1550	RUY	Jalapa	Ver	10	R Univ de Vericruzana EC	
1560	SE	Champoton	Camp	5		12-24
1560	JPV	Cd Juarez	Chin	1	La Tropical,La P-V,R Chamizal	12-2
1560	MAS	Salamanca	Gto	1	.25 Mx de Pegue,Mas MX	13-5,NS
1560	FAD	San Rafael Chamapa	Mex	10	10 R 15-60,Mx Ranchera	AN,U2,RA
1560	LAC	Lazaro Cardenas	Mich	5		13-1,CP5/.15
1560	GO	Zamora (Los Reyes)	Mich	1	R Esmeralda	CP1/.1
1560	RIU	Ixtlan del Rio	Nay	5	P Rio,UnaOndaDeAlegria	12-1,ME,NS,V1
1560	RMN	Topic	Nay	1		UC
1560	DD	Montemorelos	NL	.5	.15 R Ding Doma	
1560	ZW	Cerritos	SIP	.5	P Diversion	12-1
1560	GYS	Guaymas	Son	.25		UC
1570	RF	Cd Acuna	Coah	250	250	-7,EE,VQ
1580	SAC	Saltillo	Coah	.25		
1580	AF	Celaya (Apaseo)	Gto	1		
1580	LI	Chilpancingo	Gro	1	.25 La Stn de la Familia Guerrense	12-4
1580	NQ	Tulancingo	Hgo	1	.5 LV de Hidalgo	12-6
1580	VAB	Valle de Bravo	Mex	.25		
1580	QL	Zamora	Mich	1	.1 La Popular Q-L	12-4,RA
1580	ST	Mazatlan	Sin	.25		UC
1580	DM	Hermosillo	Son	50	50 La Grande de Sonora	13-7,VQ
1580	UY	Las Choapas	Ver	.25	.1 R Favorita	12-2
1580	TBV	Tierra Blanca	Ver	1		
1580	FP	Jalpa	Zac	1	.25 R Alegria	AN,NS,EZ,CP1230
1590	AGA	Aguascalientes	Ags	.25		UC
1590	HC	Ensenada	BC	1	1 R Bahia	14-7,RPM
1590	YX	Mexicali	EC	10		UC
1590	BZ	Cd Delicias	Chin	1	La Zeta,La Rancherita	13-1,ME
1590	VNZ	Mexico	DF	10	5 R Voz	12-9
1590	ART	Zacatepec	Mor	1	1	U3
1590	FMA	Tepic	Nay	.25		UC
1590	ACH	Monterrey	NL	5	1 R 15-90	AN,U2
1590	CSI	Culiacan	Sin	.25		UC
1590	MTS	Cd Madero	Tams	1		D3
1590	PT	Misantla	Ver	1	.1	12-3,ME
1590	CP	Valladolid	Yuc	10		UC
1600	IUG	Ixtlal Gutierrez	Chis	.25		
1600	AF	Cd Acuna	Coah	5	5 La Divertida,A-E	14-8
1600	LZ	Torreon	Coah	1		
1600	AK	Acambaro	Gto	1	.2	13-1
1600	QA	Autlan de Navarro	Jal	1		
1600	ZK	Tepatitlan	Jal	1	.25 F Altena	12-3
1600	GEN	Toluca	Mex	2		UC,D3,nights on 93C
1600	RCP	Purepero	Mich	.2		
1600	PTP	San Martin Texmelucan	Pue	.5	R Impacto	CP,5/.1
1600	JCP	Tenuacan	Pue	.25		UC
1600	NAZ	Nacozari	Son	1		
1600	PE	Noeles	Son	1		UC
1600	QT	Veracruz	Ver	.5	.25 La Pantera	12-6,UP

EUROPE, AFRICA & THE MIDDLE EAST

Stations are listed with typical programming followed by a list of times/dates when heard and the initials of those reporting reception, with state or province (or country if not USA or Canada). In the case of stations using a variety of languages (e. g. Albania-1395), programming content is worked into the time/date lists more thoroughly.

Reception merit: E excellent G good F fair P poor Note: M&W = (talk by) man & woman
(t) = tentative reception

155 W. GERMANY Donebach 1981: 0545 JAN 17 G GG vocal (BF-NY)

173unID 1981: 0607 JAN 8 P-F M&W talk, possibly RR (BF-NY)

179 E. GERMANY Berlin 1981: 0500-0616 JAN 8 GG nx.,wx.,rock nx. (BF-NY) 0559-0600
JAN 18 pip sequence 13-6-5 short, 1 long (BF-NY)

182 W. GERMANY Saarlouis "Europa #1" 1979: 0430 OCT 22 o/u unID carrier (BF-NY)
0419 DEC 15 E EE rock, FF talk (MC-MA1)

185 W. GERMANY Saarlouis "Europa #1" FF talk, mx. 1981: 0500 JAN 8 and 0804 JAN 17 (BF-NY)

191 unID 1981: 0630 JAN 17 2 carriers, SAH 10 Hz. (BF-NY)

200 ENGLAND Droitwich 1979: 0420 DEC 15 P M&W in EE (MC-MA1)

209 W. GERMANY Munich 1979: 0424 DEC 15 Muzak & GG vocal (MC-MA 1)

209 USSR Kiev (t) 1981: 0550-0614 JAN 17 orch. mx., apparent RR talk, 6 pips at 0600 (BF-NY)

209 MOROCCO Azilal 1981: 0614 JAN 17 AA chant o/0.5 Hz. SAH (BF-NY)

209 unID (Iceland?) 1981: 0815-0830 JAN 17 carrier (BF-NY)

218 MONACO Monte Carlo 1979: 0426 DEC 15 E FF talk, mx. (MC-MA 1) 1981: 0530 & 0633
JAN 17 P FF (BF-NY)

218 unID (Norway?) 1981: 0633 JAN 17 talk u/Monaco (BF-NY)

227 POLAND Konstantynow 1981: 0530-0630 JAN 17 talk (BF-NY)

236 LUXEMBOURG Junglinster 1981: 0530-0740 JAN 17 FF pop mx. (BF-NY)

245 DENMARK Kalundborg (t) 1981: 0625-0744 JAN 17 cl. & rlge. mx., talk (BF-NY)

251.4 ALGERIA Tebessa 1981: 0705 JAN 18 F FF talk (BF-NY)

263 unID (USSR or E. Germany) 1981: 0617 JAN 17 M&W in RR and 0700 JAN 17 pipe, 2-part
IS (BF-NY)

281 unID 1981: 0624 JAN 17 P mx. (BF-NY)

531 ALGERIA Ain-Beida AA talk, vocals, chants, violins, etc. 1979: 0445 SEP 8 F (MC-MA 1)
0143 SEP 26 P //548 (MC-MA 1) 0530 NOV 24 G (MC-MA 2) 1980: 2331 MAR 13 E (MC-MA 1)
0540 MAR 22 P-F (Kaz-RI 1) 0455 OCT 1 (t) carrier (GT-FL) 2230 NOV 13 G (MC-MA 1)
1981: 0115 FEB 23 P-F (Kaz - RI 2)

531 SWITZERLAND Beromunster 1980: 0510 MAR 24 P-F light mx., GG talk 0/4 Hz. Algeria
SAH (Kaz - RI 1)

531 unID 1979: 0504 OCT 21 (NHP-BC)

539 LIBYA Sebha 1979: 0454 SEP 16 P AA mx. (MC-MA 1) 1980: 0351 SEP 6 P AA mx. (MC-MA 2)

540 KUWAIT Sulaibiya 1979: 1620 DEC 26 E chants (Hart-Australia)

548 ALGERIA Oran 1979: 0441 AUG 17 P violins (MC-MA 2) 0455 SEP 16 E AA chants (MC-MA 1)
0141 SEP 26 //531 (MC-MA 1) 0448 OCT 6 AA talk (MC-MA 1) 0330 OCT 13 F chant(MC-MA 2)

- 549 ALGERIA Oran AA talk, vocals, moans, chants, drums, etc. 1979: 0032 OCT 25 P-C (MC-MA 1)
 0057 NOV 1 het (ERS-NJ) 0106 DEC 4 P (MC-MA 1) 1980: 2355 MAR 23 (t) P talk (ERS-NJ)
 0358 JUN 28 P (MC-MA 2) 0359 SEP 7 P (MC-MA 2) 0014 SEP 19 P (MC-MA 1)
 2350 NOV 13 P (MC-MA 1) 1981: 0511 JAN 18 P (MC-MA 1) 0516 MAR 31 P-C (MC-MA 1)
 0419 MAY 10 G (MC-MA 2)
- 558 MOZAMBIQUE E. Prov. de Inhambane 1348 JUN 15 P s/on IS, PRAEE pgms. (IB-South Africa)
- 567 IRELAND Tullamore 1979: 0524-0530 OCT 24 IS, then talk (MC-MA 1) 0137 NOV 1 EE talk, pop (MC-MA 1)
 2117 DEC 15 P-F EE talk (MC-MA 1) 0214-0216 DEC 23 OC, ET (MC-MA 2)
 1980: 0018 JAN 23 F EE (MC-MA 1) 2251 FEB 2 P big-band mx. (MC-MA 1) 0638 MAR 9 P-F
 cl. mx., EE talk (MC-MA 1) 0027 MAR 13 G pop, EE (MC-MA 1) 0547 MAR 24 pops (Kaz-RI 1)
 0519 SEP 20 G OC/TT (MC-MA 1) 0600 SEP 20 P s/on, EE talk (MC-MA 1) 0545 SEP 28 MX.
 & talk (RCN-BC) 0601 SEP 28 P EE mx. (MC-MA 1) 0605 OCT 19 TT's (MC-MA 2)
- 576 ALGERIA Bechar AA mx. 1979: (t) 0309 OCT 24 P (MC-MA 1) 1980: 0427 JUN 28 P (MC-MA 2)
 2355 NOV 13 P (MC-MA 1)
- 585 SPAIN Madrid SS talk, SS pop mx., occasional US/UK rock, Muzak 1979: 0454 OCT 6 (MC-MA 1)
 0338 OCT 13 P (MC-MA 2) 0010 OCT 19 P (ERS-NJ) 2312 OCT 19 P (MC-MA 1) 0023 OCT 25
 (MC-MA 1) 0102 NOV 1 F (ERS-NJ) 0142 NOV 1 F (MC-MA 1) 0534 NOV 24 F o/SAH (MC-MA 2)
 0449 DEC 15 F (MC-MA 1) 0717 DEC 22 F (MC-MA 2) 1980: 2337 MAR 23 F //684,855 (ERS-NJ)
 0435 MAR 25 P (Kaz-RI 1) 0403 JUN 28 F (MC-MA 2) 0521 SEP 20 P (MC-MA 1) 0126 OCT 4
 P (MC-MA 1) 0402 OCT 19 F (MC-MA 2) 0024 OCT 21 F (MC-MA 2) 2356 NOV 13 F (MC-MA 1)
 0453 NOV 22 (MC-MA 2) 1981: 0442 FEB 24 P o/AA stn. (MC-MA 1)
- 585 TUNISIA Gafsa 1979: (t) 0024 OCT 25 AA-sounding mx. noted briefly during Madrid QSB (MC-MA 1)
 1980: (t) 0440 MAR 9 AA moaning mixed w/2 others (MC-MA 2)
- 594 unID 1979: 0141 NOV 1 carrier in WEEI slop (MC-MA 1)
- 594 MOROCCO Oujda 1979: 1705 DEC 26 G AA mx. o/u Kuala Lumpur (Hart-Australia)
- 594 SAUDI ARABIA Duba 1980: 0315 MAR 24 F Koranic AA chant (Kaz-RI 1)
- 603 FRANCE Lyon 1979: 0720 DEC 22 P P-F talk (MC-MA 2)
- 611 ZIMBABWE Gwelo 1979: 2117 JUN 18 F pop mx. (IB-South Africa)
- 612 KENYA Nairobi 1979: 2010 DEC 26 G pop mx., Swahili talk (Hart-Australia)
- 612 MOROCCO Sebaa-Aiouen AA talk, chants, violins, etc. 1979: 0453 AUG 17 P (MC-MA 2)
 0500 SEP 16 P (MC-MA 1) 2318 OCT 13 G (MC-MA 2) 0104 OCT 22 E better than 610 (MC-MA 1)
 2347 OCT 24 F o/SAH (MC-MA 1) 0132 NOV 1 (MC-MA 1) 2220 NOV 5 E (MC-MA 1) 0337 DEC 2
 P-F (MC-MA 1) 0208 DEC 23 o/SAH (MC-MA 2) 1980: 0603 JAN 19 P-F (MC-MA 2)
 0439 JUN 29 het (MC-MA 2) 0022 SEP 7 F (MC-MA 2) 2334 SEP 8 P-F (Kaz-RI 1) 0130 OCT 4
 (MC-MA 1) 2154 NOV 7 F (MC-MA 1) 2148 DEC 13 E (MC-MA 1) 1981: 2356 APR 10 G (Kaz-RI 1)
- 612 IRELAND Athlone 1980: P pop mx., EE talk, RTE ID 0706 MAR 9. (MC-MA 2)
- 612 unID 1980: 0550 MAR 24 SAH 2.5Hz. on Morocco (Kaz-RI 1) 0523 SEP 20 2 signals (MC-MA 1)
 1981: 0215 FEB 7 carrier (MS-NY)
- 621 CANARY ISLANDS Santa Cruz de Tenerife 1979: 0340 OCT 13 (MC-MA 2) 0202 OCT 31 P SS nx.
 //774, 855 (BB-MA) 1980: (t) 0036 JAN 12 het (MC-MA 1) 0359-0401 OCT 4 P US oldie,
 SS talk (MC-MA 1)
- 639 CYPRUS Zygi 1979: 2016 JUN 18 F BBC nx. in EE (IB-South Africa)
- 639 SPAIN La Coruna 1979: 0537 NOV 24 (MC-MA 2) 2119 DEC 15 P SS talk (MC-MA 1)
 1980: 0555 MAR 1 P SS vocal (MC-MA 1)
- 639 CZECHOSLOVAKIA Liblice 1980: 2257-2300 MAR 8 G Slavic talk, bell, s/off w/antheme (MC-MA 2)
- 639 unID 1980: 0427 MAR 18 possible CG talk (MC-MA 1)
- 648 ENGLAND Orfordness 1979: 0019 JUN 19 P BBC World Service EE nx. (IB-South Africa)
 (t) 0440-0530 OCT 21 carrier (NHP-BC) 2321 NOV 1 P pop mx. (MC-MA 1) 1980:
 (t) 0446 MAR 9 het (BP-WA 2) 0110 MAR 14 P EE nx. (MC-MA 1) 0404 MAR 24 F EE nx.
 (Kaz-RI 1) 0300 JUN 29 BBC pipes (Kaz-RI 1) 0457 SEP 6 E EE documentary (MC-MA 2)
 0405 OCT 3 P nx. //5975 (NHP-BC) 1981: 0558 JAN 25 P EE talk (MC-MA 1)

- 657 E. GERMANY Neubrandenburg 1980: (t)0503-0514 MAR 9 talk(GG?), mx.(BP-WA2)
(t) 0427 MAR 13 possible GG talk (PM-OR)
- 657 unID 1980: 0300 SEP 28 5 or 6 pipes, last one long; AA-type ax. (GM-CO)
0259-0318 SEP 29 talk, AA mx. (GM-CO) 0344 OCT 3 P pop mx. (NHP-BC) 0702 NOV 10
carrier (GM-CO)
- 657 MOROCCO Laayoune 1980: 2155 NOV 6 G AA chants (MC-MA 1) 2207 NOV 8 F-G AA talk(MC-MA 1)
(t) 2238 DEC 12 het (MC-MA 1)
- 666 IRAN Ahwaz 1979: 2040 DEC 26 Farsi talk (Hart-Australia)
- 666 PORTUGAL Lisboa 1979: 0456 AUG 17 P (MC-MA 2) 0456 SEP 8 P PP talk (MC-MA 1)
0456 OCT 6 P (MC-MA 1) 0525 NOV 24 F-G PP mx. (MC-MA 2) 0722 DEC 22 romantic PP
female vocal o/other stn. (MC-MA 2) 1980: 0547 SEP 7 G inst. mx. (MC-MA 2)
- 666 unID 1980: 0623 MAR 20 carrier (GM-CO) 0500 OCT 1 carrier (GT-FL)
- 675 FRANCE Marseille 1980: 0320 MAR 24 E FF talk (Kaz-RI 1)
- 684 MAURITIUS Cuseepipe 1979: 1505 JUN 19 FF nx. // 4850 (DB-South Africa)
- 684 SPAIN Sevilla SS talk, light mx. 1979: 0522 NOV 24 F-G SS mx. (MC-MA 2)
1980: 0248 MAR 11 F o/other stn. (RE-PA) 0011 MAR 12 light mx. o/2 Hz. SAH (RE-PA)
0003 MAR 14 F (RE-PA) 2340 MAR 23 G // 585 (EBS-NJ) 0549 SEP 7 P in WKKO sloop(MC-MA 2)
1981: 0003 JAN 6 (RE-PA)
- 684 unID 1980: 0044 OCT 14 carrier (GT-FL) 1981: 0446 FEB 19 carrier (MS-NY)
- 692 unID - 1981: 0448 FEB 19 carrier (MS-NY)
- 693 ENGLAND Droitwich EE talk, Radio 3 ID's, pop/MoR/easy listening mx. 1980: 0232 MAR 9
G (RE-PA) 0647 MAR 9 (MC-MA 2) (t)0457 MAR 9 (BP-WA 2) 0013 MAR 12 E (RE-PA)
0002 MAR 13 E (RE-PA) 0135 MAR 14 E (RE-PA) 0300 MAR 14 G (CMS-ON) 0526 APR 5 (MC-MA 2)
0303 JUN 29 G (Kaz-RI 1) 0318 OCT 3 G (Kaz-NY) 0520 OCT 18 G (MC-MA 2)
1981: 0304 JAN 7 (RE-PA) 0449 JAN 25 F (S&K-NY)
- 693 unID 1980: 0415 SEP 28 het (BP-WA)
- 702 MOROCCO Sebaa-Aioun 1980: MAR 24 2154 carrier fade-in/2315 mx. G (Kaz-RI 1)
2347 SEP 1 P-F African mx. (Kaz-RI 1) 2120 DEC 13 P AA moaning (MC-MA 1)
- 711 unID 1979: 0500 OCT 6 het (MC-MA 1) 1980: 0520 MAR 14 (MM-ID) 2255 DEC 11 (MC-MA 1)
2119 DEC 13 possible AA talk (MC-MA 1)
- 711 FRANCE Rennes 1979: 2235 DEC 17 FF disco, talk (MC-MA 2) 1980: 0532 OCT 4 G France
Culture service (several languages used) (MC-MA 1) 2227 DEC 15 E MW FF (MC-MA 1)
1981: 0449 FEB 24 P FF talk (MC-MA 1)
- 719 unID 1980: 2343 MAR 21 het too weak to be Portugal (MC-MA 1) 2156 NOV 6 het against
Portugal-720 (MC-MA 1) 2149 DEC 13 het on Portugal (MC-MA 1)
- 719 PORTUGAL Norte-Azurara PP talk, PP folk & pop mx., soft mx., rock mx. 1979: 0502 SEP 16
P (MC-MA 1) 0149 SEP 26 G (MC-MA 1) 0512 OCT 6 F (MC-MA 1) 2311 OCT 19 G (MC-MA 1)
2352 OCT 24 G (MC-MA 1) 2121 OCT 28 G (MC-MA 1) 2215 NOV 1 E (MC-MA 1) 2206 NOV 23
G (RE-PA & MC-MA 2) 0542 NOV 25 F (RE-PA) 2243 DEC 3 E (MC-MA 1) 0210 DEC 23 (MC-MA 2)
1980: 2228 JAN 11 E (MC-MA 1) 2213 JAN 22 G (MC-MA 1) 2249 FEB 2 P (MC-MA 1)
0047 FEB 10 F (MC-MA 2) 0620 MAR 2 G-E (MC-MA 1) 2248 MAR 8 F-G (MC-MA 2) 0004 MAR 11
(HE-PA)
- 720 PORTUGAL Norte-Azurara 1980: 0617 MAR 24 //666 u/CMGN/WGN (Kaz-RI 1) 2311 MAR 25
PP talk o/u WGN (MC-MA 1) 2134 OCT 20 PP talk (MC-MA 2) 2150 NOV 1 P PP vocal o/u
YVOE (MC-MA 1) 2200 NOV 6 G o/WGN (MC-MA 1) 2229 NOV 13 E PP talk (MC-MA 1)
2122 DEC 13 F-G inst. mx. (MC-MA 1) 2149 DEC 13 G PP vocal (MC-MA 1) 2228 DEC 15
E PP vocal (MC-MA 1)
- 720 unID (Tunisia?) 1979: 2216 NOV 1 AA mx. o/u WGN, hetting Portugal-719 (MC-MA 1)
- 729 NIGERIA Kano 1979: 0306 JUL 8 EE nx. on late for election results (DB-South Africa)
- 729 SOUTH AFRICA Cape Town 1979: 0034 JUN 19 RSA pm. //801 (DB-South Africa)
- 729 SPAIN Oviedo 1979: 0459 SEP 8 P mx. (MC-MA 1) 1980: 0040 MAR 24 P-F //585,738 (Kaz-RI 1)

- 738 SPAIN Barcelona SS talk, nx., SS pop mx., rock, semi-cl. mx. 1979: 0502 SEP 8 F (MC-MA 1) 0542 OCT 14 F (MC-MA 2) 2310 OCT 19 F (MC-MA 1) 2355 OCT 24 F (MC-MA 1)
 0129 NOV 1 P-F (MC-MA 1) 1980: 2250 JAN 22 P (MC-MA 1) (t)0203 MAR 9 carrier (RE-PA)
 (t)0330 MAR 11 carrier (RE-PA) (t)0316 MAR 13 carrier (RE-PA) 2306 MAR 23 P-F (MC-MA 1)
 0456 SEP 7 P (MC-MA 2) 2206 NOV 6 (MC-MA 1) 2233 NOV 13 F (MC-MA 1)
 1981: (t) 0112 JAN 7 (RE-PA) 2310 JAN 19 P (MC-MA 1)
- 747 unID 1980: 0145 MAR 15 F mx. (RE-PA) 0510 MAR 13 TT, poss. Holland (NHP-BC) 0535 MAR 13 talk, mx. (MM-ID) 0416 MAR 18 GG or Slav talk w/Holland OC; SAH 1.6 Hz. (MC-MA 1)
 0335 MAR 24 mx. P before Holland s/on (Kaz-RI 1) 0443 SEP 26 (BP-WA) 0214-0240 SEP 30 het (GM-CO) 0302-0400 OCT 3 E, European carrier before Holland s/on (GM-CO)
 0419 OCT 18 E TT, prob. Holland (MC-MA 2) 1981: 2312 JAN 19 OC o/2.9 Hz. SAH (MC-MA 1)
- 747 BULGARIA Petrich 1979: 0246 NOV 1 FF pop mx., cl. mx., IS, Bulgarian nx., folk mx. G o/2 Hz. SAH (BB-MA) (t)0455 DEC 15 (MC-MA 1)
- 747 HOLLAND Flevoland 1979: (t)0513 NOV 23 carrier/TT's (MC-MA 2) (t)2240 DEC 17 (MC-MA 2)
 1980: 0025 JAN 23 TT's (MC-MA 1) (t)0335 MAR 9 OC/0555-0610 MAR 9/2300 MAR 10 anthem (RE-PA) 0527-0530 TT/0532-0535 2-note sound/talk to 0600 fade-out MAR 13 (BP-WA 2)
 0546 MAR 13 F Germanic talk (JL-WA) 0545 MAR 16 G 2-note IS (RE-PA) (t) 0527 MAR 18 P talk (PM-OR) 0529 SEP 20 P M&W Germanic lang. (MC-MA 1) (t)0444-0459 SEP 27 repeated 3-bar IS, then talk by woman (JL-WA) 0353 OCT 1 cl. mx./ band mx., doorbell IS, talk by woman (RCN-BC) 0444 & 0530, OCT 3 2-note doorbell chimes (NHP-BC) (t)0603 OCT 3 carrier (GM-CO) (t) 2244 DEC 8 G avant-garde jazz (MC-MA 1) 1981: (t) 2305 JAN 25 TT, carrier cut (S&K-NY)
- 747 UPPER VOLTA Ouagadougou 1979: (t)carrier/TT's, looping Africa 2358 OCT 24 (MC-MA 1)
 1980: 2330 DEC 5 FF ancr., native chanting //4815 (BB-MA)
- 756 PORTUGAL Lisboa classical mx., opera, PP talk 1979: 0151 SEP 26 G OC (MC-MA 1)
 2309 OCT 19 E cl.mx. o/SAH (MC-MA 1) 2217 NOV 1 E (MC-MA 1) 0042 NOV 18 (Kaz & MC-RI)
 2204 NOV 23 G (MC-MA 2) 0517 DEC 2 G (MC-MA 1) 2240 DEC 3 G (MC-MA 1) 1980:
 0026 JAN 23 o/u German (MC-MA 1) 2231 JAN 26 E (MC-MA 1) 2247 FEB 2 G (MC-MA 1)
 2345 FEB 15 G (MC-MA 1) 0229 MAR 9 E (RE-PA) (t)0004 MAR 14 F (RE-PA) 0535 MAR 12 (MM-ID) 2153 NOV 6 E (MC-MA 1) 2234 NOV 13 G (MC-MA 1) 2350 DEC 3 G (MC-MA 1)
 2254 DEC 11 E (MC-MA 1) 1981: 2313 JAN 19 o/u German (MC-MA 1)
- 756 W. GERMANY Braunschweig/Ravensburg GG talk, brass band mx., polkas, GG vocals, pop mx., show tunes, light rock 1979: 0340 NOV 1 G o/3 Hz. SAH (BB-MA) 0124 NOV 1 (MC-MA 1)
 0545 NOV 24 (MC-MA 2) 1980: 0303-0306 JAN 13 P (RC-IL) 0026 JAN 23 o/u Portugal (MC-MA 1)
 0601 MAR 2 G (MC-MA 1) 0418-0440 MAR 9 P-F (BP-WA2) 0430 MAR 9 E (MC-MA 2) 0430 MAR 9 P (PM-OR) 0410 MAR 13 (PM-OR) 0420-0429 MAR 13 F (NHP-BC) 0430 MAR 13 (DM-OR)
 0420 MAR 18 F (MC-MA 1) 0459-0517 MAR 20 E (CM-CO) 0410 MAR 24 E (Kaz-RI 1)
 2309 MAR 25 G o/u Portugal (MC-MA 1) 1981: 0400 SEP 6 F (MC-MA 2) 0431-0449 SEP 26 (BP-WA) 0444 SEF 26 (PM-OR) 0315-0400 SEP 27 (RCN-BC) 0328-0352 SEP 27 (NHP-BC)
 0416-0422 SEP 27 G (BP-WA) 0500 OCT 1 (RCN-BC) 0015 OCT 3 F (MC-MA 1) 0410 OCT 3 (RCN-BC) 0040 NOV 6 o/u Portugal (MC-MA 1) 2223 DEC 15 G (MC-MA 1) 1981: 0558 JAN 18 E (MC-MA 1) 2313 JAN 19 o/u Portugal (MC-MA 1) 0455 FEB 24 P (MC-MA 1)
- 756 NIGERIA Maiduguri 1979: 0145 JUL 8 election results in EE/0200 JUL 8 EE & vernacular talk (DB-South Africa)
- 759 SAO TOME (t) het during xlnt. African cx. 0350 OCT 13, 1979 (MC-MA 2)
- 765 UKRAINE Odessa (t) 1979: 0459 DEC 15 P apparent Slavic talk (MC-MA 1)
- 765 SWITZERLAND Sottens 1979: 0512 NOV 24 P light mx. (MC-MA 2) 1980: 0602 MAR 2 FF talk (MC-MA 1) 0458 MAR 24 IS, FF talk P (Kaz-RI 1)
- 765 SENEGAL Dakar FF talk, AA talk, vernacular talk, AA chants/flutes/violins, a-cappella Koranic AA chants, African mx. 1979: 0636 OCT 8 (GT-FL) 2200 OCT 9 (MC-MA 1)
 2159 OCT 13 F (MC-MA 2) 0045-0102 OCT 17 (JK-TX) 2215 OCT 17 E (MC-MA 1) 0606 OCT 19 P (GT-FL) (t)0558 OCT 20 carrier P (BP-WA) 2359 OCT 24 P-F (MC-MA 1) 2240 NOV 14 E (MC-MA 2) 2210 NOV 15 E (MC-MA 2) 0630 NOV 30 F-G (GT-FL) 2312 DEC 7 F-G (MC-MA 1)
 2135 DEC 22 F (MC-MA 2) 1980: 2229 JAN 3 G (MC-MA 1) 2231 JAN 4 (MC-MA 1) 2210 JAN 10 (MC-MA 1) 2256 JAN 19 G (MC-MA 2) 0802 JAN 20 E (MC-MA 2) 2157 JAN 21 E (MC-MA 1)
 2205 JAN 31 E (MC-MA 1) 2258 JAN 31 s/off (MC-MA 1) 2210 FEB 7 F-G (MC-MA 1) 0056 FEB 10 G (MC-MA 2) 2230 FEB 12 G (MC-MA 1) 0030 FEB 17 G (MC-MA 1) 2221 FEB 22 (MC-MA 1)
 2336 SEP 14 G (MC-MA 1) 2353 SEF 17 E (MC-MA 1) 0506 OCT 1 F (GT-FL) 2158-2200 OCT 15 E (MC-MA 1) 2210 NOV 2 (MC-MA 1) 2220 NOV 3 (MC-MA 1) 2158 NOV 6 E (MC-MA 1)
 2157 NOV 7 (MC-MA 1) 2156 NOV 14 E (MC-MA 1) 2124 NOV 18 G (MC-MA 1) 2223 DEC 1 G (MC-MA 1) 0627 DEC 3 E (MC-MA 1) 2250-2300 DEC 5 E (MC-MA 1) 2227 DEC 9 E (MC-MA 1)
 2208 DEC 13 (MC-MA 1) 2100-2130 DEC 21 (MC-MA 1) 0600 DEC 24 (Kaz-RI 2) 0629 DEC 27 P-F (MC-MA 2) 1981: 2237 JAN 4 F (MC-MA 1) 2314 JAN 19 (MC-MA 1) 2341 FEB 7 E (MC-MA 2)
 0722 FEB 8 E (MC-MA 2) 0054 APR 11 G (Kaz-RI 1)

- 774 unID 1979: 0530 AUG 17 carrier & SAH (MC-MA 2) 2320 OCT 19 P "non-descript mx." (BC-PA)
 0521 OCT 21 P carrier (BP-WA) 0445-0630 OCT 21 carrier (NHP-BC) 1980: 0607 MAR 20
 carrier (GM-CO) 0427 SEP 27 talk (RCN-BC) 0500 SEP 28 (RCN-BC) 0400 SEP 27 flute IS,
 talk, 6 pipe/last one long (NHP-BC) 2212 NOV 12 mx. u/Spain (MC-MA 1)
- 774 BULGARIA, Stolnik/Varna, NHP's UnID on Sept 27 (see above) was
 subsequently found to be Bulgaria. (ed)
- 774 SPAIN syncros. SS talk (pipe, nx. on the hour), SS & EE pop mx. 1979: 0505 SEP 8
 F o/SAH, way louder than TIW-775 (MC-MA 1) 0508 OCT 6 F (MC-MA 1) 2308 OCT 19 E
 (MC-MA 1) 0002 OCT 25 F-G o/unID TA (MC-MA 1) 0040 NOV 1 E (MC-MA 1) 0125 NOV 1
 F (MC-MA 1) 0511 NOV 24 G (MC-MA 2) 0118 DEC 4 F-G (MC-MA 1) 0500 DEC 15 F (MC-MA 1)
 1980: 2230 JAN 11 G (MC-MA 1) 2309 JAN 19 P o/SAH (MC-MA 2) 2200 JAN 22 E (MC-MA 1)
 2232 JAN 26 (MC-MA 1) 2207 JAN 31 G (MC-MA 1) 0057 FEB 10 F (MC-MA 2) 2224 FEB 12 E
 (MC-MA 1) 2200 FEB 27 E (MC-MA 1) 2220 MAR 5 F (MC-MA 2) 0229 MAR 9 F (RE-PA)
 0540 MAR 12 (MM-ID) 2318 MAR 25 F (MC-MA 1) 0402 SEP 6 F (MC-MA 2) 2357 SEP 17 G
 (MC-MA 1) 0604 SEP 28 F (MC-MA 1) 0536 OCT 4 G (MC-MA 1) 0509 OCT 18 G (MC-MA 2)
 2154 NOV 6 E (MC-MA 1) 2212 NOV 12 G o/2nd stn. (MC-MA 1) 2222 NOV 14 G (MC-MA 1)
 2228 NOV 15 G (MC-MA 1) 2230 DEC 9 G (MC-MA 1) 2225 DEC 12 E o/SAH (MC-MA 1)
 1981: 0456 FEB 24 G (MC-MA 1)
- 782 PORTUGAL Porto-Miramar CSB9 PP talk, PP folk vocals, soft mx., jazz 1979: 0510
 SEP 8 (MC-MA 1) 2308 OCT 19 o/783 het (MC-MA 1) 2327 OCT 19 het (BC-PA) 0004 OCT 25
 P (MC-MA 1) 2123 OCT 28 (MC-MA 1) 0127 NOV 1 F (MC-MA 1) 0124 DEC 4 F, better than
 783. (MC-MA 1) 1980: 2233 JAN 26 P weaker than 783 (MC-MA 1) 0616 MAR 2 E (MC-MA 1)
 0227 MAR 9 F (RE-PA) 0008 MAR 12 F weaker than 783 (RE-PA) 0122 MAR 14 P (MC-MA 1)
 2352 MAR 21 P (MC-MA 1) 0541 SEP 7 (MC-MA 2) 0605 SEP 28 F-G (MC-MA 1) 0140 OCT 4
 G better than 783 (MC-MA 1) (t)0049 OCT 14 carrier (GT-FL) 0026 NOV 12 G o/SAH
 (MC-MA 1) 0045 NOV 6 F (MC-MA 1)
- 782 unID 1980: 0026 NOV 12 SAH on Portugal - Syria ? (MC-MA 1)
- 783 unID 1980: 0030 JAN 12 AA, briefly G (MC-MA 1) 0604-0629 MAR 20 carrier (GM-CO)
- 783 E. GERMANY Burf CG talk, cl. mx., Alpine mx., jazz, Muzak, light mx., CG vocals
 1979: 0126 NOV 1 F (MC-MA 1) (t)2128 DEC 15 pop mx. o/782 het (MC-MA 1)
 1980: 0028 JAN 23 (MC-MA 1) 0604 MAR 2 G (MC-MA 1) 2241 MAR 8 E (MC-MA 2)
 (t) 0250-0320 MAR 9 (RE-PA) 0038 MAR 13 E (MC-MA 1) 0402 MAR 13 F (NHP-BC) 0200
 MAR 16 E (RE-PA) 2307 MAR 25 G (MC-MA 1) 0340-0440 SEP 26-28 (RCN-BC) 0405 SEP 27
 0405 OCT 1 (NHP-BC) (t)0508 OCT 1 (GT-FL) 0300-0500 OCT 1 & 3 (RCN-BC) 0013 OCT 3
 G o/782 het (MC-MA 1) 0350-0400 OCT 3 (NHP-BC) 0508 OCT 18 F (MC-MA 2) 0027 NOV 12
 (MC-MA 1) 1981: 0600 JAN 18 F-G (MC-MA 1)
- 792 SPAIN Seville 1980: 2340 MAR 19 mx., SS talk 24 dB o/noise (BB-MA)
- 792 FRANCE Limoges 1980: 0534 MAR 24 F France Culture net ppm. o/1.5 Hz. SAH (Kaz-RI 1)
- 819 ANDORRA La Vieja FF talk, pop mx. 1979: 0512 SEP 8 G o/fast SAH & 200 Hz. het (MC-MA 1)
 0600 OCT 22 (ERS-NJ) 1980: 2254 FEB 2 P (MC-MA 1) 0600 MAR 1 P-F (MC-MA 1)
 (t) 0442 MAR 13 P (PM-OR) (t)0533 MAR 20 het (GM-CO) 0504 SEP 6 G o/growl (MC-MA 2)
 0530 SEP 20 G (MC-MA 1) 0540 OCT 4 G (MC-MA 1) 0506 OCT 18 E o/u Morocco (MC-MA 2)
 1981: 0602 JAN 18 G (MC-MA 1)
- 819 MOROCCO Rabat AA talk, AA chants/violins/flutes etc. 1979: 0535 AUG 17 P-F o/Andorra
 (MC-MA 2) 0508 SEP 16 G o/SAH (MC-MA 1) 0034 SEP 26 E (MC-MA 1) 2307 OCT 19 P-F
 (MC-MA 1) 0019 OCT 25 G (MC-MA 1) 0215 NOV 24 E (MC-MA 2) 2233 DEC 3 E (MC-MA 1)
 0503 DEC 15 P (MC-MA 1) 1980: 0100 JAN 23 P (MC-MA 1) 0614 MAR 16 G (RE-PA)
 (t) 0357 JUN 28 P (MC-MA 2) (t) 0608 SEP 28 (MC-MA 1) 0145 OCT 4 F (MC-MA 1)
 0506 OCT 18 E o/u Andorra (MC-MA 2) 0050 NOV 6 P-F (MC-MA 1) 2205 NOV 6 F-G o/Andorra
 (MC-MA 1) 2150 DEC 13 E (MC-MA 1) 2120 DEC 15 P-F (Kaz-RI 1)
- 819 unID 1979: 0545 OCT 20 het on WBAP (BP-WA) 1980: 0441 MAR 9 het (BP-WA2)
 0509 OCT 1 het (GT-FL)
- 826.95 unID (Morocco or Libya) 1979: 0010 OCT 20 AA wailing (ERS-NJ)
- 827 LIBYA Sebha 1979: (t)0006 OCT 25 het on 828 (MC-MA 1) 1980: (t) 0032 NOV 12 het
 against 82c (MC-MA 1)

- 828 MOROCCO Oujda AA chants, mx., talk // 819 kHz. 1979: 0510 SEP 16 F (MC - MA 1)
 (t) 0007 OCT 25 E OC o/others (MC - MA 1) 2210 DEC 9 (BB=MA) 1980: 2335 MAR 24
 G (Kaz-RI 1) 0520 APR 5 E o/827 het (MC-MA 2) (t)0542 OCT 4 E OC (MC-MA 1)
 1981: 0536 JAN 18 P-F (MC-MA 1) 0633 JAN 25 G (MC-MA 1) 0130 FEB 23 P-G (Kaz-RI 2)
- 828 unID 1980: 0451 MAR 9 het on WCCO (BP-WA 2) 0508 SEP 6 G OC (MC-MA 2) 0032 NOV 12
 carrier (MC-MA 1) 0510 OCT 1 P carrier (GT-FL)
- 837 FRANCE Nancy 1979: 2215 DEC 9 o/others, w/FF talk, harp mx. (BB-MA)
- 837 CANARY ISLANDS Las Palmas 1980: (t) 0533 SEP 7 F SS pop vocals (MC-MA 2) (t) 2125
 DEC 15 F SS talk (Kaz-RI 1)
- 837 unID 1980: 0444 MAR 20 DF 35° (NHP-BC) 2253 DEC 11 P AA mx. (MC-MA 1)
- 846 ITALY Rome 1979: 0015 OCT 20 inst. mx., II talk (ERS-NJ) 0025-0030 NOV 1 P-G (ERS-NJ)
 0551 NOV 24 P II vocal (MC-MA 2) 1980: 0601 MAR 1 P (MC-MA 1) 0233 MAR 9 G CG nx.
 (RE-PA) 0303 MAR 9 G EE mx. (RE-PA) 2335 MAR 25 G II talk (ERS-NJ) (t)0515 MAR 12
 poss. II talk, guitar mx. o/second stn.(MM-ID) (t)0358 SEP 27 SS cr II talk (PM-OR)
- 855 SPAIN Murcia SS talk, SS mx., pop mx., rock mx., pipe & mx. on the hour 1979: 0520
 SEP 8 (MC-MA 1) 0505 OCT 6 P (MC-MA 1) 0320 OCT 13 F (MC-MA 1) 0010 OCT 19 F (ERS-NJ)
 0030 OCT 20 E (ERS-NJ) 0345-0400 OCT 24 RNE ID (BF-NY) 0012 OCT 25 F (MC-MA 1)
 0033 NOV 1 G (ERS-NJ) 0152 NOV 1 P-F (MC-MA 1) 0500 NOV 24 E (MC-MA 2) 0127 DEC 4
 F (MC-MA 1) 0204 DEC 23 G (MC-MA 2) 1980: 0255 MAR 9 G (RE-PA) 0005 MAR 13 (RE-PA)
 2342 MAR 23 E //585, 684 (ERS-NJ) 0155 JUN 29 P-F (Kaz-RI 1) 0529 SEP 7 F (MC-MA 2)
 1981: 0137 FEB 23 P-G (Kaz-RI 2)
- 855 unID 1980: 0500 MAR 14 het, bits of mx. (MM-ID)
- 864 FRANCE Paris 1979: 0512 SEP 16 F M&W in FF (MC-MA 1) 0558-0600 OCT 14 F s/on- OC then
 FF talk o/SAH (MC-MA 2) 0525 OCT 22 G FF talk & vocals (ERS-NJ) 2159 OCT 31 G FF o/
 CBH/WHDH elop (MC-MA 1) 2150 DEC 9 chorus, FF talk (MC-MA 1) 1980: 0711 MAR 9 F
 M&W in FF (MC-MA 2) 0523 MAR 10 G FF talk (RE-PA) 0600 MAR 12 M&W in FF (MM-ID)
 2220 MAR 12 FF (MC-MA 1) 0458 MAR 13 G talk in unID lang. (RE-PA) 0601 MAR 16 G
 FF (RE-PA) 0700 MAR 16 F IS, ID (RE-PA) 0548 MAR 22 P M&W in FF(MC-MA 1) 0510
 OCT 18 E M&W in AA (MC-MA 1) 0501 NOV 15 G AA mx. (MC-MA 1) 1981: 0605 JAN 18 G
 electronic mx. (MC-MA 1) 0459 FEB 24 G AA mx. (MC-MA 1)
- 864 unID 1980: 0404-0406 SEP 27 AA mx., talk (BP-WA) 0437 SEP 27 talk (JL-WA)
- 864 MOROCCO Ksar-es-Souk 1979: 2330 DEC 9 AA talk //819; o/u Bulgaria (BB-MA)
- 864 BULGARIA Plovdiv 1979: 2330 DEC 9 //747; o/u Morocco (BB-MA)
- 873 W. GERMANY Frankfurt AFN US-style EE pgms., US sports, rock mx., ID "AFN Europe"
 1979: 0224 JUL 7 (BB-South Africa) 1980: 0128 MAR 14 G o/SAH (RE-PA) 0052 MAR 15
 BKB game (RE-PA) 2350 SEP 8 P o/u Spain (Kaz-RI 1) 0445 SEP 29 G FB game (PM-OR)
 (t) 0403 OCT 1 P M&W in EE (RCN-BC)
- 873 unID 1980: 0351 MAR 9 carrier w/faint audio (BP-WA 2) 0142 MAR 14 P rock/disco(MC-MA 1)
 0510 MAR 18 CG talk (PM-OR) 0411 SEP 27 carrier (BP-WA) 0231-0250 SEP 28 P rock,
 talk (BP-WA) 1981: 0133 JAN 7 two stations (RE-PA)
- 873 SPAIN Zaragoza 1979: (t) poss. SS talk P 0014 OCT 25 (MC-MA 1) 1980: 2345 SEP 8
 P-F orchestral mx. (Kaz-RI 1) 0433 OCT 4 F US disco, SS talk (MC-MA 1) 1981: 0139
 FEB 23 F MoR SS mx. o/2 Hz. SAH. (Kaz-RI 2)
- 873 USSR Kiev 1980: 2355 MAR 20 to 0000 MAR 21 Balalaika mx., RR talk, Mayak IS (BB-MA)
- 873 MOZAMBIQUE Beira 1979: 1346 JUN 15 F local mx.. PP talk (BB-S. Africa)
- 882 ENGLAND Washford BBC EE mx./talk, light pop mx., GMT+1 time checks 1979: (t) 0607
 OCT 19 P (PM-OR) 0545-0705 OCT 20 (BP-WA) 0556 OCT 21 (BP-WA) (t)0521-0632 OCT 21
 P (NHP-BC) (t) 0438-0450 OCT 25 carrier (NHP-BC) 2131 DEC 9 EE talk, showtimes o/
 other stn. (BB-MA) 1980: (t) 2240 JAN 26 strings, possibly //909 (MC-MA 1) 2213
 JAN 31 G (MC-MA 1) 2245 FEB 12 het (MC-MA 1) (t)0610 MAR 2 (WH-UT) 0241-0600 MAR 9
 (BP-WA 2) 0512 MAR 12 R. 1 & R. 2 mentions (NHP-BC) 0621 MAR 16 G mx. through WCBS
 elop (RE-PA) 0235 MAR 17 G (MM-ID) 0220 MAR 24 G //693 (Kaz-RI 1) (t)0333-0500
 SEP 26 (BP-WA) 0441 SEP 27 (RCN-BC) 0200-0500 SEP 27 & 28 G (BP-WA) 0400 SEP 28
 G (PM-OR) 0429 OCT 18 G (MC-MA 2) 0523 NOV 29 P-F (MC-MA 2) 2220 DEC 15 E Xmas.
 mx. (MC-MA 1) 1981: 0542 JAN 18 E (MC-MA 1) 0500 FEB 24 G (MC-MA 1)

- 882 E. GERMANY Königswusterhausen (t) 1980: 0235-0248 MAR 17 P GG talk (PM-OR)
- 882 unID 1980: 0417 SEP 27 carrier (JL-WA)
- 891 ALGERIA Algiers AA talk, chants, drums, flutes, violins, etc. 1980: 0049 JUL 8 (Kaz-RI 1)
 0410 SEP 6 E (MC-MA 2) 0519-0522 SEP 7 E (MC-MA 2) 2323 SEP 8 E AA (Kaz-RI 1),
 2328 SEP 14 E (MC-MA 1) 2313 SEP 21 E (MC-MA 1) (t)0334-0400 SEP 26 het DF 40° to 60°
 (BP-WA) 0350 SEP 26 G (PM-OR) (t)0256-0306 SEP 28 (BP-WA) 0023 OCT 3 E (MC-MA 1)
 0152 OCT 4 G (MC-MA 1) 2340 OCT 9 E (MC-MA 1) 0045 OCT 15 E (MC-MA 1) 0432 OCT 18
E (MC-MA 2) 0553 OCT 19 E (MC-MA 2) 2145 OCT 20 E (MC-MA 2) 0512 OCT 1 F (GT-FL)
 2206 OCT 31 E (MC-MA 1) 2152 NOV 1 E (MC-MA 1) 2159 NOV 7 E (MC-MA 1) 2210 NOV 12
G (MC-MA 1) 2158 NOV 14 E (MC-MA 1) 2128 NOV 18 F (MC-MA 1) 2139 NOV 19 F-G (MC-MA 1)
 2140 NOV 22 E (MC-MA 2) 0126 DEC 4 G (MC-MA 1) 2217 DEC 5 G (MC-MA 1) 2235 DEC 9
E (MC-MA 1) 2252 DEC 11 E (MC-MA 1) 2125 DEC 13 E (MC-MA 1) 2110 DEC 15 G (Kaz-RI 1)
 1981: 2138 JAN 4 F (MC-MA 1) 2240 JAN 4 (MC-MA 1) 2202 JAN 7 E (RE-PA) 0102 JAN 8
G (RE-PA) 2126 JAN 17 (MS-NY) 2317 JAN 19 E (MC-MA 1) 2338 JAN 31 E (Kaz-RI 2)
 2153 FEB 24 E (MC-MA 2) 0143 FEB 23 o/SAH (Kaz-RI 2) 2205 FEB 24 F (MC-MA 2)
 0555 MAR 28 F (MC-MA 1) 2328 APR 10 F (Kaz-RI 1) 0433 MAY 10 P (MC-MA 2)
- 891 unID 1980: 0356 MAR 9 het (BP-WA 2) 0448 MAR 13 het/talk (PM-OR) 0224 OCT 1 & 0351
 OCT 3 carrier (GM-CO)
- 909 ENGLAND (BBC synchros,) EE talk, show mx., classical mx., opera, MoR/light pop mx.
 1979: 2320 OCT 19 F (MC-MA 1) 1980: 2212 JAN 10 (MC-MA 1) 0119 JAN 23 (MC-MA 1)
 2240 JAN 26 (MC-MA 1) 2222 MAR 12 E (MC-MA 1) 0030 MAR 14 F (RE-PA) 2338 MAR 20
 (ERS-NJ) (t)0515 OCT 1 P-F carrier (GT-FL) 2220 NOV 14 (MC-MA 1)
- 918 unID 1980: 0130 OCT 1 carrier (GT-FL) 2142 NOV 22 het (MC-MA 2)
- 927 unID 1979: 2219 NOV 1 strong het (MC-MA 1) 1980: 0517 OCT 1 P talk, mx. (GT-FL)
- 936 unID 1980: 2210 JAN 31 Slavic talk (Ukraine?) (MC-MA 1) 0438 OCT 18 TT'er(MC-MA 2)
- 936 MOROCCO Agadir (t) 1980: 0520 OCT 1 carrier, trace of audio (GT-FL)
- 945 FRANCE Toulouse 1979: 2140 DEC 9 FF interview o/2 others (BB-MA) 1980: (t) 2247
 JAN 26 P-F cl. mx. (MC-MA 1) 2229 FEB 28 G SS talk (MC-MA 1) 0547 MAR 22 P-F
 M&W in FF (MC-MA 1) 0448 OCT 4 F-G M&W FF & other lang. (PP?) (MC-MA 1)
 0440 OCT 18 E FF talk (MC-MA 1) 2240 NOV 14 E SS P.M. (MC-MA 1) 2152 DEC 13
P FF talk (MC-MA 1)
- 945 SAUDI ARABIA Curiat 1979: 2025 DEC 26 E AA mx. (Hart-Australia)
- 954 SPAIN Madrid 1980: 2340 MAR 24 P SS ballad (Kaz-RI 1)
- 962 unID 0458 JAN 1, 1981 (MZ-CT)
- 963 unID 1979: 0525 OCT 1 carriers (GT-FL) 0500 OCT 18 OC (MC-MA 2)
- 972 unID 1980: 0140 MAR 14 het on WCHS (MC-MA 1)
- 999 unID 1980: 2140 DEC 10 het present during low-latitude opening (MC-MA 1)
- 1008 unID 1980: 2335 MAR 12 P mx. (MC-MA 1) 0449 OCT 1 poss. AA mx. (GT-FL) 1981:
 0600 FEB 3 (LP-OR)
- 1008 MOROCCO Ksar-es-Souk 1979: 1630 DEC 26 E chants (Hart-Australia)
- 1017 NIGERIA Yola 1979: 0127 JUL 8 EE election results (IB-South Africa)
- 1017 TURKEY Istanbul 1979: 0225 OCT 21 & 0235 OCT 24 Turkish mx. F (BP-NY)
 1980: 0245-0330 MAR 14 G chants (RE-PA) 0300-0321 OCT 3 6 pips, talk, then flute
 & drum mx. (NHP-BC) 0316 OCT 1 flute & strings o/u the German (RCN-BC)
 0240-0310 OCT 3 (RCN-BC)
- 1017 W. GERMANY Mainz-Wolfsheim 1979: 0216 NOV 1 cl. mx. (MC-MA 2) 1980: 2232 MAR 8 G
 Muzak (MC-MA 2) 0203 MAR 15 probable GG talk (RE-PA) 0422 MAR 24 F (Kaz-RI 1)
 0440 SEP 27 GG talk, inst. mx. (PM-OR) 0156 OCT 4 F cl. mx. (MC-MA 1)
- 1017 unID 1979: 0220 DEC 23 (Morocco or Turkey) AA-style chant (MC-MA 2) 1980: 0352
 OCT 1 choral singing o/1.6 Hz. SAH (NHP-BC) 0445 OCT 1 P carrier (GT-FL)
- 1026 unID 1980: 0444 OCT 1 P carrier (GT-FL)

- 1035 PORTUGAL Porto Alto 1979: 0600 OCT 13 s/on with anthem, then PP talk (MC-MA 2)
 2303 OCT 18 E PP talk, soft mx. o/unID (MC-MA 1) 0035 OCT 25 G US rock (MC-MA 1)
 2113 OCT 28 F US rock (MC-MA 1) 0056 DEC 22 F Broadway mx. (MC-MA 2) 1980:
 2354 JAN 26 F disco (MC-MA 1) 0053 MAR 14 F-G PP folk vocal (MC-MA 1) 2340 MAR 23
 E jazz, PP talk o/SAH (MC-MA 1) 0158-0207 OCT 4 G flute mx., PP talk, s/off w/march
 NA (MC-MA 1) (t) 0612 OCT 1 (GT-FL) 0058-0100 NOV 6 G jazz, pipe, PP talk (MC-MA 1)
- 1035 IRAQ Babylon 1979: 1755 DEC 26 G AA mx. (Hart-Australia)
- 1044 MOROCCO Sebaa-Aioun FF talk, US/UK/FF rock, pop, and jazz mx.; AA mx. on rare occasions
 1979: 0442 SEP 16 (MC-MA 1) 0130 SEP 26 F s/off (MC-MA 1) 2307 OCT 19 P-F (MC-MA 1)
 2310 OCT 19 P-F (BC-PA) 0040 OCT 25 F FF (MC-MA 1) 2329 DEC 7 (t) G OC (MC-MA 1),
 2133 DEC 22 F-F (MC-MA 2) 1980: 2359 JAN 22 & 2351 JAN 26 o/u E. Germany (MC-MA 1),
 2331 FEB 29 G (MC-MA 1) 0537 MAR 8 P (MC-MA 2) 0054 MAR 14 F (MC-MA 1) 2339 MAR 23
 G (MC-MA 1) 0058 JUL 8 F (Kaz-RI 1) 0037 SEP 7 G (MC-MA 2) 2348 SEP 14 P-F (MC-MA 1),
 2320 OCT 3 P (Kaz-NY) 0440-0602 OCT 1 F (GT-FL) 1981: 2332 JAN 31 F (Kaz-RI 2)
 2338 APR 10 F (Kaz-RI 1)
- 1044 E. GERMANY Dresden - Burg 1979: 0515-0600 OCT 19 P (PM-OR) 1980: 2359 JAN 22 &
 2351 JAN 26 o/u Morocco (MC-MA 1) 0445 MAR 13 F GG talk, light mx. (PM-OR)
 0047 MAR 16 G GG talk (RE-PA) 0400 SEP 27 G GG talk (PM-OR) 0300-0400 SEP 23, 26, & 27
 GG talk, mx. (RCN-BC)
- 1044 unID 1979: 0238 OCT 22 F yodelling (BF-NY) 1980: 0540 & 0600 MAR 20 carrier (GM-CO)
 0240-0354 SEP 28 through OCT 4 carrier (GM-CO)
- 1053 ENGLAND (BBC synchros.) 1979: (t) 0133 SEP 26 P het (MC-MA 1) 2302 OCT 18 P EE talk
 (MC-MA 1) 2138 DEC 15 P (MC-MA 1) 0654 DEC 22 F-G Moody Blues mx. //1089 (MC-MA 2)
 1980: 2354 JAN 22 F rock (MC-MA 1) 0056 MAR 14 pop vocal in bad WGN slop (MC-MA 1),
 (t) 0430 SEP 27 light mx., EE talk (PM-OR) 0617 DEC 3 P EE talk (MC-MA 1)
- 1061 PORTUGAL Norte-Azurara classical mx., PP talk 1979: 2258 OCT 18 G (MC-MA 1) 2112
 OCT 28 P hetting WGTR (MC-MA 1) 2220 NOV 1 E killing KYW (MC-MA 1) 0046 DEC 4 F
 (MC-MA 1) 1980: 2247 JAN 4 P-F (MC-MA 1) 0001 JAN 23 F (MC-MA 1) 2215 JAN 31 E
 (MC-MA 1) 2140 FEB 27 (MC-MA 1) 2227 FEB 28 G (MC-MA 1)
- 1062 PORTUGAL Norte-Azurara classical mx., opera, PP talk 1980: 2323 MAR 21 G (MC-MA 1)
 2331 MAR 23 E (MC-MA 1) 2245 MAR 23 E (Kaz-RI 1) 0045 OCT 3 (MC-MA 1) 0106 NOV 6
 G cl. mx., OC, carrier cut (MC-MA 1) 2150 NOV 8 E (MC-MA 1) 2218 NOV 29 F (Kaz-RI 2)
 2126 DEC 13 E (MC-MA 1) C235-0241 DEC 24 G (MZ-CT) 1981: 2259-2300 JAN 19 F o/
 2.2 Hz. SAH (MC-MA 1) 2347 JAN 31 E (Kaz-RI 2)
- 1062 DENMARK Kalundborg 1980: 0505 MAR 18 F M&W in Scandinavian language, then jazz (MC-MA 1)
- 1062 TURKEY Diyarbakir 1979: 2100 DEC 24 AA mx., Turkish talk & ID (Hart-Australia)
- 1062 unID 1980: 0437 SEP 6 US folk mx. (Judy Collins) (MC-MA 2) 0438 OCT 1 carrier (GT-FL)
 1981: 0555 JAN 25 three station pile (MC-MA 1)
- 1071 FRANCE synchros. 1980: 0525 OCT 4 P FF vocal (MC-MA 1) 1981: 0621 JAN 18 FF talk
 (MC-MA 1)
- 1071 unID 1981: 0600 FEB 3 het (LP-OH)
- 1088 unID (African?) 1980: 2245 JAN 4 het on old plan channel (MC-MA 1)
- 1089 ENGLAND Orfordness BBC 1979: 0654 DEC 22 Moody Blues records //1053 (MC-MA 2)
 1980: 2356 JAN 22 // 1053 (MC-MA 1) 0058 MAR 14 MoR EE vocal, in WBAL slop (MC-MA 1)
 0555 MAR 16 EE talk (RE-PA) 0549 OCT 18 OC (MC-MA 2) 1981: (t) 0542 JAN 5 het
 (RE-PA) 0515 MAR 31 pop mx. (MC-MA 1)
- 1098 CZECHOSLOVAKIA Bratislava 1980: 0325-0330 MAR 14 folk mx., pipes, talk - format
 like 1521 (RE-PA)
- 1107 unID 1980: 2344 MAR 23 P cl. mx. (MC-MA 1)
- 1107 EGYPT Batra 1979: OCT 21/22/24 0230 OC ... 0300 s/on followed by chanting, audible
 to 0320 (BF-NY) 1980: 0237-0300 MAR 14 G OC, TT, AA talk & chants @ 0300 (RE-PA)
 0307 MAR 24 P AA chants (Kaz-RI 1) (t) 0322-0558 OCT 1 carrier (GT-FL)
- 1107 SPAIN synchros. 1979: 0627 NOV 18 (Kaz/MC-RI) 1980: 2350 FEB 9 F US pop mx.,
 SS talk (BB-MA)

- 1116 unID 1979: 2328 OCT 21 400 Hz. TT (BF-NY) 1980: 2250 DEC 11 possible SS talk o/
 SAH pile (Spanish local?) (MC-MA 1)
- 1134 YUGOSLAVIA Tovarnik 1980: (t) 0419 MAR 9 F talk (RE-PA) (t)0005 MAR 24 piano mx.
 (Kaz-RI 1)
- 1134 unID 1979: 0649 DEC 22 growl, prob. from Spain "graveyarders" (MC-MA 2)
- 1134 KUWAIT Sulaibiyah 1979: 1625 DEC 25 E AA chanting (Hart-Australia)
- 1143 unID 1980: 2230 JAN 21 British EE talk, orchestral pop mx. (BB-MA) 2331 MAR 12
 3 stations, one w/opera (MC-MA 1) 2350 SEP 6 (MC-MA 2) 0034 SEP 7 cl. mx. o/SAH(MC-MA 2)
- 1143 USSR Kaliningrad 1980: 2330 MAR 15 to 0030 MAR 16 E IS, RR talk (RE-PA) (t) 2240-
 2300 MAR 23 P mx. // 1386, s/off at 2300 (Kaz-RI 1)
- 1143 YUGOSLAVIA Zagreb 1980: (t) 2322 MAR 20 Slavic talk (ERS-NJ)
- 1152 ROMANIA Cluj 1979: 2110 DEC 24 E cl. mx. & old-time inst. mx. (Hart-Australia)
- 1161 FRANCE Strasbourg 1979: 0642 NOV 24 G FF talk (MC-MA 2) 0648 DEC 22 G M&W in FF
 (MC-MA 2) 1980: 0525 MAR 8 P-F M&W in FF (MC-MA 2) 0235 MAR 14 E vocal mx. (RE-PA)
 0201 MAR 15 G FF mx. (RE-PA) 2235 MAR 23 E (Kaz-RI 1) 1981: 0514 MAR 31 P M&W in
 FF (MC-MA 1)
- 1161 unID 1979: 0320 OCT 24 G AA chant (BF-NY) 0207 NOV 1 AA-influenced folk mx. (MC-MA 1)
 1981: 0225-0230 FEB 8 P het, talk (MS-NY)
- 1162a unID 1980: chimes, AA-sounding talk 2225 FEB 29 (MC-MA 1)
- 1169 unID 1980: 2250 DEC 11 het (MC-MA 1)
- 1179 SPAIN Murcia 1980: 2255-2300 MAR 25 SS nx. (SER net), bugle blast (Kaz-RI 1)
- 1179 SWEDEN Hörby 1980: (t) 2305 MAR 23 P inst. mx. (Kaz-RI 1) (t) 2246 MAR 25 European
 style dance band mx. (Kaz-RI 1)
- 1188 unID 1979: 0535 OCT 19 carrier/bits of talk (PM-OR) 1980: 2346 MAR 23 inst. mx.
 (ERS-NJ) 2232 MAR 25 carrier (Kaz-RI 1) 0041 OCT 3 bits of mx. (MC-MA 1)
 0312 OCT 1 P carrier (GT-PL)
- 1188 IRAN Tehran 1979: 1650 DEC 24 G AA mx. (Hart-Australia)
- 1196 MOROCCO Agadir 1980: (t) 2246 JAN 4 AA talk (MC-MA 1) (t) 2226 FEB 28 M&W shouting,
 seemingly in AA (MC-MA 1) 2215 NOV 12 F FF talk, AA violins (MC-MA 1) 2249 DEC 11
 F-C FF talk, rock (MC-MA 1) 2145 DEC 13 G FF talk, US/UK rock (MC-MA 1) 1981:
 2341 JAN 31 // 1044 (Kaz-RI 2)
- 1197 W. GERMANY Munich VOA 1979: (t) 0615 OCT 15 P US rock (ERS-NJ) 0555-0600 OCT 19 F
 Slavic talk (PM-OR) 0600-0610 OCT 19 F EE talk (PM-OR) 0645 DEC 22 F EE discussion,
 o/Morocco-1196 het (MC-MA 2) 1980: 0500 MAR 12 VOA ID (MM-ID) (t)0453 MAR 13 P
 talk in KEX slop (PM-OR) 2350 MAR 19 - 0000 MAR 20 G US C&W mx., FF talk (ERS-NJ)
 (t) 0346-0429 SEP 26 carrier (BP-WA) (t)2222 DEC 5 M&W in FF (MC-MA 1)
- 1206 FRANCE Bordeaux 1979: 0432 SEP 8 F-G M&W FF (MC-MA 1) 0545 OCT 14 P (GT-PL)
 0620 OCT 15 FF talk, mx. G (ERS-NJ) 0014 OCT 19 P (GT-PL) 2234 OCT 19 E cl. mx.
 better than WCAU (MC-MA 1) (t)0430-0440 OCT 20 P poss. FF talk (BC-PA) 2200
 OCT 24 & 2105 OCT 28 FF talk F-G (MC-MA 1) 2237 NOV 23 F FF (MC-MA 2) 0642
 NOV 24 E FF (MC-MA 2) 0658 NOV 30 P (GT-PL) 0450 DEC 8 E talk in FF & other lang.
 (MC-MA 1) 0558 DEC 22 E in Asiatic lang. //1377 (MC-MA 2) 0643 DEC 22 E FF discussion
 of CB radio (MC-MA 2) 1980: 2207 JAN 22 G FF (MC-MA 1) 2230 FEB 1 E FF (MC-MA 1)
 2227 FEB 12 G FF (MC-MA 1) 2219 FEB 29 E FF (MC-MA 1) (t)0605 MAR 2 bits of FF talk
 (WH-UT) 0523 MAR 8 G M&W FF(MC-MA 2) 0440 MAR 11 FF talk, mx. (MM-ID) 2218 MAR 12 E
 FF talk, better than WCAU (MC-MA 1) (t)0840-0847 MAR 13 talk (BP-WA 2) 0602 MAR 24
 G FF vocal (ERS-NJ) 2214 MAR 25 E FF talk (MC-MA 1) 0506 APR 5 E AA psm. (MC-MA 2)
 2155 APR 7 fade-in (MC-MA 2) 0429-0430 SEP 6 G AA vocal, then M&W in FF (MC-MA 2)
 0550 SEP 28 G OC (MC-MA 1) 0311-0555 OCT 1 FF (GT-PL) 0513 OCT 4 E AA chant // 1377
 (MC-MA 1) 0543 OCT 18 talk by M&W (MC-MA 2) 2130 OCT 20 E piano mx., FF talk (MC-MA 2)
 2157 NOV 1 E FF (MC-MA 1) 2156 NOV 8 E FF mx. (MC-MA 1) 2240 NOV 13 G FF (MC-MA 1)
 2213 NOV 14 G (MC-MA 1) 2055 NOV 15 E piano mx., FF talk (MC-MA 1) 2136 NOV 19 G FF
 (MC-MA 1) 0610 DEC 3 F M&W FF (MC-MA 1) 2239 DEC 8 FF (MC-MA 1) 2143 DEC 13 F FF
 (MC-MA 1) 1981: 2225 JAN 6 P-F (MC-MA 1) 0628 JAN 18 E folk mx. (MC-MA 1) 0420
 JAN 25 F opera (MC-MA 1) 2250 JAN 31 P-F //1377 (Kaz-RI 2) 0529 FEB 23 F FF (MC-MA 1)
 0503 MAR 24 F-G AA chant (MC-MA 1) 0507 MAR 31 E M&W in FF (MC-MA 1)

- 1206 POLAND (3 sites) 1979: (t) 0550 OCT 19 Slavic talk (PM-OR) 1980: 2329 MAR 12 P
 cl. mx. noted after France s/off (MC-MA 1)
- 1215 unID 1979: 0700 DEC 22 wobbling (FM'ing) carrier (MC-MA 2) 1980: 2145 DEC 10 het
 during AU CX, prob. Canary Islands (MC-MA 1)
- 1215 ENGLAND synchros. BBC 1979: 0002 NOV 2 P EE talk; 00 @ 0005 (ERS-NJ) (t)0654
 NOV 30 bits of audio (GT-FL) 1980: 2328-2330 MAR 8 F cl. mx. (MC-MA 2) 2328 MAR 12
G-E cl. violin mx. (MC-MA 1)
- 1215 ALBANIA Lushnje 1980: (t) 0553 OCT 1 F talk (GT-FL)
- 1224 unID 1979: 0110 OCT 20 carrier (ERS-NJ) 2316 OCT 19 jumble (MC-MA 1) 1980: 2310
 MAR 23 opera & orchestral mx., Slavic-sounding talk (Kaz-RI 1) 2347 MAR 23 jumble
 (MC-MA 1) 0000 MAR 25 IS w/ 7 harp notes (Kaz-RI 1)
- 1224 SPAIN synchros. 1980: (t) 2320 FEB 29 SS-sounding talk (MC-MA 1)
- 1233 CZECHOSLOVAKIA Prague & others 1979: (t) 0640 DEC 22 apparent Slavic talk (MC-MA 2)
- 1233 MOROCCO Tangier 1980: (t) 0006 JAN 23 apparent AA chant o/SAH (MC-MA 1)
- 1242 FRANCE Marseille 1979: 0543 DEC 22 P M&W FF in bad WOCB slop (MC-MA 2)
- 1251 unID 1980: 0306 OCT 1 (GT-FL) 1981: 0508 JAN 11 het, possible AA mx. (MC-MA 1)
- 1260 GREECE Rhodes 1979: 2140 DEC 26 G VOA EE service (Hart-Australia)
- 1269 unID 1980: 0305 OCT 1 carrier (GT-FL)
- 1269 W. GERMANY Neumünster 1979: 0401 SEP 8 (MC-MA 1) 2316 OCT 19 GG talk (MC-MA 1)
 1980: 2332 MAR 8 P Muzak (MC-MA 2) 2325 MAR 12 F cl. mx. (MC-MA 1) (t)0240 MAR 16
 het (RE-PA) (t)2315 MAR 20 het (ERS-NJ) 0035 OCT 3 F big-band mx. (MC-MA 1)
 1981: 0542 JAN 25 G GG talk (MC-MA 1)
- 1286 unID 1980: 0300 OCT 1 carrier (GT-FL)
- 1287 CZECHOSLOVAKIA Prague-Melník 1979: (t)2355 OCT 19 (ERS-NJ) (t)2315 OCT 19 P mx.
 (MC-MA 1) 0541 DEC 22 cl. mx. o/other station (MC-MA 2) 1980: 0008 JAN 23 E cl. mx.
 (MC-MA 1) 2318 FEB 29 F soft cl. mx. (MC-MA 1) (t)0330 MAR 11 carrier (RE-PA)
 (t) 0037 MAR 15 carrier (RE-PA) (t)0034 OCT 3 P bits of opera o/SAH (MC-MA 1)
 1981: (t)0536 JAN 25 jazz (MC-MA 1) (t)0413 JAN 26 carrier (S&K-NY)
- 1296 unID 1979: prob. BBC - EE or GG talk P 0638 NOV 24 (MC-MA 2)
- 1296 ENGLAND Orfordness BBC 1980: 0543 MAR 24 P (Kaz-RI 1)
- 1304 unID 1979: 0548 DEC 22 het on 1305 (MC-MA 2)
- 1305 unID 1979: 0548 DEC 22 talk by M&W ... France? (MC-MA 2) 1980: 0450 MAR 9 P
 FF talk (MC-MA 2)
- 1314 unID 1979: 0633 NOV 24 (MC-MA 2), 1980: 0454 MAR 18 carrier (MC-MA 1)
 2343 MAR 22 bits of talk (ERS-NJ)
- 1323 CYPRUS Zyyi 1979: 2125 DEC 26 BBC World Service in EE, //1296 G (Hart-Australia)
- 1332 ITALY Rome 1980: 0505-0515 MAR 8 G II talk, cl. mx. (MC-MA 2) (t)0450 MAR 9 carrier
 (RE-PA) 1981: (t) 0520 JAN 10 carrier (RE-PA)
- 1341 N. IRELAND Lisnagarvey BBC 1979: 0632 DEC 22 F EE talk (MC-MA 2) 1980: 0516 MAR 8
F-G EE talk, light mx. (MC-MA 2)
- 1349 MAURITANIA Nouakchott 1979: 0640 OCT 26 F-G chant //4845 (BF-NY) 1980: 2231 JAN 3
G AA chanting (MC-MA 1) (t)2324 MAR 23 het (MC-MA 1) 2330 AUG 28 P-F African mx.
 (Kaz-RI 1) 2150 OCT 15 chant (MC-MA 1) 2211 NOV 14 G AA talk (MC-MA 1) 2230 DEC 1
 moaning (MC-MA 1)
- 1359 E. GERMANY Berlin 1980: 0523 MAR 9 G GG talk (MC-MA 2)
- 1359 IRAQ Kirkuk 1979: 1605 DEC 26 F AA chants (Hart-Australia)

- 1368 USSR 1980: (t)2250-2300 MAR 23 P mx. // 1143 (Kaz-RI 1)
- 1368 unID 1979: D540 & 0630, DEC 22 choral mx. (Poland?) o/SAH (MC-MA 2)
- 1375 unID 1980: 2316 DEC 20 (St. Pierre?) (MS-NY) 1981: 0155 MAY 7 het (GS-VA)
- 1375 ST. PIERRE ET MIQUELON 1979: 0008 OCT 14 E FF talk (MC-MA 2) 2300 OCT 11 E now on higher power (BF-NY) 2256 OCT 18 FF folk mx. (MC-MA 1) 0025 OCT 19 F FF vocals & talk (ERS-NJ) 2312 OCT 19 P-F FF religious pgm. (BC-PA) 0125-0145 OCT 20 P-F disco, FF talk, s/off @ 0145 w/ID & "La Marseillaise" (MB-ON) 2320-2323 DEC 13 OC, audio showing erratically indicating transmitter problem (CMS-ON) 1980: 2319 JAN 10 E cl. mx. (MC-MA 1) 0906-0940 SEP 29 carrier (BP-WA) 2159 NOV 1 E FF rock (MC-MA 1) 2217 NOV 22 E M&W in FF (MC-MA 2) 2336-2345 DEC 24 P-F FF (MZ-CT) 1981: 0230 JAN 18 (t) OC (MS-NY) 2335-2343 JAN 3 E jazz, FF vocal (MS-NY)
- 1377 FRANCE Lille 1979: 0431 AUG 17 F OC (MC-MA 2) 0359 SEP 8 E AA chant (MC-MA 1) 2234 NOV 23 F FF talk, mx. (MC-MA 2) 0630 NOV 24 E rock, FF talk (MC-MA 2) 2204 DEC 21 F FF talk (RE-PA) 0452 DEC 25 G mx. (RE-PA) 0538 DEC 22 G FF talk (MC-MA 2) 1980: 2223 FEB 29 FF (MC-MA 1) 0512 MAR 8 G AA mx. (MC-MA 2) 2223 MAR 10 G (RE-PA) 0603-0700 MAR 16 G FF mx. (RE-PA) 0545 OCT 1 F FF pop mx. (GT-FL) 0507 OCT 4 G M&W in Asian lang. (MC-MA 1) 0537 OCT 18 P talk (MC-MA 2) 0610 DEC 3 G M&W in FF (MC-MA 1) 1981: 0432 JAN 9 (t) carrier (RE-PA)
- 1386 IRAN Ahwaz 1979: 1610 DEC 24 F chants (Hart-Australia)
- 1395 ALBANIA Lushnje 1979: 2234 SEP 17 loud het on car rx. (MC-MA 1) 2345 OCT 18 (GT-FL) 2255 OCT 18 E FF talk (MC-MA 1) 2315 OCT 19 F (BC-PA) 2350 OCT 19 SS mx. (ERS-NJ) 2310 NOV 1 F M&W in FF (MC-MA 1) 2056-2100 F IS, FF talk (RE-PA) 2233 NOV 23 P (MC-MA 2) 2131 DEC 21 F EE talk (RE-PA) 2040 DEC 24 IS "Internationale" (RE-PA) 2100-2130 DEC 24 FF p.m. (RE-PA) 1980: (t) 2313 JAN 26 OC (MC-MA 1) 0510 MAR 8 G CG talk (MC-MA 2) 2222 MAR 10 (RE-PA) 2256 MAR 10 G "Internationale" theme mx. (RE-PA) 2203 MAR 11 EE talk (RE-PA) 2156 MAR 12 G EE talk (RE-PA) 2323 MAR 12 SS talk (MC-MA 1) 2148 MAR 13 o/second stn. (jamming-type signal) (RE-PA) 2343 MAR 14 P-F SS//9430 (LM-NY) 2347 MAR 20 E M&W in SS (ERS-NJ) 2325 MAR 23 E SS vocal (ERS-NJ) 2355 MAR 23 s/off w/Internationale (Kaz-RI 1) 2315 OCT 3 F-G SS talk (Kaz-NY) 2123 OCT 20 F FF talk (MC-MA 2) 2209 NOV 14 E EE talk (MC-MA 1) 2312 DEC 11 E M&W in SS (MC-MA 1) 1981: 0501-0526 JAN 10 E talk, Internationale (RE-PA) 2200 JAN 8 G s/on theme, EE ID (RE-PA) 0522 JAN 25 G FF (MC-MA 1) 2252 JAN 31 F (Kaz-RI 1)
- 1403 GUINEA Conakry 1979: 0045-0200 OCT 24 E (BF-NY) 1980: 0255 JAN 9 (GT-FL) (t)2320 MAR 23 P screaming; nothing on 1404 (MC-MA 1) 0123 MAR 24 African mx. (Kaz-RI 1) 0542 OCT 1 G drums (GT-FL) 2143 NOV 19 (MC-MA 1)
- 1403.6 GUINEA Conakry 1980: 0520 DEC 6 G chanting (MC-MA 1)
- 1404 GUINEA Conakry 1979: 0248 AUG 16 E guitar mx. (MC-MA 2) 0500 OCT 3 F drums (GT-FL) 0506 OCT 13 drums (MC-MA 2) 0513 OCT 14 F rhythmic mx. (GT-FL) 0115 OCT 20 vernacular talk, drums G (ERS-NJ) 0230-0426 OCT 15 FF talk, African mx. (JK-TX) 2316 OCT 19 P FF talk, drums (BC-PA) 2230 NOV 9 F (MC-MA 1) 0105 NOV 16 P (MC-MA 2) 0600 NOV 26 G mx, interlude played on hour, echoed FF ID (CH-CA) 0634 NOV 30 F (GT-FL) 0145 EEC 4 AA-style violins (MC-MA 1) 2110 DEC 26 African mx. w/drums, FF talk (Hart-Australia) GUINEA Conakry 1980: 0546 JAN 19 F-C chanting (MC-MA 2) 0131 FEB 10 G drums (MC-MA 2) 0530 MAR 9 E AA chanting (MC-MA 2) 0540 NOV 27 G chants (MC-MA 2) 2145 DEC 16 E African vocal (MC-MA 1) (t)2316 DEC 20 (MS-NY) 1981: 0111 FEB 8 G talk (MC-MA 2) 0549 FEB 8 E AA chants (MC-MA 2)
- 1404 unID 1981: 0600 FEB 3 het (LP-OH)
- 1408a GUINEA 1980: 2335 NOV 14 drifting from 1404 to 1408, yielding het against CIGO/WPOP-1410 (MC-MA 1) 0445 NOV 20 chanting (GT-FL)
- 1410 unID (maybe domestic) 1979: 0300 OCT 22 AA mx. u/WPOP; soon fading as if a TA (BF-NY)
- 1412 unID 1980: 2310 MAR 25 het against 1413 (Kaz-RI 1)
- 1413 SPAIN Zaragoza/Sevilla/others 1979: (t)0624 NOV 24 apparent SS talk & mx. (MC-MA 2)
- 1413 YUGOSLAVIA Pristina 1981: (t)0520 JAN 25 bits of Slav talk in jumble w/2 others (MC-MA 1)
- 1413 OMAN Masirah Island BBC 1979: 2125 DEC 26 BBC World Service in EE E (Hart-Australia)

- 1422 W. GERMANY Saarbrücken CG talk, pop mx., MoR mx., rock (including new-wave, heavy metal & "high-tech, sci-fi Eurorock" e.g. Yes, Kraftwerke, etc.) 1979: 0623 NOV 24 F (MC-MA 2) 0534 DEC 22 G (MC-MA 2) 2030 DEC 24 (Hart-Australia) 0608 DEC 25 E Xmas. mx. (RE-PA) 1980: 2315 JAN 10 (MC-MA 1) 2316 FEB 29 F (MC-MA 1) 2330 MAR 5 P (MC-MA 2) 0500 MAR 8 F-G (MC-MA 2) 2321 MAR 12 F (MC-MA 1) 2340 MAR 15 G (RE-PA) 0008 MAR 22 P-F 0/2.1 Hz. SAH (MC-MA 1) 0123 JUL 8 (Kaz-RI 1) 0512 SEP 20 P pop mx. o/AA stn., 2.8 Hz. SAH resulting (MC-MA 1) (t)0541 OCT 1 P (GT-FL) 0126 NOV 6 o/u other stn. (MC-MA 1) 0602 DEC 3 CG o/u Algeria SAH 3 Hz. (MC-MA 1) 1981: (t)0502 JAN 10 carrier (RE-PA) 0512 JAN 25 E pop vocal (MC-MA 1)
- 1422 ALGERIA Algiers 1980: (t)0126 NOV 6 mix w/German (MC-MA 1) 0623 NOV 16 P AA vocal (MC-MA 1) 2218 NOV 22 G AA chants (MC-MA 2) 0602 DEC 3 AA chants o/u W. Germany, SAH 3 Hz. (MC-MA 1)
- 1424 ALGERIA Algiers 1979: (t) 0005 OCT 22 P soft mx. (MC-MA 1)
- 1424.2 ALGERIA Algiers 1979: 0530 OCT 15 AA mx. & 2300 OCT 21 G soft mx. (BF-NY) 0500 OCT 24 anthem, AA mx. (BF-NY)
- 1424.7 ALGERIA Algiers 1979: 0042 NOV 1 talk (FF or AA) (ERS-NJ)
- 1425 GREENLAND Thule 1979: (t) US BB game P, looping north 0242 AUG 16 (MC-MA 2) (t) 2247 OCT 18 P US C&W mx. (MC-MA 1) 1981: (t)0145 JAN 26 carrier on north Beverage (S&K-NY)
- 1440 LUXEMBOURG Marnach 1979: 0532 DEC 22 CG talk (MC-MA 2) 0702-0705 DEC 22 CG talk, R. Luxembourg ID, rock mx. o/CFCO (MC-MA 2) 1981: 0505-0510 JAN 25 G CG talk & vocals, Luxembourg ID atop WFTQ/CFCO (MC-MA 1)
- 1458 ENGLAND (several different stations possible) 1979: 0707 DEC 22 EE talk, Elton John mx. (MC-MA 2) 1980: (t) 2318 MAR 13 carrier (RE-PA)
- 1458 unID 1980: 0340 MAR 11 carrier (RE-PA) 0539 OCT 1 carrier (GT-FL)
- 1458 ALBANIA Durres 1979: (t)2340 NOV 1 F talk in E. European lang. (ERS-NJ) (t)2140 IEC 24 unknown lang. (RE-PA) 1980: (t) 2312 JAN 10 (MC-MA 1) (t)2315 FEB 29 FF-sounding talk P o/SAH (MC-MA 1) (t)2320 MAR 12 TT's (MC-MA 1) (t)2317 MAR 23 poss. FF talk o/prowl, in bad CKRB slop (MC-MA 1) (t)0340 MAR 25 talk (Kaz-RI 1) 1981: 0447-0457 JAN 10 E talk, Internationale theme, carrier then off (RE-PA)
- 1467 MONACO Monte Carlo 1979: 2359 OCT 18 (GT-FL) 2244 OCT 18 F rfgs. pfm. F (MC-MA 1) 2348-0000 OCT 19 G FF rfgs. pfm., then s/off (RE-PA) 2225 NOV 1 E rfgs. EE song (MC-MA 1) 2325-2330 NOV 1 E EE rfgs. pfm. "Transworld Radio, Monte Carlo" EE ID (ERS-NJ) 2102 NOV 23 F rfgs. mx. (RE-PA) 0619 NOV 24 CG talk 2155 DEC 15 P (MC-MA 1) 0441 DEC 22 G IS, CG pfm. (RE-PA) 2040 DEC 24 E EE rfgs. pfm. (RE-PA) 1980: 2219 JAN 8 P (MC-MA 1) 2310 JAN 10 G choral mx. (MC-MA 1) 2358 JAN 19 P (MC-MA 2) 2314 FEB 29 E EE preaching, London mailing address (MC-MA 1) 0457 MAR 8 E choral mx., CG talk (MC-MA 2) 2231-2311 MAR 10 G talk, rfgs. mx. (RE-PA) 2319 MAR 12 F EE talk (MC-MA 1) 0503 MAR 14 G rfgs. pfm. (RE-PA) 2352 MAR 20 G SS talk (ERS-NJ) 0445 MAR 24 mx., box IS (Kaz-RI 1) 0445 MAR 29 s/on w/mx. box IS (MC-MA 1) 0456 APR 5 rfgs. mx. (MC-MA 2) 0334 SEP 7 OC before pfm. start (MC-MA 2) 0500 OCT 4 choir mx. (MC-MA 1) 1981: 2228 JAN 8 G OC (RE-PA) 0500 JAN 25 G CG talk, hymn (MC-MA 1) 0514 FEB 24 G talk, mx. box IS, then off (MC-MA 1) 0334 APR 1 E 1 kHz. TT (MC-MA 1)
- 1476 AUSTRIA Vienna 1979: 0353 SEP 8 P cl. mx./CG talk (MC-MA 1) (t)0617 NOV 24 cl. mx. (MC-MA 2) 0527 DEC 22 G string mx. (MC-MA 2) 0616 DEC 22 E Slav talk, then CG talk (MC-MA 2) 1980: 2337 MAR 5 P Alpine mx. (MC-MA 2) 0405-0500 MAR 9 E pop mx., CG talk (RE-PA) 0350 OC/0400 s/on in CG MAR 11 (RE-PA) 0350-0359 MAR 13 G OC, TT, s/on w/IS (RE-PA) 0403 MAR 14 CG (RE-PA) 2327 MAR 14 G pop mx. (RE-PA) 1981: 0446 JAN 10 G CG talk (RE-PA) 0615 JAN 25 E cl. mx. (MC-MA 1)
- 1485 SPAIN (several stations possible) 1979: 0709 DEC 22 G SS talk (MC-MA 2)
- 1485 unID 1979: 0615 NOV 24 disco briefly o/pile (MC-MA 2) 1980: 0312 SEP 30 carriers (NHP-BC) 0538 OCT 1 P (GT-FL)
- 1493 unID 1980: 0035 MAY 17 carrier, perhaps Ivory Coast (Kaz-RI 1)
- 1494 FRANCE Bastia, et al. 1979: 0614 NOV 24 P M&W in FF (MC-MA 2) 0526 DEC 22 F-G FF talk (MC-MA 2) (t)0523 DEC 25 carrier (RE-PA) 1981: 0505 MAR 22 P France Culture AA pfm. // 1206, 1557 (Kaz-RI 1)
- 1494 unID 1980: 0537 OCT 1 drums (MC-MA 1)

- 1502 TOGO Lama-Kara 1979: (t) 0542 NOV 26 apparent audio //SW (CH-GA) 1980: (t) 0535 OCT 1 carrier (GT-FL)
- 1503 unID 1979: 0610 NOV 24 carrier jumble, probably Spanish locals (MC-MA 2) 1980: 0445 MAR 18 apparent SS talk (MC-MA 1) 0530 OCT 1 P carrier (GT-FL)
- 1503 ENGLAND (several stations possible) 1979: 0525 DEC 22 P British local here w/EE talk & mx. (MC-MA 2)
- 1503 POLAND Stargard-Stettin 1979: 0459 DEC 22 IS (RE-PA) 0558 DEC 25 G IS (RE-PA) 1980: 0408-0500 MAR 9 Chopin IS (RE-PA) 0355-0358 MAR 11 F OC, IS (RE-PA) 0356 MAR 13 G OC (RE-PA) 0429 MAR 14 G Chopin IS (RE-PA) 1981: 0540 JAN 11 (RE-PA) 0614 JAN 25 F M&W in Polish (MC-MA 1) (t) 0423 JAN 26 carrier in sloop (S&K-NY) 0521 FEB 23 P-F M&W talk (MC-MA 1)
- 1512 SAUDI ARABIA Jeddah 1980: 0257 MAR 24 P-F s/on, AA chant (Kaz-RI 1) 2242 MAR 25 P AA mx. (Kaz-RI 1) 1981: 0312 FEB 23 P AA mx. through WITS sloop (MC-MA 1)
- 1521 SAUDI ARABIA Duba 1979: 2208 OCT 17 E AA chant (MC-MA 1) 2238 OCT 18 G AA talk atop the Czech (MC-MA 1) 2316 NOV 1 AA mx. (MC-MA 1) 2229 NOV 23 E chants/violins (MC-MA 2) 2247 NOV 26 Koranic chants (CH-GA) 0225 DEC 23 AA chant (MC-MA 2) 2040-2245 DEC 24 AA //15060 (RE-PA) 1980: 0015 JAN 23 chanting o/Czech (MC-MA 1) 2240 FEB 29 E AA chant & talk, better than WKW (MC-MA 1) 0314-0345 MAR 11 E AA chants (RE-PA) 2250 MAR 19 het (ERS-NJ) 2230 MAR 23 (Kaz-RI 1) 2145 MAR 25 (Kaz-RI 1) 2135 MAR 26 fade-in (Kaz-RI 1) (t) 2200 SEP 6 het fade-in (MC-MA 2) 2010 NOV 15 fade-in (MC-MA 1) 2118 DEC 17 P AA talk (Kaz-RI 2) 1981: 0259-0303 FEB 23 E AA talk (MC-MA 1)
- 1521 CZECHOSLOVAKIA Kosice 1980: 0016 JAN 23 instrumental mx. o/u Saudi (MC-MA 1) 0410-0430 MAR 9 light mx., talk, pipes, Hvezda IS (RE-PA) 0430 MAR 12 F pipe, talk (RE-PA) 1981: 0103 JAN 11 (t) het (RE-PA)
- 1521 unID 1980: 0315 OCT 3 het (NHP-BG) 2117 DEC 30 het (MZ-CT)
- 1530 VATICAN R. Vatican 1979: 0545 OCT 22 II or Latin talk u/WCKY OC (ERS-NJ) 1980: (t) 2335-2345 MAR 12 cl. mx. o/u WCKY (RE-PA) (t) 2235 DEC 9 piano mx. o/u WCKY (Kaz-RI 2) 1981: 0514 FEB 23 G Slavic talk, Vatican mentions atop WCKY (MC-MA 1)
- 1539 W. GERMANY Mainflingen DLF CG talk, show tunes, GG march mx., pop mx., Muzak/ light cl. zx. 1979: 0349 SEP 8 loud het (MC-MA 1) (t) 0540 OCT 19 carrier, bits of audio (PM-OR) 0608 DEC 22 loud het (MC-MA 2) 0603 DEC 25 G GG (RE-PA) 1980: 0555 MAR 9 P (MC-MA 2) (t) 0531 OCT 1 het (GT-FL) 0458 DEC 15 G (MC-MA 1) 2232 DEC 19 P (Kaz-RI 2) 0534 DEC 28 (MC-MA 2) 1981: 0431 JAN 9 E (RE-PA) 0455 JAN 11 P (MC-MA 1) 0445 JAN 25 G (MC-MA 1) 0333 APR 1 F-G (MC-MA 1)
- 1548 ENGLAND Liverpool R. City 1979: 0711 NOV 24 pop mx., R. City ID (MC-MA 2)
- 1548 ENGLAND unspecified station 1979: 0403 DEC 24 (RE-PA) 1980: 0557 MAR 9 EE talk (MC-MA 2) (t) 2332 MAR 13 light mx. (RE-PA) 1981: (t) 0102-0113 JAN 11 (RE-PA) 0538 FEB 23 EE talk, Slim Whitman song (MC-MA 1)
- 1554 GABON Melene 1979: (t) 2257-2315 NOV 25 bits of audio (CH-GA) 1980: (t) 2308 JAN 26 bits of exotic mx. (MC-MA 1) 1981: (t) 0510 FEB 23 drums (MC-MA 1)
- 1557 FRANCE Nice 1979: 0540 OCT 22 G PP talk (ERS-NJ) 0530 mix w/Malta/0607 alone w/ FF NOV 24 (RE-PA) 0609 NOV 24 E (MC-MA 2) 0606 DEC 22 G FF mx., talk (MC-MA 2) 0555 DEC 25 G FF talk (RE-PA) 1980: 0610-0705 JAN 5 F FF mx., talk (NW-ON) 0540 FEB 2 P M&W in FF (MC-MA 1) 0541 FEB 9 P M&W in FF (MC-MA 2) 0606 MAR 1 M&W FF F (MC-MA 1) 0448 MAR 8 G FF drama, M&W talking (MC-MA 2) 0500 MAR 29 G AA talk, AA mx. //1206, 1377 (MC-MA 1) 0448 APR 5 P M&W FF (MC-MA 2) 0501 SEP 20 E FF nx. (MC-MA 1) 0323 OCT 4 F M&W FF (MC-MA 1) 0532 OCT 1 F FF (GT-FL) 0600 NOV 16 E OC, then ff talk (MC-MA 1) 0536 NOV 27 F FF talk (MC-MA 2) 0501 DEC 15 E AA mx. (MC-MA 1) 2230 DEC 19 F FF talk (Kaz-RI 2) 1981: 0600 JAN 5 G R. France ID, FF talk (RE-PA) 0610 JAN 25 E piano mx., FF talk (MC-MA 1) 0610 FEB 16 G FF (MS-NY) 0345 FEB 23 P-F FF talk (MC-MA 1) 0331 APR 1 E M&W in FF & another lang. (MC-MA 1)
- 1557 MALTA Cyclops 1979: 0400 AUG 17 F Deutsche Welle IS's alternated w/voice announcements, pipes @ 0400, then AA pga. (MC-MA 2) 0431 GG/0448 AA G NOV 24 (RE-PA) 0442 DEC 8 P-F OG talk (MC-MA 1) 0320 DEC 23 F (RE-PA) 2050 DEC 24 AA mx. (Hart-Australia) 1980: 0334 JAN 12 apparent Turkish pga. (CMS-ON) 0252 MAR 11 F AA mx. (RE-PA) 0312 MAR 13 G GG talk (RE-PA) 2331 MAR 12 AA chants (RE-PA) 0430 MAR 14 o/u France (RE-PA) 1981: (t) 0325 JAN 6 talk (RE-PA) 0331 APR 1 E CG talk o/u France (MC-MA 1)

- 1562 PORTUGAL Covilha 1981: (t) 0559-0606 MAR 16 P carrier, mx. (Kaz-RI 2)
- 1566 unID 1980: 0502-0521 MAR 13 carrier DF 35° (NHP-BC) 0411 MAR 20 carrier (GM-CO)
0440 NOV 25 carrier (MS-NY) 1981: 0600 FEB 3 (LP-OH)
- 1566 SWITZERLAND Sarnen 1979: 0535 OCT 22 F GG nx. (ERS-NJ) 0612 NOV 24 cl. mx. (RE-PA)
1980: 0605 NOV 16 F-G GG talk, piano mx. (MC-MA 1) 1981: (t) 0552 JAN 12 carrier
(RE-PA) 0508 FEB 23 jazz u/Tunisia (MC-MA 1)
- 1566 TUNISIA Sfax AA talk, AA chanting/moaning/violins/drums etc. 1979: 0450 AUG 16
P in CKLM sloop (MC-MA 2) 0455 OCT 13 F (MC-MA 2) 0438 OCT 14 E (MC-MA 2) 0515
OCT 14 F (GT-FL) 2351 OCT 18 F (GT-FL) 2345 NOV 1 F (ERS-NJ) (t) 0425 NOV 1 P
(CMS-ON) 0430 s/on - 0600 NOV 24 E (RE-PA) 2226 NOV 23 good RF strength; phase-
distortion on audio (MC-MA 2) 0640 NOV 30 P (GT-FL) 0433 DEC 8 E (MC-MA 1)
2340 DEC 17 G "hollow" audio (MC-MA 2) 2248 DEC 22 // 7225 (RE-PA) 2132 DEC 24 G
(RE-PA) 0436 DEC 25 G (RE-PA) 1980: 2221 JAN 8 P & 0535 JAN 5 P (MC-MA 1)
2304 JAN 10 (MC-MA 1) 2306 JAN 26 G (MC-MA 1) 0432-0450 JAN 30 (GM-CO) 0531
FEB 9 F (MC-MA 2) 0453 FEB 16 G (MC-MA 1) 2312 FEB 29 F (MC-MA 1) 0444 MAR 8
E (MC-MA 2) 2325 MAR 8 F (RE-PA) 2330 MAR 12 E (RE-PA) 0430 MAR 13 E s/on (RE-PA)
0440 MAR 18 G (MC-MA 1) 2300 MAR 19 G (ERS-NJ) 2330 MAR 23 G (ERS-NJ) 0455 MAR 29
P-F (MC-MA 1) 0442 APR 5 F (MC-MA 2) 0527 OCT 1 (GT-FL) 2145 NOV 1 (MC-MA 1)
2205 DEC 19 F (Kaz-RI 2) 1981: 2229 JAN 6 F (MC-MA 1) 0428 JAN 10 s/on (RE-PA)
0508 FEB 23 E atop Switzerland (MC-MA 1) 0505 MAR 24 P (MC-MA 1)
- 1575 ITALY Genoa 1979: 0605 NOV 24 G II talk (MC-MA 2) 1980: (t) 0610 NOV 16 P-F
apparent II pop mx., bombed by CKLM (MC-MA 1) 1981: 0608 JAN 5 G II talk (RE-PA)
0638 JAN 25 F II pops (MC-MA 1) 0545 FEB 23 G US & II pop mx., II talk (MC-MA 1)
- 1575 TUNISIA 1980: 2240 FEB 9 AA mx. // 7225 (BB-MA)
- 1575 unID 1980: 0525 OCT 1 P carrier (GT-FL)
- 1577 unID 1980: 0448 MAR 25 AA chanting (Kaz-RI 1)
- 1578 PORTUGAL Porto 1979: 0702 NOV 24 F-C PP talk (MC-MA 2) 0713 DEC 22 F-C light
jazz (MC-MA 2)
- 1578.6 unID 1980: 0548 SEP 28 P African-sounding mx. (MC-MA 1)
- 1581 unID 1980: 0445 NOV 25 carrier (MS-NY)
- 1584 SPAIN 'graveyarders' 1979: 0622 NOV 24 SS talk o/others (RE-PA) 0600 NOV 24 march
nx./0700 NOV 24 pips, SS talk (MC-MA 2) 0714 DEC 22 SS talk o/growl (MC-MA 2)
0608 NOV 16 SS screaming o/others (MC-MA 1) 1981: 0551-0605 JAN 12 SS talk, 4 pips
on the hour (RE-PA) 0526-0612 MAR 16 SER-type nx. atop second SS stat. (Kaz-RI 2)
0506 MAY 10 G R. Elche (EAJ53) atop a second SS'er which had SER nx. (Kaz-RI 1)
- 1584 unID 1980: 0527 MAR 22 GY-type pile (MC-MA 1) 0500 SEP 20 hodge-podge (MC-MA 1)
0240 OCT 1 carriers (NHP-BC) 0317 OCT 3 carriers (NHP-BC) 1981: 0600 FEB 16
jumble (MS-NY) 0505 FEB 23 AA talk mixed w/SS'ers (MC-MA 1)
- 1593 W. GERMANY Langenberg GG talk, Muzak, pop mx., light rock/oldies, big-band mx.,
waltzes, MoR mx., showtunes/operettas, CG vocals 1979: 0400 AUG 17 F-C polar
flutter-fading present (MC-MA 2) 0344 SEP 8 F (MC-MA 1) 0435 OCT 14 G (MC-MA 2)
0530 OCT 22 E (ERS-NJ) 0035 NOV 1 (CMS-ON) 0623 NOV 24 G (RE-PA) 0556 NOV 24 E
Westdeutscher Rundfunk mention (MC-MA 2) 0637 NOV 30 (GT-FL) 0527 DEC 2 (MC-MA 1)
0436 DEC 8 P (MC-MA 1) 0517 DEC 22 E (MC-MA 2) 1980: 0330-0430 JAN 12 G (CMS-ON)
0534 JAN 5 F (MC-MA 1) 0707 JAN 20 G (MC-MA 2) 2259 JAN 26 F (MC-MA 1) 0535 FEB 2
G (MC-MA 1) 0604 MAR 1 E (MC-MA 1) 0430 MAR 8 G (RE-PA) 0440 MAR 8 E (MC-MA 2)
0716 MAR 8 G (MC-MA 2) 0450 MAR 9 G (RE-PA) 2317 MAR 11 F (RE-PA) 2330 MAR 12 (RE-PA)
0424 MAR 13 P (PM-OR) 0405 MAR 14 E (RE-PA) 0438 MAR 18 E (MC-MA 1) 2330 MAR 20
G (ERS-NJ) 0457 MAR 29 E (MC-MA 1) 0439 APR 5 F (MC-MA 2) 0310 JUL 8 F (Kaz-RI 1)
0422 SEP 6 F (MC-MA 2) 0458 SEP 20 F (MC-MA 1) 0420 SEP 28 G (MC-MA 1) 0525 OCT 1
(GT-FL) 0320 OCT 4 G (MC-MA 1) 0534 OCT 18 F (MC-MA 2) 0009 NOV 12 P-F (MC-MA 1)
0532 NOV 27 G (MC-MA 2) 0142 DEC 1 F (Kaz-RI 2) 0618 DEC 3 G (MC-MA 1) 0508
DEC 15 E (MC-MA 1) 0510-0525 DEC 15 G (MS-NY) 0531 DEC 15 (DY-CT) 0602 DEC 21 F-C
(MC-MA 1) 0527 DEC 28 F (MC-MA 2) 1981: 0450 JAN 11 F (MC-MA 1) 0303 JAN 12 G
// 7265 (RE-PA) 0225-0230 JAN 18 F (MS-NY) 0502 JAN 18 F (MC-MA 1) 0427 JAN 25 E
(MC-MA 1) 0502 FEB 23 E (MC-MA 1) 0525 MAR 16 E (Kaz-RI 2) 0321 APR 1 E (MC-MA 1)
- 1602 SPAIN several low-powered stations 1979: (t) 0557 NOV 24 apparent SS talk in
jumble of signals (MC-MA 2) 0600 DEC 22 SS talk o/SAH rumble (MC-MA 2)

Afghanistan. Kabul is now on 648, 657, 945 and 1278 0125-1930 UT. Regional stations are Harat-630, 10 kw; Kandahar-864 10 kw; Mazar-i-Sharif-909 10 kw. (Arctic 8/1)

Albania. Shkoder is now on 1323. A new station is on 648 from Rogozhina, planned for 300 kw. Lushnje-1395 officially admits using 1000 kw. (Arctic 5/2, 8/1)

Albania- A station has been reported on 1183; no location. Gjirokastra has settled down on 1295 for a while. (Arctic 12/5) Rogozhina is now reported on 648. (Arctic

Algeria. Radio Algiers continues to broadcast in EE 2000-2030 on 251 khz plus SW. (SCDX 6/26)

The clandestine Free Sahara program of the Polisario Front (fighting for an independent Western Sahara) is carried in the External Service in AA, FF, and SS 2200-2300. on 575 khz plus SW. In addition there is a second anti-Moroccan program called "Maghrib of the Peoples" in the domestic service at 22002400. This is broadcast on the remaining Algiers AA domestic service frequencies but from Oran. (SCDX 7/10)

Two unsynchronized transmitters on 1304 have been heard in FF until 0203. Not heard on 890/891. (Arctic 3/7) An UNID station on 730/732 till 2300 is Algeria, with FF news at 1800, otherwise in AA. (Arctic 3/7, 3/22)

New station on 1355 calling itself "Itha'at al-Jumhuriyah al Arabiyah as-Sahra wiyyad ad-Dimug ratiyyah" (National Radio of the Saharan Arab Democratic Republic) 1900-2355. (Arctic 4/3)

Heard with SS program on 1431 0005. Apparently the transmitter supposed to be on 1422. (SCDX 10/16) Radio Algiers external service is on 251 or 254. (SCDX 10/9) 1415 is a new channel aimed at the Sahara territory; location unknown. (Arctic 10/19)

Oran-1304 is still here with FF service. Constantine-1314 French 2 is here ex 1304. Both are 40 kw. (EBU via Arctic 9/21)

An Algerian has been noted on 1214. (Arctic 12/5) The French service of R. Algiers has been heard on 251. (SCDX 12/2)
Les Trembles, 1304, 40 kw, has been taken out of service. (Arctic 9/12)

Andorra. Parliament has decided that Sud-Radio and Radio Andorra will be taken over by the government in 1981. Radio Andorra will then go to 600 kw. The French company which owns Sud-Radio has not accepted the decision. (SCDX 8/19)

Angola. The Voice of Palestine, Voice of the Palestine Revolution, now being transmitted on Luanda's 31m outlets, and on 1088, Tues., Thurs., and Sat, 2130-2145. (SCDX 12/9)

Bahrain. Construction has begun on a new powerful transmitter on 558 covering the Arabian Gulf area. (Arctic 11/2)

Bangladesh. A 100 kw transmitter in Rajshahi is on 846 to serve the northern zone. (BBCMS via Arctic 11/2) 100 kw transmitter at Khulna will be commissioned in a few months. Geneva Plan frequency is 558. (WRTH Newsletter via NZDXT 10/79)

Belgium. The new 600 kw tx in Wolvertem has been testing on 1512. (Arctic 11/7)

Benin. Cotonou-1475 signs on daily at 0415. (WRTH via Arctic 10/5)

Bophuthatswana. Bophuthatswana Commercial Radio is now on 24 hours on 702 with 100 kw, located at Ga Rankuwa. Trans World Radio is also in Ga Rankuwa with 100 kw on 1098, but broadcasts daytime only. (WRTH via Arctic 11/2)

Bulgaria. Monitored transmission times with announced sites are as follows:

576	-2330 (Vidin)	864	0500-0230
594	0230-2330 (Pleven)	945	0230-
648	0230-0030	963	AN (Sofia 4)
711	0230a s/off	1017	0215v-0000v
747	0230-0030 (Petrich)	1161	AN (Sofia 1)
774	AN (Sofia 3)	1224	0500-0230 (Vidin)
774	0230- (Varna)	1296	0230- (Kurdjali)
828	0500-0230 (Shumen)	1377	0230 (Arctic 3/7)

Burundi. Gitega-1116 100 kw will be on the air during 1981. (Arctic 11/21)

Cameroon. Radio Bafoussam, Station Provincial de la Radiodiffusion de l'Ouest uses 1448 with 20 kw until the Libyan station moves to 1449. (Arctic 5/2)

Chad. A Radio Moundou in southern Chad has been reported; no details given, but a 30 kw station planned from here on 738. (SCDX 4/29)

Channel Islands. Guernsey is hoping for a BBC Local station. Channel TV is interested in commercial radio only if the local station would be a wholly owned subsidiary. (MNN 6/79)

Cyprus. A group of Arab businessmen plan to establish a 1000kw commercial MW station to cover the Eastern Mediterranean with daytime groundwave signals. The same group also intends to establish a radio/TV program production center to sell programs throughout the Arab world. The site will be Larnaca, Cyprus.

(SWNS) BBC relay at Zakaki has a measured power of 500 kw per EBU. The Libyans want a station in Cyprus, able to cover a wide area. (Arctic 9/12, 9/26) Libya has been granted approval for a station to replace the one shut down recently by the government in Malta. Apparently this means no more PLO/Arafat and gang on Cyclops-1557. (Pete Taylor)

A new 300 kw MW station, broadcasting Christian programs in AA is planned by 7 or 8 different churches. (Arctic 12/5)

Czechoslovakia. Mnich Hradiste is alone on 1071 with 25 kw according to EBU. (Arctic 9/21) A new station at Plezn on 558 began 7/23 with Radio Prague domestic service 0230-2200. (BBC Monitoring Service via NZDXT 9/79)

Egypt. The Harris Corp, U.S., will install 80 MW transmitters at 20 sites in the next year to improve reception of Cairo programs in outlying areas. (Telescope mag via NZDXT)

EBU observed transmitters not in WRTI. Main AA program from Luxor on 882 with 5 kw Idufu/Sohag on 918 with 10 kw; Baris on 981 with 5 kw; Suez with 10 kw on 1188; Luxor on 1305 with 10 kw; Bawiti on 1341 with 10 kw; Quseir on 1350 with 10 kw; Kasrel-Farafra on 1368 with 1kw; Mut on 1386 with 10 kw. Voice of Arabs on 864 from Aswan ex 756; Assuit 981 1 kw; Idu 1341 10 kw; Sohag/Suez 1422 10 kw; Aswan/Assuit 1476 10 kw. Foreign language program from Alexandria on 1341 with 10 kw. Several transmitters are not yet on the new frequencies. (WRTI Newsletter via NZDXT 9/21)

New stations: Salum-936 10 kw; Abu Zaabal-1341 100 kw; Siwa-1341 10 kw; El Kharga-1368 10 kw; Luxor-1386 10 kw; El Minya-1476 10 kw. (Arctic 8/1)

Equatorial Guinea. The correct name of the island is now Isla Bioka. (Arctic 8/1)

Finland. Radio Finland opened a new MW outlet on 963 from Turku with 100 kw for the EE service, from 2130-2245. (SCDX 11/4)

YLE Kuopio-756 has been off since February. It will stay off until a new modern transmitter can be used. C-channels 0330 (0600)-2200; A-channels 0330 (0600)-2100. (Arctic 3/22)

France. France Inter AN on 675, 1161, 1350. Not on 1557. 1161/1350 SP on Wed. (Arctic 3/6)

Regional programs on Sundays between 1200-1300 on 711, Pernes; 945 Toulouse; 1242 Marseille; 1278 Strasbourg. FR-3 is broadcast over Clermont-Ferrand-1494 0615-0700 weekdays. (Arctic 8/2)

France-Inter is now off Tues/Wed night instead of Wed/Thurs night. (Arctic 9/21) France plans on enforcing the state broadcasting monopoly. Major financial interests are behind the move to free radio, according to the Minister of the Interior; any changes in the law must be made in a disciplined manner. (BBC Monitoring Service via SCDX 9/18)

Germany, East. Additional transmitters are 1485-Kamenz, Zittau, and Spremberg; 1584-Ebersbach, Cottbus II, Guben, and Weisswasser; 1602-Neugersdorf, Bautzen, Forst and Sentenberg. (Arctic 12/28)

Germany, West. DLF has new 100 kw tx in Nordkirchen on 549. The AFN Wurzburg telephone number from Sweden is 00949-9318947142. [I thought you blue-boxers might like to know that. Ed.] The planned NDR-Servicewelle will most likely be over the NDR MW txs and FM. The present NDR1 program will move to FM. Separate programs of NDR will be aired from Kiel, Hamburg, and Hannover over NDR1. Bayerischer Rundfunk has been testing a new 50 kw transmitter from Nurnberg on 909. (Arctic 8/29, 9/The ex-VOA transmitter from 173 may be used in the future by DLF on 209. More information on the split-up of NDR: it will be cut into two different companies, one for Schleswig-Holstein (Kiel), and the other for Niedersachsen (Hannover). A new company for the Hamburg area will be set up. In addition, private and commercial radio and TV will be allowed to operate in this part of West Germany. Other states in West Germany are expected to have pressure put on them to do the same. The federal government has no say since each state has different laws regarding media. Only DLF and DW are federally operated broadcasting stations. Apparently the federal courts are being asked to rule on the whole matter. (Arctic) The transmitter on 630 is in Luchow. Sudfunk's 3rd program is on 711 from 0800-1600. Bayerischer Rundfunk on 909 now 0600-1800. Tests are being held on 612 from Unna-Massen, near Dortmund. BR will close 909 on 11/15 and move back to 801. (Arctic 10/24, 11/7)]

Germany, West. DLF-209 increased power to 500 kw. Norddeutscher Rundfunk in Hamburg has been under fire for not providing a "home service" to the various states. DLF Doebach is now exactly on 155 khz. The VOA transmitter on 209 in Munich is not on the air with DLF programs yet, but should have been by July. Schedule will be 0400-1800, not 24 hours. Thurnau-549 is now 100 kw and 24 hours. WDR Langenberg is on the air again on 720 with 200 kw. NDR has changed MW frequencies. NDR2 will be on MW 0500-1700, Sun- days till 1800. Between 1700-2315 they will broadcast the NDR/WDR joint program; local programs for Hamburg and Hannover will be on 1815-1900. Flensburg-702 and Kiel-828 will probably broadcast the Schleswig-Holstein regional program. It is expected that 972 will broadcast the ARD Night program AN. EBU indicates that there are two RB stations on 936. (Arctic 12/5, 1/16)

Frankfurt-594 is 400 kw daytime/1000 kw from 2300. Meissner-594 is 250 kw omni daytime, s/off 2300. Sender Freies Berlin uses 630 together with NDR. AFN Frankfurt-873 is occasionally off for maintenance MMs between 0207 and 0300. All other AFN stations, especially the LPs, are 24 hour automatic relays and don't have maintenance breaks. (Arctic 11/16)

NDR, the network in northern Germany, is breaking up into 2 or 3 smaller networks. The future of the West German broadcast media is now uncertain since NDR was one of the strongest networks and financially supported several smaller stations. (SCDX 11/20)

AFN Munich-1107 has reduced power to 40 kw. Mainflingen-209 is now on 0400-1800. Langenberg is on the air on 720 with 200 kw 0600-1500. AFN-873 s/off at midnight. HR-594 is using 1000 kw directional daytime. NDR Dannenberg-630 is a mobile transmitter. They will move to Luchow and build a 100 kw rig there, after 1981. (Arctic 10/5, 10/19, 11/2) Bavarian Radio tested on 810 in July. (MWN 9/79)

Great Britain. BBC has complained about Russian interference on 200 khz. BBC is planning a Radio 3 booster in Oxford. Similar small MW relays may be placed in Aberdeen, Newcastle, Carlisle, and some towns in the South West. Contracts for the ILR franchises in Cardiff and Coventry have been awarded. (Arctic 5/31)

R. Scotland-810 is no longer AN. Now off 0025-0600. BBC-1296 s/on at 0300. Midland Community Radio has announced the on-the-air name will be "Mercia Sound." Expected on in the summer. BBC R. Norwich-855 1 kw will be ready by later summer. BBC R. Lincoln 1368 0.5 kw, will be ready by November. (Arctic 3/7, 3/22). R. Lincoln is on same frequency as R. Manx, thus interfering with Manx's plans to turn the commercial Manx station into a R. Luxembourg of the Irish Sea. BBC R. Deeside from North Wales is now on 1431. (SCDX 3/18)

Traffic radio tests have begun on 526 from Brookmans Park with 100 kw. BBC plans to cut the hours of 20 of its local stations. Radio Amy, "The Voice of North London," 1386 khz, London's first community access station closed on May 27. The London area relay of Radio 4 will be on 720 khz with 2 kw. Pirate Radio Jackie celebrated its 10th anniversary in March and went off the air when police raided the station. (Arctic 7/13, 8/2)

BBC Radio 4 has a relay at Stanraer, Scotland on 720. BBC Foreign Service will probably be forced to cut its budget by another 4 million pounds for the next year. This means a reduction of 17-25% of transmission times. One suggestion is to cut the Arab service, West/Southern European service, and the BBC Monitoring Service. (Arctic 8/24)

Radio London will have a new 50 kw transmitter from Brookmans Park to replace the BBC built transmitter. (MWN 9/79) ILR Tayside will have two groups of transmitters, one at Perth and one at Dundee. ILR Exeter/Torbay will have transmitters at Exeter and Torquay. The next phase in ILR will see stations at Ayr, Barnsley, Bristol, Bury St. Edmunds, Canterbury/Dover, Guildford, Leeds, Leicester, Londonderry, Luton/Bedford, Newport/Preston/Blackpool, Swindon, Worcester/Hereford and Wrexham/Deeside. (Arctic 10/5, 10/19)

The Conservative government has withdrawn its effort to cut BBC's External Service's budget. Jersey and Guernsey are likely to have their own local BBC stations early in 1981. A relay of Radio 2 is being built at the Rohais, St. Peter Port. The BBC is using the former LBC transmitter at Lotts Road for Radio 4 on 720 khz. BBC Morning Sou'West is a program aimed at the SW of England and the Channel Islands 0630 and 0835. Main studio is in Plymouth with unmanned studios in Exeter and Truro, Cornwall. Frequencies are 756-Redruth, 2 kw; 801-Barnstaple, 2 kw; 855-Plymouth, 1 kw; 990-Exeter, 1 kw; and 1458-Torbay, 1 kw. (Arctic 12/14)

BBC plans to replace Skalton in NW England with a new tx in southern England with 8 x 500 kw. BBC Radio Lincoln will use 1368. Radio Manx is protesting the use of this frequency. IBA Severn Sound will use 774. Two Counties Radio, Bournemouth has been testing on 828. DevonAir Radio, Exeter/Torbay will begin in late 1980 on 954. Radio Avonside, Bristol, will start late 1981 on 1260 as will Centre Radio, Leicester on same frequency. (Arctic 9/26)

Severn Sounds in Gloucester opened on 10/7 on 666 and 774. Radio Tay in Dundee-1161 is now on. A twin from Perth on 1584 will soon be on. Devon Air will soon begin testing on 954. BBC Radio Norfolk-855 is on with 1 kw. Two Counties Radio-828 began service 9/15. Radio Norfolk-1602 now from Kings Lynn. Devonair began on 666 on 11/7; later 954 will be used for Torbay. Radio Lincolnshire BBC on 1368 began 11/11. (Arctic 10/24, 11/7, 11/21)

Manx Radio-1368 now 0600-2200 except Mon till 2300 and Sun. till 2230. BBC R. Leicester-1584 will move to 837. Devon and Cornwall will have BBC locals by 1982. DevonAir Radio-954 began from Torquay on 12/12. (Arctic 1/2, 1/16)

Greece. A schedule of ERT (Elliniki Radiophonia Tlieorassis) (Greek Radio-Television) sent by Pete Taylor is essentially in agreement with current schedule in WRTH, with some exceptions: Corfu is listed as Kerkyra; Cometini is listed as Komotini; Patrai is listed as Patrai (with 1 kw, not .25). First Program from Kavala: 1030 (0815 Sun)-1320; 1530-1715; 2000-2030; 2115-2215.

Rhodes s/on at 0230 in Persian on 1260. Begun 12/13/79. There is a private station on 1614 from eastern Crete, Ierapetra. Set up to overcome QRM from Arab stations. Power 1 kw. Radiophonikos Stathmos Anatolikes Kretes is an official commercial station not listed in WRTH. Operates on 1614 0700-1500 and 1800-2200 local time with 1 kw. (SCDX 7/8) Located on Crete.

Holland. R. Nederlands will use 747 for its Foreign Service to Europe, inEE and FF from 2300. (Arctic 1/2)

India. All India Radio is considering a national network because of interference from other countries. Proposal is to have a network of superpower MW stations, including a 2 megawatt station at Magpur and others at Delhi, Bangalore, and Patna. Present high-powered station in Calcutta will also be used. (NZDXT 12/80)

Iran. Zahedan is on 777 and 1089 in Urdu from 1530-1630. Ahwaz-1390 has local programs in AA from 1430-1630, then generally joins AA external service from Tehran.

Rezaieh is still noted on 933 by EBU. 2nd program is broadcast on 1332 1130-1530. Unlisted stations are 702, 972 and 1278. Not in WRTH but confirmed are Shiraz-837 and Rezaiyeh-933. Evening service on 612/1080 is heard from 1730-2030. VIRI regional station in Ahwaz now heard on 1125 with own service 1130-1330. (Arctic 4/3 to 8/15) According to 2/15 Radio & Records, there is only one MW transmitter operating in the Teheran area, apparently the one on 580. (SWNS April)

Shiraz is now on 836 with 400 kw. (Arctic 9/12). The Voice of the Islamic Republic of Iran has announced a new frequency of 990; also is on 1386, 1116, 1080, 576, and 612. (SCDX 10/14)

Iraq. A Yugoslav company is to set up a new station in An-Nasiriyah in southern Iraq for \$9 million. (Newsweek, via Arctic 8/24)

Ireland. Commercial stations will be legal this fall, with a system similar to IBA in UK. The existing pirate stations are going to compete with the legal stations for licenses. Midland Radio-1134 broadcasts with 450 watts from Athlone. RTE Radio Two is only 100 kw and originates from the old site in Athlone. The transmitter seems to be a new one. (Arctic)

RTE-2 will be aired via Radio Tullamore 3 on 612 with 200 kw; Dublin 1 on 1251 with 20 kw. Now on the air 0500-0100. Pop and light music with heavier rock in the late evenings. After 2300 // Radio One. Many pirates still exist in Ireland. Big L-1529/1530 was heard in Norway, apparently from Limerick. Downtown Radio is probably on 1152, Dublin according to a QSL from Westside Radio on 6230. (Arctic 7/13, 8/2, 8/24)

RTE Radio Two uses 1278. The old 1251 tx is heard only with OC. (Arctic 10/24) A new law will outlaw pirate stations. Radio Dublin has moved to 1251. The station also uses 1195. (SCDX 10/21, 11/11)

Isle of Man. Manx Radio is still waiting for allocation of a channel for stereo. They are complaining to Home Office because several LR stations in UK will be on 1368, thought to be exclusive to Manx Radio. (MWN 9/79)

<u>Israel.</u> Network A- classical music and cultural pgms.	Network B-news and current events	Network C	Network D
576 Qadima 200 kw	648 Jerusalem 10 kw	531 Jerusalem	Arabic to Arab world
1170 Jerusalem 1 kw	657 Yavno 200 kw	0358-2310	675 Jerusalem 20 k
0358-2315	711 Jerusalem 1 kw	0458-2310 Sat.	738 Tel Aviv 1200
Israel Defense Forces Net:	846 Zefat 5 kw		1026 Tel Aviv 50 kw
1224 Beer Sheva	882 Bet Hillel 1 kw		0415-2220
1286 Tel Aviv	927 Elat 1 kw new		
1304 Haifa	1206 Akko 10 kw		
1367 Yamit	0358-2310;		
24 hours	0458-2310 Sat.		

Italy. New stations: Radio Ponente 77-1171; Radio Campo Rubiera-1395; Tele Spazio Campano-1151. No private outlets on 1314 or 1368, only RAI. After s/off, they use open carrier to link FM and AM, thus making it possible to hear private stations even if only on FM. (Arctic 8/29, 10/10)

Radio Italia-1179 is a new 2 kw station in Rome. Radio Campo Rubeira, Campo-galliano-1391 is a new local, with 500 watts on 1391. (Arctic 4/18, 5/19) Radio 91 Lombardia, Milano is a new local station on 1320. (Arctic 11/2)

Jordan. A new 2 mw transmitter is being used intermittently on 801 khz. Originally this was to be used on a lower frequency before that frequency was grabbed by Saudi Arabia. Used in afternoons and evenings, eventually will be fulltime in place of the existing 200 kw unit. The new 1000 kw transmitter is on 594 at least every hour with tests of AA news Radio Jordan has expanded its EE service to 0500-2000 on 855 and FM. (SWNS August)

Kenya. Two new 100 kw transmitters are now under construction for 981 and 1044; will be on no later than July 1981; one for the National service, one for the General Service. (Arctic 4/3)

Kuwait. First program in AA 0225-2210 on 540 and 1134. Second Program and Foreign Language service from 0200-2100 on 1341. (Arctic 12/28) Marconi Communications will install an additional 750 kw transmitter for the Kuwait BC and TV Service. Kuwait already has three 750 kw transmitters in use. (Broadcast Engineering, via Bruce Portzer)

Lebanon. Free Lebanon Radio has moved to 1476, mostly in AA. Voice of Palestine heard on both 1143 and 1270 from 1600-1900. Voice of the Arab Revolution now on 1175, s/on 0500; s/off 1900. Voice of Free and Unified Lebanon heard on 1308 s/off 1830. (Arctic 5/19, 8/15) Voice of Hope now heard on 950, from 945 khz. (SWNS August) Voice of Hope, from Marj-Ayoun in south Lebanon, will add a 20 kw SW transmitter in September. Voice of the Arab Revolution has moved to 1191 from 1175. Voice of Palestine mentioned above: 1160 covers Beirut; 1143 covers Eastern Syria and Lebanon; 1270 covers Jordan, Lebanon and Egypt. A new station, Artists Radio (Idha'at ahl al-Fann) is heard in Beirut on MW. Songs and entertainment only, no politics. There are eight private stations in Lebanon now. (Arctic 9/12, 9/26, 10/10) Voice of Hope, the evangelical station from Marj'Uyan is on 1593 and 945. (SCDX 9/23) The Voice of Arab Lebanon is now on 932, s/on 0430; s/off after 2000 news. (Arctic 10/24, 11/7)

Lesotho. Maseru-891 is now 100 kw. 0400-2030; Wed and Sun to 2105. (Arctic 11/7)

Liberia. 620 has been renamed Liberian Broadcasting System; a new system is projected, costing \$18 million. US has promised a contribution of \$11.7 M. (Arctic 11/21)

Libya Arab Jamahiriyyah is the only accepted name of the country, according to postal officials. (NRC via Arctic 7/13)

Lichtenstein. Switzerland has made an agreement with this country to control all activity in radio and TV. A new Andorra or Luxembourg is impossible. All licensee funds will create a local station sooner or later under the control of Swiss PTT. (Arctic 10/24)

Malta. Radio Mediterranean transmits 1800-1855 to Europe and N. Africa on 1557 in AA, FF and EE; program previously attributed to external service of Libya. (SCDX) Maltese and Tunisian officials are looking into the prospects of cooperation of their radio and TV services. Tunisia will send a group to study what assistance they can give to Radio Mediterranean. (Arctic 1/16)

Masirah Island (Oman). BBC Masirah 1700-2100 to Middle East and East Africa plus 0200-0300 to India on 1413 and 2000-2100 to Middle East on 702. (MWN 9/79)

Monaco. Radio Monte Carlo 1467 now uses 1000 kw even at night. (Arctic 8/1)

Morocco. Unlisted 666 khz is used by Radiodiffusion Television Marocaine from Aaium with SS 0030-0100. (SCDX 2/5) New transmitter on 540 is on until 0130. (Arctic 3/7) Radio Mediterranean International now broadcasting from Tangier 0500-2100 in AA and FF, on 1233. (Arctic 10/24) Morocco Radio will be 24 hours a day. All stations (209, 711, 819, 828, 963, 971, 1080 and 1115 from 0000-0100; 209, 711 and 819 from 0100-0300; only 209 0300-0500. (Arctic 11/7)

Mediterranean International Broadcasting Company will have HQ in Nador; studios in Casblanca, Rabat and Tangier. Tangier is already on the air on 1233. A new station is on 1449. Rabat is on 1492. Ad-Dakhla is on 999. (Arctic 8/29, 9/12) SOFIRAD will set up a transmitting center in Nador in NE Morocco with SW and a 1200 kw LW on 173 khz. This will be similar to Radio 1 in Gabon. SOFIRAD is a French owned company. The station, "Radio Mediterranee Internationale" will be on the air before the end of the year. HQ will be Tangiers. (Arctic 5/19, 7/4, 8/15)

Mozambique. R. Mozambique, E. Prov. da Zambezia, Quelimane, 937 khz, has been noted with s/on 0300. WRTH lists s/on at 1600. Other outlet on 1296 listed s/on at 0400.

All R. Mozambique now apparently s/on at 0300 with news relayed from Maputo-738. Provincial stations apparently relay the news via SW.

R. Mozambique, E. Prov. da Inhambarne-558 has been noted with s/on at 1356. WRTH lists evening s/on as 1600.

R. Mozambique, believed from Maputo, noted for two days on approximate frequency of 999 khz with very strong signal //Maputo 738. Not heard after June 23. Possible test transmission of proposed 250 kw station on 1008 khz. (South African Radio DX Club via Denzil Baker)

Nepal. Preliminary work on the 100 kw MW stations in Kathmandu and Pokhara with Japanese assistance is under way. (Arctic 7/4)

Nigeria. Anew transmitter of FRCN on 909 at Abuja began 10/1. 0500-2200. (Arctic 11/7) Voice of Nigeria reported that FRCN would start broadcasting from the country's new capital, Abuja, in April 1982. (Arctic 7/4)

Norway. The two new 600 kw transmitters at Kvitsøy in Rogaland are proceeding space. (Arctic 5/19)

Portugal. RDP One and Two will go commercial, as Three already is. Radio Renascença is reaching completion on the new 100 kw txat Muge outside Lisboa. It should be on before Christmas on 594. The 1287 tx will be taken out of service when the new tx goes on. They will try the new tx 24 hours. Radio Club do Centro-Emissora das Beiras, Caramulo (near Viseu) is name of station on 1460. Polo Norte ID has been dropped. 5 or 10 kw; 0800-2000. (Arctic 11/21, 11/7, 10/24)

Radiodifusora Portugal 3, called Radio Comercial, now uses 557 from Faro, 782 from miramar, 863 from Coimbra and Viseu, 969 from Covilha, 1035 from porto Alto, and 1578 from Canidelo. (SCDX 1/29)

Qatar. Gulf News Agency reports that a new Qatari transmitter was to begin experimental transmissions to the Arab countries on June 15. New station is at al-'Arish is to use 954 khz with 1500 kw. (SCDX 7/3) QBS-999 now 0300-2005. QBS-1233 now 1300-1705. (arctic 5/2)

Rumania. Bacau-1179 now uses 200 kw and interferes with R. Sweden very badly at night. Two other lowpowered Rumanians are here also. (EBU via Arctic 9/21)

Spain. RTVE-191 and 227 will start test transmissions this spring. Network of five stations to cover entire country is planned. (Arctic 3/7) EFJ15 R. Juventud de Barcelona is on 1107 ex 1395. RNE has extended transmissions on 639, 729, 855 to at least 0400, possibly AN.

EAJ39-1179 Radio Miramar, Barcelona is now 24 hours. EAJ67-1134 RP de Ciudadela ex RP de Menorca. Radio Popular de Castellon-1224, ex R. Popular de Villa Real. ECS12 La Voz de Cordoba-1314, ex Radio Atalaya. ECS17 La Voz de Lugo-1314 ex Radio Monforte. EAJ34 de Radio Gijon heard on 1359 ex 873. EFJ50 RJ de La Rioja-1395 ex RJ de Calahorra. ECS19 La Voz de Zamora, ex La Voz de Benavente 1503. EAJ18 Radio Rioja now on FM stereo; seems to be the trend throughout Cadena SER. EAJ32 Radio Santander 1485 now also IDs as LA Voz de la Montana. EAJ46 Radio Ceuta-1602 has been s/on at 0540. (Arctic 10/5, 10/19)

RNE Logrono-792 began on May 28 with 20 kw.

873 EAJ34 R. Gijon, ex 1584.

1476 EFJ37 R. Juventud de Talavera, previously only on FM 89.4

1602 EAJ72 R. Zamora, ex 1584.

1385 ECS18 La Voz del Mino, Orense, ex 1476.

1585 EFJ11 R. Juventud de La Coruna heard here.

1575 R. Peninsular de Madrid ceased operations here August 1.

The Basques have been granted the right to establish a radio and TV organization of their own. The Basque nationalists say this will guarantee the preservation of their language and culture. (Arctic 7/13, 8/2, 8/24)

1359 Radio Peninsular de Barcelona, ex 1539. (Arctic 12/28)

New RNE stations to be on the air soon: 1395 EFJ15, Radio Juventud, La Voz de Cataluna, Barcelona back here again.

639 Almeria, 20 kw

774 Orense, 20 kw

855 Pontevedra, 20 kw.

1467 EAJ38 Radio Gerona ex 1485

1539 EAJ22 R. Huesca here ex 1602.

Spain. EAJ1-828, EAJ101-873, EAJ28-990, now 24 hours. EAJ61 R. Jaén-1026 ex 1584-
EAJ12-1080 R. Alcoy ex 1485. EAK18-1224 R. P's de Mallorca will move to FM.
EAJ17 and EAJ39-1179 now 24 hours. EAJ11-1521 R. Reus ex 1026. EAJ51 R. Manresa
now on 1521. EAK2-1602 RP de Sevilla (? this is no RP/QRG/ARC) (Arctic 10/10)

EAJ49 Radio Toledo has moved to 1080 ex 1584. (Arctic 8/1) ADDX has just
published "Introduction to DKing Spanish radio stations" for 6 IRCs. Write Wilhelm
Herbst, Corneliusstrasse 2, D-5000, Köln 41, Federal Republic of Germany.

EAK22 R. Huesca-1080 now ex 1539. EAK53 R.P. de Reus back on 1134 from
1125. EAJ49 R. Toledo is now on 1080 ex 1026. EFE33 LV Mediterranee now on 1521
ex 1503. (Arctic 12/5, 1/2, 1/16)

Switzerland. Swiss Broadcasting Corporation has 4 transmitters: 531 Beromünster for GG
speaking Switzerland connected alternatively with studios of Bern, Basel, Zurich, and
Chur. 558, Monte Ceneri for Italian Swiss (Radio Della Svizzera Italiana, studio in
Lugano. 765, Sottens for French Swiss, studios in Lausanne and Geneva. 1566 Sarnen for
GG Swiss with same studios as 531. (Arctic 12/14)

Turkey. A new station is at Malatya, Eastern Anatolia, on 594 with 300 kw, 0200-
2300. Apparently not on yet. AFRTS-1590 Adana is still on. AFRTS Karamursel-1590
is off. The Technical Schools Radio in Izmir-1590 is also closed. AFRTS-1570
Diyarbakir is closed. No transmitter yet in operation on 1467. (Arctic 5/2, 7/4)

United Arab Emirates. New schedule of the Voice of the United Arab Emirates is:
Abu Dhabi-728 0200-2130 in AA; 809 0200-1400 in AA, EE, FF, and Urdu. Sharja-1575 in
AA 0230-2130. Fujairah-972 0230-0600 and 0900-2130 in AA. Ras-Al-Kaimah-1175 0215-
1610, 1000-1900 in AA, EE, and Urdu. Umm-Al-Quwain-846 0215-1705 and 1100-1600 in AA.
The frequencies of 728, 809, and 1175 do not correspond with the new MW band plan.
(SCDX 1/8)

The French company SOFRA will build a station in the Daba'ah area at Sadiyat on 1314 with 3 x 750 kw and on 729 with another 750 kw. The station will cover the Gulf area, the Middle East, Pakistan, and NW India. (Arctic 4/3)

U.S.S.R. A new 3rd program transmitter is listed on 666. Ashkaband-675 now 0100-
2400. 3rd program is now extended to 2100. Radio Moscow World Service announces
630 and 720 for listeners in Japan. Believed to be in Khabarovsk and Yuzhno-Sakhalinsk
respectively. Radio Free Europe/Radio Liberation says Soviet jamming equipment now
in use is worth \$250 million with operating costs of over \$100 million per year.
Energy consumption is 1000 million kilowatt hours per year. 2500 jamming transmitters
are in use; 650 skywave jammers, the rest groundwave, with 40-50 groundwave stations
around Moscow alone. Jammers seem to be in Soviet Union, Poland, Bulgaria, and CSSR,
but not in Romania. The First Program is carried in the European USSR on synchronous
house networks on 549 and 612. In Western Siberia and the Far East, Mayak is carried
on 576 as well. There is also a synchronous network on 200 khz. (Arctic 5/2, 4/18)

Vinnitsa-837 has increased power considerably. Alexandrovsk-Sakhalinsky-200 is listed
by BBC. Volgograd-567, add 2200-0100 Mayak. Donetsk-711 with Mayak 2200-0200. Yuzhno-
Sakhalinsk-720 rel. World Service in EE 1100-1200, 1230-1300 and 1330-1400. Moscow-927
has World Service 0400-2300. Foreign Service to So. Asia now to 0100 on 972. Kaliningrad
-1143/1385 now to 0100. Krivoy Rog -1430 now 2300-2200. (Arctic 3/22)

Karaganda is new on 245 // Taldy Kurgan, probably from Alma Ata. Karaganda listed
with 100 kw. Mayak heard on 702 at 0035. Sverdlovsk has a new Mayak station of 30 kw on
810. Mayak heard on 1134 s/on 0100. Kiev 2 drifting around 1381/2 // 1377, 1404...
Moscow has a local Mayak on 1395. None on 1525. R. Kishinev 2 heard on 1462v // 1449, 1494
... with second Republican program. Unlisted Moldavian station on 1494 with 2nd Republi-
can program. Mayak heard on 1503 at 0030. Mayak heard on 1323 with IS at 0130. (Arctic
10/5, 11/2) R. Moscow in // for Foreign Service to Europe 1386, 1323, 1494, 1142 and
936. Radio Moscow will verify reception reports naming transmitter sites if program
details are included with the report. (SCDX 12/18) Rumanian program at 1500 on 891 is
from Kiev, using transmitter at Uzhgorod. This program is in same category as Foreign
Service from Kiev on SW. (Arctic 12/28)

Yugoslavia. A new 100 kw transmitter on 1134 is from Deanovac near Ivanic. R. Zagreb AN on
1134, not on 1125, SP is Fri. R. Ljubljana AN on 549, 558, 648, 918, SP is Tues.
R. Belgrade is AN on 684, 1296. SP is Mon. R. Pristina is AN Sun. mornáng. (Arctic 3/22)
Radio Koper-Capodistria is in Italian on 1080 and 1170 at 0600-1900 and in Slovene on 549
AN. (SCDX 1) R. Capodistria celebrated 30 years of Italian broadcasts. Italian 0600-1900
on 1080 (300 kw), 1170, and in Slovenian 0500-1700 on 549. (MWN 9/79) A new station at
Radlje now broadcasts the 1st program of R. Ljubljana on 1485. An UNID station with Yugo-
slav music and Serbo-croatian announcements on 1625. Radio Sarajevo-612 changed its
antenna pattern at 1738. 1st program of Studio B on 1332//1350 at 0100. (Arctic 10/5, 11/2)
Belgrade is now on 963 with a new 200 kw transmitter. (Arctic 9/21)

A Transatlantic DXers Guide to Sunrise & Sunset Times

by Mark Connolly

The purpose of this article is to provide a handy reference to sunset and sunrise times relevant to the reception of Trans-Atlantic signals. Medium-wave TA paths are most likely to be viable when the entire path is in darkness; therefore, the sunset time on the western hemisphere end of the path and the sunrise time on the eastern hemisphere end set the approximate beginning and ending times, respectively, of TA DX reception. The actual times of fade-in & fade-out are determined by sunset at the most westerly ionospheric skip point and by sunrise at the most easterly ionospheric skip point. Because of this, reception may occur up to an hour before sunset on the western end and also up to an hour after sunrise on the eastern end. This effect is accentuated if the receiving site and transmitting site have salt water in the direction of propagation for the first 10 km. or so of the route. This article does not attempt to predict exact fade-in & fade-out times; such a project would require a complicated propagation study - daily changes due to ionospheric condition variation will occur.

These listings have been adapted for MW TA DX from a more general list published by SPEEDX, an SWL club. Times listed are GMT; they are for the middle of the month (the 15th).

TABLE 1: WESTERN HEMISPHERE SUNSET TIMES-(TA reception begins.)

LOCATION	APPROX. G. C.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Natal, Brazil	35.1W 5.5S	2030	2026	2022	2018	2014	2011	2012	2015	2020	2023	2027	2030
Rio de J., "	42.7W 22.5S	2128	2113	2055	2035	2019	2010	2013	2027	2045	2105	2122	2132
St. John, NF.	52.7W 47.6N	1949	2032	2120	2213	2257	2323	2314	2236	2146	2055	2006	1930
Surinam	56.5W 3.8N	2140	2143	2145	2149	2151	2152	2152	2150	2147	2144	2141	2140
Barbados	59.8W 13.5N	2137	2146	2157	2208	2218	2223	2221	2213	2203	2151	2141	2136
Falkland Is.	61.0W 50.8S	2359	2310	2216	2117	2027	1957	2008	2051	2147	2245	2340	0011
Halifax, NS	63.6W 44.6N	2048	2122	2205	2252	2332	2355	2346	2318	2228	2142	2058	2034
Bermuda	65.8W 32.3N	2125	2149	2217	2247	2312	2326	2321	2300	2232	2202	2135	2120
Puerto Rico	66.2W 18.5N	2154	2207	2221	2238	2250	2258	2255	2244	2229	2214	2159	2152
Venezuela	67.0W 10.5N	2211	2218	2226	2235	2242	2246	2245	2239	2230	2222	2214	2210
Boston, MA	71.1W 42.4N	2120	2156	2235	2319	2355	0017	0009	2338	2257	2214	2134	2112
Montreal, QU	73.6W 45.5N	2120	2200	2244	2334	0014	0038	0029	2354	2309	2221	2136	2111
New York, NY	74.0W 40.7N	2137	2210	2247	2329	0003	0023	0016	2347	2308	2227	2150	2129
Washington, DC	77.0W 38.5N	2155	2226	2301	2340	0011	0030	0023	2356	2320	2242	2207	2148
Toronto, ON	79.4W 43.6N	2149	2227	2308	2354	0032	0055	0046	0014	2331	2246	2204	2141
'Miami, FL	80.2W 25.5N	2239	2257	2317	2339	2357	0008	0004	2349	2328	2306	2246	2235

TABLE 1 (continued): WESTERN HEMISPHERE SUNSET TIMES

LOCATION	APPROX. G. C.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Costa Rica	84.1W 10.0N	2320	2327	2335	2343	2350	2354	2352	2347	2339	2331	2323	2319
Atlanta, GA	84.2W 33.5N	2237	2302	2330	0002	0028	0043	0038	0016	2346	2315	2246	2331
Chicago, IL	87.6W 41.9N	2228	2303	2342	0025	0100	0121	0114	0043	0003	2321	2242	2220
Houston, TX	95.2W 29.5N	2329	2351	0015	0042	0104	0116	0112	0053	0028	0002	2338	2325
Denver, CO	105.0W 39.4N	2340	0013	0049	0129	0202	0222	0215	0146	0109	0030	2353	2333
Los Angeles, CA	118.3W 34.1N	0051	0117	0146	0219	0245	0301	0255	0233	0202	0131	0101	0046
Seattle, WA	122.2W 47.4N	0027	0110	0158	0251	0335	0401	0352	0314	0224	0133	0044	0017
San Fran., CA	122.4W 37.8N	0058	0128	0202	0239	0310	0326	0321	0255	0220	0144	0110	0052
Vancouver, BC	123.1W 49.2N	0024	0110	0201	0257	0344	0413	0402	0321	0229	0134	0042	0013
Anchorage, Alaska	149.8W 61.2N	0056	0220	0341	0510	0629	0725	0703	0550	0425	0258	0131	0034
Hawaii	157.7W 20.0N	0358	0411	0427	0445	0459	0507	0504	0452	0436	0419	0403	0355

TABLE 2: EASTERN HEMISPHERE SUNRISE TIMES - (TA reception ends)

LOCATION	APPROX. G. C.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Wulumqi, China	87.6E 43.8N	0138	0101	0019	2333	2255	2232	2240	2313	2356	0041	0124	0147
Delhi, India	77.2E 28.7N	0141	0120	0057	0030	0009	2357	0001	0019	0044	0109	0133	0146
Iran	51.5E 35.7N	0340	0312	0241	0207	0139	0122	0128	0152	0224	0258	0329	0346
Saudi Arabia	46.4E 24.5N	0336	0319	0259	0237	0219	0209	0213	0228	0248	0310	0329	0340
Moscow, USSR	37.6E 55.8N	0551	0449	0344	0233	0132	0053	0107	0202	0309	0418	0526	0606
Kenya	36.8E 1.4S	0331	0332	0333	0334	0335	0335	0335	0334	0333	0332	0331	0331
Israel	35.2E 31.8N	0436	0412	0345	0315	0251	0237	0243	0303	0330	0400	0426	0441
Egypt	31.4E 30.3N	0448	0426	0400	0332	0309	0256	0301	0320	0346	0414	0439	0452
Turkey	30.7E 39.9N	0514	0442	0406	0325	0252	0233	0240	0308	0345	0425	0501	0521
South Africa	28.1E 26.6S	0322	0341	0402	0427	0446	0457	0453	0437	0414	0351	0329	0318
Romania	26.1E 44.4N	0546	0508	0425	0338	0259	0236	0244	0318	0402	0448	0531	0555
Athens, Greece	23.7E 38.0N	0537	0507	0433	0355	0325	0306	0313	0339	0414	0451	0525	0544

TABLE 2 (continued): EASTERN HEMISPHERE SUNRISE TIMES

LOCATION	APPROX. G. C.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Poland	20.9E 52.1N	0638	0545	0449	0347	0255	0222	0234	0320	0419	0519	0617	0650
Chad	15.1E 12.1N	0519	0511	0502	0452	0443	0439	0440	0447	0457	0507	0516	0521
Sweden	13.7E 55.8N	0727	0625	0520	0408	0307	0228	0242	0337	0444	0554	0702	0742
Gabon	13.6E 1.6S	0503	0504	0506	0507	0508	0509	0508	0507	0506	0505	0504	0503
Italy	12.5E 41.8N	0632	0558	0519	0436	0400	0339	0347	0417	0457	0540	0619	0640
W. Germany	10.7E 48.1N	0701	0617	0528	0434	0350	0323	0333	0411	0502	0554	0644	0711
France	2.0E 47.0N	0732	0649	0603	0511	0428	0402	0412	0449	0537	0628	0715	0741
Gt. Britain	0.1W 51.5N	0759	0708	0613	0512	0421	0349	0401	0446	0543	0642	0739	0811
Spain	3.5W 40.3N	0732	0659	0623	0541	0508	0448	0456	0524	0602	0642	0719	0739
Morocco	6.8W 34.0N	0729	0703	0634	0601	0535	0520	0525	0548	0618	0649	0719	0734
Portugal	8.7W 38.8N	0748	0717	0643	0604	0532	0514	0521	0547	0623	0701	0736	0755
Senegal	17.4W 14.7N	0733	0724	0712	0700	0650	0644	0646	0654	0706	0718	0730	0735
Iceland	21.6W 64.2N	1104	0920	0747	0606	0432	0316	0347	0520	0658	0836	1019	1135
Azores	25.8W 37.7N	0854	0824	0751	0713	0643	0625	0632	0658	0732	0809	0842	0900

In a few cases, sunrise on the western end of the path may precede sunrise at the eastern end- e. g. Iceland to Rio de Janeiro in December. This is too uncommon an occurrence to discuss in depth, however.

Use of the tables - examples:

1. A DX'er in New York City wants to know how long the N. Y. to Turkey path is in total darkness on 15 NOV.
From the tables: sunset/New York: 2150, sunrise/Turkey: 0501.
DX'ing Turkey would be accomplished best by listening from 2150 to 0501 Z.
2. Interpolation may be used to compute the sunset/sunrise times for dates other than the 15th of the month. Interpolation is less accurate between mid-June & mid-July and between mid-December & mid-January because the solstices occur within these periods; for other periods, interpolation is reasonably accurate.
ex.: During approximately what period should a DX'er in England try for Chicago stations on Halloween? For 31 OCT, you have gone through 16 days since 15 OCT; 15 days are left before 15 NOV.

From the tables: 15 OCT 15 NOV
 sunset/Chicago 2321 2242 change= 39 minutes in 31 days
 sunrise/Gt. Britain 0642 0739 change= 57 minutes in 31 days

sunset/Chicago, 31 OCT = 2321 - 16days(39min/31days) = 2321 - 20min.=2301
 sunrise/Gt. Britain, " " = 0642 + 16days(57min/31days) = 0642 + 29min.=0711
 Chicago-England should be open from 2301 to 0711.

3. Chordal-mode propagation can occur briefly when sunset on the western end of a path coincides with sunrise on the eastern end.
Find the times when chordal-mode propagation may occur on the Boston-Wulumqi path.
From the tables, we see that this is likely to occur around mid-April and again in early October.

4. I'm DX'ing from Los Angeles in mid-May. Which countries will be impossible because they will never be in the dark at the same time as Los Angeles?

sunset/Los Angeles, 15 MAY: 0245. If sunrise at the eastern end occurs before 0245, reception is very unlikely. The first five eastern hemisphere countries listed (China, India, Iran, Saudi Arabia, and USSR) have sunrise before 0245; therefore, reception of these on Trans-Atlantic paths can be considered virtually impossible.

TABLE 3: LATIN-AMERICAN SUNRISE SUPPLEMENT

Use these figures to determine the approximate eastern-end termination time of a Latin American DX path.

LOCATION	APPROX. G. C.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Natal, Brazil	35.1W 5.5S	0812	0816	0820	0825	0828	0831	0830	0826	0822	0817	0813	0811
Rio de J., Brazil	42.7W 22.5S	0813	0829	0847	0907	0923	0932	0929	0915	0857	0837	0819	0810
Surinam	56.5W 3.8N	0952	0949	0947	0943	0941	0940	0940	0942	0945	0948	0951	0952
Argentina	58.4W 34.6S	0850	0917	0947	1028	1047	1103	1057	1034	1003	0931	0901	0845
Barbados	59.8W 13.5N	1021	1012	1002	0950	0941	0935	0937	0945	0956	1007	1017	1023
Falkland Islands	61.0W 50.8S	0809	0858	0952	1051	1141	1211	1200	1117	1021	0923	0828	0757
Bermuda	65.8W 32.3N	1121	1057	1029	0959	0934	0920	0925	0946	1014	1044	1111	1126
Puerto Rico	66.2W 18.5N	1055	1042	1028	1012	0959	0952	0954	1005	1020	1036	1050	1058
Venezuela	67.0W 10.5N	1045	1038	1030	1021	1014	1010	1011	1017	1025	1034	1042	1046
Santiago, Chile	70.7W 33.4S	0942	1008	1036	1108	1134	1149	1143	1121	1052	1021	0952	0937
Colombia	74.1W 4.6N	1104	1101	1057	1053	1050	1048	1049	1052	1055	1059	1103	1104
Ecuador	78.3W 0.2S	1113	1113	1113	1113	1114	1114	1114	1114	1113	1113	1113	1113
Cuba	82.5W 23.0N	1209	1152	1134	1114	1057	1048	1051	1105	1124	1144	1202	1212
Costa Rica	84.1W 10.0N	1152	1146	1138	1130	1123	1119	1120	1126	1134	1142	1150	1154
Mexico	99.2W 19.5N	1309	1255	1240	1223	1209	1202	1204	1216	1232	1248	1303	1311

TABLE 4: Fill this in with the sunset & sunrise times for your location.

LOCATION/GC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SUNSET												
SUNRISE												

VERIFICATIONS

- 531 AUSTRALIA, Kempsey, 2MC, received nice letter verie with stickers in 3 weeks, sent report as station changed call from 2KM. MC stands for Mid Coast. Vs/ Jeff J. Condron-General Manager, Mid Coast Radio, P.O. 120, Kempsey, NSW. (Martin, OR)
- 531 JAPAN, Morioka, JOQG, Radio Japan card in 13 days, no rp, via Tokyo. (Harms, UT)
- 540 AUSTRALIA, Longreach, 4QL, received normal ABC card in 2 weeks, no signer. (Martin)
- 549 AUSTRALIA, Orange, 2CR, regular ABC card, all info, 2 weeks. (Martin, OR)
- 550 ALASKA, Anchorage, KENI, sent nice letter verie with KENI T-shirt in one week. Signer Kent Byus, Program Director. (Martin, OR)
- 558 JAPAN, Kobe, JOCR, sent 2 QSL cards (different ones), with nice letter from Engineering Dept., w/program schedule, returned by JJ mint stamps. Two months. (Martin, OR)
- 567 JAPAN, Sapporo, JOIK, NHK sent colorful card w/date, time and frequency. Took 17 days. (Martin, OR)
- 585 USSR, Svobodnyy, sent vq w/most details (except location) from R. Moscow in 5 weeks. (Martin, OR)
- 590 HAWAII, Honolulu, KSSK, received card from Alan Roycroft in about a month, for new call change, ex. KGMB. Alan says they are planning on a new antenna site. Currently the tower is downtown surrounded by highrises. (Martin, OR)
- 603 AUSTRALIA, Hobart, 7ZL, Tasmania ABC card. Manager, Don Lette. (Martin, OR)
- 620 NICARAGUA, Managua, YNGR, sent SS letter in 2 months for SS taped report w/2 IRCs. Vs- Esperanza Roman, Segundo Responsable, Onda Internacional. Said they were very happy to receive my report and tape, that such things are extremely important in this new era of Nicaraguan broadcasting and that they would like future reports. Also enclosed pennant and old postcard of clothing merchant. Letter was dated 1/16, postmarked 1/21, received 2/5 via airmail. (Portzer, WA)
- 630 AUSTRALIA, Townsville, 4QN, normal ABC card in 3 weeks, no signer. (Martin, OR)
- 630 NEW ZEALAND, Opapa, 2YZ, regular NZ Radio card. A.D. Emery, Senior Program Producer was signer. (Martin, OR)
- 639 NEW ZEALAND, Alexandria, 4YW, sent Radio NZ card with all details in 2 weeks. Only 2 kw. (Martin, OR)
- 648 AUSTRALIA, Tamworth, 2NU, regular ABC card w/all info. Unsigned. (Martin, OR)
- 648 JAPAN, Toyama, JOIG, colorful card w/date, time and freq. 17 days. (Martin, OR)
- 657 NEW ZEALAND, Wellington, 2YC, sent card w/mountain and cows on front, plus Radio NZ schedule and pennant. No signer, took 2 weeks for Aerogram report with no return postage. (Portzer, WA)
- 660 MEXICO, Mexico, D.F., XERPM, sent friendly letter in SS in 2 months after sent report in SS. Can't read signature. (Martin, OR)
- 666 JAPAN, Osaka, JOBK, Radio Japan card in 17 days, via Tokyo. (Harms, UT)
- 675 NEW ZEALAND, Christchurch, 3YA, Radio NZ card. Unsigned. (Martin, OR)
- 702 JAPAN, Kitami/Hiroshima, JOKD/JOFB, Radio Japan card in 20 days, no return postage, via Tokyo. (Harms, UT)
+NHK sent routine card and R. Japan stuff in one month. (Portzer, WA)
+Card in 6 weeks, all details. No signer. (Martin, OR)

- 711 FIJI, Suva, card in 2 months. Signer KK Ghose. Frequency only. (Martin, OR)
- 720 NEW ZEALAND, Invercargill, 4YZ, Radio NZ card, unreadable signer. (Martin, OR)
- 720 USSR, Yuzhno-Sakhalinsk, sent card w/most details (except location) from Radio Moscow in 6 weeks. (Martin, OR)
- 729 AUSTRALIA, Adelaide, 5CL, received large ABC card in 2 months. No signer. (Martin)
- 738 JAPAN, Toyama, JOLR, sent card in 5 weeks, all details, no signer. (Martin, OR)
- 747 HOLLAND, Flevoland, sent card in 9½ months for air taped report. Frequency, date, time, etc., filled in, signer unreadable in Technical Dept. (Portzer, WA)
+Sent second verie for my 3/80 report. My first one was mailed 1/5 w/45¢ postage, and gave transmitter site as Lopik. This one was mailed 12/24 w/80¢ postage and received 2/6, gave transmitter site as Flevoland. Either they think I heard both transmitters, or else an error. Same unreadable signature on both cards. (Portzer)
- 756 CHINA, CPBS, sent card in 2 weeks for report sent to Peking. Oddly enough, the 1476 verie was sent in the same envelope, even though reports were mailed a month apart. (Portzer, WA)
+Detailed card received in 3 weeks, no signer. (Martin, OR)
- 756 NEW ZEALAND, Auckland, 1YA, usual Radio NZ card and stuff in 36 days, 3 IRCs via Wellington. (Harms, UT)
+Nice card in 2 weeks. (Mittman, CA)
- 756 WEST GERMANY, Konigsblutter/Ravensburg, Deutschlandfunk, sent nice card w/frequency, date and time in 16 days. No signer. (Martin, OR)
+Full info card for tentative report. (Hall-Patch, BC)
- 774 AUSTRALIA, Melbourne, 3LO, sent card and R. Australia program schedule in 2 months seamail. Guess I should have sent return postage. (Portzer, WA)
- 774 AUSTRALIA, Townsville, 4TO, card/letter, stickers and tape w/news story of my report Ended w/great jingle. Joe Oost, Regional Manager was signer. (Martin, OR)
- 774 FIJI, Suva, R. Fiji 2, card and friendly letter in two weeks, mentioned 774 replaces 711 frequency and now 20 kw. Signed S.B. Raniga. (Martin, OR)
- 774 JAPAN, Akita, JOUB, R. Japan card in 18 days via Tokyo. No rp. (Harms, UT)
- 783 EAST GERMANY, Burg, received a bunch of Radio Berlin International literature and an RBI card for 7830 khz. Not much good I thought, but amid the pile of stuff was a form letter from RBI with a PS typed in verifying the 783 khz frequency and saying that they listened to the tape with interest. A tentative report, so new country here. Reply in 2½ months for one IRC. (Hall-Patch, BC)
- 783 NEW ZEALAND, Wellington, 2YB, Radio NZ shortwave card w/783 written in. (Martin)
- 790 ALASKA, Glenallen, KCAM, received letter w/postcard of tower and mountains in 10 days. Signed by Carlyle Callis, General Manager. (Martin, OR)
- 792 SOUTH KOREA, Seoul, HLKJ, card via air in 355 days for EE/KK report and mint stamps. Signer was S.M. Kim, Director. (Hardester, CA)
- 810 AUSTRALIA, Bega, 2BA, normal ABC card received in 6 weeks from Sydney. (Martin, OR)
- 810 JAPAN, Tokyo, Far East Network, received unsigned card in 17 days. (Martin, OR)
- 810 NEW ZEALAND, Dunedin, 4YA, Radio NZ card, unreadable signer. (Martin, OR)
- 825 SAINT KITTS, Basseterre, Radio Paradise, sent form letter in 4 months from Chief Engineer for air mail report with 2 IRCs. (Portzer, WA)
+Finally sent card for 10/3/80 report. 4 months with 1 IRC. Schedule given as 0900-0400, except Sunday, 0945-0400. (Hall-Patch, BC)
- 828 AUSTRALIA, Nambour, 4NB, letter w/stickers. Signer P. Maher, Managing Director. (Martin, OR)
- 828 AUSTRALIA, Sale, 3GI, sent letter in 2 weeks. Signer Colin Barrett, Regional Manager. Address is P.O. Box 330, Sale 3850. (Portzer, WA)
- 828 CHINA, Beijing, PBS, sent card in two weeks. (Portzer, WA)
- 828 JAPAN, Osaka, JOBB, card and R. Japan material in 2 months for report sent to NHK headquarters in Tokyo. (Portzer, WA)
+R. Japan card for no return postage in 21 days. (Harms, UT)

- 834 BELIZE, Belize, R. Belize sent card in 3½ months, same card used in 1960's when they were British Honduras. Signature unreadable. (Martin, OR)
- 837 CHINA, Gansu, PBS, card in 3½ weeks w/many stamps on envelope. (Martin, OR)
+Card in 2 weeks for aerogram report sent to Beijing. Also enclosed Radio Peking shortwave schedule. (Portzer, WA)
- 837 JAPAN, Niigata, JOQK, routine R. Japan card and various enclosures in 2 weeks for report sent to NHK HQ in Tokyo. Forgot to fill in the frequency, although the date was given. (Portzer, WA)
+Received NHK card in 28 days. (Martin, OR)
- 837 NEW ZEALAND, Kaitaia, 1YK, Radio NZ card. Signed L.J. Borck, Manager. (Martin, OR)
- 846 JAPAN, NHK1, Radio Japan card in 23 days, no return postage. (Harms, UT)
- 846 KIRIBATI, Bairiki, letter for 3/2 tentative report, so now I've finally logged this one as a new country (after all these years). Letter said they use a 1 kw relay to Christmas Island (for rebroadcast on MF) on 15433 khz, which has been heard in the US. Interesting! (Hall-Patch, BC)
- 855 CHINA, Shanghai, card in 2 weeks for report sent to Beijing. Arrived in same envelope as 837 card, even though the reports were sent separately. (Portzer, WA)
- 873 JAPAN, Kumamoto, JOGB, R. Japan card in one month for report sent to NHK headquarters in Tokyo. (Portzer, WA)
+Usual NHK stuff, card, pamphlet, schedules, questionnaire, air mail report. For 1 IRC in 22 days. JJ QSL number 3!! (Wien, CA)
+Radio Japan card in 21 days, no return postage. (Harms, UT)
- 873 WEST GERMANY, Frankfurt, AFN, sent letter in 4 months, mentioned the written report followed their format, but couldn't tell much on tape sent, too much noise. Also sent program guide for AFN stations in Germany. Name and address: Vincent B. Miller, Manager/Amerikanischer Rundfunk, AFN, 6000 Frankfurt/Main-Bertramstr. 6. (Martin, OR)
- 882 CHINA, Fujian, PBS, card received in 3 weeks, detailed, no signer. (Martin, OR)
- 882 GREAT BRITAIN, Wales, BBC, sent a letter in 3 weeks signed by P.W. Fear, Engineering Information Officer, who said he couldn't understand my tape but that the program details agreed w/their log. He added that my report was shown to the producer of the program I heard and "appropriate mention will be made in a future programme". Also, sent large glossy brochure on BBC Wales. Address: Broadcasting House, Llandaff, Cardiff CF5 2YQ. (Portzer, WA)
+Letter. Bookmark and photo of studio for tape report. (Hall-Patch, BC)
+Verie letter with all info sent from BBC, Wales. Also sent photo of station. Signer P.W. Fear, Engineering Information Officer, Wales. (Martin, OR)
- 882 NEW ZEALAND, Auckland, 1YC, sent card and friendly letter in 6 weeks, signed by Barry Hartley, Senior Technician. Address: P.O. Box 2209, Auckland. (Portzer, WA)
- 891 ALGERIA, Algiers, sent nice card in 2½ months for registered report (taped) and 3 IRCS (Wasn't taking a chance on this one!!). Sent card air-mail with all details in FF and AA. My first African. (Martin, OR)
- 891 JAPAN, Sandai, JOHK, detailed letter from NHK office in Tokyo. (Martin, OR)
+Sent Radio Japan card and usual enclosures for report sent to HQ. (Portzer, WA)
+Radio Japan card in 13 days. Again no return postage. (Harms, UT)
- 891 NEW ZEALAND, Wellington, 2XW, "Radio Windy" letter, signed by Mike West. (Martin)
- 927 AUSTRALIA, Melbourne, 3UZ, colorful card in 3 weeks. (Martin, OR)
- 927 FIJI, Sigatoka, sent card and friendly letter in 3 weeks. S.B. Raniga signer. Fiji verie number 8. (Martin, OR)
- 927 NEW ZEALAND, Palmerston North, 2ZA, nice letter and regular R. NZ card. Michael J.K. Lawrence, Supervising Technician. (Martin, OR)
- 936 CHINA, Anhei, PBS, sent card w/many colorful stamps on envelope in 3 weeks. Chinese verie number 9! (Martin, OR)
- 945 SOLOMON ISLANDS, Gizo, sent card and friendly letter (2 pages), thanking me for the taped report. Mentioned that my report was the furthest one they had received for their new 945 khz station at Gizo. Station is 5 kw, not 10 kw as per WRTW. Also sent program guide and copy of news story in Pidgin and EE on my report. Letter signed by Martin Harlow, News Trainer, who is also a DXer! Mentioned hearing KGHO, Hoquiam, WA, 1560, on PSA of 500 watts!! (Martin, OR)

- 999 JAPAN, Hachinohe, JOTQ, sent nice cards and stickers w/all details on card.
 Three weeks. (Martin, OR)
- 1008 AUSTRALIA, Brisbane, 4IP, finally after 3 reports and a year. Letter via sea mail
 in 3 months. Signer, Roger Green, Program Director. (Martin, OR)
- 1008 JAPAN, Osaka, JONR, sent second card w/friendly letter and pendant w/ABC-1008 on
 it. Letter signed by Ryuichi Masuda, Programme Section. (Martin, OR)
- 1010 MEXICO, Guadalajara, Jal., XEHL, sent card in 2 months in SS, friendly short letter
 Signer: Lic Luis Huizar, Gerente General. (Martin, OR)
- 1017 CHINA, RP Korean Service, frequency only on card printed in KK for KK report in 18
 days. Wrong frequency on card (1020). (Harms, UT)
- 1017 JAPAN, Fukuoka, JOLB, R. Japan card in 17 days, no return postage. (Harms, UT)
 +Nice hand written letter and photos of station in 3 weeks. (Martin, OR)
- 1035 CHINA, CPBS, received detailed card in 3 weeks. (Martin, OR)
- 1035 SOLOMON ISLANDS, Honaira, R. Hapi Isles, card and very friendly letter from the
 News Trainer-Martin Hadlow, who is a member of the NZRDXL. Took 2½ weeks. Verie
 number 3 from Solomon Islands. (Martin, OR)
- 1044 CHINA, Radio Peking Japanese Service, sent card in 2 weeks. (Portzer, WA)
- 1062 CHINA, Guangzhou, PBS, card received in 4 weeks from Peking. Verie number 11 from
 China. (Martin, OR)
- 1125 VANUATU, Port Vila, YJB1, (formerly New Hebrides) sent card for tentative report
 last March, giving date, time and frequency. Signer was I.J. Irving, Radio
 Vanuatu, P.O. Box 49, Port Vila, Vanuatu. (Martin, OR)
- 1143 JAPAN, Kyoto, JOBR, nice card received in 2 weeks. (Martin, OR)
- 1143 NEW ZEALAND, Hamilton, 1YW, Radio NZ card in 2 weeks. (Martin, OR)
- 1161 NEW ZEALAND, Wellington, 2ZM, Radio NZ card w/stickers and 3 x 4 2ZM poster. Now
 all Wellington stations verified. Signer L. Aehton. (Martin, OR)
- 1170 CHINA, Japanese Department verified report in 3 weeks. (Martin, OR)
- 1197 JAPAN, Kumamoto, JOBF, sent nice card and hand written letter, only 5 kw!
 Received in 3 weeks. Signer in JJ language. (Martin, OR)
- 1197 NEW ZEALAND, Wanganui, 2ZW, nice card w/all info. SIGNED by D.A. Mills, Program
 Director. (Martin, OR)
- 1206 CHINA, Yanji, Yanbian PBS, shipyard card, full data but wrong frequency (listed as
 1210). Via Central PBS in Peking, not R. Peking. This for KK report. (Harms, UT)
 +Sent card w/all details, signed Yamian People's Broadcasting Station. 1 month.
 (Martin, OR)
 +Sent card in 2 weeks for EE report sent to Peking. (Portzer, WA)
- 1206 FJJI, Sigatoka, R. Fiji, card in 2 months. Signer KK Ghose. (Martin, OR)
- 1206 NEW ZEALAND, Dunedin, 4XO, Radio Otago, letter received in 3 weeks. Signer Leigh
 Harrison, Production Manager. Only 2 kw, New Zealand verie number 61. Also sent
 some stickers. (Martin, OR)
- 1250 ALASKA, Homer, KBBI, sent friendly letter, Coverage Map, and program schedule for
 taped report and SASE. Signer Ed Gatzke, Station Engineer. (Portzer, WA)
 +Sent friendly letter in three weeks, along w/program guide. An NPR station.
 Signer Ed Gatzke, Engineer. Address: Box 1085, Homer, AK 99603. (Martin, OR)
- 1278 JAPAN, Fukuoka, JOFR, sent non-specific (no data) card detailing Japanese art.
 Sent air for mint stamps in 214 days. Address: JOFR, R.K.B. Mainchi Broadcasting
 Co., 4-1-10 Watanabe Dori, Chyuu-ku Fukuoka 810, JAPAN. (Hardester, CA)
 +Sent card in 13 days, also letter and program schedule. (Martin, OR)
- 1278 NEW ZEALAND, Napier, 2ZC, sent Radio NZ card (2 kw), w/letter, stickers in 3 weeks
 for taped report. (Martin, OR)
- 1287 AUSTRALIA, Tamworth, 2TM, letter received in 4 weeks from taped report, 2 kw.
 Signer R.G. Holley, Chief Technician. (Martin, OR)

- 1314 AUSTRALIA, Wollongong, 2WL, colorful blue card w/stickers and information on the Australian coast. (Martin, OR)
- 1323 FIJI, Rakiraki, nice letter and card in 6 weeks for taped report. Signer, S.B. Raniga, Advertising Manager. (Martin, OR)
- 1332 AUSTRALIA, Bundaberg, 4BU, nice letter and older card. G.L. McKennariey. (Martin)
- 1332 JAPAN, Nagoya, JOSF, sent letter in 10 days w/all details. (Martin, OR)
- 1341 NEW ZEALAND, Nelson, 2ZN, sent Radio NZ card in 3 weeks, w/stickers, postcards. Mentioned one of their better reports. NZ verie number 58. (Martin, OR)
- 1350 NEW ZEALAND, Rotorua, 1ZC, sent Radio NZ card w/all details in 3 weeks. (Martin)
- 1386 AUSTRALIA, Adelaide, 5AA, received letter in 10 months. Almost given up on this one. 5 kw. Signer John A. Ferguson, Chief Engineer. (Martin, OR)
- 1386 CANTON ISLAND, WXLE, sent prepared card to Global Associates, w/taped report. One of their current employees was an Engineer for the station a year or so ago. He signed the card George Dawson. One of my most wanted. (Martin, OR)
- 1386 JAPAN, NHK-2, routine verie package from Tokyo in 1 month. (Portzer, WA)
- 1413 AUSTRALIA, Newcastle, 2KO, colorful card w/stickers. (Martin, OR)
- 1458 NEW ZEALAND, Westport, 3YW, nice Radio NZ card, along w/letter saying this was one of their furthest reports. Also used in news story. F.J. Jacobs, Station Manager was the signer. (Martin, OR)
- 1467 FIJI, Rakiraki, Radio Fiji 2, verie in 2 months, signed S.B. Raniga. 10th freq. verified from Fiji. 2 kw. (Martin, OR)
- 1475 MALAYSIA, Kota Kinabalu, Sabah, card, EE program schedule and Malay stamps in 3 weeks for EE report and 3 IRCS sent to Kuala Lumpur. (Portzer, WA)
- 1476 CHINA, sent card in 6 weeks, verie was for Beijing PBS which I think is incorrect as I definitely heard and reported to Central PBS IDs. (Portzer, WA)
+Sent card in 3 weeks, signed Beijing PBS also. (Martin, OR)
- 1500 HAWAII, Honolulu, KUMU, card from Alan Roycroft w/all details in 2 weeks. (Martin)
- 1503 JAPAN, Akita, JOUK, routine card package from Tokyo in 1 month. My report was for 531/567/1503, but only 1503 was mentioned on card. I guess they do not like multi-frequency reports. (Portzer, WA)
- 1530 AUSTRALIA, Moree, 2VM, letter in 3 weeks, from taped report sent. Signer S.T. O'Shea. Australian verification number 114. (Martin, OR)
- 1540 HAWAII, Honolulu, KISA, card from Alan Roycroft w/all details in 2 weeks. (Martin)
- 1560 MEXICO, Ixtlán del Rio, Nay., XERIO, sent long friendly SS letter, signed by Srita. Bertha Bracamontes Ramos, Gerente. Gave schedule as 5:30 AM to 6:00 PM, "hora del Pacifico". Address: Hidalgo No. 57 Altos, Ixtlán del Rio, Nayarit. (Portzer, WA)
- 1566 AUSTRALIA, Wangaratta, 3NE, sent card and letter for tentative report of 8/27. Now 5 kw directional, but didn't state direction of main lobe. (Hall-Patch, BC)
- 1566 SOUTH KOREA, Cheju, HLDA, sent card, religious material, and letter in 3 weeks. Signer Jack C. Lentz, Administrative Director. (Portzer, WA)
- 1566 SOUTH KOREA, Cheju, HLAZ, sent card, program schedule, and FEBC list for report w/one IRC to Seoul. Alternate address (local): P.O. Box 44, Cheju City, Cheju-Do 590-28. (Portzer, WA)
- 1575 CHINA, Wenzhou PBS, card received in 3 weeks. (Martin, OR)
- 1584 AUSTRALIA, Newcastle, 2EN, 2EA translator w/200 watts. Nice letter from Rein Van Poeke, Operations Manager, mentioned that main station 2EA-801 w/500 watts is moving to 1386 w/5 kw at end of July '80. Also one of my best. (Martin, OR)

* GREAT CIRCLE BEARING AND DISTANCE FROM ATLANTA

	MILES	DEG			
ALASKA (Adak)	4380	322	JAPAN (Sapporo)	6399	328
ALASKA (Anchorage)	3403	324	JAPAN (Tokyo)	6860	324
ALASKA (Fairbanks)	3364	329	KIRIBATI (Tarawa)	6996	275
ALASKA (Nome)	3880	329	KOREA (Pyongyang)	7057	336
ALBANIA (Tirana)	5374	48	KOREA (Seoul)	7118	335
ALGERIA (Algiers)	4756	59	KUWAIT	7135	40
ANDORRA	4493	54	LEBANON (Beirut)	6358	46
ANGUILLA	1688	123	LIBYA (Bengasi)	5750	55
ANTIGUA	1804	123	LUXEMBOURG	4531	45
ARGENTINA (Buenos Aires)	5003	157	MALAYSIA (Kuala Lumpur)	9857	349
AUSTRALIA (Brisbane)	9032	260	MALTA	5337	55
AUSTRALIA (Melbourne)	9677	249	MAURITANIA (Nouakchott)	4403	82
AUSTRALIA (Perth)	11257	270	MEXICO (Guadalajara)	1454	236
AUSTRALIA (Sydney)	9279	253	MEXICO (Merida)	928	200
AUSTRIA (Vienna)	4972	43	MEXICO (Mexico)	1332	226
AZURES (Lajes)	3165	66	MEXICO (Monterrey)	1094	244
BAHAMAS (Nassau)	727	142	MEXICO (Veracruz)	1225	218
BANGLADESH	8559	4	MONACO (Monte Carlo)	4761	50
BARBADOS	2055	126	MONGOLIA (Ulan Bator)	6755	352
BELIZE	1133	191	MONTserrat	1797	124
BERMUDA	1141	88	MOROCCO (Casablanca)	4303	66
BOLIVIA (La Paz)	3625	160	NEPAL (Katmandu)	8143	10
BRAZIL (Brasilia)	4180	138	NET ANTILLES (Bonaire)	1784	142
BRAZIL (Recife)	4338	122	NETHERLANDS (Amsterdam)	4394	42
BRAZIL (Rio de Janeiro)	4755	139	NEW CALEDONIA (Noumea)	8120	260
BRUNEI	9522	332	NEW GUINEA (Port Moresby)	8771	284
BULGARIA (Sofia)	5465	45	NEW ZEALAND (Auckland)	8096	242
CAYMAN ISLANDS (Georgetown)	997	162	NICARAGUA (Managua)	1478	360
CHILE (Santiago)	4719	167	PANAMA (Panama)	1718	170
CHINA (Beijing)	7182	343	PARAGUAY (Asuncion)	4437	153
CHINA (Guangzhou)	9345	341	PERU (Lima)	3195	169
CHINA (Shanghai)	7649	336	PHILIPPINES (Manila)	8706	329
CHINA (Urumqi)	7061	5	POLAND (Warsaw)	5004	38
COLOMBIA (Bogota)	2088	161	PORTUGAL (Lisboa)	4092	61
COOK ISLANDS	6063	244	PUERTO RICO (San Juan)	1530	128
COSTA RICA (San Jose)	1624	0	ROMANIA (Bucharest)	5504	42
CUBA (Guantanamo)	1103	146	SABAH (Sandakan)	9336	327
CUBA (Havana)	735	170	SAUDI ARABIA (Riyadh)	7286	45
CZECHOSLOVAKIA (Prague)	4833	42	SENEGAL (Dakar)	4343	89
DENMARK (Copenhagen)	4582	37	SIERRA LEONE (Freetown)	4812	93
DOMINICA	1906	125	SINGAPORE	9953	345
DOMINICAN REP (Santo Domingo)	1372	136	SOCIETY ISLANDS (Tahiti)	5500	241
ECUADOR (Guayaquil)	2499	171	SOLOMON ISLANDS (Honiar)	8040	276
EGYPT (Cairo)	6368	51	SOVIET UNION (Leningrad)	4990	28
EL SALVADOR	1401	192	SOVIET UNION (Moscow)	5383	28
FIJI (Suva)	7290	258	SOVIET UNION (Odessa)	5589	39
FRANCE (Bordeaux)	4351	52	SOVIET UNION (Vladivostok)	6657	334
FRANCE (Paris)	4385	47	SPAIN (Madrid)	4320	57
GERMANY (Berlin)	4713	40	ST KITTS	1750	124
GERMANY (Munich)	4782	45	ST LUCIA	1996	127
GREENLAND (Thule)	3008	5	ST PIERRE	1717	49
GRENADA	2055	130	ST VINCENT	2022	128
GUADELOUPE	1861	124	SURINAM (Paramaribo)	2689	129
GUAM (Agana)	7860	306	SWEDEN (Stockholm)	4651	32
GUATEMALA	1360	196	SWITZERLAND (Zurich)	4681	46
GUINEA (Conakry)	4747	92	TAIWAN (Taipei)	8038	333
GUYANA (Georgetown)	2506	131	THAILAND (Bangkok)	9146	353
HAITI (Port au Prince)	1276	141	TONGA (Nuku'alofa)	7030	251
HAWAII (Honolulu)	4489	279	TRINIDAD (Port of Spain)	2123	132
HONDURAS (Tegucigalpa)	1353	185	TUNISIA (Tunis)	5103	56
HONGKONG	8381	339	TURKEY (Istanbul)	5762	44
INDIA (Calcutta)	8525	7	TURKS & CAICOS	1165	132
INDONESIA (Jakarta)	10427	338	UNITED KINGDOM (London)	4219	45
INDONESIA (Medan)	9849	353	UPPER VOLTA (Ouagadougou)	5333	83
INDONESIA (Surabaya)	10331	325	URUGUAY (Montevideo)	5071	156
IRAQ (Baghdad)	6740	41	VENEZUELA (Caracas)	1925	141
IRELAND (Dublin)	3926	44	VIETNAM (Saigon)	9280	344
ISRAEL (Tel Aviv)	6415	47	VIRGIN ISLANDS	1637	125
ITALY (Roma)	5039	50	WALLIS & FUTUNA	6809	260
IVORY COAST (Abidjan)	5463	90	YUGOSLAVIA (Belgrade)	5264	44
JAMAICA (Kingston)	1175	154			

* GREAT CIRCLE BEARING AND DISTANCE FROM BOSTON

	MILES	DEG			
ALASKA (Adak)	4340	323	JAPAN (Sapporo)	6201	337
ALASKA (Anchorage)	3365	320	JAPAN (Tokyo)	6704	335
ALASKA (Fairbanks)	3248	325	KIRIBATI (Tarawa)	7592	286
ALASKA (Nome)	3741	327	KOREA (Pyongyang)	6716	346
ALBANIA (Tirana)	4433	56	KOREA (Seoul)	6799	345
ALGERIA (Algiers)	3840	67	KUWAIT	6198	49
ANDORRA	3562	63	LEBANON (Beirut)	5417	54
ANGUILLA	1718	162	LIBYA (Rengas)	4822	64
ANITGUAYA	1814	160	LUXEMBOURG	3570	53
ARGENTINA (Buenos Aires)	5373	169	MALAYSIA (Kuala Lumpur)	9262	10
AUSTRALIA (Brisbane)	9762	278	MALTA	4406	64
AUSTRALIA (Melbourne)	10536	267	MAURITANIA (Nouakchott)	3672	96
AUSTRALIA (Perth)	11624	230	MEXICO (Guadalajara)	2405	241
AUSTRALIA (Sydney)	10074	270	MEXICO (Merida)	1810	221
AUSTRIA (Vienna)	4032	51	MEXICO (Mexico)	2295	234
AZORES (Lajes)	2312	81	MEXICO (Monterrey)	1902	244
BAHAMAS (Nassau)	1236	197	MEXICO (Veracruz)	2139	220
BANGLADESH	7835	17	MONACO (Monte Carlo)	3623	59
BARBADOS	2078	159	MONGOLIA (Ulan Bator)	6197	1
BELIZE	1967	214	MONTSERPAT	1827	161
BERMUDA	771	151	MORROCCO (Casablanca)	3427	79
BOLIVIA (La Paz)	4068	176	NEPAL (Katmandu)	7366	21
BRAZIL (brasilia)	4282	154	NFT ANTILLES (Bonaire)	2067	0
BRAZIL (Recife)	4162	137	NETHERLANDS (Amsterdam)	3455	50
BRAZIL (Rio de Janeiro)	4815	152	NEW CALEDONIA (Noumea)	9877	273
BRUNEI	9160	353	NEW GUINEA (Port Moresby)	9195	303
BULGARIA (Sofia)	4524	53	NEW ZEALAND (Auckland)	8996	253
CAYMAN ISLANDS (Georgetown)	1629	190	NICARAGUA (Managua)	2290	208
CHILE (Santiago)	5235	179	PANAMA (Panama)	2374	195
CHINA (Beijing)	6713	354	PARAGUAY (Asuncion)	4750	106
CHINA (Guangzhou)	7304	355	PERU (Lima)	3778	187
CHINA (Shanghai)	7293	348	PHILIPPINES (Manila)	8428	346
CHINA (Urungui)	6340	15	PORTUGAL (Lisboa)	4073	45
COLOMBIA (Bogota)	2619	186	PUERTO RICO (San Juan)	3100	72
CRICK ISLANDS	6955	253	ROMANIA (Bucharest)	4565	50
COSTA RICA (San Jose)	2393	203	SABAH (Sandakan)	6057	347
CUBA (Guantanamo)	1557	187	SAUDI ARABIA (Riyadh)	5315	53
CUBA (Havana)	1467	208	SENEGAL (Dakar)	3694	104
CZECHOSLOVAKIA (Prague)	3694	50	SIERRA LEONE (Freetown)	4196	106
DENMARK (Copenhagen)	3653	44	SINGAPORE	6402	7
DOMINICA	1933	160	SOCIETY ISLANDS (Taiti)	4410	249
DOMINICAN REP (Santo Domingo)	1637	0	SOLOMON ISLANDS (Honiera)	4607	291
ECUADOR (Guayaquil)	3123	192	SOVIET UNION (Leningrad)	4099	34
EGYPT (Cairo)	5430	59	SOVIET UNION (Moscow)	4498	36
EL SALVADOR	2272	214	SOVIET UNION (Odessa)	4656	46
FIJI (Suva)	8074	269	SOVIET UNION (Vladivostok)	6361	143
FRANCE (Bordeaux)	3416	61	SPAIN (Madrid)	3401	68
FRANCE (Paris)	3445	55	ST KITTS	1781	162
GERMANY (Berlin)	3778	48	ST LUCIA	2037	61
GERMANY (Munich)	3842	53	ST PIERRE	792	62
GREENLAND (Thule)	2378	5	ST VINCENT	2077	101
GUATEMALA	2144	163	SURINAM (Paramaribo)	2709	154
GUINEA (Conakry)	4124	105	SWEDEN (Stockholm)	3741	38
GUYANA (Georgetown)	2582	158	SWITZERLAND (Zurich)	3740	55
HAITI (Port au Prince)	1632	360	TAIWAN (Taipei)	7712	337
HAWAII (Honolulu)	5078	284	THAILAND (Bangkok)	4525	9
HONDURAS (Tegucigalpa)	2147	209	TONGA (Nuku'alofa)	7873	262
HONGKONG	7057	354	TRINIDAD (Port of Spain)	2279	151
INDIA (Calcutta)	7765	20	TUNISIA (Tunis)	4177	65
INDONESIA (Jakarta)	9975	5	TURKEY (Istanbul)	4821	52
INDONESIA (Medan)	9198	14	TURKS & CAICOS	1436	301
INDONESIA (Surabava)	9987	351	UNITED KINGDOM (London)	3276	53
IRAQ (Baghdad)	5803	49	UPPER VOLTA (Ouagadougou)	4595	94
IRELAND (Dublin)	2987	52	URUGUAY (Montevideo)	5414	167
ISRAEL (Tel Aviv)	5474	56	VENEZUELA (Caracas)	2232	169
ITALY (Roma)	4101	59	Vietnam (Saigon)	8762	2
IVORY COAST (Abidjan)	4805	101	VIRGIN ISLANDS	1701	165
JAMAICA (Kingston)	1700	190	WALLIS & FUTUNA	7585	270
			YUGOSLAVIA (Belgrade)	4323	53

* GREAT CIRCLE BEARING AND DISTANCE FROM CHICAGO

	MILES	DEG			
ALASKA (Adak)	3832	318	JAPAN (Sapporo)	5828	326
ALASKA (Anchorage)	2850	319	JAPAN (Tokyo)	6299	323
ALASKA (Fairbanks)	2796	325	KIRIBATI (Terawa)	6764	275
ALASKA (None)	3310	325	KOREA (Pyongyang)	6470	334
ALBANIA (Tirana)	5131	48	KOREA (Seoul)	6533	333
ALGERIA (Algiers)	4627	60	KUWAIT	6812	37
ANDORRA	4318	56	LEBANON (Beirut)	6087	44
ANGUILLA	2157	131	LIBYA (Bengasi)	5576	54
ANTIGUA	2316	129	LUXEMBOURG	4270	47
ARGENTINA (Buenos Aires)	5591	156	MALAYSIA (Kuala Lumpur)	9276	346
AUSTRALIA (Brisbane)	8918	265	MALTA	5163	55
AUSTRALIA (Melbourne)	9665	257	MAURITANIA (Nouakchott)	4523	84
AUSTRALIA (Perth)	10980	290	MEXICO (Guadalajara)	1705	216
AUSTRALIA (Sydney)	9236	259	MEXICO (Merida)	1434	360
AUSTRIA (Vienna)	4690	44	MEXICO (Mexico)	1673	205
AZORES (Lajes)	3136	72	MEXICO (Monterrey)	1318	216
BAHAMAS (Nassau)	1291	150	MEXICO (Veracruz)	1624	198
BANGLADESH	8004	0	MONACO (Monte Carlo)	4550	52
BARBADOS	2578	131	MONGOLIA (Ulan Bator)	6172	350
BELIZE	1664	360	MONTSERRAT	2316	130
BERMUDA	1412	109	MOROCCO (Casablanca)	4254	68
BOLIVIA (La Paz)	4215	158	NEPAL (Katmandu)	7613	6
BRAZIL (Brasilia)	4721	138	NET ANTIILLES (Bonaire)	2371	144
BRAZIL (Recife)	4791	122	NETHERLANDS (Amsterdam)	4113	45
BRAZIL (Rio de Janeiro)	5297	138	NEW CALEDONIA (Noumea)	8024	262
BRUNEI	8943	332	NEW GUINEA (Port Moresby)	8441	287
BULGARIA (Sofia)	5196	45	NEW ZEALAND (Auckland)	8188	244
CAYMAN ISLANDS (Georgetown)	1579	161	NICARAGUA (Managua)	2025	0
CHILE (Santiago)	5308	165	PANAMA (Panama)	2335	164
CHINA (Beijing)	6591	341	PARAGUAY (Asuncion)	5019	151
CHINA (Guangzhou)	7755	339	PERU (Lima)	3782	167
CHINA (Shanghai)	7062	334	PHILIPPINES (Manila)	8132	328
CHINA (Urumqi)	6514	3	POLAND (Warsaw)	4675	38
COLOMBIA (Bogota)	2707	158	PORTUGAL (Lisboa)	3997	64
COOK ISLANDS	6150	242	PUERTO RICO (San Juan)	2027	135
COSTA RICA (San Jose)	2229	170	ROMANIA (Bucharest)	5212	42
CUBA (Guantanamo)	1668	151	SABAH (Sandakan)	8766	327
CUBA (Havana)	1318	165	SAUDI ARABIA (Riyadh)	6999	41
CZECHOSLOVAKIA (Prague)	4543	43	SENEGAL (Dakar)	4532	91
DENMARK (Copenhagen)	4251	39	SIERRA LEONE (Freetown)	5027	94
DOMINICA	2426	130	SINGAPORE	9370	343
DOMINICAN REP (Sto Domingo)	1902	142	SOCIETY ISLANDS (Tahiti)	5630	237
ECUADOR (Guayaquil)	3076	168	SOLOMON ISLANDS (Honira)	7791	277
EGYPT (Cairo)	6146	49	SOVIET UNION (Leningrad)	4582	28
EL SALVADOR	1922	360	SOVIET UNION (Moscow)	4978	28
FIJI (Suva)	7227	258	SOVIET UNION (Odessa)	5263	38
FRANCE (Bordeaux)	4160	54	SOVIET UNION (Vladivostok)	6073	332
FRANCE (Paris)	4145	49	SPAIN (Madrid)	4185	60
GERMANY (Berlin)	4407	41	ST KITTS	2268	130
GERMANY (Munich)	4518	46	ST LUCIA	2523	131
GREENLAND (Thule)	2476	8	ST PIERRE	1575	66
grenada	2599	134	ST VINCENT	2554	132
GUADELOUPE	2378	130	SURINAM (Paramaribo)	3188	132
GUAM (Agana)	7381	306	SWEDEN (Stockholm)	4278	33
GUATEMALA	1866	360	SWITZERLAND (Zurich)	4434	48
GUINEA (Conakry)	4957	93	TAIWAN (Taipei)	7455	332
GUYANA (Georgetown)	3016	134	THAILAND (Bangkok)	8564	350
HAITI (Port au Prince)	1826	146	TONGA (Nuku'alofa)	7035	251
HAWAII (Honolulu)	3243	273	TRINIDAD (Port of Spain)	2675	135
HONDURAS (Tegucigalpa)	1894	0	TUNISIA (Tunis)	4941	56
HONGKONG	7791	338	TURKEY (Istanbul)	5480	43
INDIA (Calcutta)	7984	4	TURKS & CAICOS	1691	140
INDONESIA (Jakarta)	9812	335	UNITED KINGDOM (London)	3960	47
INDONESIA (Medan)	9274	351	UPPER VOLTA (Ouagadougou)	5448	83
INDONESIA (Surabaya)	9734	326	URUGUAY (Montevideo)	5657	154
IRAQ (Baghdad)	6421	38	VENEZUELA (Caracas)	2509	143
IRELAND (Dublin)	3662	47	VIETNAM (Saigon)	8690	342
ISRAEL (Tel Aviv)	6159	45	VIRGIN ISLANDS	2116	132
ITALY (Roma)	4824	51	WALLIS & FUTUNA	6734	259
IVORY COAST (Abidjan)	5648	90	YUGOSLAVIA (Belgrade)	4993	45
JAMAICA (Kingston)	1751	156			

* GREAT CIRCLE BEARING AND DISTANCE FROM DENVER

	MILES	DEG	JAPAN (Sapporo)	MILES	DEG
ALASKA (Adak)	3316	315	JAPAN (Tokyo)	5376	316
ALASKA (Anchorage)	2402	322	KIRIBATI (Tarawa)	5796	312
ALASKA (Fairbanks)	2432	329	KOREA (Pyongyang)	5866	253
ALASKA (Nome)	2916	325	KOREA (Seoul)	6122	323
ALBANIA (Tirana)	5845	38	KUWAIT	6161	321
ALGERIA (Algiers)	5446	50	LEBANON (Beirut)	7394	23
ANDORRA	5108	47	LIBYA (Tripoli)	6749	32
ANGUILLA	2905	108	LUXEMBOURG	6346	44
ANTIGUA	3023	108	MALAYSIA (Kuala Lumpur)	4985	30
ARGENTINA (Buenos Aires)	5928	143	MALTA	9024	323
AUSTRALIA (Brisbane)	9011	254	MAURITANIA (Nouakchott)	5939	45
AUSTRALIA (Melbourne)	8772	249	MEXICO (Guadalajara)	5430	73
AUSTRALIA (Perth)	10097	270	MEXICO (Merida)	1317	"
AUSTRALIA (Sydney)	8336	249	MEXICO (Mexico)	1671	141
AUSTRIA (Vienna)	5371	35	MEXICO (Monterrey)	1441	166
AZORES (Lajes)	4018	63	MEXICO (Veracruz)	1068	164
BAHAMAS (Nassau)	1870	111	MONACO (Monte Carlo)	1595	152
BANGLADESH	8008	242	MONGOLIA (Ulan Bator)	5305	43
BARBADOS	3274	110	MONTserrat	6066	330
BELIZE	1818	142	MOROCCO (Casablanca)	3014	109
BERMUDA	2298	90	NEPAL (Kathmandu)	5120	50
BOLIVIA (La Paz)	4551	141	NETHERLANDS (Bonaire)	7726	350
BRAZIL (Brasilia)	5307	124	NETHERLANDS (Amsterdam)	7935	120
BRAZIL (Recife)	5539	109	NEW CALEDONIA (Noumea)	1609	37
BRAZIL (Rio de Janeiro)	5874	125	NEW GUINEA (Port Moresby)	7120	251
BRUNET	9497	312	NEW ZEALAND (Auckland)	7586	274
BULGARIA (Sofia)	5881	35	NICARAGUA (Managua)	7314	235
CAYMAN ISLANDS (Georgetown)	2007	126	PANAMA (Panama)	2210	143
CHILE (Santiago)	5511	151	PARAGUAY (Asuncion)	2645	136
CHINA (Beijing)	6344	320	PERU (Lima)	5432	137
CHINA (Guangzhou)	7442	323	PHILIPPINES (Manila)	4067	137
CHINA (Shanghai)	6702	321	POLAND (Warsaw)	7659	211
CHINA (Urumchi)	6605	350	PORTUGAL (Lisboa)	5294	30
COLOMBIA (Bogota)	1049	131	PUERTO RICO (San Juan)	4612	55
CRICK ISLANDS	5326	230	ROMANIA (Bucharest)	2776	111
COSTA RICA (San Jose)	2436	142	SABAH (Sandakan)	5668	33
CUBA (Guantanamo)	7250	119	SAUDI ARABIA (Riyadh)	8260	308
CUBA (Havana)	1733	124	SENEGAL (Dakar)	7620	27
CZECHOSLOVAKIA (Prague)	5218	35	SIERRA LEONE (Freetown)	5435	80
DENMARK (Copenhagen)	1885	32	SINGAPORE	5928	82
DOMINICAN REP (Santo Domingo)	3123	109	SOCIETY ISLANDS (Tahiti)	9065	320
ECUADOR (Quito)	2555	114	SOLOMON ISLANDS (Honolulu)	4842	225
EGYPT (Cairo)	1302	145	SOVIET UNION (Leningrad)	6900	265
EL SALVADOR	6862	37	SOVIET UNION (Moscow)	5099	21
FIJI (Suva)	2015	140	SOVIET UNION (Odessa)	5476	20
FRANCE (Bordeaux)	6330	247	SOVIET UNION (Vladivostok)	5876	28
FRANCE (Paris)	4940	46	SPAIN (Madrid)	5609	321
GERMANY (Berlin)	4893	41	ST KITTS	6005	51
GERMANY ("united")	5067	34	ST LUCIA	2967	108
GREENLAND (Thule)	5223	38	ST PIERRE	3213	111
GRENADE	2762	12	ST VINCENT	7444	62
GUADELOUPE	3262	113	SURINAM (Paramaribo)	3236	111
GUAM (Agana)	3079	109	SWEDEN (Stockholm)	3869	114
GUATEMALA	6670	293	SWITZERLAND (Zurich)	4650	26
GUINEA (Conakry)	1925	150	TAIWAN (Taipei)	5159	40
GUUYANA (Georgetown)	5658	81	THAILAND (Bangkok)	7052	317
HAITI (Port au Prince)	3672	115	TONGA (Nuku'alofa)	9392	331
HAWAII (Honolulu)	2439	117	TRINIDAD (Port of Spain)	6160	240
HONDURAS (Tegucigalpa)	3314	263	TUNISIA (Tunis)	3325	115
HONGKONG	7049	141	TURKEY (Istanbul)	5731	46
INDIA (Calcutta)	7461	322	TURKS & CAICOS	6143	33
INDONESIA (Jakarta)	9045	346	UNITED KINGDOM (London)	2364	112
INDONESIA (Medan)	9390	311	UPPER VOLTA (Ouagadougou)	4683	40
INDONESIA (Surabaya)	9085	327	URUGUAY (Montevideo)	6352	72
IRAQ (Baghdad)	9109	303	VE涅ZUELA (Caracas)	6010	141
IRELAND (Dublin)	7014	26	Vietnam (Saigon)	8397	322
ISRAEL (Tel Aviv)	4399	41	VIRGIN ISLANDS	2650	109
ITALY (Roma)	4637	33	WALLIS & FUTUNA	5835	247
IVORY COAST (Abidjan)	5571	42	YUGOSLAVIA (Belgrade)	5674	35
JAMAICA (Kingston)	6553	78			
	2271	123			

• GREAT CIRCLE BEARING AND DISTANCE FROM HOUSTON

	MILES	DEG			
ALASKA (Adak)	4187	321	JAPAN (Sapporo)	6246	322
ALASKA (Anchorage)	3259	327	JAPAN (Tokyo)	6661	317
ALASKA (Fairbanks)	3280	333	KIRIBATI (Tarawa)	6367	269
ALASKA (None)	3779	330	KOREA (Pyongyang)	6990	329
ALBANIA (Tirana)	6011	42	KOREA (Seoul)	7031	326
ALGERIA (Algiers)	5432	53	KUWAIT	7728	33
ANDORRA	5156	49	LEBANON (Beirut)	6983	39
ANGUILLA	2161	104	LIBYA (Bengasi)	6416	50
ANTIGUA	2320	104	LUXEMBOURG	5157	41
ARGENTINA (Buenos Aires)	5060	149	MALAYSIA (Kuala Lumpur)	9883	330
AUSTRALIA (Brisbane)	8350	253	MALTA	6002	49
AUSTRALIA (Melbourne)	8990	243	MAURITANIA (Nouakchott)	5080	76
AUSTRALIA (Perth)	10603	257	MEXICO (Guadalajara)	807	219
AUSTRALIA (Sydney)	8590	247	MEXICO (Merida)	711	149
AUSTRIA (Vienna)	9598	38	MEXICO (Mexico)	763	198
AZORES (Lajes)	3853	61	MEXICO (Monterrey)	420	227
BAHAMAS (Nassau)	1146	102	MEXICO (Veracruz)	739	182
BANGLADESH	8793	351	MONACO (Monte Carlo)	5411	45
BARBADOS	2540	108	MONGOLIA (Ulan Bator)	6881	345
BELIZE	965	151	MONTSERRAT	2305	105
BERMUDA	1799	76	MOROCCO (Casablanca)	4991	60
BOLIVIA (La Paz)	3681	146	NEPAL (Katmandu)	8455	359
BRAZIL (Brasilia)	4467	128	NET ANTILLES (Ponaire)	2097	119
BRAZIL (Recife)	4788	112	NETHERLANDS (Amsterdam)	5009	39
BRAZIL (Rio de Janeiro)	5028	130	NEW CALEDONIA (Noumea)	7438	254
BRUNEI	9359	316	NEW GUINEA (Port Moresby)	8184	275
BULGARIA (Sofia)	6089	40	NEW ZEALAND (Auckland)	7413	236
CAYMAN ISLANDS (Georgetown)	1192	122	NICARAGUA (Managua)	1350	153
CHILE (Santiago)	4663	158	PANAMA (Panama)	1755	142
CHINA (Beijing)	7199	335	PARAGUAY (Asuncion)	4562	142
CHINA (Guangzhou)	9309	329	PERU (Lima)	3146	154
CHINA (Shanghai)	7572	326	PHILIPPINES (Manila)	4523	316
CHINA (Urumqi)	7338	357	POLAND (Warsaw)	5589	33
COLOMBIA (Bogota)	2249	136	PORTUGAL (Lisboa)	4774	56
COOK ISLANDS	5376	239	PUERTO RICO (San Juan)	1975	106
COSTA RICA (San Jose)	1547	150	ROMANIA (Bucharest)	6115	37
CUBA (Guantanamo)	1430	114	SABAH (Sandakan)	9120	312
CUBA (Habane)	926	117	SAUDI ARABIA (Riyahd)	7904	37
CZECHOSLOVAKIA (Prague)	5443	38	SENEGAL (Dakar)	4999	82
DENMARK (Kobenhaven)	5165	33	STERRA LEONE (Freetown)	5454	86
DOMINICA	2402	107	SINGAPORE	9927	325
DOMINICAN REP (Santo Domingo)	1767	110	SOCIETY ISLANDS (Tahiti)	4820	235
ECUADOR (Guayaquil)	2449	152	SOLOMON ISLANDS (Honiera)	7411	268
EGYPT (Cairo)	7017	45	SOVIET UNION (Leningrad)	5507	24
EL SALVADOR	1181	160	SOVIET UNION (Moscow)	5902	24
FIJI (Suva)	6604	252	SOVIET UNION (Odessa)	6178	34
FRANCE (Bordeaux)	5008	47	SOVIET UNION (Vladivostok)	6568	327
FRANCE (Paris)	5022	43	SPAIN (Madrid)	4994	53
GERMANY (Berlin)	5313	36	ST KITTS	2263	104
GERMANY (Munich)	5408	40	ST LUCIA	2477	108
GREENLAND (Thule)	338	8	ST PIERRE	2399	49
GRENADE	2504	112	ST VINCENT	2493	109
GUADELOUPE	2365	106	SURINAM (Paramaribo)	3097	114
GUAM (Agana)	7452	297	SWEDEN (Stockholm)	4200	28
GUATEMALA	1096	163	SWITZERLAND (Zurich)	5315	42
GUINEA (Conakry)	5391	85	TAIWAN (Taipei)	7922	323
GUYANA (Georgetown)	2890	115	THAILAND (Bangkok)	9240	338
HAITI (Port au Prince)	1631	113	TONGA (Nuku'alofa)	6339	246
HAWAII (Honolulu)	3892	276	TRINIDAD (Port of Spain)	2554	114
HONDURAS (Tegucigalpa)	1203	153	TUNISIA (Tunis)	5771	50
HONGKONG	8310	327	TURKEY (Istanbul)	6379	38
INDIA (Calcutta)	8804	355	TURKS & CAICOS	1600	105
INDONESIA (Jakarta)	10279	314	UNITED KINGDOM (London)	4845	41
INDONESIA (Medan)	9933	335	UPPER VOLTA (Ouagadougou)	6008	77
INDONESIA (Surabaya)	10021	304	URUGUAY (Montevideo)	5147	147
IRAQ (Baghdad)	7336	34	VENEZUELA (Caracas)	2282	120
IRELAND (Dublin)	4549	40	VIETNAM (Saigon)	9265	329
ISRAEL (Tel Aviv)	7048	41	VIRGIN ISLANDS	2100	105
ITALY (Roma)	5689	45	WALLIS & FUTUNA	6127	254
IVORY COAST (Abidjan)	6114	84	YUGOSLAVIA (Belgrade)	5887	39
JAMAICA (Kingston)	1422	121			

* GREAT CIRCLE BEARING AND DISTANCE FROM LOS ANGELES

	MILES	DEG	JAPAN (Sapporo)		
ALASKA (Adak)	3107	318	JAPAN (Tokyo)	5120	311
ALASKA (Anchorage)	2352	332	KIRIBATI (Tarawa)	5470	305
ALASKA (Fairbanks)	2471	338	KOREA (Pyongyang)	5061	256
ALASKA (Nome)	2875	331	KOREA (Seoul)	5939	315
ALBANIA (Tirana)	6598	29	KUWAIT	5954	313
ALGERIA (Algiers)	6266	43	LEBANON (Beirut)	8005	12
ANDORRA	5915	40	LIBYA (Bengasi)	7451	22
ANGUILLA	3564	92	LUXEMBOURG	7132	35
ANTIGUA	3681	93	MALAYSIA (Kuala Lumpur)	5748	32
ARGENTINA (Buenos Aires)	6117	134	MALTA	8780	306
AUSTRALIA (Brisbane)	7173	245	MAURITANIA (Nouakchott)	6732	36
AUSTRALIA (Melbourne)	7924	239	MEXICO (Guadalajara)	6269	65
AUSTRALIA (Perth)	9323	256	MEXICO (Merida)	1292	131
AUSTRALIA (Sydney)	7490	241	MEXICO (Mexico)	1948	109
AUSTRIA (Vienna)	6107	27	MEXICO (Monterrey)	1539	125
AZORES (Lajes)	4866	55	MEXICO (Veracruz)	1219	113
BAHAMAS (Nassau)	2532	92	MONACO (Monte Carlo)	1692	121
BANGLADESH	8067	328	MONGOLIA (Ulan Bator)	6090	35
BARBADOS	3909	96	MONTserrat	6120	331
BELIZE	2155	113	MOROCCO (Casablanca)	3665	94
BERMUDA	3073	76	NEPAL (Katmandu)	5963	51
BOLIVIA (La Paz)	4802	128	NET ANTILLES (Bonaire)	7904	337
BRAZIL (Brasilia)	5765	114	NETHERLANDS (Amsterdam)	3481	103
BRAZIL (Recife)	6160	100	NEW CALEDONIA (Noumea)	5564	30
BRAZIL (Rio de Janeiro)	6305	117	NEW GUINEA (Port Moresby)	6277	243
BRUNEI	8114	297	NEW ZEALAND (Auckland)	6834	264
BULGARIA (Sofia)	6613	26	NICARAGUA (Managua)	6509	227
CAYMAN ISLANDS (Georgetown)	2559	102	PANAMA (Panama)	2526	118
CHILE (Santiago)	5589	141	PARAGUAY (Asuncion)	3007	115
CHINA (Beijing)	6251	321	PERU (Lima)	5716	127
CHINA (Guangzhou)	7234	311	PHILIPPINES (Manila)	4181	132
CHINA (Shanghai)	6483	312	POLAND (Warsaw)	7291	300
CHINA (Urumqi)	6816	341	PORTUGAL (Lisboa)	5998	23
COLOMBIA (Bogota)	3486	115	PUERTO RICO (San Juan)	5678	48
COOK ISLANDS	4509	221	ROMANIA (Bucharest)	3373	94
COSTA RICA (San Jose)	2734	119	SABAH (Sandakan)	6580	24
CUBA (Guantanamo)	2814	98	SAUDI ARABIA (Riyadh)	7845	295
CUBA (Havana)	2313	99	SENEGAL (Dakar)	8270	15
CZECHOSLOVAKIA (Prague)	5953	27	SIERRA LEONE (Freetown)	6257	71
DENMARK (Kobenhaven)	5598	25	SINGAPORE	6740	74
DOMINICA	3767	94	SOCIETY ISLANDS (Tahiti)	8771	302
DOMINICAN REP (Santo Domingo)	3158	97	SOLOMON ISLANDS (Honjara)	4054	214
ECUADOR (Guayaquil)	3532	126	SOVIET UNION (Leningrad)	6103	257
EGYPT (Cairo)	7603	27	SOVIET UNION (Moscow)	5707	15
EL SALVADOR	2315	120	SOVIET UNION (Odessa)	6078	13
FIJI (Suva)	5482	239	SOVIET UNION (Vladivostok)	6555	20
FRANCE (Bordeaux)	5743	39	SPAIN (Madrid)	5510	315
FRANCE (Paris)	5661	34	ST KITTS	5828	44
GERMANY (Berlin)	5795	26	ST LUCIA	3621	93
GERMANY (Munich)	5977	30	ST PIERRE	3845	96
GREENLAND (Thule)	3321	13	ST VINCENT	3302	54
GRENADE	3869	98	SURINAM (Paramaribo)	3860	97
GUADELOUPE	3728	94	SWEDEN (Stockholm)	4466	100
GUAM (Agana)	6095	284	SWITZERLAND (Zurich)	5522	20
GUATEMALA	2164	121	TAIWAN (Taipei)	5926	33
GUINEA (Conakry)	6673	73	THAILAND (Bangkok)	6775	307
GUYANA (Georgetown)	4254	101	TONGA (Nuku'alofa)	8265	315
HAITI (Port au Prince)	3018	98	TRINIDAD (Port of Spain)	5315	232
HAWAII (Honolulu)	2555	260	TUNISIA (Tunis)	3918	100
HONDURAS (Tegucigalpa)	2393	117	TURKEY (Istanbul)	6534	38
HONGKONG	7236	310	TURKS & CAICOS	6855	24
INDIA (Calcutta)	8155	332	UNITED KINGDOM (London)	2989	94
INDONESIA (Jakarta)	8971	293	UPPER VOLTA (Ouagadougou)	5455	34
INDONESIA (Medan)	8892	309	URUGUAY (Montevideo)	7195	64
INDONESIA (Surabaya)	8699	287	VENEZUELA (Caracas)	6223	133
IRAQ (Baghdad)	7654	15	VIETNAM (Saigon)	3621	103
IRELAND (Dublin)	5166	35	VIRGIN ISLANDS	8158	307
ISRAEL (Tel Aviv)	7550	23	WALLIS & FUTUNA	3501	93
ITALY (Roma)	6349	34	YUGOSLAVIA (Belgrade)	4988	239
IVORY COAST (Abidjan)	7378	71		6414	27
JAMAICA (Kingston)	2790	102			

* GREAT CIRCLE BEARING AND DISTANCE FROM SEATTLE

	MILES	DEG			
ALASKA (Adak)	2326	306	JAPAN (Sapporo)	4369	305
ALASKA (Anchorage)	1423	321	JAPAN (Tokyo)	4778	300
ALASKA (Fairbanks)	1509	331	KIRIBATI (Tarawa)	5138	249
ALASKA (Nome)	1948	322	KOREA (Pyongyang)	5139	311
ALBANIA (Tirana)	5871	27	KOREA (Seoul)	5170	309
ALGERIA (Algiers)	5704	41	KUWAIT	7114	7
ANDORRA	5318	39	LEBANON (Beirut)	6639	18
ANGUILLA	3879	100	LIBYA (Bengasi)	6455	30
ANTIGUA	1998	99	LUXEMBOURG	6557	37
ARGENTINA (Buenos Aires)	6911	131	MALAYSIA (Kuala Lumper)	9038	309
AUSTRALIA (Brisbane)	7359	247	MALTA	6180	33
AUSTRALIA (Melbourne)	8189	243	MAURITANIA (Nouakchott)	6046	63
AUSTRALIA (Perth)	9244	267	MEXICO (Guadalajara)	2114	144
AUSTRALIA (Sydney)	7747	243	MEXICO (Merida)	2592	123
AUSTRIA (Vienna)	5365	26	MEXICO (Mexico)	2344	137
AZORES (Lajes)	4527	58	MEXICO (Monterrey)	1912	134
BAHAMAS (Nassau)	2892	106	MEXICO (Veracruz)	2461	133
BANGLADESH	7157	327	MONACO (Monte Carlo)	5415	34
BARBADOS	4258	101	MONGOLIA (Ulan Bator)	5201	328
BELIZE	2836	125	MONTSERRAT	3902	100
BERMUDA	3148	87	MOROCCO (Casablanca)	5525	50
BOLIVIA (La Paz)	5546	127	NEPAL (Kathmandu)	6958	335
BRAZIL (Brasilia)	4326	112	NET ANTILLES (Bonaire)	1947	109
BRAZIL (Recife)	6510	97	NETHERLANDS (Amsterdam)	4661	30
BRAZIL (Rio de Janeiro)	6695	113	NEW CALEDONIA (Noumea)	6530	241
BRUNEI	7479	299	NEW GUINEA (Port Moresby)	6773	263
BULGARIA (Sofia)	5854	24	NEW ZEALAND (Auckland)	7002	226
CAYMAN ISLANDS (Georgetown)	3051	114	NICARAGUA (Managua)	3212	127
CHILE (Santiago)	6446	139	PANAMA (Panama)	3650	122
CHINA (Beijing)	5398	317	PARAGUAY (Asuncion)	6439	124
CHINA (Guangzhou)	6457	310	PERU (Lima)	4972	133
CHINA (Shanghai)	5710	309	PHILIPPINES (Manila)	6641	299
CHINA (Urumdi)	5860	339	POLAND (Warsaw)	5208	22
COLOMBIA (Bogota)	4113	120	PORTUGAL (Lisboa)	5199	47
COOK ISLANDS	5125	215	PUERTO RICO (San Juan)	3720	102
COSTA RICA (San Jose)	3420	126	ROMANIA (Bucharest)	5795	21
CUBA (Guantanamo)	3245	109	SABAH (Sandakan)	7245	296
CUBA (Havana)	2771	113	SAUDI ARABIA (Riyadh)	7397	10
CZECHOSLOVAKIA (Prague)	5212	26	SENEGAL (Dakar)	6137	59
DENMARK (Kobenhaven)	4833	24	SIERRA LEONE (Freetown)	6649	70
DOMINICA	4104	100	SINGAPORE	8065	306
DOMINICAN REP (Santo Domingo)	3550	105	SOCIETY ISLANDS (Tahiti)	4758	207
ECUADOR (Guayaquil)	4283	130	SOLOMON ISLANDS (Honiara)	6130	254
Egypt (Cairo)	6838	22	SOVIET UNION (Leningrad)	4837	14
EL SALVADOR	3016	129	SOVIET UNION (Moscow)	5200	11
FIJI (Suva)	5821	234	SOVIET UNION (Odessa)	5735	18
FRANCE (Bordeaux)	5138	39	SOVIET UNION (Vladivostok)	4712	310
FRANCE (Paris)	5001	34	SPAIN (Madrid)	5288	43
GERMANY (Berlin)	5045	26	ST KITTS	7943	100
GERMANY (Munich)	5255	29	ST LUCIA	4199	191
GREENLAND (Thule)	2480	19	ST PIERRE	3009	65
GRENAADA	4258	103	ST VINCENT	4225	102
GAUDELOUPE	4057	100	SURINAM (Paramaribo)	4665	103
GUAM (Agana)	5680	281	SWEDEN (Stockholm)	4712	20
GUATEMALA	2917	130	SWITZERLAND (Zurich)	5239	32
GUINEA (Conakry)	6575	69	TAIWAN (Taipei)	6046	305
GUYANA (Georgetown)	4674	105	THAILAND (Bangkok)	7444	316
HAITI (Port au Prince)	3438	107	TONGA (Nuku'alofa)	5764	227
HAWAII (Honolulu)	2682	239	TRINIDAD (Port of Spain)	4326	104
HONDURAS (Tegucigalpa)	3066	127	TUNISIA (Tunis)	5911	36
HONGKONG	6471	309	TURKEY (Istanbul)	6066	21
INDIA (Calcutta)	7228	331	TURKS & CAICOS	3347	104
INDONESIA (Jakarta)	8372	298	UNITED KINGDOM (London)	4788	34
INDONESIA (Medan)	8116	312	UPPER VOLTA (Ouagadougou)	6924	58
INDONESIA (Surabaya)	8181	292	URUGUAY (Montevideo)	7006	130
Iraq (Baghdad)	6783	11	VENEZUELA (Caracas)	4094	109
IRELAND (Dublin)	4517	36	VIETNAM (Saigon)	7408	309
ISRAEL (Tel Aviv)	6748	19	VIRGIN ISLANDS	3828	100
ITALY (Roma)	5672	32	WALLIS & FUTUNA	5332	233
IVORY COAST (Abidjan)	7217	64	YUGOSLAVIA (Belgrade)	5664	25
JAMAICA (Kingston)	3273	112			

COUNTRIES INDEX

- TP Alaska - 550, 630, 650, 660, 670, 700, 750, 780, 790, 800, 890, 1080, 1250.
TA Albania - 1215, 1395, 1458.
TA Algeria - 251.4, 531, 548, 549, 576, 891, 1422, 1424.
TA Andorra - 819.
PA Anguilla - 1505.
PA Antigua - 1100, 1165.
PA Argentina - 1070.
TP Australia - 531(2), 540, 549, 558, 567, 594, 603, 612, 621, 630, 639(2), 648, 657, 675, 684, 693, 702, 711, 720, 729, 738, 747, 756, 765, 774(2), 792, 801, 819, 828(2), 837, 846, 855, 864(2), 873, 882, 891, 918, 927, 936, 954, 1008, 1017, 1026(2), 1044, 1071, 1107, 1116, 1152, 1161, 1179, 1188, 1197(2), 1206(2), 1224(2), 1233, 1269, 1287, 1296, 1314, 1332, 1386(2), 1413, 1458, 1485, 1491, 1503, 1512, 1530, 1539, 1548, 1557, 1566, 1575, 1584(2).
TA Austria - 1476.
PA Bahamas - 810, 1240, 1540.
PA Barbados - 900.
PA Belize - 834, 1668.
PA Brazil - 860, 1000, 1130, 1220.
PA British Virgin Islands - 780.
TA Bulgaria - 747, 774, 864.
PA Cayman Islands - 1205, 1555.
TA Canary Islands - 621, 837.
TP China - 540, 585, 594, 639, 648, 666, 675, 684, 702, 720, 756, 783, 828, 837, 840, 846, 855, 873, 875, 882, 936, 963, 995, 1017, 1044, 1116, 1188, 1206, 1251, 1287, 1323, 1377, 1476, 1575.
PA Colombia - 540, 600, 610, 620, 640, 650, 660, 680, 690, 700, 720, 730, 740, 750, 760, 770, 780, 810, 820, 830, 840, 870, 890, 910, 920, 960, 1000(2), 1005, 1010(2), 1020, 1025, 1030, 1040(2), 1050, 1055, 1070, 1080, 1090, 1091.5, 1100, 1110(2), 1130, 1140, 1160(2), 1170, 1180, 1190(2), 1200(2), 1210, 1220, 1250, 1310, 1329, 1340, 1360, 1400, 1483.2, 1500, 1520, 1550, 1580, 1690, 1715.
TP Cook Islands - 864.
PA Costa Rica - 525, 544, 575, 625.2, 675, 700, 725, 755.3, 775, 825, 875, 925, 1025, 1075, 1124.6, 1175.8, 1524.5.
PA Cuba - 550, 570, 580, 590, 600, 610, 620, 630, 640(2), 660, 670, 680, 690, 700, 720(2), 730, 740, 760, 770, 820(2), 840, 860, 870, 880, 920, 930, 940, 1005.9, 1040, 1059, 1110, 1120, 1150, 1160, 1180, 1200, 1210, 1239, 1260, 1270, 1310, 1430, 1530, 1560, 1578.
TA Czechoslovakia - 639, 1098, 1233, 1287, 1521.
TA Denmark - 245, 1062.
PA Dominica - 595, 1210.
PA Dominican Republic - 541, 620, 650, 699, 830, 860, 890, 930, 950, 960, 1120, 1130, 1150, 1160, 1180, 1315, 1511.2, 1530, 1571.
PA Ecuador - 540, 615, 700, 714.2, 735, 800, 805, 815, 830, 945, 975, 995, 1675, 1730.
TA Egypt - 1107.
PA El Salvador - 570, 655, 765, 770, 840, 904.8, 1015, 1155, 1160.
TP Fiji - 558, 639, 684, 711, 774, 891, 927, 1206, 1323, 1467.
TA France - 603, 675, 711, 792, 837, 864, 945, 1071, 1161, 1206, 1242, 1377, 1494, 1557.
TA Gabon - 1554.
TA Germany, East - 179, 657, 783, 882, 1044, 1359.
TA Germany, West - 155, 182, 185, 209, 756, 873, 1017, 1197, 1269, 1422, 1539, 1593.
TA Greenland - 1425.
PA Grenada - 535.
PA Guadeloupe - 640.
PA Guatemala - 640, 670, 700, 730, 850, 880, 890, 900, 925, 1135, 1180, 1210, 1613.
TA Guinea - 1403, 1404, 1408.
PA Haiti - 660, 840, 895, 1035, 1080, 1170, 1325, 1365, 1385, 1475.7, 1595.
TP Hawaii - 550, 590, 620, 650, 690, 720, 760, 790, 870, 900, 940, 970, 990, 1040, 1080, 1110, 1130, 1170, 1210, 1270, 1420, 1500, 1540.
PA Honduras - 610, 660, 705, 870, 880, 890, 944, 1000, 1255, 1338.
TP Indonesia - 1053.
TA Ireland - 567, 612.
TA Italy - 846, 1332, 1575.
PA Jamaica - 560, 700, 720, 750, 770.
TP Japan - 531, 558, 567, 585, 594, 603, 612, 648, 657, 666, 675, 693, 702(2), 720, 747, 756, 774, 810, 819, 828, 837, 846, 864(4), 873, 882, 891, 954, 963, 999, 1008, 1017, 1035, 1053, 1107, 1116(2), 1134, 1143, 1152, 1179, 1188, 1197, 1233, 1242, 1278, 1287, 1296, 1314, 1332, 1377, 1386, 1422, 1440, 1467, 1485, 1503, 1512.
TP Kiribati - 846.

- TP Korea, North - 585, 639, 657, 702, 783, 819, 855, 864, 875, 882, 891, 1035, 1116, 1440.
 TP Korea, South - 558, 567, 603, 639, 747, 756, 792, 819, 837, 864, 882, 891, 972, 1017, 1035, 1107, 1134, 1143, 1188, 1224, 1305, 1566.
 TA Kuwait - 540.
 TA Libya - 539, 827.
 TA Luxembourg - 236, 1440.
 TP Malaysia - 801, 1475.
 TA Malta - 1557.
 TP Marshall Islands - 1098, 1224.
 TA Mauritania - 1349.
 PA Mexico - 540, 580, 600, 620, 650, 660(2), 670, 680, 690(2), 700, 710(3), 730, 760, 790, 800, 810(2), 830(2), 840, 850, 860(4), 880, 900, 910, 940, 950, 980(2), 990(2), 1000(2), 1010(4), 1030, 1040, 1050(2), 1060, 1080, 1090, 1110(2), 1140, 1150, 1190(2), 1230, 1250, 1260, 1280, 1300, 1340, 1370, 1390, 1470(2), 1500, 1520, 1530, 1560(2), 1570, 1580, 1608, 1720.
 TA Monaco - 218, 1467.
 TP Mongolia - 882.
 PA Montserrat - 740, 885, 930.
 TA Morocco - 209, 612, 657, 702, 819, 828, 864, 936, 1044, 1196, 1233.
 TA Netherlands - 747.
 PA Netherlands Antilles - 800, 860.
 TP New Caledonia - 666.
 TP New Hebrides - 1125.
 TP New Zealand - 567, 630, 639, 657, 675, 720, 756, 765, 783, 819, 837, 864, 873, 882, 891, 963, 1008, 1026, 1035, 1044, 1053, 1080, 1098, 1116, 1143, 1152, 1161, 1197, 1206, 1215, 1296, 1314, 1323, 1449, 1476, 1485, 1557, 1593.
 PA Nicaragua - 540, 555, 620, 640, 660, 750, 930.
 TP Niue Island - 837.
 TA Northern Ireland - 1341.
 PA Panama - 720, 760, 770, 800, 825, 840, 860, 890, 1045, 1200.
 TP Papua-New Guinea - 585, 864, 1494.
 PA Peru - 854, 880.
 TP Philippine Islands - 828, 846, 882, 1143.
 TP Phoenix Islands - 1386.
 TA Poland - 227, 1206, 1503.
 TA Portugal - 666, 719, 720, 756, 782, 1035, 1061, 1062, 1562, 1578.
 PA Puerto Rico - 580, 630, 680, 740, 810, 870.
 PA Saint Kitts - 555, 825.
 PA Saint Lucia - 660, 840.
 TA Saint Pierre-et-Miquelon - 1375.
 PA Saint Vincent - 705.
 TP Samoa, American - 1120.
 TP Samoa, Western - 1062, 1251, 1359, 1404.
 TA Sao Tome - 759.
 TA Saudi Arabia - 594, 1512, 1521.
 TA Senegal - 765.
 TP Society Islands - 738.
 TP Solomon Islands - 945, 1026, 1035.
 TA Spain - 585, 639, 684, 729, 738, 774, 792, 855, 873, 954, 1107, 1179, 1224, 1413, 1485, 1584, 1602.
 PA Surinam - 600, 640, 725, 820, 914.
 TA Sweden - 1179.
 TA Switzerland - 531, 765, 1566.
 TP Thailand - 1548, 1575.
 TA Togo - 1502.
 TP Tonga - 1017.
 TA Tunisia - 585, 1566, 1575.
 TA Turkey - 1017.
 TA Ukraine - 765.
 TA United Kingdom - 200, 648, 693, 882, 909, 1053, 1089, 1215, 1296, 1458, 1503, 1548.
 TA Upper Volta - 747.
 TA U.S.S.R. - 209, 873, 1143, 1368.
 TP U.S.S.R. - 155, 173, 182, 191, 200, 236, 245, 272, 549, 576, 585, 648, 666, 720, 783, 837, 963, 972, 1008, 1125, 1251, 1377, 1467, 1476, 1575.
 TA Vatican City - 1530.
 PA Venezuela - 540, 550, 570, 640, 660, 670, 700, 710, 720, 750, 800, 820, 830, 840, 870, 880, 910, 930, 940, 950, 990, 1000, 1010, 1020, 1070(2), 1080, 1090, 1110(2), 1120, 1150, 1180, 1200(2), 1210(2), 1290, 1350, 1360.
 PA Virgin Islands - 1000.
 TP Wallis Island - 1188.
 TA Yugoslavia - 1134, 1143, 1413.

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(JA-SK) Jamil Alvi, Saskatoon, SK
(Bev-CA) Doug Nyholm, Rich Toebe; 20 miles south of Halfmoon Bay, CA
SW beverage, FRG-7000
also: the above and others at Pt. Reyes, CA--FRG-7000, FRG-7,
R-1000, 1000' beverage at 270°, 1000' beverage to
Korea/Japan, 300' northerly longwire.

(BB-MA) Bill Bailey, Holden, MA--two R-390A's, 2 1200' phased Beverages
(DB-S.Africa) Denzil Baker, Greyville, South Africa
(BB-OR) Bill Block, Portland, OR--HQ-140XA, R. West loop, longwire.
(MB-ON) Mike Brookner, Toronto, ON--RF-2200, GE Superadio
(PB-WA) Phil Bytheway, Seattle, WA--R-392, SP-600, 3' wedge, 200'
longwire.
(SC-ON) Brian Cartwright, Johnstown, PA--R-390A, SM-1
(MC-MA) Saul Chernos, Toronto, ON
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2. ---West Yarmouth, MA--HQ-180A, R-390A, R. West
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(BC-VT) Bob Curtis, Colchester, VT--SP-600, longwire
(RE-PA) Michael Dice, Kirkland, WA--Aiwa R-22 tuner, SM-2
Richard Eckman, Philadelphia, PA--modified HQ-180A, Sanserino
loop, SB-620.
(BF-NY) Bob Foxworth, Mineola, NY--HQ-150, NRD-515, R. West loop,
longwire and Hagan matching network.
(RG-IL) Rob Gerardi, Benton, IL--TRF, Motorola R-43, DX-160, IRCA
loop, 300m beverage
(LBC-CO) Larry Godwin, Durango, CO--HQ-150, SM-2
(NHP-BC) Nick Hall-Patch, Victoria, BC--Transmogrified HRO, DX-150A,
3' box loop, TRF w/Shotgun, PFM toys.
(NHP-bev) Nick Hall-Patch at Jordan River, BC--DX150A, 1000' beverage
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(WJH-UT) Bill Harms, Provo, UT--modified FRG-7, 3' wedge loop
(WJH-UT-bev) Bill Harms, DXing w/FRG-7 and various beverages in Utah.
(Hart-Austr) David Hart, Scarborough, Western Australia --R391, SSR1, longwires
J. Hart, Carlin, NV--Panasonic RF-594, SM-2, 1600' beverage
Bob Hill, Jr., Menlo Park, CA--SX-100, R. West loop
(CH-GA) Chuck Hutton, Decatur, GA--R-390A, beverages, phasing unit.
(GJ-CA) Gary Jackson, Sacramento, CA--R-390A, Dymek antenna
(JJ-WA) Jef Jaisun, Kirkland, WA--SP-600, wedge, beverage.
(JFJ-CA) Joe Jergel, San Francisco, CA--Grundig 3400, DA-5 loop
(Kaz-MC-RI) Neil Kazaross & Mark Connnelly, DXpedition at Narragansett,
RI. R-390A, HQ-180A, Sanserino loop, R. West loop, 305m
beverage @280°, 457m beverage @210°.
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(Kaz-b-RI) Neil Kazaross, Narragansett, RI--R-390A, beverage @195°.
(Kaz-RI) Neil Kazaross, Pawtucket, RI--R-390A, Sanserino loop, longwire
(CK-AZ) Chris Knight, Sierra Vista, AZ--FRG-7, DX-160, Sanserino loop
(CK-CO) Chris Knight, Pueblo West, CO
(DK-WA) Dave Korinek, Seattle, WA--R-388, R. West loop.
(RK-IL) Rob Kramer, Chicago, IL--HQ-129X, HQ-100C, 2 spiral loops, LW
(JK-TX) Joe Krueger, Corpus Christi, TX -- modified FRG-7, loop
(JKL-WA) Jack Latteman, Seattle, WA--modified FRG-7, RF-2800, R. West
loop, 50' longwire.
(RAL-VA) Bob Lazar, Alexandria, VA--FRG-7, SM-2
(RAL-WI) Bob Lazar, Madison, WI--FRG-7, SM-2
(MM-ID) Mark McMillan, Rathdrum, ID--HQ-180, four beverages
(GM-CO) Gene Martin, Denver, CO--HQ-180, box loop
(PM-OR) Patrick Martin, Seaside, OR--E.H. Scott RB0-2, 230' longwire,
ground system
Mort Meehan, 29 Palms, CA--RF-2600, GE Superadio
Steven Miller, Boston, MA--TRF
(SMM-CA) Steve Mittman, San Pedro, CA--FRG-7, TRF, 3' wedge.
(DM-AB) Don Moman, Edmonton, AB--Drake R-7, SE beverage at Wetaskiwin
(DHM-PA) Don Moore, Bellefonte, PA--FRG-7000, R. West loop
(LM-NY) Linda Morby, Ballston Lake, NY--DX-300, longwire
(PRM-OH) Paul Mount, Nelsonville, OH--TRF, GE Superadio, SM-1
(PRM-NJ) Paul Mount, Teaneck, NJ--TRF, GE Superadio

(RCN-BC) R. Colin Newell, Victoria, B.C.--DX150B, 2' loop
(DN-CA) Doug Nyholm, San Carlos, CA--FRG-7000, 150' longwire.
(AWP-CA) Tim O'Hare, Edmonds, WA--SPR-4, 150' longwire.
(FJP-CA) Art Peterson, Richmond, CA--modified FRG-7, R. West loop
(DAP-CA) Father Jack Pejza, Modesto, CA--SPR-4, Sanserino loop.
(LP-OH) Doug Pifer, Santa Ana, CA--FRG-7, R. West loop, modified TRF
Louis Poda, Akron, OH
(EP-ID) Bruce Portzer, w/McMillan, Harms, Korinek and beverages at Rathdrum, ID
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(BP-WA) Bruce Portzer, Seattle, WA--HQ-180A, modified FRG-7, 4' loop, SB-620, longwires, SM-2 etc. etc.
(BP-WA) Bruce Portzer, at Jaisun's pad, Kirkland, WA--HQ-180A, 2000' NE beverage (terminated) 3/80, 2300' SE beverage 11/80.
(GS-VA) Ralph Sanserino, Huntington Beach, CA--R-390A, R-1000, loop
(CMS-ON) Gardner Smith, Annadale, VA
(ERS-NJ) C.M. Stanbury II, Ridgeway, ON--HQ-200, RAX-1, 90' longwire
Elliot Straus, West Orange, NJ--R-390A, FET loop, 150' longwire, HP-524B counter.
(MS-NY) Matt Stutterheim, Glenford, NY--R-390A, R-388, 1000 S-N beverage, 500' longwire, Sanserino loop
(MS-Kaz-NY) Matt Stutterheim & Neil Kazaross, equipment as above
(GT-FL) Gerry Thoms, Pensacola, FL--modified FRG-7, modified SPR-4, box loop, 600' longwire
(RT-CA) Rich Toebe, San Ramon, CA--Grundig 1100 and Grundig 3400, R. West loop.
(RT-NV) Rich Toebe, Reno, NV--Grundig 1100
(RET-CA) Randy Tomer, Arcata, CA--SPR-4, FRG-7, HQ-180A, RF2200, longwires and barbed wire fence
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(BW-CA) Bradford Wall, San Bernardino, CA--Zenith Transatlantic, 4' loop.
(RW-CA) Robert Wien, San Jose, CA--GE long range portable, SM-2
(DW-OR) Dave Williams, Astoria, OR--SPR-4, 360' longwire
(RW-GA) Roy Wilson, Harlem, GA--RF-2200
(BWh-IL) Brock Whaley, Chicago, IL
(NW-ON) Niel Wolfish, Toronto, ON--FRG-7, TRF, longwire
--SPR-4, FRG-7, SM-2, beverages in Dunedin, ON
(MW-TX) Mike Worst, Beaumont, TX--SP-600, 51J-4, Wedge loop
(DY-CT) Dave Yocis, Fairfield, CT
(DY-MI) Dave Yocis, East Lansing, MI--DX-160, SM-2
(MZ-CT) Mark Zavatsky, Fairfield, CT--DX-160, longwire, box loop

Abbreviations

a	approximate frequency	GG	German
AA	Arabic	GM	General Manager
ABC	Australian Broadcasting Commission	GMT	Greenwich Mean Time
ACN	American-Contemporary Network	govt	government
addr	address	GSQ	"God Save the Queen"
Ain	American-Information Network	GY	Graveyard frequency
Aen	American-Entertainment Network	h	harmonic reception
AFKN	American Forces Korean Network	het	hetrodyne
AFN	American Forces Network	hi	a laugh
AFRS	American Forces Radio Service	hr	hour
AM	Amplitude Modulation	hrd	heard
ancr	announcer	Hz	Hertz, cycles per second
anmt	announcement	IBA	Independent Broadcast Authority
ann'd	announced	ID	Identification
AN	All-Night	II	Italian
approx	approximately	info	information
AoR	Album oriented Rock	inst	instrumental (music)
ARC	Arctic Radio Club	IRC	International Reply Coupon
AT-40	American Top-40	IS	Interval Signal
BB	Baseball	JJ	Japanese
BBC	British Broadcasting Corporation	jx	jingle
BC	Broadcast	KBS	Korean Broadcasting Service
BCB	Broadcast Band	KCBS	Korean Central Broadcasting Service
BFO	Beat Frequency Oscillator	kHz	kiloHertz, 1000 Hertz
CA	Central America	KK	Korean
CBS	CBS Incorporated	kw	kilowatts, 1000 watts
CC	Chinese	LA	Latin America(n)
CE	Chief Engineer	l&c	loud and clear
cl	classical (music)	loc	location
Corp	Corporation	LPRT	Low Powered Relay Transmitter
cw	country western (music)	LSR	Local Sunrise
cx	conditions	LSS	Local Sunset
DA	Directional Antenna	LW	Longwave, longwire
dB	decibels	ment	mention
DD	Dutch	min	minute
def	definite(ly)	MM	Monday Morning
DF	Direction Finding	MoR	Middle-of-the-Road (music)
DJ	Disc Jockey (announcer)	MW	Medium Wave, megawatt, 1,000,000 watt
DSA	Deep South America	MWN	Medium Wave News
DST	Daylight Savings Time	mx	music
DU	Down Under	NA	National Anthem, North America
DX	Long Distance reception	NBC	National Broadcasting Company
DXWW	DX World Wide	NHK	Nippon Hosso Kyokai (Japanese Broad-casting Corporation)
EBU	European Broadcasting Union	NSP	No Silent Period
EC	East Coast	nx	news
ed	editor	NZ	New Zealand
EDT	Eastern Daylight Time	o/	over
EE	English	OC	Open Carrier
ELT	Eastern Local Time	occ	occasional(ly)
esp	especially	OM	man
EST	Eastern Standard Time	orch	orchestral (music)
ET	Equipment Test	o/u	over and under
et. al.	And all the rest	PA	Pan American
EU	Europe	PFM	Precision Frequency Measurement
Euro	European	pgm	program
eve	evening	poss	possible, possibly
EZL	Easy Listening (music)	PP	Portuguese
FB	Football	PRC	People's Republic of China
FBC	Fiji Broadcasting Commission	Pres	President
f/c	frequency check	prob	probably
FEN	Far East Network	PSA	Pre-Sunrise Authority, Public Service Announcement
FF	French	pwr	power
FL	Foreign Log	QRM	Interference
FM	Frequency Modulation	QRN	Noise
freq	frequency	QSB	Fading
FS	Foreign Service		
geo	geomagnetic		

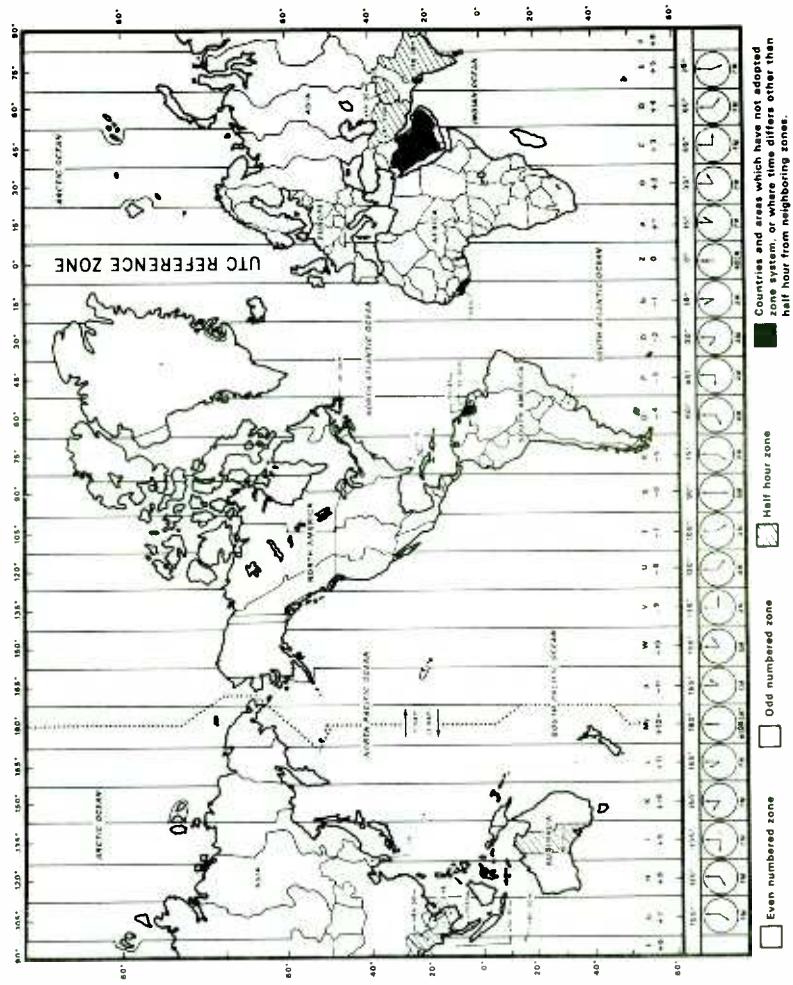
QTH	Location	temp	temperature
R.	Radio	tho	though
RCN	Radio Cadena Nacional	thru	through
rcvd	received	til	until
reverb	reverberation	tnx	thanks
rlds	religious	TP	Trans Pacific
rpt	report	TT	Test Tone
RR	Russian	TVI	Interference from a TV set
rr	rock music	tx	transmitter
RS	Regular Schedule	u/	under
rx	receiver	UFO	Unidentified Foreign Oriental
SA	South America	unid	unidentified
SAH	Sub-Audible Het	unkn	unknown
SASE	Self Addressed Stamped Envelope	UTC	Coordinated Universal Time
sec	second	v	frequency varies, verification
SID	Singing "ID"	v/c	verification by postcard
sig	signal	v/l	verification by letter
sked	schedule	VOA	Voice of America
SM	Sunday Morning, Space Magnet Antenna	v/q	verification by QSL card
s/on	sign on	v/s	verification signer
s/off	sign off	w/	with
SP	Silent Period	WC	West Coast
SRS	Sunrise Skip	w/o	without
SS	Spanish	WRTH	World Radio TV Handbook
SSB	"Star Spangled Banner"	wx	weather
SSS	Sunset Skip	YL	Young Lady
stn	station	xlnt	excellent
SW	Short Wave	xmsn	transmission
t	tentative reception	xmtr	transmitter
T-40	Top 40 (rock music)	xtal	crystal
TA	Trans Atlantic	?	unknown, unidentified
TC	Time Check	//	parallel programming
		@#\$%&	unpleasant, not nice

TIME CONVERSION CHART

All times in this log are in Coordinated Universal Time, (same as GMT), unless otherwise noted. The following chart will help in converting to the reader's own local time.

GMT UTC	ADT	AST EDT	EST CDT	CST MDT	MST PDT	PST YDT	YST A1DT	HST A1ST
0000	2100	2000	1900	1800	1700	1600	1500	1400
0100	2200	2100	2000	1900	1800	1700	1600	1500
0200	2300	2200	2100	2000	1900	1800	1700	1600
0300	0000	2300	2200	2100	2000	1900	1800	1700
0400	0100	0000	2300	2200	2100	2000	1900	1800
0500	0200	0100	0000	2300	2200	2100	2000	1900
0600	0300	0200	0100	0000	2300	2200	2100	2000
0700	0400	0300	0200	0100	0000	2300	2200	2100
0800	0500	0400	0300	0200	0100	0000	2300	2200
0900	0600	0500	0400	0300	0200	0100	0000	2300
1000	0700	0600	0500	0400	0300	0200	0100	0000
1100	0800	0700	0600	0500	0400	0300	0200	0100
1200	0900	0800	0700	0600	0500	0400	0300	0200
1300	1000	0900	0800	0700	0600	0500	0400	0300
1400	1100	1000	0900	0800	0700	0600	0500	0400
1500	1200	1100	1000	0900	0800	0700	0600	0500
1600	1300	1200	1100	1000	0900	0800	0700	0600
1700	1400	1300	1200	1100	1000	0900	0800	0700
1800	1500	1400	1300	1200	1100	1000	0900	0800
1900	1600	1500	1400	1300	1200	1100	1000	0900
2000	1700	1600	1500	1400	1300	1200	1100	1000
2100	1800	1700	1600	1500	1400	1300	1200	1100
2200	1900	1800	1700	1600	1500	1400	1300	1200
2300	2000	1900	1800	1700	1600	1500	1400	1300

ADT	Atlantic Daylight Time	PST	Pacific Standard Time
AST	Atlantic Standard Time	YDT	Yukon Daylight Time
EDT	Eastern Daylight Time	YST	Yukon Standard Time
EST	Eastern Standard Time	A1DT	Alaska Daylight Time
CDT	Central Daylight Time	A1ST	Alaska Standard Time
CST	Central Standard Time	HST	Hawaiian Standard Time
PDT	Pacific Daylight Time		



Countries and areas which have not adopted
zone system, or which differ from
half hour from neighbouring zones.

Half hour zone

Odd numbered zone

Even numbered zone

ABOUT THE IRCA

The International Radio Club of America is devoted to the hobby of listening to distant radio stations on the AM broadcast band (540 to 1600 kHz). Its members come from all walks of life and are spread throughout the U.S., Canada, and foreign countries. Membership is open to anyone with a sincere interest in this fascinating hobby.

The IRCA's main activity is publication of DX Monitor, the club's official magazine. DX Monitor is published 34 times a year --- more often than any DX publication in the world. And during the last three years DX Monitor has contained more pages of material on medium wave stations than any other DX club publication.

DX Monitor is divided into several feature columns. Three of these columns appear every issue. The others appear less frequently, usually about once a month. The weekly columns include:

- DX Roundup - recent receptions of medium wave stations in the U.S. and Canada, as heard by club members. DX Roundup is divided into three sections - eastern, central, and western - so you can tell at a glance what members in your part of North America are hearing. DX Roundup reports included signon and signoff times, formats, signal strengths, interference, and other relevant details.
- DX Forum - reports on members' recent DXing activities. DX Forum reports contain discussions on conditions, receiving equipment, radio stations, club activities, and other topics of general interest.
- DX Worldwide - recent receptions of foreign medium wave stations. The tips contained in the loggings sections of this Foreign Log were taken directly last season's DX Worldwide columns.

In addition, the following columns appear in DX Monitor from time to time:

- Broadcasting Information - The latest call letter, frequency and power changes for U.S. and Canadian stations. Information on new and proposed stations. Information on formats, radio programs, network features, and other topics.
- The IRCA Technical Column - Receiver reviews, equipment modifications, construction projects, and hints on getting the most out of your receiving setup.
- Reflections - features on medium wave propagation.
- Spotlight - features on the radio stations in a selected state or province.
- Special Features - non-technical articles on radio stations, DX listening, and recent events in the broadcasting industry.
- DX Worldwide II - information on schedules, power and frequency changes, and other topics concerning foreign stations.
- Verifications signers - recent verifications (QSLs) received by DXers.
- Swap and Shop - classified ads.
- Sports Networks - Tells which stations carry a particular teams games.
- Midday DX Records - Discusses daytime reception on medium wave.
- Graveyard DX records - lists the distance records for each station on local channels (1230, 1240, 1340, 1400, 1450, 1490).

The IRCA conducts DX Contests and issues achievement awards to club members. A Courtesy Programs Committee arranges special late night DX tests, enabling members to hear stations they might not otherwise be able to receive.

The IRCA publishes a number of other publications besides the Foreign Log. The IRCA Almanac contains a wealth of information on domestic stations. The technical handbook (available soon) will cover receivers and antennas, the Principles of Broadcast Band DX provides a brief introduction to the hobby. Nearly 200 reprints of articles on a wide range of topics are available. A complete list of publications, complete with prices, is available for a self-addressed stamped envelope.

Membership dues are as follows: Trial Membership (10 issues of DX Monitor and a copy of "Principles of BCB DX") is \$6.00; Domestic membership (32 issues of DXM and a copy of "Principles..." the first year, 34 issues after that) is \$16.50 annually; Foreign membership is \$20 annually. Sample copies of DX Monitor are 50¢ each. The club address is P.O. Box 21074, Seattle, Washington 98111.

