

WORLD RADIO TV HANDBOOK



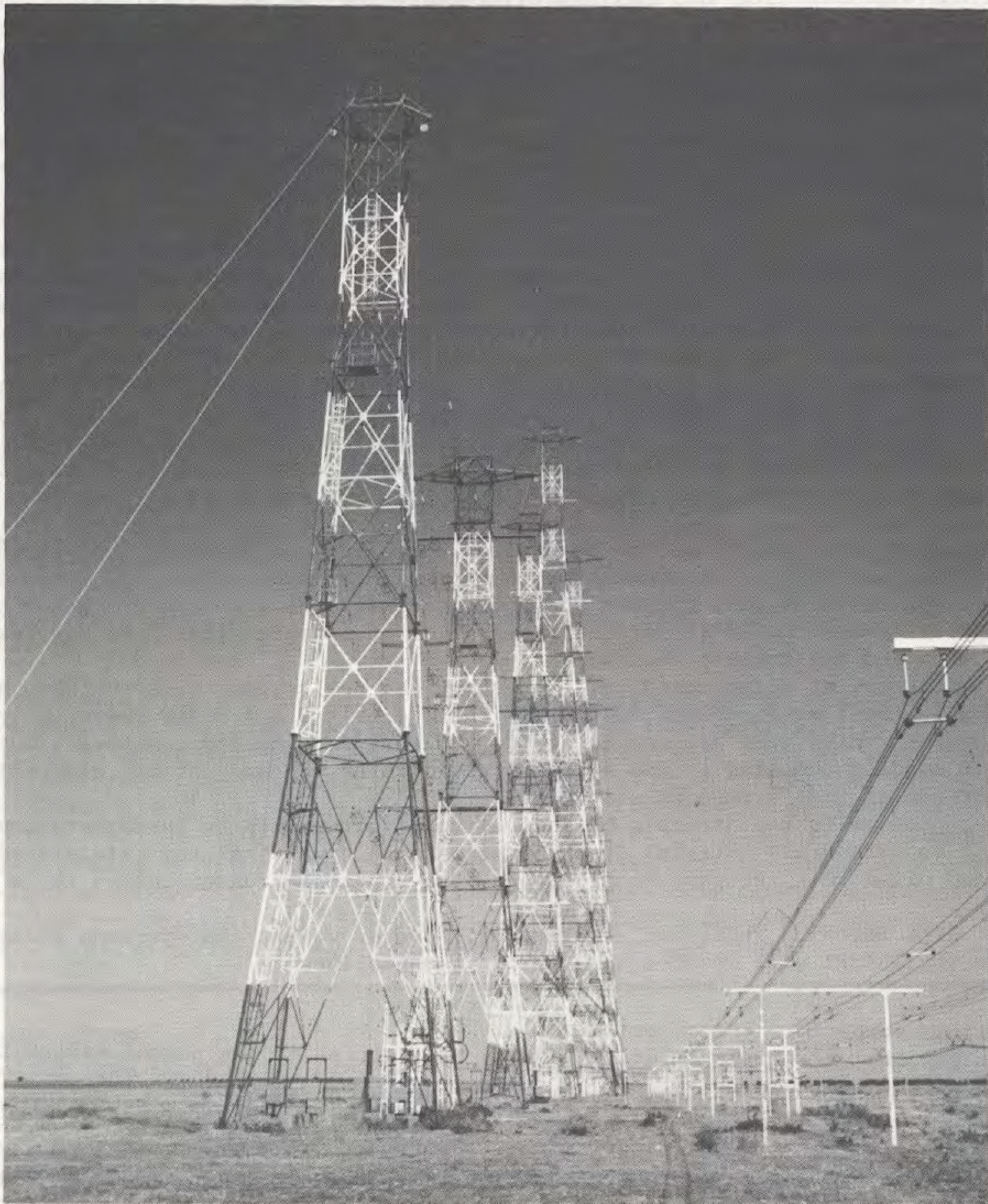
NEWSLETTER



November 1984

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CAPTION TO PHOTO

Above: A corner of the antenna complex which beams the prgrs of R.Exterior de España to listeners on all continents and on the world's oceans. REE's current schedule is inside this NL. The st. will be hosting the 1985 Conference of the European DX Council in May next year.

MESSAGE FROM THE EDITORS

ABOUT YOUR SUBSCRIPTION

Each year we receive a number of orders for the NL which request 3-issue subscriptions beginning in September or November. We regret that we can only accept subscriptions for a single calendar year, regardless of when the orders are received. This is not because we want to be awkward, but because:

- a) The contents of the NL are abbreviated to save space, and refer to the relevant edition of the Handbook. Station references change each year - the phrase "as in WRTH85" may appear in the May 1985 NL, but if you don't have the 1985 edition, the information is useless.
- b) We only have secretarial assistance for 25 hours a week. Servicing thousands of customers a year takes time and requires a well-organised system. If we start accepting "special cases" the service to all our customers could suffer.
- c) Budgeting, stock control and auditing all require that we adopt straightforward book-keeping procedures.

We trust that many of you will decide to purchase a copy of WRTH85 and order your NL subscription promptly, so that you will get maximum benefit from your expenditure.

THE EDITORS

QUOTE...UNQUOTE

It is pleasing to see that many DX clubs and DX-programmes find material in the WRTHNL worth quoting. However, we are becoming concerned about the amount of mis-quoting, which is rife nowadays. Not only the WRTHNL is the victim of this, but also such active DX Editors as Glenn Hauser have suffered similar treatment.

The commonest form of mis-quoting is the simple typing error (and, yes, we make mistakes ourselves sometimes). This is bound to happen, though some of the more obvious errors could be avoided if someone took time to proofread material before it is printed. What concerns us more is that despite our copyright statement, items which we have attributed to a particular source are re-quoted without the correct attribution. This is not only bad practice, it also means that should the item turn out not to be correct, the NL editors get the blame!

But recently another procedure has been noted which is unacceptable. That is the adding by another editor of some comment or comments immediately after the quoted item, in such a way that the reader assumes the comment to also be from the NL. We do not object to anyone commenting on NL material so long as it is made clear from the text where the quote ends and the comment begins.

In a recent case, an editor used our item about the new transmitters in Iraq, adding in brackets (without attribution) "obviously there aren't 8 new 500kW txers...". That was his opinion, which just happens to contradict what is actually monitored, but the club member reading the item in his bulletin would think we, and not his club editor, were the origin of that erroneous statement.

A further problem is the attempts by some editors (often with an inadequate command of English) to paraphrase material from the NL in such a way that the original sense is changed, and often this is again done in such a way that the reader thinks it is a direct quote.

We don't like imposing rules and regulations, however we ask that persons wishing to quote from the WRTHNL will observe the following guidelines

- 1) Quote items verbatim wherever practical.
- 2) Put any personal additions in brackets with the initial of the person making the comment at the beginning.
- 3) Ensure that the original source, if given, is correctly credited.

These are guidelines which responsible editors will always follow. It isn't any more difficult, but it does avoid the worst examples of mis-quoting which bedevil the short-wave publishing field at present.

News SECTION

EUROPE

Austria: Here is the D84 schedule of the ORF Ext.Sce. (underlined freqs 500kW, +)300kW, *)50/10kW, others 100kW): To Europe: 0500-2300 on 6000*, 0500-0700 on 6155+, 0700-1700 on 6155, 1300-1500 on 7165, 1700-1900 on 6155 (SSB, reduced carrier), 1900-2300 on 5945, 2100-2300 on 7130 (all tr's omnidirectional) --- To So.Ea.Europe: 0900-1200 on 7170 (beam 160°) --- To No.Europe: 1200-1300 on 9770(0) --- To So.We.Europe: 1300-1700 on 12015(240), 1900-2100 on 11660(230) --- To Ea.Asia: 1000-1200 on 11660(55), 1300-1500 on 7155(50) --- To Australasia: 0700-0900 on 15270+(265), 1000-1200 on 15275(85) --- To So./So.Ea.Asia: 1500-1700 on 9650/12025(95) --- To Middle East: 0600-0900 on 15410(115), 1700-2000 on 11660(115) --- To Ea.Africa: 1700-1900 on 11660(140) --- To So.Africa: 1700-1900 on 15460(170), 1900-2100 on 11835(170) --- To We.Africa: 1900-2100 on 11660(230) --- To So.America: 2300-0200 on 9760(255)/11755+(235) --- To So.America(Ea.): 2100-2300 on 9540(240)/11665(235) --- To Ce.America/Caribbean: 0200-0400 on 9580(275) --- To No.America: 0000-0400 on 5945(310) --- To No.America(Ea.): 1200-1300 on 15320+(295), 0000-0400 on 9770(303) --- To No.America(We.): 0400-0600 on 5945/9635(325) --- English at 0830-0900, 1030-1055 (to Ea. Asia/Australasia), 1230 (Sun 1200)-1300, 1330-1400 (to Ea.Asia), 1500-1530, 1830 (Sat/Sun 1805)-1900, 2130-2200 (to Europe), 0130-0200 (to No.America), 0330 (Sun 0305)-0400 (to No. America), 0430-0500 (to We.No.America) --- French: 0800-0830, 1530-1600, 1930-2000, 0100-0130 (to No.America) --- Spanish: 1300-1330 (Sun 1400) (to Europe), 2000-2030 (Sat/Sun 2100), 2130-2200 (to So.America), 2300-2330 (Sat/Sun 2400), 0100-0130 (Sun/Mon 0200) (to So.America), 0330-0400 (Sun) Mon 0300-0330 (to Ce.America & Caribbean) --- Esperanto: Sun 0547-0557 & 0947-0957 --- otherwise in German.

Belgium: In D84, the BRT Shortwave Sce. is broadcasting in English at 1400-1445 (Mon-Fri) on 21810/17610, 1915-2000W & 1910-1930 (Sun) on 1512/5895/15590, 2200-2245 on 1512/5895/9875, and 0030-0115 on 5910/9925 --- Spanish: 2130-2200 on 1512/5895/9875, 0000-0030 on 5910/9925.

During D84, the SW Sce. of RTBF operates as follows (underlined freqs for Europe, others to Africa): Mon-Fri: 0430-0615 on 9900/11780, 0630-0730 on 15210/17675, 1030-1300 on 5965/17680, 1600-1845 on 6050/17680 --- Sat: 0500-0615 on 9900/11780, 0630-1045 on 15210/17675, 1100-1255 on 5965/17680, 1900-2105 on 9900/11780 --- Sun: 0530-0615 on 9900/11780, 0630-1045 on 15210/17675, 1100-1255 on 5965/17680, 1300-1555 on 5965/21460, 1600-1845 on 6050/17680, 1900-2105 on 9900/11780.

Czechoslovakia: The D84 schedule of R. Prague shows English at 0530-0545(I) on 1287/6055/9505/11990, 0730/0830/0900 as listed, 1430-1457 on 7345/9605/15110/15205/17705/21505, 1530-1625 on 6055/7345/9605/11990/15110/15205/17705/21505, 1630 on 5930/7345, 1730-1825 on 5930/7345/9605/11990/15110/15205/17705/21505, 1900/2000/2130/0100 as listed, 0300-0357 on 9540/9630/9740/11990 --- French: 0600-0630 on 1287/6055/9505/11990, 1830-1900 on 1287/6055, 1830-1927 on 9600/11990/15205/17840, 1930-1957 on 5930/7345, 2030-2100 on 1287/6055, 2030-2125 on 9600/11990/15205/17840 --- German/Italian unchanged --- Portuguese: 2030-2100 on 5930/7345, 2130-2157 & 2230-2257 on 9630/9740/11990, 0000-0027 on 5930/7345/9740/11990 --- Spanish: add 0545-0600(I) on 1287/6055/9505/11990, 2300-2357 delete 9540/11800, otherwise unchanged --- Inter-Prgr: 0630-1157 add 11990.

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Denmark: The D84 schedule of R. Denmark reads: 1000-1052 to Japan on 9730 (beam 40°), 1100-1150 to Greenland on 11960(320), 1200-1252 to Australia on 11960(80), 1300-1352 to Ea.No.America on 15165(305), 1400-1452 to So.Europe on 15165(220), 1500-1552 to Middle East on 15140(120), 1600-1652 to No.America on 17770(310), 1730-1830 to Greenland on 9765(315), 1900-1952 to Ea.Africa on 15165(150), 2000-2052 to So.Europe on 15165(190), 2100-2115 (Sat/Sun 2152) to Greenland on 9760(305), 2130-2145 (Mon-Fri) to So.Europe on 9760(215), 2200-2252 to So.America on 9765(235), 2300-2352 to Caribbean on 11715(270), 0000-0052 to Ea.No.America on 9760(300).

Finland: During D84, R. Finland will broadcast in English as follows: 0530-0555(I) on 6120/11755 and (II) on 11735; 0730-0755(I) on 6120/11755; 0830-0930 (Sat) & 0930-0955(I) on 15265 and (VI) on 21465; 1200-1225, W 1300-1325, Sun 1330-1455 & W 1400-1425 (IV) on 15400/17800; 1500-1525 (Sun) (IV) on 15400; W 1504-1528 (IV) on 15400 & (III) on 21475; 1930-1955(I) on 6120/9540/11755; 2030-2055, 2200-2225 (Sat 2300) on 254/963 (underlined freqs are 250kW).

France: The Complete D84 schedule of R. France Internationale is as follows: To Europe: English: 1600-1700 on 6175; French: 0500-0900 & 1800-2200 on 3965, 0500-1600 & 1700-2200 on 6175; German: 1800-1900 on 6010/7145; Portuguese: 1600-1700 on 11845; Spanish: 2200-2300 on 6040 --- To Ea.Europe: French: 0530-0545, 0600-1630, 1700-1730 & 1800-2045; Polish: 0545-0600, 1730-1800, 2115-2145; Romanian: 1630-1700; Russian: 0400-0430 & 2045-2115; Freqs used: 5990(0530-0700), 6045(0400-0430 & 1800-2145), 7135(1800-2145), 7240(0400-0430), 7280(0530-0800), 9605(1900-2145), 9715(1700-2145), 9745(0400-0430 & 0530-0800), 11770(0800-1700), 11790(0530-0800), 11800(0700-0900), 11995(1600-2145), 15155(1000-1700), 15180(0700-1000), 15190(1400-1900), 15195(1000-1400), 15315(1700-1800), 21705(1000-1400) --- To Africa/Indian Ocean: English: 0315-0330, 0345-0400, 0415-0430; 1600-1700 on freq's marked (+); French: 0300-0315, 0330-0345, 0400-0415, 0430-0445, 0500-2200; Portuguese: 1600-1700 on 17845, 1800-1900 on 15300. Freq's used for French/English (G=Gabon relay): 5990(0500-0600), 6175(2030-2200), 7135(0300-0700), G7135(0400-0500), G7160(1800-2200), 9535(0300-0500), 9545(0300-0400), 9575(1900-2030), 9660(0600-0700), 9790(0400-0800), G9790(0500-0600 & 1800-2200), 11700(0500-0800), G11705+(1600-1700), 11705(1700-2030), 11800(0600-0800), 11805(1800-2030), 11845(0800-1600), 11880(0300-0600), 11930(1800-2200), 11965(1900-2200), 11995(0400-0700), 15135(0500-0900), 15155(0500-1000), 15200+(1700-1900), 15300(0600-2030), 15315+(1600-1700), 15435(1800-2030), 17620+(0700-1900), 17795+(1600-1800), 17800(0600-0800), 17845(1600-1900), 17850(0700-1600), 21515(1700-1800), 21580(0800-1800), 21685+(1000-1700) --- To the Middle East (same prgrs as African Sce): 0300-0600 on 7135/9550, 0400-0600 on 11705, 1600-1700 on 15315 --- To Ea.No.America & Caribbean: 1145-1700 on 15365/17720/21645 --- To Latin America: French: 1030-1100, 1200-1245, 1315-1400, 2200-2300, 2330-0030, 0130-0200, 0300-0315, 0330-0345; English: 0315-0330, 0345-0400; Portuguese: 2200-2300 on freqs marked (*), 0200-0300; Spanish: 1000-1030, 1130-1200, 1245-1315, 2300-2330, 0030-0130. Freqs used (M=Montsinery, Fri Guiana): 6055(0030-0200), 6085(2330-0030), 6140(2300-0200), 9535(2200-0200), M9790(1000-1030, 0200-0400), M11670* (1030-1400, 2200-0400), M11825(1000-1130), 11955(2200-2300), 11965* (2200-0030), 11995(2200-0030), M11995(0300-0400), M15140(1130-1400), M15200(2200-0130), M15435(1030-1200), M15440* (2300-0300), M17620* (2200-2300), M17860(1200-1400) --- To Asia: French: 2300-0030 on 7135/9605/11695 --- Médias France Intercontinents (formerly Cooperation Radiophonique): W 0915-0945 on 17795/21685/21730/25820/25900, W1515-1545 on 17785/17795/21685/25820/25900.

Germany: DW will commence test-transmissions from the new tx-site at Trincomalee, Sri Lanka during D-84. The D-84 schedule gives the following details (all tr's are 250 kW): 6065(2000-2145 to FE, 2145-0100 to So.Asia), 6160(1345-1800 to So.Asia), 6185(2045-2200 to So.Ea.Asia), 7110(2200-2400 to China), 7200(1415-1700 to So.Asia), 7265(1230-1430 to China), 9510(1110-1230 to FE), 9545(0945-1400 to FE), 9600(1945-2400 to So.Ea.Asia), 9685(1745-2000 to Ea.Africa), 11705(1845-2045 to ME), 11765(1800-2000 to Africa), 15105(0100-0300 to So.Asia & 0545-1000 to So.Ea.Asia/Oceania), 15185(1000-1100 to ME), 15215(0915-1030 to So.Ea.Asia/Oceania), 17800(0000-0315 to So.Ea.Asia & 1030-1215 to Ea.Africa), 17815(1215-1400 to So.Ea.Asia), 17825(0545-0800 to Africa & 0800-0900 to Afghanistan) --- German (during D-84): 0600 on 6075(2)/9545/9735/11795/15275/17845/21560, 9690/11785(A), 11705(MT); 0800 as in WRTH84 exc. 15105/17715 becomes 15205/15320; 1000 unchanged exc. 11820 replaces 11865; 1200 on 6075/9545/11820/15105/17845/21560, 11865/15245/21680(S), 15275/17715(A); 1400 on 6075/9545/9650/11855/15245/15275/17845,

1557/11795(M); 1600 on 6075/9545/9650/9715/11950/15275(2), 1557/11795(M); 1800 on 3995/6075/7175/11795/11950/15275(2), 9735/17860(K); 2000 on 3995/6075/7175/9640/11720/11795(2)/11955, 9735/17860(K), 15355(2)/17810(A); 2200 on 3995/6040/6075/6100/7235/9650/9690/9735(2)/11795, 11705/15270(K), 15410(A); 0000 on 3995/6075/6100(2)/7170/9700/9735(2)/11795, 9625/11765(K), 15410(A); 0200 on 3995/6075/6100/6145(2)/9570/9735(2), 6085(A), 9545/11795(M), until 0300 also on 9625/11765(K) and from 0330 on 6085/9605(Sackville); 0400 on 3995/6075/6145(2)/9735(2), 6085(A), 6085/9605(Sackville), 11785/11795(M) --- English: 0100 on 6085(2)/6145(2), 6040(A), 6085/9565/11785(M), 9545(MT); 0200 on 6035(2)/7285/9690, 9715(M); 0430 as in WRTH84; 0500 as in WRTH84 with 2 tx's on 5960 & 6120 (the latter replacing 6185; 0600 on 9610/9700/11765/11905/15260; 0930 on 9770/15275/17780/21680, 9650(A-2), 17800/21500(K); 1230 see WRTH84; 1500 unchanged exc. 17800 replaces 21600; 1610 on 7110/9585/11725/11785, 11705/15405(M); 1930 on 7225/9700/9715/11785; 2100 on 7130/9765(2).

German Democratic Rep.: The D84 schedule of R. Berlin International has these changes to WRTH84: European Sce: English: 1615 delete 7300, 2130 amend 9560 to 9620; French: 2215 add 7185; Italian: 2130 add 9665; Portuguese: delete 1915 broadcast. Add: German: 1430-1500 on 7300; Spanish: 1915-2000 on 7185/7260/7300/9730 --- Overseas Sce: English: 0015/0100/0230 all on 6080/9730, 0300 on 6125/6195, 0330 on 6010/6080/9560, 0630 on 6010/6080, 0645/1215/1330 all on 15445(ex.15450), 1515 on 11795/15400/15445, 1545 on 11785/15255, 2315 on 6070/6125/6195 --- French: 1500(IV) on 11785/15255, 1630/1715 on 11785/15255 --- German: 0145 on 6080/9730, 0415 on 6010/6080/9560, 0530(I) on 9730/11700/11825/15240, 0530(II) on 9635/9665, 0715 on 6010/6080, 1100(VI) on 15445(ex.15450), 1430(IV) on 11785(ex.17830) --- Portuguese: 0300 on 6040, 2315 on 9600(ex.11920) --- Spanish: 0000 on 6010/6040/6070/6125/6195/9500/9600, 0345-0515 on 6070/6125/6195 --- Other transmissions/freqs are unchanged.

Greece: The Voice of Greece will operate the following schedule for D84 (underlined freqs are Kavala 250kW, *= exc. Tues): 0000-0150 and 0200-0350 on 6225/9420/11645, 0400-0450 & 0500-0615 on 6225/7370/9420, 0630-0730 on 7370/9420, 0800-0850 on 9420/9855, 0900-0950 and 1000-1050 on 15630/17565, 1100-1120 & 1130-1150 on 9420/9855, 1200-1250 & 1300-1350 on 11645/15630/17565, 1400-1450 on 7370/9420 & to Tashkent on 9855, 1500-1550 on 11645/15630/17565, 1600-1700 and 1715-1750 on 6225*/7370*/9420, 1800-1850 on 11645/15630*/17565*, 1900-1950 and 2000-2050 on 6225/7370/9420, 2100-2150 on 6225/7370/9420, 2200-2350 on 6225/9865, 2200-2250 & 2300-2350 on 9420(all targets as in WRTH84).

Iceland: Relays of the Domestic Sce. on 13797 have been extended, and are now carried as follows: To Scandinavia: Mon-Fri 1855-1945, Sat/Sun 1215-1245; To Great Britain & Europe: Mon-Fri 1945-2030, Sat/Sun 1245-1315; To Canada & U.S.A.: Mon-Fri 2230-2315, Sat/Sun 2030-2115(Official schedule).

Italy: During D84, RAI broadcasts on SW as follows: 1400-1425 Italian on 17715/21695, 1430-1455 French on 7290/9575/11905, 1430-1455 Italian to Malta on 7235/9710, 1500-1550 Serbo-Croat/Slovene/German on 5990/7290/9575, 1500-1600 Turkish/Greek/Bulgarian on 7235/9710, 1555-1635 Italian on 5990/7290/9575, 1605-1625 Russian on 7235/9710, 1630-1655 French on 7235/9710, 1640-1655 Somali on 15385/17780/21690, 1700-1745 Italian on 7235/9710/15385/17780/21690, 1750-1825 German on 5990/7275/9575, 1750-1810 Arabic on 7235/9710, 1815-1905 Czech/Slovak/Polish on 6050/7290, 1830-1905 Italian on 15245/15385/17780, 1910-1930 Arabic on 9575/11800/15245, 1910-1930 Serbo-Croat on 5990/6050, 1935-1955 English on 7275/7290/9575, 1935-1955 Hungarian on 5990/6050, 2000-2020 Swedish/Danish/Esperanto on 7275/7290/9575, 2000-2020 Albanian on 5990/6050, 2025-2045 English on 7235/9575/9710, 2025-2045 Arabic on 5990/7275, 2050-2130 Italian on 7235/9710/11800, 2050-2130 Spanish/Portuguese on 5990/7275, 2135-2155 Romanian on 5990/7235/9710, 2135-2225 Czech/Slovak/Polish on 6050/7275, 2200-2225 English on 5990/9710/11800, 2230-0135 Italian/Spanish/Portuguese on 9710/11905/15245, 2230-0135 Italian/English/French on 5990/9575, 0140-0325 Italian/Spanish on 5990/9575/9710/11905/15245, 0330-0345 Russian on 6165/7275/9575/9710/11905, 0350-0410 English on 9710/11905/15330, 0350-0410 Ukrainian on 6165/7275, 0415-0530 Amharic/Italian/Somali on 9775/11800/15330, 0415-0440 Italian/English on 6165/7275, 0445-0505 Lithuanian on 6165/7275, 0510-0530 Romanian on 6165/7275, 0535-0555 Arabic on 7235/9775/11800, 0535-0555 Russian on 6165/7275, 0830-0930 Italian on 9585/11810/15330/17780/21615, 1410-1730(Sun) Italian on 15330/17715/17795/21610/21690 --- Home Sce. relays as in WRTH84.

Norway: The D84 schedule of R. Norway reads: N.Prgr: 0600 on 6010(beam 150°)/6020(320)/9590(170), 0700 on 9590(220)/11865(050)/15165(130)/21735(095), 1100 on 6015(nd)/21705(220)/21735(095), 1200 on 7215(035)/15165(065)/15220(290), 1500 on 15175(275)/15225(130)/17745(150), 1600 on 7210(095)/11860(320)/15165(140), 1800 on 9590(200)/9615(130)/11860(150), 2100 on 9525(220)/9590(035)/9610(245), 2300 on 9525(220)/9590(260)/9605(290), 0100 on 6020(290)/9585(320)/9590(220), 0200 on 9585(290)/9590(095)/9610(320), 0300 on 6015(300)/9590(140)/9610(290) --- P.Prgr: 1000 on 9590(035)/15175(030)/21730(080), 1300 on 9590(nd)/21700(260)/21730(160), 1400 on 11925(080)/15175(300)/15210(095), 1700 on 9565(340)/11865(290)/15220(160), 1900 on 9525(260)/9615(170)/11945(160), 2000 on 6015(210)/7215(180)/9525(220), 2200 on 6015(260)/7210(050)/9520(225), 0000 on 7210(080)/9585(290)/9615(080), 0400 on 9580(130)/9610(285)/9665(115), 0500 on 6020(340)/11865(150)/11910(120) --- Underlined freq's are 500kW.

Poland: For D84, the schedule of R. Polonia has the following changes compared to WRTH84: To Europe: Danish: 1730-1800 only on 6095/7285; English: 1500 & 2000 are Mon-Fri only, add 1700-1730(Mon-Fri) on 9675/5995/1503, 1730-1800 only on 9540/6135; add Finnish: 2000 (Sat/Sun) replacing English; Spanish: 1300-1330(ex. 1330-1400); add Swedish: 1500 & 1700 (Sat/Sun) replacing English --- To Africa: French: 1330-1355(ex. 1300-1330) --- To No. America: 0200-0355 now on 6095/6135/7145/7270/9525/11815/15120.

Romania: For D84, R. Bucharest makes the following changes compared to D84(transmissions not mentioned are as listed): To Europe: English: 1930-2030 on 9690/7195/7145/6150, 2100-2130 on 9690/7195/7145/6150; French: 1830-1900 on 9690/7195/6190, 2030-2100 on 9690/7195/5990; German: 1900-1930 on 9690/7195/6190; Portuguese: 2130-2200 on 9690/7225; Russian: 1700 & 1900 on 7135/7105/6190/6160; Spanish 1900-1930 on 11940/9570/7225; Turkish: 1330-1400 on 7175/9590 --- To Africa: Arabic: 1230-1300 on 17745/15380/15335/11940, 1400-1430 on 15380/15335/11940/11790, 1600-1700 on 15380/11940/11790/9625; English: 0530-0600 on 15380/15340/11940/11840/9685/9510, 1730-1800 on 15380/15365/11885/11790/9640/9570; French: 1130-1200 on 17730/15380, 1430-1500 on 15380/15335/11940/11790, 1930-2000 on 11940/11790/9570; Portuguese: 1800-1830 on 15380/11885/9570 --- To Near East: Arabic: 1230-1300 on 15250/11830, 1400-1430 on 11830/9590, 1600-1700 on 11775/9590/7175 -- To Asia: English: 1200-1230 on 17720/15380/11740, 1500-1530 on 15335/15250/11940/11775/9530; Persian: 1530-1600 on 15335/11970/9690, 1700-1730 on 11940/9690/7195 --- To No. America: as listed exc. delete 9550 --- To Latin America: Portuguese: 2130-2200 on 11940/9570/5990. All other Portuguese/Spanish broadcasts on 11940/11810/9570/9510/6155/5990.

Spain: The complete D84 schedule of R. Exterior de España is as follows: Spanish to Europe: 1700-2030 & 2100-2230(Sun 1700-2230) on 7105, 1100-2030 & 2100-2230(Sun 1100-2230) on 9570/11920/15395 --- To the Americas: 1400-1900(Sun) on 15365/15535/17845, 1600-1900W on 15535, 1930-2300 on 11880, 2200-0200 on 15365, 2300-0200 on 9530/11945, 2300-0500 on 6065/9360, 0200-0500 on 9630/11880, 0600-0930 on 9650/11730 --- To Australia/Indian Ocean: 0600-0930 on 9650/11730/21595 --- To Ea.Africa & Middle East: 0600-0930 on 21595, 1100-2030 & 2100-2230 on 15395, 1100-1630 on 15525, 1100-1400 on 17650, 1400-1900 on 11635, 1630-1900 on 9745 --- To We.Africa/So.Atlantic: 1400-1800 on 17660, 1800-2030 & 2100-2230 on 11890, 1930-2300 on 11940 --- To European Atlantic Area: 1400-1600 on 9620/11790 --- Arabic: 1700-1800 to Ea.Africa/Middle East on 9580/11690, 2100-2200 to Maghreb on 6140/9675 --- English: 1830-1930 to Europe on 7450, 1930-2030 to Ea.Africa/Middle East on 9780 and We.Africa on 11690, 2300-2400 to Europe on 5960/7450/9780, 0000-0200 to No.America on 9630/11880, 0500-0600 to No.America on 6065/9630/11880 --- French: 1730-1830 to Europe on 7450, 1830-1930 to We.Africa on 11690 and Ea.Africa/Middle East on 9780, 2200-2300 to Europe on 5960/7450 --- DX-Prgrs: English: Sun 1920, 2020, 2350; Mon 0050, 0150, 0550 --- French: Sat 1820, 1920, 2250 --- Spanish: Sat 1645; Sun 0120, 0320, 0720 --- New Addr. of R. Exterior is: Ap. 156 202, 28080 Madrid.

Sweden: The D84 schedule of R. Sweden International has English as follows: 1100-1130 (I/XIV) on 9630K/17820, 1230-1300 (VIII/VII) on 9745/21690K, 1400-1430 (IX/XII) on 11940K/17860, 1600-1630 (I/X) on 1179/6065K/9665, 1830-1900 (I/VII) on 1179/6065K/11845, 2100-2130 (VII/V) on 9710/11955K, 2300-2330 (I/XII/XIV) on 1179/6045/11960, 0230-0300 (XII) on 6105/9695, 0330-0400 (XII) on 6105 --- Changes to other languages (compared to WRTH84) are: French: 1500 on 17860(ex. 21615), 2030 on 11845(ex.9710) --- German: 2000 on 11845(ex.9710) --- Russian: 1330 on 11925(ex.11715K) --- Spanish: 1930 on 9710(ex.9615), 2130 on 9575K(ex. 11955K) --- Swedish: 0330-0430 now beamed to XII), 1000-1030 now beamed to

I/V/XIV) on 9630K/17820/21690, 1700 on 17710(ex.17790), 2330-2400 now beamed to I/XII/XIV) on 1179/6045/11960 --- SSB tr's: 2330-2400 & 0200-0300 on 11950(ex.11785) --- Other tr's as in WRTH84.

Switzerland: During D84, Swiss Radio International broadcasts as follows: To Europe: 0600-2245 on 3985/6165, 0600-1815 on 9535, 0900-1530 on 12030 --- Overseas Sce: 0500-0645(I) on 12030/15430/15585, 0700-0930(II/III) on 9560/15305/15570/21520, 1030-1300(I) on 15430/17795/21520/21770, 1315-1515(III/VI) on 11870/15570/15585/17830, 1530-1600(V) on 17765, 1530-1600(IV) on 12035/15430/17830, 1600-1800(IV/V) on 12035/15430/17765/17830, 1815-2030(I) on 9535/9885/11870/12035, 2045-2245(I/IV) on 9535/9885/12035/15570, 2300-0130(V) on 9625/9885/12035/15570, 0145-0415(VI) on 6135/9725/9885/12035, 0430-0630(VII) on 9725/12035.

United Kingdom: The BBC relay sts are during D-84 used as follows (carrying the World Service): C(Cyprus): Towards Europe (with various beams) On 3990(1700-1800, 2030-2315), 6180(0400-0730, 1330-1515, 1700-2315), 7210(0300-0330), 7260(0400-0430), 9580(0500-0730), 9660(0900-1130), 11760(0600-0730); Towards Africa with various beams: On 7160(0300-0330, 0400-0430), 9600(0300-0330), 11750(0430-0530), 15420(0400-1800), 17885(0545-1400), 21660(0600-1030); To M.East: 11760(0545-1330), 15420(0400-1700); To So.Asia: 7135(0000-0130); To No.America: 9590(0030-0230).

A(Atlantic Relay): To Africa: On 6005(0400-0500 & 2000-2245), 7105/9600(0400-0430 & 0600-0630), 11820(1800-2030), 11860(0400-0915), 15400(0615-1130, 1445-2030), 17870(1400-1600), 21660(1030-1615); to New Zealand 11820/15400(1800-2030); to the Western Hemisphere: 15260(2000-2330) & 11750(0000-0330) --- L(Lesotho): To Southern Africa: 6190(0400-0500 & 1515-2030), 9515(0545-0900), 11830(1030-1500) --- E(Oman): To Near East/Asia: 5965(0000-0130), 7135(0230-0330), 7160(1700-1830), 11955(0330-0530), 15310(0600-0815 & 0900-1616) --- F(Singapore): To East & South Africa: 11955(1700-1830); To Near East: 15380(0300-0330) & 11955(1700-1830); To Asia (on various beams): 3915(1545-1745), 6195(2200-0030, 0900-1830), 7120(2200-2245), 9570(2000-0030), 9740/11750(0900-1745), 11955(2200-0130, 1700-1745), 11965(2000-2200), 15280(0900-1115), 15310(1615-1830), 15380(0300-0330), 15435(2300-0030), 17710(0000-0030), 17880(0900-0945). To Australia/New Zealand: 6195(1330-1515), 9570(2000-2330), 9740(0900-1515), 11750(0900-1130), 11965(2000-2145); To No. America: 9740(1500-1745), 11750(1500-1615) --- North American Relays: S(Sackville): On 5965(1100-1330), 6120(2300-0430), 9590(2300-0030), 9515/15260: 1600(Sun 1500)-1745; G(Greenville-to Latin America): 9515(0030-0330) --- W(Antigua)(beamed to No.America plus partly Australia & N. Zealand and Latin America): 6175(2000-0730), 6195(1100-1330), 9510(0430-0915), 11775(1100-1330).

USSR: Since Sept. 30th, R. Moscow has been using many new freqs, including some in the 9.8 and 13.6MHz bands. Channels observed by Shigenori Aoki (courtesy NDXC Newsletter) are: 9810(2200-1000, 1030-1500, 1600-2030 in Russian. Tr.site Khabarovsk), 9820(1730-2130 to We.Europe. Tr.site Tula), 9830(1700-2130 to Middle East), 9850(1830-2030 in Russian), 9865(Orbita-4 from fade-in 0600 to 1330, English 1800-2200), 9890(1830-2300 in Russian), 9895(0930-1300 in Japanese) --- 13600(M3-dubl for Urals 0600-1900), 13625(1500-2100 to We.Africa ex. 15350), 13635(0330-0700 & 1530-2100 to Africa ex.15295), 13645(1000-1700 to India/Afghanistan), 13650(1500-2100 to Africa incl. English), 13680(1400-2100 to Africa incl. English) --- English (other than World Sce) has been monitored as follows since 1st Oct: to Africa: 1700-1800 on 9530/11850/11950/11970/12015/12045/13650/13680/15490/15510/15535, 2000-2100 on 9865/11690/11850/11950/12000/12015/13650/13680/15510/15520/15535 --- to the U.K.: 2000-2100 on 5980/7320/9550/9600/9685/9720/9765 --- to No.America(Ea): 2300-0400 on 6175(from 0030)/7105(to 0200)/7115(to 0100)/7135/7195(to 0100)/7215/7320/7492.75LSB/9530(to 0100)/9635/9640/9720/11735/11950/12040(to 0100)/12050/15245/15425/17700/17760 --- to No.America(We.): 0400-0800 on 7492.75LSB/9580(from 0430)/9635/9655(from 0530)/11710(from 0430)/11755(from 0530)/11870(from 0530)/11950/12030(from 0430)/15180(to 0500)/15425(to 0500)/17760(to 0500) --- Peace & Progress: 1330-1400 to Asia on 9635/11765/11845/12020/12065, 1630-1700 to Asia on 1314/6005/6190/9730/9775/15320, 1630-1700 to Africa on 9530/9795/11950/12045/15520(Aoki).

Vatican: During D84, Vatican Radio will use 7337 instead of 7450, 6185 instead of 5985 and 9755 instead of 9625 for broadcasts to Scandinavia & Ea.Europe.

The only changes to English compared to WRTH84 concern Asia, where the 0200 broadcast becomes daily on 9550/11865/15115; at 1430, 11865 replaces 11835. Other changes are:

Italian: 0620 on 1530/6185/6250/7250/9645/9755/11715/11740; Esperanto: 0600(Thurs) on 6250/7250/9755/11715/15120; French to Africa listed 0500/0615/0715 should read 0445/0600/0700 respectively, other details unchanged; Portuguese 2330 & Spanish 0000 to the Americas both on 6015/9615/11845.

AFRICA

Cape Verde: Cf. Sept. NL. Nobody has come up with any reactions to the item in our last issue. Meanwhile, Em. Oficial continues to verify reception on 7155. Acc. to Peter Bunn of ARDXC via R. Australia's Japanese DX-prgr. Em. Oficial has a new addr: P.O. Box 118, Praia, S. Tiago Island --- Further research on the mystery of 7155 has led us to the following tentative conclusion: The freq of Em. Oficial was listed as 6025 up until WRTH83, but was changed to 7155 in WRTH84 on the basis of a collaborator's report. Em. Oficial did reply officially, but left the freq. as 6025. However, because many st's do not bother to update such information properly, we trusted the collaborator's report. What seems to be the case, is that Em. Oficial has its low power SW-tr. still on 6025(although rarely, if ever, r.) and that 7155 is the daytime freq. of the more widely reported A Voz de São Vicente. This is 10kW, which would explain the fairly high number of loggings of this st. No doubt this st. carries relays of Em. Oficial, which is what various DXers have heard. QSL'ing of the freq is quite likely - no doubt the st. is unaware of the significance of tr. site details. We have recently taken delivery of an ITU publication listing all known usage within the official HF bands between 1960 and 1981. This seems to confirm our conclusion, but we are open to other suggestions!

Ghana: Acc. to a letter from the st, the Ext.Sce. on 6130 has been "temporarily suspended". (Ed.Note: The same was said of the former Ext.Sce.prgrs, which disappeared nearly 10 years ago, although the st. continued to send out QSL-cards indicating the existence of these prgrs until a few years ago. The frequency registrations continue to appear regularly in the quarterly IFRB tentative schedules!).

South Africa: For D84, amend the schedule of R. RSA in WRTH84 as follows: Chichewa: 1658-1756 on 4990/7270; Dutch: 1658-1756 on 11900/15185; English: 0158-0256 on 5980/6010/9615, 2058-2156 on 9585/11900/15155; French: 1758-1856 on 7270/9585, 1958-2056 on 9585/11900/15155; German: 1758-1856 on 11900/15185; Portuguese: 1858-1956 on 4990/7270/9585/15185; Swahili: 1558-1656 on 9585/11900/15185. Other broadcasts as listed.

Swaziland: The D84 schedule of Trans World Radio includes English at 0300-0330 on 3240, 0430-0700 on 9725, 0430-0600 on 5055, 0530-0730 on 7295, 0615-0730 on 11760, 1345-1415 on 9825, 1630-1700 on 9825, 1800-1845 on 9825, 1700-2015 on 4760 --- French: 1515-1530 on 9725, 1900-1945 on 9825 --- German: 0400-0430 on 3200/5955, 1630-1700 on 4760/9710 --- Portuguese: 1445-1532 on 9640, 1745-1832 on 4775, 1900-1947 on 9710 --- TWR Swaziland is using 9 freq's in the 90/60mb's during D84: 3200/3240/3275/3335/3365/4760/4775/4790/5055.

NEAR AND MIDDLE EAST

Iraq: Baghdad continues to be monitored on a large number of parallel frequencies from its new high power facilities at Salah el Deen (cf. Sept. NL). Contrary to suggestions in an Australian publication that there are "obviously" not 8 x 500kW tr's at this site, our own observations indicate that there must be! Frequencies vary a great deal, however on Oct 7th Roger Tidy in the U.K. noted the following Voice of the Masses outlets in parallel at 1645: 7120/7130/7270/9635/9689/11700/11790/13700/15195. Other sces continue as usual, and Roger Tidy also notes that the European Sce. has reverted to its winter timings; noted in German at 2030 & English at 2130, both on 9610.

Israel: For D84, Israel Radio in English (and corresponding French prgrs) is scheduled as follows: 0000-0030(I/V/VII) on 7412/9440/9815/11655/15585; 0100-0125 as 0000; 0200-0225(I/V/VII) on 7412/9440/9815/11655; 0500-0515(I/VII) on 9440/9815/9009 & (III) on 21625; 1100-1130(I) on 11655/15585/17630, (III) on 15645 and (VII) on 17630; 1800-1815 (VII) on 9385/11583; 2000-2030(I/VII) on 7412/9440/9815 and (VI/IV) on 9009/12080; 2230-2300(I/VII) on 7412/9440/9815 and (I/V) on 12025/15585 --- Spanish: 2330-2355 on 9440/9815/11655, 0230-0255 on 7412/9440/9815, 0615-0630 on 9009/9440/11655 --- Portuguese: 0130-0155 on 7412/9440/9815 --- Home Sce.Prgr.B: 0400-0610 on 7395/7465/9385/9920, 0615-1100 on 11583/15615/17555/17630, 1100-1400 on 11583/15105/15615/17555/17630, 1400-1955 on 11583/15105/15615/17555, 2000-2315 on 7465/9385/11583/13720 --- Home Sce.Prgr.D: 0400-2215 on 5915.

Kuwait: The current schedule of R. Kuwait differs from WRTH84 as follows: 7120: delete 0230-0600; 9750: 0800-1000(P), 1000-1500(M); 9840: 0230-1505 & 1530-2215(M); 9880: delete 0400-0600, amend 2105 to 2215; add 15450: 0400-0600(M); delete 17650; 21545: amend 1745 to 1800.

Oman: The official schedule of R. Oman for D84 is: 0200-0400 & 1400-2200 on 6085, 0400-1400 on 9735 and 0300-1600 on 11890. There is no mention of the tr. on 4890 r. in Sept. NL (However, the schedule is described as the "HF schedule" which may only include freqs above 5950kHz). It seems likely that 4890 is the same tr. which operates daytime on 11890. The English Sce. is no longer carried on SW, only on FM 94.3MHz at 0900-1100.

Syria: Cf. Sept. NL. The SW-tr. now operates on 12085 until 1500, switching to 7365 for the rest of the transmission time (first r. by ARDXC).

Turkey: Acc. to registrations with the IFRB, we expect the Voice of Turkey to operate as follows in D84 (underlined freqs 500kW): English: 1230-1300 on 17885, 2000-2100 on 7215, 2200-2300 on 5960/9560/9730/9755, 0300-0400 on 9560 --- French/German both on 7215, Greek on 5960, Albanian/Bulgarian/Hungarian/Romanian/Russian/Serbo-Croat on 11820, Persian/Urdu on 17885, Chinese on 9550 (all times as listed) --- Arabic: 0300-0400 & 1500-1600 on 9670/11955 --- Azeri: 0300-0400 on 5995/9670, 1700-1800 on 9670 --- Turkish: 6080 (1600-2200), 7215 (0400-0900), 9515 (0400-0900 & 1600-2200), 9560 (2300-0300), 9670 (Fri 1000-1500), 9730 (2300-0300), 9755 (2000-2300), 11770 (0400-0900), 11820 (0400-0900), 11955 (1000-1500), 15220 (0900-1600).

United Arab Emirates: U.A.E. Radio, Dubai has introduced an additional daily broadcast in English to Europe & No.Africa at 1330. The D84 schedule reads: No.American Sce: 0200-0400 on 9565/11730/15435 (English: 0330-0400) --- Far Eastern/Australasian Sce: 0415-0615 on 15435/17830/21700 (English: 0530-0615) --- European/No.African Sce: 0630-1000 on 21700, 0630-0900 on 15325, 0630-1500 on 17775, 0900-1500 on 21605, 1000-1300 on 21695, 1300-1800 on 15320, 1500-2100 on 11955, 1500-1800 on 15300, 1830-2100 on 7195/9550 (English: 1030-1130, 1330-1415, 1600-1700). N. in English at start of each segment --- A mailbag prgr is broadcast fortnightly on Fri/Sat/Sun (times not indicated) during which "current propagation" (sic) is discussed --- Official information indicates that 2x500kW SW-tr's are planned, though not so far registered with the ITU. The above schedule only requires the three existing tr's.

Yemen Arab Rep.: Acc. to official information, R. San'a now uses 600kW on 981 from San'a. This corresponds to the registration in the ITU MW plan of 1975. The tr. listed on 716 at Mocha (registered on 711) has been deleted, Taiz on 1008 and San'a on 1206 both 60kW as listed --- On SW, San'a uses only 20kW on 4853, and also 20kW on 6135 (unlisted in WRTH84).

Who is using 9855? During the first two weeks of Oct, a weak Arabic signal was heard on 9855 from before 1900 to after 2000. Only one ID was noted, for the PLO "Voice of Palestine" (Saut-al-Filisteen), but it was apparently not Algiers or Syria which were carrying different prgrs. Since then, we have seen several different st's in Arabic r. on 9855:

- 1) R. Bangladesh at 1600-1630 (cf. item on Bangladesh)
- 2) Tehran acc. to Roger Tidy, U.K.
- 3) Qatar, Doha at 1730-2130 acc. to Bob Padula, ARDXC.

We welcome any observations from readers.

Yemen(P.D.R.): An official schedule shows that the D.Y.B.S. operates as follows: 0230-0700 & 1100-2200(Fri and holidays 0230-2200) on 1188(400kW)/5970/6005/11770.

ASIA

Bangladesh: Roger Tidy in the U.K. has monitored the following new schedule of R. Bangladesh, as of Oct. 21st: Arabic: 1600-1630 on 7110/9855; Bengali: 0830-1000 on 17670/21640, 1630-1800 on 7110/9855; English: 0800-0830 on 17670/21640, 1230-1300 on 15180/17670, 1815-1900 & 1900-1915(slow speed N.) on 5915/7355; Nepali: 1315-1345 on 7105; Urdu: 1400-1500 on 7145/9640(Hindi not monitored so far).

Bhutan: This rarest of countries on SW is now even rarer, because it has reduced power, shortened its schedule and changed one of its freqs. R. NYAB now operates Sun 0600-0900 on 7040(as before) and Wed/Fri 1100-1300(ex. 1400) on new 3395. The power is now r. to be 100 watts.(Abdullah, Bangladesh).

China(Rep.): The D84 schedule of the Voice of Free China has these changes to WRTH84: Arabic: 1930-2030 on 9765/11860; Cantonese: 0500-0700 delete 11745; English: 0100-0200 delete 15345, 0300-0350 delete 17800, 2030-2130 on 9610/9765/11725/11860/15225, 2140-2240 on 11825/15270/15345/17890; French: 1830-1930 on 9765/11725/11860/15225, 2130-2230 on 9610/9765/11725/11860/15225; Indonesian: 1510-1610 on 7130/9575; Mandarin: 0400-0500 on 15215* , 0400-0500 delete 11745, add 1330-1400(III) on 9575, 1930-2030 on 11725/15225, 2040-2140 on 11825/15270/15345, 2250-2350 delete 15345; Spanish: 0500-0600 on 15215*, 2300-2350 on 9610/9765/11725/11860/15225/15270 --- *)via WYFR, USA. All other broadcasts remain as listed.

India: During D84, AIR's Ext.Sce. is scheduled in English as follows: 2245-0115(V) on 7215/9595/11765/15110 and (VI) on 9912/11715, 0000-0115(VI) on 15175, 1000-1100(VI) on 15230/15320/17387 and (VII) on 11795/15130/17705/17875, 1330-1500 (V) on 9545/11810/15335, 1800-2000 (VII) on 11830/B15265; 1845-2230 (X) on 7170/9665/11620, 1945-2045 (IX) on 9755/11865, 2000-2230(X) on 9912, 2045-2230 (VII) on 9550/9912/11875 --- Home News in English on SW: 0032½ as in WRTH84, 0240 on Delhi 3905/4860/6045/7195/9545/9610/11830/11895/15305 + regionals 5990/6085/6110/6120/6140/6170, 0630 on Bombay 7240, 0730 on Delhi 6050/7110/9615/11730/11850/11935/15160/15250/17705 + listed regionals, 0850 unchanged, 1135 amend 7140 to 7110, 1230 amend 11855 to 9560, 1430 on Delhi 3925/4860/6145/7155/7260/7412/9575/9950/10335 + regionals 4840/7280, 1530 replace 7195 by 7155/7260, 1730 amend 7265 to 7260.

Japan: The D84 schedule of R. Japan in English is as follows: General Sce(add: g) to Middle East): 0100-0130 on 17755b/17810c, 0300-0330 on 17755b/17810c, 0500-0600 on 15300b/17810c, 0700-0800 on 15235a/9505b/17810c + Gabon 21575ag, 0900-0930 on 15235a/9505b/15195c, 1100-1130 on 9505b/15195c/9670d, 1300-1400 on 9505b/11815c/11840e, 1500-1600 on 7235a/9505b/11815c + Gabon 21695ag, 1700-1730 on 7235a/9505b/11815c, 1900-1930 & 2100-2130 on 7235a/11815c, 2300-2330 on 7105a/17755b/15210c --- Regional Sces: 2015-2045(IX) on 6080/7105, 0000-0100(I) on 9645/11710, 0145-0245(II) on 15195/17825/21610/21640, 0630-0700(III) on 9570, 0845-0945(V) on 11875/15235, 1215-1245(VI) on 11875/15235, 1800-1830(VIII) on 9645/11840, 1930-2000(III) on 6080/7105 --- French: 2045-2115(IX) on 6080/7105, 1700-1730(VIII) on 9645/11840, 0530-0600(III) on 7225/9575 + Gabon 15315 --- German: 0500-0530(III) as 0530 French, 1900-1930(III) on 6080/7105 --- Italian: 0430-0445(III) as 0530 French --- Portuguese: 1000-1030(IV) on 5970/9525/11950 --- Spanish: 0245-0315(II) on 15195/17825/21610/21640, 1030-1100(IV) on 5970/9525/11950 --- Swedish: 0430-0445(III) as 0530 French.

Laos: The official schedules of Lao National Radio are as follows: Vientiane on 640(2200-0230, 0400-0700, 0900-1600), 6130(2200-0230, 0400-0700, 0900-1600). The new 150kW tr. on 580 now scheduled to begin operating "late 1984" --- Regional st's: Pakse 1370(2300-0200, 0400-0600, 1000-1400), Viengxay 4285(1000-1115), Houaphanh 4653(2300-0100, 0330-0530, 1000-1155, 1255-1425), Xiengkhouang 5600(2300-0100, 0400-0600, 1000-1400), Oudomxay 6858(2300-0100, 1100-1300), Luang Prabang 6997(2300-0200, 0400-0600, 1000-1400), Xiengkhouang 6700(2300-0100, 0400-0600, 1000-1400), Savannakhet 7385(2230-0100, 0430-0600, 1100-1400) ---

Ext.Sce. from Vientiane: 1030(2300-0130, 0400-0630, 1130-1400), 7145(25kW: 2200-0230, 0400-0700, 0900-1600) --- There is a 50 watt FM-tr. in Vientiane on 97.5MHz operating 0200-0400 & 0700-0900 --- The following tr's have been deleted from the official schedule: Vientiane 750, Oudomxay 800/1050, Savannakhet 1090, Pakse 6587.

Nepal: We have received complete information from Mr. K.B. Khatri, Chief Engineer of R. Nepal, concerning recent changes. R. Nepal is now an autonomous organization, and has introduced a Commercial Sce. The schedule is now as follows:

Channel One: 684/792/5005; Comm.Sce: 7165. Both operate 0020-0520, 0620-1020 & 1150-1720 with Home Sce.prgrs. There are separate prgrs on the two sces at 0150-0220, 0305-0320, 0750-0850 and 1150-1350. However, news is simulcast on both sces --- The Ext.Sce. is now at 1050-1120 in English and 1120-1150 in Nepali on 7165 only --- Mr. Khatri informs us that one of the standby MW-tr's is likely to be modified and operated on another freq from Kathmandu(Ed.Note: presumably to carry Comm.Sce.)

Pakistan: During D84, R. Pakistan's Ext.Sce. in English is scheduled as follows: 0230-0245*(V) on 7315/15175/17660, 1100-1115*(I) on 15595/17660, 1600-1615*(II) on 11670/15595/17660 and (III) on 15580/17890, 1700-1730(I) on 9432/12015. *)Slow speed news --- French: 1915-2015(III) on 7335/9465 --- Home Sces on SW will be as follows: Islamabad: 4760(1300-1600), 5095(0045-0400 & 1400-1600), 5905(0045-0230 & 0250-0325), 6070(1000-1145), 6130(1145-1345), 7090(1435-1700), 7290(0350-0400, 0800-0830 + 3 min's each at 0600, 0700, 0730, 0900), 9545(0730-0733, 0830-1000), 9645(0600-1130), 11815(1000-1010, 1145-1300) --- Karachi: 4815(0230-0600 & 1200-1900) --- Peshawar: 4950(1300-1345, 1400-1500, 1600-1800) --- Rawalpindi: 5010(0045-0400, Fri 0400-0500, 1500-1800), 7325(Fri 0600-0820, 0600-1000 exc. Fri, 1000-1100, 1145-1415) --- Quetta: 4880(0045-0400 exc. Fri, Fri 0045-0345, 1100-1600), 5980(Fri 0400-0815, 0600-1000 exc. Fri, 1000-1045) --- Balti Sce: 0300-0400 on 6065 --- Sheena Sce: 0430-0530 on 7095, 1000-1200 on 7260 --- R. Pakistan advises that the 1300 English Newscast in the Home Sce. has been dropped.

Philippines: During D84, FEBC broadcasts in English on SW as follows: 2300-2315(Philippines Sce) on 6030, 2300-2400(II) on 15445, 2300-0500(III) on 21515(2kW), 0000-0100(VI) on 15445, 0100-0500(VI) on 11815, 0500-1000(III) on 11890 and (VI) on 21530(2kW), 1300-1600 (VI) on 11850 --- German: 1800-1900(VII) on 7210(330) --- The complete freq usage for D84 is: 6030(2130-2315 & 0930-1100), 6080(2215-2245), 6115(2215-2330), 6120(1030-1100), 7210(1400-1900), 9505(1100-1400), 9640(1100-1200), 9670(1130-1400), 9675(2230-2400), 9715(1200-1400), 11815(0100-0500), 11850(0500-1000 & 1300-1600), 11860(1000-1130), 11890(0500-1100), 11915(2315-2345), 11920(1115-1300), 11930(1630-1730), 15345(0930-1100), 15385(1115-1430), 15410(2330-0230), 15445(2300-0100), 21515(2300-0500), 21530(0500-1000). The two 21MHz outlets are using only 2kW throughout.

Sri Lanka: The Ext.Sce. of the SLBC is now broadcasting in English as follows: 0030-0430 on 6005/9720/15425, 1030-1130 on 11835/15120/17850(with listed exceptions), 1230-1600 on 6005/9720/15425, 1745-1815 on 11800.(Victor Goonetilleke).

PACIFIC

Australia: After Darwin is in operation for 16½ h per day with two of the three 250kW tr's the D-84 sked of R. Australia reads as follows: English (details remain as in the Sept NL exc. the following): To II: On 11800 (0900-1600 exc. 1000-1100 & 1300-1400); on 17725(2330-0230). To IV: On 15320(2200-0100 & 0300-0700); on 17795(2100-0100 & 0200-0730). To V: On 17865/21525(0400-0730). To VI: On 9620(2000-2130), on 17725(2330-0230), on 11800 (0900-1000, 1100-1300 & 1400-1600) --- French: 0000-0100(I) on C15140/D17750, 0100-0200 (IV) on 15160/15320/17795, 0200-0300 on (IV) on 15160/15320, 0300-0400(V) on 17865/21525 --- Indonesian: 2100-2200 on 7240(C)/11970, 2200-2300 on 7240(C)/9505(D)/11970, 2300-0100 on 11855(C)/15365(D), 0900-1400 on 9640(C)/11705(D) --- Japanese: 1000-1100 on 11800/15125, 1300-1400 on 9710/11800 --- Standard Chinese: 2200-2230 on 7215(C)/9720(C), 0930-1230 on 7135(D)/11760(C) --- Cantonese: 1230-1430 on 7135(D)/11760(C) --- English/Neo Melanesian: 0800-1100 on 5995/9760/11920 --- Thai: 2300-2400 on 11835(C)/15140(D) --- Vietnamese: 2200-2300 on 11835(C)/15310.

Guam: In D84, Trans World Radio KTWR is scheduled in English at 0845-1030 (to Japan) on 11840, 1330-1430 on 9510, 1500-1600 on 9815, and 0000-0100 on 17725. The "DX Listener's Log" prgr is now broadcast three times on Sat at 0040, 1000 and 1530. A mailbag prgr is carried on Sun at 1000 and 1530.

New Zealand: The h. of tr. of the New Zealand SW Sce. have been cut back, but will cover the periods which have prgrs most likely to interest overseas listeners. The revised schedule is: To Pacific: 1745-2015 on 15485/17705, 2245-0015 & 0345-0630 on 17705. To Australia/PNG: 2245-0015 & 0345-0630 on 15485, 0930-1115 on 9620/15485 --- In 1985, a Royal Commission into broadcasting, including the SW Sce, will be held. It is due to report to Parliament in early 1986 (Robert Jones, Australia). Ed.Note: This means that R. NZ will have to struggle through the sunspot minimum with its 7.5kW tr's, but at least there is still hope for better facilities in the future.

PACIFIC SHORTWAVE REPORT by Robert Jones, Australia

Australia: VLW Perth commenced a new schedule on 26th August: 6140(15°) 2100(Sat 2130) - 0100 and 0915-1602; 9610(15) 2100(Sat 2130)-0935; 9610(35) 0942-1602; 15425(35) 2300-0915. Beam 15° is for the No.We. part of We.Australia, and 35° for the Kimberley region of WA. Since July, R. Australia has been testing to the Australian research bases in Antarctica from Perth (10kW) at 0300-0500(Fri) on 15410 using a 207° rhombic antenna. The prgr. "Calling Antarctica" is aired at 0300 and 0400, and the special prgr. in French (to the French bases) at 0430.

The SSB feeder from Lyndhurst to Carnarvon on 12290, much used by listeners in Europe as a useful outlet when in-band frequencies were poor, has ended as of Sept. 20th. The reason is that the original purpose was to feed the Indonesian service to Carnarvon, but now this service will mostly originate from Darwin, so the feeder will now only be used as a standby. From 1986, both Darwin and Carnarvon will be fed via satellite, with microwave and coaxial cable links as back-up.

The Lyndhurst transmitting site will be closed in late 1985 or early 1986. At present, there are 2x30kW ISB tr's and eight 10kW AM tr's carrying Radio Australia, ABC shortwave domestic and the VNG time signal service. These services will be transferred to other sites, eg. Shepparton and Liverpool(Sydney).

New Caledonia: The 4kW outlet on 11710 has been mainly off the air since June due to technical problems.

Vanuatu: Until 23rd March, the SW schedule of R. Vanuatu on 3945/7260 is 1800-1015(Sun 0900). Thus there is now a continuous service from this st. instead of a midday break.

NORTH AMERICA

Canada: The D84 schedule of R. Canada International differs from WRTH84 as follows:
English: 0100, 0200, 0230(Mon-Fri), 0300 & 0400 all on 9755/5960; 0615 & 0645 delete 6045; 1300 on 9650(ex.9575); 1645 uses 21695 W only; 1900 on D7235(ex.D7285); 2130 delete 17875; 2330 should read 2300-2330 on 11710/9755 + 930 via R. Antilles --- French: 0130 on 9755/5960; 0200 delete 11940; 2300 should read 2230-2300 on 11710/9755 + 740/1450 via R. Antilles --- Portuguese: 0000 & 0100 on 11940/9535, 0200 on 11845(ex.9755) --- Spanish: 0030, 0100 & 0130 delete 9755, 0230 on 11845(ex.9755) --- Polish: uses 21695 W only, D9590 replaces D9650. Also uses S11915/S15315 at 1545-1600 --- Russian: 0315 amend 7260 to D7260, 1645 on D9590(ex.D9560) --- The Northern Quebec Sce is scheduled at 0000-0610 on 6195, 1200-1400 on 6065, 1200-2330 on 11720 and 2330-2400(Sat/Sun) on 11720/6195.

U.S.A.: During D-84 the VOA carries English as follows: To Europe: 0000-0200 on 1197; 0400-0800 on 7170/7200, also 6040(0400-0700), 6060(0500-0800), 7325(0600-0800), 6035/9650(0700-0800), 3980(0430-0500, 0600-0800), 1197(0430-0500, 0700-0800), 792(0400-0430 & 0500-0800); 1700-2200 on 6040/9760/11760, also 1197/3980(1700-1730), 792(1800-1930) --- To No.Africa: 0500-0800 on 5995/7170/9670, also 6095/11840(from 0600) & 7325(from 0700); 1700-2200 on 6040/15205(& 9760 from 1830) --- To Ea/Ce.& So.Africa: 0300-0600 on 7280, also 6035/9550/11835(to 0500) & 11720(to 0430), 621(0300-0430); 1600-2300 on 7195/15445/

15600/17870, also 9575/11920(to 1900), 21485(to 2000), 21660(from 1800), 621(1730-2200) --- To We.Africa: 0600-0800 on 3990/6080/6125/9530/9540/9550/11915, also 6035/7280(from 0700); 1600-2300 on 15580/17785, also 6045/9620(from 1900), 15410(1600-2200), 21485(to 2000), 17715(from 2000), 21660(from 1800) and 15415(from 2200) --- To Middle East: 0300-0800 as follows: On 7200/9740(to 0600), 15205(from 0500), 5965/7325/15195(from 0600), 9770/11925(0500-0700), 9660/11920(from 0700), 1260(0300-0330 & 0600-0800); 1500-2200 on 9700, 9760(from 1700), 15205(1500-1700, 7205(from 2100), 1260(1500-1630 & 2100-2200) --- To So.Asia: 0100-0400 on 7115/7200/9740/11710/15210/15250/21540, also 17735(to 0300) & 17745(from 0300); 1300-1900 on 9645/9700/15395, also 9760/15205(to 1700), 7125(to 1500), 6110(from 1400), 7105(from 1500), 1575(1400-1500, 1530-1600 & 1700-1800) --- To No.Ea.Asia: 2200-0100 on 11775/15290/17740(& 15185 to 2400); 1100-1500 on 9760/11715(& 15425 to 1330) --- To So.Ea.Asia: (*=for Indonesia): 2200-0100 on 7275/9770/*11760, 1100-1500 on 7230/9760/*15160, also *6110(to 1400), 1575(1100-1200 & 1400-1500) --- To Oceania: 2200-2400 on 11760/15185/17740, 1100-1400 on 6110/15160(& 15425 to 1330) --- To Latin America: 1700-1800(first Sun of the month only) on 1580/15580/17640/17860/21545/21560/21590/21840(this is a new transmission), 0000-0400 on 1580/5995/6130/9455/9650/9690/11580/11675/15205(also 11740 to 0200).

AFRTS currently operates on SW as follows: To Europe: 0100-0700 on 6030B, 0900-1100 on 9590G, 1100-0100 on 15430G --- To the Middle East: 0700-1100 on 15400 & 1100-1300 on 15265(both Munich) --- To Africa: 0900-1100 on 9530, 1100-1700 on 15330, 1700-2300 on 15345, 2300-0700 on 11790(all Bethany) --- To the Caribbean: 0900-1300 on 6030G, 1300-0200 on 15330B, 0200-0700 on 6030B --- To Ea.Asia: 1000-1700 on 11805, 2200-0430 on 21570, 0430-0700 on 15330, 1700-2200 on 15345, 1000-1800 on 9700, 1800-0700 on 17765 (all Delano) --- To So.Ea.Asia: 0000-2000 on 21670, 2000-2400 on 15305(both Poro) --- AFRTS schedules are now issued in January and July.

The D84 schedule of WYFR-Family Radio is as follows: English to Europe: 0600-0800 on 6015/6160/7355/9680/9852.5, 1600-1700 on 15440/17845/21510/21615, 1900-2000 on 9852.5/11805/11925/15566, 2000-2100 on 9600/9852.5/11805/11925 --- To Africa: 2000-2100 on 17845, 2200-2400 on 15355 --- To the Americas: 0000-0100 on 11970, 0100-0200 on 9715, 1300-1500 on 9590, 1500-2100 on 15215 --- To Ea.Canada: 1300-2300 on 15380 --- To We.Canada: 1200-1300 on 5995, 1300-1600 on 5985, 1600-2300 on 15365, 2300-0200 & 0600-0800 on 6065 --- To No.México: 2100-2300 on 15215 --- Spanish: To So.America/Caribbean: 2300-0100 on 9660/11855/15215, 0100-0300 on 9660, 0300-0400 on 9680/11855, 0400-0600 on 11855, 0800-1100 on 6105/9550 --- To México/Ce.America: 0400-0600 on 9680, 1100-1200 on 6175/9605, 1200-1300 on 9605/11720, 1300-1400 on 15355/17785 --- To No.México: 1200-1300 on 11855, 1300-1500 on 17730, 0300-0500 on 9715, 0500-0800 on 9705 --- To Brazil: 0900-1000 on 6175/9605, 0200-0400 on 11720 --- To Europe: 2200-2300 on 6155 --- German: 0500-0600 on 6015/7355, 1700-1800 on 15440/15566/17750/17845 --- French: 1000-1100 to So.America/Caribbean on 6175/9605, 1200-1300 to Canada on 6095, 1800-1900 to Europe/No.Africa on 9852.5/15440 and to We.Africa on 21525, 2100-2200 to Europe/No.Africa on 9852.5/11925, 2300-2400 to Canada on 5985 --- Portuguese: 1600-1700 & 1900-2000 to Africa on 21525, 2200-2300 to Brazil/Caribbean on 15130, 0100-0200 to Brazil on 9555/11720, 0800-0900 to Brazil/Caribbean on 6175/9605 --- Arabic: 1700-1800 on 21525 --- Italian: 1800-1900 on 11800/15566, 2100-2200 on 11805 --- Russian: 0400-0500 on 7355.

CENTRAL AMERICA & THE CARIBBEAN

Cuba: We have received the official D84 schedule of R. Habana, which reads as follows: English: To No.America: 0100-0450 on 6140, 0330-0600 on 6090, 0630-0800 on 9525; To the Caribbean: 2050-2140 on 15300/17750, 0100-0600 on 11725, 0330-0600 on 6090; To Europe/Africa/Middle East: 1700-1800 on 9695*, 2010-2140 on 11850, 2200-2300 on 7135* --- French: To No.America/Caribbean: 2200-2230 on 6090; To Europe/Africa/Middle East: 0830-0930 on 9730, 1600-1700 on 9695*, 1830-2010 on 11850, 2000-2140 on 11710/11950, 2100-2200 on 9550*/7135* --- Spanish to the Americas: 1100-1645 on 9550/15230/17705, 1100-1820 on 11760, 1100-2040 on 15300/17750, 2200-0050 on 6060/11760, 2200-0200 on 9550, 2200-0600 on 9770/15230, 2300-0600 on 11710, 0000-0245 on 11970, 0100-0300 on 6090, 0300-0600 on 6060/9550; To Europe/Africa/Middle East: 0630-0730 on 9730, 0930-1045 on 9730, 1800-2000 on 9590*/9695*/11710/11950 --- Portuguese to Brazil: 0900-1000 on 9550, 2300-2400 on 11970; To Europe/Africa: 0730-0830 on 9730, 2000-2100 on 9590*/9695* --- Creole: 1100-1200 on 9640, 0200-0300 on 9550 --- Quechua: 1000-1050 on 11760, 2200-2300 on 11710 --- Guarani: 2200-2300 on 11970 --- Arabic: 1500-1600 on 9695*, 1650-1750 on 15230/17705 --- *)via USSR tr.

SOUTH AMERICA

Bolivia: 25) now on 970/6135(10/1) at 0900-0200 - 40)1110/4845(0900-0300) - 59)1250(3) 1000-0300 - 80)1390/4815(3/1.5) 0800-0200(on SW) - 111)1545(0.35) 0900-0400 - 146)5965 (0925-0200) all direct from the sts --- New sts: On 1150: R. Horizontes, Casilla 196, Cobija: 1100-0300 - On 4195(r) R. Santa Rosa, Yacuma: 2300-0200 - On 4730(r) R. Guanay, Huanay, La Paz - On 6340(r) R. La Voz del Caine, Cochabamba - On 7370(r) R. Carlos Quinto, 1000-1500 & 2230-0300(Sun 1100-0230).

Brazil: 107) now on 630(ex.670) - 117)680(is ZYK628) - 631) now on 790(from 1370)/3345 (5/1): 24h - 519)1250/2490 plans to use 5035 - 658) now on 1400/4880(ex.4885) - 690)1420 is ZYK733 - 703)1430(ZYK328): 0900-0200 - 966)1550 is now R. Cristal, Francisco Beltrão, PR: 0900-0130 --- 1037) now on 2480(ex.2490) - 927) now using 680(ex.1530)/4935 until 0200 - 1044)4945 is ZYD542 - 1046)6025/9515(20/20):0850-2330 - 1047)9665(ex.9675): 0930-2400 (Sun 2200) --- New st: On 670/2310(1/0.25) R. Vale Rio Madeira, 69800 Humaita, AM --- For numerous other new sts and amendments, please refer to WRTH85 now in production.

Ecuador: 21)745(10) 1100-0600 - 33)830(3) 1000-0200 - 37)850(50) 1000-0500 - 42)880/5055 (42/9) 1130-0300 - 46)900(2) 1000-0400 - 79)1070(5) - 90)1125(5) 1100-0400 - 103)1170/3240(10/1) 1000-0200(on SW) - 110)1200(7.5) R. Super Canal 12 - 118)1225(3) 1000-0700 - 130)1260(HCM01) La Voz del Santuario, Cas. 3386, Quito: 1100-0500 - 151) 1340(5) 24h - 156)1350(0.5) - 189)1440(3) - 191)1440(5) 1030-1500 & 2000-0030 - 193)1445(10) 0800-0400 - 200)1470(1100-0300) - 224)1530(1.5) 1145-0330 - 225)1530(1130-0230) - 243)1560 (5) 0930-0400 - 271)r on 4692-4773(ex. 5020).

Falkland Islands: The official schedule of the FIBS is now 0900-1115 & 1930-0530 on 2380, and 1115-1930 on 3958(all times on FM 96.5MHz).

Paraguay: We have received an interesting letter from our collaborator Tony Jones, explaining some of the problems of collecting information for the 1985 edition: "As I mentioned in my previous letter, obtaining information from Paraguayan stations was a major task this year. To give some examples: Emisoras Paraguay declined to fill in the questionnaire since they are changing from private ownership to a limited company; the owner of Radio Guarani could not give me the technical details until the station engineer arrived from San Juan Misiones (where he has his own station, La Voz de Misiones). In turn, the owner of the latter station did not return the questionnaire because he normally mails such items when visiting Asunción. The technician from Canal Cien (FM) has been in Buenos Aires for several weeks, and is the only person who can fill in the details in the questionnaire. The person who normally completes the questionnaires for Radio Carlos Antonio López and Radio Concepción (at the Asunción office) has also been out of town for almost three months; and so on...."

While sympathising with these problems, we also want to point out to our readers that it's not only in Third World countries where management and technical people seem to exist in different worlds, the former having not even the remotest idea about frequency, power etc. We could name a few West European stations where station administrators react with incredulity when asked to produce some evidence that they actually have transmitters!

Peru: 93) now on 580(10) from 1180; 1100-0200 - 15)680(5) - 24)760(=Radiomar) 24h - 229)1112/5045(OAX9C/OAX9L - 1/2) 1000-0400 - 49) now on 1160/4910 as R. Libertad (SW-OAX2H); 980 R. La Hora silenced and inactive at present - 87)1160(1100-0700) - 35) now on 1300(ex.840) with 0.5kW - 117)moved to 1300(1) - 126)1300(1100-0500) - 130)1300/5015(1/1) 1100-0200 on MW, 2100-0200 on SW - 133)1320/3260(5/5) 1100-0500 - 136)1340/4935/9710(0900-0500) - 137)1340(1) - 147)1370(1) 1100-0500 - 165)1440/5190(OBX2J/OAZ2E-2/3) 0900-0500(MW) & 1100-0500(SW) - 106)moved to 1450(ex.1220) 1100-0500 - 53) now on 1460(ex.1000) 0.5kW - 17) now on 1490(ex.690) 0.35kW - 182)4998(10) (ex.4934) 1100-2300 (MW inactive) - 190)1520(5) - 241)1530(new)/5800 - 202)1550/9540(1/1) 1000-0300 - 199)1545/5360(OAX9X) 1100-0400 - 207)1590(5) 1000-0500 - 246)6270(0.2) 1115-0400.

Venezuela: 33)910(20kW) is now R. Centro - New sts: On 1420 R. Cardenal(YVRW); On 1450 R. Alto Llano(10kW), Santa Bárbara de Barinas, Barinas.

LA-REPLY STATISTICS

After completion of the LA-section for the WRTH85 (now in production) our LA-editor Tor-Henrik Ekblom has released the following figures for the st's who responded to our questionnaire: Costa Rica 2 out of 35 = 5.7%, Dominican Republic 17/109 = 15.6%, El Salvador 1/44 = 0.2%, Guatemala 3/92 = 3.2%, Haiti 1/26 = 3.8%, Honduras 17/107 = 15.8%, Mexico 2/13 = 15.3%, Nicaragua 1/40 = 0.2%, Panama 5/58 = 8.6%. Total for Ce. America 49/524 = 9.3% --- Argentina 12/151 = 7.9%, Bolivia 15/148 = 10.1%, Brazil 114/1048 = 10.9%, Chile 17/148 = 11.5%, Colombia 18/349 = 5.1%, Ecuador 30/271 = 11.0%, Peru 26/255 = 10.2%, Uruguay 28/81 = 34.5%, Venezuela 13/156 = 8.3%. Total for So. America 303/2607 = 11.6%. Information for Cuba received via R. Schatz, and for Paraguay the details were collected by Tony Jones.

MORE ON SOVIET SHORTWAVE FACILITIES

by Douglas W. Johnson. Edited version of an article in the USSR High Frequency Broadcast Newsletter, August 1984.

Several years ago, when I began assisting Roger Legge in monitoring quarterly schedule changes of Radio Moscow's shortwave transmissions, I became interested in quite a puzzle. While the Soviet Union complies with International Telecommunications Union (ITU) provisions requiring shortwave broadcasters to furnish ITU in advance with changes in schedules of transmissions - their times, transmitter powers, antenna characteristics and target zones - the data furnished is consistently misleading in many respects. Such duplicity is correspondingly mirrored in Radio Moscow's QSL's, which are consequently of very little value. Reception characteristics of their shortwave transmissions frequently do not agree with the transmitter locations listed by Radio Moscow. Transmitter powers and antenna gains often seem to be exaggerated but are admittedly difficult to corroborate. Even Radio Free Europe-Radio Liberty (RFE/RL), in the author's opinion the most technically sophisticated shortwave broadcast system on the air, does not exceed a 250kW input power on any transmissions in its daily battle with East European and Soviet jammers.

A lengthy review of reception characteristics of Radio Moscow transmissions, Operational Navigation Charts (ONC), Landsat satellite photographs, extensive communications with some of this hobby's "old hands" and consultation with a VOA chief engineer, produced some progress toward a resolution of the hazy Radio Moscow puzzle. However, the point was eventually reached beyond which little further progress could be expected save actual field study. While the idea of a trip to the Soviet Union seemed attractive and fascinating, the prospect of attempting to gather field data about subject matter considered more or less a national secret required careful thought and preparation. Covert methods would obviously be necessary to minimize the risk of a "misunderstanding" while on the road. Actually this was no casual, spur of the moment idea. Preparations evolved slowly, beginning perhaps as early as 1980 with the commencement of a reading program devoted to Siberia and the Soviet Far East, since these areas contain the Radio Moscow sites most familiar to me.

During March of this year the time had come to stop procrastinating and initiate actual travel plans. Accordingly, arrangements were made and, travelling alone, I sailed out of Yokohama, Japan aboard the Soviet ship M/V Khabarovsk on June 28, 1984, arriving in the Soviet port of Nakhodka at 5:30 p.m. on June 30th. The customs inspection at Nakhodka was very thorough, but luckily the customs official evidently became convinced that I posed no threat and, with a warm smile, told me to proceed. I entered the country carrying a Sony 2002 shortwave portable receiver with long wire antenna, cassette recorder, 35mm SLR camera with 35-105mm zoom lens, copies of selected portions of ONC maps (!) and a copy of my Radio Moscow summer schedule as previously monitored.

In summary, the trip then progressed as follows: From Nakhodka I took an overnight train to Khabarovsk where I stayed for three nights, departing on July 4th for Irkutsk by rail on Rossiya No. 1, the Trans-Siberian express. At 5:40 a.m. on July 7th the train arrived in Irkutsk where I got off and stayed until the 10th. Then it was again back on the Trans-Siberian for the trip to Novosibirsk, arriving there on the 11th. At 9 p.m. on the 13th I boarded an Aeroflot TU-154 plane for a four hour flight to Moscow, the show-place of the USSR. After an all too short four nights in Moscow I flew off to Zurich, Montreal and home.

Several shortwave transmitting sites were observed between Khabarovsk and Novosibirsk, and a tour of Radio Moscow's foreign service offices and studios was accomplished while in Moscow. Here is a brief survey of my shortwave findings:

KHABAROVSK: Across the Amur River, west of the city 11km at GC 48°29'N, 134°48'E, is an array of 18 towers of uniform height arranged in three equally spaced rows of 6 towers each orientated east-west. Between each tower top and its corresponding tower in the adjacent row is a horizontal wire antenna element. The distance between rows is about 2.5 times the height of the towers. Spacing between towers within each row is 2.1 times

their height. The ONC indicates a multiple vertical obstruction here and a maximum height of 780 feet (238 meters) but the towers are probably shorter, perhaps rising to no more than 180 meters. Further analysis of this array will be made and reported in a future issue of UHN.

SKOVORODINO: East of Skovorodino 5km is a shortwave horizontal multi-wire dipole antenna suspended between two guyed metal towers. The radiation pattern is nearly north-south. A road runs north from Skovorodino, crossing the new Baikal-Amur railway, and on to Yakutsk and the Northeast. This antenna is likely used by Radio Moscow for its domestic service programming. The ONC shows a multiple vertical obstruction here (GC 53°58'N, 124°06'E) and gives a height of 660 feet (201 meters) but the height applies to a nearby TV relay tower. The shortwave antenna is probably no more than 50 meters high.

CHITA: Photos of a Radio Moscow foreign service facility south of Chita were obtained in 1981 by a fellow DXer. Since then an updated ONC has been released which indicates for the first time multiple vertical obstructions 25km south of Chita, north of the village of Aleksandrovka, at GC 51°50'N, 113°43'E. It is now confirmed that this is the Chita transmitter site. Eight curtain arrays are arranged in four groups.

A further antenna array was observed about 2km south of the main complex. It consists of 37 freestanding white towers of uniform height, perhaps 50 meters maximum, aligned in a row running nearly north-south. A horizontal wire(s) extends along the tops of the towers, paralleled by a transmission line close to the ground. Tower spacing is twice their height. There are 36 phased elements in this array. Olle Alm, our monitor in Sweden, reports that three high-power transmitters at Chita were brought on the air during 1973. This may date the construction of the phased array.

ULAN-UDE: East of Ulan-Ude 30km, just west of the village of Onokhoy, at GC 51°54'N, 108°02'E, is an interesting installation. Two Orbita staellite ground receiving antennas are located a few dozen meters apart on a low hill south of the railway. Beyond them and nearly out of sight is at least one antenna(SW?) and possibly several others. The latest ONC no longer shows the earlier indicated multiple masts here, probably because they have subsequently been determined to be less than the 200-foot minimum ONC height threshold. It is unlikely that curtain arrays as large as those at Chita are present here, but a phased array could be hidden by the low hill. It is more likely that there is a domestic service facility here of modest scale.

The purpose of the dual Orbita antennas is unclear, given their absence at other observed radio sites. Only one other Orbita dish antenna was seen, at a riverfront park in Khabarovsk, and it was a retired 1967-vintage station. It is reasonably clear that the terrestrial microwave relay network typically feeds the programs to the radio and television facilities along the route of the Trans-Siberian railway. Perhaps of significance is the fact that the facility east of Ulan-Ude is located on the border dividing the coverage zones of the Orbita II and III schedules.

IRKUTSK: There are at least 28 towers on the grounds of the Irkutsk Polytechnic Institute along the south bank of the Angara River, across from a downtown riverfront park. Most of the antennas are horizontal dipoles similar to the one observed near Skovorodino, though not quite as high. It seems reasonable to assume the Irkutsk standard frequency transmissions originate from this site. Radio Moscow domestic service shortwave broadcasts may also emanate from here. The location is GC 52°16'E. No antennas, by the way, were found near Usol'ye-Sibirskoye, as previously reported in UHN No. 40.

NOVOSIBIRSK: The site reported in UHN No. 40 as being 65km northeast of Novosibirsk, just northwest of the village of Stantsionno Oyashinskiy, is now confirmed. The location is as earlier published: GC 55°31'N, 83°45'E. This is a major Radio Moscow foreign service complex, larger than the one at Chita. It is believed there are 13 curtain arrays here, all of the same design as those at the Chita site. No other types of shortwave antennas were observed at this site. Maximum tower height, according to the ONC, is 420 feet (128 meters), which also seems consistent with the highest curtain towers at Chita. A preliminary analysis of the arrays has produced the following tentative beam headings:

42°/222°, 64°/244°, 112°/292° and 134°/314°.

Radio Moscow's offices and studios at 25 Pyatnitskaya Street in Moscow are for foreign service operations only. The domestic service is housed elsewhere in the city. It is necessary for one to arrange an appointment to visit Radio Moscow and this can be done by telephone while in Moscow. The afternoon of my visit very few members of the English language staff were present. Many were on vacation and several were not scheduled to be on duty until later in the day. I was greeted warmly and taken on a tour of the 10-story building, which is at least 40 years old. All English language mail is processed in an office measuring about six by seven meters containing eight desks. Some of the oak paneled wide corridors have communications wires stapled to their walls. Programs are evidently fed over phone lines out of the building to the shortwave transmitting sites in the vicinity of the city, also into the terrestrial microwave relay network and to the Orbita relay satellite system. There is a shortwave dipole antenna on the roof of the building which may be for receiving purposes only. This is a Spartan, no frills place by Western standards.

The same can be said of every Radio Moscow transmitting facility I observed. Antennas are simple, bare-bones designs. Curtain arrays appear very modest compared with those used by RFE/RL and some other Western broadcasters. The Chita curtains for example, typically consist of four half-wave dipoles arranged horizontally in four rows. An identical curtain is spaced one-quarter wavelength away, one serving as a reflector for the other, each capable of a reversed role. In such a configuration one adds 3dB gain each time the number of dipoles is doubled, with the reflector contributing an additional 3dB, producing in this case a gain of only 15dB over a single half-wave dipole (17dB over an isotropic half-wave dipole).

Radio monitoring was conducted in hotel rooms and only once on the train while passing north of Vladivostok. Darkness prevented a visual confirmation of the suspected shortwave site at Razdolnoye (GC 43°32'N, 131°57'E), north of Vladivostok, but monitoring of 11990kHz - MAYAK indicated a limited ground wave presence only in the vicinity of Razdolnoye. In general the monitoring data collected seems less conclusive than expected. It was hoped that skip dead-zones and limited ground wave coverage would combine to create a clear, if general, picture of site proximity. Further study of the field data is necessary before any conclusions can be presented.

Our thanks to Roger Legge, publisher of the USSR High Frequency Broadcast Newsletter, for making this article available for re-publishing.

WYFR-LISTENER-CLUB-EUROPE

We have been asked to publicise this new organisation, which is described as a "DX club". We have no further details, and those interested are asked to contact Bernd Pfromm, Hegaustrasse 7, D-7204 Wurmlingen, W.Germany. (Ed.Note: As a matter of policy, we do not list clubs run by, or in support of, specific broadcasting organisations in the WRTH. However, we are happy to publish such items in the NL, when specifically asked to do so).

CHANGE OF CHANGE OF ADDRESS

Cf. Sept. NL. The new addr. of Glenn Hauser/Review of International Broadcasting as given in the last issue was correct. However, Glenn inform us "it turns out that the PO has trouble interpreting its own 9-digit zip codes, so it has become necessary to publicize my address in a different way":

Glenn Hauser, Review of International Broadcasting, Box 490756, Fort Lauderdale, FL 33349, U.S.A.

We regret any convenience caused to readers who may have unsuccessfully tried to use the version published last month.

MORE HIGHLIGHTS OF WRTH85

Readers of the NL will no doubt be anxious to know what is new and different in the World Radio section of the forthcoming edition. Just a few of the highlights are:

France: A complete schedule of R. France Internationale (cf. item in this NL), including relays.

Germany: For the first time, full frequency schedules of R. Free Europe/R. Liberty.

Netherlands: Advance details of R. Netherlands' completely new schedule effective March 31st.

China: A completely revised and updated text of domestic services prepared by our co-editor Olle Alm with the assistance of expert monitors.

Cuba: Exclusive up-to-date information on the Cuban domestic stations compiled by Ronald Schatz (cf. article in May NL). The WRTH is the only commercial publication authorized to publish Mr. Schatz's material.

Of course, as usual there are thousands of changes to the 1984 listings. The NL includes a few of these, but to see the full extent of a year's progress in world broadcasting you will need WRTH85. See the details elsewhere in this NL.

LAST MINUTE INFORMATION

INTERNATIONAL WATERS: (Cf. Sept. NL). Judging by our mail, there is very considerable interest in the offshore stations amongst our readers. From a very reliable source who is in daily contact with both stations (but who, for legal reasons, cannot be named) we have received the definitive technical data (our source is a qualified radio engineer).

Radio Caroline on 963 is using a 50kW tr. which is capable of 40-45kW, but actually runs 16kW (as of Sept. 26th). On 576, the power is 3kW. Our source tells us that, as suggested in the Sept. NL, this tr. was introduced to attract listeners looking for Laser 558, but will be used for religious progr's to earn revenue for the st.

Laser 558 has 2 x 25kW tr's, but one is still tuned to 729 (the originally planned freq). There is a combining unit on board which would enable both tr's to be used in parallel on 729, but this will never work on 558. So only one tr. is used, and this runs only 7.5 or 18kW depending which generator is in use. The st's much-promoted "satellite link" with the U.S.A. has not worked since April.

For the technically-minded MW enthusiast, we have the latest measured freqs of the three tr's: R. Caroline on 575.998.7 varying +0.8 and -0.6Hz, and R. Caroline on 963.004.7 varying +0.3 and -0.4Hz. Laser 558 on 557.995 varying +135 and -30Hz. (EBU measurements for Sept. 1984). The figures for R. Caroline show that the st. is well within the generally accepted parameters for frequency tolerance, and in fact better than many landbased st's!

WRTH85: PRICES DIRECT FROM DENMARK BY POST

Readers of this NL will hardly need to be reminded about the high value of the U.S.\$ recently. Also, due to a very large increase in production costs since the price of the WRTH was last increased in 1983, the publishers (Billboard) have set a cover price of US\$ 19.50 for WRTH85. Under these circumstances, customers ordering copies of WRTH85 by post from this office might expect a substantial rise in the price.

In fact, as will be seen from the prices below, there has been no increase to mail order customers paying in Dollars or Deutschmarks (of course, we cannot be held responsible for the increased cost of obtaining U.S.dollars from the banks!). The prices in D.Kr. and UK £ have been increased, but by much less than would have been necessary to bring the price up to the equivalent of the American cover price.

Remember that these prices are inclusive of postage and registration. Prices to bookstores ordering copies of WRTH via this office will be based on the figures mentioned below (with appropriate trade discount). However, we cannot be sure what the selling price will be at bookstores in different countries because the foreign exchange rates are fluctuating so much.

We want to draw your attention to one thing: Since WRTH81, there has only been an increase of one U.S. dollar in the cost of buying your copy of WRTH from us when paying in U.S. currency. The WRTH is now even better value for money - beware of non-U.S. publications which may appear less expensive, but which actually contain large amounts of white space and minimal useful information for the active listener (much of it lifted from the pages of WRTH!). There is only one WRTH, so get the real thing. It still gives you the World at less than 5 cents a day - surely your hobby is worth at least that much?

<u>Prices for WRTH85</u>	<u>D.Kr.</u>	<u>£</u>	<u>DM</u>	<u>US\$</u>
by Registered Seamail, worldwide:	200.00	13.50	48.00	20.95
Extra for airmail delivery: (outside Europe)	50.00	3.50	14.00	5.00
1985 Newsletters:	80.00	6.00	22.00	8.00
Airmail extra for Newsletters:	20.00	1.50	5.00	1.75

Payments by cheque: add equivalent of D.Kr. 40.00 for bank fee.

Other ways to pay: by International Money Order (not domestic postal or money orders) from a Post Office - by Postal Giro (our a/c number is Copenhagen 3 13 25 95) - by cash (do not include coins).

If in doubt, contact us and we will try to assist you.

Publication date for WRTH85: February 1985.

HOME SERVICE STATIONS OUTSIDE THE TROPICAL BANDS

To many DX-ers in Europe, Finn Krone is known as "the Voice of the DSWCI", as he presents the highly-rated DX tips feature for the Danish Shortwave Clubs International on Adventist World Radio (Sun 0915 on 9670). FK is also a WRTH Co-Editor, and recently took over as editor of the DSWCI's Latin American section, a job done for many years by Tor-Henrik Ekblom.

Now, Finn Krone has produced a new publication on the lines of the famous DSWCI Tropical Bands Survey, this one concentrating on domestic broadcasting on the HF bands. But the definition has been stretched to include clandestine broadcasts, an area not covered in the WRTH, and the result is a unique reference source, in frequency order, which is sure to become as popular as the TBS. Its format is basically the same as its illustrious companion.

Details of how to obtain a copy of the new publication may be found in the advertisement elsewhere in this NL. Our congratulations to FK and the DSWCI for another "first" in DX publishing!

HOLIDAY SUPPLEMENT

Although the WRTH is not a travel agency, we can recommend two places to visit during 1985: Madrid, Spain and Milwaukee, Wisconsin, USA. But the radio enthusiast should choose the dates carefully, in order to coincide with the major Radio Conventions, namely:

EDXC85, hosted by Radio Exterior de España, in Madrid over the whitsun weekend May 24th-27th 1985. This is the annual gathering of the European DX Council, and is expected to attract over 200 listeners and broadcasters from most countries in We.Europe and some from overseas.

Homeservice Stations outside the Tropical Bands.

A new publication is now available from the DSWCI, called:
"Homeservice Stations outside the Tropical Bands"

In this 32 pages offset-printed booklet in A-4 size you will find all active Home Service broadcasting stations on Shortwave above 5.900 kHz, listed by frequency with their power and transmission times. It is based upon monitoring information from DX-ers all over the World and is a natural supplement to the wellknown DSWCI, Tropical Bands Survey. The survey is doubled spaced for updating ease.

It is compiled by DSWCI member, Finn Krone, Denmark.

Homeservice Stations outside the Tropical Bands is available for 7 IRC's or 25,00 Danish Crowns, or 9 IRC's or 32 Danish Crowns by airmail. Reduced rates for bulk orders to DX-Clubs.

Send your order with payment now to:

The Danish Shortwave Clubs International

Tavleager 31, DK-2670 Greve Strand, Denmark

ANARCON85, the North American equivalent hosted by the National Radio Club (North America's oldest DX club) on behalf of the Association of North American Radio Clubs. Although, like the EDXC event, all main listening interests are covered, MW DXers one likely to be especially well catered-for, as the NRC is a MW-only club. The dates here are July 19th-22nd 1985.

The WRTH is always represented at these annual gatherings. We look forward to meeting our readers and NL subscribers. You don't have to be a member of a DX club to attend, and there is no need to feel shy because these are very informal events where listeners, broadcasters and people like us all mix on equal terms, experienced and beginners alike.

See the club section in the forthcoming WRTH85 for further details (all major DX-prgrs will also carry them) and make a note of the dates: May 24th-27th in Madrid, July 19th-22nd in Milwaukee. See you there!

OFFICE HOURS

The deadline for WRTH85 is now well past, and the Editorial Office will be closed from Nov. 10th until after the New Year holiday. There will be a delay in answering editorial correspondence received during Nov/Dec.

The WRTH Sales Office in Copenhagen will be open at the following hours only:

Mon-Fri 0800-1300 UTC (exc. during the Christmas & New Year holiday period).

Orders and enquiries by mail will be handled as usual. Telephone enquiries can only be accepted during normal office hours as above. We regret that there is no automatic answering service available at the present time.

We seek your cooperation in taking note of the above arrangements.

Typing of this NL by Mrs. A. Møller completed on November 4th, 1984.
