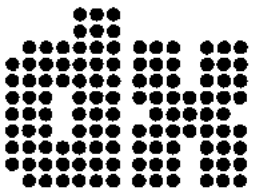


3 - 2002



ISSN 0175-6877



magazine



WORLD WIDE DX CLUB



Staff of WORLDWIDE DX CLUB:

- PRESIDENT AND CHIEF EDITOR** . . . ☒ WWDXC Headquarters, Michael Bethge, Postfach 12 14, D-61282 Bad Homburg, Germany
☎ daytime +49-6102-2861, evening/weekend +49-6172-390918
☎ +49-6102-800999
E-mail: mail@wwdxc.de • Internet: http://www.wwdxc.de
- BROADCASTING NEWS EDITOR** . . . ☒ Dr. Jürgen Kubiak, Goltzstrasse 19, D-10781 Berlin, Germany
E-Mail: j.kubiak@gmx.net
- LOGBOOK EDITOR** ☒ Ashok Kumar Bose, Apt. #421, 3420 Morning Star Drive, Mississauga, ON, L4T 1X9, Canada • E-mail: logbook@wwdxc.de
- OSL CORNER EDITOR** ☒ Richard Lemke, 60 Butterfield Crescent, St. Albert, Alberta, T8N 2W7, Canada • E-Mail: qsl@wwdxc.de
- TOP NEWS EDITOR (Internet)** ☒ Wolfgang Büschel, Hoffeld, Sprollstrasse 87, D-70597 Stuttgart, Germany • E-Mail: topnews@wwdxc.de
- TREASURER & SECRETARY** ☒ Karin Bethge, Urseler Strasse 18, D-61348 Bad Homburg, Germany
- NEWCOMER SERVICE OF AGDX** . . . ☒ Hobby-Beratung, c/o AGDX, Postfach 11 07, D-91001 Erlangen, Germany (please enclose return postage)

Each of the editors mentioned above is self-responsible for the contents of his composed column. Furthermore, we cannot be responsible for the contents of advertisements published in DX MAGAZINE.

We have no fixed deadlines. Contributions may be sent either to WWDXC Headquarters or directly to our editors at any time. If you send your contributions to WWDXC Headquarters, please do not forget to write all contributions for the different sections on separate sheets of paper, so that we are able to distribute them to the competent section editors.

WORLD RADIO TV HANDBOOK 2002

Prices for orders from WORLDWIDE DX CLUB • Preise bei Bestellung beim WORLDWIDE DX CLUB:

€ 25.56 or US\$30.45. Extra for air mail: € 9.20 or US\$11.00.

These prices include postage and packing. Delivery against advance payment by International Money Order, eurocheque (issued in €), cheques in US\$ drawn on a US bank, cash in any convertible currency, Postal Money Order or transfer to our postal giro accounts Frankfurt/Germany No. 289010605 (IBAN: DE49 5001 0060 0289 0106 05) or Arnhem/Netherlands No. 3822840 (IBAN: NL57 PSTB 0003 8228 40).

Der obige Preis enthält Porto und Verpackung. Lieferung gegen Vorauszahlung durch Überweisung, Scheck, Postanweisung oder Bargeld. Postbankkonten: Frankfurt am Main/BRD Nr. 2890 10-605 [Bankleitzahl 500 100 60] und Arnhem/Niederlande Nr. 3822840. Bei Nachnahmelieferung: € 3,00 Zuschlag.

DX MAGAZINE is the monthly publication of WORLDWIDE DX CLUB, Postfach 12 14, D-61282 Bad Homburg, Germany. Price for a single copy: € 1.28 or 2 International Reply Coupons (IRC's); annual subscription rate: € 15.34 or 15 IRC's. Other currencies and air mail rates on request. Cover: Peter Pohle + Jürgen Kauer (KAVOP)



DX MAGAZINE No. 3

· Vol. XXXVII ·

March 2002

Hello again,

Welcome to another issue of our DX MAGAZINE. Since we have no news from inside the club this month, let's just start with our usual news from outside the club:

On the occasion of its 20th anniversary, DX-Antwerp will broadcast a special commemorative programme, via Krasnodar Tbilisskaya in Russia, on the 25th of May 2002 between 08:00 and 09:00 UTC. Frequencies will be 17785 kHz (250 kW) and 9945 kHz (100 kW). A specially issued and very attractive QSL card will be available for correct reception reports. During this broadcast five keywords will be given. If you note at least 4 of these keywords, you can send them together with a reception report to the following address: DX-Antwerp, P.O. Box 16, B-2660 Hoboken, Belgium or e-mail to <qsl@dxa.be>. After verification of your reply, DX-Antwerp will send you this special DX-Antwerp QSL card by mail.



Anfang März ist die neue Ausgabe des **HÖRZU Radio Guide 2002/03** (4. Auflage) im Siebel Verlag, Auf dem Steinbüchel 6, D-53340 Meckenheim, erschienen. Verfasser des Buches sind Gerd Klawitter und Wolf Siebel. Auf 400 Seiten gibt das Buch einen aktuellen Überblick über alle Rundfunksender in Deutschland, Österreich und der Schweiz und zeigt, welche Sender und Programme heute mit dem Radio, über Kabel, über Satellit oder via Internet zu empfangen sind. Zu finden sind alle wichtigen Angaben über sämtliche Sender, detaillierte Sendertabellen und Frequenzlisten und zahlreiche Senderkarten. Zusätzliche Kapitel über Digitalradio (DAB), Radiohören im Auto, Rundfunk in den angrenzenden Ländern und viele weitere Informationen, Fotos und Abbildungen runden das Buch ab. Es ist für € 12,90 direkt vom Verlag oder im Buchhandel erhältlich (ISBN 3-89632-057-2).

Am Samstag, dem 25. Mai 2002 ab 13.00 Uhr treffen sich zum 3. Mal die ehemaligen Mitarbeiter und Freunde des im September 1994 eingestellten DX-Programmes **DX AKTUELL** von DS Kultur (siehe Abbildung der damaligen QSL-Karte in unserem DX MAGAZINE 7/2001 auf Seite 2). Das Treffen findet statt im Restaurant "Der Turm" (im umgebauten einstigen Wasserturm) auf dem Funkerberg in Königs Wusterhausen. Über zahlreiche Teilnehmer würde man sich freuen. Zu den beiden letzten Treffen (März 2000 und März 2001) kamen etwa 25 bis 30 Personen zusammen.
(Thomas Kubaczewski, Berlin)

And with this best wishes and good DX until next month from

0215-0230	6	Arabic/Iraqi	243	1233	600	205	38,39,40	1901-2001	1234	7	Hebrew	222	1350	1000	232	39
1929-1944	2	Arabic	243	1233	600	205	38,39,40	TRANS WORLD RADIO - GRIGORIOPOL, MOLDOVA								
1929-2100	1 345	Arabic	243	1233	600	205	38,39,40	1730-1745	67	Ukrainian	300	999	500	0	29	
1929-2115	67	Arabic	243	1233	600	205	38,39,40	1730-1800	12345	Ukrainian	300	999	500	0	29	
1944-1959	2	Arabic/Sudanese	243	1233	600	205	38,39,40	1745-1800	67	Russian	300	999	500	0	29	
1959-2100	2	Arabic	243	1233	600	205	38,39,40	1800-1830	1234567	Bulgarian	194	1548	1000	245	28	
TRANS WORLD RADIO CENTRAL ASIA								1830-1845	1234567	Romani/Balkan	194	1548	1000	245	28	
0300-0330	1234567	Armenian/East	347	864	1000	0	29	1845-1915	7	Macedonian	194	1548	1000	245	28 **	
1610-1625	1234567	English	347	864	1000	0	30,31	1845-1915	7	Serbian	194	1548	1000	245	28 **	
1625-1640	67	Russian	347	864	1000	0	30,31	1845-1915	7	Macedonian	194	1548	1000	245	28 **	
1625-1640	12345	Kazak	347	864	1000	0	30,31	1845-1915	7	Serbian	194	1548	1000	245	28	
1640-1655	567	Turkmen	347	864	1000	0	30,31	1845-1915	123456	Romani/Kalderash	194	1548	1000	245	28	
1640-1655	1234	Kirgis	347	864	1000	0	30,31	1900-1915	6	Russian	300	999	500	0	29	
1655-1710	1234567	Uzbek	347	864	1000	0	30	1900-1930	4	Ukrainian	300	999	500	0	29	
1710-1740	7	Tajiki	347	864	1000	0	30,31	1900-1930	23 5 7	Russian	300	999	500	0	29	
1710-1740	123456	Farsi	347	864	1000	0	39,40	1900-1930	1	Belorussian	300	999	500	0	29	
1740-1810	1234567	Farsi	347	864	1000	0	39,40	1915-1930	6	Ukrainian	300	999	500	0	29	
1810-1825	1234567	Kurdish/Sorani	347	864	1000	0	39	1915-1945	1234567	Rumanian	194	1548	1000	245	28	
1830-1900	1234567	Turkish	222	1350	1000	262	39	1945-2015	1234567	Serbian	194	1548	1000	245	28	
1901-1931	6	Hebrew	222	1350	1000	232	39	Day 1 = Mon .. 7 = Sun								
1901-1931	5	Russian	222	1350	1000	232	39									

(TWR via Alokesh Gupta; March 11, 2002)

CANADA: Final A02 short wave broadcast schedule effective 07.04.02 to 27.10.02 of **Radio Canada International - RCI**, published by RCI-Engineering.

UTC	FREQUENCY	kW	AZ	TARGET	PROGRAM	RMP	15325	500	61							
0000-0057	XIA KIM	11895 9640	120 100	188 225	S.E. Asia/China	English										
0030-0059		9590 11895 13670 15170 15305	250 250 250 250 250	240 176 240 240 176	USA/Caribb./ Lat.Am.	Spanish	1900-1959	SKN SKN FLE	5995 7235 15245	300 300 500	150 150 196		Europe/ N.W. Africa		French	
0100-0159		5960 13670 15170 15305	100 250 250 250	268 240 240 189	USA/Caribb./ Lat.Am.	English	1915-1944	VIE WER HBY	15200 17820 17630	100 500 350	115 120 135		Middle East		Arabic	
0200-0257	XIA XIA	15260 17860	120 120	258 258	India	English	2000-2059	HBY SKN SKN WER DHA	5850 5995 11690 11965 12015	300 300 300 500 250	230 150 110 180 230		Europe/ N.W. Africa/ Middle East		English	
0230-0259	HBY VIE	5840 11835	350 100	135 115	Middle East	Arabic		ARM	15325 15470 17870	250 100 250	60 188 60					
0330-0359	VIE WER	11945 13735	100 500	115 120	Middle East	Arabic										
1100-1159:30 (MON-FRI)		5990 9515 11910	100 250 250	268 212 212	N.E. USA	French	2100-2129	HBY SKN SKN	5850 7235 13690	300 350 300	230 150 180		Europe/ N.W. Africa/ Middle East		English	
1100-1259:30 (SAT-SUN)		5990 9515 11910	100 250 250	268 212 212	N.E. USA	French	2100-2129	WER	11920 17820	500 250	180 92		North Africa		Arabic	
1200-1259	YAM YAM	9660 15190	100 300	270 235	China	English	2130-2159	HBY FLE FLE	5850 7235 13690	350 500 500	230 196 196		Europe/ N.W. Africa/		French	
1200-1459:30 (MON-FRI)		9515 15305 17820	250 250 250	240 240 189	USA/Caribb.	MON-THU: English FRI: French *)			15325 17870	250 250	60 60					
1300-1329	KIM YAM YAM	9810 9660 15190	250 100 300	270 270 235	China	Chinese	2130-2159		9590 11920 17880	250 250 250	240 240 189		USA/Caribb./ Lat.Am.		French	
1300-1559:30 (SAT&SUN)		9515 15305 17800	250 250 250	240 240 189	USA/Caribb.	English	2200-2229:30		11920 15305 17880	100 250 250	240 176 189		USA/Caribb./ Lat.Am.		English	
1430-1459	KIM YAM YAM	6075 9680 11890	250 300 300	290 290 270	China	Chinese	2200-2229:30		6175 9590 13670 17695	250 250 250 250	268 240 240 240		USA/Caribb./ Lat.Am.		English	
1500-1557	XIA XIA	15455 17720	120 120	258 258	India	English	2200-2259	KIM YAM	11810 17835	300 300	305 235		China S.E. Asia		French	
1500-1529	MSK WER RMP WOF	9920 11935 15325 17820	250 300 500 300	84 75 61 70	Russia	Russian	2230-2359:30		6175 9590 13670 17695	250 250 250 250	268 240 240 240		USA		English	
1530-1559	SKN RMP	11935 15325	300 500	90 76	Ukraine	Ukrainian	2230-2259		11920 15305 17880	100 250 250	240 176 189		Caribb./ Lat. Am.		Spanish	
1600-1659:30		9515 13650 15305	250 250 250	240 240 227	USA/Caribb.	French	2300-2329	YAM SNG YAM	13660 15360 17835	100 100 300	270 13 235		China		Chinese	
1600-1629	WER RMP WOF	11935 15325 17820	300 500 300	75 61 70	Russia	Russian		KIM	11810	300	305					
1630-1659	SKN	11935	300	90	Ukraine	Ukrainian	2300-2359		5960 15305 17880	250 250 250	240 189 176		USA/Caribb.		French	

*) Language isn't clear in schedule, cause RCI doesn't give any information about the languages English or French. Only program titles are listed [Editor].

Transmitters:

ARM: ARMAVIR RELAY, RUSSIA
 ASC: ASCENSION RELAY, ASCENSION ISLAND
 DHA: DHABAYYA RELAY, UNITED ARAB EMIRATES
 HBV: HOERBY RELAY, SWEDEN
 KIM: KIMJAE RELAY, KOREA
 MDC: MADAGASCAR

MSK: MOSCOW RELAY, RUSSIA
 RMP: RAMPISHAM, ENGLAND
 SKN: SKELTON RELAY, ENGLAND
 SIN: SINES, PORTUGAL
 SNG: SINGAPORE RELAY, SINGAPORE
 VIE: VIENNA RELAY, AUSTRIA
 WOF: WOFFERTON, ENGLAND
 WER: WERTACHTAL RELAY, GERMANY
 XIA: XIAN RELAY, CHINA
 YAM: YAMATA RELAY, JAPAN

(RCI website. Last-Modified: 06 Mar 2002 via JKB)

CHINA (Peoples Rep.): CRI - China Radio International A02 schedules of English broadcasts, beginning Mar 31, 2002.

NoAmerica East Coast	1200-1300 1188*
2300-2400 5990(B)*	1400-1500 15110, 9700, 11675
0100-0200 9580(B)*	1500-1600 7160, 9785
0300-0400 9690(S)	The SoPacific
0400-0500 9730(G)	0900-1000 15210, 11730
1300-1400 9570(B)*	1000-1100 15210, 11730
1300-1400 1120AM (Washington D.C.)	1200-1300 11760, 9760, 15415
NoAmerica West Coast	1300-1400 11760, 11900
2300-2400 13680(C)	Ea and SoAfrica
0100-0200 9790(C)	1400-1600 13685(M), 15125(M)
0300-0400 9690(S)	1600-1700 9565, 9870
0400-0500 9730(G), 9560	1700-1800 9570, 11920, 15265, 9695*
1300-1400 7405	2000-2100 11640(M), 13630(M)
1400-1500 7405, 17720(B)	2100-2130 11640(M), 13630(M)
1400-1600 17720(B)	We and NoAfrica
Europe	1900-2000 9440, 13790
2000-2100 11790, 15110	2000-2100 9440
2100-2200 11790, 15110	*Testing Freqss
2200-2300 9880(R)	B - Relay from Cuba
2300-2330 558AM (London)	C - Relay from Canada
Southeast Asia	S - Relay from Spain
1200-1300 1341, 9730, 11980	G - Relay from Fr Guiana
1300-1400 1341, 15180, 11980	M - Relay from Mali
South Asia	R - Relay from Russia

(Lionel Carter, Mike Barraclough via WDXC via BC-DX #563, 2002 Feb 12)

CYPRUS: Radio Bayrak, reactivated recently, audible in E USA since early March after China s/off 2157, to 2202*. (Jerry Berg via NASWA via EDXP #24, 12 March 2002)

DENMARK: *Radio Denmark* A02 schedule (rev. 03/11/02), March 31 - October 26, 2002.

UTC	Target (primary target in brackets)	kHz	Tx	Beam			
1130-1155	*Europe, Mediterranean, Canary Islands	13800	S	180	New Zealand	11615	K 35
	North America (east), Carribean	18950	S	280	*Africa (west, central + south), Europe (south)	13800	K 180
1230-1255	Far East	15705	K	40	1930-1955 *Europe, Canary Islands	7490	S 180
	North America (east + central), Greenland	15735	S	300	*New Zealand	11615	K 35
	*South East Asia, Australia (west), Russia	18920	K	80	Africa (west, central + south), Europe (south)	13800	K 180
	*North America (east), Carribean	18950	S	280	North America (west), Greenland	15705	S 315
1330-1355	*Europe	9590	S	180	2030-2055 Europe, Canary Islands	7490	S 180
	*North America (east + central), Greenland	15735	S	300	*Australia (east)	9510	K 65
	*Far East	17525	K	40	2130-2155 Australia (east)	9510	K 65
	South East Asia, Australia (west), Russia	18920	K	80	2230-2255 South America	9925	S 235
1430-1455	South Asia, Middle East (north), Russia	15735	K	95	Far East	11620	K 35
	North America (west), Greenland	17525	S	315	2330-2355 South East Asia, Australia (west)	9920	K 80
1530-1555	Russia, Europe (south east), Middle East (east), South Asia	13800	K	110	*North America (east), Carribean	9945	S 280
	Middle East (north), South Asia, Russia	15735	K	95	*South America	9985	S 235
	*North America (west), Greenland	17525	S	315	*Far East	13710	K 35
1630-1655	*Europe	9595	S	180	0030-0055 *South East Asia, Australia (west)	9930	K 80
	*Russia, Europe (south east), Middle East (north), South Asia	13800	K	95	North America (east), Carribean	9985	S 280
	Europe (south east), Middle East (west), Africa (east)	15735	K	145	*North America (east + central), Greenland	11635	S 300
	North America (east), Carribean	17525	S	280	0130-0155 *South Asia	9975	K 95
1730-1755	*Europe	7490	S	180	*North America (east), Carribean, South America (north west)	9985	S 280
	Middle East (west)	13800	K	120	North America (east + central), Greenland	11635	S 300
	*Europe (south east), Middle East (west), Africa (east)	15705	K	145	0230-0255 South Asia	9975	K 95
	North America (east + central), Greenland	17505	S	300	0330-0355 Russia, Europe (south east), Middle East (north)	7490	K 95
1830-1855	Europe	7490	S	180	North America (west), Greenland	9960	S 315
					*Europe (south east), Middle East (west),		

0430-0455	Africa (east)	13800	K 145					Europe (south), Africa, New Zealand	13800	K 165
	Europe	7465	S 180					*Europe	7180	K 165
	*Russia, Europe (south east), Middle East (east)	7490	K 110					Europe, Canary Islands	9590	S 195
	*North America (west), Greenland	9475	S 315					Africa (west), Canary Islands, New Zealand	13800	S 220
	Europe (south east), Middle East (west), Africa (east)	13800	K 145					0830-0855 Middle East (east)	11640	K 110
0530-0555	Europe	7465	S 180					Australia, Europe (south west), Canary Islands, South America	13800	S 235
	Europe (south east), Middle East (west)	11615	K 120					0930-0955 *Australia, Europe (south west), Canary Islands, South America	13800	S 235
	*Europe (south), Africa	13800	K 165					*Far East, New Zealand	17505	K 40
0630-0655	*Europe, Canary Islands	7180	K 165					1030-1055 Europe, Mediterranean, Canary Islands	13800	S 180
	Europe (south west), Canary Islands, Africa (north west), New Zealand	9590	S 195					South America, Canary Islands	21745	S 235

Address: Radio Danmark, Radioavisen, Rosenorns Allé 22, DK-1999 Frederiksberg C, Denmark.
Telefax: +45 35 20 57 81.

e-mail: schedule, programme matters: rdk@dr.dk - technical, reports: rdktek@dr.dk

The schedule is also available by auto-reply email from: schedule@dr.dk

WWW: <http://www.dr.dk/rdk> or <http://www.dr.dk/radiodanmark>

The two daily news transmissions in Danish only are aired at 11.30 and 17.30 utc. Transmissions inbetween are repeats.

The technical letterbox programme, "Tune In" is heard bi-weekly on Saturdays in uneven weeks from 11.48 UT until 16.48 UT.

An asterisk (*) indicates that this transmission may be cancelled without warning.

Radio Denmark shares the Norwegian transmitters with Radio Norway. They Stations: Kvitsoy (K) and Sveio (S) each have two 500 kW transmitters. They are located on the Norwegian west coast near Stavanger and Haugesund at 05.27E 59.04N (K) and 05.19E 59.37N (S). Kvitsoy covers the Eastern Globe, while Sveio covers the Western Globe. Radio Denmark replies complete reports by a QSL-card. Although not necessary, return postage is appreciated (1 IRC, 1 Euro or 1 US dollar). Recordings (incl. RealAudio and MP3 email files) are accepted. Tapes, however, are not returned.

(RDK via Alokesh Gupta, March 11, 2002)

GERMANY: Operational Schedule A02 (version 1) of *Deutsche Welle - DW* by frequency planning department sorted by language than time.

Language	Start	Stop	kHz	Transmitter	kW	Azi.	Target										
ALBANIAN	0545	0600	7190	WERTACHTAL	500	135	EUR	BENGLI	0100	0150	15105	TRINCOMALE	250	025	SAS		
ALBANIAN	0545	0600	9750	NAUEN	500	150	EUR	BOSNIAN	0600	0615	199	DAB BERLIN	001	OND	BLN		
ALBANIAN	0545	0600	88000	PRSTINA	001	OND	KOSOVO	BOSNIAN	0600	0615	7190	WERTACHTAL	500	135	EUR		
ALBANIAN	0730	0800	199	DAB BERLIN	001	OND	BLN	BOSNIAN	0600	0615	9750	NAUEN	500	150	EUR		
ALBANIAN	0730	0800	7190	WERTACHTAL	500	120	EUR	BOSNIAN	0600	0615	88000	PRSTINA	001	OND	KOSOVO		
ALBANIAN	0730	0800	9650	WERTACHTAL	500	135	EUR	BOSNIAN	1130	1230	7170	WERTACHTAL	500	120	EUR		
ALBANIAN	0730	0800	88000	PRSTINA	001	OND	KOSOVO	BOSNIAN	1130	1230	9770	WERTACHTAL	500	135	EUR		
ALBANIAN	1100	1130	9770	WERTACHTAL	500	135	EUR	BOSNIAN	1830	1859	17810	SINES	250	075	EUR		
ALBANIAN	1100	1130	11905	WERTACHTAL	500	120	EUR	BOSNIAN	1830	1900	199	DAB BERLIN	001	OND	BLN		
ALBANIAN	1100	1130	88000	PRSTINA	001	OND	KOSOVO	BOSNIAN	1830	1900	15115	SINES	250	070	EUR		
ALBANIAN	1430	1530	810	OVEC POLE	100	OND	EUR	BULGARIAN	0500	0530	7190	WERTACHTAL	500	120	EUR		
ALBANIAN	1430	1530	17835	SINES	250	075	EUR	BULGARIAN	0500	0530	9750	NAUEN	500	135	EUR		
ALBANIAN	1430	1530	21590	SINES	250	075	EUR	BULGARIAN	0500	0530	95000	SOFIA	001	OND	SOFIA		
ALBANIAN	1430	1530	88000	PRSTINA	001	OND	KOSOVO	BULGARIAN	0930	1030	199	DAB BERLIN	001	OND	BLN		
ALBANIAN	1930	2000	199	DAB BERLIN	001	OND	BLN	BULGARIAN	0930	1030	11655	WERTACHTAL	500	105	EUR		
ALBANIAN	1930	2000	88000	PRSTINA	001	OND	KOSOVO	BULGARIAN	0930	1030	13790	NAUEN	500	130	EUR		
ALBANIAN	2015	2030	199	DAB BERLIN	001	OND	BLN	BULGARIAN	0930	1030	95000	SOFIA	001	OND	SOFIA		
ALBANIAN	2015	2030	1458	FLLAKA	500	004	EUR	BULGARIAN	1300	1330	15470	WERTACHTAL	500	105	EUR		
ALBANIAN	2015	2030	6130	WERTACHTAL	500	120	EUR	BULGARIAN	1300	1330	17875	SINES	250	075	EUR		
ALBANIAN	2015	2030	13790	SINES	250	065	EUR	BULGARIAN	1300	1330	95000	SOFIA	001	OND	SOFIA		
ALBANIAN	2015	2030	88000	PRSTINA	001	OND	KOSOVO	CHINESE	1030	1055	199	DAB BERLIN	001	OND	BLN		
AMHARIC	1400	1450	11810	KIGALI	250	OND	C/EAF	CHINESE	1030	1055	9760	PETROPAVL.	200	263	FE		
AMHARIC	1400	1450	15410	KIGALI	250	030	C/EAF	CHINESE	1030	1055	12045	IRKUTSK	500	152	FE		
AMHARIC	1400	1450	21840	WERTACHTAL	500	135	C/EAF	CHINESE	1030	1055	17715	TRINCOMALE	250	045	FE		
ARABIC	1300	1330	15595	SINES	250	100	NAF	CHINESE	1030	1055	17770	TRINCOMALE	250	060	FE		
ARABIC	1300	1330	17570	WERTACHTAL	500	210	NAF	CHINESE	1030	1055	21650	WERTACHTAL	500	060	FE		
ARABIC	1300	1330	17650	WERTACHTAL	500	150	NAF	CHINESE	1300	1350	9460	IRKUTSK	500	152	FE		
ARABIC	1400	1429	17570	WERTACHTAL	500	210	NAF	CHINESE	1300	1350	15275	TRINCOMALE	250	025	FE		
ARABIC	1400	1429	21560	TRINCOMALE	250	300	ME	CHINESE	1300	1350	17820	TRINCOMALE	250	060	FE		
ARABIC	1400	1430	13720	SINES	250	100	NAF	CHINESE	1300	1350	21650	WERTACHTAL	500	075	FE		
ARABIC	1400	1430	15470	WERTACHTAL	500	165	NAF	CHINESE	2300	2350	9790	TRINCOMALE	250	060	FE		
ARABIC	1430	1459	21560	WERTACHTAL	500	135	ME	CHINESE	2300	2350	11850	NAUEN	500	070	FE		
ARABIC	1430	1500	17485	WERTACHTAL	500	120	ME	CHINESE	2300	2350	11870	IRKUTSK	500	152	FE		
ARABIC	1600	1630	15195	WERTACHTAL	500	120	ME	CHINESE	2300	2350	15605	IRKUTSK	250	180	FE		
ARABIC	1600	1630	17875	WERTACHTAL	500	135	ME	CROATIAN	0800	0830	199	DAB BERLIN	001	OND	BLN		
ARABIC	2000	2130	6225	KRASNODAR	500	188	ME	CROATIAN	0800	0830	7190	WERTACHTAL	500	120	EUR		
ARABIC	2000	2130	9495	WERTACHTAL	500	165	NAF	CROATIAN	0800	0830	9650	WERTACHTAL	500	135	EUR		
ARABIC	2000	2130	9690	SINES	250	105	ME	CROATIAN	1230	1300	199	DAB BERLIN	001	OND	BLN		
ARABIC	2000	2130	11695	NAUEN	500	215	ME	CROATIAN	1230	1300	7170	WERTACHTAL	500	120	EUR		
ARABIC	2000	2130	13755	WERTACHTAL	500	120	ME	CROATIAN	1230	1300	9770	NAUEN	500	150	EUR		
ARABIC	2030	2130	199	DAB BERLIN	001	OND	BLN	DARI	0800	0815	15525	SAMARA	250	140	ME		
ARABIC	2100	2130	1350	EREVAN	999	232	NAF	DARI	0800	0815	17570	WERTACHTAL	500	090	ME		
BENGLI	0100	0150	9615	TRINCOMALE	250	015	SAS	DARI	1330	1400	17835	WERTACHTAL	500	090	ME		
BENGLI	0100	0150	13690	NAUEN	500	085	SAS	DARI	1330	1400	21590	WERTACHTAL	500	090	ME		
								DARI	1830	1845	9900	SAMARA	250	140	ME		

DARI	1830	1845	12045	WERTACHTAL	500	090	ME	ENGLISH	2100	2145	15135	KIGALI	250	295	WAF/AM
DARI	1830	1845	15200	TRINCOMALE	250	335	ME	ENGLISH	2100	2200	96000	KIGALI	002	0ND	KIG
DARI	1900	1915	972	DUSHANBE	999	0ND	ME	ENGLISH	2130	2200	199	DAB BERLIN	001	0ND	BLN
ENGLISH	0000	0100	199	DAB BERLIN	001	0ND	BLN	ENGLISH	2200	2300	199	DAB BERLIN	001	0ND	BLN
ENGLISH	0100	0145	6040	SACKVILLE	250	253	NAM	ENGLISH	2300	0000	199	DAB BERLIN	001	0ND	BLN
ENGLISH	0100	0145	9640	WERTACHTAL	500	300	N/CAM	ENGLISH	2300	0000	96000	KIGALI	002	0ND	KIG
ENGLISH	0100	0145	11810	ANTIGUA	250	340	NAM	ENGLISH	2300	2345	9815	WERTACHTAL	500	075	SAS/SEAS
ENGLISH	0100	0145	13720	SINES	250	290	N/CAM	ENGLISH	2300	2345	12000	TRINCOMALE	250	090	SAS/SEAS
ENGLISH	0100	0200	199	DAB BERLIN	001	0ND	BLN	ENGLISH	2300	2345	17560	KOMSOMOLSK	250	213	SAS/SEAS
ENGLISH	0100	0200	1548	TRINCOMALE	400	035	SAS	ENGLISH	2300	2345	21790	PETROPAVL.	250	247	SAS/SEAS
ENGLISH	0200	0245	1548	TRINCOMALE	400	035	SAS	FRENCH	0500	0515	199	DAB BERLIN	001	0ND	BLN
ENGLISH	0200	0245	11965	TRINCOMALE	250	345	SAS	FRENCH	0500	0515	7225	KIGALI	250	0ND	AF
ENGLISH	0200	0245	13720	WERTACHTAL	500	090	SAS	FRENCH	0500	0515	9565	KIGALI	250	210	AF
ENGLISH	0200	0245	15370	TRINCOMALE	250	025	SAS	FRENCH	0500	0515	11785	KIGALI	250	0ND	AF
ENGLISH	0200	0300	199	DAB BERLIN	001	0ND	BLN	FRENCH	0500	0515	13720	WERTACHTAL	500	180	AF
ENGLISH	0300	0345	9535	SACKVILLE	250	277	NAM	FRENCH	1200	1257	15410	KIGALI	250	0ND	AF
ENGLISH	0300	0345	9640	ANTIGUA	250	340	NAM	FRENCH	1200	1300	13790	SINES	250	100	NAF
ENGLISH	0300	0345	11935	SINES	250	305	N/CAM	FRENCH	1200	1300	17570	WERTACHTAL	500	210	WAF
ENGLISH	0300	0345	15105	BONAIRE	250	320	NAM	FRENCH	1200	1300	21665	WERTACHTAL	500	180	AF
ENGLISH	0400	0430	199	DAB BERLIN	001	0ND	BLN	FRENCH	1200	1300	21745	KIGALI	250	295	AF
ENGLISH	0400	0445	6180	KIGALI	250	180	AF	FRENCH	1200	1300	96000	KIGALI	002	0ND	KIG
ENGLISH	0400	0445	7225	KIGALI	250	0ND	AF	FRENCH	1500	1600	199	DAB BERLIN	001	0ND	BLN
ENGLISH	0400	0445	12045	SINES	250	130	AF	FRENCH	1500	1600	13790	SINES	250	115	ME
ENGLISH	0400	0445	13690	WERTACHTAL	500	150	AF	FRENCH	1500	1600	15135	KIGALI	250	0ND	C/EAF
ENGLISH	0400	0500	96000	KIGALI	002	0ND	KIG	FRENCH	1500	1600	17715	WERTACHTAL	500	180	WAF
ENGLISH	0500	0545	9670	ANTIGUA	250	340	NAM	FRENCH	1500	1600	21560	WERTACHTAL	500	210	WAF
ENGLISH	0500	0545	9785	SINES	250	315	NAM	FRENCH	1600	1658	15135	KIGALI	250	0ND	C/EAF
ENGLISH	0500	0545	11985	BONAIRE	250	320	NAM	FRENCH	1600	1659	17715	WERTACHTAL	500	180	WAF
ENGLISH	0500	0600	96000	KIGALI	002	0ND	KIG	FRENCH	1600	1700	13790	SINES	250	115	ME
ENGLISH	0600	0645	11925	SINES	250	180	WAF	FRENCH	1600	1700	21560	WERTACHTAL	500	210	WAF
ENGLISH	0600	0645	13790	SINES	250	150	AF	FRENCH	1700	1757	15390	KIGALI	250	0ND	C/EAF
ENGLISH	0600	0645	17860	WERTACHTAL	500	180	WAF	FRENCH	1700	1757	17765	KIGALI	250	295	WAF
ENGLISH	0600	0700	6140	JUELICH	100	130	EUR	FRENCH	1700	1759	17745	WERTACHTAL	500	180	WAF
ENGLISH	0600	0700	96000	KIGALI	002	0ND	KIG	FRENCH	1700	1800	13790	SINES	250	115	ME
ENGLISH	0700	0800	6140	JUELICH	100	130	EUR	FRENCH	1700	1800	15215	WERTACHTAL	500	165	WAF
ENGLISH	0800	0900	6140	JUELICH	100	130	EUR	FRENCH	1700	1800	96000	KIGALI	002	0ND	KIG
ENGLISH	0800	0900	96000	KIGALI	002	0ND	KIG	GERMAN	0000	0155	17875	TRINCOMALE	250	105	SEAS
ENGLISH	0900	0945	6160	ANTIGUA	250	205	OC	GERMAN	0000	0200	3995	WERTACHTAL	500	0ND	EUR
ENGLISH	0900	0945	9510	ANTIGUA	125	235	OC	GERMAN	0000	0200	6075	SINES	250	040	EUR
ENGLISH	0900	0945	9510	ANTIGUA	125	310	N/CAM	GERMAN	0000	0200	6075	WERTACHTAL	500	0ND	EUR
ENGLISH	0900	0945	12035	KIGALI	250	0ND	AF	GERMAN	0000	0200	7130	NAUEN	500	245	NAF
ENGLISH	0900	0945	15410	KIGALI	250	180	AF	GERMAN	0000	0200	9545	WERTACHTAL	500	240	LA
ENGLISH	0900	0945	15470	IRKUTSK	250	110	FE	GERMAN	0000	0200	11785	KIGALI	250	280	WAF/AM
ENGLISH	0900	0945	17715	KOMSOMOLSK	250	178	SEAS/OC	GERMAN	0000	0200	11920	WERTACHTAL	500	300	N/CAM
ENGLISH	0900	0945	17770	TRINCOMALE	250	120	SEAS/OC	GERMAN	0000	0200	13780	SINES	250	230	LA
ENGLISH	0900	0945	17800	TALATA VO.	200	245	EAF	GERMAN	0000	0200	15275	KIGALI	250	265	CAM
ENGLISH	0900	0945	17820	TRINCOMALE	250	090	SEAS	GERMAN	0000	0200	15410	ANTIGUA	250	340	N/CAM
ENGLISH	0900	0945	21560	KIGALI	250	295	AF	GERMAN	0000	0200	17860	KIGALI	250	085	SAS
ENGLISH	0900	0945	21780	WERTACHTAL	500	165	AF	GERMAN	0000	0200	88000	PRSTINA	001	0ND	KOSOVO
ENGLISH	0900	0945	21790	WERTACHTAL	500	090	SEAS/OC	GERMAN	0000	0200	95000	SOFIA	001	0ND	SOFIA
ENGLISH	0900	1000	6140	JUELICH	100	130	EUR	GERMAN	0000	0200	96000	KIGALI	002	0ND	KIG
ENGLISH	0900	1000	96000	KIGALI	002	0ND	KIG	GERMAN	0200	0300	693	MOSKVA	010	0ND	MOSKAU
ENGLISH	1000	1100	6140	JUELICH	100	130	EUR	GERMAN	0200	0300	1188	ST.PETERB.	010	0ND	PETERSBG
ENGLISH	1100	1145	11785	KIGALI	250	0ND	C/EAF	GERMAN	0200	0300	96000	KIGALI	002	0ND	KIG
ENGLISH	1100	1145	15410	KIGALI	250	180	AF	GERMAN	0200	0355	11785	KIGALI	250	330	WAF/AM
ENGLISH	1100	1145	17860	WERTACHTAL	500	210	AF	GERMAN	0200	0400	3995	WERTACHTAL	500	0ND	EUR
ENGLISH	1100	1145	21665	KIGALI	250	295	AF	GERMAN	0200	0400	6075	ANTIGUA	250	340	NAM
ENGLISH	1100	1200	199	DAB BERLIN	001	0ND	BLN	GERMAN	0200	0400	6075	SINES	250	040	EUR
ENGLISH	1100	1200	6140	JUELICH	100	130	EUR	GERMAN	0200	0400	6075	WERTACHTAL	500	0ND	EUR
ENGLISH	1100	1200	96000	KIGALI	002	0ND	KIG	GERMAN	0200	0400	6100	WERTACHTAL	500	300	N/CAM
ENGLISH	1200	1300	6140	JUELICH	100	130	EUR	GERMAN	0200	0400	9735	NAUEN	500	305	NAM
ENGLISH	1300	1400	6140	JUELICH	100	130	EUR	GERMAN	0200	0400	11795	NAUEN	500	145	AF
ENGLISH	1400	1500	6140	JUELICH	100	130	EUR	GERMAN	0200	0400	15205	TRINCOMALE	250	345	SAS
ENGLISH	1500	1555	6140	JUELICH	100	130	EUR	GERMAN	0200	0400	88000	PRSTINA	001	0ND	KOSOVO
ENGLISH	1555	1600	6140	WERTACHTAL	125	120	EUR	GERMAN	0200	0400	95000	SOFIA	001	0ND	SOFIA
ENGLISH	1600	1630	199	DAB BERLIN	001	0ND	BLN	GERMAN	0300	0400	9735	NAUEN	500	060	GUS
ENGLISH	1600	1645	1548	TRINCOMALE	400	035	SAS	GERMAN	0400	0500	95000	SOFIA	001	0ND	SOFIA
ENGLISH	1600	1645	6170	TRINCOMALE	250	015	SAS	GERMAN	0400	0545	88000	PRSTINA	001	0ND	KOSOVO
ENGLISH	1600	1645	7225	TRINCOMALE	250	345	SAS	GERMAN	0400	0555	6075	ANTIGUA	250	340	NAM
ENGLISH	1600	1645	9735	KIGALI	250	0ND	AF	GERMAN	0400	0555	6075	SINES	250	040	EUR
ENGLISH	1600	1645	11665	KIGALI	250	180	AF	GERMAN	0400	0555	6075	WERTACHTAL	500	0ND	EUR
ENGLISH	1600	1645	17595	WERTACHTAL	500	090	SAS	GERMAN	0400	0555	9735	NAUEN	500	060	GUS
ENGLISH	1600	1645	21840	NAUEN	500	170	AF	GERMAN	0400	0555	9735	NAUEN	500	305	NAM
ENGLISH	1600	1700	6140	WERTACHTAL	125	120	EUR	GERMAN	0400	0555	13780	NAUEN	500	175	AF
ENGLISH	1600	1700	96000	KIGALI	002	0ND	KIG	GERMAN	0400	0555	17810	WERTACHTAL	500	150	AF
ENGLISH	1700	1800	6140	WERTACHTAL	125	120	EUR	GERMAN	0400	0600	693	MOSKVA	010	0ND	MOSKAU
ENGLISH	1800	1830	199	DAB BERLIN	001	0ND	BLN	GERMAN	0400	0600	1188	ST.PETERB.	010	0ND	PETERSBG
ENGLISH	1800	1900	6140	WERTACHTAL	125	120	EUR	GERMAN	0400	0600	3995	WERTACHTAL	500	0ND	EUR
ENGLISH	1900	1945	11805	KIGALI	250	295	WAF	GERMAN	0400	0600	6100	WERTACHTAL	500	300	N/CAM
ENGLISH	1900	1945	11965	TRINCOMALE	250	240	AF	GERMAN	0400	0600	9640	SACKVILLE	250	268	N/CAM
ENGLISH	1900	1945	13720	WERTACHTAL	500	210	WAF	GERMAN	0400	0600	9700	KIGALI	250	190	AF
ENGLISH	1900	1945	15390	KIGALI	250	280	WAF	GERMAN	0500	0600	9735	WERTACHTAL	500	255	OC
ENGLISH	1900	1945	17810	TRINCOMALE	250	270	AF	GERMAN	0530	0600	95000	SOFIA	001	0ND	SOFIA
ENGLISH	1900	2000	96000	KIGALI	002	0ND	KIG	GERMAN	0555	0630	6075	SINES	250	040	EUR
ENGLISH	2000	2045	6140	WERTACHTAL	500	300	EUR	GERMAN	0558	0800	6075	WERTACHTAL	500	0ND	EUR
ENGLISH	2000	2100	96000	KIGALI	002	0ND	KIG	GERMAN	0558	0800	13780	WERTACHTAL	500	120	SEUR/ME
ENGLISH	2100	2145	9670	TRINCOMALE	250	120	SEAS/OC	GERMAN	0600	0800	693	MOSKVA	010	0ND	MOSKAU
ENGLISH	2100	2145	9765	WERTACHTAL	500	090	SEAS/OC	GERMAN	0600	0800	1188	ST.PETERB.	010	0ND	PETERSBG
ENGLISH	2100	2145	9875	KIGALI	250	295	WAF	GERMAN	0600	0800	9545	NAUEN	500	230	SWEUR
ENGLISH	2100	2145	11865	WERTACHTAL	500	195	WAF	GERMAN	0600	0800	9690	ANTIGUA	250	205	OC
ENGLISH	2100	2145	11915	TRINCOMALE	250	105	SEAS/OC	GERMAN	0600	0800	9735	WERTACHTAL	500	255	OC

GERMAN	0600	0800	11795	WERTACHTAL	500	270	OC	GERMAN	1600	1759	17845	WERTACHTAL	500	135	ME
GERMAN	0600	0800	11865	NAUEN	500	060	GUS	GERMAN	1600	1800	9545	NAUEN	500	230	SWEUR
GERMAN	0600	0800	11985	ANTIGUA	250	270	OC	GERMAN	1600	1800	9655	TRINCOMALE	250	005	SAS
GERMAN	0600	0800	17845	NAUEN	500	090	SEAS/OC	GERMAN	1600	1800	95000	SOFIA	001	0ND	SOFIA
GERMAN	0600	0800	21640	TRINCOMALE	250	120	SEAS/OC	GERMAN	1700	1730	88000	PRSTINA	001	0ND	KOSOVO
GERMAN	0600	0800	21840	WERTACHTAL	500	165	AF	GERMAN	1700	1800	1548	TRINCOMALE	400	035	SAS
GERMAN	0600	0800	95000	SOFIA	001	0ND	SOFIA	GERMAN	1758	2000	15275	WERTACHTAL	500	195	WAF/LA
GERMAN	0700	0730	88000	PRSTINA	001	0ND	KOSOVO	GERMAN	1800	1900	96000	KIGALI	002	0ND	KIG
GERMAN	0700	0800	96000	KIGALI	002	0ND	KIG	GERMAN	1800	1930	88000	PRSTINA	001	0ND	KOSOVO
GERMAN	0800	0930	95000	SOFIA	001	0ND	SOFIA	GERMAN	1800	2000	1548	TRINCOMALE	400	035	SAS
GERMAN	0800	0955	11865	NAUEN	500	060	GUS	GERMAN	1800	2000	6075	SINES	250	040	EUR
GERMAN	0800	0955	17845	NAUEN	500	090	SEAS/OC	GERMAN	1800	2000	6075	WERTACHTAL	500	0ND	EUR
GERMAN	0800	0959	21640	TRINCOMALE	250	120	SEAS/OC	GERMAN	1800	2000	6075	WERTACHTAL	500	135	SEUR/ME
GERMAN	0800	1000	693	MOSKVA	010	0ND	MOSKAU	GERMAN	1800	2000	7185	NAUEN	500	160	AF
GERMAN	0800	1000	1188	ST.PETERB.	010	0ND	PETERSBG	GERMAN	1800	2000	9545	NAUEN	500	230	SWEUR
GERMAN	0800	1000	6075	WERTACHTAL	500	0ND	EUR	GERMAN	1800	2000	9735	KIGALI	250	180	AF
GERMAN	0800	1000	9545	NAUEN	500	230	SWEUR	GERMAN	1800	2000	9790	TRINCOMALE	250	120	SEAS/OC
GERMAN	0800	1000	9690	ANTIGUA	250	205	OC	GERMAN	1800	2000	11795	WERTACHTAL	500	165	AF
GERMAN	0800	1000	9735	WERTACHTAL	500	180	EUR	GERMAN	1800	2000	13780	WERTACHTAL	500	150	AF
GERMAN	0800	1000	11795	WERTACHTAL	500	270	OC	GERMAN	1800	2000	17860	KIGALI	250	295	WAF/AM
GERMAN	0800	1000	13780	WERTACHTAL	500	120	SEUR/ME	GERMAN	1800	2000	95000	SOFIA	001	0ND	SOFIA
GERMAN	0800	1000	88000	PRSTINA	001	0ND	KOSOVO	GERMAN	2000	2155	9790	TRINCOMALE	250	120	SEAS/OC
GERMAN	0900	1000	15135	KIGALI	250	0ND	AF	GERMAN	2000	2155	17810	ANTIGUA	250	300	NAM
GERMAN	1000	1100	88000	PRSTINA	001	0ND	KOSOVO	GERMAN	2000	2200	693	MOSKVA	010	0ND	MOSKAU
GERMAN	1000	1150	11985	ANTIGUA	250	340	N/CAM	GERMAN	2000	2200	1188	ST.PETERB.	010	0ND	PETERSBG
GERMAN	1000	1155	15135	KIGALI	250	0ND	AF	GERMAN	2000	2200	3995	WERTACHTAL	500	0ND	EUR
GERMAN	1000	1200	693	MOSKVA	010	0ND	MOSKAU	GERMAN	2000	2200	6075	SINES	250	040	EUR
GERMAN	1000	1200	1188	ST.PETERB.	010	0ND	PETERSBG	GERMAN	2000	2200	6075	WERTACHTAL	500	0ND	EUR
GERMAN	1000	1200	1548	TRINCOMALE	400	035	SAS	GERMAN	2000	2200	7185	NAUEN	500	160	AF
GERMAN	1000	1200	6075	WERTACHTAL	500	0ND	EUR	GERMAN	2000	2200	9545	NAUEN	500	230	WAF/LA
GERMAN	1000	1200	7420	PETROPAVL.	250	241	FE	GERMAN	2000	2200	9735	KIGALI	250	180	AF
GERMAN	1000	1200	9545	NAUEN	500	230	SWEUR	GERMAN	2000	2200	11795	WERTACHTAL	500	165	AF
GERMAN	1000	1200	9900	IRKUTSK	250	152	SAS/SEAS	GERMAN	2000	2200	13780	WERTACHTAL	500	150	AF
GERMAN	1000	1200	13780	WERTACHTAL	500	120	SEUR/ME	GERMAN	2000	2200	15275	WERTACHTAL	500	195	WAF/LA
GERMAN	1000	1200	15490	NOVOSIBIR.	500	145	SEAS/OC	GERMAN	2000	2200	17810	ANTIGUA	250	160	LA
GERMAN	1000	1200	17485	WERTACHTAL	500	120	ME	GERMAN	2000	2200	17860	KIGALI	250	295	WAF/AM
GERMAN	1000	1200	17560	WERTACHTAL	500	240	WAF	GERMAN	2000	2200	95000	SOFIA	001	0ND	SOFIA
GERMAN	1000	1200	21640	TRINCOMALE	250	060	FE	GERMAN	2030	2200	88000	PRSTINA	001	0ND	KOSOVO
GERMAN	1000	1200	21790	NAUEN	500	090	SAS/SEAS	GERMAN	2200	0000	3995	WERTACHTAL	500	0ND	EUR
GERMAN	1000	1200	21840	NAUEN	500	060	GUS	GERMAN	2200	0000	6075	SINES	250	040	EUR
GERMAN	1030	1200	95000	SOFIA	001	0ND	SOFIA	GERMAN	2200	0000	6075	WERTACHTAL	500	0ND	EUR
GERMAN	1100	1200	17650	SINES	250	025	EUR	GERMAN	2200	0000	9545	WERTACHTAL	500	240	LA
GERMAN	1130	1200	88000	PRSTINA	001	0ND	KOSOVO	GERMAN	2200	0000	11785	KIGALI	250	280	CAM
GERMAN	1155	1400	15135	KIGALI	250	180	AF	GERMAN	2200	0000	11795	IRKUTSK	500	152	SAS/SEAS
GERMAN	1200	1300	17650	SINES	250	025	EUR	GERMAN	2200	0000	11895	NAUEN	500	090	SAS/SEAS
GERMAN	1200	1300	95000	SOFIA	001	0ND	SOFIA	GERMAN	2200	0000	12070	IRKUTSK	250	110	FE
GERMAN	1200	1330	88000	PRSTINA	001	0ND	KOSOVO	GERMAN	2200	0000	13780	SINES	250	230	LA
GERMAN	1200	1355	17485	WERTACHTAL	500	120	ME	GERMAN	2200	0000	13780	WERTACHTAL	500	300	N/CAM
GERMAN	1200	1355	21640	TRINCOMALE	250	060	FE	GERMAN	2200	0000	15275	KIGALI	250	265	CAM
GERMAN	1200	1355	21840	NAUEN	500	060	GUS	GERMAN	2200	0000	15410	ANTIGUA	250	340	N/CAM
GERMAN	1200	1359	17730	ANTIGUA	250	160	LA	GERMAN	2200	0000	17860	KIGALI	250	295	CAM
GERMAN	1200	1359	17730	ANTIGUA	250	340	N/CAM	GERMAN	2200	0000	88000	PRSTINA	001	0ND	KOSOVO
GERMAN	1200	1400	693	MOSKVA	010	0ND	MOSKAU	GERMAN	2200	0000	95000	SOFIA	001	0ND	SOFIA
GERMAN	1200	1400	1188	ST.PETERB.	010	0ND	PETERSBG	GERMAN	2200	2300	96000	KIGALI	002	0ND	KIG
GERMAN	1200	1400	1548	TRINCOMALE	400	035	SAS	GERMAN	2200	2355	15250	TRINCOMALE	250	060	FE
GERMAN	1200	1400	6075	WERTACHTAL	500	0ND	EUR	HAUSA	0700	0730	199	DAB BERLIN	001	0ND	BLN
GERMAN	1200	1400	7420	PETROPAVL.	250	241	FE	HAUSA	0700	0730	13790	SINES	250	160	WAF
GERMAN	1200	1400	9545	NAUEN	500	230	SWEUR	HAUSA	0700	0730	15275	SINES	250	140	WAF
GERMAN	1200	1400	9900	IRKUTSK	250	152	SAS/SEAS	HAUSA	0700	0730	17860	WERTACHTAL	500	180	WAF
GERMAN	1200	1400	13780	WERTACHTAL	500	120	SEUR/ME	HAUSA	1300	1350	15410	KIGALI	250	295	AF
GERMAN	1200	1400	15490	NOVOSIBIR.	500	145	SEAS/OC	HAUSA	1300	1350	17800	KIGALI	250	310	AF
GERMAN	1200	1400	15650	MOSKVA	500	068	GUS	HAUSA	1300	1350	21665	WERTACHTAL	500	180	AF
GERMAN	1200	1400	17560	WERTACHTAL	500	240	WAF	HAUSA	1300	1350	21745	KIGALI	250	295	AF
GERMAN	1200	1400	21790	NAUEN	500	090	SAS/SEAS	HAUSA	1800	1900	11805	KIGALI	250	295	WAF
GERMAN	1300	1400	96000	KIGALI	002	0ND	KIG	HAUSA	1800	1900	15390	KIGALI	250	280	WAF
GERMAN	1330	1400	95000	SOFIA	001	0ND	SOFIA	HAUSA	1800	1900	17845	WERTACHTAL	500	180	WAF
GERMAN	1400	1429	1548	TRINCOMALE	400	035	SAS	HINDI	1515	1600	1548	TRINCOMALE	400	035	SAS
GERMAN	1400	1500	96000	KIGALI	002	0ND	KIG	HINDI	1515	1600	6170	TRINCOMALE	250	015	SAS
GERMAN	1400	1555	6075	WERTACHTAL	500	0ND	EUR	HINDI	1515	1600	7225	TRINCOMALE	250	345	SAS
GERMAN	1400	1600	1512	WOLVERTEM	025	0ND	EUR	HINDI	1515	1600	17595	WERTACHTAL	500	090	SAS
GERMAN	1400	1600	9545	NAUEN	500	230	SWEUR	INDONESIAN	1200	1250	15105	TRINCOMALE	250	105	SEAS
GERMAN	1400	1600	9655	TRINCOMALE	250	005	SAS	INDONESIAN	1200	1250	17820	TRINCOMALE	250	120	SEAS
GERMAN	1400	1600	13780	WERTACHTAL	500	120	SEUR/ME	INDONESIAN	1200	1250	21650	WERTACHTAL	500	090	SEAS
GERMAN	1400	1600	15275	KIGALI	250	030	ME	INDONESIAN	2200	2250	9670	TRINCOMALE	250	120	SEAS
GERMAN	1400	1600	15515	SACKVILLE	250	272	N/CAM	INDONESIAN	2200	2250	9815	NAUEN	500	085	SEAS
GERMAN	1400	1600	15650	MOSKVA	500	068	GUS	INDONESIAN	2200	2250	11915	TRINCOMALE	250	105	SEAS
GERMAN	1400	1600	17560	WERTACHTAL	500	240	WAF	MACEDONIAN	0630	0700	199	DAB BERLIN	001	0ND	BLN
GERMAN	1400	1600	17730	ANTIGUA	250	300	NAM	MACEDONIAN	0630	0700	810	OVEC POLE	100	0ND	EUR
GERMAN	1400	1600	17765	ANTIGUA	250	160	LA	MACEDONIAN	0630	0700	7190	WERTACHTAL	500	135	EUR
GERMAN	1400	1600	17845	NAUEN	500	100	SAS	MACEDONIAN	0630	0700	9750	NAUEN	500	150	EUR
GERMAN	1400	1600	17845	WERTACHTAL	500	135	ME	MACEDONIAN	0630	0700	88000	PRSTINA	001	0ND	KOSOVO
GERMAN	1400	1600	21790	NAUEN	500	090	SAS	MACEDONIAN	0900	0930	9770	WERTACHTAL	500	120	EUR
GERMAN	1400	1600	95000	SOFIA	001	0ND	SOFIA	MACEDONIAN	0900	0930	11905	WERTACHTAL	500	120	EUR
GERMAN	1557	1800	6075	WERTACHTAL	500	0ND	EUR	MACEDONIAN	1300	1330	199	DAB BERLIN	001	0ND	BLN
GERMAN	1600	1700	15515	SACKVILLE	250	272	N/CAM	MACEDONIAN	1300	1330	7170	WERTACHTAL	500	120	EUR
GERMAN	1600	1700	17730	ANTIGUA	250	300	NAM	MACEDONIAN	1300	1330	9770	NAUEN	500	150	EUR
GERMAN	1600	1700	17765	ANTIGUA	250	160	LA	MACEDONIAN	1530	1600	810	OVEC POLE	100	0ND	EUR
GERMAN	1600	1755	15275	KIGALI	250	030	ME	MACEDONIAN	1530	1600	17835	SINES	250	075	EUR
GERMAN	1600	1755	17845	NAUEN	500	100	SAS	MACEDONIAN	1530	1600	21590	SINES	250	075	EUR
GERMAN	1600	1755	21790	NAUEN	500	090	SAS	MACEDONIAN	1530	1600	88000	PRSTINA	001	0ND	KOSOVO
GERMAN	1600	1758	13780	WERTACHTAL	500										

MACEDONIAN	1900	1930	15525	SINES	250	070	EUR	RUSSIAN	1600	1700	9800	IRKUTSK	100	263	GUS
PASHTO	0815	0830	15525	SAMARA	250	140	ME	RUSSIAN	1600	1700	11915	WERTACHTAL	500	075	GUS
PASHTO	0815	0830	17570	WERTACHTAL	500	090	ME	RUSSIAN	1600	1700	15425	WERTACHTAL	500	075	GUS
PASHTO	1400	1420	17835	WERTACHTAL	500	090	ME	RUSSIAN	1700	1759	15425	WERTACHTAL	500	075	GUS
PASHTO	1400	1420	21590	WERTACHTAL	500	090	ME	RUSSIAN	1700	1800	693	MOSKVA	010	OND	MOSKAU
PASHTO	1845	1859	15200	TRINCOMALE	250	335	ME	RUSSIAN	1700	1800	1188	ST.PETERB.	010	OND	PETERSBG
PASHTO	1845	1900	9900	SAMARA	250	140	ME	RUSSIAN	1700	1800	9715	WERTACHTAL	500	045	GUS
PASHTO	1845	1900	12045	WERTACHTAL	500	090	ME	RUSSIAN	1700	1800	9800	IRKUTSK	100	263	GUS
PASHTO	1915	1930	972	DUSHANBE	999	OND	ME	RUSSIAN	1700	1800	11915	WERTACHTAL	500	075	GUS
PERSIAN	0900	0930	17570	WERTACHTAL	500	105	ME	RUSSIAN	1800	1900	693	MOSKVA	010	OND	MOSKAU
PERSIAN	0900	0930	17675	KRASNODAR	250	128	ME	RUSSIAN	1800	1900	999	GRIGORIOPO	500	OND	GUS
PERSIAN	0900	0930	21840	WERTACHTAL	500	090	ME	RUSSIAN	1800	1900	1188	ST.PETERB.	010	OND	PETERSBG
PERSIAN	1230	1300	15245	WERTACHTAL	500	090	ME	RUSSIAN	1800	1900	5955	NAUEN	500	090	GUS
PERSIAN	1230	1300	17545	SAMARA	250	175	ME	RUSSIAN	1800	1900	9715	WERTACHTAL	500	045	GUS
PERSIAN	1700	1800	199	DAB BERLIN	001	OND	BLN	RUSSIAN	1800	1900	11915	WERTACHTAL	500	075	GUS
PERSIAN	1700	1800	9835	SAMARA	250	175	ME	RUSSIAN	1900	1930	199	DAB BERLIN	001	OND	BLN
PERSIAN	1700	1800	15360	NAUEN	500	100	ME	RUSSIAN	1900	1959	9715	WERTACHTAL	500	045	GUS
POLISH	1200	1230	199	DAB BERLIN	001	OND	BLN	RUSSIAN	1900	2000	693	MOSKVA	010	OND	MOSKAU
POLISH	1200	1230	7130	WERTACHTAL	500	045	EUR	RUSSIAN	1900	2000	1188	ST.PETERB.	010	OND	PETERSBG
POLISH	1200	1230	9735	WERTACHTAL	500	045	EUR	RUSSIAN	1900	2000	5955	NAUEN	500	090	GUS
POLISH	1630	1700	199	DAB BERLIN	001	OND	BLN	RUSSIAN	1900	2000	11915	WERTACHTAL	500	075	GUS
POLISH	1630	1700	15595	SINES	250	040	EUR	SERBIAN	0615	0630	199	DAB BERLIN	001	OND	BLN
PORTUGUESE	0515	0530	199	DAB BERLIN	001	OND	BLN	SERBIAN	0615	0630	7190	WERTACHTAL	500	135	EUR
PORTUGUESE	0515	0530	9565	KIGALI	250	210	AF	SERBIAN	0615	0630	9750	NAUEN	500	150	EUR
PORTUGUESE	0515	0530	11785	KIGALI	250	OND	AF	SERBIAN	0615	0630	88000	PRSTINA	001	OND	KOSOVO
PORTUGUESE	0515	0530	17860	WERTACHTAL	500	165	AF	SERBIAN	0930	1000	9770	WERTACHTAL	500	120	EUR
PORTUGUESE	2000	2050	7285	KIGALI	250	180	AF	SERBIAN	0930	1000	11905	WERTACHTAL	500	120	EUR
PORTUGUESE	2000	2050	9875	KIGALI	250	210	AF	SERBIAN	1330	1430	7170	WERTACHTAL	500	120	EUR
PORTUGUESE	2000	2050	12045	WERTACHTAL	500	225	AF	SERBIAN	1330	1430	9770	NAUEN	500	150	EUR
PORTUGUESE	2000	2050	17485	WERTACHTAL	500	165	AF	SERBIAN	1330	1430	88000	PRSTINA	001	OND	KOSOVO
ROMANES	1730	1800	7170	WERTACHTAL	500	120	EUR	SERBIAN	1600	1700	810	OVEC POLE	100	OND	EUR
ROMANES	1730	1800	17835	SINES	250	075	EUR	SERBIAN	1600	1700	7185	WERTACHTAL	500	120	EUR
ROMANES	1730	1800	88000	PRSTINA	001	OND	KOSOVO	SERBIAN	1600	1700	17835	SINES	250	075	EUR
ROMANIAN	0830	0930	199	DAB BERLIN	001	OND	BLN	SERBIAN	1600	1700	88000	PRSTINA	001	OND	KOSOVO
ROMANIAN	0830	0930	11655	WERTACHTAL	500	105	EUR	SERBIAN	2000	2015	199	DAB BERLIN	001	OND	BLN
ROMANIAN	0830	0930	13790	NAUEN	500	130	EUR	SERBIAN	2000	2015	1458	FLLAKA	500	004	EUR
ROMANIAN	1100	1200	11865	WERTACHTAL	500	090	EUR	SERBIAN	2000	2015	6130	WERTACHTAL	500	120	EUR
ROMANIAN	1100	1200	13790	NAUEN	500	130	EUR	SERBIAN	2000	2015	13790	SINES	250	065	EUR
RUSSIAN	0000	0059	11865	TRINCOMALE	250	345	GUS	SERBIAN	2000	2015	88000	PRSTINA	001	OND	KOSOVO
RUSSIAN	0000	0059	15135	TRINCOMALE	250	025	GUS	SWAHILI	0300	0400	199	DAB BERLIN	001	OND	BLN
RUSSIAN	0000	0100	5925	SAMARA	200	117	GUS	SWAHILI	0300	0400	6180	KIGALI	250	180	AF
RUSSIAN	0000	0100	9690	WERTACHTAL	500	060	GUS	SWAHILI	0300	0400	7225	KIGALI	250	OND	AF
RUSSIAN	0000	0100	12045	PETROPAVL.	250	263	GUS	SWAHILI	0300	0400	12045	SINES	250	130	AF
RUSSIAN	0000	0100	13690	VLADIVOST.	200	320	GUS	SWAHILI	0300	0400	13690	WERTACHTAL	500	150	AF
RUSSIAN	0100	0200	7105	NAUEN	500	080	GUS	SWAHILI	0300	0400	96000	KIGALI	002	OND	KIG
RUSSIAN	0100	0200	9490	WERTACHTAL	500	075	GUS	SWAHILI	1000	1050	9565	KIGALI	250	OND	AF
RUSSIAN	0200	0300	15605	NOVOSIBIR.	500	240	ZAS	SWAHILI	1000	1050	11785	KIGALI	250	265	AF
RUSSIAN	0300	0400	693	MOSKVA	010	OND	MOSKAU	SWAHILI	1000	1050	15410	KIGALI	250	180	AF
RUSSIAN	0300	0400	1188	ST.PETERB.	010	OND	PETERSBG	SWAHILI	1000	1050	21780	WERTACHTAL	500	150	AF
RUSSIAN	0300	0400	7105	WERTACHTAL	500	045	GUS	SWAHILI	1000	1100	96000	KIGALI	002	OND	KIG
RUSSIAN	0300	0400	9545	WERTACHTAL	500	075	GUS	SWAHILI	1500	1600	9735	KIGALI	250	OND	AF
RUSSIAN	0300	0400	15605	NOVOSIBIR.	500	240	ZAS	SWAHILI	1500	1600	11665	KIGALI	250	180	AF
RUSSIAN	0400	0500	9545	WERTACHTAL	500	045	GUS	SWAHILI	1500	1600	21840	NAUEN	500	170	AF
RUSSIAN	0400	0500	11655	WERTACHTAL	500	075	GUS	SWAHILI	1500	1600	96000	KIGALI	002	OND	KIG
RUSSIAN	0500	0530	999	GRIGORIOPO	500	OND	GUS	TURKISH	0530	0600	199	DAB BERLIN	001	OND	BLN
RUSSIAN	0500	0530	9545	WERTACHTAL	500	045	GUS	TURKISH	0530	0600	11865	WERTACHTAL	500	105	SEUR/ME
RUSSIAN	0500	0530	11655	WERTACHTAL	500	075	GUS	TURKISH	0530	0600	15215	WERTACHTAL	500	105	SEUR/ME
RUSSIAN	1400	1500	199	DAB BERLIN	001	OND	BLN	TURKISH	1330	1359	17650	WERTACHTAL	500	105	SEUR/ME
RUSSIAN	1400	1500	693	MOSKVA	010	OND	MOSKAU	TURKISH	1330	1400	199	DAB BERLIN	001	OND	BLN
RUSSIAN	1400	1500	1188	ST.PETERB.	010	OND	PETERSBG	TURKISH	1330	1400	15470	WERTACHTAL	500	105	SEUR/ME
RUSSIAN	1400	1500	9800	IRKUTSK	100	263	GUS	TURKISH	1730	1800	7170	WERTACHTAL	500	120	EUR
RUSSIAN	1400	1500	11915	WERTACHTAL	500	075	GUS	TURKISH	1730	1800	17835	SINES	250	075	EUR
RUSSIAN	1400	1500	13840	WERTACHTAL	500	045	GUS	TURKISH	1730	1800	88000	PRSTINA	001	OND	KOSOVO
RUSSIAN	1400	1500	15425	WERTACHTAL	500	060	GUS	UKRAINIAN	0430	0500	199	DAB BERLIN	001	OND	BLN
RUSSIAN	1500	1559	13840	WERTACHTAL	500	045	GUS	UKRAINIAN	0430	0500	999	GRIGORIOPO	500	OND	GUS
RUSSIAN	1500	1600	693	MOSKVA	010	OND	MOSKAU	UKRAINIAN	0430	0500	9780	WERTACHTAL	500	075	GUS
RUSSIAN	1500	1600	999	GRIGORIOPO	500	OND	GUS	UKRAINIAN	0430	0500	11820	WERTACHTAL	500	075	GUS
RUSSIAN	1500	1600	1188	ST.PETERB.	010	OND	PETERSBG	URDU	1430	1514	15470	TRINCOMALE	250	335	SAS
RUSSIAN	1500	1600	9800	IRKUTSK	100	263	GUS	URDU	1430	1515	1548	TRINCOMALE	400	035	SAS
RUSSIAN	1500	1600	11915	WERTACHTAL	500	075	GUS	URDU	1430	1515	7225	TRINCOMALE	250	345	SAS
RUSSIAN	1500	1600	15425	WERTACHTAL	500	075	GUS	URDU	1430	1515	17595	WERTACHTAL	500	090	SAS
RUSSIAN	1600	1700	693	MOSKVA	010	OND	MOSKAU	URDU	1800	1830	7260	NOVOSIBIR.	500	195	SAS
RUSSIAN	1600	1700	1188	ST.PETERB.	010	OND	PETERSBG	URDU	1800	1830	12045	WERTACHTAL	500	090	SAS
RUSSIAN	1600	1700	9715	WERTACHTAL	500	045	GUS	URDU	1800	1830	15200	TRINCOMALE	250	335	SAS

(via Andreas Volk - ADDX via WB; March 1, 2002)

GREECE: ERT S.A.: THE VOICE OF GREECE - A02 Shortwave transmissions schedule, effective from 31/03/02 to 27/10/02, 00:00 UTC:

Service Area	GMT/UTC	Frequencies	Languages
EUROPE	00:00-03:50	5865 7475	Gr
	04:00-06:00	9420 15630	Gr
	06:00-06:50	9420 15630	Gr, Eng
	07:00-08:00	17905 15630	Gr, Eng
	08:00-10:00	17905 15630	Gr, Eng
	11:00-12:00	17905	Gr

	12:00-12:50	12105	17905	Gr
	13:00-14:00	9420	15630	Gr
	14:00-15:00	9420	15630	Gr
	15:00-17:00	9420	15630	Gr
	17:00-18:00	9420	15630	Gr
	18:00-19:00	9420	15630	Gr
	19:00-20:00	9420	15630	Gr
	20:00-21:00	9420	15630	Gr
	21:00-22:00	9375		Gr
	22:00-23:00	9375		Gr
	23:00-24:00	7475	9375	Gr
Foreign Language				
Transmissions	12:00-13:30	15650		Gr,Ar
	13:30-16:57	12105		D,Rus,E,R,Tr,Bg,Sc
	17:00-18:00	12105		AI,F
	18:00-19:00	12105		BI,Eng
MW	09:00-18:00	792		Gr,Ar,D,Rus,E,R,Tr
	21:00-22:30	792		Gr
	23:00-24:00	792		Gr
TASKEND	12:00-13:00	15650		Gr
M.EAST, INDIAN OCEAN	00:00-03:50	15630		Gr
	04:00-06:00	21530	17520	Gr
	06:00-07:00	21530	17520	Gr
	07:00-08:00	21530	17520	Gr
	12:00-14:30	15650		Gr,Ar
MW	10:00-15:00	1260		Gr,Ar,D
	22:00-22:30	1260		Gr
ATLANTIC OCEAN	00:00-04:00	7475	9420	Gr
	04:00-06:00	9420	15630	Gr
	06:00-07:00	15630	9420	Gr
	07:00-10:00	15630	17905	Gr
	11:00-13:00	17905		Gr
	13:00-20:50	15630		Gr
	21:00-24:00	9375		Gr
AFRICA	00:00-03:57	9420		Gr
	23:00-24:00	12110		Gr
JAPAN, PACIFIC OCEAN	06:00-08:00	15190		Gr
AUSTRALIA	00:00-03:50	15630		Gr
	04:00-08:00	17520	21530	Gr
	06:00-08:00	15190		Gr
	12:00-13:30	15650		Gr,Ar
	21:00-22:57	9420	12110	Gr
	23:00-24:00	15650		Gr
NORTH AMERICA	00:00-03:50	7475		Gr
	12:00-15:00	9590		Gr
	16:00-22:00	17705		Gr
SOUTH AMERICA,PANAMA				
ZONE & SW AFRICA	00:00-03:57	9420		Gr
	20:00-22:00	17565		Gr
	23:00-24:00	12110		Gr

(1) Gr=Greek, Eng= English, Al= Albanian, Ar=Arabian, Bg= Bulgarian, F=French, E= Spanish, I=Italian, Pl=Polish, P=Portuguese, R=Romanian, Rus= Russian, S= Swedish, Sc= Serbo-croatian, Tr=Turkish

LIVE AUDIO URL: <http://www.ert.gr>

Reports via e-mail: era5@ert.gr. Technical information: bcharalabopoulos@ert.gr

ERT S.A. MACEDONIA STATION

EUROPE 11:00-15:50 11595

EUROPE 16:00-22:50 9935

ERA 5 'THE VOICE OF GREECE': Messogion 432, 15342, Ag.Paraskevi Attikis,Tel +301 6066308,6066297,Fax +301 6066309

Macedonia Radio Station: Angelaki Str 2, 54621 Tel:+3031244979, Fax:+3031 236370
 General Direction of E.RA (Engineering Div.): Messogeion 432, 15342, Ag.Paraskevi Attikis
 Tel 301 606 6257 Fax +301 606 6243.

(Schedule received directly from Ch. Charalabopoulos, Voice of Greece, March 20, 2002)

GUAM (USA) : Frequency schedule A02 (March 31, 2002 - October 27, 2002) of **KTWR** - **Guam**, Christian evangelical broadcaster with its headquarters in North Carolina, USA. Address: Trans World Radio, 1868 Halsey Drive, Asan, Guam 96922-1505, USA. Fax: +(671)828-8636 and email <ktwrfreq@guam.twr.org>.

Freq (KHz)	Time UTC	Pwr (kW)	Azm (deg)	Target	CIRAF (zones)	Languages	12105	2230-2300	100	285	43,44	Hakka
7455	1100-1615	100	320	43,44		Mandarin	12130	0915-1630	100	305	42,43,44	Mandarin
9430	1100-1145	100	285	49		Vietnamese	12130	2115-2200	100	305	42,43,44	Mandarin
9430	1400-1445	100	278	49		Vietnamese	15195	2200-2230	100	255	49,54	Indonesian
9430	1500-1530	100	345	33,44,45		Korean	15200	0900-0915	100	248	54	Balinese
9465	1200-1300	100	345	45		Japanese	15200	0915-0930	100	248	54	Torajanese
9865	0930-1100	100	315	42,43,44		Mandarin	15200	0930-1230	100	248	54	Madurese
9870	1300-1330	100	315	42,43,44		Mandarin	15215	0715-0900	100	278	49,50,54	Indonesian
9870	1330-1400	100	285	44		Swatow	15330	0815-0930	100	165	51,55,56,58,59,60	English
9870	1400-1430	100	285	43,44		Cantonese	15330	0815-1000	100	165	51,55,56,58,59,60	English
9870	1400-1445	100	285	43,44		Cantonese	15330	1300-1400	100	285	49	Burmese
9870	1400-1500	100	285	43,44		Cantonese	15330	1430-1600	100	285	41,48,49	English
9910	0915-1100	100	320	43,44		Mandarin	15395	1330-1400	100	293	41,49	Indian
11690	2100-2200	100	345	45		Japanese	15445	2200-2230	100	293	42,43,44	Cantonese
11720	1300-1330	100	278	49		Khmer	15445	2200-2245	100	293	42,43,44	Cantonese
11765	1100-1200	100	345	33,44,45		Korean	15445	2200-2300	100	293	42,43,44	Cantonese
11850	1200-1300	100	255	49,54		Javanese	15585	2200-2315	100	305	42,43,44	Mandarin
11900	1230-1300	100	248	54		Sudanese						

(KTWR Frequency Coordination via Alokesh Gupta; March 06, 2002)

MISCELLANEOUS: As late as 1996, DXers heard **Radio TV Hong Kong** weather reports broadcast on shortwave for participants in the China Sea Race. This is a sailing race between Hong Kong and the Philippines organised by the Royal Hong Kong Yacht Club. The Cape D'Aguilar HF station in Hong Kong provided the actual transmission facilities, operating on 3940 with 10 kW. In 1997, Radio TV Hong Kong told Cumbre DX that the broadcasts would no longer be made due to trouble and expense. The broadcasts were forgotten about until late 2001 when Roland Schulze in the Philippines reported to Wolfgang Bueschel's BC-DX that he heard weather broadcasts during a race in November. The 2002 China Sea Race Series will be from Mar-28 until Apr-06. According to the Royal Hong Kong Yacht Club the broadcasts will begin on Mar-28 starting at 0945 (UTC). There will also be a morning broadcast at 2345. Both will be on 3940. The transmissions will stop on the morning on Tuesday Apr-02 whereby most of the boats should have arrived. There will be a 2345 transmission for the return journey from Apr-07 through to Apr-12. The website for the race is: <<http://www.rhkyc.org.hk/chinasearace/home.htm>> Those wishing to receive a QSL can contact: Cape D'Aguilar HF station, P.O.Box: 9896, GPO Hong Kong. Tel: +852 2888 1128. Fax: +825 2809 2434. Lam Chi Keung, Assistant Engineer, is the verification signer. (Hans Johnson and Richard Lam in Cumbre DX via EDXP #242; Feb-28, 2002)

On the occasion of its 20th anniversary **SW Club DX-Antwerp** will broadcast a special commemorative programme, via Krasnodar Tbilisskaya in Russia, on the 25th of May 2002 between 0800 and 0900 UTC. Frequencies will be 17785 kHz (250 kW) and 9945 kHz (100 kW). A specially issued and very attractive QSL card will be available for correct reception reports. During this broadcast five keywords will be given. If you note at least 4 of these keywords, you can send them, together with a reception report to the following address: DX-Antwerp, PO Box 16, B-2660 Hoboken, Belgium or email us at: <qsl@dxa.be>. After verification of your reply, we will send you this special DX-Antwerp QSL card by mail. (Guido Schotmans - DXA via EDXP-NET, 8 March 2002)

Celebrating the **Queen's Jubilee** by Amateur Radio later in the year there will be a very special Special Event Station to celebrate the Queen's Golden Jubilee. The unique callsign GB50 has been issued by the Radio communications Agency for the station, which

will be established in the grounds of Windsor Castle between May-29 Jun-09. GB50 will be run by the Cray Valley Radio Society in association with the Burnham Beeches Radio Club, with the support of the RSGB. The station, which will be open to the general public, will be operational between 0700 and 2200 (UTC daily), and will be well equipped to allow simultaneous operation on several bands. Not only will GB50 celebrate a landmark in British history, it will also provide an opportunity to establish an amateur radio station that is of national and international importance - one that will raise the profile of amateur radio in the British Isles, and will attract young people to the hobby. (RSGB via VK4 QNEWS - WIA via EDXP #24; March 12, 2002)

The **Flemish Radio Amateurs** have announced a special initiative on the occasion of this year's Flemish National Day on July 11. On that day, Flanders commemorates the Battle of the Golden Spurs in 1302. This means that this year it's the 700th anniversary of the event, and it will be commemorated throughout the year by the Flemish govt and a myriad of organisations. The VRA, Vlaamse R. Amateurs, the Flemish ham association, have gained permission from the Belgian Communications Dept for all Flemish ham operators to use the special OS prefix instead of the usual ON, and that's from May 18 to July 11. They are calling on amateurs worldwide, and in particular the Flemish ones abroad, to contact OS stns. On Thurs, the 11th of July there will be a special stn on the air: OS4VRA, at 1400-0200 UT on 3620, from Kortrijk, scene of the battle of the Golden Spurs, seven centuries ago. There is an award for those who make a number of contacts. Details will be announced shortly. We received this information from the radio ham association VRA and will communicate further information when available. (Franz Vossen in Radio World via BC-DX #566, 2002 Mar 10)

SWITZERLAND: Schedule A02 of **Swiss Radio International - SRI**. Address: Swiss Radio International, Giacomettistrasse 1, CH-3000 Bern 15. Fax: +41-31-3509544, E-mail: technical@swissinfo.org, Web: <<http://www.swissinfo.org>>.

LANGUAGE	UTC	FREQ	STATION	kW	Azi	Target	Days 1=So
Arabic	1700-1730	15220	JUELICH	100	115	EU/AF/M	1234567
Arabic	1700-1730	17735	JUELICH	100	115	neAF/ME	1234567
Arabic	1700-1730	21720	SOTTENS	500	140	neAF/ME	1234567
Arabic	1900-1930	13645	SOTTENS	500	140	AF	1234567
Arabic	1900-1930	15220	JUELICH	100	160	AF	1234567
Arabic	1900-1930	17580	JUELICH	100	200	wAF	1234567
Arabic	1900-1930	17735	MONTSINERY	500	115	sAF	1234567
English	0730-0800	15445	JUELICH	100	160	nAF	1234567
English	0730-0800	17685	JUELICH	100	200	wAF	1234567
English	0730-0800	21750	SOTTENS	500	165	AF	1234567
English	0830-0900	21770	SOTTENS	500	165	AF	1234567
English	1730-1800	15220	JUELICH	100	115	EU/AF/M	1234567
English	1730-1800	17735	JUELICH	100	115	neAF/ME	1234567
English	1730-1800	21720	SOTTENS	500	140	neAF/ME	1234567
English	1930-2030	13645	SOTTENS	500	140	AF	1234567
English	1930-2030	15220	JUELICH	100	160	AF	1234567
English	1930-2030	17580	JUELICH	100	200	wAF	1234567
English	1930-2030	17735	MONTSINERY	500	115	sAF	1234567
English	2330-2400	9885	SOTTENS	500	230	SA	1234567
English	2330-2400	11905	MONTSINERY	500	175	SA	1234567
French	0600-0630	15445	JUELICH	100	160	nAF	1234567
French	0600-0630	17685	JUELICH	100	200	wAF	1234567
French	0600-0630	21750	SOTTENS	500	165	AF	1234567
French	1000-1030	21770	SOTTENS	500	165	AF	1234567
French	1800-1815	15220	JUELICH	100	115	EU/AF/M	1234567
French	1800-1815	17735	JUELICH	100	115	neAF/ME	1234567
French	1800-1815	21720	SOTTENS	500	140	neAF/ME	1234567
French	2100-2130	13645	SOTTENS	500	140	AF	1234567

French	2100-2130	15220	JUELICH	100	160	AF	1234567
French	2100-2130	17580	JUELICH	100	200	wAF	1234567
French	2100-2130	17735	MONTINERY	500	115	sAF	1234567
French	2200-2230	9885	SOTTENS	500	230	SA	1234567
French	2200-2230	11905	MONTINERY	500	175	SA	1234567
German	0630-0700	15445	JUELICH	100	160	nAF	1234567
German	0630-0700	17685	JUELICH	100	200	wAF	1234567
German	0630-0700	21750	SOTTENS	500	165	AF	1234567
German	0930-1000	21770	SOTTENS	500	165	AF	1234567
German	2030-2100	13645	SOTTENS	500	140	AF	1234567
German	2030-2100	15220	JUELICH	100	160	AF	1234567
German	2030-2100	17580	JUELICH	100	200	wAF	1234567
German	2030-2100	17735	MONTINERY	500	115	sAF	1234567
German	2230-2300	9885	SOTTENS	500	230	SA	1234567
German	2230-2300	11905	MONTINERY	500	175	SA	1234567
Italian	0700-0730	15445	JUELICH	100	160	nAF	1234567
Italian	0700-0730	17685	JUELICH	100	200	wAF	1234567
Italian	0700-0730	21750	SOTTENS	500	165	AF	1234567
Italian	0900-0930	21770	SOTTENS	500	165	AF	1234567
Italian	1630-1700	15220	JUELICH	100	115	EU/AF/M	1234567
Italian	1630-1700	17735	JUELICH	100	115	neAF/ME	1234567
Italian	1630-1700	21720	SOTTENS	500	140	neAF/ME	1234567
Italian	1830-1900	13645	SOTTENS	500	140	AF	1234567
Italian	1830-1900	15220	JUELICH	100	160	AF	1234567
Italian	1830-1900	17580	JUELICH	100	200	wAF	1234567
Italian	1830-1900	17735	MONTINERY	500	115	sAF	1234567
Italian	2300-2330	9885	SOTTENS	500	230	SA	1234567
Italian	2300-2330	11905	MONTINERY	500	175	SA	1234567

(Andreas Volk - ADDX, via WB)

Sources & Contributors:

ADDX	Assoziation deutschsprachiger DXer - Duesseldorf, Germany.
Alokesch Gupta	New Delhi - India.
BC-DX	News Bulletin by Wolfgang W. Bueschel - Germany.
DXA	DX Antwerpen - Holland.
EDXP	Electronic DX Press, Bob Padula - Australia.
EDXP-NET	ELECTRONIC DX PRESS Messaging Network - Australia.
JKB	Dr. Juergen Kubiak, Berlin - Germany.
NASWA	Journal of North American Shortwave Association - USA.
WB	Wolfgang W. Bueschel, Stuttgart - Germany.
WWDXC-HQ	WWDXC Headquarter, Michael Bethge - Germany.

Abbreviations:

<i>Target:</i>	<i>Target Prefix:</i>
ITU country code or	N North
Af Africa	E East
Am America	S South
As Asia	W West
Eu Europe	C Central
ME Middle East	
FSU Former Soviet Union	

Languages:

Ar Arabic
 Ch Chinese
 Du Dutch
 E English
 F French
 G German
 Gr Greek
 I Italian
 J Japanese
 K Korean
 P Portuguese
 R Russian
 Sp Spanish
 Turk Turkish

Other common abbreviations:

bc broadcast
 lsb Lower Side Band Mode
 nd non-directional
 px program
 sce(d),
 sked schedule
 ssb Single Sideband Mode
 tx(er) transmitter
 usb Upper Side Band Mode
 mm/dd/yy Date (month/day/year)
 ddmmyy (daymonthyear)
 dd.mm.yy (day.month.year)

Dr. Juergen Kubiak • Goltzstr. 19 • D-10781 Berlin • GERMANY

email:

Internet

j.kubiak@gmx.net or j.kubiak@web.de

Fidonet (To: Juergen Kubiak)

2:2410/301.20

Web Page:

http://surf.to/Dr.Kubi (V3)

http://home.snafu.de/j.kubiak/



 Extracts of items sourced to ELECTRONIC DX PRESS (EDXP) may be further reproduced only by organizations or individuals which have on-going exchange arrangements with EDXP.

LIST OF TROPICAL BAND STATIONS

by Raimo Mäkelä

In each line you will find: frequency (kHz), station, location and country.

120 meter band

2310.0 ABC Northern Territory Service, Alice Springs, Australia
 2325.0 ABC Northern Territory Service, Tennant Creek, Australia
 2340.0 Fujian People's Broadcasting Station, Fuzhou, China
 2380.0 Radio Educadora, Limeira, Brazil
 2390.0 XEJN Radio Huayacocotla, Mexico
 2390.0 WWCR, United States of America
 2410.0 Radio Enga, Papua New Guinea (off air?)
 2415.0 Wenzhou People's Broadcasting Station, Wenzhou, China
 2420.0 Radio Sao Carlos, Brazil
 2460.0 Radio Alvorada, Rio Branco, Brazil
 2485.0 ABC Northern Territory Service, Katherine, Australia
 2490.2 Radio Oito de Setembro, Brazil (v)
 2500.0 VNG Time Signal Station, Australia
 2500.0 BPM Time Signal Station, China
 2500.0 WWVH Time Signal Station, Hawaii
 2500.0 WWV Time Signal Station, United States of America
 2500.0 ULW Time Signal Station, Uzbekistan

90 meter band

3200.0 Trans World Radio, Swaziland
 3205.0 Radio Ribeirao Preto, Brazil
 3205.0 Radio West Sepik, Radio Sandaun, Papua New Guinea

3210.0 Radio Exterior Espana, Costa Rica
 3210.0 WWCR, United States of America
 3214.9 RRI Manado, Indonesia (v)
 3215.0 Adventist World Radio, Madagascar
 3215.0 South Africa Amateur Radio League, South Africa
 3215.0 WWCR, United States of America
 3220.0 HCJB, Ecuador
 3220.0 Hamgyong Broadcasting Station, Hamhung, North-Korea
 3220.0 Radio Morobe, Papua New Guinea
 3223.0 All India Radio, Shimla, India
 3230.0 Radio Nepal, Nepal (v)
 3230.0 World Beacon, South-Africa
 3230.2 Radio El Sol de Los Andes, Juliaca, Peru (v)
 3234.8 Radio Luz y Sonido, Huánoco, Peru (v)
 3235.0 Radio West New Britain, Papua New Guinea
 3240.0 Trans World Radio, Swaziland
 3245.0 Radio Clube, Varginha, Brazil
 3245.0 All India Radio, Lucknow, India
 3245.0 Radio Gulf, Papua New Guinea (off air?)
 3249.8 Radio Luz y Vida, Honduras (v)
 3250.0 Pyongyang Broadcasting Station, North-Korea
 3250.0 Voice of Korea, Clandestine
 3255.0 BBC, Meyerton, South Africa
 3260.0 Radio Estereo Carrizal, Calzeta, Ecuador (v)
 3260.0 La Voix du Sahel, Niger

3260.0 Radio Madang, Papua New Guinea
 3264.7 RRI Gorontalo, Indonesia (v)
 3270.0 Namibian Broadcasting Corporation, Namibia
 3270.0 WWFV, McCaysville, United States of America
 3275.0 Radio Southern Highlands, Papua New Guinea
 3280.0 Voice of Pujiang, Shanghai, China
 3280.0 La Voz del Napo, Tena, Ecuador (v)
 3285.0 Radio La Voz del Río Tarqui, Cuenca, Ecuador (v)
 3287.0 Radio Madagascar, Madagascar (v)
 3289.8 Radio Centro, Ambato, Ecuador (v)
 3290.0 Central People's Broadcasting Station, China
 3290.0 Namibian Broadcasting Corporation, Namibia
 3290.0 Radio Central, Papua New Guinea
 3291.0 Voice of Guyana, Georgetown, Guyana
 3300.0 Radio Cultural, Guatemala, Guatemala
 3305.0 Radio Western, Papua New Guinea - off air?
 3306.0 Zimbabwe Broadcasting Corporation, Zimbabwe
 3310.0 Radio Msoj Chaski, Cochabamba, Bolivia
 3315.0 All India Radio, Bhopal, India
 3315.0 Radio Manus, Papua New Guinea
 3316.0 Sierra Leone Broadcasting Service, Sierra Leone
 3320.0 Pyongyang Broadcasting Station, North-Korea
 3320.0 Radio Sondergrense, South-Africa
 3324.8 Radio Maya, Barillas, Guatemala (v)
 3325.0 Radio Nacional, Sao Paulo, Brazil
 3325.0 RRI Palangkaraya, Indonesia
 3325.0 Radio North Salomons, Radio Bougainville, Papua New Guinea
 3326.0 Federal Radio Corporation of Nigeria, Lagos, Nigeria
 3329.5 Radio Ondas del Huallaga, Huanuco, Peru (v)
 3330.0 CHU Time Signal Station, Canada
 3335.0 Radio East Sepik, Papua New Guinea
 3335.0 Broadcasting Corporation of China, Taipei, Taiwan
 3339.9 Radio Altura, Cerro de Pasco, Peru (v)
 3343.0 Radio Ayopaya, Bolivia (v)
 3344.8 RRI Ternate, Indonesia (v)
 3345.0 All India Radio, Jaipur, India
 3345.0 Channel Africa, Meyerton, South-Africa
 3350.0 South Pyongyang Broadcasting Station, North-Korea
 3355.0 Radio Nacional de Angola, Angola
 3355.0 Radio Difusora 6 de Agosto, Brazil
 3355.0 Radio Simbu, Papua New Guinea
 3355.4 RRI Jambi, Indonesia (v)
 3360.0 La Voz del Upano, Macas, Ecuador
 3360.0 La Voz de Nahualá, Guatemala (v)
 3365.0 Radio Cultura, Araraquara, Brazil
 3365.0 All India Radio, Delhi, India
 3365.0 Radio Milne Bay, Papua New Guinea
 3366.0 Ghana Broadcasting Corporation, Ghana
 3370.0 Radio Tezulutlan, Guatemala (v)
 3375.0 Radio Nacional de Angola, Angola (v)
 3375.0 Radio Clube, Dourados, Brazil (v)
 3375.0 Radio Educadora, Guaraja Mirim, Brazil
 3375.0 Radio Nacional, Cachoeira, Brazil
 3375.0 Radio Western Highlands, Papua New Guinea (off air?)
 3375.1 Radio San Antonio, Atalaya, Peru (v)
 3380.0 Radio Chortis, Guatemala
 3380.0 Radio Malawi, Malawi
 3384.9 Radio East New Britain, Papua New Guinea
 3385.0 Radio Educacao Rural, Tefé, Brazil
 3385.0 RRI Kupang, Indonesia (v)
 3385.0 RTM Miri, Sarawak, Malaysia
 3390.0 All India Radio, Gangtok, India
 3390.0 BBC Meyerton, South-Africa
 3391.0 Radio Emisora Camargo, Bolivia
 3395.0 RRI Bandar Lampung, Indonesia
 3395.0 Radio Eastern Highlands, Papua New Guinea
 3396.0 Zimbabwe Broadcasting Corporation, Zimbabwe
 3396.4 Radio Internacional del Peru, San Pablo, Peru (v)
 3492.0 Radio Padilla, Padilla, Bolivia (v)

75 meter band

3900.0 Hulun Ber People's Broadcasting Station, China
 3900.0 Radio Freedom of Communist Party in Iraqi Kurdistan (v)
 3900.0 Voice of the People of Iraq, Unknown (v)
 3900.0 Voice of the Strait, Fuzhou, China
 3904.9 Radio New Ireland, Papua New Guinea (v)
 3904.9 RRI Merauke, Indonesia (v)
 3915.0 BBC World Service, Singapore
 3920.0 North Pyongyang Broadcasting Station, North-Korea
 3922.0 Radio Samorodinka, Russia
 3925.0 Radio Tampa, Japan
 3930.0 Korean Broadcasting System, Korea
 3935.0 Radio Reading Svc (ZLXA), Levin, New Zealand
 3940.0 Hubei People's Broadcasting Station, China
 3945.0 All India Radio, Gorakhpur
 3940.0 North Hamgyong Broadcasting Station, North-Korea
 3945.0 Radio Tampa, Japan
 3945.0 Radio Vanuatu, Vanuatu
 3950.0 Xinjiang People's Broadcasting Station, China
 3955.0 Radio Korea via United Kingdom
 3955.0 Radio Taipei via United Kingdom
 3960.0 Chacong Provincial Broadcasting Station, North-Korea
 3960.4 RRI Palu, Indonesia (v)
 3965.0 Radio France International, France
 3970.0 NHK, Japan
 3970.0 Kangwong Broadcasting Station, North-Korea (v)
 3970.0 Federal Radio Corporation of Nigeria, Enugu, Nigeria
 3970.0 Radio Korea via United Kingdom
 3975.0 Voice of Islamic republic of Iran, Iran
 3975.0 Radio Budapest, Hungary
 3976.0 RRI Pontianak, Indonesia (v)
 3981.0 North Hamgyong Broadcasting Station, North-Korea (v)
 3985.0 China National Radio, China
 3985.0 IRRS, Italy
 3985.4 RRI Surabaya, Indonesia (v)
 3987.4 RRI Manokwari, Indonesia (v)
 3990.0 Xinjiang People's Broadcasting Station, China
 3995.0 Deutsche Welle, Germany
 4000.0 Nei Menggu People's Broadcasting Station, China
 4000.5 RRI Kendari, Indonesia (v)
 4003.0 RRI Padang, Indonesia (v)
 4005.0 Vatican Radio, Vatican City

60 meter band

4750.0 Hulun Ber People's Broadcasting Station, China
 4750.0 Xizang People's Broadcasting Station, China
 4750.1 Radio San Francisco Solano, Peru (v)
 4753.0 RRI Makassar, Indonesia (v)
 4755.0 Radio Educacao Rural, Brazi
 4760.0 All India Radio, Leh, India
 4760.0 All India Radio, Port Blair, Andaman & Nicobar Islands
 4760.0 Radio ELWA, Liberia
 4760.0 Trans World Radio, Swaziland
 4763.6 Radio Chincheros, Chincheros, Peru (v)
 4765.0 Radio Rural, Santarem, Brazil
 4765.0 Radio Integracao, Cruzeiro do Sul, Brazil
 4765.0 Radio Congo, Congo
 4766.0 RRI Medan, Indonesia
 4766.6 Radio Constelacion, Guanay, Bolivia (v)
 4770.0 Federal Radio Corporation of Nigeria, Kaduna, Nigeria
 4770.1 Radio Centinela del Sur (CDS), Loja, Ecuador (v)
 4774.9 Radio Tarma, Peru (v)
 4775.0 Radio Amarela, Rolim do Moura, Brazil
 4775.0 Radio Congonhas, Congonhas, Brazil
 4775.0 Radio Portal do Amazonia, Cuaiba, Brazil
 4775.0 Radio Liberal, Belém, Brazil (v)
 4775.0 All India Radio, Imphal, India
 4775.0 Trans World Radio, Swaziland
 4777.0 Radiodiffusion Gabonaise, Libreville, Gabon (v)
 4771.0 RRI Jakarta, Indonesia (v)
 4779.8 Radio Coátan, Guatemala

- 4780.0 Emissora Provincial Kuando-Kubango, Angola
 4780.0 Emisora Onda Musical, Dominican Republic (v)
 4780.0 Radio Satellite, Santa Cruz, Peru (v)
 4783.2 RTV Malienne, Mali (v)
 4785.0 Radio Brasil, Campinas, Brazil
 4785.0 Radio Caiari, Porto Velho, Brazil
 4785.0 Nei Menggu People's Broadcasting Station, China
 4785.6 Radio Super, Ibagué, Colombia (v)
 4788.0 Radio Ballivian, San Borja, Bolivia (v)
 4789.0 RRI Fak-Fak, Indonesia (v)
 4790.0 All India Radio, Chennai, India
 4790.0 Azad Kashmir Radio, Pakistan
 4790.0 Radio Pakistan, Pakistan
 4790.0 Radio Atlántida, Iquitos, Peru (v)
 4795.0 Radio Difusora, Aquidauana, Brazil
 4795.0 Buryat Radio, Ulan-Ude, Russia
 4795.2 Radio La Voz de Los Caras, Ecuador (v)
 4796.0 Radio Mallku, Bolivia (v)
 4799.8 Radio Buenas Nuevas, Guatemala (v)
 4800.0 Radio Rebelde, Cuba
 4800.0 All India Radio, Hyderabad, India
 4800.0 Lesotho National Broadcasting Service, Lesotho
 4800.7 Radio Armonia, Argentina
 4801.0 Radio Oriental, Tena, Ecuador (v)
 4802.0 Radio Mamore, Bolivia (v)
 4805.0 Radio Difusora do Amazonas, Manaus, Brazil
 4805.0 Radio Itatiaia, Belo Horizonte, Brazil
 4810.0 Voice of Armenia, Yerevan, Armenia
 4814.6 Radio El Buen Pastor, Saraguro, Ecuador (v)
 4814.9 Radio Difusora, Londrina, Brazil
 4815.0 Radio Television Burkina, Burkina Faso
 4815.0 China Radio International, China
 4819.1 La Voz Evangélica, Tegucigalpa, Honduras (v)
 4820.0 Emissora Provincial da Huila, Angola
 4820.0 Radio Botswana, Botswana
 4820.0 Khanty-Mansiysk Radio, Russia
 4820.0 All India Radio, Calcutta, India
 4824.3 La Voz de la Selva, Iquitos, Peru (v)
 4824.9 Radio Cancao Nova, Cachoeira Paulista, Brazil
 4824.9 Radio Mam, Guatemala (v)
 4825.0 Radio Ecuadora, Braganca, Brazil
 4825.0 Radio Rossii, Yakutsk, Russia
 4826.4 Radio Sicuani, Sicuani, Peru (v)
 4828.0 Zimbabwe Broadcasting Corporation, Zimbabwe
 4828.0 Radio Mauritanie, Mauritanie (v)
 4830.0 Radio Grigota, Bolivia (v)
 4830.0 Hua-yi Broadcasting Corporation, Fuzhou, China
 4830.0 Radio Litoral, Le Ceiba, Honduras
 4830.0 Radio Thailand, Thailand
 4830.0 Radio Táchira, San Cristobal, Venezuela
 4831.5 Radio Reloj, Costa Rica (v)
 4835.0 ABC Northern Territory Service, Alice Springs, Australia
 4835.0 RTM Malienne, Mali (v)
 4835.3 Radio Tezulutlan, Guatemala (v)
 4836.0 Radio Buenaventura, Buenaventura, Colombia (v)
 4840.0 Heilongjiang People's Broadcasting Station, China
 4840.0 Radio Interoceanica, Santa Rosa de Quijos, Ecuador (v)
 4840.0 All India Radio, Mumbai, India
 4840.0 Radio Andahuaylas, Peru (v)
 4844.6 Radio K'ekchi, Guatemala (v)
 4845.0 Radio Fides, La Paz, Bolivia (v)
 4845.0 Radio Ibitinga, Brazil
 4845.0 RRI Ambon, Indonesia
 4845.0 Radio Malaysia, Kajang, Malaysia
 4845.2 Radio Cultura do Amazonas, Manaus, Brazil
 4850.0 CRTV Radio Yaonde, Cameroon
 4850.0 China National Radio, China
 4850.0 All India Radio, Kohima, India
 4850.0 Mongol Radio, Mongolia
 4850.0 Uzbek Radio, Uzbekistan
 4855.0 Radio Tropical, Barra do Garcas, Brazil
 4855.4 Radio La Hora, Cusco, Peru (v)
 4860.0 All India Radio, Delhi, India
 4865.0 Radio Centenario, Santa Cruz, Bolivia (v)
 4865.0 Radio Alvorada, Londrina, Brazil
 4865.0 Radio Missoes da Amazonia, Obidos, Brazil
 4865.0 Radio Verdes Florestas, Cruzeiro do Sul, Brazil (v)
 4865.0 Gansu People's Broadcasting Station, Lanzhou, China
 4865.0 La Voz de Cinaruco, Arauca, Colombia (v)
 4870.0 ORTB Cotonou, Benin (v)
 4870.0 Radio La Voz de Upano, Macas, Ecuador
 4870.0 XERTA, Mexico
 4870.0 SLBC, Sri Lanka
 4874.6 RRI Sorong, Indonesia (v)
 4875.0 Radio Difusora de Roraima, Boa Vista, Brazil
 4875.0 Radio Khara, Georgia
 4875.2 Radio La Cruz del Sur, La Paz, Bolivia (v)
 4876.0 Radio Samorodinka, Russia (v)
 4879.8 Radio Nacional Espejo, Quito, Ecuador (v)
 4880.0 Radio Bangladesh, Bangladesh (v)
 4880.0 All India Radio, Lucknow, India
 4880.0 Provincial Station Than Hoa, Vietnam
 4881.0 Radio Comas, Comas, Peru (v)
 4883.0 China Radio International, China
 4885.0 Radio Voz do Coracao Imaculado, Anápolis, Brazil
 4885.0 Radio Clube do Pará, Belém, Brazil
 4885.0 Radio Difusora Acreana, Rio Branco, Brazil
 4885.0 Radio Ondas del Meta, Villavivencio, Colombia
 4885.0 Kenya Broadcasting Corporation, Kenya
 4886.0 Radio Virgen del Carmen, Peru (v)
 4890.0 Radio France Internationale, Moyabi, Gabon
 4890.0 National Broadcasting Commission, Papua New Guinea
 4890.4 Radio Chota, Chota, Peru (v)
 4895.0 Radio IPB AM, Campo Grande, Brazil
 4895.0 La Voz del Rio Arauca, Colombia
 4895.0 Colombia Estereo, Santa Fe, Colombia
 4895.0 All India Radio, Kurseong, India
 4895.0 Radio Malaysia, Sarawak, Malaysia
 4895.0 Radio Chanchamayo, La Merced, Peru (v)
 4895.0 Tyumen Radio, Russia
 4895.0 Radio Pakistan, Pakistan (v)
 4988.0 Radio La Voz de Saquisili, Ecuador (v)
 4900.0 Voice of the Strait, China
 4902.0 SLBC, Sri Lanka (v)
 4904.9 Radio La Oroya, La Oroya, Peru (v)
 4905.0 Radio Anhanguera, Araguaina, Brazil
 4905.0 Radio Relógio, Rio de Janeiro, Brazil
 4905.3 Radio Ecos del Orinoco, Puerto Carreno, Colombia (v)
 4907.0 National Radio of Cambodia, Phnom Penh, Cambodia
 4910.0 ABC Northern Territory Service, Tennant Creek, Australia
 4910.0 All India Radio, Jaipur, India
 4910.0 Zambia National Broadcasting Corporation, Zambia
 4910.6 La Voz de la Mosquitia, Puerto Lempira, Honduras (v)
 4914.5 Radio Cora, Lima, Peru (v)
 4915.0 Radio CBN Anhanguera, Goiania, Brazil (v)
 4915.0 Radio Difusora, Macapa, Brazil
 4915.0 Radio Armonias del Caquetá, Florencia, Colombia
 4915.0 Ghana Broadcasting Corporation, Ghana
 4919.0 Radio Quito, Ecuador (v)
 4920.0 All India Radio, Chennai, India
 4924.9 Radio Difusora, Taubaté, Brazil
 4925.0 Honghe People's Broadcasting Station, China (v)
 4925.0 RRI Jambi, Indonesia
 4925.3 Radio San Miguel, Riberalta, Bolivia (v)
 4926.0 Radio Nacional, Bata, Equatorial Guinea
 4930.0 Radio Costena, San Pedro Sula, Honduras
 4930.0 Turkmen Radio, Turkmenistan
 4931.0 RRI Surakarta, Indonesia (v)
 4935.0 Radio Capixaba, Brazil
 4935.0 Radio Difusora, Jatai, Brazil
 4935.0 Radio Tropical, Tarapoto, Peru (v)
 4939.2 Radio Norte, Montero, Bolivia (v)

- 4939.5 Radio Amazonas, Venezuela (v)
 4940.0 China Hua-yi Broadcasting Corporation, Fuzhou, China
 4940.0 All India Radio, Guwahati, India
 4940.0 Radio San Antonio, Peru (v)
 4940.0 Radio Mix Master, Russia
 4940.0 Voice of Russia via Tajikistan
 4940.0 SLBC, Sri Lanka
 4945.0 Radio Illimani, La Paz, Bolivia
 4945.0 Radio Emissora Rural, Petrolina, Brazil (v)
 4945.0 Radio Difusora, Pocos de Caldas, Brazil
 4945.0 Radio Progreso, Porto Velho, Brazil (v)
 4949.9 Radio Baha'i, Otavalo, Ecuador (v)
 4950.0 Radio Nacional de Angola, Angola (v)
 4950.0 Voice of Pujiang, Shanghai, China
 4950.0 All India Radio Kashmir, Srinagar, India
 4950.0 VOA, Sao Tome
 4950.1 Radio Madre de Dios, Peru (v)
 4955.0 Radio Clube, Rondonopolis, Brazil
 4955.0 Radio Cultura, Campos, Brazil (v)
 4955.0 Radio Nacional, Bogota, Colombia
 4955.4 Radio Cultural Amauta, Huanta, Peru (v)
 4960.0 All India Radio, Ranchi, India
 4960.0 Radio Vanuatu, Vanuatu
 4960.0 VOA, Sao Tome
 4960.1 Radio Federacion, Sucua, Ecuador
 4960.2 Radio Villa, Santo Domingo, Dominican Republic (v)
 4960.3 Radio HRET, Puerto Lempira, Honduras
 4965.0 Radio Alvorada, Parintins, Brazil
 4965.0 Voice of Russia, Tajikistan
 4965.0 Provincial Station Radio Son La, Vietnam
 4965.0 Christian Voice, Zambia
 4970.0 Xinjiang People's Broadcasting Station, China
 4970.0 Radio Rumbos, Villa de Cura, Colombia
 4970.0 All India Radio, Shillong, India
 4970.0 Radio Imagen, Tarapoto, Peru (v)
 4974.8 Radio del Pacifico, Lima, Peru (v)
 4975.0 Radio Mundial, São Paulo, Brazil
 4975.0 Fujian People's Broadcasting Station, Fuzhou, China
 4975.0 Radio Ondas del Orteguzza, Colombia
 4975.0 Radio Tajikistan, Tajikistan
 4976.0 Radio Uganda, Kampala, Uganda
 4980.0 Ecos del Torbes, San Cristobal, Venezuela
 4985.0 Radio Brasil Central, Goiania, Brazil
 4990.0 Hunan People's Broadcasting Station, China
 4990.0 All India Radio, Chennai, India
 4990.9 Radio Animas, Chocaya, Bolivia (v)
 4990.9 Radio Apintie, Paramaribo, Surinam (v)
 4991.0 Radio Ancash, Huaraz, Peru (v)
 4993.0 AFRTS Sigonella, Italy
 4995.8 Radio Andina, Huancayo, Peru (v)
 4996.0 RWM Time Signal Station, Russia
 5000.0 LOL1 Time Signal Station, Argentina
 5000.0 VNG Time Signal Station, Australia
 5000.0 BPM Time Signal Station, China
 5000.0 WWVH Time Signal Station, Hawaii
 5000.0 HLA Time Signal Station, Korea
 5000.0 BSF Time Signal Station, Taiwan
 5000.0 WWV Time Signal Station, United States of America
 5000.0 ULW 4 Time Signal Station, Uzbekistan
 5000.0 Observatorio Cagigal, Venezuela
 5000.0 Provincial Station Binh Thuan, Vietnam
 5000.0 Provincial Station Radio Yen Bai, Vietnam
 5003.0 Radio Nacional, Equatorial Guinea (v)
 5005.0 RTM Kuching, Sibul, Malaysia
 5009.5 Radio Madagascar, Madagascar (v)
 5009.9 HIMI Radio Cristal Internacional, Dominican Republic (v)
 5010.0 CRTV Radio Garoua, Cameroon (v)
 5010.0 Central People's Broadcasting Station, China
 5010.0 HRMI Radio Misiones Internacional, Honduras (v)
 5010.0 All India Radio, Thirupuram, India
 5011.3 Escuelas Radiofónicas Populares, Riobamba, Ecuador (v)
 5015.0 Emissora Provincial do Namibe, Angola
 5015.0 Radio Brasil Tropical, Cuiaba, Brazil (v)
 5015.0 Radio Copacabana, Brazil
 5015.0 Radio Pioneira, Teresina, Brazil (v)
 5015.0 Turkmen Radio, Turkmenistan
 5019.8 Radio Horizonte, Chahapoyas, Peru (v)
 5019.9 Ecos del Atrato, Quibda, Colombia
 5020.0 Jiangxi People's Broadcasting Station, China
 5020.0 ORTN Niamey, Niamey, Niger (v)
 5020.0 SIBC Honiara, Solomon Islands (v)
 5025.0 ABC Northern Territory Service, Katherine, Australia
 5025.0 ORTB Parakou, Benin (v)
 5025.0 Radio FM Vale do Xingu, Altamira, Brazil
 5025.0 Radio Rebelde, Cuba
 5025.0 Radio Quillabamba, Peru (v)
 5025.0 Radio Tashkent, Uzbekistan
 5026.0 Radio Uganda, Kampala, Uganda
 5027.0 Radio Pakistan, Pakistan (v)
 5029.0 University Network, Costa Rica (v)
 5030.0 Radio Burkina, Burkina Faso
 5030.0 China National Radio, China
 5030.0 RTM Sarawak, Malaysia
 5030.0 Radio Tonga, Tonga
 5030.0 Provincial Station Dia Tieng Noi, Vietnam
 5035.0 Radio Aparecida, Brazil (v)
 5035.0 Radio Educacao Rural, Coari, Brazil (v)
 5035.0 RTV Centrafricaine, Bangui, Central African Republic (v)
 5035.0 Radio Tashkent, Uzbekistan
 5039.2 Radio Libertad, Junin, Peru (v)
 5039.9 RRI Pekanbaru, Indonesia (v)
 5040.0 Fujian People's Broadcasting Station, China
 5040.0 La Voz de Yopal, Colombia
 5040.0 Radio La Voz del Upano, Macas, Ecuador
 5040.0 Georgian Radio, Dusheti, Georgia
 5040.0 All India Radio, Jeypore, India
 5040.0 Radio Tashkent, Uzbekistan
 5043.0 Emissora Provincial de Benguela, Angola
 5045.0 Radio Cultura do Para, Belem, Brazil
 5046.2 Radio Intergración, Peru (v)
 5047.0 Radiodiffusion Togolaise, Lomé, Togo
 5050.0 Guangxi Foreign Broadcasting Station, China
 5050.0 The Voice of the Strait, China
 5050.0 All India Radio, Aizawl, India
 5050.0 Radio Tanzania, Dar-es-Salaam, Tanzania
 5053.6 Radio Acobamba, Acobamba, Peru (v)
 5054.6 Radio Faro del Caribe, Costa Rica (v)
 5055.0 Radio Jornal A Critica, Manaus, Brazil(v)
 5055.0 Radio Difusora, Caceres, Brazil
 5055.0 RFO Cayenne, French Guyana (v)
 5060.0 Xinjiang People's Broadcasting Station, Urumqi, China
 5060.0 Radio Progreso, Loja, Ecuador (v)
 5060.0 Radio Tashkent, Uzbekistan
 5060.5 Radio Bolivar, Peru (v)
 5066.0 Radio CANDIP, Congo D.R.
 5067.0 Ondas del Suroriente, Quillabamba, Peru (v)
 5070.0 WWCR, Nashville, United States of America
 5075.0 Voice of Pujiang, China
 5076.8 CARACOL, Columbia
 5084.6 Radio Mundo, Cusco, Peru (v)
 5085.0 WWFV, McCaysville, United States of America
 5090.0 Central People's Broadcasting Station, China
 5100.0 Liberian Communications Network, Liberia

v = variable frequency



DX LOGBOOK

Logs around the clock

by Ashok Kumar Bose, Apt. #421, 3420 Morning Star Drive, Mississauga, ON, L4T 1X9, Canada
E-Mail: logbook@wwdxc.de

TROPICAL BANDS

Frequ.	UTC	SIO	ITU	Radio Station	Language	Programme Details	Date	Rep.
2495.0	1821	332	EGY	Radio Cairo	Arabic	Sports Program	0203	HJK
3200.0	1755	333	SWZ	Trans World Radio,Swaziland	English	Religious Program	0203	HJK
3240.0	0307	333	SWZ	Trans World Radio,Swaziland	Shona	Religious Program	0103	HJK
3244.8	1313	322	INS	RRI,Ternate	Indonesian	Local Pops and Talks	0903	JY
3245.0	1205	232	PNG	Radio Gulf,Kerama	English	Talks and pop music	1902	GI
3264.6	1115	232	INS	RRI,Gorantala	Indonesian	Local Pops and Music	2402	JY
3275.0	1215	322	PNG	Radio Southern Highlands,Mendi	Pidgin	Pop Music Program	1902	GI
3279.6	1006	333	EQA	La vOz del Napo	Spanish	Talks,ID and Vocals	1702	RAD
3316.0	2005	232	SRL	Sierra Leone BC,Goderich	English	News	0203	HJK
3326.0	1845	232	NIG	FRCN,Lagos	English	African Music	0203	HJK
3344.8	1146	212	INS	RRI,Ternate	Indonesian	Local Pops and News	2402	JY
3365.0	1720	333	IND	All India Radio, Delhi	Hindi	Orchestra Music	2602	HJK
3966.0	0550	242	GHA	Ghana Broadcasting Corp., Accra	English	Folklore Music	2602	HJK
3976.0	1544	333	INS	RRI,Pontianak	Indonesian	Local Pops and Sign off	1902	JY
4716.7	0105	232	BOL	Radio Yura,Yura	Spanish	Music Program,ID	1003	ALS
4746.8	0918	232	PRU	Radio Huanta 2000,Huanta	Spanish	Greetings and Music	0203	ALS
4760.0	1918	232	LBR	ELWA,Monrovia	English	Religious Program	0203	HJK
4770.0	1750	443	NIG	Radio Nigeria, Kaduna	English	ID and Program	2602	HJK
4782.0	0610	443	MLI	RTV Malienne	French	African Music and ID	2602	HJK
4795.0	0130	131	B	Radio difusora Aquidauna	Portugese	Music	0903	DC
4815.0	0138	232	B	Radio difusora Londrina	Portugese	Music	0903	DC
4820.0	1737	444	BOT	Radio Botswana ,Sekele	Setswa	Music,ID	0203	HJK
4830.0	0418	333	VEN	Radio Tachira,San Cristobal	Spanish	ID,Political Comments	2802	HJK
4835.0	2120	232	MLI	RTV Malienne, Bamako	French	Talk and Folk Music	1502	HY
4844.0	0143	343	GTM	Radio Kekchi,Alta Verapaz	Spanish	Music ID	0903	DC
4845.0	1930	444	MTN	RTV Mauritanie, Nouakchott	Arabic	ID and Talks	0203	HJK
4874.6	1109	232	INS	RRI, Sorong	Indonesian	Local Pop Music	1702	JY
4890.0	1948	243	PNG	NBC,Port Moresby	English	Music and ID	0203	HJK
4910.0	1225	332	IND	All India Radio, Jaipur	Hindi	Talks and songs	1902	GI
4914.4	1058	322	PRU	Radio Cora	Spanish	Talk and Music and ID	2502	KH
4924.5	0125	232	B	Radio difusora Taubate	Portugese	Romantic Music	1003	ALS
4925.0	2220	242	INS	RRI,Jambi	Indonesian	Koran Verses	1702	ZL
4965.0	0220	333	ZMB	Christian Voice,Lusaka	English	Gospel Program	0103	HJK
4970.0	1237	433	IND	All India Radio,Shillong	Hindi	Ann and Music	1902	GI
4975.0	1010	242	PRU	Radio del Pacifico,Lima	Spanish	Religious Program and ID	0203	ALS
4976.0	0258	443	UGA	Radio Uganda	English	ID and News	0103	HJK
4980.0	1557	333	VEN	Ecos del Torbes	Spanish	ID and Latin Music	2802	HJK

4991.0	0432	322	SUR	Radio Apintie	Dutch	Romantic vocals ID & Music	0303	RAD
5005.0	1242	332	NEP	Radio Nepal	Nepali	Regional Music	1902	GI
5009.5	1021	333	PRU	Radio Altura, Cerro de Pasco	Spanish	Folk Song, ID	0703	IN
5025.0	0220	444	UZB	Radio Tashkent	Uzbek	IS, ID and Music	0303	HJK
5029.1	0635	344	CTR	Gene Scott University Network	English	Religious Program	2602	HJK
5050.0	1742	443	TZA	Radio Tanzania	Arabic	Islamic Talks	2302	ZL
5060.0	1700	433	CHN	Xinjiang Peoples BCS, Urumqui	Chinese	Songs and ID	1302	ZL

SHORTWAVE BANDS

Frequ.	UTC	SIO	ITU	Radio Station	Language	Programme Details	Date	Rep.
5678.0	0003	322	PRU	Radio Ilucan, Cutervo	Spanish	Peruvian Folk Music, Ann	1703	ALS
5745.0	0105	444	USA	WHRI, South Bend	English	DX-ing with Cumbre	2402	HJK
5950.3	1007	242	PRU	Radio Bethel, Arequipa	Spanish	Religious Program	1602	ALS
5952.5	0038	242	BOL	Radio Pio XII, Siglo XX	Ayamara	Music Program	1003	ALS
5975.2	0925	333	CLM	Radio Autentica	Spanish	Religious Talks, Choir vocals	1702	ALS
5975.0	1515	333	THA	BBC WS via Nakhon Sawan	English	Winter Oympics	1502	HJK
5985.0	0415	232	GTM	Radio Cultural	Spanish	Religious Program	2602	HJK
5985.0	1840	432	COG	RTV Congolaise, Brazzaville	French	African Pop Music	1702	HJK
5990.0	0933	322	B	Radio Senado de la Nacion, Brasilia	Portugese	Local Music and ID	0403	ALS
6025.0	0038	433	UAE	Adventist World Radio	English	Wavescan	2402	HJK
6030.0	0433	533	CAN	CFVP relay CKMX, Calgary	English	Candle light & wine music	2502	RL
6045.4	1015	232	PRU	Radio Santa Rosa, Lima	Spanish	Folk Music, Ann, ID	1703	ALS
6055.0	0153	533	E	REE, Madrid	English	Radio Waves, Country Music	2402	RL
6065.0	2059	343	SWE	Radio Sweden	Swedish	IS, ID and Talks	1502	HY
6071.2	0930	332	INS	RRI, Jayapura	Indonesian	ID, News, Talk and Pop music	1002	KH
6085.2	0115	242	BOL	Radio San Gabriel La Paz	Ayamara	Romantic Music, Ann	1003	ALS
6115.0	0845	332	J	Radio Tampa	Japanese	Continous instrumental Music	2702	RAD
6153.7	0908	322	INS	RRI, Biak	Indonesian	Holy Koran Readings	0903	JY
6155.0	0050	232	BOL	Radio Fides, La Paz	Sapanish	Music and ID	1003	ALS
6155.0	0146	443	URU	Banda Oriental Sarandi del Yi	Spanish	Folk Music	1003	ALS
6180.0	0759	333	B	Radio Nacional Amazonia, Manaus	Portugese	ID, Music and News	0803	ALS
6193.7	0935	342	PRU	Radio Cusco, Cusco	Spanish	Folk Music & huaynos	0203	ALS
6210.0	1610	222	ETH	Radio Fana	Amharic	Talk and Music	1203	KH
6265.0	1559	332	ZMB	Zambia Nac. Broadcasting Corp.	Vernacular	IS, Drums & African PopMusic	1902	KH
6295.0	2225	333	IRL	REFS Europe	English	Religious Program	1702	ZL
6496.5	1202	333	VTN	Cao Bang Radio	Vietnamese	Song by woman	1003	GI
6537.4	0925	232	PRU	Radio difusoras Huancabamba	Spanish	Folk Music	0203	ALS
6723.6	1215	333	VTN	RTV Lao Cai	Vietnamese	Song by man	1003	GI
6775.8	0823	333	PRU	Radio Union, Lima	Spanish	Salsa Songs followed by ID	1503	ALS
6780.5	1006	232	PRU	Radio Union, Lima	Spanish	Short Commentary	1103	ALS
6797.5	1106	333	PRU	Ondas del Rio Mayo, Nuevo C'arca	Spanish	Talks, Folklore and Huaynos	0603	KH
6956.7	2350	232	PRU	Radio La Voz del Campesino	Spanish	Andean Music	1402	DC
7171.2	0948	322	INS	RRI, Serui	Indonesian	Talks	0903	JY
7240.0	0449	533	TUR	Voice of Turkey, Ankara	English	Turkish Bulletin	2102	RL
7260.0	0856	443	VUT	Radio Vanuatu	French	Talk Music ID	1002	KH
7325.0	0246	553	AUT	Radio Austria Intl.,	English	Postbox heard Richard Lemke	2402	RL
7345.0	0225	543	CZE	Radio Prague	English	Spotlight, Carnival Time	1902	RL
7385.0	0430	543	USA	WRMI	English	WRN-1 Network	2402	RL
7445.0	0655	553	CTR	Radio for Peace Intl., Ciudad Colon	English	RFPI Mailbag	2402	RL

9400.0	0047	554	BUL	Radio Bulgaria, Sofia	English	Radio Bulgaria Calling	1602	RL
9535.0	0550	444	D	Radio Africa International	French	African Folklore	0303	HJK
9550.0	0530	433	CUB	Radio Haban,Cuba	English	Dxers Unlimited	0203	HJK
9560.0	0255	543	CAN	Radio Korea Intl., via Sackville	English	Multiwave Feedback	1802	RL
9580.0	0920	232	AUS	Radio Australia,Melbourne	English	Program	0303	HJK
9615.0	0915	132	ALS	KNLS,Anchor Point	Russian	Religious Program	1003	HJK
9704.2	0445	333	ETH	Radio Ethiopia	Amharic	Talks	2602	HJK
9720.6	0752	222	PRU	Radio Victoria,Lima	Spanish	Religious Program	0803	ALS
9730.0	1605	433	VTN	Voice of Vietnam	English	News,ID,Winter Oympics	1702	HJK
9736.3	0814	444	PAR	Radio Nacional de Paraguay	Spanish	Talk and Paraguayan Music	0603	KH
9780.4	1612	333	YEM	Yemen Radio & TV	Arabic	Arabic Music	1103	KH
9820.0	0150	553	CUB	Radio Habana,Cuba	Rnglish	Dxers Unlimited	2002	RL
9885.0	0740	553	D	Swiss Radio Intl., via Juleich relay	English	Out and About	2502	RL
9925.0	0211	553	GER	Hrvatski Radio via Juleich relay	English	News Sports Olympics	2202	RL
9960.0	1858	322	ARM	Radio International	German	IS,ID and rEligious Talks	1702	RAD
9975.0	0136	132	USA	KVOH,Simi Valley	Spanish	Religious Program,Chorus	2402	HJK
11650.0	1134	233	MRA	KFBS,Saipan	Mongolian	Religious Program	1103	HJK
11690.0	1638	453	JOR	Radio Jordan,Amman	English	Friday Special Music	1502	RL
11710.0	0252	233	ARG	RAE,Buenos Aires	English	ID,DX Program	2802	HJK
11765.0	0828	343	ALS	KNLS,Anchor Point	English	Golden era of American Music	1103	HJK
11775.0	1052	233	AIA	Caribbean Beacon	English	Dr.Gene Scott Univ Network	1502	HJK
11775.0	1225	333	GUM	KSDA,Agat	Vietnamese	Religious Program	1502	HJK
11840.0	0100	343	EQA	HCJB,Pifo	English	DX Party Line	2402	HJK
11880.0	0900	333	AUS	Radio australia,Melbourne	English	News,ID and Weather	1502	HJK
11970.0	1700	433	J	NHK World	English	ID,News Jingle	2602	HJK
11980.0	2130	443	GUM	KSDA,Agat	English	Christ Programs	1602	HJK
11995.0	0418	353	FRA	Radio France International	English	RFI News Report	2502	RL
12080.0	0444	344	AFS	AWR,Meyerton	English	DX Program Wavescan	0303	HJK
12255.0	1827	243	IRL	Reflections Europe	English	Religious Program	1702	HJK
13585.0	2048	343	POR	RDP International	Portugese	Football Match Commentary	1103	IN
13675.0	1900	343	D	IBRA Radio Via Juleich relay	Unknown	Religious Program	1702	IN
13700.0	2234	553	ATN	Radio Vlaanderen International	English	Belgium Today	2002	RL
13810.0	2020	443	D	Radio Ecclesia via Juleich relay	Portugese	ID,Politics in Ruanda	1602	HJK
13820.0	1705	443	D	Radio africa International	English	ID News about Congo	1502	HJK
13865.0	1213	333	ISL	Iceland State Broadcasting Service	Icelandic	ID,Program on Europe,Music	1502	HJK
15038.0	0400	453	CTR	RFPI, Costa Rica	English	Interactive Radio Show	2102	RL
15060.0	1150	233	TWN	CBS News Network	Chinese	News,Instrumental Music	1103	HJK
15120.0	0910	444	NIG	Voice of Nigeria	English	Political Nx Angola Parliament	1103	HJK
15150.0	1805	443	INS	RRJ,Jakarta, Cimanggis	German	ID,News	1702	HJK
15175.0	1100	444	NZL	Radio New Zealand, Rangitaiki	English	ID,News aroun Pacific	1103	HJK
15330.0	1430	333	GUM	KSDA,Agat	English	Voice of Hope Religious Px.	1502	HJK
15340.0	0727	343	NZL	Radio New Zealand,Rangitaiki	English	News of Winter Oympics	1502	DC
15375.0	0314	333	CHL	Voz Cristiana	Spanish	ID,South american Music	2802	HJK
15400.0	2057	333	ASC	BBC WS via Ascension relay	English	Oympic Updates	1702	SM
15475.6	2020	242	ATA	Radio Nacional Arcangel	Spanish	Music and ID	2002	KH
15505.0	2054	333	KWT	Radio Kuwait	Arabic	Interview	1702	SM
15510.0	2052	333	MRA	Radio Free Asia	Chinese	Music	1702	SM
15535.0	1235	343	SEY	FEBC,Mahe	Arabic	Religious program	1502	HJK
15640.0	2046	333	ISR	KOL Israel,Jerusalem	Spanish	Program	1702	SM
15660.0	1300	343	GUM	KSDA,Aagt	English	ID,Religious Chorus	1902	HJK

15735.0	2038	333	RUS	Voice of Russia	English	Comments	1702	SM
15820.0	1007	242	ARG	LS4 Radio Continent,Buenos Aires	Spanish	Local Advts. and Commentary	2402	ALS
17595.0	1227	343	EGY	Radio Cairo	English	Music and News, ID	0602	KH
17630.0	0720	343	GAB	Africa No.1,Moyabi	French	Hilife songs,News	0603	KH
17695.0	2029	433	AFS	Adventist World Radio	English	IS and ID	1702	SM
17735.0	1236	343	TUN	RTV Tunisienne	Arabic	Music and ID	0602	KH
17750.0	0815	243	AUS	Radio Australia	Indonesian	Magazine Program	1103	HJK
17780.0	1456	343	AFS	Channel Africa	Swahili	IS,ID,Drums and News	1103	KH
17820.0	0814	444	AUT	AWR via Moosbrunn	French	Religious Program	1802	ZL
17825.0	2127	533	J	Radio Japan NHK	English	Weekend Square	2402	RL
17865.0	1658	453	CAN	Radio Austria Intl	English	Postbox	1602	RL
17895.0	1530	333	AUT	Radio Africa Intl.,	French	African Pop Music and Talks	1902	KH
21455.0	0120	453	EQA	HCJB,Quito	English	DX Party Line Paul Ormandy	2402	RL
21490.0	1700	444	AFS	UN Radio ,Meyerton	French	ID,News,Madagascar Crisis	1502	HJK
21560.0	0800	353	AFS	Amateur Radio Mirror Intl.,	English	Amateur Radio News & ID	1702	KH
21597.5	1248	444	UAE	UAE Radio , Dubai	Arabic	ID,Hymns nad News	2602	HJK
21820.0	1320	344	AUS	Radio Australia via Sheparton	English	Irish Folk Music,ID	1502	HJK

Thanks a lot for your contributions:

ALS : Arnaldo L. Slaen, Argentina. Sony ICF 2010, RealisticDX-160 & GE Superradio with 15 metres long wire
DC : Daniele Canonica, Switzerland. JRC 535 with 30 metres long wire + MLB + ALA 1530
GI : Gaku Iwata, Chiba, Japan. FRG 7700 / NRD 535D, AD30, 20 metres long wire
HJK : Hans-Joachim Koch, Dornstetten-Aach, Germany. AR 7030 with 20 metres long wire
HY : Hiromitsu Yanagisawa, Saitama, Japan. Drake R8 with 10 metres long wire
IN : Iwao Nagatani , Kobe,Japan. NRD 525, AD-370 with 20 metres long wire
JY : Juichi Yamada , Japan. NRD-525, AR 7030 with SONY AN-1
KH : Kouji Hashimoto,Yamanashi, Japan. NRD 525, FRG 7 & RD 9830 with 35 metres long wire
RAD : Richard A .D'Angelo, Wyomissing, USA. Drake R-8B Lowe HF-150 Alpha Delta DX Sloper, RF Systems Mini-Windom Datong FL3 JPS ANC-4
RL : Richard Lemke, St. Albert, Alberta, Canada. JRC NRD 535 HF with random long wires.
SM : Stewart Mackenzie, California, USA. Kenwood R 5000/Grundig Satellit 650 with 100 metres long wire.
ZL : Zacharias Liangas, Thessalonki, Greece with Lowe HF-150,Sony ICF 7600D,Yupiteru MVT 7100

Dear Friends,

Welcome to the third issue of Logbook this year.

With the seasonal Frequency change due to happen this month end there should be lot of new frequencies coming up. Also the coming of summer in the northern hemisphere with the sustenance of high sunspot activity, the higher frequencies should provide some good propagation for DX-ing.

Till next issue it's 73's from your Editor,

Ashok Kumar Bose

QSL CORNER

Editor: Richard Lemke, 60 Butterfield Crescent, St. Albert, Alberta, T8N 2W7, CANADA

Country	Station	QSL	Time	ORG	Remarks	OM
Finland	Scandinavian Weekend R.	f/d cd	38 ds	11.720	v/s Frank and Radio Jack.	RAD
Germany	R. Africa International	f/d cd	279 ds	15.485	v/s Donna Niemann & Raphael Mbadinga	RAD
Pirate (Euro)	Classic Rock Radio	e-mail	one day	7.470		RAD
Pirate (Euro)	R. Nova International	e-mail	6 hours	7.450	v/s Terry Philips	RAD
Pirate (Euro)	R. Bandonica & R. Enterprise	letter	20 ds	11.485	v/s Marcel & Bandonica	RAD
Pirate (Euro)	Free R. Service Holland	e-mail	15 ds	7.449.8	v/s Peter Verbruggen	RAD
Pirate (Euro)	Classic Rock Radio	f/d cd	18 ds	7.470	v/s CCR	RAD
Pirate (Euro)	Radio Alfa Lima Int. SW	e-mail	14 hours	15.070	from Alfred.	RAD
Pirate N am	KIPM	f/d cd	60 ds	6.955	v/s Alan Maxwell	RAD
Russia	R. Studio("Gardarika")	f/d cd	42 ds	9.940	v/s Dmitry Vasyliiev	RAD
Russia	Voice of Tatarstan	f/d cd	24 ds	11.665	V/s lidus	RAD
USA	WJCR	f/d cd	17 ds	7.490	v/s Gerri Powell via e-mail, Larry Baysinger, QRP QSL	RAD

Thanks to our Reporter:

RD = Rich D'Angelo, Wyomissing, PA, USA - Drake R-88, Lowe HF-150, Alpha Delta DX Sloper, RF Systems Mini-Windom, Datong FL3, JPS ANC-4 (Welcome)

BBC Daventry.... Potted History Of A Famous Station by Keith Orchard



Photo: Daventry BBC main building in 1991, the year before final closure.

Keith Orchard G3TTC provides a 'potted history' of the BBC Daventry transmitting station, for so many years a familiar name 'on the dial' and sight from the M1 Motorway in the English Midlands.

Daventry is a name, like Hilversum (Holland), Motala (Sweden), Pittsburgh and Schenectady (USA), which was familiar to generations of listeners in the early days of domestic and international broadcasting. It has been one of the best heard and most listened to stations in the world, but on 28 March 1992, after 67 years of broadcasting, it fell silent.

Due to a reduction in the BBC's total transmission requirements, it was closed down. However, it still remains a base for a mobile maintenance team, which maintains domestic radio and television broadcasting station maintenance in the area.

Network Transmitters

By 1924, a network of nine 'main' and eleven 'relay' medium wave transmitters, each with its own studio, had been set-up across the country. However, there were problems in feeding all stations with a common programme from London, so the British Broadcasting Company made plans to build a long wave transmitter capable of covering a large part of the country, something not possible on medium wave.

Following successful long wave experiments at the Marconi works in Chelmsford, a search was made for a permanent site. This had to be fairly central in the country, to relay the London programme on long wave.

Borough Hill on the outskirts of Daventry in Northamptonshire was chosen, being 200m above seal level (a.s.l.). It also had a flat top covering 20 hectares with good earth qualities.

The site also had nearby electricity and water supplies and road and rail networks at hand. The site cost £2670 freehold, and as it was some distance from a road, a light railway was built to the top of the hill, using petrol-driven locomotives to transport the building materials.

Callsign 5XX

The station, using the callsign 5XX and a frequency of 187.5kHz was opened by the Postmaster General on 27 July 1925. With an output power of 25kW it was the most powerful in the world and the first to use long waves.

Originally, two 152m masts, each weighing 45 tonnes, spaced 244m apart supported a T aerial,



Photo: Daventry's 'aerial farm' from the Weedon road, which was also visible from the M1 motorway.

while a number of buried zinc plates provided the earth system. The power supply of about 300kW was taken from the public mains supply without standby plant. Reception reports soon confirmed that the range of the station was 300km for valve receivers, which at this time were becoming fairly common. Results showed that 85% percent of the population could receive Daventry.

The opening of the station was a significant event for the BBC. This was because for the first time listeners were given the opportunity to receive an alternative programme if they were also within the range of a local medium wave station. Such was the birth of Daventry.

National & Regional

By now, some listeners had a choice of two programmes, the 'National' programme on long wave from Daventry 5XX and the local programme from their nearest 'Regional' medium wave station. But **Capt. P. P. Eckersley** (Chief Engineer) wanted everyone to have the choice.

Eckersley conceived the idea of the 'Regional Scheme', where a network of high power (50kW) medium wave transmitters would cover the country. They were to replace the existing low power transmitters.

A second building was erected at Daventry in 1926 and as no commercial 50kW m.w. transmitter was available, the BBC designed and built its own. It was estimated that it would cost £10,000 and that the running costs would be £3,000 per annum.

The prototype transmitter was built in under six months and was powered into a T aerial hung between two 100m masts for the first time on 5 May 1927, a remarkable achievement. It was known as 5GB.

The first alternative programme for the Midlands started from this transmitter on 21 August 1927, operating on 610kHz with an output power of 30kW. During the testing of this transmitter, the BBC's first oscilloscope was used.



Photo: The original 1925 transmitter building (callsign 5XX) on the left, with the later transmitter building on the far right.

Distorting Radiation

When it was discovered that one of the long wave masts was distorting the radiation towards Birmingham, a new aerial had to be erected. Despite this, the new service was a success and the only complaints were overloading of local receivers!

There was a 25kW power restriction imposed by the Government on long wave transmissions from the Daventry site and in the early 1930s, thought was being given to the building of a new high power transmitter using the full 150kW permitted by the Lucerne Plan, but a new site would be required.

The new site was to be Droitwich in Worcestershire south of Birmingham, where the new National 200kHz transmitter was commissioned in October 1934. This was followed by the Regional m.w. transmitter in February 1935. (*For further reading see 'Droitwich...Engraved On The Dial' PW January 1990. Editor*).

Apart from a low power Air Met transmitter operating around 250kHz between 1935 and 1950, medium wave transmissions did not resume until 1950 when a Marconi experimental 'Ampliphase' transmitter was used to start the 'Third Programme' on 647kHz, later to be carried on two Marconi transmitters operated in parallel giving 162kW, housed in the original 5XX building.

The 'Third Programme' aerial was a 220m high mast radiator one and a half miles away at Dodford. It was fed by an open coaxial feeder comprising eight outer and four inner copper wires, resulting in a feeder loss of only 12kW.

The transmitters were completely air-cooled and were operated remotely from the main short wave building 150m away. This service ceased with the wavelength change in November 1978.

Short Wave Service

In May 1926, the Post Office granted permission to the BBC to set-up an experimental short wave transmitter at Daventry with a power not exceeding 20kW to service the Colonies.

Faced with shortages of money and manpower, priority was given to the experiments then taking place with high power m.w. transmitters. Because of this, s.w. transmissions did not start until 19 December 1932, taking over from the 7kW Chelmsford experimental transmitter 5SW.

Mention should be made at this point of the pioneering work carried out by Radio Amateur **Gerald Marcuse G2NM**. Under the authority of the Postmaster General, he broadcast speech and music on a wavelength of 32m from 1 September 1927 with a power of 1kW from his home in Caterham, Surrey, and in doing so, proved that reliable world-wide broadcasting was possible.

New Concept

The design of a broadcasting station to give effective world-wide coverage was a new concept. Two Standard telephones and Cables Ltd. 15kW transmitters were installed to operate on eight wavelengths feeding 18 aerials, some directional and some omnidirectional.

The British Empire was divided into five zones, centres on Australia, India, West Africa and Canada. The programmes quickly gained a wide audience.

The early aerials were vertically polarised and supported by masts about 30m high but following experiments with different types, arrays of stacked horizontal dipoles were introduced, on taller masts. Two self-supporting steel masts were erected in 1934, so that various types of directional aerial could be tested.

Following the transfer of l.w. and m.w. transmissions to Droitwich in 1934, the two 152m masts used for the 5XX and 5GB aerials became available to support s.w. aerials. The old 5SW transmitter from Chelmsford was rebuilt and installed as Sender 3 in 1935, running 10kW, before being uprated to 20kW and then 60kW.



Photo: A temporary railway was used in the construction of Daventry, and a more permanent system - complete with 'points' - was used to move 'trucks' carrying the grid and anode tuned circuits (as shown).

In the following year, construction of a new building commenced, in which Senders 4 and 5 (80kW ST&C) were commissioned prior to the Coronation of King George VI in May 1937, followed by Sender 6 (80kW Marconi SWB) and Sender 7 (80kW ST&C) in December 1940.

In 1937, the Postmaster General had announced that the BBC would commence foreign language transmissions. This led to an extension being added to house Senders 8, 9, 10 and 11 (all Marconi 100kW SWB18) which were commissioned in 1939/40.

Each 'sender' (the BBC always referred to the transmitters as 'senders') had several low power stages. Any of these could be switched in to drive the higher power stages, which had a system of coils mounted on moveable trucks on a railway system, so that the coil truck corresponding to the desired waveband could be wheeled into the rear of the final amplifier.

Control Desk

Each transmitter had a control desk from which its various supplies - the extra high tension (e.h.t.) obtained from an evacuated steel tank rectifier containing mercury vapour, the remaining supplies from motor generator sets - could be controlled and monitored. A Technical Assistant was assigned to each transmitter and was responsible for its operation and monitoring its output on headphones. As the number of transmitters increased, so did the number of aerials. Several additional stayed masts up to 100m high were erected to support them.

The aerials were fed by balanced 550 Ohm open wire feeders through an open air switching system. When a transmitter was not powered, a moveable connection could be transferred using a hook and eye arrangement, to connect it to a different aerial.

In 1944, new drive equipment was installed. This took the form of a number of v.f.o.s and crystal oscillators operating between 0.7 and 1.4MHz, which fed via frequency multiplier units to the transmitters. Frequent checks have to be made to ensure that the output frequencies were maintained within a few tens of Hertz.

Major Re-Engineering

In the early 1960s, a major re-engineering programme took place. Senders 1, 2, 4, 5, 6 and 7 were withdrawn in 1961/2 and four new Marconi 100kW BD253s installed. Designated Senders 12, 13, 14 and 16, they were commissioned in 1962/3.



Photo: Rather impressive! The r.f. stages of a 1939 Marconi SWB18 transmitter.

The new senders had r.f. channels, only one of which could be powered at a time. Between these was a modulator and power supply unit.

The unpowered r.f. channel could be set-up ready for a new frequency, and with a break of only two seconds, one transmission would cease and another start. Senders 12 to 16 were scrapped in October 1991.

A new control desk was installed in 1961. Remote control of filament and e.h.t. supplies was provided for the transmitters.

A nearby automatic switching unit consisting of a pegboard, relays and uniselectors was programmed to switch any desired programme to any transmitter at 15 minute intervals throughout the day.

A lamp matrix on the control desk showed the selection. An audio monitor sequenced round all the incoming lines and transmitter outputs.

In the adjacent drive room, the first frequency synthesiser (by Rohde and Schwarz and containing 48 valves) made its appearance among the 1940s drive equipment.

New Transmitters

From 1964 to 1966, four new Marconi 250kW BD272 transmitters (Senders 18 to 21) entered service. In 1964, Sender 10, originally operated at 100kW was modified to generate a 20kW p.e.p. s.s.b. output for use as a point-to-point link to relay stations overseas.

Sender 10 was withdrawn in 1969 when two Marconi H1200 30kW single sideband transmitters (SSB1 and 2) were commissioned, with three rhombic aerials. These transmitters were later converted for independent sideband operation, i.e. two sidebands carrying different programmes, SSB1 and 2 were withdrawn in 1985, when overseas relay stations received their programme feeds by satellite.

In 1965, a new feeder and feeder switching system with a characteristic impedance of 330 Ohms was brought into use. The switching was controlled remotely and replaced the original manual gantry system installed in 1937. The new system, using pneumatically operated r.f. switches, enabled any transmitter to be connected to any eight chosen aerials.

More Synthesisers

Several more frequency synthesisers by Rohde and Schwarz and Marconi made their appearances after 1969. And when the (frequency) 'drive room' was abolished in 1972, each transmitter was equipped with its own synthesiser.

During 1982, vacuum circuit breakers were fitted to switch the e.h.t. power supplies of the transmitters. This was to reduce the wear and tear on the original oil-filled circuit breakers when switching the transmitters on and off.

A further modernisation programme began in 1985, when the pre-war Senders 8 to 11 were replaced by six Marconi 300kW B6126 self-tuning transmitters, Senders 22, 24 and 26 to 29. Senders 18 to 21 were dismantled and shipped to overseas stations and in their place a new control centre was installed, providing automatic selection of frequency, programme line, aerial and bearing.

Other Modes

Daventry transmitted in 'other modes' and radiated experimental television pictures in 1928, using the Fultograph process. Later in 1935, early experiments with radar were conducted. One of the transmitters was operated in the 49 metre band and a receiver driving a cathode ray oscilloscope (then a new and expensive instrument) was set-up in an old van a few miles away.

The object of the experiment was to see if an aircraft flying through the radio beam would reflect the signal. An obsolete RAF Heyford bomber was 'borrowed' for the tests.

As the lumbering aircraft flew at around 6000ft from Daventry to nearby Weedon, the spot on the oscilloscope wobbled due to interference between the direct and indirect (reflected) rays. This was a very encouraging start for Robert Watson-Watt's (later Sir Robert) team and further development took place at Orfordness with the result that British radar was ready for the outbreak of the Second World War in September 1939.

Large Electricity Bill

In mid-1990, Daventry transmitted programmes in 37 languages to all parts of the world with a total air time of 1000 hours a week and a large electricity bill of £100 an hour. It had been the scene of many pioneering developments over the years and everyone was sad to see its closure in 1992.



Photo: All (almost!) gone, just one mast left in October 1992.

Most of the BBC transmitter engineers have worked there at some time. But, like the Phoenix, Daventry is becoming a transmitting station once again, with a transmitter being installed for DAB (Digital Audio Broadcasting), the new v.h.f. digital

radio service. You can't keep a good station off the air!

This article is reproduced by kind permission on PW Publishing Ltd. publishers of **Practical Wireless** magazine from which this article is taken. Visit the Practical Wireless Website <<http://www.pwpublishing.ltd.uk/pw>> for further information about the magazine. There are additional pictures of the BBC Daventry station in the "1960 historical photos section" at <<http://www.daventry-index.co.uk/about/1960/index.html>>.