

8/9 - 2005

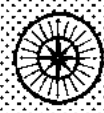


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WORLD WIDE DX CLUB



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
 +49-69-13303051669 ● E-Mail: mail@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, Unit # 28, 7035, Rexwood Road, Mississauga, Ontario, L4T 4M6, Canada ● E-Mail: logbook@wwdxc.de
- QSL 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 12 14, D-61282 Bad Homburg, 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.

- WORLDWIDE DX CLUB homepage in the Internet at: <http://www.wwdxc.de>
- Weekly "TopNews" by Wolfgang Büschel at: <http://www.wwdxc.de/topnews.htm> (available also free of charge by E-Mail to our members on request)
- Latest DRM schedule at: <http://www.wwdxc.de/drm.htm>

WORLD RADIO TV HANDBOOK 2005

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Bei uns erhältlich für € 1,00 pro Stück (inkl. Porto). Mindestbestellung: 10 Stück. Laut UPU (s. DX MAGAZINE 6/02, S. 31) sind diese weiterhin unbeschränkt gültig.

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DX MAGAZINE No. 8/9 ■ Vol. XL ■ August/September 2005

Hello again,

Welcome to the annual summer double issue of our DX MAGAZINE. Like in the past years you will find our normal monthly sections, several articles and in addition our annual "List of Members".

Please note that we have a new German bank account: Raiffeisenbank Graevenwiesbach No. 100019984 (IBAN: DE75 5006 9345 0100 0199 84 - BIC/SWIFT-Code: GENODE51GWB). Our previous account with Postbank Frankfurt will be deleted by September 30th, 2005. This is due to the high charges of Postbank Frankfurt for club accounts since the beginning of 2005.

Bitte beachten Sie, daß wir ab sofort ein neues deutsches Bankkonto eingerichtet haben: Raiffeisenbank Grävenwiesbach No. 100019984 [Bankleitzahl 500 693 45]. Unser bisheriges Konto bei der Postbank Frankfurt werden wir zum 30. September 2005 kündigen. Grund für den Kontowechsel ist die erneute Erhöhung der Kontogebühren für Vereinskontoen Anfang des Jahres 2005.

And now over to our usual information from outside the club, this time only two items in German: Aus der "Regulierungsbehörde für Telekommunikation und Post - Reg TP" wurde am 13. Juli 2005 mit In-Kraft-Treten des neuen Energiewirtschaftsgesetzes (EnWG) die **Bundesnetzagentur**. Diese übernimmt nun zusätzlich zur Regulierung der Bereiche Post und Telekommunikation auch die neuen Sektoren Strom- und Gasmarkt und Eisenbahnen.

Anschrift und Telefon bleiben unverändert: Tulpenfeld 4, D-53113 Bonn, Tel. 0228-14-0. Die Internet-Adresse lautet jetzt: <<http://www.bundesnetzagentur.de>>. Unter dieser Adresse sind auch weitere Informationen zur Arbeit der neuen Bundesnetzagentur nachzulesen.

Ende Mai wurde die neue Ausgabe der Liste **Hörfunk- und Fernsehsender in der Bundesrepublik Deutschland** für das Jahr 2005 vom NDR ausgeliefert. Es wird die letzte Liste unter der Federführung des NDR sein. Ab 2006 wird hierfür das IRT München zuständig sein. Die Ausgabe 2005 mit Stand vom 1.1.2005 enthält 448 Seiten im Format A4, davon 40 Seiten Karten, geordnet nach dem bisher üblichen Aufbau in früheren Listen. Die Liste kann bei folgender Adresse bestellt werden: Norddeutscher Rundfunk, Abt. Sendertechnik/Wittsmoor, Rothenbaumchaussee 132-134, D-20149 Hamburg. Bitte legen Sie Ihrer Bestellung einen Verrechnungsscheck über € 15,00 bei.

(Volker Knütel, BRD)

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

NEWS ABOUT BROADCASTING (+other) STATIONS

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

ALASKA: World Christian Broadcasting, charter member of NASB and owner and operator of *KNLS*, Anchor Point, Alaska, has announced expansion of their KNLS facility. They are also announcing the beginning of construction of a broadcast center on the island of Madagascar. Charles Caudill, President, stated that their expansion is an indication of the company's confidence in the future of shortwave and that they are looking forward to DRM usage worldwide. KNLS has been on the air since July 1983. Situated on a 70-acre property located just south of the small town of Anchor Point and some 120 air miles southwest of Anchorage on the Kenai Peninsula, they began broadcasting daily in the Russian, Mandarin Chinese and English languages. Since 1983 they have been using a 100KW Harris transmitter and a TCI 611 antenna. On May 1, 2005 they doubled the broadcast day by adding a 100KW Continental 418F transmitter and another TCI 611 antenna. Director of Engineering, Kevin Chambers, reports the new facility is working well. During November 2004 World Christian Broadcasting obtained 85 acres of land on the island nation of Madagascar. Initial plans were to begin an Arabic language service to add to the present programming in English, Russian and Chinese from Alaska. But, after propagation studies showed that excellent signals could be put into Western Europe, southern and western China, India, Indonesia, South America and of course, Africa, it was decided to expand the original plan. Construction will begin this October under the supervision of Chambers. The facility will be comprised of three 100 kW transmitters, feeding into four antennas; two 9-17 MHz 4/4/1, one 7-15 MHz 4/4/1 and one Log Periodic antenna. The three curtain dipole antennas will be aimed to reach the areas of the world mentioned above. The Log Periodic antenna will be used to broadcast directly to the people of Madagascar. In fact, World Christian Broadcasting has agreed for the government of Madagascar to use that antenna to broadcast to the Malagasy people. At a projected cost of \$7,000,000, construction is expected to be completed early in 2008. World Christian Broadcasting Operation Center and Studios are located in Franklin, Tennessee. Using a magazine format of programming content, they present a variety of programs including: good music; programs on science, health, technology; life in America; family life; language tutorials and more. The Bible messages vary in length from one to five minutes. They are brief and simple, with the focus on reaching out to unbelievers. Charles Caudill is President/CEO of the ministry. Dale Ward is Executive Producer. Kevin Chambers is Director of Engineering and KNLS Station Manager, while Andy Baker serves as Vice President. Ed Bailey, former COO and board member now serves as legal counsel for NASB. (NASB NEWSLETTER August 2005 via WYFR via WWDXC-HQ; July 29, 2005)

AUSTRALIA: The *Hutt River Province Principality*, a self-proclaimed independent territory on Australia's mainland, has announced plans to begin shortwave broadcasts and also seek amateur radio DXCC entity status. Located just north of Geraldton, Western Australia it claimed self-government 35 years ago and survives on a tourist based economy. The Australian Government does not recognize its claim of independence. The Hutt River Province Director-General, Ministry of Electronic Communications, Eddie DeYoung has announced plans to set up a shortwave broadcast station possibly to be called Hutt River Radio. He says its programmes will be primarily replays of old radio drama shows, music from yesteryear, readings from the world's newspapers for print handicapped listeners, and provide time-slots to non-government humanitarian aid organizations. Eddie DeYoung says that Hutt River Province is trying to gain United Nations recognition which would in turn enable the International Telecommunications Union (ITU) to issue it with a block of radio call signs. (©RNMN July 15, 2005 by AS; via JKB)

BHUTAN: Schedule A05 of *Bhutan Broadcasting Service - BBS:*

BGN	END	LANGUAGE	FREQ	DAYS
0100	0300	Dzongkha	6035	Su Mo Tu We Th Fr Sa
0300	0400	Sharchhop	6035	Su Mo Tu We Th Fr Sa
0400	0500	Nepali	6035	Su Mo Tu We Th Fr Sa
0500	0600	English	6035	Su Mo Tu We Th Fr Sa
0600	0800	Dzongkha	6035	Su Sa

0800 0900 English 6035 Su Mo Tu We Th Fr Sa
 0900 1000 Nepali 6035 Su Mo Tu We Th Fr Sa
 1000 1100 Sharchhop 6035 Su Mo Tu We Th Fr Sa
 1100 1300 Dzongkha 6035 Su Mo Tu We Th Fr Sa
 (DXAsia Website via JKB, March 2005)

CZECH REPUBLIC: Property developer Orco Property Group will build new headquarters for *Radio Free Europe/Radio Liberty* in Prague 10, RFE/RL spokeswoman Anna Rausova said. RFE/RL will leave the former parliament building near Prague's Wenceslas Square. The two sides signed a contract ensuring a 15-year lease with an option to extend every 10 years. RFE/RL managers estimate the process of construction and moving out of the city centre could take about 2.5 years. "Our target date is end-2007," Rausova said. At that time, the radio station's lease contract at the former parliament building expires. The Czech government started to consider moving the radio station's headquarters out of the centre after the 9/11 terror attacks on the USA. Since that time, the building has been under police protection. For some time after the attacks, it was guarded by several armoured vehicles. (Source: CTK - Czech News Agency via @RNMN July 28, 2005 by AS; via JKB)

GUINEA: In early June, a thunderbolt damaged the transmitters of *Radio Télévision Guinéenne* (RTG) installed in Sonfonia, on the outskirts of the capital Conakry. This prevented the station from broadcasting on shortwave. The government appealed to "friendly countries" for assistance, and after one month China responded by handing over a spare part which meant that shortwave transmissions could resume on 7 July. The shortwave transmissions are necessary to reach the rural parts of Guinea as well as neighbouring countries. But RTG technicians say a renovation of the transmitting centre at Sonfonia is necessary to ensure reliable performance in the future. (@RNMN July 12, 2005 by AS; via JKB)

HONDURAS: *La Voz Evangelica* resumed SW broadcasts Jul 22 at 2200, using 4820, with the callsign HRVC. An engineer at the station advised that they are currently using 2 kW as they are still doing some adjustments, and using a V-type antenna. They plan on increasing to 5 kW shortly, and they are already working on a new H-type antenna with more gain which should improve the efficiency of the transmitter, thus the range. Their schedule will be daily 2100-1600. Programs are 99% in Spanish but there will be a program in English on Sundays at 10 PM (UTC Mondays at 0400). They might increase their English schedule, but that depends on the response from the audience, but this would be aired at night only. Many canned IDs are noted, such as "HRVC, Cadena Radial" and some long IDs mentioning the regional stations on mediumwave, such as La Ceiba on 810, Choluteca on 1140, Tegucigalpa on 1370 and San Pedro Sula on 1310. The station promises to respond to all reports from abroad and send out calendars, pens, key chains, etc. (Elmer D. Escoto, San Pedro Sula, Honduras, in DSWC DX-Window via WORLD BROADCASTING MAGAZINE #343 by BP; August 9, 2005; via WDXC-HQ)

INDIA: The website DXAsia reports that *All India Radio* is going to vacate the 90 metre band altogether in favour of 60 metre band for domestic shortwave services. This means Shimla on 3223kHz, Bhopal on 3315kHz, Delhi on 3365kHz and Gangtok on 3390kHz will soon move onto the 60 metre band. It is expected that there will be some adjustments on the present 60 metre band usage by All India Radio. (@RNMN July 15, 2005 by AS; via JKB)

All India Radio - AIR A05 schedules (G.O.S. = General Overseas Service in English), External Services. Reception reports on technical quality of the programmes are welcome and may be sent to the Director (Spectrum Management & Synergy), All India Radio, Room No.204, Akashvani Bhawan, New Delhi-110001 (India). Telefax: 91-11-23421062, 91-11-23421145. E-mail: <spectrum-manager@air.org.in>.

FREQ	BGN -END	LANG	STATION	SCE	TARGET						
3365	1400-1410	Punjabi	Delhi	Home	NEWS	6030	0245-0300	English	Delhi	Home	NEWS
3945	0130-0230	Nepali	Gorakhpur	External	South Asia	6030	0300-0310	Punjabi	Delhi	Home	NEWS
3945	0230-0245	Hindi	Gorakhpur	Home	NEWS	6030	1215-1430	Hindi	Delhi	Home	UTTARANCHAL
3945	0245-0300	English	Gorakhpur	Home	NEWS	6045	1430-1930	Urdu	Delhi	External	South Asia
3945	1330-1430	Nepali	Gorakhpur	External	South Asia	6085	1220-1230	NATIONAL	Delhi	Home	NETWORK
3945	1430-1735	Urdu	Gorakhpur	External	South Asia	6085	1230-1235	English	Delhi	Home	NEWS
4860	1220-1230	Hindi	Delhi	Home	NETWORK	6085	1235-1240	Hindi	Delhi	Home	NEWS
4860	1230-1235	Hindi	Delhi	Home	NETWORK	6085	1240-1245	Sanskrit	Delhi	Home	NEWS
4860	1235-1240	Hindi	Delhi	Home	NETWORK	6085	1245-1255	Sindhi	Delhi	Home	NEWS
4860	1240-1245	Sanskrit	Delhi	Home	NETWORK	6085	1255-1310	Kashmiri	Delhi	Home	NEWS
4860	1245-1315	Hindi	Delhi	Home	NETWORK	6085	1330-1335	Hindi	Delhi	Home	NEWS
4860	1330-1430	Nepali	Delhi	External	South Asia	6085	1335-1340	SPORTS HIN	Delhi	Home	NEWS
4860	1430-1930	Urdu	Delhi	External	South Asia	6085	1345-1400	Dogri	Delhi	Home	NEWS
5990	0100-0200	Sindhi	Aligarh	External	South Asia	6085	1405-1415	SAMAYIKI	Delhi	Home	NETWORK
6030	0130-0230	Hindi	Delhi	Home	UTTARANCHAL	6085	1415-1420	PROG SUMM	Delhi	Home	NETWORK
6030	0230-0245	Hindi	Delhi	Home	NEWS	6085	1430-1435	English	Delhi	Home	NEWS
						6085	1435-1440	SPORTS ENG	Delhi	Home	NEWS

15185	0810-0820	Assamese	Delhi	Home	NEWS	15770	1215-1245	Telugu	Aligarh	External	S.E.Asia
15185	0820-0830	Oriya	Delhi	Home	NEWS	15795	1145-1315	Chinese	Bangalore	External	N.E.Asia
15185	0830-0900	English	Delhi	Home	NEWS	17510	0845-0945	Indonesian	Delhi	External	S.E.Asia
15185	0900-0930	Hindi	Delhi	Home	NEWS	17510	1000-1100	GOS-2	Delhi	External	Australia & NZ
15185	1115-1130	Arunachali	Delhi	Home	NEWS	17670	1515-1615	Swahali	Delhi	External	East Africa
15185	1130-1135	Hindi	Delhi	Home	NEWS	17670	1615-1730	Hindi	Delhi	External	East Africa
15185	1135-1140	English	Delhi	Home	NEWS	17670	1745-1945	GOS-4	Delhi	External	East Africa
15260	0700-0710	Telugu	Delhi	Home	NEWS	17705	1145-1315	Chinese	Bangalore	External	N.E.Asia
15260	0710-0720	Tamil	Delhi	Home	NEWS	17715	0315-0415	Hindi	Delhi	External	East Africa
15260	0720-0730	Malayalam	Delhi	Home	NEWS	17715	0415-0430	Gujarati	Delhi	External	East Africa
15260	0730-0735	English	Delhi	Home	NEWS	17715	0430-0530	Hindi	Delhi	External	East Africa
15260	0735-0740	Hindi	Delhi	Home	NEWS	17740	1115-1200	Thai	Delhi	External	S.E.Asia
15260	0740-0750	Kannada	Delhi	Home	NEWS	17800	1000-1100	GOS-2	Bangalore	External	N.E.Asia
15260	0750-0800	Gujarati	Delhi	Home	NEWS	17810	1115-1215	Tamil	Panaji	External	S.E.Asia
15260	0800-0810	Marathi	Delhi	Home	NEWS	17810	1215-1245	Telugu	Panaji	External	S.E.Asia
15260	0820-0830	Urdu	Delhi	Home	NEWS	17845	0400-4030	Persian	Delhi	External	West Asia
15260	0830-0900	English	Delhi	Home	NEWS	17845	0430-0530	Arabic	Delhi	External	West Asia
15260	0900-0930	Hindi	Delhi	Home	NEWS	17860	1115-1215	Tamil	Delhi	External	South Asia
15260	1000-1100	GOS-2	Delhi	External	South Asia	17860	1220-1230	NATIONAL	Delhi	Home	NETWORK
15410	1000-1100	GOS-2	Bangalore	External	N.E.Asia	17860	1230-1235	English	Delhi	Home	NEWS
15410	1115-1200	Thai	Panaji	External	S.E.Asia	17860	1235-1240	Hindi	Delhi	Home	NEWS
15770	0400-0430	Persian	Aligarh	External	West Asia	17860	1240-1245	Sanskrit	Delhi	Home	NEWS
15770	0430-0530	Arabic	Aligarh	External	West Asia	17875	0845-0945	Indonesian	Aligarh	External	S.E.Asia
15770	0845-0945	Indonesian	Aligarh	External	S.E.Asia	17895	1000-1100	GOS-2	Aligarh	External	Australia & NZ
15770	1115-1215	Tamil	Aligarh	External	S.E.Asia						

(DXAsia website last Update March 2005, via JKB)

IRELAND: Following a lot of complaints from Irish citizens in the UK, Ireland's public broadcaster *RTÉ* has put its weekend sports coverage back on 252 kHz longwave, which is audible over much of the UK. The past two weekends, sports coverage was on FM only, in order to accommodate a programme called 'Second Helpings', featuring the best of the week's output, which was placed on both the longwave and mediumwave frequencies. Now RTÉ says that "From this Saturday, 16 July, listeners to RTÉ Radio 1 will be able to hear our weekend sports coverage on both the FM and Longwave 252 frequencies." The Second Helpings' programme will now be aired on mediumwave 567 kHz only. (©RNMN July 14, 2005 by AS; via JKB)

LATVIA: According to Eric Chilvers of commercial broadcaster *Radio Tatras International*, mediumwave transmissions from Latvia on 1350 kHz are due to commence this evening at 1800 UTC. Test transmissions are on the air during the day. Location and power of the transmitter have not been disclosed. (©RNMN July 20, 2005 by AS; via JKB)

LIBERIA: BBC Monitoring observed *Radio Veritas* relaying Voice of America's "Nightline Africa" programme on 5470 kHz shortwave at 2025 gmt on Saturday 9 July 2005, with reception varying from poor to fair. At 2100 gmt the following announcement was heard: "This is Radio Veritas, the Voice of Truth. We are broadcasting from Monrovia on the standard frequencies of 97.8 MegaHertz on the FM band, and 5.470 MegaHertz in the 60-metre band shortwave." The broadcast continued with the following programming, all times given are Greenwich Mean Time:
2100-2130: "Education Forum"
2130-2200: "The Soap Opera"
2200-2215: News
2215-2255: Music
2255-2300: Religious programme
2300-2304: Closing announcement, repeating the above frequencies but mentioning that they would be back on air the following morning at 0545 gmt on 6.090 MegaHertz in the 49-metre band shortwave. Radio Veritas is operated by the Archdiocese of Monrovia and broadcasts daily in English and vernacular languages from the city's Catholic Media Centre. (Source: BBC Monitoring research via ©RNMN July 11, 2005 by AS; via JKB)

LIBYA: A bilingual test transmission from Libyan *Radio Voice of Africa* was observed from 1200-1400 gmt on 21675 kHz and 21695 kHz shortwave by BBC Monitoring on 4 July. Reception was fair to good. The first hour was in Swahili and included a news bulletin at 1230-1235 gmt. This was followed at 1300-1400 gmt with a programme in English, identifying as "Voice of Africa from the Great Jamahiriya", and announcing that this was an experimental transmission for east Africa on 21695 kHz, and for central, northern and southern Africa on 21675 kHz. There was a news bulletin at 1330-1340 gmt. Voice of Africa was further observed broadcasting in Arabic 1700-1900 gmt on the frequency of 11615 kHz. A transmission on 15660 kHz tentatively identified as Fulani was noted from tune-in at 1743 until 1800. According to a statement on the broadcaster's website the station launched experimental transmissions in two African languages on 1 July 2005, on the occasion of the fifth African Union Summit being held in the Libyan coastal town of Sirte. Voice of Africa is the external service of state broadcaster Libyan Jamahiriya Broadcasting Corporation, which has an Arabic/English/French website at

<<http://www.ljbc.net>>. (Source: BBC Monitoring research 4 Jul 05 in ©RNMN July 05, 2005 by AS; via JKB)

MISCELLANEOUS: VT Merlin Communications stopped selling *DRM software* in May 2005, after a successful 2.5 year project to enable enthusiasts to decode DRM tests & provide feedback to the tests well before the advent of consumer DRM radios. Because of continued demand for the software, Winradio have agreed to take over the day to day job of distributing the software on behalf of VT Communications for the next year until June 2006. Open source DRM software is also available. More details at the Internet: Open-Source Software Implementation of a DRM Receiver at <<http://drm.sourceforge.net/>>. (©RNMN July 27, 2005 by AS; via JKB)

English and Spanish shortwave broadcasts sorted by time. Credits to Eike Bierwirth, Leipzig (Germany), who compiled a comprehensive shortwave broadcasting-schedule list of stations on the air in various languages, version July 10, 2005. Based on this data I filtered language-based transmissions.

English Part 2 of 2 (transmission starting 1200-0000), English part 1 was published in last issue of DXM. Note: E = English, EDI = English, German, Italian:

STARTSTOP	DAY	ITU	STATION	LANG	TAR	FREQUENCY
1200 1215		CBG	Nat.Radio of Cambodia	E	SEA	11940
1200 1230		CAN	Radio Canada Int.	E	FE	9660/J 15170/J
1200 1230		F	Radio France Int.	E	Waf	17815/ASC
				E	Eaf	21620
1200 1230		USA	Adventist World Radio	E	As	15135/UAE
1200 1230		UZB	Radio Tashkent Int.	E	As	7285 15295 17775
1200 1245		USA	WYFR Family Radio	E	WNA	5985
				E	ENA	5950
				E	CAM	17750
				E	SAM	17505
1200 1257		CHN	China Radio Int.	E	Eu	13650/ALB 13790u 17490ka
				E	SEA	9730k 11980k
				E	Oc	9760k 11760k
1200 1300		ALS	KNLS Anchor Point	E	FE	9615 9780
1200 1300		AUS	Radio Australia	E	As	9475 11880
				E	W0c	5995b 6020 9560 9590
				E	Oc	9580
1200 1300		AZE	Radio Azerbaijan Int.	E	ME	1295 6111
1200 1300		G	BBC World Service	E	NAm	9605/USA-o
				E	CAM	9605/GUF 11865/ATN
				E	SAM	15190/ATN
1200 1300		G	BBC World Service	E	Eu	12095w 15485s 17640s
				E	CIS	15565r 17640w
				E	ME	11760/OMA 15575/CYP
1200 1300		G	BBC World Service	E	SAf	6190/AFS 11940/AFS 21470/SEY
				E	Waf	17830/ASC
				E	Eaf	17885/SEY
1200 1300		G	BBC World Service	E	SEA	6195/SNG 9740/SNG
				E	SAs	15310/THA 17790/OMA
				E	FE	17760/THA
1200 1300		HOL	Radio Nederland DIGITAL	E	CEu	7240
1200 1300		KOR	KBS World Radio	E	NAm	9650/CAN
1200 1300		POL	Radio Polonia	E	Eu	9525 11850
1200 1300		TWN	Radio Taiwan Int.	E	FE	7130
1200 1300		USA	Voice of America	E	As	1170#/PHL 6160/PHL 9645/THA
				E		9760/PHL 15240/CLN
1200 1400	Mo-Fr	USA	WHRI World Harvest R. 1	E	NAm	15285
1200 1400	SaSu	USA	WHRI World Harvest R. 1	E	NAm	11785
1200 1400		USA	WWCR 3	E	NAm	9985
1200 1500	Mo-Fr	CAN	Radio Canada Int.	E	ENA	9515 13655
				E	Car	17800
1200 1500		USA	WHRA World Harvest R. 5	E	Af	15310
1200 1500		USA	WHRI World Harvest R. 2	E	NAm	9840
1200 1500		USA	WINB Red Lion, PA	E	NAm	13570
1200 2200	Su	USA	WRMI Radio Miami Int.	E	NAm	7385
1200 2230	Sa	USA	WRMI Radio Miami Int.	E	NAm	7385
1200 2300		USA	WBCQ Monticello, ME	E	NAm	17495
1200 0200		USA	WWCR 2	E	NAm	13845

1205	1220	Mo	AUT	oe1	international	E	Eu	6155	13730
						E	As	17715	
						E	AUS	17715	
1205	1230	SaSu	AUT	oe1	international	E	Eu	6155	13730
						E	As	17715	
						E	AUS	17715	
1215	1230	Tu-Fr	AUT	oe1	international	E	As	17715	
						E	AUS	17715	
1215	1330		EGY		Radio Cairo	E	SAs	17835z	
1230	1235		IND		AIR Delhi	E	SAs	4860d 6085 17860d	
1230	1245		G		BBC World Service	E	Eu	15105w	
						E	Waf	17780/ASC	
						E	CAf	21640/ASC	
1230	1245	Th	G		Bible Voice	E	FE	12065/RUS-kh	
1230	1245	Mo-Fr	GUM		KTWR Trans World Radio	E	FE	11750	
1230	1300		AUS		HCJB Australia	E	SEA	15425	
1230	1300		BGD		Radio Bangladesh	E	SAs	7185	
						E	SEA	7185	
1230	1300		S		Radio Sweden	E	As	13580 15735	
						E	NAm	15240	
1230	1300		THA		Radio Thailand	E	Oc	9600	
1230	1300		VTN		Voice of Vietnam	E	SEA	9840 12020	
1230	1315	Su	G		Bible Voice	E	SEA	5890/RUS-v	
1230	1320		TUR		Voice of Turkey	E	Eu	15225	
						E	As	15535	
						E	AUS	15535	
1235	1300	SaSu	AUT	oe1	international	E	Eu	6155	13730
						E	As	17715	
						E	AUS	17715	
1245	1300	Mo	AUT	oe1	international	E	As	17715	
						E	AUS	17715	
1245	1300	Tu-Fr	AUT	oe1	international	E	Eu	6155	13730
						E	As	17715	
						E	AUS	17715	
1245	1300		USA		WYFR Family Radio	E	SAm	17505	
						E	CAm	17750	
1300	1330		CAN		Radio Canada Int.	E	FE	9660/J 15170/J	
1300	1330		CAN		Radio Canada DIGITAL	E	CEu	7240/HOL	
1300	1330		CZE		Radio Prague	E	NEu	13580	
						E	EAF	21745	
1300	1357		CHN		China Radio Int.	E	Eu	13790u 17490ka	
						E	SEA	11980k	
						E	Oc	11760k 11900k	
						E	ENA	9650/CAN 15260/CAN	
						E	SAm	17625/CHL	
1300	1400	SaSu	AUS		HCJB Australia	E	SEA	15405	
1300	1400		AUS		Radio Australia	E	W0c	5995b 6020 9560 9590	
						E	Oc	9580	
1300	1400		G		BBC World Service	E	Car	15190/GUF	
1300	1400		G		BBC World Service	E	Eu	12095w 15485s 17640s	
						E	CIS	15565r 17640w	
						E	ME	11760/OMA 15575/CYP	
1300	1400		G		BBC World Service	E	SAf	6190/AFS 11940/AFS 21470/ASC	
						E	EAF	15420/SEY 17885/SEY	
						E	Waf	17830/ASC	
1300	1400		G		BBC World Service	E	SEA	6195/SNG 9740/SNG	
						E	SAs	15310/THA 17790/OMA	
						E	FE	17760/THA	
1300	1400		KOR		KBS World Radio	E	SEA	9570 9770	
1300	1400		KRE		Voice of Korea	E	Eu	4405 13760 15245	
						E	NAm	9335 11710	
1300	1400		ROU		Radio Romania Int.	E	Eu	11830 15105	
1300	1400		USA		Voice of America	E	As	9645/THA 9760/PHL	
1300	1400		USA		WYFR Family Radio	E	WNA	11830 11865	
						E	ENA	11910	
						E	CAm	17750	
						E	SAs	7580/RUS-n 11560/TWN	
1300	1430		CLA		VoJammu-Kashmir Freedom	E	SAs	5102	
1300	1600	SaSu	CAN		Radio Canada Int.	E	ENA	9515 13655	

				E	Car	17800	
1300	1600		D	Deutsche Welle	E	Eu	6140j
1300	1630		JOR	Radio Jordan	E	Eu	11690
1300	1850		NZL	Radio New Zealand Int.	E	Oc	6095
1300	0805		CAN	CKZU Vancouver	E	NAm	6160
1330	1345		G	BBC World Service	E	Waf	15105/ASC 21640/ASC
1330	1400	Sa	AUS	Radio Australia DIGITAL	E	Eu	9770/G-r
1330	1400		HOL	Radio Nederland DIGITAL	E	CEu	7240
1330	1400		LAO	Lao National Radio	E	SEA	7145
1330	1400		S	Radio Sweden	E	As	15735
					E	NAm	15240/CAN
1330	1400	Mo-Fr	USA	Adventist World Radio	E	SAs	15275/GUM
1330	1400		USA	Adventist World Radio	E	FE	11980/GUM
1330	1400		UZB	Radio Tashkent Int.	E	As	7285 15295 17775
1330	1500		IND	All India Radio	E	SEA	9690b 11620k 13710b
1400	1415	Mo-We	G	BBC World Service	E	Eaf	11860/SEY 15420/SEY
					E		21490/CYP
1400	1415	Th	G	Bible Voice	E	SAs	7485/UZB
1400	1415		G	FEBA Radio	E	PAK	9500/RUS-n
1400	1430		THA	Radio Thailand	E	Oc	9830
1400	1457		CHN	China Radio Int.	E	Eu	13790u 17490ka 17650ka
					E	SAs	9560ka 11675k
					E		11765u 11775ka
					E	CAf	17630/MLI
					E	Eaf	13685/MLI 17630/MLI
					E	WNA	13740/CUB
1400	1500		AFS	Channel Africa	E	SAf	11825
1400	1500		ALS	KNLS Anchor Point	E	FE	9555
1400	1500		AUS	Radio Australia	E	As	6080 9475\$ 9625d 11660\$
					E	W0c	5995 9590
					E	Oc	7240
1400	1500		F	Radio France Int.	E	ME	15615
					E	SAs	9580/CHN-x 15615
1400	1500		G	BBC World Service	E	Eu	12095w 15485s 17640s
					E	CIS	15565r 17640w
					E	ME	15575/CYP
1400	1500		G	BBC World Service	E	SAf	6190/AFS 11940/AFS 21470/ASC
					E	Waf	17830/ASC
					E	Eaf	21660/CYP
1400	1500		G	BBC World Service	E	SEA	6195/SNG 9740/SNG
					E	SAs	15310/THA 17790/OMA
					E	FE	11750/THA
1400	1500	SaSu	G	Bible Voice	E	SAs	7485/UZB
1400	1500		J	NHK Radio Japan	E	SEA	7200
					E	SAs	11730
					E	Oc	11840/CLN
1400	1500		OMA	Radio Sultanate Oman	E	Eu	15140
1400	1500		RUS	Voice of Russia	E	ME	1251
					E	As	1251 1269/CHN-k 7390v
					E		9745c 11755/TJK 12055c
					E		15605m 17645m
1400	1500		RUS	Voice of Russia DIGITAL	E	Eu	9480m
1400	1500		TWN	Radio Taiwan Int.	E	SEA	15265
1400	1500		USA	KJES Vado, NM	E	ENA	11715
1400	1500	Sa	USA	Pan American Broadc.	E	ME	15650/D-j
1400	1500		USA	Voice of America	E	As	6160/PHL 7125/THA
					E		9760/PHL 15265/PHL-x
1400	1500		USA	WYFR Family Radio	E	ENA	11910 13695
					E	WNA	11830
					E	CAM	17750
					E	SAs	7580/RUS-n 11560/TWN
1400	1600	Sa	BEL	TDPradio DIGITAL	E	Eu	3955/D-j
1400	1600		BEN	ORTV du Benin	E	Waf	7210
1400	1600		HOL	Radio Nederland	E	SAs	9345/UZB 9890/MDG 11835/MDG
1400	1600		SNG	News Radio 93.8	E	SEA	6150
1400	1600		USA	Brother Stair	E	Eu	6110/D-j
1400	1600		USA	WEWN Birmingham, AL	E	NAm	9955
1400	1800		AUS	CVC International	E	SEA	13635
					E	SAs	13635

1400	1800		USA	WOCR 4	E	CHN	15205
1400	2300		USA	WOCR 3	E	NAm	9985
1400	2400		USA	KAIJ Dallas, TX	E	NAm	12160
1400	2400		USA	WHRI World Harvest R. 1	E	WNA	13815
1400	0100		USA	KTBN Salt Lake City	E	NAm	15285
1415	1430		NPL	Radio Nepal	E	NAm	15590
1430	1445	Su	USA	Pan American Broadc.	E	NPL	5005
1430	1500	SaSu	CHN	Voice of Strait	E	SAs	15650/D-j
1430	1500		GRC	Voice of Greece	E	TWN	666 1269 4940 11590
1430	1500	Sa	IND	AIR Gangtok (Sikkim)	E	Eu	12105
1430	1500		KOR	KBS World Radio DIGITAL	E	IND	1404 3390
1430	1600		AUS	HCJB Australia	E	Eu	9770
1430	1600		BRM	Radio Myanmar	E	SAs	15390
1435	1440		IND	AIR Delhi	E	SEA	576 4725 5986
1445	1500	Mo-Sa	G	BBC World Service	E	SAs	6085 9575d
1500	1510		TKM	Turkmen Radio	E	SAs	6140/OMA 7205/THA 15245/OMA
1500	1530		BTN	Bhutan BS	E	CAs	279 5015
1500	1530	We,Fr	D	Radio Rhino Int.	E	BTN	6035
1500	1530	Su	HNG	Radio Budapest	E	UGA	17870/D-j
1500	1530		MNG	Voice of Mongolia	E	Eu	6025 9655
1500	1530		VTN	Voice of Vietnam	E	As	12015
1500	1545		USA	WYFR Family Radio	E	SEA	1242 7285h 9840 12020
					E	ENA	11910
					E	WNA	11830
					E	CAM	17750
					E	SAM	15770
					E	SAs	6280/TWN 15520/UAE
1500	1557		CHN	China Radio Int.	E	Eu	11965ka 13640ka 17490ka
					E	SAs	7160u 9785j 11775ka
					E	CAf	17630/MLI
					E	EAF	13685/MLI 17630/MLI
					E	SAf	6100/AFS
					E	WNA	13740/CUB
1500	1600		AFS	Channel Africa	E	SAf	11825
					E	EAF	17770
1500	1600		AUS	Radio Australia	E	As	6080 9475 9625d 11660
					E	Woc	5995 9590
					E	Oc	7240
1500	1600		CAN	Radio Canada Int.	E	SAs	11675/CHN-k 15360/G-r
					E		17720/CHN-u
1500	1600		G	BBC World Service	E	Eu	12095w 15485s
					E	CIS	15565r
1500	1600		G	BBC World Service	E	SAf	6190/AFS 11940/AFS 21470/ASC
					E	EAF	9750#/AFS 11860#/SEY
					E		15420#/SEY 21660/CYP
					E	WAF	15400/ASC 17830/ASC
1500	1600		G	BBC World Service	E	SAs	5975/SNG 15310/THA 17790/OMA
					E	SEA	6195/SNG 9740/SNG
					E	FE	11750/THA
1500	1600	Sa	G	Bible Voice	E	SAs	17510/D-j
1500	1600		G	FEBA Radio	E	SAs	7320/RUS-i
1500	1600		J	NHK Radio Japan	E	SEA	7200
					E	As	6190
					E	SAs	11730
					E	NAm	9505
					E	CAM	9505
1500	1600		KRE	Voice of Korea	E	Eu	4405 13760 15245
					E	NAm	3560 9335 11710
1500	1600	Mo-Fr	NMB	Namibian BC 1	E	NMB	6175
1500	1600	Mo-Fr	NMB	Namibian BC 2	E	NMB	6060
1500	1600		RUS	Voice of Russia	E	Af	7315
					E	Eu	12040m 15455a
					E	ME	972 4965/TJK 4975/TJK
					E		7325a 11985m
					E	As	972 9660/CHN-x 11500/CHN-x
1500	1600		USA	KJES Vado, NM	E	WNA	11715
1500	1600		USA	Voice of America	E	Af	9850/STP 15580/BOT
					E	As	7125/THA 9580/CLN
					E		13690/CLN 15105/THA

1500	1600		USA	Voice of America	E	ME	9825/GRC 15195/D-b 15445/D-L
					E	FE	1575/THA 6160/PHL 9590/PHL
					E		9760/PHL 9845/PHL
					E		12040/PHL 15550/THA
1500	1615	Mo	G	Bible Voice	E	ME	13590/D-j
1500	1630		GUM	KTWR Trans World Radio	E	SAs	12105
1500	1630	Su	USA	Pan American Broadc.	E	ME	15650/D-j
1500	1700		USA	WHRI World Harvest R. 2	E	NAm	12020
1500	1900		USA	WHRA World Harvest R. 5	E	Af	17640
1500	2000	Mo-Fr	USA	WINB Red Lion, PA	E	NAm	9740
1500	2000	SaSu	USA	WINB Red Lion, PA	E	NAm	13570
1500	2100	Mo-Sa	USA	WMLK Bethel, PA	E	NAm	9265
1505	1520	Mo	AUT	oe1 international	E	WNA	13775
1505	1530	SaSu	AUT	oe1 international	E	WNA	13775
1515	1530	Tu-Fr	AUT	oe1 international	E	WNA	13775
1530	1545		IND	AIR Delhi	E	SAs	1134 6085 7255a 9575d
					E		9820p 9835d 9910d 11740p
1530	1545	We	USA	Pan American Broadc.	E	EEu	11610/D-j
1530	1600		CVA	Radio Vaticana	E	SAs	12065/UZB 13765 15235
1530	1600	134	G	Bible Voice	E	SAs	17510/D-j
1530	1600		USA	Adventist World Radio	E	As	15225/UAE
1530	1630		IRN	IRIB Teheran	E	SAs	9635s 11650k
1530	1800	Su	G	Bible Voice	E	ME	13590/D-j
1535	1600	SaSu	AUT	oe1 international	E	WNA	13775
1540	1615	We-Fr	G	Bible Voice	E	ME	13590/D-j
1540	1700	Tu	G	Bible Voice	E	ME	13590/D-j
1545	1600	Mo-Fr	AUT	oe1 international	E	WNA	13775
1545	1600		USA	WYFR Family Radio	E	ENA	11910
					E	WNA	11830
					E	CAM	17750
					E	SAs	6280/TWN 15520/UAE
1545	1830	Sa	G	Bible Voice	E	ME	13590/D-j
1600	1615		PAK	Radio Pakistan	E	ME	11570 15100
					E	EAF	11850 15725
1600	1620	Mo-Fr	MDA	Radio DMR	E	Eu	5910
1600	1627		CZE	Radio Prague	E	WEu	5930
					E	EAF	17485
1600	1630		USA	Adventist World Radio	E	As	11640/GUM 11680/GUM
1600	1630		VTN	Voice of Vietnam	E	Eu	7280 9730
					E	Af	9550 13860
1600	1645		USA	WYFR Family Radio	E	WNA	11830 11865
					E	ENA	13695
					E	CAM	17750
					E	Car	6085
					E	CAf	21525
					E	Eu	18980 21455
					E	SAs	15520/UAE
1600	1657		CHN	China Radio Int.	E	Eu	7255ka 11940ka 11965ka
					E		13760ka 17490ka
					E	EAF	9570x 11900j
					E	SAf	6100/AFS
1600	1700		AUS	Radio Australia	E	As	6080 9475 11660
					E	W0c	5995 9710
					E	Oc	7240
1600	1700		D	Deutsche Welle	E	SAs	1548/CLN 6170/CLN
					E		7225/CLN 17595w
1600	1700		ETH	Radio Ethiopia	E	EAF	7165 9560
1600	1700		F	Radio France Int.	E	NAf	11615 15160/AFS
					E	CAf	7170/AFS 17850
					E	EAF	7170/AFS 15605 17605
					E	ME	15605
1600	1700		G	BBC World Service	E	Eu	9410w 12095w 15105w 15485s
					E	CIS	15565r
					E	ME	17790/CYP
1600	1700		G	BBC World Service	E	SAf	3255/AFS 6190/AFS 21470/ASC
					E	WAF	15400/ASC 17830/ASC
					E	EAF	21660/CYP
1600	1700		G	BBC World Service	E	SAs	3915/SNG 5975/THA 9510/SNG
					E		15310/THA

1600	1700		KOR	KBS World Radio	E	SEA	6195/SNG 7160/SNG
					E	ME	9870
					E	Af	9870
					E	FE	5975
1600	1700		KRE	Voice of Korea	E	ME	3560 9990 11545
1600	1700		RUS	Voice of Russia	E	Af	11985m 15540m
					E	ME	648 1251 6070n
					E		11985m 12055s 15540m
					E	As	1251 6070n 9405i
					E		11640/TJK 12055s 12115/TJK
1600	1700		TWN	Radio Taiwan Int.	E	CHN	11550 11815
					E	SAs	11815
1600	1700	Fr	TWN	Radio Taiwan DIGITAL	E	Eu	9770
1600	1700		USA	KJES Vado, NM	E	CAM	11715
1600	1700		USA	Voice of America	E	Af	909/BOT 1530/STP 4930/BOT
					E		9850/STP 15410/STP 15580/BOT
1600	1700		USA	Voice of America	E	As	1170/PHL 6160/PHL
					E		7125/THA 9760/PHL
1600	1700		USA	Voice of America	E	ME	9700/D-L 9825/GRC
					E		15195/D-b 15445/D-L
1600	1700		USA	Voice of America	E	Af	12080/BOT 17895/MRC
					E	SEA	13600/THA
1600	1700	Fr,Sa	USA	WWRB Manchester, TN	E	NAm	9320 12170 15250
1600	1800	Sa	BEL	TDPradio DIGITAL	E	NAm	11900/CAN
1600	1800		USA	Brother Stair	E	WEu	5980/D-w
					E	EEu	9845/D-j
1600	2000		USA	WEWN Birmingham, AL	E	NAm	13615
					E	Eu	15685
					E	Af	15685
1600	2330	Su	IRL	Reflections Europe	E	Eu	3910 6295 12255
1600	0500		USA	WBCQ Monticello, ME	E	NAm	9330
1600	0600		ZMB	Christian Voice	E	SAf	4965
1610	1625		USA	Trans World Radio	E	CAs	864/ARM 5855/ARM
1615	1630		CVA	Radio Vaticana	E	Eu	585 1530 4005v 5885v
					E		7250 9645
					E	ME	15595
1615	1700	SaSu	G	BBC World Service	E	EAF	11860/SEY 15420/SEY
					E		21490/AFS
1630	1645	Fr	G	FEBA Radio	E	IRN	9850/RUS-a
1630	1700		CHN	PBS Xizang	E	CHN	4905 4920 5240 6110
					E		6130 6200 7125 7385
1630	1700	Sa	D	Freie Volksmission	E	ME	11865w
1630	1700	Mo-Fr	G	BBC World Service	E	EAF	15420/SEY
1630	1700		SVK	Radio Slovakia Int.	E	WEu	5920 7345
1630	1700	SaSu	SWZ	Trans World Radio	E	SAf	6130
1630	1700		USA	Adventist World Radio	E	As	11975/GUM
1630	1720		SUD	Radio Peace	E	SUD	4750
1630	1830		EGY	Radio Cairo	E	SAf	11880a
1640	1650		TKM	Turkmen Radio	E	CAs	576 4930
1645	1700		TJK	Radio Tajikistan	E	As	1161 7245
1645	1700		USA	WYFR Family Radio	E	ENA	13695
					E	Car	6085
					E	CAf	21525
					E	Eu	18980 21455
					E	SAs	15520/UAE
1645	1715	Mo-Fr	SWZ	Trans World Radio	E	SAf	6130
1700	1715	Su	SWZ	Trans World Radio	E	SAf	6130
1700	1727		CZE	Radio Prague	E	WEu	5930
					E	CAf	17485
1700	1730		AZE	Radio Azerbaijan Int.	E	ME	1295 6111
1700	1730		F	Radio France Int.	E	EAF	15605 17605
					E	ME	15605
1700	1730		SDN	Radio Peace	E	EAF	5895
1700	1730		VTN	Voice of Vietnam	E	Eu	9725/AUT
1700	1746		G	BBC World Service	E	EAF	6005/SEY 9630/SEY
1700	1755		AFS	Channel Africa	E	WAF	15235
1700	1757		CHN	China Radio Int.	E	SAf	6100/AFS
					E	EAF	9570x 11900j
					E	Eu	7255ka 9695qq

1700 1800		AUS	Radio Australia	E	11940ka 13760ka
				E	As 6080 9475
				E	Oc 9580 11880
				E	W0c 5995 9710
1700 1800		CLA	SW Radio Africa	E	ZWE 15145/G-r
1700 1800		CLA	Voice of the People VOP	E	ZWE 7120/MDG
1700 1800		G	BBC World Service	E	NEu 6195/CYP
				E	WEu 6195r 15105s
				E	Eu 9410/CYP 12095w
				E	CIS 15565r
1700 1800		G	BBC World Service	E	SAf 3255/AFS 6190/AFS 21470/ASC
				E	EAF 11945/AFS
				E	WAF 15400/ASC 17830/ASC
1700 1800		G	BBC World Service	E	SAs 3915/SNG 5975/THA 9510/SNG
				E	15310/THA
				E	SEA 7160/SNG
1700 1800	We,Fr	G	Bible Voice	E	ME 13590/D-j
1700 1800		J	NHK Radio Japan	E	NAm 9535
				E	CAM 9535
				E	Af 15355/GAB
				E	Eu 11970
1700 1800		POL	Radio Polonia	E	Eu 5965 7285
1700 1800		RUS	Voice of Russia	E	Af 11510/ARM 11985m
				E	Eu 1494sp+ 9480s 9890m
				E	11675+a
				E	ME 1251
				E	As 1251 1269 9405i
1700 1800		USA	Voice of America	E	Af 9850/STP 15410/MRC 15580/BOT
1700 1800		USA	Voice of America	E	As 1143-/PHL 1575-/THA
				E	6160/PHL 7125/THA 9345/CLN
1700 1800		USA	WYFR Family Radio	E	Eu 3955/D-j 18980 21455
				E	ENA 13695
				E	CAM 17795
				E	SAf 21680/ASC
1700 1900		NIG	Voice of Nigeria	E	Eu 15120
1700 2030		SWZ	Trans World Radio	E	SAf 1170 3200
1700 2200		USA	AFRTS	E	NAO 7590/ISL 13855/ISL
				E	Car 5446k 7812k 12134k
				E	Oc 5765/GUM 10320/HWI
1700 2200		USA	WHRI World Harvest R. 2	E	NAm 15785
1700 2200	Fr,Sa	USA	WWRB Manchester, TN	E	NAm 9320 11920
				E	Af 15250
1700 2215		SRL	Sierra Leone BS	E	WAF 3316
1700 2300		GNE	Radio Africa	E	Af 15190
1730 1735		IND	AIR Thiruvananthapuram	E	IND 5010
1730 1735		LBY	LJB Voice of Africa	E	Af 15615/F 15660/F
				E	17695/F 17880/F
1730 1745	Mo,We	G	BBC World Service	E	Eu 6050/CYP 11960/CYP 13650s
1730 1745		ISR	KoI Israel	E	Eu 9345 11590 15640
				E	NAm 9345 11590 15640
1730 1745	Mo-Fr	UN	United Nations Radio	E	SAf 7150/AFS
				E	ME 15495/G-s
				E	WAF 17810/ASC
1730 1746		G	BBC World Service	E	SAf 3390/AFS
				E	EAF 7230/AFS
				E	WAF 9525/AFS
1730 1800		BUL	Radio Bulgaria	E	WEu 9500 11500
1730 1800		CVA	Radio Vaticana	E	EAF 11625
				E	SAf 13765 15570
				E	WAF 15570
1730 1800		GEO	Radio Georgia	E	ME 6180
1730 1800	Mo-Sa	S	Radio Sweden	E	Eu 1179 6065
1730 1800		USA	Adventist World Radio	E	ME 9385/GUM
1730 1800	Mo-Fr	USA	Voice of America	E	ZWE 909/BOT 4930/BOT
				E	11975/STP 17895/MRC
1730 1900		SWZ	Trans World Radio	E	EAF 9500
1730 2230		LBR	ELWA Radio Liberia	E	WAF 4760
1740 1800	SaSu	USA	Voice of America	E	ZWE 909/BOT 4930/BOT
				E	11975/STP 17895/MRC

1745	1815		BGD	R Bangladesh - VoIslam	E	Eu	7185
1745	1945		IND	All India Radio	E	EAF	11935m 15075k 17670k
					E	WAF	9445b 13605b 15155a
					E	Eu	7410k 9950k 11620a
1800	1810		BOT	Radio Botswana	E	SAF	4820
1800	1810		TZA	Radio Tanzania Zanzibar	E	EAF	11734
1800	1815	Sa	G	Bible Voice	E	IRN	11965/D-j
1800	1830	Sa	CAN	Radio Canada DIGITAL	E	NAM	11900
1800	1830	Su	D	Radio Santec, Univ.Life	E	WAF	15675j
1800	1830	Su	G	Bible Voice	E	EEu	6015/D-j
1800	1830		LTU	Radio Vilnius	E	Eu	666
1800	1830		USA	Adventist World Radio	E	SAF	3215/AFS 3345/AFS
					E	Af	9590/AFS
1800	1830		VTN	Voice of Vietnam	E	Eu	7280 9730
1800	1830	We,Fr	USA	Adventist World Radio	E-C	EAF	15280/AUT
1800	1845		USA	WYFR Family Radio	E	ENA	13695
					E	WNA	13800
					E	CAM	17795
					E	Eu	3955/G-s 18980
					E	ME	13780/G-r
					E	WAF	17525
1800	1857		CHN	China Radio Int.	E	Eu	9695qq 11940ka 13760ka
1800	1900	Mo-Fr	ARG	R.Argentina al Exterior	E	Eu	9690 15345
1800	1900		AUS	Radio Australia	E	As	9475
					E	Oc	9580 11880
					E	WOC	6080 7240 9710
1800	1900		CAN	Radio Canada Int.	E	WAF	13730/D-w 15255/G-s
					E	EAF	9530/D-w 9780/CHN-ka
					E		13730/D-w 15420/CHN-ka
1800	1900		G	BBC World Service	E	NEu	6195/CYP
					E	WEu	6195r 17795s
					E	Eu	9410/CYP
					E	CIS	12095w
1800	1900		G	BBC World Service	E	SAF	3255/AFS 6190/AFS 21470/ASC
					E	EAF	6005\$/SEY 9630\$/SEY
					E		11945/AFS
					E	WAF	15400/ASC 17830/ASC
1800	1900		G	BBC World Service	E	SAs	5975#/THA 9510#/THA
					E		12045\$/THA 15310/THA
1800	1900	Sa	G	Bible Voice	E	ME	9430/D-n 9430/D-j
					E	EEu	6015/D-j
1800	1900	Su	G	Bible Voice	E	ME	9430/D-j
1800	1900		HOL	Radio Nederland	E	SAF	6020/MDG
					E	EAF	9895/MDG 11655
					E	WAF	9895/MDG
1800	1900		KRE	Voice of Korea	E	Eu	4405 13760 15245
1800	1900		ROU	Radio Romania Int.	E	Eu	9635 11830
1800	1900		RUS	Voice of Russia	E	Af	9745c 11510/ARM
					E	Eu	9480s 9820s 9890m 11630m
1800	1900		SDN	Sudan National Radio	E	SDN	7200
1800	1900		TWN	Radio Taiwan Int.	E	Eu	3965
1800	1900		USA	Voice of America	E	Af	909/BOT 4930/BOT 9850/STP
					E		11975/STP 15410/MRC
					E		15580/BOT 17895/MRC
1800	1900		YEM	Rep.of Yemen Radio	E	ME	5990 9780
1800	1915	Fr,Su	G	Bible Voice	E	ME	9430/D-n
1800	2200		USA	WWCR 4	E	NAM	9975
1800	0700		USA	WBCQ Monticello, ME	E	NAM	7415
1805	1815		HRV	Voice of Croatia	E	Eu	6165 13830
1815	1900		BGD	Radio Bangladesh	E	Eu	7185
1820	1825		LBY	LJB Voice of Africa	E	Af	11615/F 15205/F
					E		15615/F 15660/F
1825	1845	Mo-Sa	ARM	Voice of Armenia	E	Eu	4810 9775&#n
1830	1840		RRW	Radio Rwanda	E	Caf	6055
1830	1845		S	IBRA Radio	E	EAF	9485/D-j
1830	1900		GRC	Voice of Greece	E	Eu	666 12105
1830	1900		SCG	Int.R.Serbia-Montenegro	E	Eu	6100
1830	1900		SVK	Radio Slovakia Int.	E	WEu	5920 6055
1830	1900		USA	Adventist World Radio	E	Af	9590/AFS

1830	1920		TUR	Voice of Turkey	E	Eu	9785
1835	1850	SaSu	COG	RTV Congolaise	E	CAf	5985 6115
1845	1900	Mo-Sa	ALB	Radio Tirana	E	Eu	6115 7210
1845	1900		USA	WYFR Family Radio	E	ENA	13695
					E	WNA	13800
					E	CAM	17795
					E	Eu	3955/G-s 18980
					E	ME	13780/G-r
1851	1950		NZL	Radio New Zealand Int.	E	Oc	9845
1900	1920	SaSu	MLI	RTV du Mali	E	WAf	4783 4835 5995
1900	1925		ISR	Kol Israel	E	Eu	11590 15615
					E	NAm	11590 15615
					E	Af	15640
1900	1930		HNG	Radio Budapest	E	Eu	3975 6025
1900	1930	Sa	G	Bible Voice	E	NIG	9430/D-j
1900	1930	Mo-Sa	S	Radio Sweden	E	Eu	1179
1900	1930		VTN	Voice of Vietnam	E	Eu	7280 9730
1900	1945		USA	WYFR Family Radio	E	ENA	13695
					E	WNA	13800
					E	CAM	17795
					E	Car	6085
					E	Eu	18930 18980
					E	WAf	17845
					E	EAF	6020/MDG
					E	SAf	3230/AFS
1900	1957		CHN	China Radio Int.	E	Eu	11940ka
					E	ME	7295ka 9585k
					E	NAf	7295ka 9440k
1900	2000	Mo	AFS	So.African Radio League	E	SAf	3215
1900	2000		AUS	Radio Australia	E	As	9500
					E	Oc	9580 11880
					E	WOC	6080 7240 9710
1900	2000		D	Deutsche Welle	E	EAF	13780w 15520w
1900	2000		G	BBC World Service	E	Eu	6195r 6195/CYP 9410/CYP
					E		17795s
1900	2000		G	BBC World Service	E	SAf	3255/AFS 6190/AFS 12095/ASC
					E	EAF	6005/SEY 9630/SEY
					E	WAf	15400/ASC 17830/ASC
1900	2000		G	BBC World Service	E	SAs	12045/THA 15310/THA
1900	2000		HOL	Radio Nederland	E	EAF	9895/MDG 11655
					E	WAf	9895/MDG 17810/ATN
					E	SAf	7120/MDG
1900	2000		KOR	KBS World Radio	E	Eu	7275
					E	FE	5975
1900	2000		KRE	Voice of Korea	E	ME	3560 9975 11535
					E	SAf	7100 11910
1900	2000		RUS	Voice of Russia	E	Eu	7380m 9890m 12070m
1900	2000		THA	Radio Thailand	E	Eu	7155
1900	2000		USA	KJES Vado, NM	E	Oc	15385
1900	2000		USA	Voice of America	E	Af	909/BOT 4930/BOT 4940/STP
					E		9850/STP 11975/STP
					E		13670/CLN 15410/MRC
					E		15445g 15580/BOT 17895/MRC
1900	2000		USA	Voice of America	E	ME	6040/GRC 9670/THA 13635/CLN
1900	2030		I	IRRS Milano	EDI	Eu	5775
1900	2100	SaSu	HOL	Radio Nederland	E	ENA	17735/ATN
					E	CNA	15315/ATN
					E	WNA	17660/CAN
1900	2100		NIG	Voice of Nigeria	E	WAf	7255
1900	2100		USA	WHRA World Harvest R. 5	E	Af	15665
1900	2200		CAN	Radio Canada Int.	E	Car	17765
1900	0400	SaSu	NMB	Namibian BC 2	E	NMB	6060 6175
1900	0500	Mo-Fr	NMB	Namibian BC 2	E	NMB	6060 6175
1900	1100		SLM	Solomon Islands B.C.	E	SLM	5020
1915	1930		G	BBC World Service	E	WAf	15105/ASC 17885/ASC
1915	1930	Su	G	Bible Voice	E	EEu	6015/D-j
1920	1940		SOM	Radio Hargeisa	E	SOM	7530
1925	1930		LBY	LJB Voice of Africa	E	Af	11715/F 15205/F
1930	1945	Fr	COG	RTV Congolaise	E	CAf	5985 6115

1930	2000	1245	BLR	Radio Belarus	E	Eu	1170 7105 7280 7290
1930	2000	Sa	G	Bible Voice	E	LBR	9430/D-w
1930	2000	Su	G	Bible Voice	E	NIG	9430/D-j
1930	2000		GEO	Radio Georgia	E	CEu	11910
1930	2000		S	Radio Sweden	E	Eu	6065
1930	2030		IRN	IRIB Teheran	E	Eu	7205k 11860s
					E	SAf	9800s 9925k
1930	2030	alt	IRN	IRIB Teheran	E	Eu	11660s 11670k
1930	2200		PNG	NBC Port Moresby	E	PNG	4890
1935	1955		I	RAI International	E	Eu	5960 9845
1945	2000		USA	WYFR Family Radio	E	ENA	13695
					E	WNA	13800
					E	CAM	17795
					E	Eu	18930 18980
					E	WAF	17845
					E	EAF	6020/MDG
					E	SAf	3230/AFS
1945	2030		CVA	Radio Vaticana DIGITAL	E	NAm	9800/CAN
1950	2020		CVA	Radio Vaticana	E	Eu	585 1530 4005v
					E		5885 7250 9645
1951	2050		NZL	Radio New Zealand Int.	E	Oc	11725ßn
2000	2027		CZE	Radio Prague	E	WEu	5930
					E	As	11600
					E	Oc	11600
2000	2030		CVA	Radio Vaticana	E	SAf	9755 11625
					E	WAF	11625 13765
2000	2030		MNG	Voice of Mongolia	E	Eu	12015
2000	2030		USA	Adventist World Radio	E	Af	7175/AFS
2000	2045		USA	WYFR Family Radio	E	Eu	7360/MDA 17750 18980
					E	WNA	13800
					E	CAM	17795
					E	SAM	17725
					E	WAF	15195/ASC 17845
					E	EAF	6020/MDG
					E	SAf	3230/AFS
2000	2057		CHN	China Radio Int.	E	ME	7295ka
					E	NAf	7295ka 9440k
					E	EAF	11640/MLI 13630/MLI
					E	Eu	5960/ALB 7285/ALB 9600ka
					E		9855u 11790ka
2000	2100		AUS	Radio Australia	E	As	9500
					E	Oc	11660 11880 12080b
					E	WOC	6080+ 7240+ 11650
2000	2100		CAN	Radio Canada Int.	E	Eu	5850/S 11765/G-s 15325
2000	2100		D	Deutsche Welle	E	SAf	7130/RRW 11895w 15205w
					E	EAF	11895w 13780w
2000	2100	Mo-Fr	E	Radio Exterior España	E	Af	9570
					E	Eu	15290
2000	2100		G	BBC World Service	E	Eu	6195r 6195/CYP 9410/CYP
2000	2100		G	BBC World Service	E	SAf	3255/AFS 6190/AFS 12095/ASC
					E	EAF	6005/SEY 9630/SEY
					E	WAF	15400/ASC 17830/ASC
2000	2100		G	BBC World Service	E	SAs	15310/THA
2000	2100		HOL	Radio Nederland	E	EAF	9895/MDG
					E	WAF	9895/MDG 11655 17810/ATN
					E	SAf	7120/MDG
2000	2100		INS	Voice of Indonesia	E	Eu	9525 15150
2000	2100		RUS	Voice of Russia	E	Eu	12070m 15455a
2000	2100		USA	KJES Vado, NM	E	Car	15385
2000	2100		USA	Voice of America	E	Af	909/BOT 1530/STP 4930/BOT
					E		4940#/STP 9850/STP 11975/STP
					E		13670/CLN 15410/MRC 15445g
2000	2100		USA	Voice of America	E	ME	6040/GRC 9670/THA 13635/CLN
2000	2200		AFS	Channel Africa	E	SAf	3345
2000	2200		USA	WEWN Birmingham, AL	E	NAm	13615
					E	Eu	17595
					E	Af	17595
2000	2300		USA	WINB Red Lion, PA	E	NAm	13570
2005	2105		SYR	Radio Damascus	E	Eu	9330 12085

2025	2045		I	RAI International	E	Eaf	6050	11875
2030	2035		LBY	LJB Voice of Africa	E	Af	11635/F	
2030	2045		THA	Radio Thailand	E	Eu	9680	
2030	2100		GEO	Radio Georgia	E	NEu	11760	
2030	2100		HOL	Radio Nederland DIGITAL	E	NAm	9800/CAN	
2030	2100		USA	Adventist World Radio	E	Af	7175/AFS	
2030	2100	Sa	USA	Voice of America	E	Af	4940/STP	
2030	2100		USA	Voice of America	E	AFG	1296/AFG	12140/KWT
2030	2100		UZB	Radio Tashkent Int.	E	Eu	5025	9545 11905
2030	2100		VTN	Voice of Vietnam	E	Eu	7280	9730
					E	Af	9550	13860
2030	2120		TUR	Voice of Turkey	E	As	7170	
					E	AUS	7170	
2030	2130		CUB	Radio Habana Cuba	E	Car	9505	
					E	ENA	11760	
2030	2200		EGY	Radio Cairo	E	Waf	15375z	
2030	2200	Fr,Su	I	IRRS Milano	EDI	Eu	5775	
2045	2100		USA	WYFR Family Radio	E	Eu	7360/MDA	18980
					E	WNA	13800	
					E	CAM	17795	
					E	SAM	17725	
					E	Waf	15195/ASC	17845
					E	Eaf	6020/MDG	
					E	SAf	3230/AFS	
2045	2230		IND	All India Radio	E	Oc	9910a	11620b 11715p
					E	Eu	7410k	9445b 9950k
2051	0458		NZL	Radio New Zealand Int.	E	Oc	15720	
2100	2130	Su	BLR	Radio Belarus	E	Eu	1170	7105 7280 7290
2100	2130		HNG	Radio Budapest	E	Eu	6025/SVK	
					E	SAf	9525	
2100	2130		KOR	KBS World Radio	E	Eu	3955/G-s	
2100	2130		SCG	Int.R.Serbia-Montenegro	E	Eu	6100	
2100	2130		USA	Adventist World Radio	E	Af	9715/AUT	
2100	2145		USA	WYFR Family Radio	E	Eu	7360/MDA	11565 18980
					E	WNA	13800	
					E	CAM	17795	
					E	SAM	17725	
					E	Waf	17845	
2100	2157		CHN	China Radio Int.	E	Eu	5960/ALB	7285/ALB 9600ka
					E		9855u	11790ka
					E	Eaf	11640#/MLI	13630#/MLI
2100	2200		AUS	Radio Australia	E	As	11695#	15415#
					E	W0c	9660b	11650 15515
					E	Oc	11660	12080b 13630
2100	2200		BUL	Radio Bulgaria	E	WEu	5800	7500
2100	2200		CAN	Radio Canada DIGITAL	E	NAm	9800	
2100	2200	Sa	CAN	R. Canada Nord-Quebec	E	CAN	9625	
2100	2200	We,Sa	CLA	Voice of Biafra Int.	E	NIG	7380/AFS	
2100	2200		D	Deutsche Welle	E	Waf	9440w	11865/RRW 15205/RRW
2100	2200	SaSu	E	Radio Exterior España	E	Eu	9840	
					E	Af	9570	
2100	2200		G	BBC World Service	E	Car	11675/ATN	15390/GUF
2100	2200		G	BBC World Service	E	Eu	6195r	6195/CYP 9410/CYP
2100	2200		G	BBC World Service	E	SAf	3255/AFS	6005/SEY 6190/AFS
					E	Eaf	9860/SEY	
					E	Waf	15400/ASC	
2100	2200		G	BBC World Service	E	SAs	3915/SNG	
					E	SEA	6195/THA	
					E	FE	5965/THA	11945/J
2100	2200		J	NHK Radio Japan	E	Oc	6035/SNG	
					E	HWA	21670	
					E	NAm	17825	
					E	Af	11855/ASC	
					E	Eu	6055/G	6180/G
2100	2200		KRE	Voice of Korea	E	Eu	4405	13760 15245
2100	2200		UKR	Radio Ukraine Int.	E	WEu	7490x	
2100	2200		USA	Voice of America	E	Af	909/BOT	1530/STP 4930/BOT
					E		11975/STP	13670/CLN
					E		15410/MRC	15445g

2100	2200		USA	Voice of America	E	AFG	1296/AFG 12140/KWT
2100	2300		USA	WHRA World Harvest R. 5	E	Af	11765
2110	2130	Mo-Fr	G	BBC World Service	E	LAm	11675/ATN 15390/GUF
2110	2210		SYR	Radio Damascus	E	Eu	9330 12085 13610
2115	2245		EGY	Radio Cairo	E	Eu	9990a
2130	2157		CZE	Radio Prague	E	CAf	9800
					E	NAm	11600
2130	2200	Mo-Sa	ALB	Radio Tirana	E	Eu	7120
2130	2200		HOL	Radio Nederland DIGITAL	E	ENA	9800/CAN
2130	2200		ROU	Radio Romania Int.	E	Eu	7165 9535
					E	NAm	9645 11940
2130	2200		S	Radio Sweden	E	Eu	1179 6065
					E	As	7420/MDG
2130	2200		USA	Adventist World Radio	E	Af	9715/AUT
2130	2200		UZB	Radio Tashkent Int.	E	Eu	5025 9545 11905
2130	2400	Mo-Fr	CAN	R. Canada Nord-Quebec	E	CAN	9625
2145	2200		USA	WYFR Family Radio	E	WAF	17845
					E	SAm	17725
					E	Eu	7360/MDA 11565
2200	2230		D	Deutsche Welle DIGITAL	E	NAm	9800/CAN
2200	2230	Su-Fr	SCG	Int.R.Serbia-Montenegro	E	AUS	7230
2200	2245		USA	WYFR Family Radio	E	CAf	15770
					E	WNA	11740
2200	2250		TUR	Voice of Turkey	E	Eu	9830
					E	NAm	9830
2200	2257		CHN	China Radio Int.	E	Eu	7175/RUS-m
2200	2300		AGL	Radio Nacional Angola	E	AGL	944 7217
2200	2300		AUS	Radio Australia	E	W0c	15230 15515
					E	Oc	13630 21740
					E	As	13620d 15240/TWN
2200	2300		D	Deutsche Welle	E	FE	7115/KAZ 9720n
2200	2300		G	BBC World Service	E	Car	5975/GUF
2200	2300		G	BBC World Service	E	EAF	9860/SEY
					E	WAF	15400/ASC
2200	2300		G	BBC World Service	E	WEu	6195/CYP
2200	2300		G	BBC World Service	E	FE	5965/THA
					E	SEA	6195/SNG 7105/OMA 9740/SNG
					E		11955/SNG
					E	W0c	9660/AUS-b
					E	Oc	12080/AUS-b
2200	2300		TWN	Radio Taiwan Int.	E	Eu	9355 15600/USA-o
2200	2300		USA	Voice of America	E	ME	1593/KWT
					E	AFG	1296/AFG 12140/KWT
					E	As	7215/PHL-x 15185/PHL-x
					E		15290/PHL 15305/CLN
					E		17740/PHL 17820/PHL
2200	2300		USA	WWRB Manchester, TN	E	NAm	11920
2200	2400		PNG	Radio East New Britain	E	PNG	5985
2200	2400		USA	WEWN Birmingham, AL	E	NAm	9975
					E	Eu	15745
					E	Af	15745
2200	2400	Mo-Sa	USA	WHRI World Harvest R. 2	E	NAm	9495
2200	2400	Su	USA	WHRI World Harvest R. 2	E	NAm	9840
2200	2400		USA	WJIE Millerstown, KY	E	NAm	7490 13595
2200	0100		USA	WWCR 1	E	NAm	7465
2200	0100		USA	WWCR 4	E	NAm	9985
2200	0500		USA	WBCQ Monticello, ME	E	NAm	5105
2200	0507	Su	CAN	R. Canada Nord-Quebec	E	CAN	9625
2200	0600		USA	AFRTS	E	NAO	7590/ISL 13855/ISL
					E	Car	5446k 7812k 12134k
					E	Oc	10320/HWI 13362/GUM
2200	0700		PNG	NBC Port Moresby	E	PNG	9675
2205	2230		I	RAI International	E	J	11895
2215	2230		HRV	Voice of Croatia	E	Eu	1125 1134
					E	Oc	9925/D-j
2215	2230	Sa	USA	Trans World Radio	E	Eu	1467/F
2215	2245	Su	USA	Trans World Radio	E	Eu	1467/F
2230	2257		CZE	Radio Prague	E	NAm	7345 9415
2230	2300		CAN	Radio Canada Int.	E	FE	9525/KOR 9870/KOR 12035/J

2230	2300	S	Radio Sweden	E	Eu	1179/S
2230	2300	USA	Adventist World Radio	E	NAm	9800/CAN
2230	2300	USA	Voice of America	E	As	11850/GUM 15320/GUM
2230	2400	SaSu	AUS HCJB Australia	E	FE	9570/PHL 13755/MRA 15145/PHL
2230	2400	Fr,Sa	USA Voice of America	E	FE	15525
2230	0730	AUS	Australian Broadc.Co.	E	SEA	1575/THA
2245	2300	USA	WYFR Family Radio	E	AUS	4835 4910 5025
2245	0045	IND	All India Radio	E	WNA	11740
				E	FE	9950a 11645k 13605b
2300	2330	USA	Voice of America	E	SEA	9705p 11620k 13605b
				E	ME	1593/KWT
2300	2345	USA	WYFR Family Radio	E	FE	9570/PHL 13755/THA 15145/PHL
				E	WNA	11740
2300	2357	CHN	China Radio Int.	E	SAm	15255 17750
				E	SAs	5915ka 7180ka
				E	ENA	6145/CAN
				E	WNA	13680/CAN
				E	Car	5990/CUB
2300	2400	AUS	Radio Australia	E	As	13620d 15240/TWN
				E		15415\$ 17750\$
				E	W0c	9660b 13630 15230
				E	0c	12080b 17795 21740
2300	2400	BUL	Radio Bulgaria	E	NAm	9700 11700
2300	2400	CUB	Radio Habana Cuba	E	Car	9550
2300	2400	D	Deutsche Welle	E	SEA	5955/CLN 9890/RRW
				E		15135/RUS-c
2300	2400	G	BBC World Service	E	Car	5975/GUF
				E	NAm	9800/CAN
2300	2400	G	BBC World Service	E	SEA	3915/SNG 6195/SNG 9740/SNG
				E		11955/THA
				E	FE	5965/THA 9580\$/KOR 11945/J
				E		15280/THA
2300	2400	HOL	Radio Nederland	E	Eu	1179/S
2300	2400	ROU	Radio Romania Int.	E	Eu	6140 7265
				E	NAm	9645 11940
2300	2400	USA	Voice of America	E	AFG	1296/AFG 12140/KWT
2300	2400	USA	Voice of America	E	As	7215/PHL-x 15185/PHL-x
				E		15290/PHL 15305/CLN
				E		17740/PHL 17820/PHL
2300	0030	EGY	Radio Cairo	E	NAm	11885z
2300	0100	USA	WHRA World Harvest R. 5	E	Af	7520
2300	0400	USA	WINB Red Lion, PA	E	NAm	9320
2300	0507	Su	CAN R. Canada Nord-Quebec	E	CAN	9625
2300	0600	USA	WWRB Manchester, TN	E	NAm	3185 5085 5745
				E	SAm	5050
2300	1100	SNG	NewsRadio 93.8	E	SEA	6150
2300	1200	USA	WOCR 3	E	NAm	5070
2305	2320	Mo-Fr	UN United Nations Radio	E	Saf	6165/ZMB
2330	2400	LTU	Radio Vilnius	E	NAm	9875
2330	2400	USA	Voice of America	E	ME	1593/KWT
2330	2400	USA	Voice of America	E	SEA	7260/PHL 13725/MRA
2330	2400	Su	USA WRMI Radio Miami Int.	E	LAm	9955
2345	2400	USA	WYFR Family Radio	E	SAm	15255 17750

Spanish:

STARTSTOP	DAY	ITU	STATION	LANG	TAR	FREQUENCY
0000	0015	Mo	USA WRMI Radio Miami Int.	S	LAm	9955
0000	0027		CZE Radio Prague	S	SAm	11665/ASC
0000	0030		CAN Radio Canada Int.	S	CAm	13725
0000	0057		CHN China Radio Int.	S	CAm	5990/CUB 9745/ATN
				S	SAm	9590ka 9800ka 15120/CUB
0000	0100		CUB Radio Habana Cuba	S	ENA	6000 6060 11760 11875
				S	WNA	9820
				S	CAm	6140 9655
				S	SAm	9600 15230
0000	0100	E	Radio Exterior España	S	NAm	9535
				S	SAm	6020/CTR 9620 11680 15160
0000	0100	G	BBC	S	CAm	5875s 6110/GUF
				S	SAm	5875r 6110/ASC

				S		9525/ASC 11765/ASC
0000 0100		KRE	Voice of Korea	S	CAM	11735 13760 15180
0000 0100		ROU	Radio Romania Int.	S	SAM	11935 15140
				S	Car	9760 11970
0000 0100		RUS	Voice of Russia	S	Eu	603/D
				S	LAM	7300m 7330m 9665/MDA
				S		9830a 11510/TJK 12010s
0000 0100		USA	WYFR Family Radio	S	Car	5985 11855
				S	SAM	15215 17845
0000 0200		HOL	Radio Nederland	S	SAM	5995/ASC 9895 15315/ATN
0000 0300		PRU	Radio Chasqui	S	PRU	5980
0000 0300		URG	Radio Banda Oriental	S	URG	6155
0000 0300		USA	Radio Marti	S	CUB	1180 6030g 7365g
				S		11775g 15330d
0000 0300	Su	USA	WRMI Radio Miami Int.	S	LAM	9955
0000 0500		USA	WEWN Birmingham, AL	S	LAM	7425 13615
0000 1200		CLM	La Voz de tu Conciencia	S	CLM	1530 6010
0000 1200		MEX	Radio Educacion	S	CAM	6185
0000 2400		ARG	Various Progs (Feeders)	S	ATA	5241 10490 11423
				S		15820 20276 29810
0000 2400		CHL	Radio Esperanza, Temuco	S	SAM	6090
0000 2400		CHL	R Parinacota, Putre	S	SAM	6010
0000 2400		CLM	La Voz del Llano	S	CLM	6115
0000 2400		CLM	Radio Melodia	S	CLM	6140.5
0000 2400		CTR	Universidad de Costa R.	S	CAM	6105
0000 2400		MEX	Candela FM	S	CAM	6105
0000 2400		MEX	Nucleo Radio Mil	S	CAM	1000 6010
0000 2400		PRG	Radio America	S	SAM	1480 3220 7371 9905 15483
0000 2400		PRG	Radio Nacional Paraguay	S	SAM	9737
0000 2400		PRU	Radio del Pacifico	S	PRU	4975 9675
0000 2400		PRU	Radio Melodia, Arequipa	S	PRU	1220 5997
0000 2400		SLV	Radio Imperial	S	CAM	17835
0000 2400		URG	Em.Ciudad de Montevideo	S	SAM	6010
0000 2400		URG	SODRE	S	SAM	1050 6125 9620
0000 2400		USA	CMF Radio One	S	ME	6125 9133 15500
0030 0035	Tu-Sa	AUT	oe1 international	S	SAM	9870
0030 0057		CZE	Radio Prague	S	CAM	7345
				S	SAM	9440
0030 0200	Mo	USA	WRMI Radio Miami Int.	S	LAM	9955
0030 0230		IRN	IRIB Teheran	S	LAM	9655k 9905k
0030 0230	alt	IRN	IRIB Teheran	S	LAM	7220k 11610k
0045 0200		EGY	Radio Cairo	S	NAM	7260z
				S	SAM	9415a 11755z
0055 0115		I	RAI International	S	SAM	9840
0100 0105	Tu-Sa	AUT	oe1 international	S	CAM	9870
0100 0115		G	BBC	S	CAM	5875r
				S	SAM	5875s 6110/ASC
				S		9525/ASC 11765/ASC
0100 0130		F	Radio France Int.	S	CAM	9800/GUF
0100 0145		CVA	Radio Vaticana	S	SAM	1260 7305 9605 11910
0100 0157		CHN	China Radio Int.	S	SAM	9710ka
0100 0200		BUL	Radio Bulgaria	S	CAM	9400
				S	SAM	9500 11500
0100 0200		CUB	Radio Habana Cuba	S	ENA	6060 11760
				S	CAM	6140 9655
				S	SAM	9600 15230
0100 0200		E	Radio Exterior España	S	NAM	6055 9535
				S	CAM	9535 15160
				S	SAM	6020/CTR 9620 11680 15160
0100 0200		KOR	KBS World Radio	S	SAM	11810
0100 0200		RUS	Voice of Russia	S	LAM	7300m 7330m 9830a
				S		9945/TJK 11510/TJK 12010s
0100 0200		USA	Voice of America	S	LAM	9560d 9735d 9885g
				S		11815d 13760d
0100 0200		USA	WYFR Family Radio	S	SAM	15255 17750
				S	CAM	11835
				S	Car	5985 11855
0100 0300	Mo	ARG	R. Nacional Argentina	S	Am	6060 15345
0100 0400		CHL	Christian Voice	S	SAM	6070 11655

0100	0500	EQA	HCJB	Voice of the Andes	S	CAM	11655 15585
					S	CAM	9745
0115	0130	Tu-Sa	G	BBC	S	SAM	690 6050 21455
					S	CAM	5875s
					S	SAM	5875r 6110/ASC
					S		9525/ASC 11765/ASC
0130	0135	Tu-Sa	AUT	oe1 international	S	ENA	9870
0145	0230		CVA	Radio Vaticana	S	SAM	7305 9605 11910
0200	0227		CZE	Radio Prague	S	CAM	6200
					S	SAM	7345
0200	0230		CAN	Radio Canada Int.	S	CAM	9755 13710
					S	SAM	11990
0200	0257		CHN	China Radio Int.	S	CAM	13685/GUF
					S	SAM	9710ka
0200	0300		CUB	Radio Habana Cuba	S	ENA	6060 11760
					S	CAM	6140 9655
					S	Car	9550 9600
					S	SAM	9600 15230
0200	0300		E	Radio Exterior España	S	NAM	6055 6125/CTR 9535
					S	CAM	3350/CTR 9535 15160
					S	SAM	6020/CTR 9620 15160
0200	0300		HOL	Radio Nederland	S	CAM	7325 9590/ATN 9890
0200	0300		KRE	Voice of Korea	S	CAM	11735 13760 15180
0200	0300		TWN	Radio Taiwan Int.	S	SAM	15215/USA-o 17845/USA-o
0200	0300		USA	WYFR Family Radio	S	SAM	11740 15255
0200	1300		PRU	Radio Union	S	PRU	6115
0230	0300		SVK	Radio Slovakia Int.	S	SAM	9440 11990
0230	0330		IRN	IRIB Teheran	S	LAM	9905k
0230	0330	alt	IRN	IRIB Teheran	S	LAM	7220k
0300	0330		VTN	Voice of Vietnam	S	Car	6175/CAN
0300	0345		G	BBC	S	LAM	5995/USA-d 6110/GUF
					S		7325r 7325s 9515/USA-d
0300	0345		USA	WYFR Family Radio	S	SAM	11580
					S	WNA	9680
					S	ENA	6855
					S	CAM	9715
					S	Car	5985 11855
0300	0357		CHN	China Radio Int.	S	SAM	9560/CAN
0300	0400		E	Radio Exterior España	S	NAM	6055 6125/CTR 9535
					S	CAM	3350/CTR 9535 15160
					S	SAM	6020/CTR 9620 15160
0300	0400		HOL	Radio Nederland	S	CAM	9890
0300	0400		HRV	Voice of Croatia	S	NAM	9925/D-j
0300	0400		ROU	Radio Romania Int.	S	SAM	9700 11725
					S	MEX	9775 11970
0300	0400	Tu-Su	USA	Radio Marti	S	CUB	1180 6030g 7365g
					S		7405g 11775g
0300	0500		CUB	Radio Habana Cuba	S	ENA	6060 11760
					S	CAM	6140 9655
					S	Car	9550 9600
					S	SAM	9600 11875 15230
0315	0335		I	RAI International	S	SAM	9840
					S	NAM	11800
0320	0400		CVA	Radio Vaticana	S	NAM	7305 9605
0330	0400		HNG	Radio Budapest	S	Eu	3975 6025/SVK
0345	0400	Tu-Sa	G	BBC	S	LAM	5995/USA-d 6110/GUF
					S		7325r 7325s 9515/USA-d
0345	0400		USA	WYFR Family Radio	S	WNA	9680
					S	ENA	6855
					S	CAM	9715
					S	Car	5985 11855
0400	0430		J	NHK Radio Japan	S	SAM	9660/GUF
0400	0430		VTN	Voice of Vietnam	S	Car	6175/CAN
0400	0445		USA	WYFR Family Radio	S	Car	5985 11855
					S	SAM	15255
0400	0500		E	Radio Exterior España	S	NAM	6055 6125/CTR 9535
					S	CAM	3350/CTR 9535 15160
					S	SAM	5965/CTR 9620 15160
0400	0500		TWN	Radio Taiwan Int.	S	CAM	11740/USA-o

0400	0700	Tu-Su	USA	Radio Marti	S	CUB	1180	6030g	7405g
					S			9805g	11775g
0400	0800		CHL	Christian Voice	S	SAm	6070	11655	
					S	CAm	11655		
0430	1300		BOL	Emisora Pio XII.	S	BOL	5952.5		
0500	0530		J	NHK Radio Japan	S	CAm	11895/GUF		
					S	Eu	11970/GAB		
0500	0600		E	Radio Exterior España	S	NAm	6055	6125/CTR	
					S	CAm	3350/CTR		
					S	SAm	5965/CTR		
					S	Eu	9710	12035	
					S	ME	11890		
0500	0600		USA	WYFR Family Radio	S	Eu	9985		
					S	CAm	9715		
					S	Car	5810		
0500	1100		USA	WEWN Birmingham, AL	S	LAm	7425		
0500	1200		BOL	Radio Santa Cruz	S	BOL	6135		
0500	2200		GNE	Radio Nacional Bata	S	Caf	5005		
0500	2300		GNE	Radio Nacional Malabo	S	Caf	6250		
0530	0630		IRN	IRIB Teheran	S	SEu	15530k	17785s	
0600	0630		BUL	Radio Bulgaria	S	SEu	13700	15700	
0600	0630		KOR	KBS World Radio	S	Eu	6045/CAN		
0600	0700	irr	CUB	Radio Reloj	S	Car	6195	9655	
0600	0700		E	Radio Exterior España	S	SAm	5965/CTR		
					S	Eu	9710	12035	
					S	ME	11890		
0600	0700		TWN	Radio Taiwan Int.	S	WNA	5950/USA-o		
0600	0700		USA	WYFR Family Radio	S	ENA	6855		
					S	CAm	9715		
					S	Car	9505		
0600	1300		CLM	Radio Autentica	S	CLM	5975		
0700	0745		USA	WYFR Family Radio	S	WNA	9680		
					S	Eu	9355		
					S	Car	5810		
0700	0800		E	Radio Exterior España	S	SAm	5965/CTR		
					S	AUS	17770	21610+	
					S	Eu	12035	13720	
0700	0800		KOR	KBS World Radio	S	Eu	13670		
0700	0900	irr	CUB	Radio Reloj	S	CAm	6195	9550	11760
0700	0900	Tu-Su	USA	Radio Marti	S	CUB	1180	5980d	6030g
					S			7405g	9805d
0745	0800		USA	WYFR Family Radio	S	Car	5810		
0800	0827		CZE	Radio Prague	S	SEu	11600	15710	
0800	0900	Mo-Fr	E	Radio Exterior España	S	AUS	17770		
					S	Eu	12035	13720	
0800	0900	SaSu	E	Radio Exterior España	S	AUS	17770	21610	
					S	Eu	12035	13720	
0800	0900		USA	WYFR Family Radio	S	Car	5810	9505	
					S	CAm	9715		
					S	SAm	9550	11855	11970
0800	1200		CHL	Christian Voice	S	SAm	5960	6070	
					S	CAm	5960		
0800	1230		PRU	Radio Cusco	S	PRU	6193		
0800	1300		CLM	La Voz del Guaviare	S	CLM	6035		
0900	0945		USA	WYFR Family Radio	S	Car	5810	9505	
					S	CAm	9715		
					S	SAm	9550	11855	11970
					S	ENA	5950		
0900	1000		E	Radio Exterior España	S	Af	21540		
					S	SAm	21570		
					S	Eu	13720	15585	
					S	ME	21610		
0900	1100	Mo-Fr	USA	WRMI Radio Miami Int.	S	NAm	7385		
0900	1100	Sa	USA	WRMI Radio Miami Int.	S	LAm	9955		
0900	1200		ARG	R.Argentina al Exterior	S	Am	6060		
0900	1200		USA	Radio Marti	S	CUB	1180	5980d	6030d
					S			9565g	9805d
0900	1200		PRU	Radio Oriente	S	SAm	6188		
0900	1330		CLM	La Voz de los Centauros	S	CLM	810	5958	

0900	0200	Mo-Sa	BOL	Radio San Gabriel	S	BOL	6080
0900	0300		CTR	Faro del Caribe	S	CAM	5055 6175 9645
0900	0330		PRU	Ondas del Rio Mayo	S	PRU	6797
0930	1100		BOL	Radio Nacional	S	BOL	5965
0930	0400		BOL	Radio Illimani	S	BOL	4945 6025
0945	1000	Su	USA	WRMI Radio Miami Int.	S	LAm	9955
0945	1000		USA	WYFR Family Radio	S	SAM	9550 11855 11970
					S	CAM	9715
					S	ENA	5950
0945	0200		PRU	Radio La Voz	S	PRU	6250
1000	1030		J	NHK Radio Japan	S	CAM	9540
					S	SAM	9530/GUF 9710
1000	1100	irr	CUB	Radio Rebelde	S	CAM	9600
1000	1100	Mo-Fr	E	Radio Exterior España	S	Af	21540
					S	NAm	21700
					S	CAM	21700
					S	SAM	11815/CTR 21570
					S	Eu	13720 15585
					S	ME	21610
					S	FE	9660/CHN-b
1000	1100	SaSu	E	Radio Exterior España	S	Af	21540
					S	SAM	21570
					S	Eu	13720 15585
					S	ME	21610
					S	FE	9660/CHN-b
1000	1100		KOR	KBS World Radio	S	Eu	15210
					S	SAM	9580
1000	1100		USA	WYFR Family Radio	S	SAM	9550 11855
					S	CAM	9715
					S	Car	6085
1000	1200		BOL	Radiodifusora Minería	S	BOL	5927
1000	1200		PRU	Radio Panorama	S	PRU	5907
1000	1230		PRU	Radio Chasqui	S	PRU	5980
1000	0005		PRU	Radio Tacna	S	PRU	9505
1000	0030		BOL	Radio Juan XXIII.	S	BOL	6054.3
1000	0130		PRU	Radio Comercial	S	PRU	6324
1000	0200		PRU	Radio Tawantinsuyo	S	PRU	1190 6173
1000	0230		PRU	La Voz de los Huarinjas	S	PRU	6819
1000	0230		PRU	Radio Huancabamba	S	PRU	6536
1000	0300		ARG	Radio Baluarte	S	SAM	6215
1000	0300		URG	Radio Monte Carlo	S	URG	6140
1000	0400		DOM	Radio Amanecer	S	Car	1570 6025
1030	1500		PRU	Radio Altura	S	PRU	6480
1045	1130	Su	USA	WRMI Radio Miami Int.	S	LAm	9955
1045	0230		BOL	Radio Fides	S	BOL	6155 9625
1100	1130		BUL	Radio Bulgaria	S	SEu	11600 13600
1100	1130	Mo-Fr	G	BBC	S	Car	6110/USA-g
					S	CAM	6130/USA-d
					S	SAM	6130/USA-d 15220/ASC
1100	1130		HOL	Radio Nederland	S	Car	6165/ATN
1100	1130		USA	Voice of America	S	LAm	9535g 11925g 13790g
1100	1145		USA	WYFR Family Radio	S	CAM	9715
					S	Car	6085 9605
					S	SAM	9355 11855 11970
					S	ENA	6855
1100	1200	Mo-Fr	E	Radio Exterior España	S	Af	21540
					S	NAm	15170/CTR 21700
					S	CAM	9765/CTR 21700
					S	SAM	11815/CTR 21570
					S	Eu	13720 15585
					S	ME	21610
1100	1200	SaSu	E	Radio Exterior España	S	Af	21540
					S	SAM	21570
					S	Eu	13720 15585
					S	ME	21610
1100	1200		KOR	KBS World Radio	S	SAM	11795/CAN
1100	1300		EQA	HCJB Voice of the Andes	S	SAM	690 6050 11690
					S	CUB	11960
1100	1400	irr	CUB	Radio Reloj/Rebelde	S	CAM	6140 9600 11655

1100	1400		USA	WEWN	Birmingham, AL	S	LAm	11645	13615	
1100	1500		CUB	Radio Habana	Cuba	S	CAM	6000		
						S	Car	9550		
						S	SAM	11800	15230	
						S	ENA	11760	11875	12000 13660
1100	2400	Su	BOL	Radio Panamericana		S	BOL	6105		
1100	0400	Mo-Sa	BOL	Radio Panamericana		S	BOL	6105		
1130	1200	Mo-Sa	CVA	Radio Vaticana		S	Eu	1260		
						S	SAM	21850		
1130	1200		HOL	Radio Nederland		S	SAM	6165/ATN		
1130	1200		USA	Voice of America		S	LAm	9535g	13790g	
1145	1200		USA	WYFR	Family Radio	S	Car	6085	9605	
						S	SAM	11970		
1200	1230		F	Radio France Int.		S	CAM	15515/GUF		
1200	1230		HOL	Radio Nederland		S	CAM	9715/ATN		
						S	SAM	9895/ATN		
1200	1230		USA	Voice of America		S	LAm	7370d	11890g	13770g 15360g
1200	1300		CHL	Christian Voice		S	SAM	17680		
						S	CAM	17680		
1200	1300	Mo-Fr	E	Radio Exterior	España	S	Af	21540		
						S	NAM	15170/CTR	21700	
						S	CAM	9765/CTR		
						S	SAM	11815/CTR	21570	
						S	PHL	11910/CHN-x		
						S	Eu	13720	15585	
						S	ME	21610		
1200	1300	Sa	E	Radio Exterior	España	S	Af	21540		
						S	SAM	21570	21700	
						S	PHL	11910/CHN-x		
						S	Eu	13720	15585	
						S	ME	21610		
1200	1300	Su	E	Radio Exterior	España	S	Af	21540		
						S	NAM	15170/CTR	21700	
						S	CAM	9765/CTR		
						S	SAM	11815/CTR	21570	21700
						S	PHL	11910/CHN-x		
						S	Eu	13720	15585	
						S	ME	21610		
1200	1300		USA	Radio Marti		S	CUB	1180	7405d	9565g
						S		9805d	13820g	
1200	1300		USA	WYFR	Family Radio	S	Car	6085		
						S	CAM	15130		
						S	SAM	7355	11970	13800 15770
1200	1400	Mo-Fr	ARG	R.Argentina al Exterior		S	Am	11710		
1200	0500		HND	Radio Misiones		S	CAM	1480	3340	
1200	0500		MEX	XERMX	R Mexico Int.	S	CAM	9705	11770	
1210	0500		MEX	XEXQ	Radio Universidad	S	CAM	1460	6045	
1300	1315		CVA	Radio Vaticana		S	Eu	1260	9645	11740
1300	1330		EQA	HCJB	Voice of the Andes	S	SAM	690	11690	
						S	MEX	9745		
1300	1330	Mo-Fr	G	BBC		S	LAm	6130/USA-d	9670/USA-d	
						S		15325/USA-g		
1300	1345		USA	WYFR	Family Radio	S	Car	6085	9605	
						S	CAM	15130		
						S	SAM	7355	13800	15770
1300	1400	Mo-Fr	E	Radio Exterior	España	S	Af	21540		
						S	NAM	15170/CTR	17595	
						S	CAM	9765/CTR		
						S	SAM	21570		
						S	PHL	11910/CHN-x		
						S	Eu	15585		
						S	ME	21610		
1300	1400	Sa	E	Radio Exterior	España	S	Af	21540		
						S	CAM	21700		
						S	SAM	21570	21700	
						S	PHL	11910/CHN-x		
						S	Eu	13720	15585	
						S	ME	21610		
1300	1400	Su	E	Radio Exterior	España	S	Af	21540		

				S	NAm	15170/CTR	
				S	CAM	9765/CTR 21700	
				S	SAM	11815/CTR 21570 21700	
				S	PHL	11910/CHN-x	
				S	Eu	13720 15585	
				S	ME	21610	
1300	1400		USA	Radio Marti	S	CUB	1180 7405d 11845g
					S		13630g 13820g
1300	2200		CHL	Christian Voice	S	SAM	9635 17680
					S	CAM	17680
1330	1500		EQA	HCJB Voice of the Andes	S	SAM	690 6050 11690 21455
					S	MEX	9745
1345	1400		USA	WYFR Family Radio	S	Car	6085
					S	CAM	15130
					S	SAM	13800 15770
1400	1427		CZE	Radio Prague	S	SEu	11625
1400	1500	Mo-Fr	E	Radio Exterior España	S	Af	21540
					S	NAm	17595
					S	SAM	21570
					S	Eu	15585
					S	ME	21610
1400	1500	Sa	E	Radio Exterior España	S	Af	21540
					S	CAM	21700
					S	SAM	21570 21700
					S	Eu	15585
					S	ME	21610
1400	1500	Su	E	Radio Exterior España	S	Af	21540
					S	CAM	21700
					S	SAM	11815/CTR 21570 21700
					S	Eu	15585
					S	ME	21610
1400	1500		USA	WYFR Family Radio	S	Car	6085 11670
					S	CAM	15130
					S	SAM	11970 13800 17505 18980
					S	WNA	11865
1400	1700		USA	Radio Marti	S	CUB	1180 11845g 11930g
					S		13630g 13820g
1400	1830	Su	VEN	Aló Presidente	S	CAM	13680/CUB
					S	SAM	11875/CUB 17750/CUB
					S	Car	11670/CUB
					S	WNA	13750/CUB
1400	1900		BOL	Radio La Plata	S	BOL	9717
1400	2200		USA	WEWN Birmingham, AL	S	LAm	11645 15745
1430	1500		SVK	Radio Slovakia Int.	S	WEu	9440 11600
1500	1545		USA	WYFR Family Radio	S	Car	6085 11670
					S	CAM	15130
					S	SAM	11970 13800 17505
					S	ENA	13695
1500	1600	Mo-Fr	E	Radio Exterior España	S	Af	17760
					S	CAM	21700
					S	SAM	21570 21700
					S	Eu	15585
					S	ME	21610
1500	1600	Sa	E	Radio Exterior España	S	Af	15385 17760
					S	CAM	21700
					S	SAM	21570
					S	Eu	15585
					S	ME	21610
1500	1600	Su	E	Radio Exterior España	S	NAm	17850/CTR
					S	CAM	9765/CTR 21700
					S	SAM	11815/CTR 21570
					S	Eu	15585
					S	ME	21610
1545	1600		ISR	Ko1 Israel	S	Eu	11590 15640 17535
					S	NAm	11590 15640 17535
1545	1600		USA	WYFR Family Radio	S	Car	6085
					S	CAM	15130
					S	ENA	13695
1600	1630		F	Radio France Int.	S	CAM	15515/GUF

1600	1700	Mo-Fr	E		Radio Exterior España	S	Af	15385	17760
						S	CAM	21700	
						S	SAM	21570	21700
						S	Eu	15585	
						S	ME	21610	
1600	1700	Sa	E		Radio Exterior España	S	Af	15385	17760
						S	NAM	17850/CTR	
						S	CAM	9765/CTR	21700
						S	SAM	11815/CTR	21570 21700
						S	Eu	15585	
						S	ME	21610	
1600	1700	Su	E		Radio Exterior España	S	Af	17760	
						S	NAM	17850/CTR	
						S	CAM	9765/CTR	21700
						S	SAM	11815/CTR	21570 21700
						S	Eu	15585	
						S	ME	21610	
1600	1700			USA	WYFR Family Radio	S	CAM	15130	
1600	1730	irr		CUB	Radio Reloj/Rebelde	S	CAM	11655	
1630	1655			TUR	Voice of Turkey	S	SEu	13720	
1630	1700			BUL	Radio Bulgaria	S	SEu	15700	17500
1700	1800	Mo-Fr	E		Radio Exterior España	S	Af	17760	
						S	CAM	21700	
						S	SAM	17715	21700
						S	Eu	7275	
1700	1800	SaSu	E		Radio Exterior España	S	Af	17760	
						S	NAM	17850/CTR	
						S	CAM	9765/CTR	21700
						S	SAM	11715	17715 21700
						S	Eu	7275	9665
1700	1800			INS	Voice of Indonesia	S	Eu	9525	15150
1700	1800			USA	WYFR Family Radio	S	CAM	15130	
						S	Car	6085	
						S	WNA	13800	
						S	Eu	21670	
1700	2000			USA	Radio Marti	S	CUB	1180	9565g 11930g
						S		13630g	13820g
1715	1730			ISR	Ko1 Israel	S	Eu	9345	11590 15640
						S	NAM	9345	11590 15640
1800	1827			CZE	Radio Prague	S	SEu	5930	13580
1800	1830			F	Radio France Int.	S	CAM	17630/GUF	
1800	1845			USA	WYFR Family Radio	S	CAM	15130	
						S	Car	6085	
						S	Eu	21670	
1800	1900	Mo-Fr	E		Radio Exterior España	S	Af	17760	
						S	CAM	9765/CTR	
						S	SAM	11815/CTR	17715
						S	Eu	7275	
1800	1900	SaSu	E		Radio Exterior España	S	Af	17760	
						S	NAM	17850/CTR	
						S	CAM	9765/CTR	
						S	SAM	11815/CTR	17715
						S	Eu	7275	9665
1800	2100	Mo-Fr		ATA	LRA36 RN Arcangel	S	ATA	15476	
1800	0100	Su		ARG	R. Nacional Argentina	S	Am	6060	11710
						S	Eu	15345	
1800	1230			PRU	Radio Santa Rosa	S	PRU	1500	6045
1820	1840			J	NHK Radio Japan	S	Eu	11970	
1845	1900			USA	WYFR Family Radio	S	CAM	15130	
						S	Car	6085	
1845	2115			CLM	La Voz de los Centauros	S	CLM	810	5958
1900	1927			CZE	Radio Prague	S	SEu	5930	13580
1900	1930	Sa		CVA	Radio Vaticana	S	CAf	9755	11625
1900	1930	Su		D	Radio Santec, Univ.Life	S	ME	13820j	
1900	1930			SCG	Int.R.Serbia-Montenegro	S	Eu	7200	
1900	1945			USA	WYFR Family Radio	S	CAM	15130	
						S	SEu	7440/BLR	
1900	2000	Mo-Fr	E		Radio Exterior España	S	NAM	15110	17850/CTR
						S	CAM	9765/CTR	

					S	SAm	11715
					S	Eu	7275
1900	2000	Sa	E	Radio Exterior España	S	NAm	15110 17850/CTR
					S	CAm	9765/CTR 21700
					S	SAm	11815/CTR 21700
					S	Eu	7275 9665
1900	2000	Su	E	Radio Exterior España	S	Af	17760
					S	NAm	15110 17850/CTR
					S	CAm	9765/CTR 21700
					S	SAm	11815/CTR 21700
					S	Eu	7275 9665
1900	2000		EQA	HCJB Voice of the Andes	S	EQA	690 6050
1900	2000		KRE	Voice of Korea	S	Eu	4405 13760 15245
1900	2000	Su	VEN	R. Nacional Venezuela	S	WNA	13740/CUB
1900	2100	SaSu	PRU	Ondas del Pacifico	S	PRU	6782.5
1900	2200	Su	BOL	Radio La Plata	S	BOL	9717
1900	0200		CLM	Radio Autentica	S	CLM	5975
1900	0200		PRU	Radio Altura	S	PRU	6479.5
1915	1930	Fr	USA	Trans World Radio	S	Eu	1467/F
1945	2000		ISR	KoI Israel	S	Eu	9345 11590 15640
					S	NAm	9345 11590 15640
1945	2000		USA	WYFR Family Radio	S	SEu	7440/BLR
2000	2030		SVK	Radio Slovakia Int.	S	WEu	6055
					S	SAm	11650
2000	2100	Mo-Fr	E	Radio Exterior España	S	NAm	15110
					S	Eu	7275
2000	2100	Sa	E	Radio Exterior España	S	NAm	15110
					S	CAm	9765/CTR 21700
					S	SAm	21700
					S	Eu	7275 9665
2000	2100	Su	E	Radio Exterior España	S	Af	17760
					S	NAm	15110
					S	CAm	9765/CTR
					S	Eu	7275 9665
2000	2100		EQA	HCJB Voice of the Andes	S	SAm	690 6050 21455
2000	2100		KOR	KBS World Radio	S	Eu	9515
2000	2100		ROU	Radio Romania Int.	S	SEu	11940 15465
2000	2100		TWN	Radio Taiwan Int.	S	Eu	5975/D-j
2000	2100		USA	Radio Marti	S	CUB	1180 9565g 11930g
					S		13630g 13820d
2000	2100		USA	WYFR Family Radio	S	CAm	15155
					S	Car	5985 11855
2000	2100		VEN	R. Nacional Venezuela	S	Car	9550/CUB
					S	WNA	13680/CUB
					S	SAm	15230/CUB 17705/CUB
2000	2300	Sa	ARG	R. Nacional Argentina	S	Am	6060 11710
					S	Eu	15345
2020	2040		CVA	Radio Vaticana	S	Eu	585 1530 4005v
					S		5885 7250 9645
2030	2057		CZE	Radio Prague	S	SEu	5930 11600
2030	2100		RUS	Voice of Russia	S	Eu	7380m 11630m
2030	2130		IRN	IRIB Teheran	S	SEu	7300k 9650s 15085k
2055	2100	Mo-Fr	AUT	oe1 international	S	Eu	5945 6155
2100	2115		COG	RTV Congolaise	S	CAf	5985
2100	2130		F	Radio France Int.	S	CAm	17630/GUF
2100	2157		CHN	China Radio Int.	S	SEu	9640ka 11775s
2100	2200		BUL	Radio Bulgaria	S	SEu	11800 13800
2100	2200	Mo-Fr	E	Radio Exterior España	S	Af	11625
					S	NAm	15110
					S	Eu	7275
2100	2200	SaSu	E	Radio Exterior España	S	NAm	15110 17850/CTR
					S	CAm	9765/CTR
					S	SAm	11815/CTR
					S	Eu	7275
2100	2200		USA	Radio Marti	S	CUB	1180 9565g 11930g
					S		13820d 21500d
2100	2200		USA	WYFR Family Radio	S	Car	5985 11855
					S	CAm	15155
					S	Eu	15600

2100	2200	Su	VEN	R. Nacional Venezuela	S	SAm	11875/CUB
2100	2300		CUB	Radio Habana Cuba	S	Car	9550
					S	SAm	15230
					S	SEu	11800 13660
2100	2300		EQA	HCJB Voice of the Andes	S	SAm	690 6050 12000 21455
2100	0100		BOL	La Voz del Campesino	S	BOL	6537
2100	0230		BOL	Emisora Pio XII.	S	BOL	5952.5
2100	0230		BOL	Radio Santa Cruz	S	BOL	6135
2100	0230		CLM	La Voz del Guaviare	S	CLM	6035
2100	0300		PRU	La Voz del Campesino	S	PRU	6958
2100	0300		PRU	Ondas del Pacifico	S	PRU	6782.5
2110	2130		I	RAI International	S	SEu	6110 7130
2130	2200		HNG	Radio Budapest	S	Eu	6025/SVK 7250
2130	2200		VTN	Voice of Vietnam	S	Af	9550 13860
2130	0300		PRU	Radio Cusco	S	PRU	6193
2145	1200		PRU	Radio Victoria	S	SAm	780 6020 9720
2200	2230		CAN	Radio Canada Int.	S	SAm	11825 15455
2200	2257		CHN	China Radio Int.	S	SEu	7210/ALB 7250u
					S		9640ka 11775s
					S	SAm	13700/CAN
2200	2300	Su,Mo	D	Radio Cimarrona	S	URG	9480j
2200	2300	Mo-Fr	E	Radio Exterior España	S	NAf	7270
					S	NAm	15110
					S	Eu	7275
2200	2300	Sa	E	Radio Exterior España	S	Af	7270 11625
					S	NAm	15110 17850/CTR
					S	CAm	9765/CTR
					S	SAm	11815/CTR
					S	Eu	7275
2200	2300	Su	E	Radio Exterior España	S	NAf	7270
					S	NAm	15110 17850/CTR
					S	CAm	9765/CTR
					S	SAm	11815/CTR
					S	Eu	7275
2200	2300		KRE	Voice of Korea	S	Eu	4405 13760 15245
2200	2300		ROU	Radio Romania Int.	S	SAm	11940 15255
2200	2300		USA	Radio Marti	S	CUB	1180 6030g 11930g
					S		13820d 15330d
2200	2300		USA	WYFR Family Radio	S	Car	5985 11855
					S	CAm	15155
2200	2300		VEN	R. Nacional Venezuela	S	WNA	13680/CUB
2200	2330	Su	USA	WRMI Radio Miami Int.	S	LAm	9955
2200	2400	Mo-Fr	ARG	R.Argentina al Exterior	S	Eu	15345
					S	Am	6060 11710
2200	2400		USA	Adventist World Radio	S	SAm	6165/ATN
2200	2400		USA	WEWN Birmingham, AL	S	LAm	9355 13615
2200	0030		PRU	Radio Oriente	S	SAm	6188
2200	0100		CHL	Christian Voice	S	SAm	6070 17680
					S	CAm	17680
2200	0240		BOL	Radiodifusora Minería	S	BOL	5927
2200	0500		PRU	Radio Melodia, Arequipa	S	PRU	5940
2200	1230		PRU	CPN Radio	S	PRU	6141
2215	2330		SYR	Radio Damascus	S	Eu	9330 12085
2230	2400	Sa	USA	WRMI Radio Miami Int.	S	LAm	9955
2300	2327		CZE	Radio Prague	S	SAm	7345 9440
2300	2330		CAN	Radio Canada Int.	S	SAm	11825
					S	CAm	15455
2300	2330		F	Radio France DIGITAL	S	NAf	6175
2300	2330		SCG	Int.R.Serbia-Montenegro	S	SAm	9680
2300	2345		USA	WYFR Family Radio	S	Car	5985 11855
					S	CAm	15155
					S	SAm	15215 17845
2300	2357		CHN	China Radio Int.	S	SEu	6175/ALB 7210/ALB 7250u
					S	SAm	9590ka 9800ka
2300	2400		BUL	Radio Bulgaria	S	SAm	9500 11500
2300	2400		CLA	Nat.R.of Sahara AD Rep.	S	NAf	700 1550 7466
2300	2400		CUB	Radio Habana Cuba	S	ENA	6000 6060 9600
					S		11760 11800 11875 17740
2300	2400		E	Radio Exterior España	S	NAm	9535

			S	CAm	9535 15160
			S	SAm	9620 11680 15160
2300 2400	HOL	Radio Nederland	S	SAm	9895
2300 2400	TWN	Radio Taiwan Int.	S	SAm	15130/USA-o 17805/USA-o
2300 2400	USA	Radio Marti	S	CUB	1180 6030g 7365g
			S		13820d 15330d
2300 2400	VEN	R. Nacional Venezuela	S	NAm	9820/CUB 11760/CUB 13680/CUB
2300 0100	EQA	HCJB Voice of the Andes	S	SAm	690 6050 11720 21455
			S	NAm	11720
2300 0100	HRV	Voice of Croatia	S	Oc	9925/D-j
			S	SAm	9925/D-j
2300 0200	PRU	Radio La Poderosa	S	PRU	6536
2300 0200	PRU	Radio Panorama	S	PRU	5907
2300 0200	PRU	Radio Tropical	S	PRU	6419
2300 0230	Sa	ARG R. Nacional Argentina	S	Am	6060 15345
2330 2400	Mo-Fr	CAN Radio Canada Int.	S	SAm	11825
			S	CAm	15455
2345 2400	USA	WYFR Family Radio	S	Car	5985 11855
			S	SAm	15215 17845

(Eike Bierwirth's shortwave broadcasting-schedule list - July 10, 2005, filtered for the language-based transmissions by JKB)

MONGOLIA: The overseas service of the *Voice of Mongolia* was founded in 1964. Since then it has been introducing Mongolia to the rest of the world. The first broadcast in September 1964 was a half hour transmission in the Mongolian and Chinese languages, beamed to China. In the next few years, Mongolian international broadcasting expanded in terms of languages used, broadcast hours and target areas. The English service of Radio Ulaanbaatar, which was renamed The Voice Of Mongolia on January 1st, 1997, was launched on January 29th, 1965. Today the service transmits its broadcasts under the name "The Voice Of Mongolia" in the Mongolian, English, Chinese, Russian and Japanese languages. The Voice Of Mongolia is the country's only overseas broadcasting service and is operated by Mongolian National Radio & Television, a public service broadcaster of the Mongolian Government. All of The Voice Of Mongolia's broadcasts come directly from its Khonkhor Transmitting Station, about 25 km east of Ulaanbaatar, Mongolia's capital. It broadcasts through Soviet-made 100, 250, and 500 kW transmitters and curtain antennas built in the mid sixties. All reception reports and personal letters should be sent to the station's address marked for a particular language section (e.g. English Section): Voice of Mongolia, C.P.O.Box-365, Ulaanbaatar 13, MONGOLIA. E-mail: <mr@mongol.net>, URL: <<http://www.mol.mn/mrtv>>. (JKB)

Schedule A05 of the Voice of Mongolia:

0830-0900	J	12085	1130-1200	Mandarin	12085
0900-0930	Mongol	12085	1200-1230	J	12085
0930-1000	Mandarin	12085	1330-1400	R	12015
1000-1030	E	12085	1500-1530	E	12015
1030-1100	Mongol	12085	2000-2030	E	12015

(Marcelo A. Cornachioni in CONEXION #318 via WDXC-HQ; June 04, 2005)

NEPAL: Postal address: Radio Broadcasting Service, P.O. Box 634, Singha Durbar, Kathmandu, Nepal. A05 Schedule of *Radio Nepal*:

BGN	END	LANGUAGE	FREQ	DAYS															
0010	0015	Sanskrit	5005	Su Mo Tu We Th Fr Sa	0830	1115	Nepali	5005	Su	Mo	Tu	We	Th	Fr	Sa				
0015	0215	Nepali	5005	Su Mo Tu We Th Fr Sa	1115	1415	Nepali	5005	Su	Mo	Tu	We	Th	Fr	Sa				
0215	2030	English	5005	Su Mo Tu We Th Fr Sa	1415	1430	English	5005	Su	Mo	Tu	We	Th	Fr	Sa				
0230	0515	Nepali	5005	Su Mo Tu We Th Fr Sa	1430	1615	Nepali	5005	Su	Mo	Tu	We	Th	Fr	Sa				
0515	0715	Nepali	5005	Sa	1615	1630	Hindi	5005	Su	Mo	Tu	We	Th	Fr	Sa				
0715	0815	Nepali	5005	Su Mo Tu We Th Fr Sa	1630	1715	Nepali	5005	Su	Mo	Tu	We	Th	Fr	Sa				
0815	0830	English	5005	Su Mo Tu We Th Fr Sa	2345	0010	Nepali	5005	Su	Mo	Tu	We	Th	Fr	Sa				

(DXAsia Website last updated March 2005 via JKB)

SAUDI ARABIA: *Broadcasting Service of the Kingdom of Saudi Arabia - BSKSA* complete schedule for A05 season. Address of Technical/Frequency management: PO Box 61718, Riyadh. Fax: +966-1-404-1692.

1st Main px in Arabic		0600-0855	9675 17730 17740
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0900-1155	9675	17805	21705	2nd px in Arabic
1200-1455	9675	21505	21640	0300-0555 9580
1700-1755	15315	15435		0600-1655 11855
1800-2255	9555	9870		1700-2155 9580
Voice of Islam in Arabic				External Services
1500-1655	15315	15435		0400-0455 17760 in Somali
Holy Qu'ran in Arabic				0400-0555 15275 in Turkish
0300-0555	9715	15170	17895	0500-0555 17760 in Swahili
0600-0755	9715	15380	17895	0800-0955 17785 in French
0800-0855	9715	15380		1000-1155 21670 in Indonesian
0900-1155	11935	17615	21495	1200-1355 15345 in Urdu
1200-1255	15380	17895	21600	1400-1555 21600 in French
1300-1355	15380	17895	21460 21600	1400-1555 11745 in Persian
1400-1455	17895	21460		1400-1555 9730 in Turkmen
1500-1555	13710	21460		1600-1655 9525 in Pashto
1600-1755	13710	15205	17560	1600-1655 15345 in Bengali
1800-2255	11740	11820	11915	1700-1755 17775 in Bambara

(OBSERVER #374 by Ivanov and Datzinov, via WB, 29 July 2005)

SINGAPORE: From 01 August 2005 onwards, *RSI*'s official website URL will be changed to <<http://www.rsi.sg>>. For programme schedule, visit <<http://www.rsi.sg/english>>. (Alokesh Gupta; July 28, 2005)

SLOVAKIA: Last week, the public broadcaster announced its intention to close down its shortwave foreign language service and to downsize the staff of the radio station by 84 people. The management decided to take this radical step to cut costs. By this step it intended to compensate revenue shortfalls in concession payments and payments from the state budget. Due to the restrictive measures taken by general director of Slovak Radio Jaroslav Reznik, the Radio Council, a radio supervisory body, was summoned for a special meeting on Tuesday. Its members appointed by Parliament have agreed to bind the director to continue the shortwave broadcasting of Radio Slovakia International. Shortwave broadcasting will not be stopped, Jaroslav Reznik confirmed for *Radio Slovakia International*. Nevertheless, he added he could not say for how long this status will be possible. According to him, it is now up to the state authorities to express clearly whether they are interested in a foreign broadcast service. The supervisory body of Slovak radio agrees with the General Director in the point that the foreign service should be financed from the state budget not from the concession fees. That is why the financial sources should be provided by the government. Nevertheless, neither the Culture Ministry nor the Foreign Ministries seem to be interested in allocating sufficient means from their budgets. The European standard is to support a foreign radio broadcast from the budget of the Foreign Ministry. The law dealing with Slovak radio states that finance should be provided from the state budget for foreign service broadcasting. However the current Culture Minister questions this part of the law. Due to an allegedly unclear interpretation of lines defining financing foreign broadcasting, Culture Minister Frantisek Toth has initiated a legal analysis of the respective lines. The position of state authorities leaves the financing foreign broadcast on the reserves of the Slovak radio. Zuzana Mistrikova, the head of the media section at the Culture Ministry. The Slovak Republic represented by the government thinks it is something that the Slovak Republic needs to have and to have it in high quality and then to decide how it will be financed and if it will be financed directly from the state budget or if the system of financing of Slovak Radio will be so well managed that it will be able to finance broadcasting like this. Despite the fact that the foreign broadcast on short waves will not stop, there will be restrictive measures taken in Slovak Radio. According to the Radio Council, these cannot be affecting the production and broadcasting of the program. The supervisory body consists of members appointed by the parliament. The head of the council Michal Dzurjanin concluded that now they have to wait for Parliament and the Government to solve the current deficit of over EUR 8 million for the Radio. (©RNMN July 20, 2005 by AS; via JKB)

SRI LANKA: *Sri Lanka Broadcasting Corporation - SLBC*, External Shortwave Services, A05 schedule. Postal address: Sri Lanka Broadcasting Corporation, P.O.Box 574, Torrington Square, Colombo 7, Sri Lanka. E-mail: <slbcweb@lanka.net>.

External Services:

| BGN END LANGUAGE FREQ DAYS

0025 0430	English	6005	Su	Mo	Tu	We	Th	Fr	Sa	1130 1330	Tamil	11905	Su	Mo	Tu	We	Th	Fr	Sa
0025 0430	English	9770	Su	Mo	Tu	We	Th	Fr	Sa	1230 1550	English	6005	Su	Mo	Tu	We	Th	Fr	Sa
0025 0430	English	15745	Su	Mo	Tu	We	Th	Fr	Sa	1230 1600	English	9770	Su	Mo	Tu	We	Th	Fr	Sa
0030 0430	English	9770	Su	Mo	Tu	We	Th	Fr	Sa	1230 1600	English	15745	Su	Mo	Tu	We	Th	Fr	Sa
0030 0430	English	15745	Su	Mo	Tu	We	Th	Fr	Sa	1330 1530	Hindi	7300	Su	Mo	Tu	We	Th	Fr	Sa
0030 0430	Hindi	7300	Su	Mo	Tu	We	Th	Fr	Sa	1330 1530	Hindi	11905	Su	Mo	Tu	We	Th	Fr	Sa
0030 0430	Hindi	11905	Su	Mo	Tu	We	Th	Fr	Sa	1600 1900	Sinhala	11775	Su	Mo	Tu	We	Th	Fr	Sa
0035 0050	Bengali	7300	Su	Mo	Tu	We	Th	Fr	Sa	Shortwave transmitters:									
0035 0050	Bengali	11905	Su	Mo	Tu	We	Th	Fr	Sa	EkaLa: 2 x 10 kW, 2 x 35 kW, 1 x 100 kW,									
0130 0145	Bengali	7300					Th			2 x 250 kW:									
0130 0145	Bengali	11905					Th			6005 10 kW Non Directional									
0800 0830	Kannada	7300	Su	Mo	Tu	We	Th	Fr	Sa	7300 10 kW Non Directional									
0800 0830	Kannada	11905	Su	Mo	Tu	We	Th	Fr	Sa	9770 100 kW 350 degrees									
0830 1000	Telugu	7300	Su	Mo	Tu	We	Th	Fr	Sa	11775 250/35 kW 350 degrees									
0830 1000	Telugu	11905	Su	Mo	Tu	We	Th	Fr	Sa	11905 250/35 kW 350 degrees									
1000 1130	Malayalam	7300	Su	Mo	Tu	We	Th	Fr	Sa	15745 35 kW 350 degrees									
1000 1130	Malayalam	11905	Su	Mo	Tu	We	Th	Fr	Sa	Skelton (UK) 1 x 300 kW (leased airtime):									
1130 1330	Tamil	7300	Su	Mo	Tu	We	Th	Fr	Sa	6010 kHz 300 kW 160 Degrees									

(DXAsia Website last updated Apr 2005 via JKB)

USA: An amendment to the State Department finance bill for 2006/2007 passed yesterday in the US Congress authorizes the Broadcasting Board of Governors to initiate radio and television broadcasts to Venezuela for at least 30 minutes a day of balanced, objective, and comprehensive news programming. In response, Venezuelan President Hugo Chavez has called the amendment another "desperate attack by the imperialists." Chavez said that Venezuela's government would "jam the signal" of any broadcasts from the United States. It isn't yet clear whether the Bush Administration will request the BBG to initiate such a service, which appears to be similar in concept to the BBG's service to Cuba, Radio & TV Martí. (©RNMN July 21, 2005 by AS; via JKB)

UZBEKISTAN: Frequency changes for *Voice of Tibet* in Tibetan and Chinese:

1100-1148 NF 17563 TAC 100 kW / 131 deg, ex 17522/17525/17528
 1212-1300 NF 17563 TAC 100 kW / 131 deg, ex 17522/17525/17528
 1302-1350 NF 17563 TAC 100 kW / 131 deg, ex 17522/17525/17528
 1430-1518 NF 17563 TAC 100 kW / 131 deg, ex 17522/17525/17528
 (OBSERVER #375 by Ivanov and Datzinov, via WB, 4 August 2005)

Radio Tashkent Postal address: Radio Tashkent, 49 Khorezm Street, 700047 Tashkent, Uzbekistan. E-mail: <uzradio@uzpak.uz>, Web: <http://ino.uzpak.uz>. Radio Tashkent International A05 schedule (all transmissions daily):

BGN	END	LANGUAGE	FREQ	1300	1330	Hindi	7285	1400	1430	Urdu	7285
1200	1230	English	7285	1300	1330	Hindi	15295	1400	1430	Urdu	15295
1200	1230	English	15295	1300	1330	Hindi	17775	1400	1430	Urdu	17775
1200	1230	English	17775	1330	1400	English	7285	1430	1500	Hindi	7285
1230	1300	Urdu	7285	1330	1400	English	15295	1430	1500	Hindi	15295
1230	1300	Urdu	15295	1330	1400	English	17775	1430	1500	Hindi	17775
1230	1300	Urdu	17775								

(DXAsia website last updated Apr 2005, via JKB)

VENEZUELA: Radio Nacional de Venezuela announced schedule. All broadcasts are from transmitters in Cuba. Reception reports are requested to this e-mail address: <internacional@rnv.gov.ve>.

13740	1900-2000	15230	2000-2100	9820	2300-0000
9550	2000-2100	17705	2000-2100	13680	2300-0000
13680	2000-2100	11875	2100-2200	11760	2300-0000

(Manuel Méndez, Lugo, Spain, in DX Window via WORLD BROADCASTING MAGAZINE #343 by BP; August 9, 2005; via WDXC-HQ)

ZIMBABWE: *SW Radio Africa*, which broadcasts to Zimbabwe from studios in the UK, has launched an appeal for donations. On its website, the station says its funding remains uncertain: "Mugabe's jamming of the airwaves has forced the station to suspend its transmission on shortwave and drained its funds because of the high cost of using extra shortwave frequencies to counteract the jamming. The station can now only broadcast on

medium wave. If there is no new funding, this may also be silenced. If there was additional funding it could go back onto multiple shortwave frequencies.
(©RNMN July 07, 2005 by AS; via JKB)

Sources & Contributors:

Alokesh Gupta	New Delhi - India.
AS	Andrew Sennit - Radio Netherlands.
BP	Bob Padula - Australia.
CONEXION	CONEXION Digital - Buenos Aires, Argentina.
JKB	Dr. Juergen Kubiak, Berlin - Germany.
OBSERVER	Fortnightly edition of Radio Bulgaria's Frequency Management.
RNMN	R. Netherlands Media Network ©.
WB	Wolfgang W. Bueschel, Stuttgart - Germany.
WDXC-HQ	WDXC 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:	Other common abbreviations:
Ar Arabic	bc broadcast
Ch Chinese	lsb Lower Side Band Mode
Du Dutch	nd non-directional
E, En English	px program
F French	sce(d),
G, Ge German	sked schedule
Gr Greek	ssb Single Sideband Mode
I Italian	tx(er) transmitter
J Japanese	usb Upper Side Band Mode
K Korean	mm/dd/yy Date (month/day/year)
P Portuguese	dd.mm.yy (day.month.year)
R Russian	
Sp Spanish	
Turk Turkish	

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/>



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QSL CORNER

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

Country	Station	QSL	Time	ORG	Remarks	OM
Ascension Is.	UN Radio via Merlin	f/d cd	169 ds	17.810 kHz		RAD
Australia	Voice of International	cd	14 days	13.635 kHz	schedules/CD	TP
Clandestine	Radio Free Syria	return	3 months		bad addresses	RAD
Cyprus	CBC	cd	20 days	603 kHz		TP
Czech Rep.	Radio Prague	cd	6 days	5.930 kHz	magnet, sticker, Mouse mat/Schedules.	TP
Czech Rep.	Radio Prague	cd	6 days	9.880 kHz	small mouse mat magnetic. Stickers, schedules.	TP
Czech Rep.	Radio Prague	cd	5 days	9.880 kHz		TP
Equatorial Guinea	Ledbetter Bible via R. Africa	n/d cd	6 days	15.190 kHz		RAD
Germany	Bay-5 Aktuel	cd	6 days	6.085 kHz		TP
Germany	DLR	cd	18 days	6.005 kHz	177/990 kHz	TP
Germany	Evang. Radio Hamburg	cd	15 days	6.045 kHz		TP
Germany	Evang Rundfunk	cd	14 days	1539 kHz		TP
Hungary	Radio Budapest	cd	36 days	6.025 kHz		TP
India (Goa)	All India Radio Panaji	f/d cd	82 days	11.715 kHz	v/s Y. K. Sharma, Director.	RAD
Malaysia	Voice of Malaysia	n/d cd	146 ds	15.295 kHz		RAD
Morocco	Voice of America	f/d cd	22 days	17.895 kHz		RAD
Netherlands	Radio Netherlands	cd	14 days	15.335 kHz	Card series of 6.	TP
Oman	BBC Relay Station	f/d L	51 days	11.955 kHz	v/s Afrah Al Orimi	RAD
Russia	Voice of Russia	cd	30 days	9.795 kHz	extra confirmation by e-mail.	TP
Sweden	Hoerby DRM test 1 kW	cd	14 days	7.430 kHz	Report and QSL by e-mail.	MB
Syria	Radio Damascus	cd	19 days	12.085 kHz	large sticker.	TP
Taiwan	Radio Taiwan Int.	cd	30 days	3.965 kHz	2 newspapers, sticker,	TP
Taiwan	Radio Taiwan Int.	cd	31 days	3.965 kHz	Sticker/pennant.	TP
USA	Family Radio	cd	5 days	7.355 kHz	Schedules.	TP
USA	Voice of America	cd	6 days	13.685 kHz	schedules/map/magnet stickers. Map USA and World.	TP
USA	Voice of America	cd	10 days	15.205 kHz	card with QTH from Tinang/Phil	TP

Thanks to our Reporters:

MB = Michael Bethge, Bad Homburg, Germany. JRC NRD-525 with 20 m longwire.

RAD = Richard A. D' Angelo, Wyomissing, PA, USA. Drake R-8B, Lowe HF-150, Alpha Delta DX Sloper, RF Systems Mini-Window, Datong FL3, JPS ANC-4.

TP = Th. Peters, Amsterdam, Netherlands. Philips D-2999 and Sangean ATS-505 (digital), Antenna, Hochbau SONY AN-1 wide range.



DX LOGBOOK

Logs around the clock

by Ashok Kumar Bose, Unit # 28, 7035, Rexwood Road, Mississauga, ON, L4T 4M6, Canada
E-Mail: logbook@wwdxc.de

MEDIUMWAVE BAND

Frequ.	UTC	SIO	ITU	Radio Station	Language	Programme Details	Date	Rep.
1152.0	0130	111	G	Classic Gold,Amber Norwich	English	Ferryport	1807	MF
1161.0	0135	111	G	Magic Hull	English	Plastic Bomb in London	1807	MF
1197.0	2000	221	G	Hoo AM	English	Fresh CD's	1707	MF
1305.0	0140	211	G	Capital Gold,Barnsley	English	Israel threatened by bomb	1807	MF
1359.0	2205	111	G	Radio Chelmsford	English	Last News from Chelmsford	3107	MF
1395.0	0055	322	G	Radio London	English	Jingles	1807	MF
1413.0	2155	111	G	Radio Gloucestershire	English	Easy living in UK	3107	MF
1431.0	2330	111	G	Classic Gold,Southend	English	Terrorist in London	1707	MF
1458.0	1940	111	G	Radio Torquay,Devon	English	Torquay by travel	1707	MF
1485.0	2340	111	G	Radio Merseyside	English	Our river Mersey	1707	MF
1530.0	0010	211	G	Classic Gold,Huddersfield	English	The Early summer	1807	MF
1560.0	2200	121	G	Somerset Sound	English	Guntrade	1707	MF
1602.0	2140	333	GRC	ERA 1	Greek	ID,Hits	3107	MF

TROPICAL BANDS

Frequ.	UTC	SIO	ITU	Radio Station	Language	Programme Details	Date	Rep.
3910.0	2153	333	IRL	Reflections Europe	English	Program,Music	2407	FP
3965.0	2220	333	F	CBS,Taipei	Chinese	Program	2407	FP
4750.0	0247	211	SDN	Radio Peace	Vernacular	English ID,Talks,music	0807	RAD
4780.0	0216	211	GTM	Radio Cultural,Coatan	Spanish	Latin music,ID	1607	RAD
4780.0	0300	222	DJI	Radio TV Djibouti	???	Opening music,ID,Koran	1607	RAD
4810.0	0209	211	MEX	XERTA-Radio Transcontinental da America	Spanish	Latin Music,ID's,Pop music vocals	0207	RAD
4890.0	0400	322	GAB	RFI via Moyabi	French	ID,News & Instrumental music	2306	RAD
4910.0	0249	222	ZAM	Zambia Broadcasting Corp.	English	IS,Choral National Anthem,music	1407	RAD
4976.0	2040	222	UGA	Radio Uganda	Swahili	Talks,Music	2407	FP
4985.0	0240	433	B	Radio Brasil Central	Portugese	Romantic vocals,ID	1007	RAD
5005.0	2256	211	GNE	Radio Guinee Equatorial,Bata	Spanish	Long Orchestra National Anthem	2806	RAD
5470.0	2259	211	LBR	Radio Veritas,Monrovia,Liberia	English	ID,The Lord's Prayer	2306	RAD

SHORTWAVE BANDS

Frequ.	UTC	SIO	ITU	Radio Station	Language	Programme Details	Date	Rep.
6020.2	0736	333	PRU	Radio Victoria	Spanish	Talks,ID,TC	0507	RAD
6100.0	0252	555	CAN	Deutsche Welle via Sackville relay	German	The Pencil. cultural theme	2407	RL
6134.8	0035	333	BOL	Radio Santa Cruz	Spanish	ID,Two vocal selections,flutes	3006	RAD
6134.9	0102	211	B	Radio Aparecida	Portugese	Religious talks	3006	RAD
6150.0	0235	333	B	Radio Record	Portugese	Football match commentary	0107	RAD
6175.0	0350	555	CAN	Voice of Vietnam	English	Songs about Hanoi	2407	RL
7110.0	0342	222	ETH	Radio Ethopia	Amharic	Horn of Africa vocals,ID and News	2906	RAD
7275.0	0528	211	NIG	Radio Nigeria,Abuja	English	Pop Music,,ID's and News	1706	RAD
7385.0	0245	454	USA	WRMI	English	World of Radio # 1281	2507	RL
7390.0	0359	454	AFS	Channel Africa	French	ID and program	2507	RL

9290.0	1010	333	LVA	Radio Casablanca via Riga relay	German	ID,Talks,Muisc	2307	FP
9560.0	0224	545	CAN	KBS World Radio	English	WorldWide Friendship	2407	RL
9629.0	2145	122	USA	Radio Marti	Spanish	Jingles	0907	MF
9630.0	0130	221	PHL	Radio Filipinas	English	Filipino communities in USA	0607	MF
9665.0	2105	122	IRN	Voice of Dem. Movement of Iraq	English	Help from Iran	0907	MF
9675.0	0040	322	B	Radio Cancao Nova	Portugese	ID,Jesus Muisc	0108	MF
9680.0	2035	333	THA	Radio Thailand	English	Oil Price	0907	MF
9700.0	0242	555	BUL	Radio Bulgaria	English	Radio Bulgaria calling	2307	RL
9736.9	0145	222	PRG	Radio Nacional del Paraguay	Spanish	Latin vocal,Talks and several ID's	1507	RAD
9760.0	2230	333	CYP	Cyprus BC	Greek	ID,Radioplay	1007	MF
9770.0	0110	323	CLN	SLBC	English	ID,Hit Music	1107	MF
9779.5	0258	222	YEM	Yemen Radio	Arabic	ID,Anncts., Music,News	0107	RAD
9870.0	0313	545	CZE	Radio Prague	English	Letter from Prague	2507	RL
9875.0	2343	454	LTU	Radio Vilinius	English	Recognition EU,Education	1907	RL
9885.0	0835	555	NZL	Radio New Zealand Intl.,	English	Mailbox	1807	RL
9980.0	2101	333	ISL	AFRTS	English	Tour de France	2407	FP
11820.0	2254	333	ARS	BSKSA	Arabic	Koran,ID	2106	RAD
11935.0	0139	454	ATN	Radio Japan,NHK	English	44 Minutes	2207	RL
11965.0	2100	322	ASC	Star Radio,Monrovia,Liberia	English	News,Program on elections	1607	RAD
11990.0	0122	555	CAN	RCI	English	Writers & Company	2507	RL
12085.0	2349	222	SYR	Radio Damascus	Arabic	Vocals	2106	RAD
13710.0	0057	554	CAN	RCI	English	Maple Leaf Mailbag	2507	RL
15205.0	2150	45	D	Detsche Welle	English	Hits from Germany	2407	RL
15205.0	1238	232	GRC	Radio Liberty	Russian	Talk,ID	2307	FP
15225.0	1310	443	TUR	Voice of Turkey	English	Music,ID,News	2307	FP
15245.0	1343	333	MRC	VOA	Kurdish	ID,Music,News	2307	FP
15245.0	1359	333	KRE	Voice of Korea	French	ID,News	2307	FP
15265.0	1750	322	TWN	Voice of Taiwan	Arabic	ID,Arabic music	3107	MF
15275.0	2114	454	D	Deutsche Welle	German	Music Request program	2307	RL
15280.0	1810	222	UAE	AWR	Vernacular	ID,God is our Hero	3107	MF
15285.0	1433	232	SNG	BBC,Kranji	Mandarin	Muisc,program	2307	FP
15300.0	1508	232	F	Radio France Intl.,	French	Talks,News	2307	FP
15310.0	1535	333	THA	BBC World Service	English	ID,Sports	2307	FP
15315.0	1606	333	ARS	BSKSA	Arabic	Koran	2307	FP
15335.0	1633	333	MDG	Radio Nederland	Dutch	Theatre Program	2307	FP
15345.0	2045	333	MRC	RTV du Maroc	Arabic	Music	2307	FP
15345.0	2200	322	ARG	RAE	Spanish	ID,News,Music	2307	FP
15385.0	0028	434	E	REE,Madrid	English	Radio Waves	2407	RL
15390.0	1820	222	UAE	Emirates Radio	Arabic	ID,Daily life in Dubai	3107	MF
15400.0	2241	333	ASC	BBC,World Service	English	Program	2307	FP
15410.0	2305	333	ATN	Deutsche Welle Bonaire relay	German	News,Weather,ID	2307	FP
15440.0	2333	232	USA	Radio Taiwan Intl.,	Mandarin	Program	2307	FP
15455.0	1555	333	RUS	Voice of Russia	French	Program	2407	FP
15475.0	1607	333	GAB	Africa No. 1	French	Sports	2407	FP
15480.0	1700	333	MRC	Radio Liberty	Italian	Program	2407	FP
15485.0	1716	222	CHL	Voz Cristiana	Portugese	Program	2407	FP
15720.0	028	454	NZL	Radio New Zealand Intl.,	English	Mailbox	1909	RL

Thanks a lot to our club members for your contributions:

FP : Frank Paukstat, Wehretal, Germany. Kenwood R-2000 with multiband Dipole antenna & Mizuho AT-2000 Preselector.

MF : Michael Frese, Osnabrueck, Germany. SONY ICF SW 7600G with Telescopic antenna.

RAD : Rich D'Angelo, Wyomissing, Pennsylvania, USA. Ten-Tec RX-340 & Drake R-8B with 500/200 feet long wire,Datong FL3.

RL : Richard Lemke, St. Albert, Alberta, Canada. JRC NRD-535 HF & Grundig YB 550 PE with random long wire antennas.

Dear Friends,

Welcome to the August/September double issue.

This month we have a short logbook. I guess everybody is enjoying the warm summer we are having. Thanks!

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

Ashok Kumar Bose

The History of Radio Romania International

The Beginnings

Radio Romania International

The first experimental radio programmes broadcast by Romania for listeners in foreign countries were music programmes. That was in 1927, a year before the National Radio Broadcasting Society was established.

A 19th century building in Bucharest, which today is home to the Museum of Romanian Literature, served as the location of the University Electrotechnical Institute in the 1920s. Historian Eugen Denize, a highly documented researcher of the history of Romanian radio broadcasting, says that a Romanian broadcasting station with a 200 W power and operating in the 280m band was built in the labs of that Institute in 1927. Already the third Romanian experimental radio station, but in this case the programmes were announced in four languages: Romanian, French, German and Italian. With a range of action measuring roughly 1,000 km, the station could also be picked up abroad, in Europe and the Middle East. Historian Eugen Denize writes: "for the first time audiences could listen to the artists of the Romanian Opera House on that station. It also broadcast the concerts of the Romanian Athenaeum and also Beethoven's Symphonies in the winter of the same year".

Therefore, we could say that 1927 was the birth date of experimental radio shows broadcast from Romania and targeting listeners abroad. Although the station was functioning on the premises of the Electrotechnical Institute and was not an official one, its programmes actually targeted listeners abroad as well and - quite importantly - it had the technical capability to reach them.

In the beginning, as only natural, radio communication was not limited by borders, save those of a technical nature. But the good times were soon brought to a halt by the dictatorial regimes - be it the Nazi or the communist regime - which discovered the role of interference and jamming and also of deceitful or simply hostile propaganda.

But let's return to the inter-war kingdom of Romania. The first official broadcast in Romanian was aired on November the 1st, 1928, on a 400 Watt transmitter, in the 401.6 metre band. The address of the new Radio-Phone Broadcasting Society (as it was named in the beginning) was the same with our address now: 60-64 General Berthelot Street, right in the heart of Bucharest. Two decades had elapsed since the first wireless telegraphy station was made operational in the Black Sea Constanta Port (in south-eastern Romania).

In 1932 the broadcasts could be picked up as far as the other side of the globe, in New Zealand. Two years previously, the Romanian Consulate in Palestine had informed Romanian authorities that a large number of people from Palestine were requesting that the national radio station in Bucharest should also broadcast information in French.

However, the first formal broadcasts in foreign languages of the Romanian Radio Broadcasting Corporation (SRR) were conceived in the early 1930s, in order to inform the diplomatic corps in the Romanian capital city. Eugen Denize makes the following remarks in his first volume devoted to the history of SRR: The first broadcasts of this kind started in 1932, namely Newsreels in French and English, aired before the end of the programme, a quarter of an hour before midnight. Before the end of the daily programmes in Romanian, the so-called "miniature talk-shows" were broadcast, which referred to specific Romanian life, as a document of our archives says. They provided brief information in French and German (we quote from a document of the time) about "the wealth, economy, culture and creations of Romania". There followed Newsreels in Italian and German, alternatively broadcast with those in English and French.

In the following years, with the establishment of the National Radio Corporation, foreign audiences were to become the subject of thorough research by the authorities. Romania, just like other countries had discovered an extraordinary instrument of making itself known worldwide. Special evenings dedicated to other countries were organized. Exchange programmes were introduced and after 1930 pages of classical Romanian literature were periodically transmitted in French, Italian and German.

However, the information is not very precise and recollections or even written sources generate a rather blurred picture, which makes it all the more fascinating. It is the picture of a still and idyllic period in the history of Europe and of the world, which although had gone through a world war and had started to get in touch with Stalin's USSR and Hitler's Germany, had not experienced the horrors of the past century-Nazism and communism.

Browsing the review "Radiophony" issued before World War II, our colleagues from the SRR Archives Department discovered that in March 1933, at 23:00 hours, Bucharest time, (21:00 GMT), taking advantage of the fact that its broadcasts were received throughout the Mediterranean, in Germany and even in Australia, the Romanian Radio Broadcasting Corporation started airing a broadcast titled "Update for Foreign Countries" twice a week.

On Tuesdays, the broadcast was aired in French and on Fridays and then on Thursdays, it was transmitted in German. It was actually a dialogue on Romania's artistic life, tourist offers and sometimes on its economic opportunities. The first discussion in French headlined "Artistic Life in Romania" was given by Professor Alexandru Busuioceanu on March 21st 1933. The first discussion in German under the heading "Literary Life in Romania" was given by Paul Zarifopol on March 24th 1933. With small breaks, various other talks were given on the great Romanian poet Mihai Eminescu, on the novel "The Uprising" by Liviu Rebreanu, on Byzantine monuments in Romania, the Romanian landscape, Romanian folk poetry, spas in Romania, the Little Entente, economic news, Romanian theatre and painting, castles in Romania, the city of Bucharest, Romania's hills and plains, etc.

In August 1933, a letter sent in by Mr. John Hardle of Scotland confirmed, among other things, the good reception of the broadcast which apparently began with the announcement "This is Radio Bucharest - broadcasting on an experimental basis", against the background of piano music. It seems that the first letter received from abroad came from Egypt.

The first letter from Italy was sent in by Mr. Oscar Laurenti of Naples in 1934 and it was not written in Italian but in French. He wrote he had been thrilled by the way the opera Lucia di Lamermoor had been performed and wanted to be told details about the broadcasting station.

As stated in the 349th issue of 'Radio Adevarul' of 1935, an international news programme in French and German was broadcast at 23.45 hours, Romania's time.

We even have an extremely moving confirmation over the telephone of a listener, 80 year old Professor Luigi Menguzzi from Padua, who told us 5 years ago: "I have been listening to these programmes since 1938. They used to broadcast a news bulletin in French and German in the evening, before the end of the programme."

A milestone for Romanian international radio broadcasting is February 12th, 1939, when a complex programme about Romania was launched for America; the magazine 'Radio Universul' described it as a 'propaganda instrument for Romania's participation in the New York World Exhibition'. That programme broadcast among other things George Enescu's 'Romanian Poem', a folk song performed by the great Romanian artist Maria Tanase, a folk dance tune performed by the orchestra conducted by Grigoras Dinicu, and Romanian folk songs performed by Valentina Cretoiu Tassian and G. Folescu.

The issue of February 19th, 1939 of the magazine 'Radio Adevarul' described that programme as an 'historic event'. The programme included interviews and music and was re-broadcast on American stations. No record of it has been preserved, but we do have a recording of Maria Tanase's performing in that programme.

The first confirmation of the fact that a programme produced in English by Radio Bucharest could be received in the United States is dated therefore February 1939, which is considered the birthday of Romanian radio broadcasts targeted at listeners across the ocean.

Partnerships in the Interests of the Romanian State

The broadcasts in foreign languages were introduced as a result of a government initiative. Although the Romanian Radio Broadcasting Corporation was a joint venture made up of 60% state capital and 40% private capital, the decisions made by its Board would always reflect the best interests of the Romanian state. Those programmes were introduced precisely to make known to the world Romanian culture, realities and the events taking place in the Kingdom of Romania. They were a government initiative aimed at promoting Romania's image abroad.

This is what historian Eugen Denize writes about the programmes in foreign languages broadcast from Bucharest:

"Overall the broadcasts in foreign languages held quite a big share of the programmes produced by the Romanian Radio Broadcasting Corporation between the two world wars; until World War II they were of a more general nature and were aimed at telling the world what was going on in Romania at that time. When the war broke out, they started to focus more on propaganda and when Romania joined the war, they, naturally, supported the country's military actions on the eastern front".

Broadcasting Performance

The content of our international broadcasts was inspired from foreign radio stations, especially French and British ones. Eugen Denize points out that from the very beginning international broadcasts consisted of original productions and were not mere translations of the domestic broadcasts. They were a kind of review of the latest developments in Romania, of political, cultural, economic and sports news. Programmes covered Romania's relations with other countries but also cultural events.

Reception of those programmes abroad was poor, said Mr. Denize. Before World War II the French, English, German and Italian Services were broadcasting on medium waves, so they didn't have a very strong impact abroad. But later, the first short wave station was inaugurated allowing our programmes to reach considerably farther. However in the late 1930s there were still many geographical areas in Europe where our programmes could not be picked up. The transmitters were located in the north of the capital city. The transmission was on 34.2 metre frequency, but the transmitter was not powerful enough to reach the whole of Europe. However reception of the programmes was very good in the Balkans and the Middle East thanks to the geographical configuration and the waves propagation.

Radio during the 'Warm War'

The outbreak of World War II brought about a growth and diversification of the information broadcast from Romania in foreign languages to audiences abroad. So, besides broadcasts in French, English, German and Italian, programmes in Greek, Turkish, Serbian, Russian and later Ukrainian were introduced. Programmes

were, obviously, highly propagandistic during the war, serving Romania's military and political purposes together with those of the Axis and, implicitly, Germany.

On August the 23rd 1944 Romania joined the Allied Powers. At the end of the same year a new station was inaugurated. 'Roman Dacia' radio station was broadcasting in 5 languages: English, Russian, French, Hungarian and German. The war had not come to an end. The Roman Dacia Board decided to serve the cause of Romania's integration into the United Nations Organisation and to promote Romania's economic reconstruction and democratisation process.

The studios in General Berthelot Street had been destroyed by German air raids. Programmes were broadcast temporarily from the nearby St. Sava College. A special Roman Dacia studio was set up in the festive hall of the college.

Radio during the Cold War

The communist regime had left its mark on the history of the Romanian Radio Broadcasting Corporation. During the Cold War, east of the Iron Curtain, the idea of propaganda became all pervasive so that international broadcasts were used as a pure instrument for promoting the communist ideology. Nevertheless, cultural, sports and music programmes still found their way to foreign audiences.

On December 21st 1946 a new international broadcasting station was set up, called Free Romania. The "Free Romania" Board report wrote: "our international programmes have been proof of the Romanian people's efforts for the democratisation of the country." To be read: communisation. In 1948 broadcasts in French, English, Russian, Serbian and German were being aired from Bucharest.

Let's Go Back Half a Century

In our attempt to write the history of international broadcasting we turned to the memories of many of our senior colleagues, but also to the radio archives and the Romanian Radio Golden Tape Library.

The first broadcast in Romanian for foreign audiences was aired on July 10th 1950 and it was on short waves. It ran in parallel to the "Free Romania" programmes that were also broadcast on short waves. Both programmes were 30 minute long. In the following years a new programme was introduced: "The Romanian Broadcast for the United States". That meant a geographical diversification that started from a reality, namely the existence of the largest Romanian community of immigrants, which was in the United States. In late 1955 a new programme was added "The Voice of the Motherland", running in parallel with "The Romanian Broadcast for the United States". Let's not forget that 1955 was the year when Romania became a member of the United Nations Organisation. The Editor-in-Chief was a highly experienced journalist, Leon Sarateanu.

The importance of the Voice of the Motherland programme was proved by the fact that the news bulletins were read by two of the golden voices of the Romanian Radio Broadcasting Corporation: Mihai Zirra and Marcela Rusu. It is said that the Romanian Service had gathered the creme de la creme of the Romanian Radio journalists in the communist authorities' bid to give propagandistic programmes a more humane sound.

The Romanian exile was clearly hostile to the communist regime, but the authorities in Bucharest hoped to win them back. So a Repatriation Committee was set up in Eastern Berlin chaired by General Cretulescu who served in the old Romanian Army. There was even a press organ: "The Voice of the Motherland" (in Romanian: "Glasul Patriei"), a newspaper with a massive distribution network abroad, based in Bucharest.

On April the 12th 1958 "The Romanian Broadcast for the United States" became one and the same programme with "The Voice of the Motherland", which in turn had geographically diversified programmes for Western Europe and the United States.

The history of the French Service after the end of World War II started with Mrs. Andree Fleury whom some of our listeners had the privilege to hear. She died at the venerable age of 100 years. Some of her younger colleagues at the French Service in Bucharest continued their careers at big radio stations like Radio France, RFI and Radio Free Europe. Elena Murgu and Alain Paruit are just two examples.

As for the pioneers of the English Service, they were Edith and Max Eisinger, a couple of radio enthusiasts educated in England. They were followed by reputed intellectual and journalist, Catinca Ralea, who did a series of exceptional interviews with world famous people like writers Saul Bellow, William Saroyan, Alvin Toffler and Iris Murdoch, musicians Yehudi Menuhin and Arthur Rubinstein, sculptor Henry Moore and politicians Margaret Thatcher and Edward Kennedy. And later by another truly remarkable voice Alexandru Fole.

In the 1950s Radio Bucharest broadcast programmes in Russian for the Soviet army and Soviet experts. With their withdrawal, in the second half of the 1950s, those programmes stopped. At around the same time, programmes started to be exchanged with Radio Moscow, similarly to those which Soviet Radio exchanged with radio stations in most countries of the Soviet bloc. Those were programmes produced and recorded in Bucharest which were sent to Moscow and broadcast from there twice a week.

In 1975, the Russian Service was set up as part of the Foreign Language Programmes Department and its first show was aired on short waves on December the 15th 1975. Romania thus became the first Warsaw Treaty country to broadcast a programme in Russian directly to Russian listeners, without passing through the Moscow "filter". By that time Romania had distanced itself from the USSR, especially as regards its foreign and economic policies, therefore the Soviets unsuccessfully tried to convince Romania to give up the idea of such programmes.

The German Service enjoyed, throughout the years, the collaboration of personalities of great repute: German speaking poets Alfred Margul Sperber and Franz Johannes Bulhart, actress Margot Goettling, who graduated from the Drama Institute in Vienna, exceptional radio presenters and hosts: Ingrid Kloos, Heidemarie Papp, Otto Schneider, Erwin Sacher or Ilse Borcea, as well as talented journalists, such as Richard Lang and Juergen Salzer.

Programmes in Greek started being broadcast in 1950 and the staff mainly consisted of Greek nationals who were political refugees. The first team members included Elena Papadopoulos, Panas Panaitopoulos, Egon Steindler Petraru and Filareti Folea.

The Yiddish language programme was set up in 1950, as part of the Department for National Minorities. One year later, the programme was transferred to the Department of Programmes for Foreign Countries (REPS). The programme ceased in 1955, according to some sources. However, historian Eugen Denize says that the programme was still broadcast in 1957, being among the 11 foreign languages in which programmes were transmitted: Russian, English, French, Italian, Spanish, German, Turkish, Iranian, Yiddish, Greek and Serb.

In 1952, Radio Bucharest started to broadcast in Italian, through the voice of the popular presenters Ugo Merola and Walter Bencivenga, and then the talented Florin Velcu, full of youthful energy. "The programmes started in 1952 with three one hour shows a day" remembers Mr. Velcu.

1955 was the year that programmes in Portuguese started to be broadcast. The first programmes were produced by two Portuguese nationals in collaboration with the young student Angela Mocanu. Soon afterwards, Jose and Tereza Ramos joined the team, but they went back to Portugal after the 1974 Flower Revolution.

The starting point of the Spanish Service can be traced back to the 15th of March 1955, at 8.00 hours pm, local time. The mastermind of the Spanish programmes was, in fact, Hortensia Roman, a political refugee in Bucharest after the Spanish Civil War.

The Serbian Service started its broadcasts in 1956 with Father Ghena Petrov. His programme, which targeted what was back then referred to as the Tito's deviationist regime, became an epitome of the Romanian-Yugoslavian friendship in the 60's as a result of the change in attitude of the Romanian leadership.

On July the 15th, 1957 the Turkish Service was set up, among its "founders" being Mrs Melike Roman. The Turkish Service was dismantled on the 27th of March 2004, along with the Bulgarian, Greek, Hungarian and Portuguese ones.

On the 17th of September 1957, the radio announcement "You are tuned to Radio Bucharest" was first aired in Persian. This was made possible with the generous help of the Saidi Masuds, a refugee family. In the spring of 2000, the programmes stopped for a very objective reason - the complete absence of a "new generation" of Farsi speakers to take over from the radio presnters who had entertained their listeners for decades on end.

The Arabic Service began broadcasting on 5th April 1961 and had its glory days during the 1960's and 1970's when Romania was promoting a policy of cooperation with both Arab states and Israel, thus contributing to the Middle East peace process. Nowadays, 50% of the editors and programme producers are Arabs and the rest are Romanians who studied Arabic at the University of Bucharest. Among the founding members of the Arabic Service were Nader Karajoli and his wife Suleima Samman.

A presentation brochure published by the Romanian Radio and Television Broadcasting Corporation in 1982 gave a statistical account of the programmes broadcast in foreign languages by the state-controlled Romanian Radio: in 1982, as opposed to 1961, there had been an increase in the broadcasting hours per year from 8,570 to 10,807: programmes were broadcast in Arabic (2h/day), English (6h15/day), German (1h45/day), Greek (1h/day), Persian (1h/day), Italian (2h/day), Portuguese (1h/day), Russian (1h15/day), Romanian (3h/day), Serbian (1h/day), Spanish (4h30/day), Turkish (1h/day) and the programme entitled "Tourism and Music", a multilingual programme providing tourism information in English, French and German (30min/day).

A Free and Friendly Radio

Following the anticommunist Romanian Revolution of December 1989, Radio Bucharest became Radio Romania International, the programmes acquired a whole new format, the staff welcomed young members, and the RRI services turned towards the future, towards once again building a bridge between Romania and the democratic world and re-establishing the link between Romanians living abroad and those back home, a link that had been weakened on purpose by the totalitarian regime.

During the 1990's three radio channels gradually developed under the umbrella of Radio Romania International, addressing the target audience: "Romania Live" for Romanians abroad; "Open Radio" with programmes in major international languages: Arabic, Chinese (a programme set up in 1999), English, French, German, Italian, Portuguese and Spanish (the Persian Service stopped airing programmes for reasons of staff shortage); and "Hertz Bridges" with programmes mostly for neighbouring countries in Bulgarian, Hungarian, Ukrainian (programmes produced after 1990 with a view to improving communication with the neighbouring states) along with the programmes in Greek, Turkish, Russian and Serbian. Another novelty were the programmes broadcast in the Aromanian dialect, which started in 1991.

New Broadcasting Languages, New Bridges to Our Friends

Let us now focus on the "new-comers": On the 23rd of March 1991, RRI started broadcasting in the Aromanian dialect for the Aromanian communities in the Balkans, and not only. This bond that we had shared and that had been broken by the hardships of old was now brought back to life in a deeper and more profound shape.

Hungarian programmes were first aired on the 14th of August 1993, against the background of an overwhelming need felt by Romania and Hungary to overcome their common problems, in particular the

historical problems, so as to help chisel their European and Euroatlantic future as two former communist countries that history had placed side by side. The last programme in Hungarian was broadcast by RRI on March the 27th, 2004, when all barriers were pulled down between the two countries and new forms of direct communication emerged.

Programmes in Ukrainian had been also broadcast in Bucharest in World War Two, but the genuine birthday of programmes in Ukrainian is September the 25th, 1994. Therefore, it's been 10 years of broadcasts in the language of our neighbours with whom we had and still have a lot a extremely interesting subjects to discuss.

Programmes in Bulgarian started on December the 1st, 1995, against the background of democratic developments taking place in Romania and Bulgaria after the break-up of communism; these broadcasts were meant to bring the two countries closer to each other and consolidate the relations between the Romanians and the Bulgarians. The last show in Bulgarian was broadcast on 27 March 2004.

On October the 1st, 1999, RRI started to produce programmes in Chinese. The editorial staff benefited from the contribution of Chinese nationals residing in Romania, and Chinese language experts such as Yang Shunxi, a former professor of Romanian at the University of Beijing, as well as our colleagues from Radio China International, the Romanian language department, Li Jiayu and Shen Qinchen.

From Present to the Future

In 2004, RRI repositioned itself on the international radio broadcasting market. RRI was re-organised into two international stations: RRI 1, broadcasting round the clock in Romanian, and also in the Aromanian dialect, and RRI 2, broadcasting in 10 foreign languages: Arabic, Chinese, English, French, German, Italian, Serbian, Spanish, Russian and Ukrainian.

According to the decision of the Romanian Radio Broadcasting Corporation Board, broadcasts in Bulgarian, Greek, Hungarian, Portuguese and Turkish ended late in March 2004; a Multimedia Group was set up for Internet productions and international radio coproductions.

At the same time, the two Romanian international broadcasters started to diversify their programmes.

Until early 2004, we used traditional land transmitters in short waves, the Internet (Real Audio formula, Direct Streaming) and the Hotbird 5 satellite for Europe and the Mediterranean. As of the 1st of January 2004, certain programmes in English, French, German, Russian and Romanian are rebroadcast through World Radio Network (WRN), including on medium and ultra-short waves from the target areas, and in the USA also through mobile telephony (the English programme). At the same time, we are developing the duplex broadcasting system and the communication with you, those who listen to RRI 1 and RRI 2, by means of our Internet page. As of the summer of 2004, our broadcasts in Romanian reach the USA and Canada also via Telstar 5 satellite.

RRI 1 - "Romania Live"

As of March 2001, RRI 1 has been broadcasting daily shows under the heading "Romania, live", a summary of the shows produced by the main departments in the Romanian Radio Broadcasting Corporation. This summary is broadcast around the clock via the satellite, on the Internet (in Real Audio), and also on short waves (to Central and Western Europe and Israel), 5 hours per day. RRI 1 has daily broadcasts around the clock in Romanian, and three 30 minute-broadcasts in the Aromanian dialect, which add up to 9,300 hours per year.

RRI 2- "Radio Bridges"

RRI 2 produces and broadcasts shows in ten foreign languages: Arabic, Chinese, English, French, German, Italian, Serbian, Spanish, Russian and Ukrainian, which total 25.5 hours per day. In other words, 9,300 more broadcasting hours per year.

Together, 775 Days ... Per Year

So, you can listen to our programmes on short, medium and ultra-short waves, but also via satellite and other means of reception; we have 51 hours of radio programme every day, which amount to more than 18,600 hours of radio production in 12 months. In other words, 775 days per year!

The History of an Ageless and Borderless Friendship

This history of Romanian international broadcasting would not have existed, however, if our programmes had not reached you, and especially if you had not liked them.

Proof that you like our programmes is your participation, always in large numbers, in our general knowledge contests, held in the last 10 to 12 years. Whether it's Maramures, Bucovina, the Danube Delta, the Arges area, Nasaud or Gorj, the total eclipse of the sun of 1999, your answers to our contests have proved you are genuinely interested in Romania's history and people.

Those who won trips to Romania - our friends from many countries- Germany, the USA, France, Russia, Brazil, Italy, Ireland, Ukraine, Belgium, etc., came as listeners of RRI and left, with no exception, as friends of Romania. The history of this solid friendship continues!

(Radio Romania International Website <<http://www.rri.ro>>)

All India Radio **A visit to All India Radio Chennai** **by Jose Jacob, VU2JOS**

Chennai which was known in English as Madras till recently is located in the South Eastern coast of India. It is a metropolitan city and is the capital of Tamilnadu. State. The local language is Tamil. A couple of days back on 13 May 2004 while passing through Chennai, I had the pleasure of visiting the AIR transmitting station at Avadi there by prior appointment.

All India Radio Madras as it was known then was inaugurated on 16 June 1938. Its studios are in near the beach in Mylapore. The MW & SW transmitters are presently located at Avadi, about 25 kms away from Chennai in a 275 acre site. Its peripheral wall is about 7 kms long! The staff quarters are also located here. One has to pass through security checks at 3 places to enter the transmitter building.

There are 3 transmitter buildings at this site. In the first building which is about 1 km away from the main entrance, are two SW transmitters. On the way we can see their large antennas.

In one room is the 50 kW BEL HHB 144 transmitter made by Bharat Electronics, Bangalore and commissioned in 1994. It is used for the A channel programs on 4920 & 7160 kHz.

In the next room is a 100 kW BBC SK 51F3 transmitter made by British Brown Boveri and commissioned on 19 Feb 1985. Currently it operates on 7270 kHz with test broadcasts of AIR FM Gold programs relayed from New Delhi received via satellite. Later it is proposed to be used for the new a AIR news channel. Earlier it also used to operate on 4790, 4990, 7270, 7275 etc. with External Services to Sri Lanka in Tamil, English & Sinhala and Vividh Bharati programs on 10330 etc. on the Home Service. This transmitter can in fact operate from 3900 to 26100 kHz. This transmitter is known as M5 (M stands for Madras and 5 is transmitter no.). Earlier in this building there was a 10 kW Philips KVFH10/12A SW transmitter which was commissioned on 16 June 1938. It used to operate on 4920, 6085, 7160 and 9575. It was dismantled after 1994 when it was replaced by the 50 kW BEL transmitter. A workshop is working in that room now.

There used to be another 100 kW Marconi BD253 (Players) SW transmitter in this building. It was on air from 3 October 1957 with the popular Vividh Bharati programs on 6115, 7235, 9750, 15125 kHz etc. It was

also used for the External Service to S.E.Asia on 15335 kHz and for the programs for the Indian Peace Keeping Forces in Sri Lanka on 7205, 7340, and 9910 kHz in the mid 1980s. It was dismantled around 1992 and in its exact place the BEL 50 kW transmitter was installed. There is a standby studio also here.

The 2nd transmitter building is about half a km away from the SW building. In this building there are the 2x10 kW BEL HMB 163 MW transmitters operating on 783 kHz with Vividh Bharati programs which were commissioned on 14 October 1994. Next to it is a 20 kW Harris DX20 MW transmitter operating on 1017 kHz with B channel programs which was commissioned on 17 October 2001. Interestingly these two transmitters use the same self radiating mast antenna of 91.5 Meters using the Dplexing System. There are standby generators in this building.

A Mobile BEL 10 kW transmitter was in use here temporarily when Harris transmitter was under installation. It has now moved to AIR Cuddapah now where a new 100 kW transmitter is under installation.

Till 2001 an NEC MB124C was in use here on 1395 kHz by B Channel and this was moved to the A channel building complex to be used as stand by for the main transmitter there.

About quarter of a km away is the third building in which there are the 2x100 kW BEL HMB 140 MW transmitters operating on 720 kHz which was commissioned on 14 May 1987. There is also a 10 kW NEC MB124C transmitter which is used as standby. As the transmitter site is near the coast they use directional antenna to beam towards the mainland. For this, the main self radiating mast tower is 148 Meters high while the reflector tower is of 122 Meters. There is standby generator for the 10 kW NEC transmitter. Programs on 5 channels from the studios are received by Studio to Transmitter Link on 1440 MHz and some programs are also received by Satellite.

There was an old 20 kW BBC SM42 A3 transmitter here which was commissioned on 11 Jan 1956 and dismantled in the mid 1990s. At first it used to operate on 940 kHz but shortly it was changed to the present channel of 720 kHz.

In the entire site I could see over 15 towers. Several cows were grazing under the antennas, may be to bring down the grass. They also use Motorola walkie talkies in the site. The Security people and others were seen using transistor radios and wired speakers and listening to their station keenly which was giving the results of the Indian General Elections during the time of my visit.

Avadi is just one site used by AIR Chennai. Till mid 1990s they used to have a small site at Guindy in the City. I had the pleasure of visiting it in early 1990s. At that time the following transmitters were there.

- | | | | |
|-----------------|----------|--------|----------------|
| 1. AWA BTH 2 | 783 kHz | 2.5 kW | Vividh Bharati |
| 2. BEL HMB 103 | 1395 kHz | 1 kW | B Channel |
| 3. Collins 20 T | MW | 1 kW | Standby Tx. |

These were dismantled in the mid 1990s when higher power transmitters came up in Avadi.

Another is the FM site at Chepauk. Here a 3 kW BEL HVB 123 transmitter was commissioned on 23 July 1977 which operated on 107.1 MHz. It was in fact the very first FM station in India. The antenna was put on the TV tower at this site. This was replaced by 2x5 kW transmitters on same channel. FM II on 105.0 MHz with 5 kW was inaugurated on 15 May 1998. Both these FM transmitters are being replaced by 20 kW transmitters in the future.

AIR Chennai broadcasts in Tamil, Telegu, English, Hindi, Sanskrit etc. Being the station in the state capital, several of its programs are also relayed by all other AIR stations in the State. AIR Chennai also uses the following transponders of INSAT 3 C for networking downlink purposes. 1) S1 Transponder 2557.425 MHz, 2) S2 Transponder 2592.950 MHz. At Swamy Sivanand Salai, there is the AIR South Zone Regional Office also.

Chennai has an interesting history of broadcasting.

The Madras Presidency Radio Club was formed by Mr.C.V.Krishnaswamy Chetty on 16 May 1924 at Holloways Garden, Egmore. On 31 July 1924 a 40 watts MW station with the callsign 2GR was started by them. Later the power was increased to 200 Watts. In 1927 it was closed down due to financial difficulties and given to the Corporation of Madras. On 1 April 1930 it was revived by the Madars Corporation and operated on 770 kHz. In 1926 there was also another station which operated by Crampton Elec. Co. on 1360 kHz with 120 watts. On 16 June 1938 All India Radio Madras was started with a 10 kW SW transmitter operating on 6085, 7260 & 9590 kHz and a 250 watt MW transmitter on 1420 kHz. On 4 January 1949 a 1 kW MW transmitter was started on 1420 kHz along with a 500 watt SW transmitter operating on 4920, 6085 & 7260 kHz. When AIR started the station operated by the Corporation of Madras closed down. On 9 June 1950 B channel started on 1110 kHz with a 1 kW transmitter. The station used callsigns in the VUM series. Vividh Bharati service started on 15 June 1961 on 1550 kHz with a 2.5 kW transmitter. Other transmitters were added from time to time. Other historical information is given else where in this article. Some years back I had visited also a museum in Chennai where old broadcasting equipment are displayed.

Madras has many firsts including the first FM station in India and the first Campus Community Radio station.

The current details of AIR Chennai programs are as follows:

A 720 kHz 2x100 kw (10 kW Standby)
 B 1017 kHz 20 kW
 C 783 kHz 2x10 kW (Vividh Bharati)

FM I 107.1 MHz 2x5 kW (FM Rainbow)
 FM II 105.0 MHz 5 kW (FM Gold)

SW 4920, 7160 kHz 50 kW
 SW 7270 kHz 100 kW (Tests)

Besides AIR, the following private stations are also operating on FM from Chennai now:

- 1) Gyan Vani 104.2 MHz (from 2003)
- 2) Radio Mirchi 98.3 MHz (from 23 May 2003)
- 3) Suryan FM 105.1 MHz 20 kW (from 5 May 2003)
- 4) Anna FM 90.4 MHz 50 Watts (from 1 Feb 2004)
 (Anna University, First Campus Community Radio Station in India)

I have got several verifications from AIR Chennai. Their address is: Superintending Engineer, High Power Transmitters, All India Radio, Avadi, Chennai 600062, Tamilnadu, India - Email: airavadi@vsnl.com

Sometimes replies are received from AIR Directorate General in New Delhi although reports are sent to Chennai.

(Jose Jacob, National Institute of Amateur Radio, Raj Bhavan Road, Hyderabad 500082, India)

The Grimeton Radio Station: a Unique Piece of IT **by Hans Bengtsson**

Grimeton, Sweden - The methods we use to communicate with each other are under constant development, and technology offers ever more sophisticated means of human contact.

By looking back, we can get an idea about where this progress will lead us in the future. In Grimeton, just outside Varberg on the Swedish west coast stands a piece of IT-history of world interest.

Six steel towers, 127 meters high, are visible from a great distance in the level landscape. Despite their impressive size, the towers are not what's important. They are simply supporting the eight antenna wires, almost invisible from the ground. These wires kept up the connection with the USA, when the ultra-longwave transmitter was in use during the 1920's and 1930's. It is now on the UNESCO World Heritage List.

The poles are strategically located, with nothing but the open sea in front of them, all the way to New York. The site was carefully selected when the Swedish government and parliament decided to modernize communications in the early 1920's.

Experience from World War I, in which sabotage of international cable communications had made clear the increasing need for wireless communication, less vulnerable to third party interference. However, wireless communication wasn't completely new when the transmitter in Grimeton was built. The Italian engineer Marconi had developed radio telegraphy in the late 19th century (see adjacent article).



In Karlsborg in the south of Sweden, a transmitter based on earlier "spark" technology was available for Morse code communication with other countries. It wasn't powerful enough for transatlantic communication, however, and its technology had become outdated.

The transmitter installed at Grimeton was state of the art in 1924. A 200 kilowatt AC generator would generate the signal, which, provided with the right kind of auxiliary equipment, was capable of transmitting both speech and music. This was not its purpose however. It was used strictly for telegraphic communication.

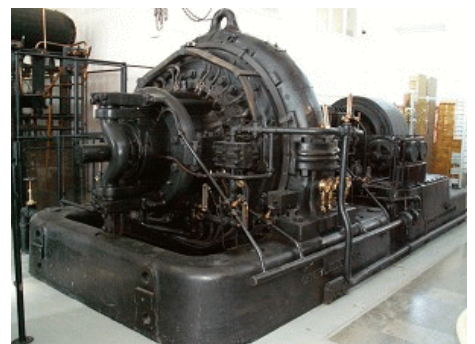
Originally there were two alternators in Grimeton. Now one of them is left and it is the only still functioning Alexandersson alternator in the world.

The transmitter was built in the USA by General Electric. It was designed by Swedish immigrant Ernst Alexandersson, born in 1878. The new innovation was its AC generator which, unlike earlier DC models, generated a carrier wave which was constantly on the air. Apart from Morse code signals, speech as well as music could be modulated with this carrier wave. A first prototype was completed in 1906, and on Christmas Eve that year, the first transmission was made. People out at sea and others in possession of telegraphic receivers, were then surprised by speech and singing. The first audio radio transmission in Swedish was a Christmas gift for them.

The radio transmitter at Grimeton was part of a global radio link system for telegraphy which, by the early 20's, included 18 stations. It uses ultra-long-wave, with a wavelength of just over 18 kilometers for the first years, later to be reduced to just over 17 kilometers. The two Alexandersson generators at Grimeton were online by 1924.

Today, one remains. It is the only surviving, still functional, Alexandersson generator in the world.

The Swedish government granted 4 million Swedish crowns towards the building of the station, and construction began in 1923. The first transmission from Grimeton was carried out during the night of the last of November in 1924. July the following year, the station was officially opened by the Swedish king Gustaf V, by sending a telegram to the president of the United States Calvin Coolidge, in which he praised the transmitter and the "democratic rule, under which, millions of Swedes have found a home."



Harald Lövhede and Bo Johansson are members of the Alexander society, named after the designer. The society is responsible for taking care of the World Heritage in Grimeton. They provide guided tours of the station, which was online more or less around the clock during the 20's and 30's.

Bringing the machine online was an involved procedure, taking some 10 to 15 minutes. Bo Johansson shows some of the many tasks performed at startup, and plays back a recording of the procedure, taking you back in time. You can hear the power getting switched on, cooling pumps starting up and the big, heavy generator wheel slowly accelerating, all amidst a deafening noise. The machine is brought online regularly even nowadays, for maintenance, to grease the ball bearings. It's been done several times this year already, says Harald Lövhede.

At the operator table, a few meters away from the noisy generator, the station manager would sit and tap out the signals, using the Morse key. Bo Johansson says that there's not much difference between the Morse signals this station used to transmit and today's computerized communication. Both use "ones and zeros" or "information- non-information." Grimeton was capable of sending a hundred five-letter words a minute, but in actual use never sent more than fifty.

Nowadays, modern technology has taken over at Grimeton. In 1939, shortwave transmitters took over most of the telegram traffic. In the 60's, the Alexandersson generator was replaced by another ultra-longwave transmitter, still in use today for submarine communications. Only the really long frequencies can reach deep into the ground and water.

This is the reason why it's been possible to preserve the transmitter for coming generations. The Swedish navy has had a deal with the Grimeton station for many years, the proceeds from which has made the preservation of the transmitter possible.

(Epoch Times, May 17, 2005, via Mike Terry, Great Britain)

75th anniversary of Russian radio broadcasts in foreign languages

The seventy-fifth anniversary of radio broadcasts in foreign languages will be marked in Russia this year. Itar-Tass was told at the Russian "Golos Rossii" (Voice of Russia) state broadcasting company, which has been representing Russia on the air all these years, that the most eminent broadcasters in foreign languages, including directors and presidents of foreign radio broadcasting companies, would come to Moscow on October 29 on the occasion of the jubilee and to attend the "Radio Without Borders" international conference.

The conference will be held on the day when the first broadcasts in the German language came from Russia in 1929. This was the world's first case of international radio broadcasting. The BBC appeared on the air three years later and the "Voice of America" - seven years later. Moscow began to broadcast in French in November of the same year, and in English - in December.

"Voice of Russia" officials noted that the world public at large always evinces particular interest in the broadcasts of their station during global crises and it sometimes even plays a special role in the events themselves. This happened, for instance, during the Caribbean crisis in the early sixties, when the negotiations between the USSR and the United States were deadlocked.

The Moscow Radio was the first at that time to inform Washington and the entire world about the Soviet Union's decision to turn back its warships from the Atlantic, which were heading for Cuba.

Today, the "Voice of Russia" daily broadcasts in Russian and in thirty-one foreign languages for a total of 115 hours. The company relays 400 programmes on different aspects of life within the country. The "Voice of Russia" is listened in more than 160 countries. The global audience of the "Voice of Russia" numbers 109 million people.

(Itar-Tass, Moscow, October 15, 2004, via Mike Terry, Great Britain)

SWL / Media Programs in English, German & Spanish

Mar 27th – Oct 29th 2005 – V07 As of August 16th, 2005

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DX & Media news, receiver reviews, radio features, letterbox programmes, tuning tips, propagation, satellites, computers, amateur radio and radio theory.

2nd Figures behind language symbols E, G or Sp, indicate weeks of the month. Times and days in UTC.

STL – Satellite transmission. d = DRM – digital mode

Monday

0008 RNW Radio Enlace, Sp – 9895 11900 15315
STL TelStar V AM

0030 DW Bonn, E, **4th/last** – 1548 3995d 7130 9505 9825

0032 RCI Montreal, E, Maple Leaf Mailbag –
9755 11990 13710 AS/CHN STL Hotbird No&LatAM
STL WRN1 Afristar, Asiastar, WorldSpace AF / ME /
AS / PAC / WRN1 TelStar-12 SoAM

0110 NHK R Japan, JSWC E, after **1st** Sat –
5960 11860 11935 15345 17560 17810 17845

0115 Radio Budapest, E, DX Corner, monthly – 9590

0118 Radio Bulgaria Sofia, Sp – 7500 9400 11500 LatAM

0208 RNW Radio Enlace, Sp – 6165 7325 9590

0230 WRMI Miami (World of Radio), E – 7385

0230 WHRA, E, DXwCumbre – 5850

0245 Radio Budapest, E, DX Corner, monthly – 9795

0300 WBCQ, E, World of Radio – 9330Lsb

0300 WRMI Miami (DX PartyLine), E – 7385

0300 WHRI, E, Radio Weather – 7465

0330 WHRI, E, DXwCumbre – 7315

0330 KWHR Naalehu Hawaii, E, DXwCumbre – 17510

0415 WBCQ, E, World of Radio – 7415

0430 DW Bonn, E, **4th/last** – 7170 9630 11945 15445

0630 DW Bonn, E, **4th/last** –
6140 7170 15275 17860 21675d

0810 Radio Slovakia Internat., G, – 6055 7345

0830 Radio NZL Internat., E, biweekly – 9885

0900 WRMI Miami (World of Radio?), E – 9955

0900 VOA, Talk To America by Kim Elliott, E after **1st** Fri –
9520 15205 17745 EUR NE ME

1100 VOA, Talk To America by Kim Elliott, E after **1st** Fri –
9520 15205 17745 EUR NE ME

1130 Radio NZL Internat., E, biweekly – 9885

1230 WWCN Nashville, E, Ask WWC R **1st 3rd 5th** – 15825

1330 Radio NZL Internat., E, biweekly – 6095

1530 Radio NZL Internat., E, biweekly – 6095

1530 RCI Montreal, E, Media Zone –
11675 15360 17720 SoAS/IND STL Hotbird EUR

1800 RfPI Costa Rica, E, World of Radio – webcast

1830 RCI Montreal, E, Media Zone –
9530 9780 13730 15255 15420 STL Hotbird
STL WRN1 Afristar, Asiastar, WorldSpace AF / ME /
AS / PAC / WRN1 TelStar-12 SoAM

1900 Amateur Radio Mirror, Channel Africa, E –
3215 7082usb

1950 Radio Budapest, G – 3975 6025

2000 WWCN Nashville, E, DX Radio School – 15825

2025 REE Madrid, E – 9570 15290 EUR / AF

2030 RCI Montreal, E, Media Zone – 5850 11765 15325
STL Hotbird STL WRN1 Afristar, Asiastar, WorldSpace
AF / ME / AS / PAC /
WRN1 TelStar-12 SoAM

2115 WWCN Nashville, Sp, Mundo Radial – 15825

2130 RAE Buenos Aires, G – 9690 15345

2130 WHRI, E, Radio Weather – 15785

2130 WBCQ, E, Operator's Choice – 5105

2200 WBCQ, E, Radio Weather – 7415

2200 RfPI Costa Rica, E, World of Radio – webcast

2230 RCI Montreal, E, Media Zone –
9525 9870 12035 CHN/SoEaAS STL Hotbird EUR

2300 WBCQ, E, Allan Weiner WW – 9330Lsb

Tuesday

0200 RfPI Costa Rica, E, World of Radio – webcast

0330 Radio NZL Internat., E, biweekly – 15720

0600 RfPI Costa Rica, E, World of Radio – webcast

0900 WRMI Miami (WoR), E – 9955

0900 Voice of Russia Moscow, G –
603 630 693d 1323 7330 15455 15780d

0930 WWCN Nashville, E, DX Party Line – 9985

1000 RfPI Costa Rica, E, World of Radio – webcast

1305 RCI Montreal, E, Media Zone –
7240d 9660 9870 15170 Asia/CHN STL Hotbird EUR

1400 RfPI Costa Rica, E, World of Radio – webcast

1530 RCI Montreal, E, Maple Leaf Mailbag –
11675 15360 17720 SoAS/IND STL Hotbird EUR

1725 Radio Polonia Warsaw, E – 5965 7285
WRN STL EUR. WRN1 TelStar-12 SoAM

1750 Radio Budapest, G – 3975 6025

1800 Voice of Russia Moscow, G –
603 630 693d 1215 1323 1386 7330 7380 12010

1830 RCI Montreal, E, Maple Leaf Mailbag –
9530 9780 13730 15255 15420 STL Hotbird
STL WRN1 Afristar, Asiastar, WorldSpace AF / ME /
AS / PAC / WRN1 TelStar-12 SoAM

1900 Radio Cairo, G – 9990

1935 Radio Tashkent, G **1st 3rd** – 5025[5060] 11905
 1950 Radio Bulgaria Sofia, G – 5800 7500 EUR
 2030 RCI Montreal, E, Maple Leaf Mailbag –
 5850 11765 15325 STL Hotbird
 STL WRN1 Afristar, Asiarstar, WorldSpace AF / ME /
 AS / PAC / WRN1 TelStar-12 SoAM
 2100 WBCQ, E, Operator's Choice – 5105
 2105 RHC Habana, E – 9505 11760
 2130 RAE Buenos Aires, G – 9690 15345
 2230 RCI Montreal, E, Maple Leaf Mailbag –
 9525 9870 12035 CHN/SoEaAS STL Hotbird EUR
 2300 WBCQ, E, Allan Weiner WW – 9330Lsb
 2315 RAE Buenos Aires, Sp – 6060 15345
 2330 WBCQ, E, World of Radio – 7415
 2335 RHC Habana, E – 9550

Wednesday

0135 RHC Habana, E – 6000 9820
 0335 RHC Habana, E – 6000 9820
 0535 RHC Habana, E – 6000 6060 9550 11760
 0900 WRMI Miami (Wavescan/WoR/DXPL), E – 9955
 0930 WWCN Nashville, E, World of Radio – 9985
 1050 Radio Bulgaria Sofia, G – 11700 15700 EUR
 1305 RCI Montreal, E, Maple Leaf Mailbag –
 7240dFLE 9660 9870 15170 AS/CHN STL HotbirdEUR
 1530 RCI Montreal, E, Mailbag –
 11675 15360 17720 SoAS/IND STL Hotbird EUR
 1745 Radio UKR Internat. Kiev, G, fortnightly – 7490
 1845 RAE Buenos Aires, E, Dxers Special – 9690 15345
 1930 WWCN Nashville, E, Ask WWCN – 15825
 1950 Radio Budapest, G – 3975 6025
 2045 Radio UKR Internat. Kiev, G, fortnightly – 7490
 2100 WBCQ, E, Operator's Choice – 5105
 2200 WBCQ, E, World of Radio – 7415
 2300 WBCQ, E, World of Radio – 17495usb
 2300 WBCQ, E, Allan Weiner WW – 9330Lsb
 2300 WBCQ, E, Off the hook – 7415
 2345 Radio UKR Internat. Kiev, G, fortnightly – 7420

Thursday

0245 RAE Buenos Aires, E, Dxers Special – 11710
 0330 Radio Australia, E, Media Report – 9660 12080 13630
 15240 15415 15515 17750 21725
 0520 Radio Bulgaria Sofia, G – 9500 11500 EUR
 0900 WRMI Miami (Wavescan/WoR/DXPL), E – 9955
 0930 WWCN Nashville, E, DX Radio School – 9985
 1000 Voice of Russia Moscow, G – 603 630 693d 1323 15780d
 1030 Radio Australia, E, Media Report –

9580 9590 11880 15240twN 15415
 1225 Radio Polonia Warsaw, E – 9525 11850 STL
 1530 Radio Australia, E, Media Report –
 5995 6080 7240 9475 9590 9625 11660
 1600 Voice of Russia Moscow, G –
 603 630 693d 1215 1323 1386 7330 9795 9890 12010
 1935 Radio Tashkent, G – 5025[5060] 11905
 2000 WWCN Nashville, E, DX Party Line – 15825
 2030 WWCN Nashville, E, World of Radio – 15825
 2100 WBCQ, E, Radio Weather – 7415
 2100 WBCQ, E, Operator's Choice – 5105
 2300 WBCQ, E, World of Radio, (occasional) – 7415
 2300 WBCQ, E, Allan Weiner WW – 9330Lsb

Friday

0105 Radio Tashkent, E, biweekly – 7190 9715
 0900 WRMI Miami (Wavescan/WoR/DXPL), E – 9955
 0945 WWCN Nashville, E, Ask WWCN – 9985
 1230 BBC R4, World in Your Ear / Feedback, E –
 LW 198, MW, FM, DAB, STL
 1600 VOA, Talk To America by Kim Elliott, E **1st** –
 4930 9850 15410 15580 AF; 6160 7125 9760 AS;
 9825 15195 15445 EUR ME NoAF
 1800 WRN on Internet, E, World of Radio
 1845 RAE Buenos Aires, E, Dxers Special – 9690 15345
 1920 Radio Budapest, E, DX Corner – 3975 6025
 STL WRN WorldSpace Afristar AF / AsiaSat / AsiaStar
 AS/Pac WRN1 TelStar-12 SoAM
 2000 RfPI Costa Rica, E, World of Radio – webcast
 2100 WBCQ, E, Amateur Radio Show – 7415
 2115 WWCN Nashville, Sp, Mundo Radial – 15825
 2120 Radio Budapest, E, DX Corner – 6025 9525
 2130 RAE Buenos Aires, G – 9690 15345
 2138 Radio Bulgaria Sofia, E – 5800 7500 EUR
 2300 Studio-X Italy, E, World of Radio – 1584, FM
 2320 Radio Budapest, E, DX Corner – WRN-Eur
 2328 RNW Radio Enlace, Sp – 9895
 2338 Radio Bulgaria Sofia, E – 9700 11700 NoAM

Saturday

0000 WBCQ, E, Allan Weiner Live – 7415
 0000 RfPI Costa Rica, E, World of Radio – webcast
 0120 Radio Budapest, E, DX Corner – 9590
 0128 RNW Radio Enlace, Sp – 9895 15315
 0230 WHRA, E, Dxing with Cumbre – 5850
 0238 Radio Bulgaria Sofia, E – 9700 11700 NoAM
 0245 RAE Buenos Aires, E, Dxers Special – 11710
 0250 Radio Budapest, E, DX Corner – 9795
 0300 WHRI, E, Radio Weather – 7315
 0328 RNW Radio Enlace, Sp – 6190

- 0330 KWHR Naalehu Hawaii, E, DXwCumbre – 17510
0400 RfPI Costa Rica, E, World of Radio – webcast
0500 HCJB Quito, G – 9780 21455usb EUR
0500 WHRI, E, DXwCumbre – 7315 7465
0500 KWHR Naalehu Hawaii, E, Radio Weather – 17510
0510 NHK R Japan, JSWC E, after **1st** Sat –
5975 6110 7230 15195 21755
0700 KWHR Naalehu Hawaii, E, DXwCumbre – 17510
0730 HCA/HCJB Australia, E, DX Party Line – 11750 PAC
0745 RKI Seoul, G – 15210 AS/EUR
0800 WRN1, E, World of Radio – STL Astra/Hotbird
Euromax EUR/ME/AF, Worldspace
AfriStar AF / AsiaSat / AsiaStar AS/Pac
0800 RfPI Costa Rica, E, World of Radio – webcast
0810 DW Bonn, G, except **1st**
0810 RKI Seoul, E – 9570 9640 AS
0845 WWCN Nashville, E, Ask WWCN – 5070
0930 KWHR Naalehu Hawaii, E, Radio Weather – 9510
1000 Voice of Russia Moscow, G – 603 630 693d 1323 15780d
1010 NHK R Japan, JSWC E, after **1st** Sat –
6120 9695 11730 17585 17720 21755
1010 RKI Seoul, Sp, Antena de la Amistad – 9580 15210
1030 WWCN Nashville, E, World of Radio – 5070
1030 WHRI, E, Radio Weather – 7520
1030 KWHR Naalehu Hawaii, E, Radio Weather – 11565
1100 HCA/HCJB Australia, E, DX Party Line – 15405 SoEaAS
1110 RKI Seoul, Sp, Antena de la Amistad – 11795CAN
1105 REE Madrid, Sp, Amigos de la O.C. –
13720 15585 EUR
1145 Voice of Turkey, G, fortnightly – 13760
1200 RfPI Costa Rica, E, World of Radio – webcast
1210 DW Bonn, G, except **1st**
1210 RKI Seoul, E – 9650CAN NoAM
1227 RRI Bucharest, G – 9515 11775
1230 WHRA, E, Radio Weather – 15310
1230 HCJB Quito, E, DX Party Line – 12005 21455usb NoAM
1245 Voice of Turkey, E, fortnightly – 15225 15535
1300 HCA/HCJB Australia, E, DX Party Line – 15405 SoEaAS
1310 RKI Seoul, E – 9570 9770 AS
1500 HCA/HCJB Australia, E, DX Party Line – 15390 AS
1500 Voice of Russia Moscow, G –
603 630 693d 1215 1323 1386 7330 9795 9890 12010
1504 SR2 Saarebruck, Medienwelt, G –
FM, STL Astra ADR, DAB-S
1505 DeutschlandFunk Cologne, G, Media Magazine
1515 WWCN Nashville, E, Ask WWCN – 15825
1600 RfPI Costa Rica, E, World of Radio – webcast
1610 RKI Seoul, E – 5975 9870 AS
1610 DW Bonn, G, except **1st**
1630 RSCG Belgrade, G, fortnightly – 9620
1651 RKI Seoul, G – 7275 AS
1710 NHK R Japan, JSWC E, after **1st** Sat –
9535 11970 15355
1730 WRMI Miami (World of Radio), E – 7385
1730 WRN, E, World of Radio – WRN-NoAM
1730 HCJB Quito, G – 6015 EUR
1730 Voice of Turkey, G, fortnightly – 13640
1730 WHRI, E, Radio Weather – 15785
1730 RKI Seoul, G – STL WRN2 Astra EuroMax/Hotbird EUR /
WRN2 AfriStar AF
1845 Voice of Turkey, E, fortnightly – 9785
1910 RKI Seoul, E – 5975 7275 AS
1911 RRI Bucharest, G – 7165 9590
1920 Radio Bulgaria Sofia, G – 5800 7500 EUR
1930 WHRI, E, DXwCumbre – 15285
1930 Radio Belarus Minsk, G – 1170 7105 7280 7440
2000 WBCQ, E, Radio Weather – 7415
2010 DW Bonn, G, except **1st**
2030 Radio Belarus Minsk, G – 1170 7105 7280 7440
2035 Radio Tashkent, E, **2nd** – 5025[5060] 11905
2045 Voice of Turkey, E, fortnightly – 7170
2051 RKI Seoul via Skelton, G – 3955 EUR
2105 RHC Habana, E – 9505 11760
2110 RKI Seoul via Skelton, E – 3955 EUR
2118 Radio UKR Internat. Kiev, E – 7490
2125 REE Madrid, E – 9570 9840 EUR / AF
2200 WBCQ, Allan Weiner WW, E – 9330Lsb
2215 Voice of Turkey, E, fortnightly – (9830Aug) 7300
2235 RCI Montreal, E, Media Zone – 1179 EUR
9525 9870 12035 CHN/SoEaAS STL Hotbird EUR
2300 WBCQ, Real Amateur Radio Show, E, – 7415
2330 WHRI, E, Radio Weather – 15120
2337 RHC Habana, E – 9550
2345 WWCN Nashville, E, Ask WWCN, – 3210

Sunday

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- 0010 NHK R Japan, JSWC E, after **1st** Sat – 6145
0010 DW Bonn, G, except **1st**
0018 Radio UKR Internat. Kiev, E – 7440
0025 REE Madrid, E – 15385
0030 WHRI, E, Radio Weather – 7315
0105 REE Madrid, Sp, Amigos de la O.C. – 6020 6055 9535
9620 11680 15160 LatAM
0135 RHC Habana, E – 6000 9820
0145 WWCN Nashville, E, Ask WWCN, bi-weekly – 5070
0200 WWCN Nashville, E, DX Party Line – 5070
0210 RKI Seoul, E – 9560CAN 11810 15575 NoAM / AS
0230 WWCN Nashville, E, World of Radio – 5070
0230 WHRA, E, Dxing with Cumbre – 5850
0300 WBCQ, World of Radio, E, – 9330Lsb
0300 WRMI Miami (DX PartyLine), E – 7385

- 0300 WWCN Nashville, E, Radio Weather – 5070
0310 NHK R Japan, JSWC E, after 1st Sat – 21610
0315 Voice of Turkey, E, fortnightly – 6140 7270
0318 Radio UKR Internat. Kiev, E – 7440
0330 WRMI Miami (World of Radio), E – 7385
0330 WWCN Nashville, E, DX Radio School – 5070
0330 KWHR Naalehu Hawaii, E, Radio Weather – 17510
0335 RHC Habana, E – 6000 9820
0400 WBCQ, E, Tom & Darryl – 7415
0405 WWCN Nashville, E, Cyberline – 5070
0410 DW Bonn, G, except 1st
0500 KWHR Naalehu Hawaii, E, DXwCumbre – 9510
0530 KWHR Naalehu Hawaii, E, Radio Weather – 9510
0535 RHC Habana, E – 6000 6060 9550 11760
0610 NHK R Japan, JSWC E, after 1st Sat – 17870
0628 WWCN Nashville, E, World of Radio – 3210
0638 Radio Bulgaria Sofia, E – 11600 13600 EUR
0751 RKI Seoul, G – 15210 AS/EUR
0800 Amateur Radio Mirror, Channel Africa, E –
7082usb 7205 17565
0800 WRN1, E, Dxing with Cumbre – STL Astra/Hotbird
Euromax EUR/ME/AF, Worldspace
AfriStar AF / AsiaSat / AsiaStar AS/Pac
0830 WRN-AM, E, World of Radio, NoAM
0830 DW Bonn, E, 4^{th/last} –
3995d 5900d 5975d 6140d 7265d 15440d 21675d
0900 hr1 Frankfurt, Netzwerk, G – FM STL
0930 WRMI Miami (World of Radio), E – 9955
0930 WHRI, E, Radio Weather – 7520
1012 Radio NZL Internat., Media Talk, E, – 9885
1015 WWCN Nashville, E, Ask WWCN – 15825
1030 SWR Cont.Ra Baden Baden, Media, G –
576 666 711 828 1017 FM, STL Astra ADR, DAB-S
1110 NHK R Japan, JSWC E, after 1st Sat –
6120 9695 11730
1118 Radio UKR Internat. Kiev, E – 15675
1130 DW Bonn, E, 4^{th/last} –
6140d 7265d 15440d 15545d
1138 Radio Bulgaria Sofia, E – 11700 15700 EUR
1200 WRMI Miami (World of Radio), E – 7385
1205 BR5 Munich, Medienmagazin, G –
6085d, FM, STL Astra ADR, DAB-S
1230 WRMI Miami (DX PartyLine), E – 7385
1230 WHRI, E, Radio Weather – 9840
1230 WHRA, E, Radio Weather – 15310
1330 DW Bonn, E, 4^{th/last} – 6140
1335 Radio Tashkent, E, biweekly – 7285 15295 17775
1340 Radio Slovakia Internat., G, – 6055 7345
1500 KWHR Naalehu Hawaii, E, DXwCumbre – 11555
1500 Voice of Russia Moscow, G –
603 630 693d 1215 1323 1386 7330 9795 9890 12010
1505 RCI Montreal, E, Mailbag –
11675 15360 17720 SoAS/IND STL Hotbird EUR
1510 NHK R Japan, JSWC E, after 1st Sat –
6190 7200 9505 11730
1515 Radio Budapest, E, DX Corner, monthly – 6025 9655
1530 WHRI, E, DXwCumbre – 15285
1603 WDR5 Cologne, Medienmagazin, G –
FM, STL Astra ADR, DAB-S
1605 REE Madrid, Sp, Amigos de la O.C. – 21610 ME/IND
1610 Radio Slovakia Internat., G, – 5920 7345
1630 DW Bonn, E, 4^{th/last} –
1548 6140d 6170 7175d 7225 13790d 17595
1648 Radio Bulgaria Sofia, Sp – 15700 17500 EUR
1700 WWCN Nashville, E, Ask WWCN – 15825
1730 WRMI Miami (WRN, World of Radio), E – 7385
1805 RCI Montreal, E, Maple Leaf Mailbag –
9530 9780 13730 15255 15420 STL Hotbird
STL WRN1 Afristar, Asiastar, WorldSpace AF / ME /
AS / PAC / WRN1 TelStar-12 SoAM
1810 Radio Slovakia Internat., G, – 5920 6055
1830 SWR Cont.Ra Baden Baden, Media, G –
576 666 711 828 1017 FM, STL Astra ADR, DAB-S
1900 BBC R4, World in Your Ear / Feedback, E –
LW 198, MW, FM, DAB, STL
1900 Studio-X Italy, E, World of Radio – 1584, FM
1915 Radio Budapest, E, DX Corner, monthly – 3975 6025
1930 Radio Belarus Minsk, G – 1170 7105 7280 7440
1935 BR5 Munich, Medienmagazin, G –
6085d, FM, STL Astra ADR, DAB-S
2000 WHRI, Radio Weather, E, – 15285
2000 WBCQ, Radio Weather, E, – 9330Lsb
2000 RSCG Belgrade, G, fortnightly – 6100
2005 RCI Montreal, E, Maple Leaf Mailbag –
5850 11765 15325 STL Hotbird
STL WRN1 Afristar, Asiastar, WorldSpace AF / ME /
AS / PAC / WRN1 TelStar-12 SoAM
2030 DW Bonn, E, 4^{th/last} – 7130 11895 13780 15205
2030 Radio Belarus Minsk, G – 1170 7105 7280 7440
2030 WHRI, E, DXwCumbre – 15785
2115 Radio Budapest, E, DX Corner, monthly – 6025 9525
2118 Radio Bulgaria Sofia, Sp – 11800 13800 EUR
2130 WBCQ, E, Radio Weather – 7415
2135 Radio Tashkent, E, biweekly – 5025[5060] 11905
2200 WBCQ, E, Allan Weiner WW, E, – 9330Lsb
2230 DW Bonn, E, 4^{th/last} – 7115 9720
2230 RCI Montreal, E, Maple Leaf Mailbag – 1179 EUR
9525 9870 12035 CHN/SoEaAS STL Hotbird EUR
2230 WHRA, Radio Weather, E, – 11765
2318 Radio Bulgaria Sofia, Sp – 7500 11500 LatAM
2345 WRMI, (Mundo Radial), Sp – 9955

WORLDWIDE DX CLUB

WORLDWIDE DX CLUB, founded in 1966, does not claim to be the biggest or best DX club in the world. Nevertheless, it offers its members and subscribers a rather good monthly bulletin (mainly in English) entitled "DX MAGAZINE" with up-to-date information on most aspects of DX'ing at the reasonable price of € 15.60, £12.00, US\$18.70 or 16 International Reply Coupons (IRC's) per year (air mail: Europe: € 17.40, £13.00, US\$20.90 or 18 IRC's; Overseas: € 20.40, £15.50, US\$24.50 or 21 IRC's).

Since WORLDWIDE DX CLUB is the "International Department" of ARBEITSGEMEINSCHAFT DX (AGDX), the head organization of the German language DX clubs, it is able to offer its members and subscribers another DX publication in German entitled "Radio-Kurier - weltweit hören". This is jointly issued by the German DX organizations ADDX and AGDX and is available for € 40.00, £28.50, US\$48.00 or 40 IRC's per year (including air mail to countries outside Europe) or, if ordered together with "DX MAGAZINE", for € 51.00, £36.00, US\$61.20 or 51 IRC's per year (air mail: Europe: € 52.80, £37.00, US\$63.40 or 53 IRC's; Overseas: € 55.80, £39.00, US\$66.60 or 56 IRC's per year).

Both publications, "DX MAGAZINE" as well as "Radio Kurier - weltweit hören", are also available as PDF files. If you decide to receive this version, a worldwide subscription rate of € 9.00, £7.00, US\$10.80 or 9 IRC's is applicable for "DX MAGAZINE". "Radio Kurier - weltweit hören" is available for € 20.00, £15.50, US\$24.00 or 20 IRC's, both publications together for € 26.00, £20.00, US\$31.20 or 26 IRC's.

WORLDWIDE DX CLUB has currently the following special publications available:

1. "REPORTING GUIDE", published by the EUROPEAN DX COUNCIL (€ 1.00 or 1 IRC; please enclose 1 additional IRC for air mail).
2. "EDXC RADIO COUNTRIES LIST 1998", published by the EUROPEAN DX COUNCIL (€ 3.00 or 3 IRC's; please enclose 1 additional IRC for air mail).
3. "WORLD RADIO TV HANDBOOK 2005", published by WRTH Publications Limited in December 2004 (€ 28.00 or US\$33.60; extra for air mail: € 10.20 or US\$12.20).
4. "DAS OHR ZUR WELT" (Eine Einführung in den Rundfunk-Fernempfang, herausgegeben von der ARBEITSGEMEINSCHAFT DX e. V.) (€ 1.00 or 1 IRC; please enclose 1 additional IRC for air mail).
5. "EMPFÄNGER-FIBEL 1995/96" (Ratgeber für den Empfänger-Kauf, herausgegeben von der ARBEITSGEMEINSCHAFT DX e. V.) (€ 2.00 or 2 IRC's; please enclose 1 additional IRC for air mail).

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For further information on WORLDWIDE DX CLUB please write to: WORLDWIDE DX CLUB, Postfach 12 14, D-61282 Bad Homburg, GERMANY (e-mail: <info@wwdxc.de>), or visit us in the Internet at <<http://www.wwdxc.de>>.

"HF-Messungen für den Funkamateurler, Teil 2" ist ein neues Buch von Hans Nussbaum.

Dieses Buch beschreibt Messverfahren mit preiswerten selbst gebauten Messgeräten und nützlichem Zubehör. Zusammen mit einem Oszilloskop oder Analyzer bilden sie die Voraussetzungen für leicht erzielbare und aussagekräftige Messergebnisse. Der Schwerpunkt liegt auf der Verwendung von Rauschgeneratoren, wobei erstaunlich viele Messungen und Versuche möglich sind. Aber auch Zweitton-Untersuchungen, Brücken-Messungen oder Wobbel-Versuche zeigen: Präzise Messungen benötigen nicht unbedingt einen großen Messgerätepark, vielmehr kommt es darauf an, vorhandene Messgeräte und zum Teil unkonventionelle Messmethoden sinnvoll einzusetzen. Genau dies vermittelt das Buch.

Aus dem Inhalt: Was ist Rauschen? • Begriffe für Rauschzahlmessungen • Messadapter oder Übergangsstecker • Anschlusskabel und Messhilfsmittel • Bau eines Stufenabschwächers • Bau von Fix-Dämpfungsgliedern • Selbstbau von Tiefpässen • Eigenbau einer Kunstantenne • Messverstärker - einfach und nützlich • Einfache SWR-Messbrücke • Messgleichrichter, Verdoppler, Verstärker • Ein Stationsmonitor • Powersplitter und Combiner • Eigenbau eines Rauschgenerators • Rauschgenerator-Anwendungen • Ein Leistungsrauschgenerator • Versuche mit dem Generator • Impulsgenerator für diverse Tests • HF-Messungen mit PC-Unterstützung • Einsatz eines HF-Messgenerators • Wobbeln in der Praxis.

(112 Seiten, Format 16,5 x 23 cm, 162 Abbildungen, Best.-Nr. 411 0115, ISBN: 3-88180-815-9, Broschur, Preis € 12,80)



Ein weiterer neuer Titel ist **"Das große Handbuch der Satelliten-Frequenztabellen"** von Thomas Riegler. Noch vor wenigen Jahrzehnten war es undenkbar, TV- und Radio-Programme aus der ganzen Welt an einem einzigen Ort in guter Qualität zu empfangen. Heute ist das oft schon mit kleinen Satellitenantennen möglich. Seit sich die Digitaltechnik beim Satellitenempfang durchgesetzt hat, stieg die Zahl der über Satellit ausgestrahlten Programme stark an. Heute ist es schwer, sich überhaupt einen Überblick zu verschaffen, welche und wie viele Programme auf den unterschiedlichsten Satellitenpositionen empfangbar sind.



Dieses Buch und die beiliegende CD-ROM listen in rund 11.000 Eintragungen alle vom Autor empfangenen TV- und Radio-Programme sowie Datendienste auf. Annähernd 50 Satellitenpositionen werden betrachtet. Zu jedem Sender sind alle Übertragungsparameter, die für den Empfang benötigt werden, aufgelistet. Wertvolle Zusatzinformationen wie PID-Daten sowie Hinweise zur Verfügbarkeit von EPG und Teletext stehen exklusiv auf der CD-ROM bereit. Diese beinhaltet auch die Ausleuchtzonen für die empfangenen Programme. Das Angebot wird auf der CD-ROM durch mehrere Spezialtabellen abgerundet. Darunter sind ausführliche Tabellen zu Datendiensten, allen frei empfangbaren deutschen TV-Kanälen und analogen Satellitenprogrammen, Astra Digital Radio und vieles mehr.

Das Buch informiert darüber hinaus über alle wichtigen Details und Fakten zum erfolgreichen Satellitenempfang. Es gibt Hintergrundinformationen zum Aktualisieren von Senderlisten und Nutzen von Ausleuchtzonen.

Aus dem Inhalt: Frequenztabellen: Alle TV- und Radioprogramme von 80° Ost bis 45° West • Die Datendienste • Alle frei empfangbaren deutschen TV-Programme • Spezial-Frequenztabellen mit allen internationalen Musik-, Nachrichten und Sportkanälen • Alle in Europa verfügbaren analogen Programme • ADR-Radio-Frequenzliste • Folgende Beiträge runden das Werk ab: Die Frequenztafel im Detail: Erklärung aller Parameter • Senderlisten-Update leicht gemacht • Footprint und Öffnungswinkel • Out-of-Footprint-Empfang.

(224 Seiten, Format 16,5 x 23 cm, 17 Abbildungen, Best.-Nr. 411 0116, ISBN: 3-88180-816-7, Broschur, Preis: € 17,80)

Der dritte neue Titel **"Rundfunk-Sendeanlagen - Funktürme, Masten und Antennen"** von Harald Lutz. Die unzähligen Sendetürme und -masten zeugen von der Allgegenwart der drahtlosen Nachrichtentechnik und des modernen Rundfunks. Ob Funkturm, Antennen tragender oder selbststrahlender Mast - oft handelt es sich um bemerkenswerte Konstruktionen, da bei ihrer Realisierung oft ungewöhnliche Probleme zu meistern waren. In der Regel ist jede dieser Sendeeinrichtung ein Unikat. Besondere Ansprüche, die sich aus der Nutzung als Sendeantenne ergeben, wie eine Isolation gegenüber dem Erdboden, forderten die Konstrukteure zu erstaunlichen Leistungen heraus. Kein Wunder, dass das höchste Bauwerk der Erde zurzeit ein weit über 600 m hoher Sendemast ist!

Dieses Buch stellt wichtige und interessante Sendetürme und -masten in Europa näher vor und erzählt die Geschichten, die sich um Bau und Betrieb dieser optisch auffallenden und oft die Landschaft prägenden Bauwerke und Konstruktionen ranken. Der Leser erfährt nicht nur viel Interessantes und Lehrreiches, sondern wird auch bestens unterhalten.

Inhalt: Bauweisen von Sendetürmen • Die Technik der Sendeantennen • Geschichte und Technik einiger Sendeanlagen im In- und Ausland • Der Berliner Funkturm • Der lange Weg zum Berliner Fernsehturm • Der Müggelturm • Der Stuttgarter Fernsehturm und seine Brüder • Der Stuttgarter Fernmeldeturm • Mühlacker - ein traditionsreicher Senderstandort • Die Geschichte des Senders Ismaning • Die turbulente Geschichte des Senders Langenberg • Der Langwellensender Donebach • Allouis - der zentrale Langwellen-Rundfunksender in Frankreich • Der Langwellensender Zehlendorf • Europe 1 - Deutschlands ältester kommerzieller Radiosender • Die Langwellensender der BBC • Aholming - die zweite Langwelle für den Deutschlandfunk • Roumoules - Hauptsendeanlage von Radio Monte Carlo • Der höchste Sendemast aller Zeiten • Die Sendeanlagen von RTL in Luxemburg • Der Rundfunksender Kalundborg • Atlantic 252 - Irlands Langwelle • Radio Wolga und die Langwellenfrequenz 261 kHz.

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