



Monitoring System

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The monthly newsletter for Region 1

November 2014

The 27 members of the IARUMS Region 1 Monitoring Team:



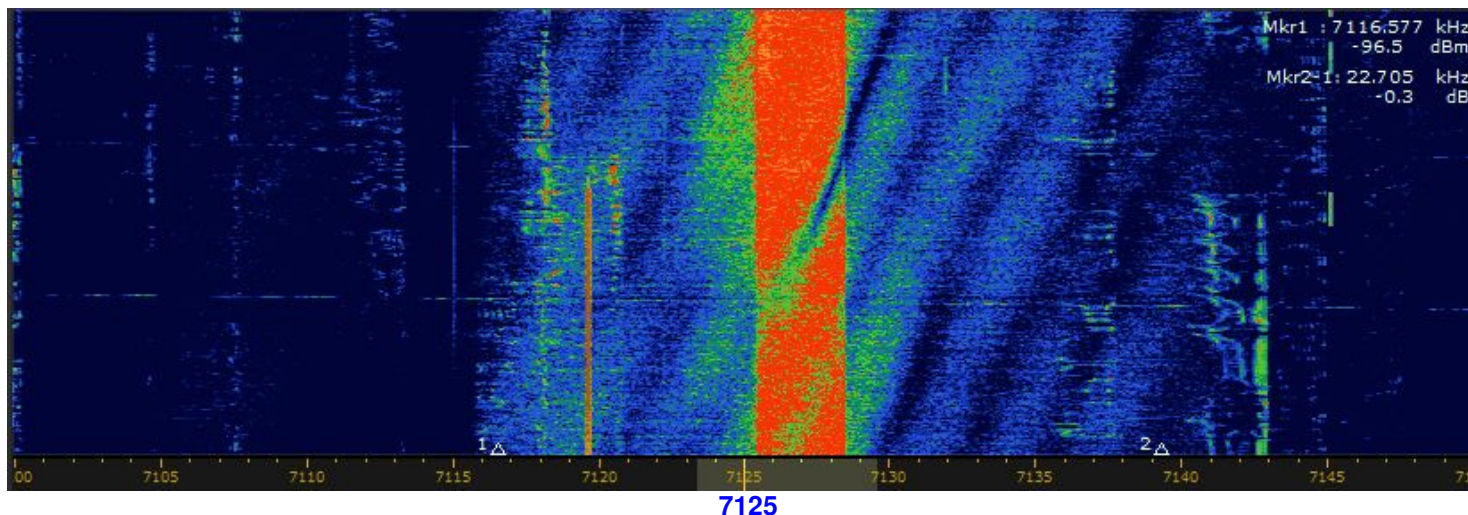
Acknowledgements

ARI: DH7SA – Salvatore ++ ARSK: 5Z4NU - Ted ++ ASTRA: DL1BDF – Mustapha ++ DARC: DK2OM – Wolf ++ ERASD: SU1SA – Sayed ++ IARC: 4Z1AB – Amos ++ IRTS: EI9GSB - Lisa ++ KARS: 9K2RR – Faisal ++ MARL: 9H1M – Dominic ++ MRASZ: HA7PL - Laci ++ NARS: 5N9AYM – Yusuf ++ NRRL: LA4EU – Hans Arne ++ OEVSV: OE3GSA – Gerd ++ PZK: SP9BRP – Jan ++ RAL: OD5RI – Riri ++ REF: F5MIU – Francis ++ REP: CT4AN – Jose ROARS: A41MA - Younis ++ RSGB: M0VRR - Vaughan ++ SARL: ZS4GJA - Gideon ++ SRAL: OH2BLU - Pekka ++ SSA – Ullmar ++ UBA: ON4PN - Patrick URE: EB1TR - Fabian ++ USKA: HB9CET - Peter ++ VERON: PA2GRU - Dick ++ ZRS: S56ZDB – Darko ++ G3VZV – Graham (satellite) ++ TG9ADV – Jorge (Co-ordinator Region 2) ++ VK3MV – Peter (Co-ordinator Region 3) ++ DF8FE – (Webmaster assis.) ++ DL8AAM (ALE) ++ DJ7KG (BUOYS) ++ DF5SX (BC) ++ DARC (server support) ++ OD5TE (Hani) ++ VE6SH – Tim (IARU President) ++ 9K2RR – Faisal (EC-IARU-R1) ++ PTTs: BAKOM (Swiss), BNetzA Konstanz (Germany) ++ OFCOM (UK) ++ Dutch AT ++ SK6AW – DX-Cluster ++ YO9RIJ – Petrica

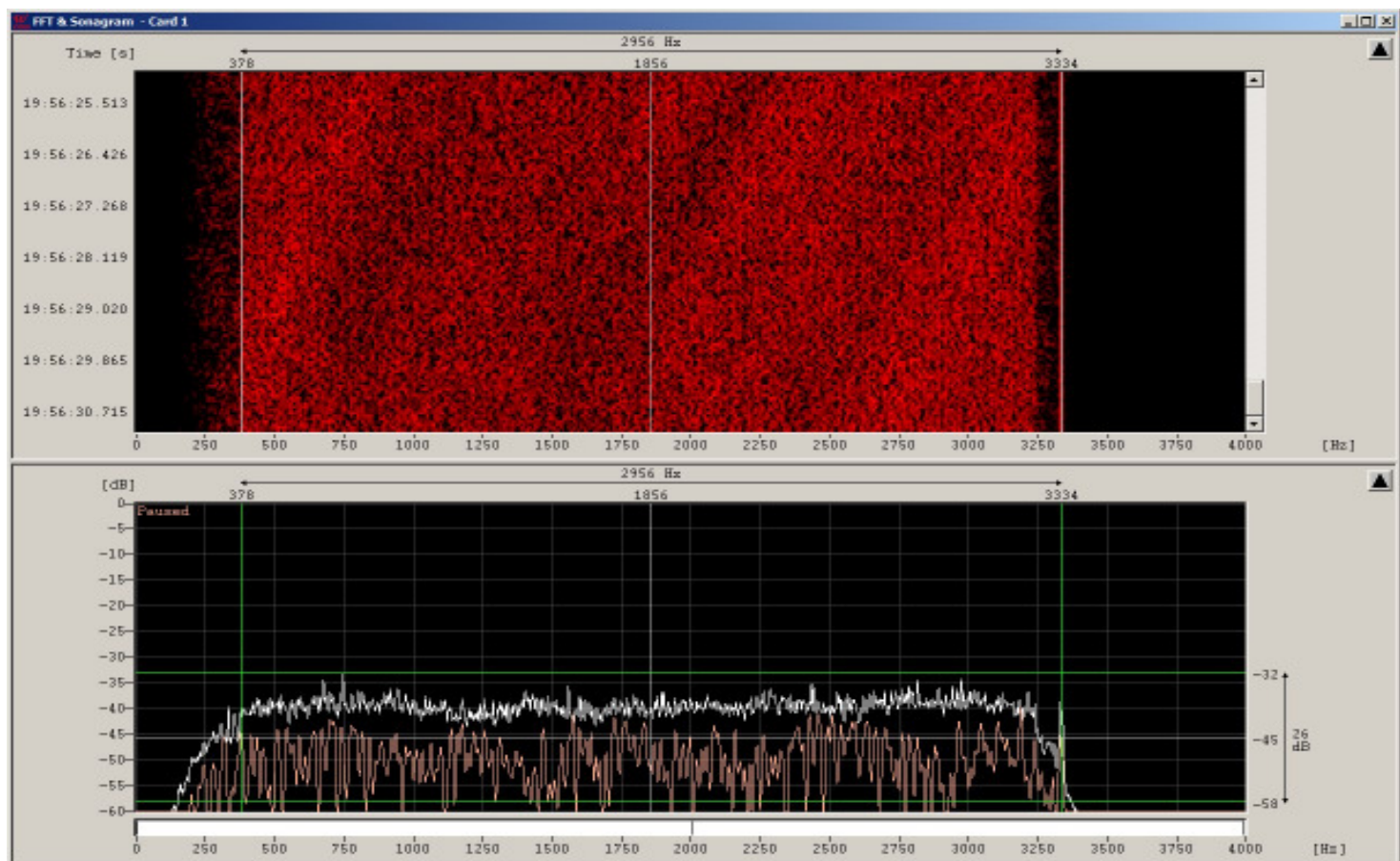
Part 1: News and Infos

1. Russian OFDM112 on 7 MHz

Russian OFDM112 on 7125.0 RF QRG with 22.2 Bd and 2960 Hz shift. With splatters about 23 kHz wide.
Location: Moscow --- Screenshot: DK2OM on Nov. 28th at 1930 utc



W-Code V 8.6 analysis showing sonagram and FFT – pilotone at 3334 Hz AF



2. 7130 – BC from Iran

A BC transmitter was audible on 7130 kHz for few days. Propaganda against Bahrain. Location. Yazd, Iran.

3. 21446 – Spurious from 21510 – Voice of Iran

These spurious emissions were daily audible at about 0900 utc. The German PTT filed a complaint.

4. 7200 – Voice of Iran

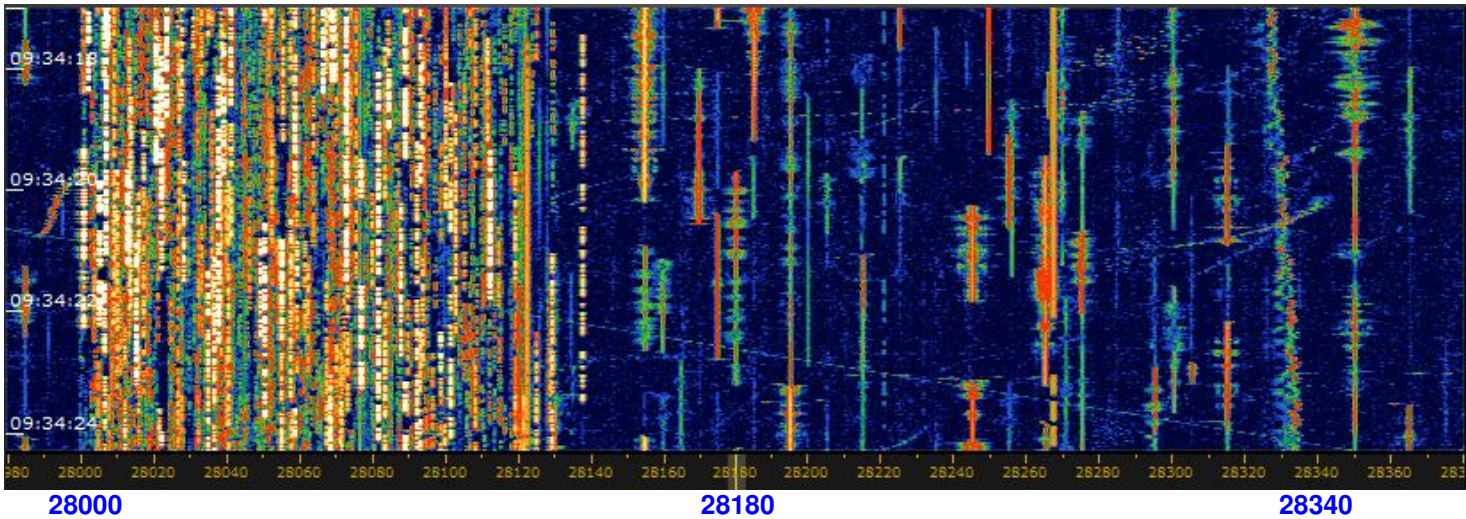
.I found the Voice of Iran on 7200 kHz (+/- 4.5 kHz) at about 1550 utc daily. The German PTT filed a complaint.

5. Less Russian MIL traffic and OTH radars

We observed less Russian digital military traffic on 14 and 7 MHz.

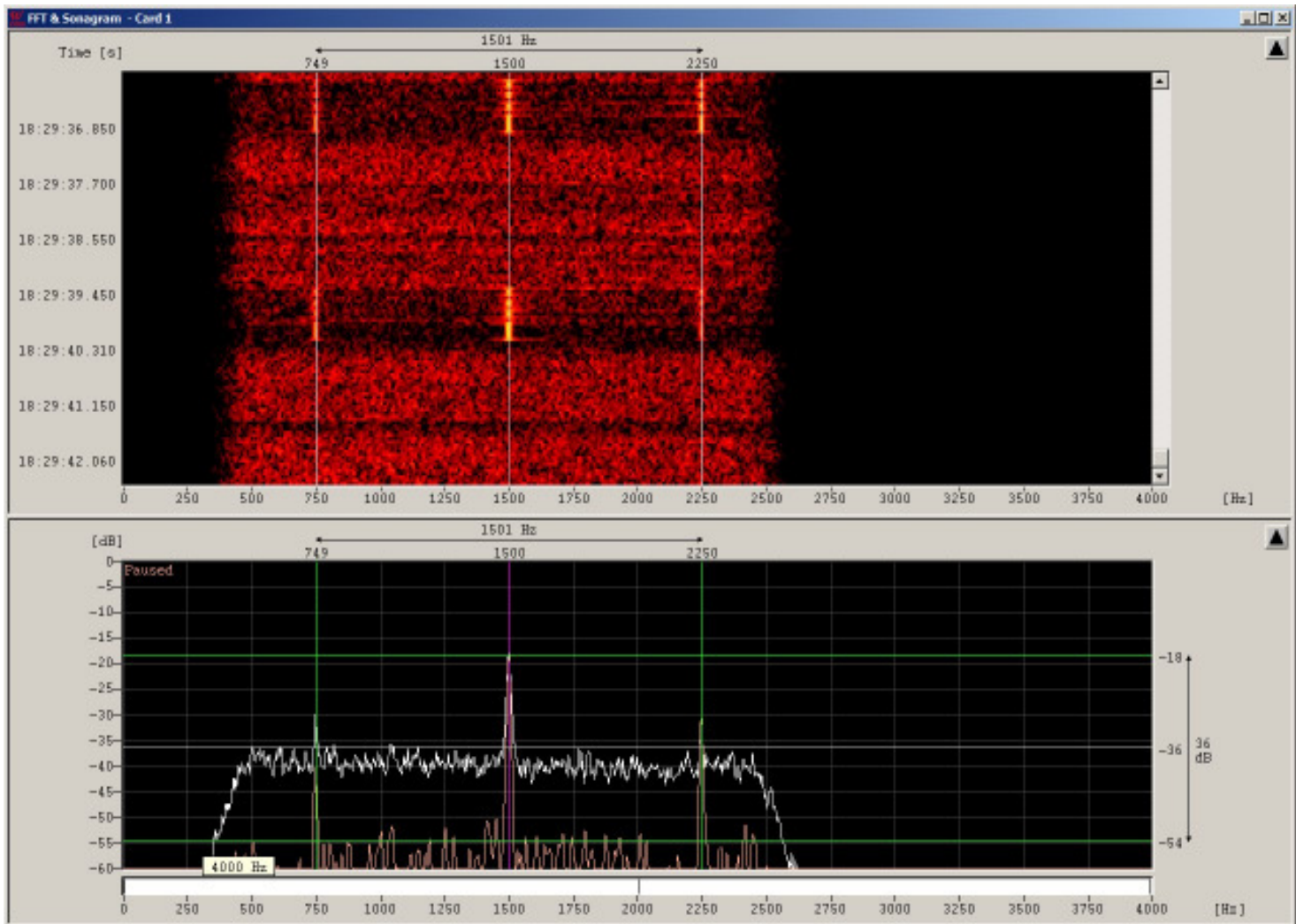
6. Much taxi traffic on FM from Russia, Ukraine and Kazakhstan

Most of the taxis were transmitting from Russia. The screenshot below shows the situation during the CW-WW-Contest on Nov. 29th. The CW-part of the band is crowded of contest traffic, and above 28140 kHz many taxis (no contest...) Screenshot: DK2OM



7. Beacon “V” on 7091.5 kHz

The beacon “V” was transmitting on 7091.5 from Almaty, Kazakhstan. The screenshot shows “V” on CW with spurious products +/- 750 Hz. Screenshot: DK2OM with W-Code V 8.6 on Nov. 15th



- 11. Homepage IARU Region 1 <http://www.iaru-r1.org/>
- Homepage IARUMS Region 1 <http://www.iarums-r1.org>
- Homepage IARUMS Region 2 <http://www.iaru-r2.org/>
- Homepage IARUMS Region 3 <http://www.iaru-r3.org/ms/>
- Intruderlogger Region 1 <http://peditio.net/intruder/bluechat.cgi> - The service will continue! TNX OH2BLU!
- ITU-Monitoring Reports: <http://www.itu.int/ITU-R/index.asp?category=terrestrial&rlink=terrestrial-monitoring&lang=en>

Part 2: Detailed reports of the national Co-ordinators

DD = day *** MM = month *** dly = daily *** vt = various times *** vd = various days *** BD = Baud *** SH = shift *** SP = spacing *** Mode = mode of transmission *** A3E = AM *** A1A = CW *** J3E-U = USB *** J3E-L = LSB *** FSK (F1B) = frequency shift keying *** PSK = phase shift keying *** OFDM = orthogonal frequency division multiplex
ALE (MIL-188-141A) = automatic link establishment *** MUX = multiplex *** Ui (unid) = unidentified *** Illicit = illegal
UiILL = unidentified illegal *** BC = broadcast *** MIL = military *** PTR = printer *** NGO = non governmental organization *** ITU = ITU country abbreviation *** PRC = People's Republic of China *** PLA = People's Liberation Army *** MFA = Ministry of Foreign Affairs *** MOI = Ministry of Interior *** MOPO = Ministry of Public Order *** IARUMS = IARU Monitoring System *** UTC = Universal Time Coordinated *** pps = pulses per second (earlier radar systems) *** sps = sweeps/sec (radar systems) *** FMCW = frequency modulated continuous wave (OTH and coastal Radars)
5BL = cyrillic 5 lettergroups

ARSK MONITORING OVERVIEW FOR NOVEMBER 2014

Radio Hargeisha on 7120 kHz continued as usual, but Uganda Radio on 7195 kHz was no longer heard. Unidentified intruders using KiSwahili (who may be military) on 7,000 kHz and others unidentified on 7,075 kHz were also active as usual.

E/H.M. Alleyne, 5Z4NU

ARSK National IARUMS Co-ordinator

ARSK – Kenya – 5Z4NU (Ted)

DARC 1 – Germany – DG0JBJ (Mario) – OTH radar intrusions

DG0JBJ (Mario) observed 44 OTH radars on 20 m, 56 OTH radars on 15 m and 213 OTH radars on 10 m in November 2014. A Chinese OTH radar disturbed 160 kHz of our 7 MHz-band on several evenings.

DARC 2 – Germany - DK2OM (Wolf)

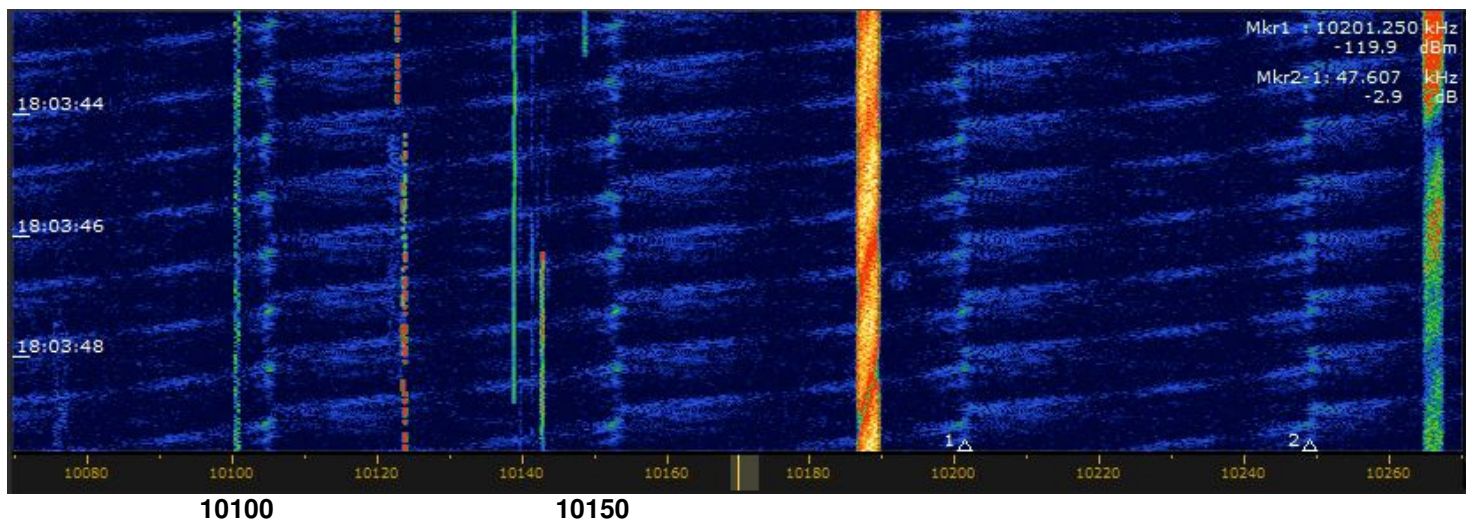
FSK transmissions -> center frequency between mark and space

PSK transmissions -> center frequency - ALE (MIL188-141A) -> USB frequency

exclusive bands -> black – shared bands -> blue - voice traffic -> green - BC -> red

SH = shift --- SP = spread (radar) – SPS = sweeps/sec (radar)

Severe and strong disturbances by LED-lamps (no CE-marks) from a neighbour house every evening and morning since Oct. 2014. Range 6 MHz – 21 MHz - BC reception on 9 MHz is not possible. screenshot: DK2OM – showing the 10 MHz Amateurband on Nov. 7th during the evening hours.



soundfile: <http://www.iarums-r1.org/iarums/sound/led-qrm.wav>

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	1812,0	1840	11	11	RUS		USB LSB			14 tones – hyperbolic radio navigation system – BRAS-3/RS-10 – Kaliningrad – daily, all day
DK2OM	1852,0	1713	01	11	I	IPP	USB			Palermo Radio, weather reports
DK2OM	1855,0	1713	01	11	I	IQP	USB			San Benedetto Radio, weather reports
DK2OM	1876,0	1957	14	11	I	IQN	USB			Lampedusa Radio, weather reports
DK2OM	1888,0	1714	01	11	I	IPD	USB			Civitavecchia Radio, weather reports
DK2OM	1925,0	1715	01	11	I	IPL	USB			Livorno Radio, weather reports – daily, vt
DK2OM	3500,0	vt	dly	11	TUR		FSK8	120	1750	ALE, “201” - Turkish Red Crescent – legal!
DK2OM	3500,0	1728	08	11	E		USB			Spanish fishery
DK2OM	3500,0	2130	10	11	TUN		USB			male persons in Arabic voice
DK2OM	3502,0	2230	13	11	RUS		F1B	75	250	Rostov na Donu
DK2OM	3503,5	vt	dly	11	G	no ITU	FSK8	125	1750	ALE – “XSS” “XPU” “XJR” – British MIL Tascomm – vt, daily - legal!
DK2OM	3510,8	1710	12	11	D		PSK4A	2400	2400	
DK2OM	3512,0	1834	16	11	RUS		F1B	75	200	Kaliningrad
DK2OM	3519,5	1854	09	11	RUS		F1B	50	200	St. Peterburg
DK2OM	3524,0	2150	18	11	RUS		F1B	75	250	Moscow
DK2OM	3525,0	1755	12	11	HOL		USB			Dutch fishery
DK2OM	3527,0	2018	12	11	RUS		F1B	50	200	Severomorsk
DK2OM	3530,0	vt	dly	11			FSK8	125	1750	ALE, “11141”
DK2OM	3532,0	2250	06	11	F		PSK4	75	5800	Link11-CLEW on both sidebands (5800 Hz wide) – area of Brest – legal!
DK2OM	3535,0	1703	18	11	HOL		USB			Dutch fishery
DK2OM	3540,0	1930	23	11	E		USB			Spanish fishery
DK2OM	3550,0	vt	vd	11	ALG		FSK8	125	1750	ALE, “TU50” “TU52” “FN50”
DK2OM	3550,0	2003	24	11			PSK2A	120	2600	AT3004D -
DK2OM	3553,8	2100	03	11	TUR		PSK8	2400	2400	Stanag4285 – TUR MIL - Ankara – daily, all day - legal operation
DK2OM	3556,0	1935	26	11	RUS		F1B	50	500	Severomorsk
DK2OM	3567,0	vt	dly	11	CHN ?		FSK8	125	1750	ALE, “103” “106”
DK2OM	3567,0	2103	08	11	RUS		PSK2	120	2600	AT3004D – submode idle – Caucasian area
DK2OM	3568,0	2040	11	11	RUS		F1B	50	200	Kaliningrad
DK2OM	3574,5	2030	13	11	RUS		PSK2A	120	2600	AT3004D - Sevastopol
DK2OM	3576,4	ady	dly	11	I	IZ3DVW	A1A			uncoordinated beacon
DK2OM	3585,0	ady	dly	11	TWN	HLL	F1C			120 rpm, IOC 576, WX-fax - daily - legal!
DK2OM	3586,0	1930	10	11	G		PSK2A	40	40	area of London – every evening
DK2OM	3586,0	1953	03	11	RUS		F1B	50	250	Cheboksary
DK2OM	3586,5	1750	22	11	F		OFDM	44.44	1800	OFDM27 – area of Bordeaux
DK2OM	3587,0	vt	vd	11	E	no ITU	FSK8	125	1750	ALE, “TVV” “TXX” - Spanish Guardia Civil
DK2OM	3587,0	2315	20	11	RUS		PSK2A	120	2600	AT3004D – close to UKR border
DK2OM	3590,0	vt	dly	11	PAK	no ITU	FSK8	125	1750	ALE, “KW” “KHAIBAR” – Pakistan navy
DK2OM	3590,0	2040	27	11	E		USB			Spanish fishery
DK2OM	3595,0	vt	dly	11	D		FSK8	125	1750	ALE – German customs
DK2OM	3595,0	1818	06	11	RUS		USB			woman in Russian voice – often spelling figures - St. Peterburg - daily
DK2OM	3596,0	vt	dly	11	D, S, HRV		FSK8	125	1750	ALE, “DK3CW” “SA6CBK” “9A0PZ” – just for info!
DK2OM	3614,0	1957	03	11	RUS		F1B	100	250	Kaliningrad
DK2OM	3617,0	vt	dly	11	HRV	9A5EX	FSK8	125	1750	ALE, “9A5EX” – HAM-ALE - just for info

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	3622,5	ady	dly	11	J	JMH	FIC			Tokyo Meteo – 120 rpm – IOC576 – daily, legal!!!
DK2OM	3642,0	vt	dly	11	CHN		A1A			endless slip – DKG6 de 3A7D Chinese military – daily, all day
DK2OM	3660,0	2000	24	11	RUS		PSK2A	120	2600	AT3004D - Voronezh
DK2OM	3662,0	2318	20	11	RUS		PSK2A	120	2600	AT3004D – close to UKR border
DK2OM	3712,0	1959	03	11	F		PSK4	75	5800	Link11-CLEW on both sidebands (5800 Hz wide) - Toulon
DK2OM	3720,0	vt	dly	11	S		FSK8	125	1750	ALE, “YU” “YT” “YV” “DZ” – Swedish MIL
DK2OM	3751,5	vt	dly	11	POL	no ITU	FSK8	125	1750	ALE, “IZ3” “MI3”
DK2OM	3756,0	ady	dly	11	UKR		A3E			UKR – pip – 14 tones – hyperbolic navigation system – BRAS-2/RS-10 – 3756.022 kHz
DK2OM	3756,0	2030	09	11	UKR		A3E			UKR – pip – 14 tones – hyperbolic navigation system – BRAS-2/RS-10
DK2OM	3761,5	vt	vd	11	POL		FSK8	125	1750	ALE, “NI9” “PL7” “AB2” – Polish MIL
DK2OM	3782,0	ady	dly	11	POR	CTP	F1B	75	850	POR Navy headquarter Lisbon
DK2OM	3791,0	vt	vd	11	D	DK0ESD	FSK8	125	1750	ALE, “DK0ESD” – just for info!
DK2OM	6999,0	1833	09	11	G		USB			UK fishery – very rude and obscene – splattering up into HAM-band
DK2OM	7000,0	2024	12	11	?	no ITU	FSK8	125	1750	ALE, “210” “20989” “2205” “203”
DK2OM	7000,0	2008	11	11	RUS	D	A1A			spurious from Cluster beacon – Sevastopol RUS Navy – “RCV”
DK2OM	7000,0	1720	28	11	E		USB			Spanish fishery
DK2OM	7000,0	2033	11	11	RUS		PSK2A	120	2600	AT3004D – Kaliningrad – submode idle
DK2OM	7001,5	1825	09	11	ALG		PSK4A	62.5	1750	Clover 2000 – 8 x 62.5 Bd – South Algeria – connecting mailbox
DK2OM	7001,7	2030	27	11	ISR		PSK4 PSK8	75 2400	2400 2400	hybrid modem – ISR Navy – PSK4 parallel and PSK8 serial
DK2OM	7010,0	1515	05	11	MLE		LSB			male persons – Kuala Lumpur
DK2OM	7012,0	1455	12	11	UKR		PSK2A	120	2600	AT3004D – area of Donetsk
DK2OM	7012,8	1815	03	11	IND		PSK8	2400	2400	MIL-188-110A – idle - Kashmir
DK2OM	7013,0	0615	19	11	RUS		PSK2A	120	2600	AT3004D - Penza
DK2OM	7015,5	1520	05	11	?		PSK4A	62.5	1750	Clover 2000 – 90 deg. from DL
DK2OM	7018,0	1944	08	11	RUS	REA4	F1B	100	1000	mostly idling – Russian airforce Moscow – ident at full hour + 40 min.
DK2OM	7026,8	1816	03	11	IND		PSK8	2400	2400	MIL-188-110A – idle - Kashmir
DK2OM	7027,0	2000	28	11	CHN		FMCW		160k	Chinese OTH radar – 7027 - 7187 kHz – 10 sps
DK2OM	7029,5	1500	06	11	RUS		PSK2A	120	2600	AT3004D – Belgorod – close to UKR NE-border
DK2OM	7031,0	1302	18	11	RUS		PSK2	120	2600	AT3004D – modem idle - Kaliningrad
DK2OM	7031,0	2000	20	11	RUS		NON			carrier + spurious – vy unclean - Volgograd
DK2OM	7032,0	1435	13	11	RUS		PSK2	120	2600	AT3004D – modem idle - Kaliningrad
DK2OM	7038,7	ady	dly	11	RUS	D	A1A			Cluster beacon – Sevastopol RUS Navy – “RCV”
DK2OM	7038,8	ady	dly	11	RUS	P	A1A			Cluster beacon – 7038.780 kHz - Kaliningrad RUS Navy – “RMP”
DK2OM	7038,9	ady	dly	11	RUS	S	A1A			Cluster beacon – Severomorsk

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										RUS Navy – „RIT“
DK2OM	7039,0	ady	dly	11	RUS	C	A1A			Cluster beacon - Moscow RUS Navy - “RIW”
DK2OM	7039,2	ady	dly	11	RUS	F	A1A			Cluster beacon - Vladivostok RUS Navy - “RJS”
DK2OM	7039,3	---	---	11	RUS	K	A1A			Cluster beacon - Petropavlovsk Kamchatskiy - RUS Navy - Pacific fleet - “RCC”
DK2OM	7039,4	1712	25	11	RUS	M	A1A			Cluster beacon – Magadan RUS Navy – „RTS“
DK2OM	7040,0	vt	dly	11	F	F6BAZ	FSK8	125	1750	ALE, “F6BAZ” – just for info
DK2OM	7040,0	ady	dly	11	I		A1A			IZ3DVW – uncoordinated and unwanted beacon
DK2OM	7040,5	vt	dly	11	HRV		FSK8	125	1750	ALE, “9A5EX” “9A0ALE” – just for info
DK2OM	7047,0	0723	28	11			PSK2B	120	2600	AT3004D -
DK2OM	7047,37	vt	vd	11	D		FSK8	125	1750	ALE, “DL0NOT” – just for info!
DK2OM	7049,5	vt	dly	11	HRV G F	9A0ALE M1DFO F6BAZ	FSK8	1250	1750	Amateur ALE, just for info!
DK2OM	7050,0	vt	vd	11	UKR RUS		LSB			music and chats mentioning Ukraine - daily
DK2OM	7053,0	2140	05	11	RUS		PSK2A	120	2600	AT3004D – close to UKR border
DK2OM	7055,5	vt	vd	11	MEa	no ITU	FSK8	125	1750	ALE, “111” “132” “133” - Kaukasus
DK2OM	7063,5	0156	21	11	RUS		F1B	75	200	ship – White Sea
DK2OM	7070,0	vt	dly	11	GEO	no ITU	FSK8	125	1750	ALE, “MV” “244” “686” “334” “204” “571” – daily active
DK2OM	7077,4	2009	11	11	RUS	D	A1A			spurious from Cluster beacon – Sevastopol RUS Navy – “RCV”
DK2OM	7088,8	---	---	11	S	SL0FRO	A1A			7088.830 - cw-trainee, Sweden – kHz – SL0FRO - just for info!
DK2OM	7089,0	1654	13	11	UKR		PSK2	120	2600	AT3004D – submode idle – UKR border – NE of Kyiv
DK2OM	7089,8	---	---	11	TUR		PSK8	2400	2400	Link11 - SLEW – aircraft – area of Izmir
DK2OM	7091,5	1942	15	11	KAZ	V	A1A			beacon “V” continuous – Almaty – Kazakhstan
DK2OM	7092,0	vt	vd	11			FSK8	125	1750	ALE, “3014”
DK2OM	7099,5	vt	dly	11	HRV	9A0ZG	FSK8	125	1750	ALE, “9A0ZG” “9A5EX1P” “9A0OS” – daily - just for info!
DK2OM	7102,0	1717	01	11	HRV SUI D	9A0ALE	FSK8	125	1750	ALE, “9A0ALE” “9A2KS” “HB9MHB” “9A0ZG” “DK0ESD” – just for info!
DK2OM	7102,5	1637	04	11	RUS		PSK2	120	2600	AT3004D – submode idle - Sevastopol
DK2OM	7110,0	vt	dly	11	HRV	9A0ALE	FSK8	125	1750	ALE, “9A0ALE” – just for info
DK2OM	7110,0	vt	dly	11			FSK8	125	1750	ALE, “1101” “1112”
DK2OM	7119,0	1026	09	11	RUS		PSK2A	120	2600	AT3004D – Far East Russia
DK2OM	7120,0	1628	03	11	SOM		A3E		9k	Radio Hargaysa Somalia
DK2OM	7121,0	vt	vd	11	CHN		PSK2A LSB	60	2400	PRC30 burst – preamble 4 x PSK2A – pilotone 450 Hz
DK2OM	7124,8	2105	02	11	IND		PSK8	2400	2400	MIL-188-110A - Kashmir
DK2OM	7126,9	1910	28	11			OFDM	22.2	2960	OFDM112 – with spurious 22 kHz wide
DK2OM	7130,0	1718	16	11	IRN		A3E		9k	7130.025 kHz – propaganda against Bahrain
DK2OM	7137,0	vt	dly	11	TWN	no ITU	FSK8	125	1750	LSB – ALE , “ACCENT” “ABLAZE” “ABOUND” “AGHAST” “ARTIST” “ANYWAY” “ABJECT” “ADROIT” – Taiwanese navy – daily – various times - tnx for

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										info: DL8AAM
DK2OM	7142,0	0620	19	11	RUS		PSK2A	120	2600	AT3004D – SW of Moscow
DK2OM	7145,0	1630	03	11	RUS		F1B	100	200	idle - Jekaterinburg
DK2OM	7152,0	1435	05	11	RUS		PSK2A	120	2600	AT3004D – ship - Sea of Azov
DK2OM	7162,0	0935	19	11	RUS		F1B	75	250	Kaliningrad
DK2OM	7179,0	1500	26	11	RUS		F1B	75	200	Severomorsk
DK2OM	7181,0	2145	20	11	RUS		PSK2A	120	2600	AT3004D - Severomorsk
DK2OM	7182,5	1900	05	11	AZB		USB			male persons in Azerbaijan voice – permanent TXing - Baku
DK2OM	7183,0	vt	dly	11	SUI		FSK8	125	1750	ALE, “HB9MHB” – just for info!
DK2OM	7183,0	0300	21	11	IRN		A3E			spurious from IRIB – 7420 kHz
DK2OM	7185,5	vt	dly	11	D HRV		FSK8	125	1750	ALE, “9A5EX” “DK0ESD” just for info - daily
DK2OM	7186,0	0847	12	11	RUS		PSK2	120	2600	AT3004D – submode idle – Severomorsk
DK2OM	7193,0	0830	15	11			F1B	50	200	
DK2OM	7196,0	1550	25	11	IRN		A3E		9k	Voice of Iran from 7200.0 kHz
DK2OM	7197,0	vt	dly	11	TUR	no ITU	FSK8	125	1750	ALE, “8241” “206102” “8151” “3021” “3761” “8021” “8141” “3061” “3241” “8411” – Turkish Sivil Avunma = Turkish Civil Defense - source: DL8AAM – daily, various times
DK2OM	7198,0	0908	30	11	RUS		PSK2A	120	2600	AT3004D – submode idle and traffic - Moscow
DK2OM	7199,8	1400	30	11	UKR		A3E			East-Ukraine pirate playing Russian music – carrier - 7199.765 kHz – location: Starobelsk
DK2OM	10100,8	ady	dly	11	D		F1B	50	450	Baudot - German Weatherservice – legal!
DK2OM	10110,0	1648	25	11	SNG		FSK8	125	1750	ALE, “CN6” “68” – Singapore Navy - Changi Naval Base
DK2OM	10113,0	vt	dly	11	TUN	no ITU	FSK8	125	1750	ALE, “TUD”
DK2OM	10114,8	0720	05	11	RUS		F1B	100	1000	CIS14 – Moscow - daily
DK2OM	10115,0	vt	vd	11		no ITU	FSK8	125	1750	ALE, “2001” “2002”
DK2OM	10120,0	1909	14	11			FSK8	125	1750	ALE, “9066” “9067” “8001”
DK2OM	10120,5	0930	02	11	MRC		USB			Moroccan fishery
DK2OM	10123,0	vt	dly	11	ALG	no ITU	FSK8	125	1750	ALE, “CM3” “COF” “BSF” “CM2” “ESA”
DK2OM	10125,9	1450	07	11	RUS		F1B	75	500	St. Peterburg
DK2OM	10129,0	vt	dly	11	ALG	no ITU	FSK8	125	1750	ALE, “CM1” “CTF” “772”
DK2OM	10130,0	2130	02	11	MRC		FSK8	125	1750	Thales 3000 – West Sahara – daily - vt
DK2OM	10130,0	2000	dly	11	MLE	no ITU	FSK8	125	1750	ALE, “001” “068” – Kuala Lumpur
DK2OM	10130,0	2100	02	11	MRC		USB			Moroccan fishery
DK2OM	10131,1	2100	12	11	B		LSB			Salvador – Brazil daily
DK2OM	10133,8	2146	05	11	ALG		PSK8	2400	2400	Stanag 4538 – and MIL-188-141B-App. C – East ALG
DK2OM	10136,0	vt	dly	11	ALG	no ITU	FSK8	125	1750	ALE, “CM3” “BLD” “CNC” “TF2”
DK2OM	10144,0	ady	dly	11	D	DK0WCY	A1A			10143.986 kHz - DK0WCY – German aurora beacon – just for info!
DK2OM	10145,5	1538	30	11	HRV S / D F / G	9A5EX	FSK8	125	1750	ALE, “9A5EX” “SM5VRH” “DK0ESD” “F6BAZ” “MIDFO” - just for info - daily
DK2OM	14000,0	1330	23	11	PHL		USB LSB			Philippine pirates – daily 1300 utc and later
DK2OM	14000,0	0800	18	11	RUS		FMCW		10k	OTH radar 10 sps – Nizhny Novgorod
DK2OM	14040,0	1710	16	11	POR		USB			pirates in Portuguese voice
DK2OM	14060,0	vt	vd	11	ISR	no ITU	FSK8	125	1750	ALE, “AAA” - Israel

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	14100,0	1535	05	11	RUS		LSB			RUS voice - Rostov na Donu
DK2OM	14109,0	vt	dly	11	ISR	4X1	FSK8	125	1750	ALE, "4X1" "CT2IXQ" – just for info!
DK2OM	14109,0	vt	dly	11	CAN		FSK8	125	1750	ALE, "VE3GDZ" – just for info!
DK2OM	14140,0	0940	19	11	RUS		FMCW		10k	OTH burst radar 10 sps – Nizhny Novgorod – long lasting
DK2OM	14192,0	1324	02	11	RUS		F1B	50	400	RUS navy Kaliningrad – vd, vt
DK2OM	14205,0	vt	dly	11	CHN	no ITU	FSK8	125	1750	ALE, "505" "822" – 60 deg. from DL - CHN ?
DK2OM	14260,0	vt	dly	11	SRB	YU1BI	FSK8	125	1750	ALE, "YU1BI" – just for info!
DK2OM	14265,0	vt	vd	11	TUR		FSK8	125	1750	ALE, "526"
DK2OM	14268,0	0805	22	11	RUS		F1B	50	200	Vologda
DK2OM	14280,0	1005	12	11	UKR		A3E			female voice with encrypted msgs – figures – "SZRU" = Foreign Intelligence Service of Ukraine at Rivne – every Wednesday
DK2OM	14295,0	vt	dly	11	SRB	YU1BI	FSK8	125	1750	ALE, "YU1BI" – just for info!
DK2OM	14295,1	ady	dly	11	TJK		A3E			3 rd from Radio Tajik on 4765 kHz – daily, all day
DK2OM	14308,0	0952	10	11	RUS		F1B	75	500	Moscow
DK2OM	14322,0	vt	dly	11	CHN	no ITU	FSK8	125	1750	ALE, "402"
DK2OM	14328,0	vt	dly	11	CHN	no ITU	FSK8	125	1750	ALE, "139" "534" "772" – West China
DK2OM	14330,0	vt	dly	11			FSK8	125	1750	ALE, "BV4"
DK2OM	14335,5	1147	26	11	RUS		FMCW		10k	OTH burst radar 10 sps – Nizhny Novgorod
DK2OM	14344,0	0722	27	11	RUS		F1B	75	250	Pechora
DK2OM	14344,7	1412	16	11	CHN		PSK8	2400	2400	modified MIL-188-110A - 600 bps short – 14344.650 kHz – daily, all day
DK2OM	14346,0	vt	dly	11	HRV RUS D		FSK8	125	1750	ALE, "9A0ZG" "RX3ARZ" "DK0ESD" – just for info – various times, daily
DK2OM	14346,0	vt	dly	11	THA	HS0ZEA	A1A			HS0ZEA beacon – 14345.950 kHz - every 5 minutes – just for info!
DK2OM	18100,0	vt	dly	11	MRC	no ITU	FSK8	125	1750	ALE, "CD" "C3" "R3" "G3" "E4" "E5" "Z2" "FORD" – daily, various times
DK2OM	18107,0	vt	vd	11	RUS	RDL	F1B	50	200	Moscow – idle and traffic – Russian navy – various days and times – legal operation
DK2OM	18109,3	1745	05	11	CHN		PSK4A	75	2250	PRC4+4 – Chinese ship – Gulf of Aden
DK2OM	18117,5	vt	vd	11	POR	CT2IXQ	FSK8	125	1750	ALE, "CT2IXQ" – just for info
DK2OM	18140,0	vt	dly	11	SRB	YU1BI	FSK8	125	2600	ALE, "YU1BI" – just for info!
DK2OM	21000,0	0917	06	11	SDN		USB			MFA Sudan – Khartoum with emba Yemen – voice traffic – daily, vt
DK2OM	21000,0	1830	vd	11	B		USB			Brazilian pirates – Rio de Janeiro with North Brazil – every Saturday
DK2OM	21000,0	vt	vd	11	F		FMCW			OTH radar – 6 sps bursts – South France – full hour 02 min. and then every 15 min.
DK2OM	21002,1	0916	06	11	SDN	!0000	F1B	100	170	21002.15 kHz - Pactor 1 encrypted – MFA Sudan – Khartoum with emba Yemen – daily, vt
DK2OM	21096,0	vt	dly	11	INS	YD00XH	FSK8	125	1750	ALE, "YD00XH3" – daily, various times - just for info!
DK2OM	21131,0	vt	vd	11	CHN	no ITU	FSK8	125	1750	ALE, "A92" "L02" – Chinese Navy?
DK2OM	21145,0	vt	dly	11	MRC	no ITU	FSK8	125	1750	ALE, "B301", "C3", "IR4" "T4" "E4" "A2" "CD" "K3"

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										“KB2” “J5” “GS4” “R3” – various times, daily
DK2OM	21145,8	vt	dly	11	I	IZ3DVW	A1A			21145.764 kHz – IZ3DVW uncoordinated and unwanted beacon
DK2OM	21190,0	0824	26	11	RUS		F1B	100	1000	harmonic from 10595 kHz - Moscow
DK2OM	21346,0	ady	dly	11	THA	HS0ZEA	A1A			beacon “HS0ZEA” – just for info!
DK2OM	21347,0	0805	18	11	CHN		FMCW		10k	Chinese OTH burst radar - 66 sps – 3.8 sec bursts
DK2OM	21380,0	0918	18	11	CHN		FMCW		10k	Chinese OTH burst radar - 66 sps – 3.9 sec bursts
DK2OM	21390,0	0805	25	11	E		USB			Spanish fisherman and wife (rogerbeep)
DK2OM	21400,0	0958	20	11	RUS		F1B	50	2000	harmonic from 5350 kHz – area of Moscow - daily
DK2OM	21409,5	0733	05	11	RUS		F1B	100	2000	F1B 100 / 2000 - CIS14 – harmonic from 10704.75 - Jekaterinburg, RUS - daily
DK2OM	21438,0	vd	dly	11	RUS	RCV	A1A			RIP90 de RCV - RUS Navy Sevastopol - daily
DK2OM	21440,0	0900	08	11	IRN	IRIB	A3E			spurious from 21510.0 “Voice of Iran” – also on 21370 kHz
DK2OM	21446,0	ady	dly	11	THA	HS0ZEA	A1A			HS0ZEA beacon – every 5 minutes - just for info!
DK2OM	25000,0	1049	26	11	FIN		A3E			time signal Helsinki – just for info – carrier on 25000 – dots on 25001 and 24999 – daily, all day
DK2OM	28000,0	vt	dly	11	CIS		F3E			28000 – 29700 numerous CIS taxi nets – mostly Russia
DK2OM	28000,0	ady	dly	11	B		A3E			Brazilian CBers – 28000 – 28315 – no change
DK2OM	28000,0	0748	02	11	E		USB			Spanish pirates
DK2OM	28025,0	1138	03	11	POR		F1B	51	300	F1B bursts - 28100.160 kHz - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28030,0	1644	08	11	POR		F1B	51	340	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28045,0	1645	08	11	POR		F1B	51	280	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28045,0	1410	18	11	RUS		F3E			Russian taxi
DK2OM	28050,0	1500	06	11	POR		F1B	51		F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28051,5	1706	08	11	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28065,0	0837	18	11	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28066,8	0834	18	11	GAB		A3E		980	carrier and dots in USB and LSB, bursts every 60 sec – carrier – Gabon – daily and all day
DK2OM	28085,0	vt	vd	11	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28100,0	0921	03	11	E		USB			Spanish CBers
DK2OM	28101,0	ady	dly	11	POR		F1B	51	320	F1B bursts - 28100.780 kHz - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28102,1	1141	03	11	POR		F1B	51	320	F1B bursts - west of Lisbon –

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28125,0	1524	08	11	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28146,0	vt	vd	11	ARG B		FSK8	125	1750	ALE, “LU8EX” “PY2TI” “DL1” – just for info!
DK2OM	28200,0	0947	20	11	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28235,0	1050	03	11	E		A3E			Spanish CBers
DK2OM	28275,1	1628	08	11	AF		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28315,0	vt	dly	11	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28420,0	1135	03	11	F		FMCW		20k	OTH radar – 2.5 sps - South France – sounding similar to CODAR
DK2OM	28435,0	1025	14	11	E		F1B	81.9	140	Datawell-buoy “Waverider” – 28435.040 kHz – Costa del Sol – Malaga
DK2OM	28600,0	0809	14	11	IRN		FMCW		50k	OTH radar Iran – 307 and 870 sps – splattering +/- 400kHz – also audible in USA east-coast, Chile and Australia
DK2OM	28850,0	1005	02	11	IRN		FMCW		50k	OTH radar Iran – 307 and 870 sps – splattering +/- 300kHz
DK2OM	28860,0	0850	16	11	IRN		FMCW		50k	OTH radar Iran – 307 and 870 sps – splattering +/- 300kHz
DK2OM	29250,0	1105	20	11	E		F1B	81.9	140	Datawell-buoy “Waverider” – 29249.905 kHz – Fuerteventura - daily, all day
DK2OM	29350,0	0838	28	11	IRN		FMCW		50k	OTH radar Iran – 307 and 870 sps – splattering +/- 400kHz
DK2OM	29375,0	1432	19	11	I		F1B	81.9	140	Datawell-buoy “Waverider” – 29374.898 kHz – Gallipoli, South Italy - daily, all day
DK2OM	29387,5	---	--	11	IND		F1B	81.9	140	Datawell-buoy “Waverider” – 29387,460 kHz – Indian NW coast, close to Pakistan - daily, all day
DK2OM	29450,0	---	--	11	MRC		F1B	81.9	140	Datawell-buoy “Waverider” – 29449.870 kHz - area of El Aaiun – Morocco - daily, all day
DK2OM	29500,0	---	--	11	G		F1B	81.9	140	Datawell-buoy “Waverider” – area of Gibraltar – daily, all day
DK2OM	29525,0	---	---	11	MRC		F1B	81.9	140	Datawell-buoy “Waverider” – 29524.990 kHz - Agadir - Morocco – daily, all day
DK2OM	29625,0	1645	29	11	USA		F1B	81.9	140	Datawell-buoy “Waverider” – USA north-east coast
DK2OM	29645,0	0940	30	11			F1B		1000	harmonic – weak signal
DK2OM	29685,5	---	--	11	I				2000	serial modem, Italian MIL Brescia – report: SWL
DK2OM	29699,8	---	--	11	I				2000	serial modem, Italian MIL Brescia - report: SWL

IRTS – Ireland – EI9GSB (Lisa)

KARS – Kuwait – 9K2RR (Faisal)

MRASZ – Hungary - HA7PL (Laci)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SH	DETAILS
MRASZ	3507,0	1930	11	11			USB		Ui male
MRASZ	3507,9	1828	19	11			USB		numbers, by russian male
MRASZ	3507,9	1921	19	11			USB		numbers, by russian male
MRASZ	3508,0	1939	11	11			USB		Ui male
MRASZ	3508,0	2121	13	11			LSB		music
MRASZ	3513,0	1906	11	11			A1A		QSO's with "D0A" call, hrd: "pirate" "pirate"
MRASZ	3515,0	2058	11	11			A3E		very instable carrier
MRASZ	3525,0	1900	25	11			USB		Ui male
MRASZ	3535,0	1903	19	11			USB		Ui male
MRASZ	3570,0	2004	26	11			USB		russian female
MRASZ	3570,0	2025	26	11			USB		russian male's "ROTOR 27/GOROD 907"
MRASZ	3595,0	1641	16	11			LSB		russian female
MRASZ	3595,0	1812	25	11			USB		numbers, by russian female
MRASZ	3700,0	1940	22	11			LSB		music and song
MRASZ	7000,0	1626	27	11			USB		Ui male
MRASZ	7000,0	vt	ady	11	UKR	D	A1A		"D" beacon,
MRASZ	7012,0	1812	12	11			PSK2		AT3004D
MRASZ	7016,0	1740	19	11			F1B	250	
MRASZ	7017,6	2001	3	11			A1A		dotter
MRASZ	7018,0	1814	11	11	RUS	REA4	F1B	1000	hrd: 12, 14, 26, 27
MRASZ	7018,0	1651	27	11			OTHR		
MRASZ	7038,7	vt	ady	11	UKR	D	A1A		"D" beacon, sometimes "wrong" letter
MRASZ	7038,9	1806	11	11	RUS	S	A1A		"S" beacon, hrd: 13, 14, 16, 23, 24, 27
MRASZ	7039,0	1809	3	11	RUS	C	A1A		"C" beacon, hrd: 11, 17, 23
MRASZ	7039,9	1813	12	11	RUS	F	A1A		"F" beacon, hrd: 13, 14
MRASZ	7047,0	1605	27	11			PSK2		AT3004D
MRASZ	7050,0	1840	18	11	UKR		LSB		ukr. "revolution" hrd: 18, 19
MRASZ	7055,0	1846	3	11	UKR		LSB		ukr. "revolution" hrd: 16, 19, 22, 24, 26, 27
MRASZ	7063,0	1320	20	11			F1B	200	
MRASZ	7077,4	vt	ady	11	UKR	D	A1A		"D" beacon,
MRASZ	7089,0	1229	14	11			PSK2		AT3004D
MRASZ	7090,5	1810	11	11			N0N		
MRASZ	7090,8	2049	10	11			A1A		slowly V string, hrd: 12, 13, 17
MRASZ	7090,8	1810	11	11		Ű	A1A		"Ű" beacon
MRASZ	7091,5	2049	10	11			A1A		slowly V string, hrd: 12
MRASZ	7091,5	1810	11	11		Ű	A1A		"Ű" beacon
MRASZ	7094,0	1534	14	11			N0N		
MRASZ	7130,0	1624	16	11			A3E		UiBC, hrd: 17, 18, 19, 21, 22
MRASZ	7146,0	1812	11	11			A1A		morse text with Ä, Ü, Ö
MRASZ	7179,0	1744	26	11			F1B	200	hrd: 27
MRASZ	7181,0	1635	21	11	RUS		PSK2		AT3004D
MRASZ	7181,0	1748	22	11	RUS		PSK2		AT3004D
MRASZ	7181,0	0622	23	11	RUS		PSK2		AT3004D
MRASZ	7197,0	0926	28	11			PSK2		AT3004D
MRASZ	7200,0	1529	14	11			A3E		BC with splatter down
MRASZ	7200,0	1625	16	11			A3E		BC with splatter down 3-4 kHz
MRASZ	10123,0	1857	21	11			FSK8		ALE
MRASZ	10130,0	1759	25	11			OTHR		till 10200 kHz
MRASZ	10135,0	1756	20	11			OTHR		10120 - 10160 kHz
MRASZ	14099,6	1233	14	11			A1A		"IW2MXP/B" beacon
MRASZ	14192,0	1234	14	11	RUS		F1B	400	hrd: 16,
MRASZ	14280,0	0835	16	11			OTHR		
MRASZ	14299,0	0953	28	11			USB		russian, non ham

OEVSV – Austria – OE3GSA (Gerd)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
oevsv	7030.0	1640	28	11	unid	unid	J3Eu			males unknown lanqu.
oevsv	10115.0	0655	20	11	unid	unid	A1A			dashes 2/sec
oevsv	10120.0	1914	22	11	unid	unid	OTHR			
oevsv	14000.0	0705	20	11	unid	unid	OTHR			

PZK – Poland – SP9BRP (Jan)**REF 1 – France – F5MIU (Francis)****REF 2 – France – F5JBR (Andre)****REP – Portugal – CT4AN (Jose Francisco)**

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REP	3550	07.03	02	11	F		A3E			INFRINGE IARU-R1 Bandplans - AM mode
REP	3560	23.05	18	11			J3E-U			Fishermen, unid language
REP	3710	20.43	21	11	RUS		J3E-U			Navy operations
REP	3739	18.11	21	11	E		J3E-U			Spanish fishermen
REP	7000	23.07	28	11			J3E-L			Intruders
REP	7002	19.11	02	11			J3E-L			Unid. Language
REP	7005	07.53	09	11	E		J3E-U			Fishermen
REP	7015	21.55	11	11			J3E-L			Unid ops
REP	7025	22.01	15	11			F1B	75	240	Encrypted FSK
REP	7038,6	23.09	11	11	RUS	S	A1A			KALININGRAD, ADY, DLY
REP	7038,7	22.25	04	11	UKR	D	A1A			SEVASTOPOL, ADY, DLY
REP	7039,0	23.34	12	11	RUS	C	A1A			MOSCOW, ADY, DLY
REP	7039,2	23.55	11	11	RUS	F	A1A			VLADIVOSTOK, ADY, DLY
REP	7063	19.14	20	11			F1B	75	200	Unid teletype transmissions
REP	7070	16.00	08	11	I		J3E-L			INFRINGE - MUSIC
REP	7070	16.05	19	11	I		J3E-L			INFRINGE - MUSIC
REP	7070	18.52	05	11	I		J3E-L			INFRINGE - MUSIC jamming QSOs
REP	7099	04.56	15	11			J3E-L			Repetitive musical sounds jamming
REP	7110	20.03	12	11	E		J3E-U			Fishermen with phone patch
REP	7130	17.05	17	11			8k00 A3EGN			Unid Arabic language BC station
REP	7170	21.58	16	11			J3E-U			Arabic lang. fishermen
REP	10110	22.56	24	11			J3E-U			Unid ops
REP	10111	21.38	11	11	MRC		J3E-U			Moroccan fishery. Also Spain fishery
REP	10115	22.39	22	11			J3E-U			Arabic ops
REP	10120	09.39	02	11	MRC		J3E-U			Morocco fishery
REP	10121	19.33	12	11	MRC		J3E-U			Morocco fishery
REP	10130	19.20	07	11	MRC		J3E-U			Moroccan fishermen
REP	10130	21.28	11	11			J3E-U			Unid voice ops w/scrambler
REP	10130	Dly	14	11	ALG		J3E-U			Algerian mil voice and digital comms
REP	10130	19.57	14	11	B		J3E-L			Brazilian fishermen
REP	10130	17.54	21	11			J3E/PSK			Arabic language and STANAG 4285
REP	10131	19.45	28	11	E		J3E-U			Spanish fishery
REP	10131	19.43	14	11			J3E-U			Unid arabic language ops
REP	10131	21.15	15	11			J3E-L			Unid language, two ops
REP	10132	10.52	14	11	F	F6x, F4x	J3E-U			Amateurs ignoring rules: no voice on 30m
REP	10132	10.40	21	11	F	F6x, F4x	J3E-U			Repeat offenders, French amateurs
REP	10140	17.56	21	11			FMCW			OTH radar
REP	14015	23.57	24	11	MRC		J3E-U			Intruders
REP	14175	15.04	23	11	I		J3E-U			Italian Music jamming QSO's
REP	14192	10.57	14	11	RUS		F1B	75	400	Russian military, encrypted
REP	19185	11.11	21	11	RUS		F3E			Russian taxi dispatch
REP	21105	15.33	05	11	E		J3E-U			Fishermen talking about fish

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REP	21140	14.00	11	11			FMCW			OTH radar 20kHz
REP	21350	13.02	05	11			FMCW			OTH radar
REP	21350	13.04	15	11			FMCW			OTH radar 50sps/20kHz
REP	28000	13.38	11	11	B		J3E-U			Brazilian CB'rs
REP	28050	11.26	17	11	E		F1B	50	200	Enagal style GPS buoy
REP	28065	11.55	03	11	RUS		F3E			Taxis
REP	28065	14.08	07	11			A3E			South american taxi dispatch spanish lang.
REP	28085	14.07	24	11			A3E			Taxis
REP	28125	13.10	09	11	B		A3E			Brazilian CB'rs disturbing WSPR MEPT
REP	28125	12.48	27	11	E		F1B	50	200	Enagal style GPS buoy
REP	28145	14.50	21	11	RUS		F3E			Taxis
REP	28150	12.18	03	11	RUS		F3E			Taxis
REP	28150	12.06	10	11	F		A3E			CB's inside Ham Band
REP	28185	12.49	02	11	RUS		F3E			Russian taxi dispatcher
REP	28199	14.11	26	11			J3E-L			Unid Slavic language ops, not ham
REP	28245	18.18	09	11	RUS		F3E			Taxis
REP	28255	15.22	24	11	USA		A3E			US truckers
REP	28320	09.53	12	11			FMCW			OTH radar 50sps/20kHz
REP	28570	10.38	03	11			FMCW			OTH radar
REP	28570	12.58	11	11			FMCW			OTH radar 50sps/20kHz unstable signals
REP	28700	12.05	03	11			F3E			INFRINGE IARU-R1 Bandplans
REP	28860	11.00	17	11	IRN		FMCW			Iranian OTH radar
REP	29035	10.55	17	11	RUS		F3E			Russian taxi dispatch
REP	29070	15.13	23	11			FMCW			OTH radar
REP	29070	12.43	07	11			FMCW			OTH radar 50 sps/20kHz
REP	29135	12.59	25	11			F3E			Unid language
REP	29150	12.30	13	11			F1B	82	160	Datawell buoy, idling
REP	29170	11.56	08	11	RUS		F3E			Russian taxi dispatcher
REP	29185	11.38	07	11	RUS		F3E			Russian taxi dispatcher
REP	29220	13.02	10	11			FMCW			OTH radar
REP	29250	10.25	06	11	RUS		F3E			Unid ops, Asian language
REP	29250	11.54	07	11			F1B	82	120	Datawell GPS buoy
REP	29250	11.17	20	11			F1B			Datawell GPS buoy
REP	29255	10.51	17	11	B		F3E			Brazilian fishermen, engine sounds
REP	29350	11.53	10	11			J3E-L			Unid language male talks
REP	29444	13.19	15	11			J3E-L			South/Central American ops, Spanish lang
REP	29550	10.46	17	11			FMCW			OTH radar 25sps/20kHz
REP	29600	09.54	12	11			F3E/PSK			8 x PSK channels, 8kHz wide FM signal
REP	29630	10.34	20	11			FMCW			OTH radar
REP	29660	12.39	07	11			FMCW			OTH radar 25sps/15kHz
REP	29680	13.31	11	11			FMCW			OTH radar 25sps/20kHz
REP	28x-29xx	dly	dly	11			F3E			Russian taxi dispatchers
REP	28x-29xx	dly	dly	11			A3E			Brazilian CB'rs
REP	28x-29xx	dly	dly	11			FMCW			OTH sea surface radars

RSGB - Great Britain – M0VRR (Vaughan)

SRAL – Finland – OH2BLU (Pekka)

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	REMARKS
SRAL	7000,0	1245-145/	*	11		UiCarr	NON			Days: 1. 3. 11. 14. 15. 26.
SRAL	7008,0	0950	6.	11		UiPTR	F1B		250	
SRAL	7012,0	1245-1300	12. 14.	11	UKR	UiMUX	PSK2	120	2600	
SRAL	7013,0	0900-1350	11. 19.	11	RUS	UiMUX	PSK2	120	2600	
SRAL	7014,0	0700-0800	10.	11		UiMUX	PSK2	120	2600	
SRAL	7016,0	0835-0920	15. 27.	11		UiMUX	PSK2	120	2600	
SRAL	7018,0	1120-	3. -	11	RUS	REA	F1B/		800/	

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	REMARKS
		2030	30.				N0N		1000	
SRAL	7022,0	1035-1350/	28.	11		UiMUX	PSK2	120	2600	
SRAL	7031,0	1250-1900	17. 18.	11		Uidotter	A1A			38 / 50 Hz
SRAL	7032,0	0615-1440	*	11		UiMUX	PSK2	120	2600	Days: 5. 8. 13. 16.
SRAL	7038,7	h24	dly	11	RUS	D	A1A			Sevastopol, Spur +/- 38,7 kHz
SRAL	7038,8			11	RUS	P	A1A			Kaliningrad, not heard
SRAL	7038,9	0600-1500	*	11	RUS	S	A1A			Severomorsk, days 7. 9. 11. 13. 14. 19. 23. 24. 25. 28.
SRAL	7039,0	0515-1415	*	11	RUS	C	A1A			Moscow, days: 1. 13. 14. 26.
SRAL	7047,0	1630-0435	27. 28.	11		UiMUX	PSK2	120	2600	
SRAL	7048,5	1230	26.	11		UiMUX	PSK2	120	2600	
SRAL	7056,0	0810	4.	11		UiCW	A1A			MR 5BL
SRAL	7063,5	0205-2020	20. 21.	11		UiPTR	F1B		200	
SRAL	7076,0	1110-1810/	14.	11		UiPTR	F1B		200	
SRAL	7086,06	0910-1000/	17.	11		Uidotter	A1A			40 Hz
SRAL	7089,0	0400-1700	13. 14.	11		UiMUX	PSK2	120	2600	
SRAL	7102,0	1030-1430	4.	11		UiMUX	PSK2	120	2600	
SRAL	7106,0	1230	2.	11		UiMUX	PSK2	120	2600	
SRAL	7116,0	0830	27.	11		UiPTR	F1B		200	50 Hz dotter
SRAL	7116,7	1110-1400	14.	11		UiCarr	N0N			
SRAL	7120,0	1400-1900	1. – 12.	11	SOM	R. Hargeisa	A3E			
SRAL	7120,0	1200-1338/	26.	11		UiBC	A3E			Turkish
SRAL	7127,0	0615	7.	11		UiPTR	F1B/ N0N			
SRAL	7130,0	1430-1830/	15.- 22.	11	IRN	Lualua TV sound	A3E			
SRAL	7142,0	1450	17.	11		UiMUX	PSK2	120	2600	
SRAL	7142,0	0930-1200	2. 8.	11		UiPTR	F1B		250	
SRAL	7146,0	0910	5.	11		UiCW	A1A			MR Z- codes
SRAL	7150,0	0555-0610	7. 14.	11		186	R3E-u			Synthetic fem.
SRAL	7152,0	0805	11.	11		UiMUX	PSK2	120	2600	
SRAL	7158,0	0705-0755	12.	11		UiPTR	F1B/ N0N		250	
SRAL	7159,0	0835-0930	24. 27.	11		UiPTR	F1B		250	
SRAL	7160,0	0650-1010	18.	11	RUS	RMW32	A1A			MR 5BL
SRAL	7162,0	0900-1000	11. 19.	11		UiPTR	F1B		250	
SRAL	7169,0	0845-0915	5.	11		UiPTR	F1B		225	dotter
SRAL	7179,0	0700-1700	26. 27.	11		UiPTR	F1B		250	
SRAL	7181,0	h24	20. – 25.	11	RUS	UiMUX	PSK2	120	2600	
SRAL	7184,0	1345-1445/	28.	11		UiMUX	PSK2	120	2600	
SRAL	7186,0	0645-1500	12.	11	RUS	UiMUX	PSK2	120	2600	
SRAL	7193,0	0800-1500	3. – 26.	11		UiPTR	F1B/ N0N		200	Often with A1 jammer
SRAL	7196,5	0900-	20.	11		UiPTR	F1B		200	

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	REMARKS
		1000								
SRAL	7198,0	0900-1000	10.30.	11	RUS	UiMUX	PSK2	120	2600	
SRAL	7199,8	0700-1500	dly	11	RUS/UKR	UiPirate	A3E			Russian music
SRAL	7200,0	/1520-1620/	dly	11	IRN	IRIB	A3E			
SRAL	14000,0	0550-1305	*	11		UiCarr	N0N			Days: 10. 17. 19. 22. 27.
SRAL	14026,0	0900	11.	11		UiMUX	PSK2	120	2600	
SRAL	14044,0	1205	28.	11		UiMUX	PSK2	120	2600	2f from 7022 kHz
SRAL	14091,0	0825	14.	11		UiMUX	PSK2	120	2600	
SRAL	14169,0	0840	25.	11		UiPTR	F1B			With A1- jammer
SRAL	14192,0	0645-1500	dly	11	RUS	UiPTR	F1B	200/400		When 400 Hz shift on 14191,9 kHz
SRAL	14242,0	0750-0840/	8. 24.	11		UiMUX	PSK2	120	2600	
SRAL	14268,0	0750-1040	12. 22.	11	RUS	UiPTR	F1B	200/250		
SRAL	14270,0	0700	8.	11		UiMUX	PSK2	120	2600	
SRAL	14278,5	0755	24.	11		UiMUX	PSK2	120	2600	
SRAL	14295,2	0400-1600	dly	11	TJK	R Tojikiston	A3E			3f 4765,07 kHz, Yangiyul TX
SRAL	14302,5	0945-1040	12.	11		UiPTR	F1B	250		
SRAL	14308,0	0830-0940	10.	11		UiPTR	F1B	500		
SRAL	14 MHz	0645-0730	*	11	RUS	29B6	FMCW			50Hz / 15 kHz, days: 19. 20. 30.
SRAL	14 MHz	0645-1500	dly	11	RUS	UiOTHR	FMCW			10Hz / 15 kHz, mostly 30 sec bursts, 19. Long lasting
SRAL	18 MHz	0645-0947/	*	11	CYP / TUR	UiOTHR	FMCW			25/50Hz / 20 kHz, days: 12. 15. 29.
SRAL	18107,0	1400	14.	11	RUS	RDL	F1B/A		200	
SRAL	21 MHz	0630-1500	*	11	CYP / TUR	UiOTHR	FMCW			25/50Hz / 20 kHz, days: 3. 5. 11. 13. 19. 22. 29.
SRAL	21438,0	0830-1400	dly	11	RUS	RCV	A1A			
SRAL	28 MHz	0645-1430	dly	11	CYP / TUR	UiOTHR	FMCW			25/50Hz / 20 kHz
SRAL	28 MHz	0530-1600	dly	11	IRN	UiOTHR	FMCW			307 & 870 Hz / 60 kHz, tested on 12. Third tone: 185 Hz
SRAL	28 MHz	0700-1345	dly	11	RUS	Taxi disp.	F3E			180 reports

USKA – Switzerland – HB9CET (Peter)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
USKA	3613.875	2046	03	11	D		A1A			Jammer, interfering ~2kHz
USKA	3614.0	2046	03	11			F1B	100	250	jammed
USKA	7000.0	2331	01	11		D	A1A			Beacon D, spurious of 7038.7 daily
USKA	7000.0 VFO USB	2309	27	11			PSK4 PSK8	75 2400	~2k7	Burst system, Hybrid modem with 7 unmodulated tones, 450Hz spacing
USKA	7000.0	2314	27	11			J3E-U			Italian language
USKA	7000.0	2319	27	11			N0N			long lasting carrier
USKA	7012.90	1053	03	11			A1A			Jammer, interfering ~2kHz
USKA	7013.0	1028	19	11			J7D	12x120	2k7	PSK-2: CIS12 = AT3004D
USKA	7014.0	1615	11	11			J7D	12x120	2k7	PSK-2: CIS12 = AT3004D
USKA	7017.6	2217	10	11			N0N			long lasting carrier
USKA	7018.0	2341	08	11		REA4	F1A		1000	Letters and figures daily
USKA	7018.0	2343	08	11		REA4	F1B	100	1000	started 8.11.14 daily
USKA	7031.0	1321	18	11			J7D		2k7	CIS12 system, idling
USKA	7032.0	0848	05	11			J7D	12x120	2k7	PSK-2: CIS12 = AT3004D often

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
USKA	7038.7	2333	01	11	UKR	D	A1A			Beacon D Sevastopol daily
USKA	7038.9	2156	03	11	RUS	S	A1A			Beacon S Murmansk daily
USKA	7039.0	2154	03	11	RUS	C	A1A			Beacon C Moscow
USKA	7039.2	2151	03	11	RUS	F	A1A			Beacon F Vladivostok daily
USKA	7039.4	2340	03	11	RUS	M	A1A			Beacon M Magadan daily
USKA	7047.0	1521	27	11			J7D	12x120	2k7	PSK-2: CIS12 = AT3004D
USKA	7050.0	1702	03	11			J3E-L			Music, voice, QRM almost daily
USKA	7077.4	2334	01	11		D	A1A			Beacon D spurious of 7038.7 often
USKA	7089.0	1927	13	11			J7D		2k7	CIS12 system, idling
USKA	7091.500	2246	08	11		V	A1A			Beacon ID "V" (sometimes also at 7090.75 and 7092.25) daily
USKA	7095.3	0814	07	11			F1B	75	250	
USKA	7102.5	1236	04	11			J7D	12x120	2k7	PSK-2: CIS12 = AT3004D version with carrier
USKA	7107.0	2151	28	11			FMCW	10 sps	160k	OTHR continuous mode
USKA	7120.0	1629	02	11	SOM		A3E			Radio Hargaysa often
USKA	7125.0 VFO USB	1826	28	11			OFDM 112	22.24	~2k9	~25.66Hz spacing; with unmodulated Pilottone at 3300Hz
USKA	7130.0	1754	17	11			A3E		~6k	Arabian language and music (1430 - 1830 utc) often
USKA	7137.0	1605	02	11		ABOARD	MFSK8	125	1750	LSB! MIL 188-141A: To: ACCEPT
USKA	7137.0	1606	02	11		ABDUCT	MFSK8	125	1750	LSB! MIL 188-141A: To: ASLANT
USKA	7137.0	1611	02	11		ABLAZE	MFSK8	125	1750	LSB! MIL 188-141A: To: AMOUNT
USKA	7137.0	1611	02	11		AMOUNT	MFSK8	125	1750	LSB! MIL 188-141A: To: ABLAZE
USKA	7137.0	1622	02	11		ACCEPT	MFSK8	125	1750	LSB! MIL 188-141A: To: ABLAZE
USKA	7137.0	2209	11	11		ABJECT	MFSK8	125	1750	LSB! MIL 188-141A
USKA	7137.0	2210	12	11		AIRGUN	MFSK8	125	1750	LSB! MIL 188-141A: To: ABJECT
USKA	7141.0	2213	14	11			J7D		2k7	CIS12 system idling
USKA	7142.0	1716	26	11			J7D	12x120	2k7	PSK-4: CIS12 = AT3104D often
USKA	7158.0	1736	11	11			F1B	50	250	
USKA	7162.0	1029	19	11			F1B	75	250	ID in F1A
USKA	7162.0	1031	19	11			F1A		250	
USKA	7179.0 VFO USB	2224	22	11			J7D	12x120	2k7	PSK-4: CIS12 – AT3104D version with carrier often
USKA	7179.0	1744	26	11			F1B	75	200	
USKA	7181.0	0901	21	11			J7D	12x120	2k7	PSK-2: CIS12 – AT3004D
USKA	7193.0	1054	03	11			F1B	50	200	often
USKA	7198.0	0946	10	11			J7D		~2k7	CIS12 system, idling
USKA	7200.0	1614	11	11			A3E		±~10k	BC, interfering 40m band daily
USKA	14000.0	0902	27	11			N0N			long lasting carrier often
USKA	14000.0 VFO USB	06	1413	11			OFDM 112	~22.25	~2k9	112 tone burst mode with pre-ambule 7 tones; Pilot tone at 3k3 tone spacing ~25.66Hz
USKA	14091.0	14	0803	11			J7D	12x120	2k7	PSK-4: CIS12 = AT3104D
USKA	14191.9	0954	10	11			F1B	50	400	
USKA	14192.0	1535	02	11			F1B	50	200	CIS 50-50 daily
USKA	14342.0	1514	27	11			FMCW	50 sps	~12k	OTHR, interfered BW ~40k
USKA	14344.0	0901	27	11			F1B	75	250	
USKA	14344.65	1517	05	11			PSK-8	2400	2k4	MIL 188-110A, variant burst system, short intro ton daily
USKA	18148.0 VFO USB	1654	29	11			PSK-8	2400	2k6	Stanag 4285 frame format 1200 bps/long (-80dBm)
USKA	21438.0	1229	15	11		RCV	A1A			letters and figures daily
USKA	21442.0	0914	18	11			AM		~8k	spurious; distorted daily
USKA	21448.45	1002	18	11			F1B	600	600	ARQ system
USKA	28600.0	0855	11	11				307 sps 870 sps	app 50k	OTHR Burst system; interfered BW sometimes > 100k often
USKA	28855.0	1438	02	11				307 sps 870 sps	app 50k	OTHR Burst system
USKA	28865.0	1326	18	11				307 sps 870 sps	app 50k	OTHR Burst system often
USKA	28912.0	1311	18	11			FMCW	25 sps	20k	OTHR
USKA	29350.0	0731	29	11				307 sps 870 sps	app 50k	OTHR Burst system; interfered BW sometimes > 100k often

Veron 1 – Netherlands – PA2GRU (Dick)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SHIFT	DETAILS
VERON	3524,0	16,15	18	11		UiPTR	F1B		Ptr
VERON	3586,0	19,00	10	11		UiPTR	F1B		Ptr
VERON	3604,5	16,12	18	11		UiPTR	F1B		Ptr
VERON	7017,0	19,25	24	11	RUS	UiCAR	NON		carrier
VERON	7018,0	14,40	11	11	RUS	REA4	F1A		REA4 11130 5F
VERON	7018,0	13,40	13	11	RUS	REA4	F1A		REA4 13120 99900 5F
VERON	7032,0	19,57	17	11	RUS	UiMUX	PSK2	2600	AT3004D idle Kaliningrad
VERON	7038,7	17,33	8	11	UKR	D	A1A		D-beacon
VERON	7038,9	14,32	11	11	RUS	S	A1A		S-beacon
VERON	7050,0	18,48	5	11		UiBC	LSB		UKR-RUS speech all day
VERON	7101,0	17,25	8	11	CIS	IJ5L	A1A		YUFD de IJ5L K (calls)
VERON	7113,0	19,26	13	11	RUS	UiPTR	F1	500	Ptr/Revs
VERON	7120,0	18,47	5	11	SOM	R.Har	A3E		speech+music
VERON	7130,0	16,30	17	11		UiBC	A3E		speech
VERON	7130,0	16,32	18	11		UiBC	A3E		speech Arabic, also 20/11 16.04 utc
VERON	7167,0	19,50	16	11		UiPTR	F1B	200	Revs
VERON	7179,0	16,23	27	11		UiPTR	F1B	200	Ptr
VERON	7180,0	19,30	24	11	RUS	UiMUX	PSK		12 MPSK
VERON	7192,0	16,28	17	11	RUS	UiMUX	PSK		12 MPSK
VERON	10109,2	15,22	3	11		UiCW	A1A		Strings of Figures
VERON	14060,0	09,00	16	11		OTHR	FMCW		radar
VERON	14126,0	09,30	1	11		UiLL	J3eu		group male non amateur Slavic
VERON	14135,0	16,22	6	11		OTHR	FMCW		radar
VERON	14192,0	09,24	3	11	CIS	UiPTR	F1B		Revs/Ptr (also at 11/11 13/11)
VERON	14192,0	09,56	1	11	RUS	UiPTR	F1B	200	Ptr
VERON	14192,0	13,00	11	11	RUS	UiPTR	F1	400	Ptr
VERON	14220,0	11,37	18	11		OTHR	FMCW		radar
VERON	14280,0	11,24	3	11		OTHR	FMCW		radar
VERON	14320,0	13,33	26	11	SM/ HB9	UiCW	A1A		SM5CID-HB9HHK qso unknown in qrz.com
VERON	21438,0	13,50	7	11	RUS	RCV	A1A		Weather message in Plain Russian
VERON	21438,0	14,17	7	11	RUS	RCV	A1A		RHI99 de RCV QLS K
VERON	21438,0	14,20	7	11	RUS	RCV	A1A		RFH71 de RCV QYT4 QMO K
VERON	21438,0	14,05	11	11	RUS	RCV	A1A		RKZ de RCV QTC 818 Prognoz Pogody
VERON	21438,0	09,22	13	11	RUS	RCV	A1A		de RCV QYT4 QWH 10201 K
VERON	21438,0	09,23	13	11	RUS	RCV	A1A		RIP90 de RCV QTC 267 Nawip 032 22.. K
VERON	21438,0	09,26	13	11	RUS	RCV	A1A		RIP90 de RCV QTC 264 Nawip 033 2243 K
VERON	21438,0	09,31	13	11	RUS	RCV	A1A		RIP90 de RCV QTC 499 Nawip 032 2194 K
VERON	21438,0	09,37	13	11	RUS	RCV	A1A		RBE86 de RCV QTC 673 Nawip 034 2131 K
VERON	21438,0	09,45	13	11	RUS	RCV	A1A		RKZ de RCV QTC 365 47472 5F
VERON	21438,0	13,15	13	11	RUS	RCV	A1A		RKZ de RCV QTC 222 Prognoz Pogody
VERON	21438,0	13,24	13	11	RUS	RCV	A1A		RMUW de RCV QTC 470 AKRWS 5BL
VERON	21438,0	09,45	26	11	RUS	RCV	A1A		RIP90 de RCV QTC 302 Nawip 032 2348 K
VERON	21438,0	09,48	26	11	RUS	RCV	A1A		RIP90 de RCV QTC 297 Nawip 032 2338 K
VERON	28025,0	15,12	5	11	CIS	UiPTR	F1B		Revs/Ptr (short TX)
VERON	28025,0	09,55	13	11	CIS	UiPTR	F1B		Revs/Ptr
VERON	28140,0	10,47	13	11	RUS	Taxi	F3E		taxi traffic
VERON	28155,0	10,00	11	11	RUS	Taxi	F3E		taxi traffic
VERON	28155,0	12,01	26	11	RUS	Taxi	F3E		taxi traffic
VERON	28169,0	13,05	7	11	Griba lter	ZB2TEN /b	A1A		beacon, outside IBP
VERON	28195,0	12,02	26	11	RUS	Taxi	F3E		taxi traffic
VERON	28235,0	10,55	13	11	RUS	Taxi	F3E		taxi traffic
VERON	28245,0	10,42	13	11	RUS	Taxi	F3E		taxi traffic

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SHIFT	DETAILS
VERON	28255,0	10.02	11	11	RUS	Taxi	F3E		taxi traffic
VERON	28265,0	13.00	25	11	RUS	Taxi	F3E		taxi traffic
VERON	28447,0	13.04	7	11		OTHR	FMCW		radar
VERON	28765,0	10.01	11	11	RUS	Taxi	F3E		taxi traffic

The monitoring team of IARU Region 1

Season's greetings!

credits:

Wavecom Elektronik – Buelach – Switzerland

Many thanks for your interest!

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