



International Amateur Radio Union

Region 1



Monitoring System

DK2OM – Wolf Hadel
Co-ordinator of IARUMS Region 1
Editor of the Newsletter

HB9CET – Peter Jost
Vice Co-ordinator of IARUMS Region 1

The monthly newsletter for Region 1

October 2019

The 27 members of the IARUMS Region 1 Monitoring Team:



Acknowledgements

ARAT: 3V8CB – Ahmed ++ ARI: DH7SA – Salvatore ++ ARSK: 5Z4BV - Kamweti ++ DARC: DK2OM – Wolf ++ EARS: A61M – Obaid ++ ERASD: SU1SA – Sayed ++ HRS: 9A5DGZ – Gianluca ++ IARC: 4Z1AB – Amos ++ IRTS: EI3GYB - Michael KARS: 9K2RR – Faisal ++ MARL: 9H1M – Dominic ++ MRASZ: HA7PL - Laci ++ NARS: 5N9AYM – Yusuf ++ NRRL: LA4EU – Hans Arne ++ OEVS: OE3GSA – Gerd ++ PZK: SP5GNI - Miro ++ RAL: OD5RI – Riri ++ REF: F5MIU – Francis ++ REP: CT4AN – Jose ++ ROARS: A41MA - Younis ++ RSGB: G4DYA - Richard ++ SARL: ZS6NS - James ++ SRAL: OH2BLU - Pekka ++ SSA – N.N. ++ UBA: ON5NQ – Frank +++ URE: EA6AMM - Gaspar ++ USKA: HB9CET - Peter ++ VERON: PG1R - Ruud ++ ZRS: S56ZDB – Darko ++ LU1BCE – Carlos (Co-ordinator Region 2) ++ YB3PET – Titon (Co-ordinator Region 3) ++ DF8FE – (Webmaster supp.) ++ DL8AAM (ALE) ++ DJ7KG (BUOYS) ++ DF5SX (BC) ++ DARC (server support) ++ OD5TE (Hani) ++ VE6SH – Tim (IARU President) ++ 9K2RR – Faisal (EC-IARU-R1) ++ PTTs: BAKOM (Swiss) ++ OFCOM (UK) ++ Dutch AT ++ Austrian PTT

Part 1: News and infos

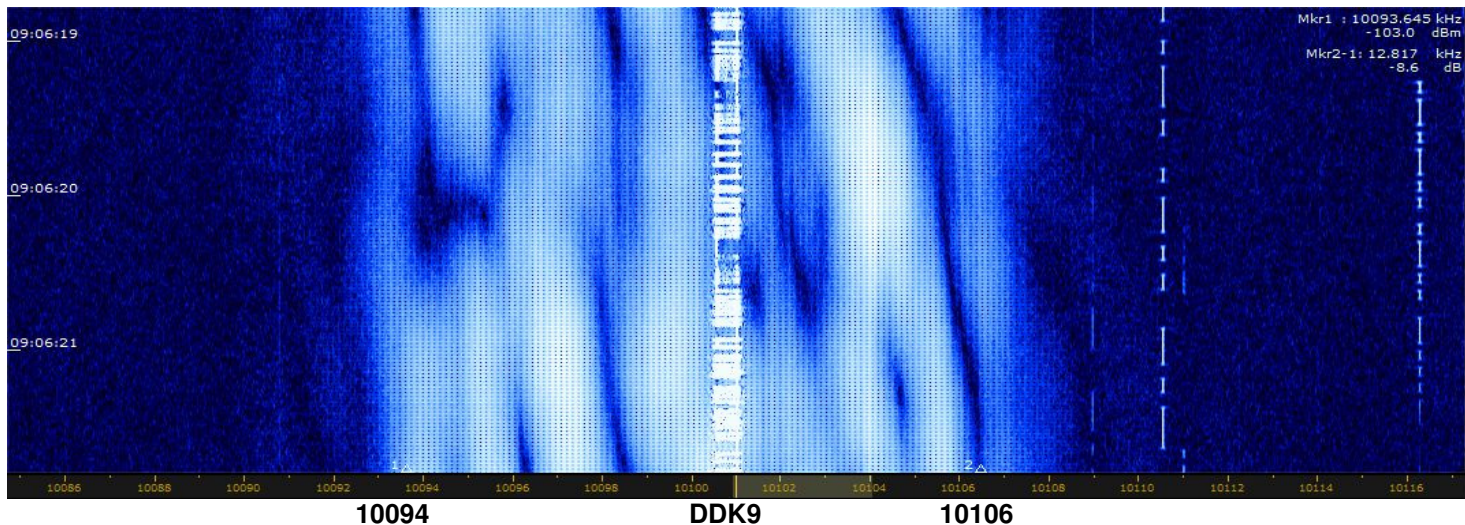
Part 2: Detailed reports of the national co-ordinators

Copyright © IARUMS Region 1 - DK2OM

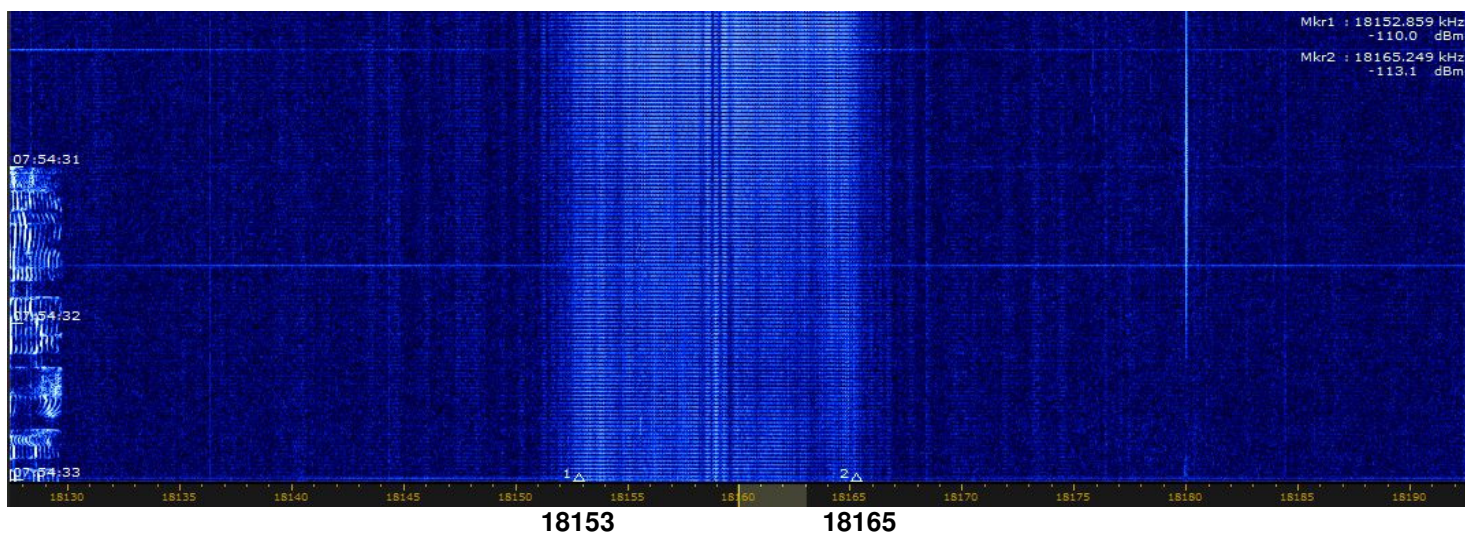
Part 1: News and Infos

1. Russian OTH radar Contayner now everywhere

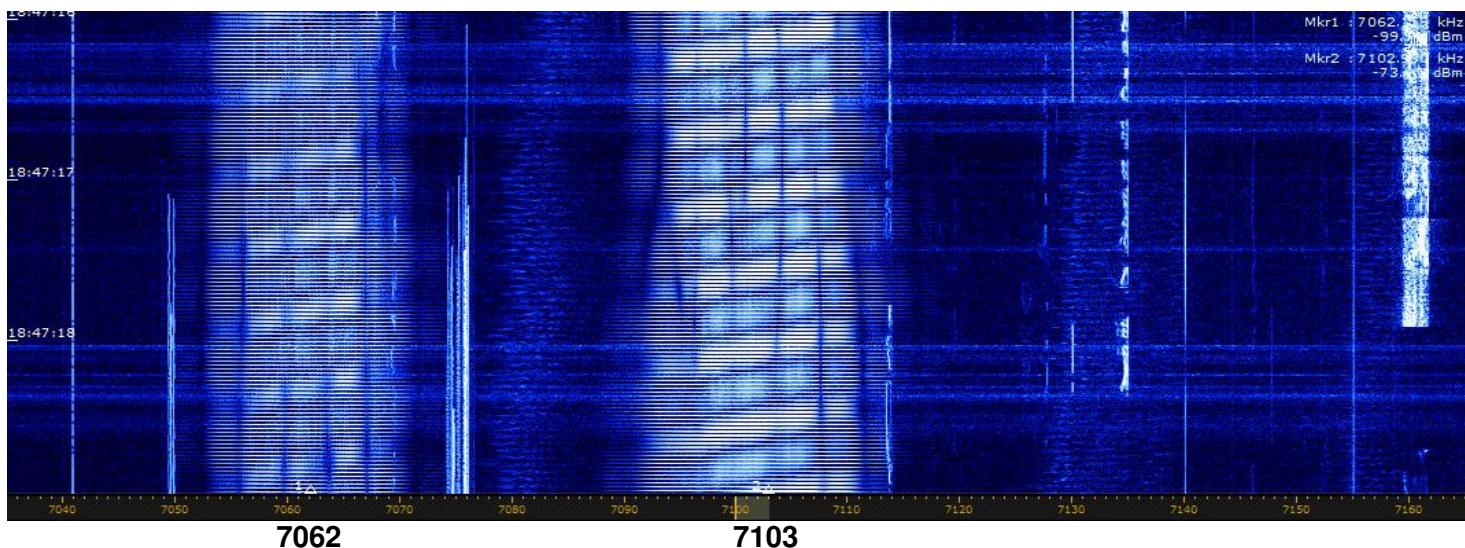
We found the Russian OTH radar Contayner on 7, 10, 14 and 18 MHz with 40 sps, FMOP and 12 kHz wide. Below the radar on 10100 kHz (center) disturbing the German Weather service "DDK9" on 10100.8 kHz. It was not possible to decode the F1B transmissions. Screenshot: 27 Oct. 0906 utc



OTH radar Contayner on 18153 – 18165 kHz on 23 Oct. at 0751 utc



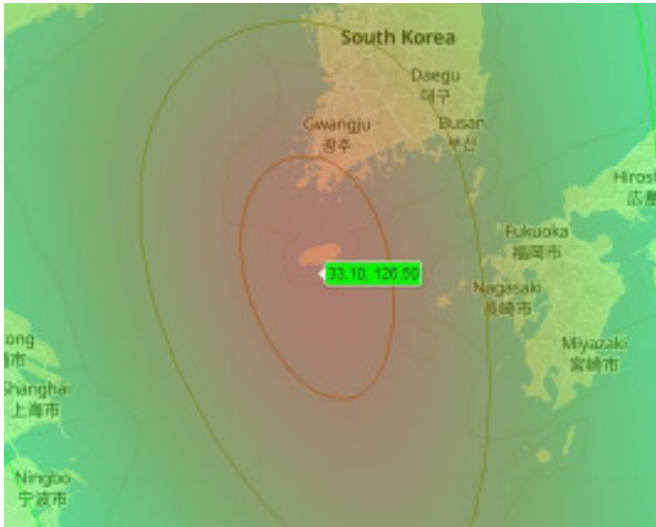
OTH radar Contayner on 7062 and 7103 on 21 Oct. at 1847 utc



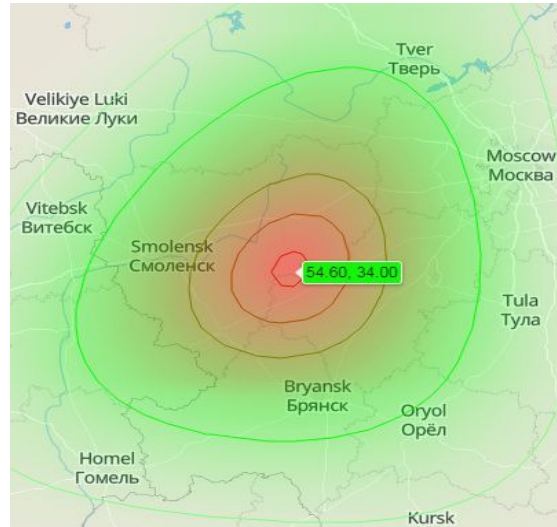
2. Russian MIL traffic more active as ever before

We found much Russian MIL traffic on F1B, PSK and OFDM on 7, 10, 14 and 21 MHz.

3. TDoA bearings



Codar like transmission on 7156 kHz RF – 30 Oct.

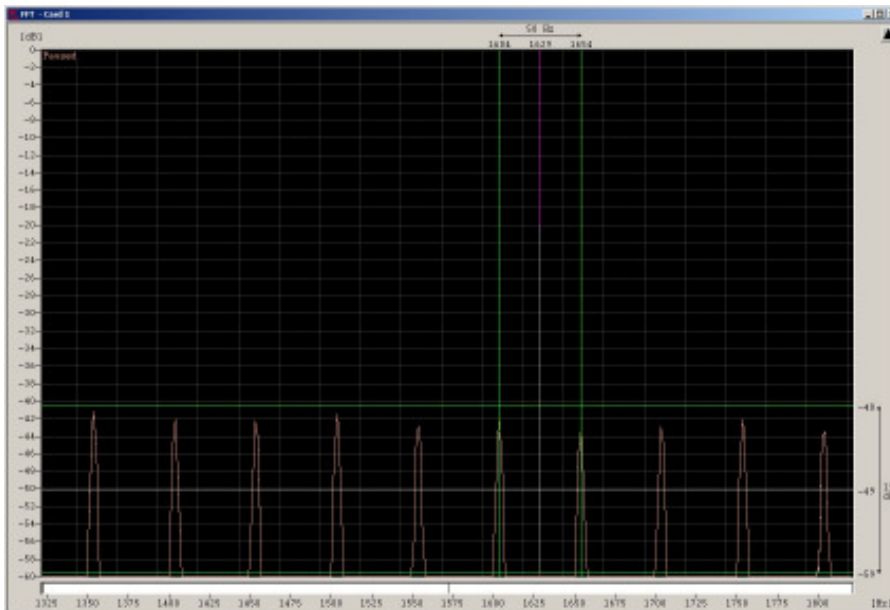


OFDM 60 on 7000.9 kHz – 18 Oct.

4. Far East Codar like emissions on 7156 kHz (ocean wave radar)

We found such emissions very often on 7 MHz during the last years. Parameters: FMOP, 2.6 sps and 32 kHz wide. Location: JEJU – South Korean Island

5. UK OTH radar Cyprus on 21 MHz



The UK OTH Cyprus was transmitting on 10,18 and 21 MHz on FMCW, 50 sps (= PRF 50) and 20 kHz wide. Screenshot with Wavecom W-Code showing the sweep rate on the FFT-display

6. Miscellaneous news:

- 7140 and 7180 kHz – A3E/BC – VOB Eritrea
- 14000.5 kHz – robust packet daily
- 14295.0 kHz – harmonic from Radio Tajik on 4765 kHz (no change)
- 21030.0 kHz – Spanish fishery on USB
- 28000 and 28860 kHz – Iranian radar often
- 28000 – 29700 CIS taxi services – FM (F3E)

7. Homepage IARU Region 1

Homepage IARUMS Region 1 <http://www.iaru-r1.org/>

Homepage IARUMS Region 2 <http://www.iarums-r1.org>

Homepage IARUMS Region 3 <http://www.iarums-r2.org/>

Intruderlogger Region 1 <http://www.itaru-r3.org/iaru-region-3-monitoring-system-newsletter/>

ITU-Monitoring Reports <http://peditio.net/intruder/bluechat.cqj>

<http://www.itu.int/en/ITU-R/terrestrial/monitoring/Pages/Regular.aspx>

Part 2: Detailed reports of the national Coordinators

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 *** **PRF** = pulse repetition frequency (radar) = **sps** *** **sps** = sweeps/sec (radar systems) *** **FMCW** = frequency modulated continuous wave (OTH radars)
FMOP = frequency modulation on pulse (OTH radars) *** **5BL** = cyrillic 5 lettergroups *** **DF** = direction finder
AMOP = amplitude modulation on pulse

DARC – Germany - DK2OM (Wolf)

FSK transmissions -> center frequency between mark and space

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

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

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

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	1,8 – 50 MHz	vt	dly	10	D		QRM			1.8 - 50 MHz strong QRM by a neighbouring LED lamp - since April 2016 - "many thanks" to German "BNetzA" Eschborn
DK2OM	1814,0	2026	06	10	RUS		USB LSB			14 tones – hyperbolic radio navigation system – BRAS-3/RS-10 – Kaliningrad
DK2OM	1855,0	2027	06	10	I	IQP	USB			San Benedetto Radio, weather reports - daily
DK2OM	1925,0	2027	06	10	I	IPL	USB			Livorno Radio, weather reports - daily
DK2OM	3503,5	vt	dly	10	G	no ITU	FSK8	125	1750	ALE – British MIL Tascomm – shared band - legal!
DK2OM	3504,0	1926	02	10	RUS		PSK2A	120	2600	AT3004D - Ryazan
DK2OM	3509,0	1706	16	10	RUS		PSK2A	120	2600	AT3004D – submode idle – area of Bryansk
DK2OM	3510,0 RF	1500	01	10	RUS		chirps		3k	mysterious chirps – northwest of Smolensk – daly, all day - shared band!
DK2OM	3511,3	1846	03	10			A1A			slow CW - 12 wpm - figures encrypted
DK2OM	3525,0 center	1850	07	10	F		PSK8A	2400	2400	LINK11-SLEW on both sidebands (6300 Hz wide) – area of Marseille – legal!
DK2OM	3527,0	1800	dly	10	RUS		F1B	50	200	Severomorsk - daily
DK2OM	3531,0	---	--	10	RUS	REA4	N0N			unclean carrier - RUS airforce Moscow, ident: full hour + 40 min - daily
DK2OM	3531,5	2100	07	10	RUS		PSK2A	120	2600	AT3004D – RUS ship – north of Kaliningrad – shared band!
DK2OM	3532,0	1905	07	10	F		PSK4	75	5800	LINK11-CLEW on both sidebands (5800 Hz wide) – area of Brest – lower channel disturbed by a ship with AT3004D – submode idle – sw Baltic Sea
DK2OM	3550,0	0630	dly	10	F		A3E			French amateurs not respecting bandplans – every morning
DK2OM	3550,0	2042	31	10	RUS		PSK2A	120	2600	AT3004D – Sevastopol
DK2OM	3550,7	---	--	10	ISR		PSK4 PSK8	75 2400	2400 2400	hybrid modem – ISR Navy – PSK4 parallel and PSK8 serial – shared band!
DK2OM	3553,8	ady	dly	10	TUR		PSK8A	2400	2400	Stanag4285 – 600 bps long -TUR

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										MIL - Ankara – daily, all day - legal operation
DK2OM	3559,5	1912	08	10	RUS		PSK2A	120	2600	AT3004D - Kaliningrad
DK2OM	3580,0 RF	ady	dly	10	TUR		PSK8A	2400	2400	Stanag-4285 – 600 bps long – Ankara – shared band!
DK2OM	3585,0	ady	dly	10	TWN	HLL	F1C		800	WX-fax Taiwan - 120 rpm, IOC 576 - daily, all day - legal!
DK2OM	3586,0	vt	dly	10	HOL		PSK2A	40	40	Amsterdam - daily
DK2OM	3590,6	1939	06	10	RUS		F1B	100	250	Sevastopol
DK2OM	3591,0	1745	11	10	RUS		PSK2A	120	2600	AT3004D - Kaliningrad
DK2OM	3592,0	vt	vd	10	G		PSK8A	2400	2400	Stanag-4285 – 600 bps long - area of Falmouth – shared band
DK2OM	3608,0	2030	17	10	RUS		F1B	50	200	mostly idling – RUS ship north of Poland
DK2OM	3622,5	ady	dly	10	J	JMH	F1C		800	Tokyo Meteo – 120 rpm – IOC 576 – daily, all day - legal!
DK2OM	3713,0 RF	1900	12	10	G		PSK8A	2400	2400	Stanag-4285 – 600 bps long – UK - area of Leeds – shared band!
DK2OM	3756,0	1800	dly	10	RUS		USB			RUS MIL – channel marker – Tuapse – East Black Sea – night QRG
DK2OM	5350,0	---	--	10	RUS		FMOP		50k	Russian coastal radar “Sunflower” – 43 sps – 5350 – 5400 kHz - Makhachkala
DK2OM	5350,0	0858	04	10	E		USB		2400	5350.0 – 5352.4 kHz - Spanish fishery (Galicians) splattering up – all day like telephone
DK2OM	5351,7	1700	07	10	GRC		PSK8A	2400	2400	Link11-SLEW Aegean Sea
DK2OM	5356,0	2000	17	10	RUS		unid		1500	unid broken signal? – Rostov on Don
DK2OM	5356,0	0834	22	10	RUS		F1B	75	200	Moscow – primary user
DK2OM	5361,8 RF	1925	01	10	DNK	OUA15	PSK8A	2400	2400	Stanag-4285 – 600 bps long – assigned to Danish Navy – ne of Aalborg - primary user!
DK2OM	5365,0 RF	1537	22	10	G		PSK8A	2400	2400	Stanag-4285 – 600 bps long – area of Manchester – primary user
DK2OM	6978,0	2108	25	10	RUS		FMOP		12k	OTH radar Contayner - 40 sps – west of Saransk – 6972 – 6984 – splattering up to 7000
DK2OM	6987,0	1820	03	10	CHN		FMOP		160k	Chinese wideband OTH radar – 10 sps – 6907 – 7067 kHz – long lasting
DK2OM	6990,0	1434	24	10	CHN		FMOP		160k	Chinese wideband OTH radar – 10 sps – 6990 – 7150 kHz
DK2OM	6999,5 RF	0820	18	10	RUS		OFDM	29.63	2760	6999.5 – 7002.3 - OFDM 60 – PSK4B – east of Smolensk
DK2OM	7000,0	vt	dly	10	INS		LSB USB			Indonesian pirates - singing and playing music - daily
DK2OM	7000,0	2030	09	10	RUS		PSK2A	120	2600	AT3004D – 6998.7 – 7001.3 kHz – southeast of Noginsk
DK2OM	7000,0	1318	10	10	CHN		FMOP		160k	Chinese wideband OTH radar – 10 sps – 6895 – 7055 kHz
DK2OM	7000,0	1350	16	10	RUS		PSK2A	120	2600	AT3004D – 6998.7 – 7001.3 kHz – sw of Bryansk
DK2OM	7005,0	1636	09	10	INS		LSB			Indonesian pirates
DK2OM	7010,0	vt	dly	10	INS		LSB			Indonesian pirates
DK2OM	7010,0	vt	vd	10	RUS		FMOP		103k	coastal radar „Sunflower“ – 43 sps – 6905 – 7010 kHz with spurious – east of Vladivostok
DK2OM	7015,0	vt	dly	10	INS		LSB			Indonesian pirates – male and female voices
DK2OM	7016,0	0855	08	10	RUS		F1B	75	250	Moscow

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	7018,0	0816	04	10	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	7022,0	1310	21	10	RUS		PSK2A	120	2600	AT3004D – idling – southeast of Moscow
DK2OM	7025,0	vt	dly	10	INS		LSB			Indonesian pirates singing
DK2OM	7030,0	vt	03	10	RUS		PSK2A	120	2600	AT3004D – Vladivostok - often
DK2OM	7034,0	1831	17	10	CHN		FMOP		160k	Chinese wideband OTH radar – 10 sps – 7034 – 7194 kHz
DK2OM	7035,0	vt	dly	10	INS		LSB			Indonesian pirates singing
DK2OM	7039,2	---	--	10	RUS	„F“	A1A			Cluster beacon „F“ - Vladivostok RUS Navy - “RJS”
DK2OM	7039,3	---	--	10	RUS	„K“	A1A			Cluster beacon “K” Petropavlovsk Kamchatskiy - RUS Navy - Pacific fleet - “RCC”
DK2OM	7039,4	1800	dly	10	RUS	„M“	A1A			Cluster beacon „M“ – Magadan RUS Navy – „RTS“ - daily
DK2OM	7046,2 RF	1034	25	10	D		PSK8A	2400	2400	Stanag-4285 – 600 bps long – ship – north of Cuxhaven
DK2OM	7051,0	1530	30	10	RUS	RDL	F1B	50	200	Kaliningrad – RUS navy
DK2OM	7054,0	vt	dly	10	UKR		USB		2400	picture propaganda transmissions
DK2OM	7055,0	vt	dly	10	UKR		LSB			music and Russian voices
DK2OM	7062,0	1848	21	10	RUS		FMOP		12k	OTH radar Contayner - 40 sps – west of Saransk – 7056 - 7068
DK2OM	7062,0	2037	25	10	RUS		FMOP		12k	OTH radar Contayner - 40 sps – west of Saransk – 7056 - 7068
DK2OM	7080,0	1930	05	10	RUS		F1B	50	200	also 18.10. at 1840 - Kaliningrad
DK2OM	7088,0	0841	19	10	RUS		F1B	75	200	RUS ship west of Greece
DK2OM	7088,8	vt	vd	10	S	SL0FRO	A1A			7088.820 kHz - cw-trainee, Sweden - SL0FRO – often - just for info!
DK2OM	7089,8	---	--	10	TUR		PSK8	2400	2400	Link11 - SLEW – aircraft ? west of Izmir
DK2OM	7090,0	1834	17	10	KOR		FMOP		32k	Codar like ocean surface radar 2.6 sps – 7090 – 7122 kHz
DK2OM	7090,0 RF	1839	28	10	KOR		FMOP		32k	Codar like ocean surface radar 2.6 sps – 7090 – 7122 kHz
DK2OM	7090,0	1808	31	10	CHN		FMOP		160k	Chinese wideband OTH radar – 10 sps – 7010 – 7170 kHz
DK2OM	7102,0	1848	21	10	RUS		FMOP		12k	OTH radar Contayner - 40 sps – west of Saransk – 7096 - 7108
DK2OM	7104,0	vt	04	10	CHN		PSK4A	60	2350	PRC 30 tone modem - LSB mode - pilot tone 450 Hz
DK2OM	7111,0	vt	04	10	CHN		PSK4A	60	2350	PRC 30 tone modem - LSB mode - pilot tone 450 Hz
DK2OM	7111,0	vt	07	10	RUS		F1B	75	250	Moscow
DK2OM	7114,0	1740	09	10	RUS	RDL	F1B	50	200	Kaliningrad
DK2OM	7118,0	1945	24	10	RUS		PSK2A	120	2600	AT3004D – submode idle – area of Moscow
DK2OM	7121,0	vt	01	10	CHN		PSK4A	60	2350	PRC 30 tone modem - LSB mode - pilot tone 450 Hz
DK2OM	7122,0	1310	08	10	RUS	RDL	F1B	50	200	Severomorsk - often
DK2OM	7132,0	1930	11	10	FEa		FMCW		32k	Codar like ocean surface radar 2.6 sps – 7132 – 7164 kHz
DK2OM	7137,0	vt	dly	10	TWN		FSK8 LSB	125	1750	ALE, MIL-188-141A, “FBABA” “FWKMB” “FXIBY” “FCPSL” “FHKHD” “FVIKE” “FHVWY” “FCUGP” “FDRRK” “FWIML” ”FBQCY” ”FCEAX” Taiwanese navy
DK2OM	7137,0	1830	10	10	RUS		F1B	50	200	Kaliningrad
DK2OM	7140,0	1724	02	10	ERI		A3E		9k	7140.021 kHz - Radio Eritrea
DK2OM	7141,0	1901	24	10	RUS	?	PSK2A	120	2600	AT3004D – no DF

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	7142,0	1240	18	10	RUS		PSK2A	120	2600	AT3004D - Kaliningrad
DK2OM	7144,0	vt	07	10	CHN		PSK4A	60	2350	PRC 30 tone modem - LSB mode - pilot tone 450 Hz
DK2OM	7144,0	1423	14	10	RUS		unid		8000	unid burst modem – short intro tones - 7140 – 7148 – Rostov on Don
DK2OM	7146,0	0924	29	10	RUS		PSK2A	120	2600	AT3004D - Sevastopol
DK2OM	7156,0	1837	30	10	KOR		FMOP		32k	Codar like ocean surface radar 2.6 sps – 7156 – 7188 kHz
DK2OM	7180,0	1729	01	10	ERI		A3E		9k	7180.021 kHz - Radio Eritrea
DK2OM	7192,0	1720	09	10	RUS		F1B	75	250	Moscow
DK2OM	7194,0	2020	13	10	BLR		PSK2A	120	2600	AT3004D – area of Homel
DK2OM	7197,0	vt	dly	10	TUR		FSK8	125	1750	ALE, „353013“ „334018“ „314013“ - Turkish Sivil Avunma – Turkish Civil Defense
DK2OM	7198,0	1648	21	10	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	7200,0	---	--	10	RUS		PSK2A	120	2600	AT3004D – 7198.7 – 7201.3 kHz – Kaliningrad
DK2OM	7202,0	1554	11	10	RUS		PSK2A	120	2600	AT3004D – 7200.7 – 7203.3 kHz – Kaliningrad – just for info
DK2OM	10100,0	1723	26	10	RUS		FMOP		12k	OTH radar Contayner - 40 sps – west of Saransk – 10094 – 10106 – long lasting
DK2OM	10100,8	ady	dly	10	D	DDK9	F1B	50	450	Baudot - German Weatherservice – legal! – disturbed by Russian OTH radar Contayner on 26 Oct. at 1723 utc and later (also 27.10.)
DK2OM	10105,0	1300	06	10	RUS		PSK2A	120	2600	AT3004D – Sevastopol – shared band
DK2OM	10110,0	1347	14	10	RUS		FMOP		12k	OTH radar Contayner - 40 sps – west of Saransk - 10104 – 10116kHz
DK2OM	10114,8	0640	dly	10	RUS		F1B	100	1000	CIS14 – Moscow
DK2OM	10121,0	0825	08	10	RUS		F1B	75	250	Moscow – shared band
DK2OM	10125,0	1403	22	10	RUS		PSK2A	120	2600	AT3004D - Samara
DK2OM	10128,0 RF	0827	01	10	RUS		MFSK		3000	CIS 2 x 34 tones – shared band!
DK2OM	10132,0	vt	vd	10	F		USB			French amateurs not respecting bandplans
DK2OM	10144,0	ady	dly	10	D	DK0WCY	A1A			10144.000 kHz - DK0WCY – German aurora beacon – just for info!
DK2OM	10146,0	0950	11	10			PSK2A	120	2600	AT3004D - Moscow
DK2OM	10150,0	1534	09	10	CYP		FMCW		20k	UK OTH radar Cyprus - 50 sps – 10140 – 10160 kHz
DK2OM	13869,0	1012	03	10	CHN		FMOP		160k	Chinese wideband OTH radar – 10 sps – 13869 – 14029 kHz
DK2OM	14000,0	vt	dly	10	PNG		USB			fishermen - south east of Papua New Guinea (Coral Sea) - daily
DK2OM	14000,0	vt	vd	10	B		USB			Brazilian pirates – Rio with North Brazil
DK2OM	14000,0 RF	1020	15	10	?		PSK8A	2400	2400	Stanag-4285
DK2OM	14000,5	ady	dly	10	CHN		OFDM	200 600	420	RF: 13999.0 kHz - Robust Packet – OFDM 8 – no Ham calls – idents with 6 characters (letters and figures like tiny URLs) – large net – daily, all day
DK2OM	14001,8	---	--	10	ISR		PSK4 PSK8	75 2400	2400 2400	hybrid modem – ISR Navy – PSK4 parallel and PSK8 serial
DK2OM	14005,0	0911	23	10	RUS		PSK2A	120	2600	AT3004D – many splatters - Penza
DK2OM	14006,0	0904	30	10	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	14008,0	0920	04	10	RUS		F1B	50	500	Moscow – very often

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	14030,0	0804	10	10	MNG		FMOP		40k	Mongolian OTHR – 10 sps – 14010 – 14050 – long lasting
DK2OM	14031,0	1027	22	10	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	14034,0	0905	22	10	CHN		FMOP		10k	Chinese OTH radar – 14029 – 14039 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14043,0	0858	22	10	CHN		FMOP		10k	Chinese OTH radar – 14038 – 14048 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14050,0	0936	24	10	CHN		FMOP		10k	Chinese OTH radar – 14045 – 14055 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14057,0	0915	27	10	CHN		FMOP		10k	Chinese OTH radar – 14052 – 14062 kHz - 66.66 sps – 3.8 sec bursts
DK2OM	14091,3	1310	23	10			F1B	600	600	DPRK-FSK 600
DK2OM	14097,0	0825	15	10	CHN		FMOP		10k	Chinese OTH radar – 14092 - 14102 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14099,0	1302	21	10	RUS		FMOP		12k	OTH radar Contayner - 40 sps – west of Saransk – 14093 - 14105
DK2OM	14100,0	---	--	10	F		A1A			„051“ loop – daily 1658 – 1710 utc – area of Ternant
DK2OM	14101,9	0917	10	10	RUS		OFDM	35.55	2760	OFDM 60 – PSK8B - Moscow
DK2OM	14102,0	0933	24	10	CHN		FMOP		10k	Chinese OTH radar – 14097 – 14107 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14107,5	1320	23	10	FIN		MFSK	31.25	970	Olivia 32 tones – HAM traffic – just for info
DK2OM	14108,0	vt	vd	10	RUS		A1A			encrypted – area of Moscow
DK2OM	14109,0	0942	29	10	CHN		FMOP		10k	Chinese OTH radar – 14104 – 14114 kHz - 50 sps – 2.5 sec bursts
DK2OM	14113,4	1313	23	10	IRQ		F1B	600	600	DPRK-FSK 600 – DPRK emba Iraq
DK2OM	14122,0	0858	22	10	CHN		FMOP		10k	Chinese OTH radar – 14117 – 14127 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14126,0	1248	21	10	RUS		FMOP		12k	OTH radar Contayner - 40 sps – west of Saransk – 14120 - 14132
DK2OM	14133,0	1017	01	10			F1B	75	250	unclean - Samara
DK2OM	14135,0	0917	01	10	RUS		PSK2A	120	2600	AT3004D – unclean - ne of Samara
DK2OM	14165,0	0900	22	10	CHN		FMOP		10k	Chinese OTH radar – 14160 – 14170 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14182,0	1018	03	10	CHN		FMOP		10k	Chinese OTH radar – 14177 – 14187 kHz - 66.66 sps – 7.6 sec bursts
DK2OM	14184,0	0936	13	10	CHN		FMOP		160k	Chinese wideband OTH radar – 10 sps – 14184 – 14344 kHz – jumping 13270
DK2OM	14187,0	1007	07	10	RUS		FMOP		12k	OTH radar Contayner - 40 sps – west of Saransk – 14181 - 14193
DK2OM	14192,0	vt	vd	10	RUS		F1B	50 75 50 100 100	500 500 200 500 200	RUS navy Kaliningrad – often with 50 Bd and 200 Hz shift
DK2OM	14200,0 RF	vt	vd	10	CHN		PSK2A	75	2000	PRC 16 tone modem – China – Shanghai – marker tones on 14201.7 kHz
DK2OM	14212,0	1206	vd	10	UKR		A3E			female voice with encrypted msgs – figures – “SZRU” = Foreign Intelligence Service of

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										Ukraine in Rivne – every Thursday at 1206 utc – msgs at 1214 utc
DK2OM	14221,0	---	--	10	KAZ		F1B	50	200	Kazakhstan – west of Almaty - mostly idling - every evening
DK2OM	14223,0	1027	17	10	MNG		FMOP		40k	Mongolian OTHR – 10 sps – 14203 – 14243 kHz
DK2OM	14227,0	0837	15	10	CHN		FMOP		10k	Chinese OTH radar – 14222 - 14232 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14236,0	0835	12	10	RUS		FMOP		12k	OTH radar Contayner - 40 sps – west of Saransk – 14230 - 14242
DK2OM	14237,0	0902	22	10	CHN		FMOP		10k	Chinese OTH radar – 14232 – 14242 kHz - 50 sps – 5 sec bursts – „foghorn“
DK2OM	14242,0	0835	15	10	CHN		FMOP		10k	Chinese OTH radar – 14237 - 14247 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14245,0	1024	17	10	MNG		FMOP		40k	Mongolian OTHR – 10 sps – 14225 – 14265 kHz
DK2OM	14249,0	0921	09	10	CHN		FMOP		10k	Chinese OTH radar – 14244 – 14254 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14250,0	0823	05	10	MNG		FMOP		40k	Mongolian OTHR – 10 sps – 14230 – 14270 – long lasting
DK2OM	14251,0	0834	15	10	CHN		FMOP		10k	Chinese OTH radar – 14246 - 14256 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14260,0	vt	vd	10	UKR		A3E			female voice with encrypted msgs – figures – “SZRU” = Foreign Intelligence Service of Ukraine in Rivne – reported by a German HAM
DK2OM	14264,0	1001	06	10	CHN		FMOP		10k	Chinese OTH radar – 30 sps – 14259 – 14269 – also 10.10. at 0931 utc
DK2OM	14265,0	0913	14	10	MNG		FMOP		40k	Mongolian OTHR – 10 sps – 14265 – 14305 – long lasting
DK2OM	14268,0	0925	09	10	CHN		FMOP		10k	Chinese OTH radar – 14263 – 14273 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14273,0	0850	16	10	RUS		unid		3k	unid signal - Moscow
DK2OM	14288,0	0846	04	10	CHN		FMOP		10k	Chinese OTH radar – 14283 – 14293 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14295,0	0837	25	10	CHN		FMOP		10k	Chinese OTH radar – 14290 – 14300 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14295,2	ady	dly	10	TJK		A3E/BC		9k	14295.128 kHz -3x from Radio Tajik on 4765 kHz – daily, all day
DK2OM	14300,0	0833	03	10	CHN		FMOP		10k	Chinese OTH radar – 30 sps – 14295 – 14305 – also 05.10. at 0820 utc
DK2OM	14301,9	1022	10	10	RUS		OFDM	35.55	2760	OFDM 60 – PSK8B – Moscow
DK2OM	14304,0	0944	29	10	CHN		FMOP		10k	Chinese OTH radar – 14299 – 14309 kHz - 50 sps – 2.5 sec bursts
DK2OM	14310,0	0923	09	10	CHN		FMOP		10k	Chinese OTH radar – 14305 – 14315 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14315,0	0828	15	10	MNG		FMOP		40k	Mongolian OTHR – 10 sps – 14295 – 14335 – long lasting
DK2OM	14320,0	0936	12	10	CHN		FMOP		10k	Chinese OTH radar – 14315 – 14325 kHz - 66.66 sps – 3.8 sec

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										bursts – „foghorn“
DK2OM	14329,0	0832	15	10	CHN		FMOP		10k	Chinese OTH radar – 14324 - 14334 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14329,0	0843	25	10	CHN		FMOP		10k	Chinese OTH radar – 14324 – 14334 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14331,0	0918	20	10	CHN		FMOP		10k	Chinese OTH radar – 14326 – 14336 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14337,0	1001	03	10	CHN		FMOP		10k	Chinese OTH radar – 14332 – 14342 kHz - 66.66 sps – 3.8 sec bursts
DK2OM	14347,0	0946	12	10	CHN		FMOP		10k	Chinese OTH radar – 14342 – 14352 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	14348,0	1009	03	10	CHN		FMOP		10k	Chinese OTH radar – 14343 – 14353 kHz - 66.66 sps – 3.8 sec bursts
DK2OM	14348,5	vt	dly	10	THA	HSOZEA	A1A			HSOZEA beacon – 14348.488 kHz - every 5 minutes – daily - just for info!
DK2OM	14350,0	0920	25	10	CHN		FMOP		10k	Chinese OTH radar – 14345 – 14355 kHz - 66.66 sps – 3.8 sec bursts – „foghorn“
DK2OM	18060,0	0827	25	10	CYP		FMCW		20k	UK OTH radar Cyprus - 50 sps – 18050 – 18070 kHz
DK2OM	18080,0	0750	08	10	TWN		A3E/BC			Sound of Hope – Taiwan and Chinese BC jammer – daily at 06 utc and later
DK2OM	18107,0	0820	13	10	RUS	RDL	F1B	36/50	200	CIS-36-50 - Moscow – idle and traffic – often - Russian navy
DK2OM	18150,0	---	--	10	RUS		F1B	100	1000	harmonic from 9075 (100 Bd, 500 Hz) - Kaliningrad
DK2OM	18150,0	---	--	10	RUS		F1B	100	1000	harmonic from 9075 kHz (100 Bd – 500 Hz) - Kaliningrad
DK2OM	18165,0	0935	23	10	RUS		FMOP		12k	OTH radar Contayner - 40 sps – west of Saransk – main signal 18159 – 18171 – many splatters
DK2OM	18173,0	1339	22	10	RUS		FMOP		12k	OTH radar Contayner - 40 sps – west of Saransk – main signal 18167 – 18179 – many splatters
DK2OM	21000,0	---	--	10	B		USB			Brazilian pirates – Rio de Janeiro with North Brazil – very often
DK2OM	21015,0	0926	21	10	CYP		FMCW		20k	UK OTH radar Cyprus - 50 sps – 21005 – 21025 kHz
DK2OM	21110,0	0942	27	10	CYP		FMCW		20k	UK OTH radar Cyprus - 50 sps – 21100 – 21120 kHz – long lasting
DK2OM	21145,0	vt	dly	10	MRC		FSK8	125	1750	ALE, “A” “B301” “C3”, “IR4” “H4” “IR6” “T4” “E4” “A2” “CD” “K3” “KB2” “J5” “J52” “GR2” “GS4” “R3” “R301” “R33” “R8” “R5” “Y1” “S51” “S3” “S4” “S512” “S552” “G2” “G501” - various times, daily
DK2OM	21220,6	1346	22	10	KRE		F1B	600	600	DPRK-FSK600
DK2OM	21438,0	1023	01	10	RUS	RCV	A1A			RIP90 de RCV - RUS Navy Sevastopol - daily
DK2OM	21446,0	---	--	10	THA	HSOZEA	A1A			HSOZEA beacon – every 5 minutes - just for info!
DK2OM	28000,0	---	--	10	B		A3E			Brazilian CBers – 28000 – 28325 – daily, all day - no change
DK2OM	28000,0	vt	vd	10	CIS		F3E			28000 – 29700 numerous CIS

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										taxi nets – no change
DK2OM	28000,0	0900	05	10	IRN		AMOP		45k	Iranian radar - 27980 – 28025 kHz – 307 sps – 870 sps alternating
DK2OM	28860,0	0840	31	10	IRN		AM pulse		45k	Iranian radar - 28837 – 28883 kHz – 150 sps – 313 sps alternating – North Iran - daily
DK2OM	29685,0	---	--	10	I		VFT		2300	Italian MIL – Brescia - daily
DK2OM	29699,5	---	--	10	I		VFT		1600	Italian MIL – Brescia - daily

IRTS – Ireland – EI3GYB (Michael)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	DETAILS
IRTS	1833	0635	01	10	POR or MM		USB	2 Portuguese fishermen. Medium strength signals.
IRTS	3510	1845	13	10	RUS			“New” chirping sound from Russia, strong.
IRTS	3550	0635	02	10	F		AM	2. Group of French Hams violating the band plan on a daily basis.
IRTS	3560	0850	08	10			USB	2 male voices, very weak. On and off, ends 0925z.
IRTS	3590	0630	02	10	F		AM	Group of French Hams still violating the band plan on a daily basis.
IRTS	3640	0640	02	10	MM		USB	2 Japanese speaking voices with plenty of “dodo” and “arrigato”. Huge signals from both parties. Also heard on the 8 th at 0845z. Also 11 th at 0225z.
IRTS	3640	1620	05	10	POR or MM		USB	2 Portuguese fishermen. Very strong.
IRTS	3698	1210	05	10	E or MM		USB	2 Spanish fishermen, strong signals.
IRTS	3733.5	1810	23	10	UK		USB	2 English fishermen. Loud motor noise from one of the ships. Both ships send out strong signals. Talking about “fucking foreigners”. The rather unpleasant “show” ends at 1845z.
IRTS	3760	1525	16	10	UK		LSB	D-QRM to disturb the WAB net. Ends at 1545z.
IRTS	3773.2	1815	23	10	HOL		USB	2 Dutch fishermen.
IRTS	3780	2015	25	10			LSB	Another transmission of church bells sounds. Monster signal.
IRTS	3782	1820	23	10			LSB	Somebody transmits the sound of church bells. Huge signal.
IRTS	5220	0305	04	10	RUS or CHN		FMOP	Strong radar busts, about 15 kHz wide, moving up and down the band from 5220 to 5420 kHz covering many EI spot frequencies and the whole 5 MHz Ham band. Heard on many nights all night until early morning.
IRTS	5346	0320	02	10	MRC or MM		USB	2 Moroccan fishermen chatting. Splattering up to the US/EI spot frequency of 5346.5 kHz.
IRTS	5350	0050	01	10	POR or MM		USB	2 Portuguese fishermen. Strong signals. Loud motor noise from both ships. Splattering up into the 5 MHz Ham section.
IRTS	5361.8	0645	02	10	DNK		PSK8A	NATO Aarhus. Heard on a few occasions with a huge signal. Legal primary user. Inside 5 MHz Ham allocation- unfortunately.
IRTS	5367.5	2005	04	10	E or MM		USB	2 Spanish fishermen. Very loud. Ends 2028z. Splattering into the 5 MHz Ham band.
IRTS	5400	0750	05	10	UK		AM	Spurious emissions from KBS Seoul relay in Woofferton, Shropshire. Heard daily in various strengths between about 0800z and s/off at exactly 0900z. Original signal on 9860 kHz in the 31 metre BC band. Signals were also copied by several HAM stations in Scotland and England. Disturbing 2 UK/EI spot frequencies.
IRTS	7020	1825	21	10	RUS or		FMOP	Radar from 7020 to 7085 kHz. All frequencies unusable.

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	DETAILS	
					CHN				
IRTS	7055	1425	18	10	RUS or UKR		LSB		Ukrainian- Russian radio war. Agitprop. Heard on many days with big signals.
IRTS	7123	2015	23	10			Digital		Digital signal, quite strong.
IRTS	7138	2020	23	10			Digital		Another digital signal, also very strong.
IRTS	7140	1800	14	10	ERI		AM		Radio Eritrea. Medium strength signal. Heard a few times during the month.
IRTS	7146	1755	31	10			Digital		Huge digital signal.
IRTS	7165	1520	25	10	RUS or CHN		FMOP		Radar between 7165 and 7185 kHz. On and off until 1900z.
IRTS	7172	1700	23	10	CHN or RUS		FMOP		Huge radar signals from 7172 to 7225 kHz.
IRTS	7175	1215	22	10			Digital		Huge digital signal.
IRTS	7180	1630	10	10	ERI		AM		Radio Eritrea, medium strength signal. Heard occasionally.
IRTS	10115	0845	27	10			FMOP		Strong radar from 10115 to 10119 kHz.
IRTS	10127	1815	29	10	MRC or MM		USB		Group of Moroccan fishermen.
IRTS	14118	1240	13	10	RUS or CHN		FMOP		14118 to 14128 kHz radar on and off.
IRTS	14175	1025	24	10	RUS or CHN		FMOP		Radar between 14175 and 14315 kHz, on and off.
IRTS	14176	1300	22	10			Digital		Strong digital signal.
IRTS	14232	1235	08	10	CHN or RUS		FMOP		Strong radar from 14232 to 14354 kHz.
IRTS	14340	1335	20	10			FSK		Huge digital signal on and off. Could be a North Korean embassy in Africa.
IRTS	18107	1125	21	10			FMOP		Radar from 18107 to 18124 kHz.
IRTS	18152	0900	24	10	RUS or CHN		FMOP		Huge radar signals from 18152 to 18168 kHz.
IRTS	18162	0840	20	10	CHN/ RUS		FMOP		Strong radar signals from 18162 to 18182 kHz.
IRTS	21096	1125	27	10			FMOP		Strong radar from 21096 to 21120 kHz.
IRTS	21220	1540	24	10			FSK		Probably another North Korean embassy in Africa. Strong signals.

KARS – Kuwait – 9K2RR (Faisal)

MRASZ – Hungary - HA7PL (Laci)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SH	DETAILS
MRASZ	3510,0	1710	22	10			A1A		slow dashes, and dots, disturbance
MRASZ	3525,0	1755	28	10			F1B	250	
MRASZ	3548,0	1731	21	10			F1B	200	
MRASZ	3548,0	1535	27	10			F1B	200	
MRASZ	3548,0	1758	28	10			F1A	200	"59387 21942 59387 K"
MRASZ	3548,0	1800	28	10			F1B	200	
MRASZ	3548,0	1619	29	10			F1B	200	
MRASZ	3548,0	1745	31	10			F1B	200	
MRASZ	3608,0	2015	29	10			F1B	200	
MRASZ	3640,0	1712	22	10			F1B	200	
MRASZ	3649,0	1751	9	10			F1B	250	
MRASZ	3733,0	1713	22	10			F1B	250	
MRASZ	3740,0	1822	29	10			A1A		"VVVVVVVVVV"

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SH	DETAILS
MRASZ	3767,0	1714	22	10			PSK2		AT3004D
MRASZ	7016,0	1802	9	10			F1B	250	
MRASZ	7016,0	0723	10	10			F1B	250	
MRASZ	7051,0	1553	30	10			F1B	200	
MRASZ	7051,0	0723	31	10			F1B	200	
MRASZ	7055,0	1532	7	10			LSB		propaganda
MRASZ	7055,0	0842	16	10			LSB		music, propaganda, chaos
MRASZ	7055,0	0710	18	10			LSB		music, singing, chaos
MRASZ	7059,0	1259	12	10			F1B	250	
MRASZ	7080,0	1757	9	10			F1B	200	
MRASZ	7080,0	1706	30	10			F1B	200	
MRASZ	7088,0	0712	19	10			F1B	200	
MRASZ	7095,0	1308	25	10			F1B	500	
MRASZ	7114,0	1756	9	10			F1B	200	
MRASZ	7122,0	1517	16	10			F1B	200	
MRASZ	7146,0	1624	29	10			PSK2		AT3004D
MRASZ	7146,0	0605	30	10			PSK2		AT3004D
MRASZ	7146,0	1555	30	10			PSK2		AT3004D
MRASZ	7192,0	1754	9	10			F1B	250	
MRASZ	7198,0	1729	21	10			PSK2		AT3004D
MRASZ	10114,75	0721	10	10			F1B	1000	
MRASZ	10114,75	0713	18	10			F1B	1000	
MRASZ	10114,75	0725	31	10			F1B	1000	
MRASZ	14008,0	0837	16	10			F1B	500	
MRASZ	14008,0	0725	26	10			F1B	500	
MRASZ	18107,0	1311	25	10			F1B	200	

OEVSV – Austria – OE3GSA (Gerd)

PZK – Polish group

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
PZK										October 2019
SP5GNI	3500,5	1627	23	10			FSK		200	RTTY transmission ended 1632
SP3AMO	3510,0	1840	16	10			PSK		1k2	Multi-tone emission
SP5GNI	3512,0	vt	vd	10			UI		3,2k	Chirps from 3510,4 to 3513,6 kHz
SP3AMO	3521,0	1842	16	10			PSK		1k6	
SP3AMO	3526,7	2011	15	10			PSK/R TTY	75	200	Multi-tone emission + F1B
SP3AMO	3532,2	600	16	10			A1A/F SK			
SP5GNI	3548,0	1932	24	10			FSK		200	RTTY transmission S9+30dB
SP3AMO	3559,0	2015	15	10			PSK		1k6	
SP5GNI	3563,5	2107	1	10			FDM		3k	OTHR
SP5GNI	3568,5	901	10	10			FDM		3k	OTHR S9
SP5GNI	3581,0	1625	23	10			FMCW			OTHR S9 +20dB
SP3AMO	3582,0	vt	vd	10			PSK		1k6	
SP3AMO	3687,0	2007	10	10			PSK		1k6	NOARS
SP5GNI	3698,2	2104	25	10			FMCW		2,2k	
SP3AMO	3709,0	427	6	10			PSK		900	Multi-tone emission
SP3AMO	3715,0	vt	vd	10			PSK		1k6	NOARS Multi-tone emission
SP5GNI	3715,0	2056	4	10			FDM		3k	OTHR
SP3AMO	3715,2	vt	vd	10			PSK		1k7	NOARS
SP3AMO	3717,0	440	17	10			PSK			Multi-tone emission [530 still working]
SP3AMO	3722,0	1253	13	10			NON			
SP3AMO	3726,5	537	13	10			PSK		350	10 lines [1 3 1 1 3 1]
SP5GNI	3735,0	1206	29	10			FSK		500	RTTY-like continuous transmission
SP5GNI	3738,0	1210	29	10			FSK		250	
SP5GNI	3740,0	1620	23	10			FDM		12k	Wide from 3732 to 3744; 4 peaks with AM between them
SP3AMO	3741,5	1745	15	10			PSK			10 lines
SP3AMO	3741,5	1847	16	10			PSK		250	Multi-tone emission [6 lines]

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
SP5GNI	3745,5	1100	30	10			A1B			Group of numbers, strong S9+30dB
SP3AMO	3758,0	1850	16	10			UI			Chirp
SP5GNI	3759,0	1213	29	10			FDM			OTHR S9 +10dB
SP5GNI	3768,0	859	10	10			FDM		3k	OTHR S9 +30dB
SP5GNI	3768,0	1313	10	10			FDM		3k	Continuous multi-tone transmission, highest peak at 3767,1 and about 20 more visible in different distances
SP5GNI	5360,0	1138	16	10			A1A			numbers
SP5GNI	5361,7	1303	3	10			FDM		3k	OTHR S9
SP5GNI	7016,0	1340	9	10			FSK		250	Continuous RTTY transmission
SP5GNI	7033,0	1132	16	10			FDM		4,5k	Main subcarriers 7031, 7032,15, 7033,35, 7034,50, and additionally 7038,50 , 7040,05
SP5GNI	7047,5	1345	9	10			MFSK			Packet every 2 seconds, from time to time longer transmission. Multi-tone - one tone at a time
	7047,5	1451	25	10			FDM		3k	OTHR
SP3AMO	7052,0	1913	16	10			PSK		300	Multi-tone emission
SP5GNI	7055,0	1104	30	10			A3J			Long-lasting Russian-language program
SP5GNI	7088,9	1222	29	10			A1A			Letters, number and non typical signs, very slow telegraphy
SP5GNI	7122,0	1109	30	10			FSK		200	S8
SP5GNI	7146,0	vt	vd	10			FDM		3k	OTHR
SP3AMO	10109,1	1915	16	10			UI			Multi-tone emission [many lines every 50Hz]
SP3AMO	10122,0	1920	30	10			UI			S0 constant - Gaspar's report [EA6AMM]
SP3AMO	10127,0	1755	29	10			J3E-U			A little above noise level - Gaspar's report [EA6AMM]
SP5GNI	14155,0	1230	2	10			FDM		14k	14148 -14162 kHz, at 1232 disappeared, then observed on a few other freq in 20m band
SP5GNI	14193,0	1233	2	10			FDM			Disappeared, later observed on a few other freq in the band
SP5GNI	21220,6	1537	8	10			MFSK		1,3k	Packets sent 2 times per second, 2 main peaks at 21220,25 and 21220,85
SP3AMO	28137,8	1917	16	10			PSK			Multi-tone emission
SP3AMO	28424,5	1919	16	10			NON			
SP3AMO	28434,5	842	14	10			PSK		200	4 lines
SP3AMO	28436,0	1734	15	10			PSK		200	4 lines
SP3AMO	28437,3	1920	16	10			PSK			Multi-tone emission [4 lines]
SP3AMO	28633,0	vt	vd	10			NON			
SP5GNI	28667,2	1223	2	10			MFSK		180	Continuous, about 10 tones
SP3AMO	28687,5	846	14	10			PSK		220	2 lines
SP3AMO	28857,8	849	14	10			NON			
SP3AMO	29004,0	vt	vd	10			NON			
SP3AMO	29034,2	1500	5	10			PSK			4 lines
SP3AMO	29034,6	1741	15	10			PSK			3 lines
SP3AMO	29345,0	854	14	10			NON			
SP3AMO	29584,3	1503	5	10			NON			

REF – France – F5MIU (Francis)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	Baud	Sh /Bw	DETAILS
R.E.F.										October 2019
	3616	1715	8	10			lsb		2,5kHz	Crypt voice transmission S9+15 like QSO; 64sub carrier + pilot tone on middle
	18090	0755	22	10			fmcw		20kHz	OTH Radar pulsed 20ms,S7
	10130	1541	25	10			fmcw		20kHz	OTH Radar pulsed 25ms,S6
	14093	1717	26	10			usb		3kHz	Many Spanish? Station in QSO no callsign given S9+ out of band plan
	10100	1723	26	10			fmcw		20kHz	OTH Radar pulsed 25ms,S9
	10100	1829	27	10			fmcw		20kHz	OTH Radar pulsed 25ms,S8

REP – Portugal – CT4AN (Jose Francisco)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REP	3500	09.00	02	10	E		J3E-U			Fishery
REP	3510	14.00	10	10	RUS					Chirp transmission (with QRM)
REP	3525	08.05	11	10	F		PSK4			LINK11 CLEW
REP	3582	21.12	21	10	TUR		PSK8	2400	2400	
REP	3592	07.44	06	10	G		PSK8A			STANAG 4285
REP	7000	07.28	17	10			J3E-U			Fishery
REP	7025	22.38	09	10	B		J3E-U			Fishery
REP	7025	20.45	12	10			MFSK8			MilStd 188-141
REP	7039	21.58	07	10	RUS	M	A1A			MAGADAN Beacon
REP	7039	22.59	09	10	RUS	K	A1A			Beacon
REP	7130	08.10	12	10	RUS		FSK	75	500	CIS75 encrypted
REP	7140	16.03	12	10	ETH		8k00 A3EGN			Broadcasting Eritrea
REP	7146	08.43	20	10	RUS		PSK2	120	2600	AT3004
REP	7179	17.00	12	10	RUS		MFSK	120	3k	AT3004D
REP	7180	dly	dly	10	ERI		9k00 A3EGN			Radio Eritrea
REP	7197	09.34	27	10	RUS		A1A			Encrypted
REP	10130	11.03	14	10	MRC		J3E U			Fishery
REP	14140	12.00	14	10	CHN		FMOP	10	100k	OTH
REP	14145	14.30	19	10	E		J3E-L			Fishery
REP	14192	10.05	28	10	RUS		F1B			
REP	14195	07.55	06	10	RUS		F1B	50	200	CIS50
REP	14225	08.12	06	10	CHN		FMOP		10k	OTH 30sps
REP	14270	08.08	20	10	RUS		F1B	75	200	T206
REP	14295	16.20	12	10	TJK		9k00 A3EGN			Tajik Radio (3rd harmonic from 4765 kHz)
REP	14302	08.50	20	10	RUS		OFDM		2750	OFDM-60
REP	18070	09.47	20	10	CYP		FMCW	50	20k	OTH radar
REP	18080	08.21	04	10	TWN		9k00 A3EGN			Radio Sounds of Hope (with jamming)
REP	18100	13.50	19	10			FMCW	50	20k	OTH
REP	21185	16.10	10	10	MRC		J3E-U			Fishery
REP	28725	11.08	14	10	RUS		F3E			Taxis dispatchers

RSGB – United Kingdom – G4DYA (Richard)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/BW	DETAILS
RSGB	1812.0	2210 1929	02 10	10	RUS		P0N		10K7E	BRAS/RS-10 hyperbolic navigation. Approx 14 sidebands spaced 821 Hz
RSGB	3510.0	2240	23-25	10			J3E			USB repetitive chirp sound
RSGB	5357.3	0720	22	10			J7D		2K70E	USB 5355.5 / CIS-12 primary user
RSGB	7000.0	1711	17	10			J7D		2K70E	USB 6998.0 / CIS-12 obw to 7001.3
RSGB	7016.0	vt	08-11	10	RUS		F1B		250	
RSGB	7022.0	1457	10	10			J7D		2K70E	USB 7020.0 / CIS-12
RSGB	7038.5	ady	dly	10	CZE	OK0EU	A1A			For info: QRP propagation beacon
RSGB	7047.8	1120	25	10			G1D			USB 7046.0 / Stanag 4285
RSGB	7080.0	vt	10, 13, 17, 27 30	10			F1B		200	
RSGB	7122.0	vt	08, 17 21, 24 27-28	10	RUS		F1B		200	
RSGB	7088.0	vt	19, 23-24	10			F1B		200	
RSGB	7137.0	1923	10	10	RUS		F1B		200	
RSGB	7140.02	vt	07, 10,	10	ERI	VoBM1	A3E			BC

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/BW	DETAILS
			11, 17, 20, 25, 29							
RSGB	7146.0	vt	29-31	10	RUS		J7D		2K70E	USB 7144.0 / CIS-12
RSGB	7180.02	vt	04, 07, 10, 17, 20, 25, 27, 29	10	ERI	VoBM2	A3E			BC
RSGB	7186.0	2114	08	10			R7D		3K30E	USB 7184.0 / CIS-12
RSGB	7192.0	2233	23	10			F1B		250	
RSGB	10100.0	1729	27	10			P0N		14K0E	Container OTH radar. 40 sps.
RSGB	10100.8	ady	dly	10	D	DDK9	F1B	50	450	For info: Primary user: WX broadcast
RSGB	14008.0	vt	06-07, 09, 11, 14-15, 17, 20, 23-24	10	RUS		F1B		500	Kiwi TDoA: near Moscow
RSGB	14031.0	1045	22	10			J7D		2K70E	USB 14129.0 / CIS-12
RSGB	14057.0	0940	27	10	CHN		P0N		10K0E	Foghorn OTH radar. ~67 sps.
RSGB	14135.0	0917	01	10			J7D		2K70E	USB 14133.0 / CIS-12
RSGB	14135.0	0949	15	10			F1B		250	
RSGB	14137.0	0900	15	10			J7D		10K0E	USB 14135.0 / CIS-12 + IMD/splatter
RSGB	14160.0	0939	03	10	RUS		F1B		250	Kiwi TDoA: near Moscow
RSGB	14164.0	0923	28	10	CHN		P0N			Foghorn OTH radar. ~67 sps.
RSGB	14168.0	1019	21	10	RUS		P0N		14K0E	Container OTH radar. 40 sps.
RSGB	14235.0	0923	28	10	CHN		P0N			Foghorn OTH radar. ~67 sps.
RSGB	14249.0	0851	05	10			P0N		40K0E	OTH radar 10 sps
RSGB	14323.0	0923	28	10	CHN		P0N			Foghorn OTH radar. ~67 sps.
RSGB	14342.0	0842	15	10	RUS		F1B		250	RR 5.152
RSGB	18107.0	vt	14-15, 17-18, 21-24, 26, 31	10	RUS		F1A/ F1B		200	RR 5.154..
RSGB	21438.0	1010 0916	18 22	10	RUS	RCV	A1A			

RSK – Kenya – 5Z4BV (Kamweti)

Soc	kHz	UTC	dd	mm	ITU	identity	MODE	Shift	Details
RSK	7089,1	v.t.	nr.dly	10	Central Africa?	?	J3E-u		French/vernacular msg net
RSK	7100	v.t.	nr.dly	10	E. Africa	?	PSK	2500	ALE MIL 188-141/STANAG
RSK	7120	v.t.	dly	10	?		A3E		Carrier and weak broadcast; unconfirmed identity
RSK	7122	1223	14	10	E. Africa	?	J3E-u		Kiswahili QSO
RSK	7140	v.t.	dly	10	Eritrea	VOB 1	A3E		Commercial broadcast Voice of the Broad Masses of Eritrea 1
RSK	7163	a.m.	5	10	Ethiopia	?	J3E-l		Amharic systematic reporting
RSK	7180	v.t.	dly	10	Eritrea	VOB 2	A3E		Commercial broadcast Voice of the Broad Masses of Eritrea 2
RSK	7191,5	a.m.	7	10	Western Indian Ocean	?	J3E-u	2500	Sino/Chinese QSO

SRAL – Finland – OH2BLU (Pekka)

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	REMARKS
SRAL	6999.0	1425-1450/	7	10	RUS	UiMUX	PSK2	120	2600	
SRAL	7000.0	1130-1455/	16 22	10	RUS	UiMUX	PSK2	120	2600	
SRAL	7011.8	'0750	10	10		UiCarr	N0N			
SRAL	7013.0	'0750	15	10	RUS	UiMUX	PSK2	120	2600	
SRAL	7015.0	0530-1400	8 24	10	RUS	UiPTR	F1B		200	
SRAL	7015.0	0900-1215	30	10	RUS	RLD	A1A			5F
SRAL	7016.0	0400-1930	*	10	RUS	UiPTR	F1B		250	Days: 8. 9. 10. 11.
SRAL	7018.0	0700-0833/	4	10		UiMUX	PSK2	120	2600	
SRAL	7020A	'0800	17	10		UiPTR	F1B		500	unstable fq
SRAL	7020.0	0945-1045/	4	10	RUS	UiPTR	F1B		250	
SRAL	7022.0	1230-1415/	10 21	10	RUS	UiMUX	PSK2	120	2600	
SRAL	7029.0	1620	10	10	RUS	RLO64	A1A			Calls RMP
SRAL	7035.5	'0505	21	10	RUS	UiMUX	2xPSK2	2x120	2x2600	
SRAL	7044.0	1145-1400	*	10	RUS	UiPTR	F1B/ N0N		250	Days: 6. 8. 15. 24.
SRAL	7047.0	0815-1000	25 26	10	RUS	UiMUX	PSK2	120	2600	
SRAL	7059.0	1215-1335/	*	10	RUS	UiPTR	F1B		250	Days: 12. 14. 15.
SRAL	7060.0	0815-1640/	14 16	10		UiMUX	PSK/ A1A			// 7143 kHz, A1A = dotter
SRAL	7061.0	1310-1400	18	10	RUS	UiMUX	PSK2	120	2600	
SRAL	7088.0	0515-0530	19	10		UiPTR	F1B		200	
SRAL	7115.0	'0725	23	10		UiCW	R2E-u			MR 5F, 830 Hz tone
SRAL	7122.0	/0530-1815/	*	10	RUS	UiPTR	F1B/A		250	Days: 5. 6. 8. 9. 10. 11. 13. 15. - 20. 23. 24. 30. 31. 5F
SRAL	7127.0	0800-1530	*	10	RUS	MWNA etc	A1A			Days: 6. 8. 15. 18. 23. 24. 25. 30. 5F
SRAL	7137.0	1615	23	10	RUS	UiPTR	F1B		200	
SRAL	7140,0	0430-0600	dly	10	ERI	VoBME	A3E			
SRAL	7140,0	1400-1842/	dly	10	ERI	VoBME	A3E			
SRAL	7142.0	0900-1245	18	10	RUS	UiMUX	PSK2	120	2600	
SRAL	7143.0	0830-1640/	14 16	10		UiMUX	PSK			15Hz/ 15kHz bursts
SRAL	7146.0	h24	*	10	RUS	UiMUX	PSK2	120	2600	Days: 29. 30. 31.
SRAL	7160.0	0730-1015	15 16	10	RUS	RBL88	F1A/ A1A		500	Also usb female russ.
SRAL	7160.0	1340	16	10	RUS	UiMUX	PSK2	120	2600	
SRAL	7169.0	0510-0635/	25	10	RUS	UiPTR	F1B		200	
SRAL	7171.0	0520-1100	10	10		UiMUX	PSK2	120	2600	
SRAL	7174.0	0850-1350	11 18	10	RUS	1TWR	A1A			5F, 5BL
SRAL	7180.0	1400-1842/	dly	10	ERI	VoBME	A3E			
SRAL	7186.0	0900-0930	18	10	RUS	UiMUX	PSK2	120	2600	

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	REMARKS
SRAL	7187.8	1110-1315	*	10		UiPTR	F1B		500	Days: 18. 22.
SRAL	7188.0	0930-1250/	*	10	RUS	UiPTR	F1B		250	Days: 16. 20. 24. 30. ship
SRAL	7192.0	1810	9	10	RUS	UiPTR	F1B		250	
SRAL	7198.0	0845-1345/	*	10	RUS/BLR	UiMUX	PSK2	120	2600	TdoA 56.00/36.60
SRAL	7 MHz	0800-1230		10	RUS	Kontainer	FMCW			50Hz/14kHz, days: 7. 21. 23.
SRAL	7 MHz	1145-1345	14	10	CHN	UiOTHR	FMCW			10Hz/ 40kHz
SRAL	10 MHz			10	CYP	UiOTHR	FMCW			25/50Hz, 20kHz, (WebSDR 13d)
SRAL	10 MHz			10	CHN	UiOTHR	FMCW			10Hz/ 10kHz
SRAL	10MHz	0445-1345/	*	10	RUS	Kontainer	FMCW			40Hz/15kHz, days: 14. 26. 27. 28. (WebSDR 7d)
SRAL	14 MHz	0515-1130	*	10	CHN	UiOTHR	FMCW			10Hz/ 40kHz, days: 1. 5. 6. 10. 11. 14. 19. 22. 23. 24. 29.
SRAL	14 MHz	0515-1000	*	10	CHN	UiOTHR	FMCW			67Hz/ 10kHz, days: 8. 15. 17. 20. 21. 22. 24. 29. 30. foghorn
SRAL	14 MHz	0845-1400	*	10	RUS	Kontainer	FMCW			40Hz/ 15kHz, days: 8. 18. 21. (WebSDR 4d)
SRAL	14008.0	0540-1050	*	10	RUS	UiPTR	F1B/NON		500	Days: 7. 8. 17.
SRAL	14102.0	1000	22	10	RUS	UiMUX	PSK2	120	2600	
SRAL	14137.0	'0900	15	10	RUS	UiMUX	PSK2	120	2600	
SRAL	14212.0	1210-1217/		10	UKR	167	R3E-u/NON			
SRAL	14221.0	0430-0600/	*	10	KAZ	UiPTR	F1B		200	Days: 1. - 24.
SRAL	14280.0	'0845	29	10		UiMUX	PSK2	120	2600	
SRAL	14295.2			10	TJK	R Tojikiston	A3E			3f, not heard
SRAL	18 MHz	0515-1130	*	10	CYP	UiOTHR	FMCW			25/50Hz/20kHz, days: 1. 5. 6. 10. 11. 14. 19. 22. 23. 24. 29. (WebSDR 19d)
SRAL	18 MHz	0535-0820	22 26	10	RUS	Kontainer	FMCW			40Hz/15kHz (WebSDR 0d)
SRAL	18080.0	0600-0800	*	10	TWN	Sound of Hope	A3E			CHN jam by BC, days: 5. 11. 12. 14. 15. 16. 17. 19. 20. 23.
SRAL	18107.0	0730-0900	11	10	RUS	RDL	F1A		200	
SRAL	21 MHz	0545-1230	*	10	CYP	UiOTHR	FMCW			25/50Hz/20kHz, days: 8. 15. 17. 20. 21. 22. 24. 29. 30. (WebSDR 22d)
SRAL	21438.0	/0830-1130	*	10	RUS	RCV	A1A			Days: 1. 2. 17. 21. 27.
SRAL	28860.0	0900-0930	10 30	10	IRN	UiOTHR	FMCW			150 & 313Hz / 60 kHz.

URE – Spain – EA6AMM (Gaspar)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
URE	7016	14:00	11	10			F1B		200	
URE	7008	18:45	31	10						ALE
URE	7022	14:00	11	10			PSK2A	120	2600	AT3004-D
URE	7098	05:15	12	10			A3E			
URE	7122	VT	VD	10			F1B		250	
URE	7146	19:25	31	10			PSK2A	120	2600	AT3004-D
URE	10.122	18:24	30	10			G7D		6k	Link-11 CLEW DSB
URE	10,126	20:10	29	10			J3E-U			Unid people talking. Spanish language.

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
URE	10.127	17:46	29	10			J3E-U			Unid people chatting.
URE	14295 USB	08:00	01	10			FMOP		40k	OTH RADar from 14295 to 14335 kHz
URE	18107	07:51	07	10			F1B		200	
URE	14035	17:16	31	10			J3E-U			Unid people talking
URE	14318.5	06:24	08	10			FSK		600	DRPK-FSK600
URE	18068	11:10	25	10			FMOP		20 kHz	OTH Radar 18055 to 18075 kHz

USKA – Switzerland – HB9CET (Peter)

SOC	kHz	UTC	DD	MM	ITU	ID	MODE	BD	SH (BW)	DETAILS
80m, 60m and 30m band for information only										
USKA	3510.0 USB	2203	03	10			XX		ca. 3k	unid Chirps; 450Hz spacing; daily
USKA	3520.0	2241	01	10			G1D	2400	2k7	Stanag 4285
USKA	3525.0 USB	0848	10	10			G1D PSK-8	2400	2k7	LINK 11 SLEW
USKA	3525.0 USB	1009	24	10			DQPSK	14x75	ca. 2k5	LINK 11 CLEW; DSB often
USKA	3527.0	2243	01	10			F1B	50	200	daily
USKA	3532.0	2202	08	10			DQPSK	14x75	ca. 6k1	LINK 11 CLEW; DSB; often
USKA	3548.0 USB	2158	10	10			J7D	12x120	2k7	PSK-2; CIS12; aka AT3004D
USKA	3548.0	2240 2249	29 29	10			F1A F1B	17 wpm 50	200	Letteres and figures often
USKA	3550.8	2221	28	10			G1D PSK8	2400	2k7	MIL 188-110A (D2) mod (Hybrid) preamble 4 tones; PSK4 75Bd 450Hz spacing often
USKA	3552.0	2202	19	10			F1B	75	250	
USKA	3578.0	22129	29	10			G1D	2400	2k7	Stanag 4285
USKA	3581.8	2246	01	10			G1D	2400	2k7	Stanag 4285 almost daily
USKA	3608.0	2207	09	10			F1B	50	200	almost daily
USKA	3610.0	2247 2219	01 27	10			DQPSK	14x75	ca. 6k1	LINK 11 CLEW; DSB often
USKA	3631.0 USB	2106	23	10			G1D PSK8	2400	2k7	MIL 188-110A (D2) mod (Hybrid) preamble 4 tones; PSK4 75Bd 450Hz spacing
USKA	3640.0	1336	20	10		XSS	MFSK8	125	1750	ALE; MIL 188-141A;
USKA	3647.0 USB	2158	10	10			J7D	12x120	2k7	PSK-2; CIS12; aka AT3004D
USKA	3687.0	2158	10	10			J7D	12x120	2k7	PSK-2; CIS12; aka AT3004D; idling
USKA	3715.0	2249	01	10			G1D	2400	2k7	Stanag 4285 almost daily
USKA	3735.0	2140	04	10		123	MFSK8	125	1750	ALE; MIL 188-141A; To: FN01
USKA	3741.5	2223	15	10			F1B	50	200	often
USKA	3745.8	2208	09	10			G1D PSK8	2400	2k7	MIL 188-110A D2 mod (Hybrid); preamble 4 tones; PSK4 75Bd 450Hz spacing
USKA	3750.0	2253	01	10			DQPSK?	2x2400 ?	ca. 5k9	Burst Emission; DSB ; each sideband ca. 2k4 wide
USKA	5360.0 USB	1003	29	10			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D
USKA	5361.8 USB	1749	01	10	DNK		G1D	2400	2k7	STANAG 4285
USKA	6985.0	2216	28	10			FMOP	10 sps	160k	OTHR (6905 - 7065kHz) partially in 40m band
USKA	6999.8	2152	18	10			J7D	12x120	2k7	PSK-2; CIS12; aka AT3004D partially in 40m band
USKA	7000.0 USB	2253	30	10			G1D	2400	2k7	MIL 188-141B App. C BW1
USKA	7000.9	0937	18	10	RUS		OFDM6 0	30.0	ca. 2.76k	PSK4; spacing 44.45Hz; pilotone partially in 40m band
USKA	7016.0	1713	08	10			F1B	75	250	CIS 75/250 almost daily
USKA	7022.0	1003	21	10			J7D	12x120	2k7	CIS12 (idling)
USKA	7024.0	1328	15	10			F1B	75	250	CIS 75/250

SOC	kHz	UTC	DD	MM	ITU	ID	MODE	BD	SH (BW)	DETAILS
USKA	7030.0	2137	04	10			J7D	12x120	2k7	PSK-2; CIS12; aka AT3004D
USKA	7032.0	1013	01	10			J7D	12x120	2k7	PSK-2; CIS12; aka AT3004D
USKA	7039.2	2216	18	10		F	A1A			Vladivostok
USKA	7039.4	2216	18	10		M	A1A			Magadan
USKA	7043.0	2138	30	10			F1B	75	200	
USKA	7047.8	1033	25	10			G1D	2400	2k7	Stanag 4285 600bps/long
USKA	7051.0	1004	09	10			J7D	12x120	2k7	PSK-4; CIS12; aka AT3104D
USKA	7051.0	0731	24	10			F1B	50	200	
USKA	7062.0	1941	21	10	RUS		FMOP	40 sps	ca. 12k	OTHR; Contayner 29B6
USKA	7064.0	0934	02	10			J7D	12x120	2k7	PSK-2; CIS12; aka AT3004D
USKA	7078.0	1300	24	10			J7D	12x120	2k7	PSK-2; CIS12; aka AT3004D
USKA	7080.0	1715	09	10			F1B	50	200	often
USKA	7088.0	1013	19	10			F1B	75	200	often
USKA	7102.0	1944	21	10	RUS		FMOP	40 sps	ca. 12k	OTHR; Contayner 29B6
USKA	7111.0 LSB	2054	23	10			BPSK	30x60Bd	ca. 2k5	Burst system; tone spacing 75 Hz Preamble 4x PSK4 60Bd; spacing 600Hz; Pilotone at 450Hz
USKA	7114.0	1716	09	10			F1B	50	200	
USKA	7114.0	0833	10	10			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D
USKA	7116.0 USB	1931	24	10			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D
USKA	7121.0 LSB	1725	08	10			BPSK	30x60Bd	ca. 2k5	Burst system; tone spacing 75 Hz Preamble 4x PSK4 60Bd; spacing 600Hz; Pilotone at 450Hz
USKA	7121.0	2145	23	10		81100 1	MFSK8	125	1750	ALE; MIL 188-141A
USKA	7122.0	1324 1403	09 15	10 15		RDL	F1B F1A	50	200	often
USKA	7134.0	1732	08	10			F1B	75	200	
USKA	7137.0	2148	09	10			F1B	50	200	CIS 50/200
USKA	7140.0	1527	01	10	ERI	VOB M	A3E		ca. 9k	BC often
USKA	7140.0 USB	0907	18	10			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D
USKA	7144.0 USB	0812	29	10			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D
USKA	7172.0	0944	02	10			FMOP	2.6 sps	30k	OTHR (380ms)
USKA	7176.0	2221	02	10			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D
USKA	7180.0	1525	01	10	ERI	VOB M	A3E		ca. 9k	BC almost daily
USKA	7184.0 USB	09470	18	10			J7D	12x120	2k7	PSK-4; CIS12 aka AT3104D
USKA	7186.0	2153	08	10			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D
USKA	7188.0	0744	24	10			F1B	XX	250	
USKA	7192.0 USB	2057	08	10			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D
USKA	7192.0	1722	09	10			F1B	75	250	CIS 75/250 almost daily
USKA	7197.0	2202	10	10	TUR	123456	MFSK8	125	1750	ALE; MIL 188-141A often
USKA	7198.4	2133	08	10			PSK4	8x75	2250	PRC 4+4 – 8 x 75 Bd; Bursts
USKA	7200.0	0815	02	10	RUS		FMOP	40 sps	ca. 12k	OTHR; Contayner 29B6
USKA	7200.0	1323	07	10			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D
USKA	10110.0	2143	30	10			FMCW	50 sps	20k	OTHR
USKA	10122.0	2147	30	10			DQPSK	14x75	ca. 6k1	LINK 11 CLEW; DSB
USKA	14005. 0	1018	23	10			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D
USKA	14008.0	0908	04	10			F1B	50	500	almost daily
USKA	14029.0	1035	22	10			J7D	12x120	2k7	CIS12
USKA	14047.0	0956	02	10	RUS		FMOP	40 sps	ca. 12k	OTHR; Contayner 29B6
USKA	14052.0	0915	04	10			FMOP	66.66 sps	ca. 10k	OTHR; Foghorn
USKA	14095.0	0849	15	10			FMOP	10 sps	40k	OTHR; long lasting
USKA	14100.0 USB	0916	10	10			OFDM6 0	35.55	ca. 2.79k	PSK4; spacing 44.45Hz; often
USKA	14108.0	1001	02	10	RUS		FMOP	40 sps	ca. 12k	OTHR; Contayner 29B6
USKA	14120.0	0852	15	10			FMOP	10 sps	160k	OTHR
USKA	14133.0	1015	01	10			F1B	75	250	
USKA	14155.0	0932	15	10			FMOP	66.66 sps	ca. 10k	OTHR; Foghorn

SOC	kHz	UTC	DD	MM	ITU	ID	MODE	BD	SH (BW)	DETAILS
USKA	14164.0	0946	28	10			FMOP	66.66 sps	ca. 10k	OTHR; Foghorn
USKA	14165.0	0838	22	10			FMOP	66.66 sps	ca. 10k	OTHR; Foghorn
USKA	14168.0	1028	21	10	RUS		FMOP	40 sps	ca. 12k	OTHR; Contayner 29B6
USKA	14180.0	0901	15	10			FMOP	66.66 sps	ca. 20k	OTHR; Foghorn
USKA	14190.0	1003	15	10	RUS		FMOP	40 sps	ca. 12k	OTHR; Contayner 29B6
USKA	14225.0	0912	15	10			FMOP	66.66 sps	ca. 10k	OTHR; Foghorn
USKA	14240.0	0913	15	10			FMOP	66.66 sps	ca. 10k	OTHR; Foghorn
USKA	14248.0	0927	05	10			FMOP	10 sps	40k	OTHR; long lasting
USKA	14261.0	0805	24	10			R3E		2k0	letters and figures; english
USKA	14264.0	0941	19	10			FMOP	XX	ca. 10k	OTHR; few short bursts only
USKA	14266.0	1008	23	10			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D
USKA	14266.0	0807	24	10			FMOP	XX	ca. 10k	OTHR; few short bursts only
USKA	14300.0 USB	1021	10	10			OFDM6 0	35.55	ca. 2.79k	spacing 44.45Hz; pilottone often
USKA	14300.0 USB	1052	23	10			OFDM7 6	30	ca. 2.8k	spacing 44.45Hz; pilottone
USKA	14301.0	0935	19	10			FMOP	10 sps	160k	OTHR
USKA	14305.0	0940	31	10			FMOP	66.66 sps	ca. 10k	OTHR; Foghorn
USKA	14324.3	1312	09	10			A1A			encrypted; letters and figures
USKA	14325.0	0851	15	10			FMOP	66.66 sps	ca. 10k	OTHR; Foghorn
USKA	14330.0	0919	20	10			FMOP	66.66 sps	ca. 10k	OTHR; Bursts; Foghorn
USKA	14331.0	0904	05	10			FMOP	66.66 sps	10k	OTHR; Bursts; BD 3.8s BRI 45s
USKA	14340.0	0907	15	10			FMOP	10 sps	160k	OTHR
USKA	14340.0	0838	24	10			FMOP	66.66 sps	ca. 10k	OTHR; Bursts; Foghorn
USKA	18060.0	0821	02	10			FMCW	50 sps	20k	OTHR;
USKA	18080.0	0738	23	10	TWN		A3E		ca. 9k	BC: Sound of Hope + Jammer; daily
USKA	18107.0	1523 0941	01 24	10	RUS	RDL	F1B F1A	36/50	200	CIS 36-50; almost daily
USKA	18168.0	0846	22	10	RUS		FMOP	40 sps	ca. 12k	OTHR; Contayner 29B6; partially in 17m band
USKA	18170.0	1120	10	10			FMCW	50 sps	20k	OTHR; partially in 17m band
USKA	21230.0	0954	30	10			FMCW	25 sps	20k	OTHR
USKA	21438.0	1018	01	10	RUS	RCV	A1A			letters + figures daily
USKA	28000.0	0955 0947	05 19	10	IRN		XXX	307 + 870 sps	ca. 45k	OTHR; Bursts; almostdaily
USKA	28198.0	1012	01	10	IRN		XXX	226 + 333 sps	ca. 45k	OTHR; Bursts
USKA	28860.0	1027 0957	01 19	10	IRN		XXX	150 + 313 sps	ca. 45k	OTHR; Bursts; almost daily

Veron – Netherlands – PG1R (Ruud)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SHIFT	DETAILS
VERON	3649,0	1733	09	10		UiPTR	F1B		Ptr
VERON	7016,0	1710	09	10		UiPTR	F1B		Ptr
VERON	7016,0	1410	10	10	RUS	UiPtr	F1B	250	S9
VERON	7055,0	0947	13	10	RUS/UKR		J3E-l		Chaos; 2TX same freq.; S5
VERON	7080,0	1900	07	10	CIS	UiPTR	F1B		Refs/Ptr
VERON	7080,0	1723	09	10	RUS	RDL	F1A		RDL 41318 10861 K
VERON	7080,0	1745	09	10	RUS	RDL	F1A		RDL 64005 47085 K (par 7080/7114)
VERON	7089,0	1850	07	10		UiCW	A1A		5F
VERON	7114,0	1716	09	10	CIS	UiPTR	F1B		Revs/Ptr
VERON	7114,0	1726	09	10	CIS	UiCW	F1A		XXX (followed by F1B Revs/Ptr)
VERON	7114,0	1746	09	10	RUS	RDL	F1A		RDL 64005 47085 K (par 7114/7080)
VERON	7122,0	1728	09	10	CIS	UiPTR	F1B		Revs/Ptr
VERON	7123,0	1123	30	10	RUS	RDL	F1B		RDL XXX F1A 5F
VERON	7146,0	1256	30	10			PSK2		AT3004-D long period Crimea

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SHIFT	DETAILS
									area
VERON	7192,0	1720	09	10	CIS	UiPTR	F1B		Revs/Ptr
VERON	7199,0	1332	30	10			PSK2		AT3004-D Baltic area
VERON	14005,0	0903	14	10	Italy	UiILL	USB		male Italian language
VERON	14008,0	0921	24	10	RUS	UiPtr	F1B	500	Ptr
VERON	14008,0	0950	04	10	RUS	UiPtr	F1B	500	Ptr nr. Moscow
VERON	14118,0	1300	23	10	RUS	UiCAR	NON		carrier
VERON	14133,0	0950	01	10	RUS		PSK		AT3004D nr. Samana
VERON	14160,0	0921	03	10	RUS	UiPtr	F1B	250	Ptr nr. Moscow
VERON	14260,0	0745	24	10		UiCAR			8 channels
VERON	14338,0	0901	16	10	RUS		PSK		AT3004D nr Krasnador
VERON	14350,0	1309	23	10	RUS	OTHR	FMOP		radar, east of Moscow
VERON	18080,0	0738	23	10	TWN	UiBC	A3E		Sound of Hope weak
VERON	18107,0	0852	15	10	RUS	UiPtr	F1B	200	Ptr
VERON	18107,0	0925	16	10	CIS	UiPTR	F1A		XXX (followed by F1B Revs/Ptr)
VERON	18107,0	1010	16	10	RUS	RJY95	F1A		XXX RJY95 59938 61546 WOLOSNO 8452 4104 K
VERON	18107,0	0950	18	10	RUS	RDL	F1A		RDL 54885 32006 K
VERON	18107,0	0905	21	10	RUS	RDL	F1A		RDL 01055 36251 K
VERON	21105,0	1111	27	10		OTHR	FMOP		radar, east of Moscow
VERON	21329,0	1243	27	10		UiRadar	FMOP	25k	OTHR; 25sps
VERON	21438,0	1019	16	10	RUS	RCV	A1A		RIP90 de RCV QTC 297 38 3 1247 297 = Nawip 032 1789
VERON	21438,0	1023	16	10	RUS	RCV	A1A		RIP90 de RCV QTC 293 53 2 1657 293 = Nawarea 033 1103
VERON	21438,0	0930	18	10	RUS	RCV	A1A		RIP90 de RCV QTC 361 43 15 1332 361 = Nawip 1865
VERON	21438,0	0938	18	10	RUS	RCV	A1A		RBE85 de RCV QTC 622 60 12 1345 622 = Nawarea 034 1135
VERON	21438,0	1058	30	10	RUS	RCV	A1A		RIP90 de RCV QTC 376 35 31 1456 376 = Nawarea 032 954
VERON	24966,9	1351	10	10		UiMux		400	pilot tone + 4 channels; PV?
VERON	28105,0	1346	10	10	CIS		F3E		Taxi communication; S3 QSB

The monitoring team of IARU Region 1

credits:

Wavecom Elektronik – Buelach – Switzerland

All our friends and contributors worldwide!

Many thanks for your interest!

compiled and published by DK2OM - November 2019