



International Amateur Radio Union

Region 1



# Monitoring System

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The monthly newsletter for Region 1

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## The 30 members of the IARUMS Region 1 Monitoring Team:



## Acknowledgements

ARAT: 3V8CB – Ahmed ++ ARI: DH7SA – Salvatore ++ ARSK: 5Z4NU - Ted ++ ASTRA: DL1BDF – Mustapha ++ DARC: DK2OM – Wolf ++ 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: SP9BRP – Jan ++ RAL: OD5RI – Riri ++ REF: F5MIU – Francis ++ REP: CT4AN – Jose ++ ROARS: A41MA - Younis ++ RSGB: M0VRR - Vaughan ++ SARL: ZS6NS - James ++ SSAL: OH2BLU - Pekka ++ SYRAL: OH2BLU - Pekka ++ SYSA – Ullmar ++ UBA: ON8IM – Ivan ++ URE: EB1TR - Fabian ++ USKA: HB9CET - Peter ++ VERON: PA2GRU - Dick ++ ZRS: S56ZDB – Darko ++ G3VZV – Graham (satellite) ++ TG9ADV – Jorge (Co-ordinator Region 2) ++ YB3PET – Titon (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 ++ YO9RIJ – Petrica

Part 1: News and infos

Part 2: Detailed reports of the national co-ordinators

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# Part 1: News and Infos

## 1. IARU Region 1 Monitoring System now with 30 members



Obaid Ali Alshamsi – A61DJ – is now the national Coordinator of EARS (Emirates Amateur Radio Society).

Welcome to our Monitoring Team, dear Obaid!



## 2. CT4AN – Jose – reports:

### **ANACOM and Maritime Police inspected 30 boats in Madeira, Douro and Cascais**

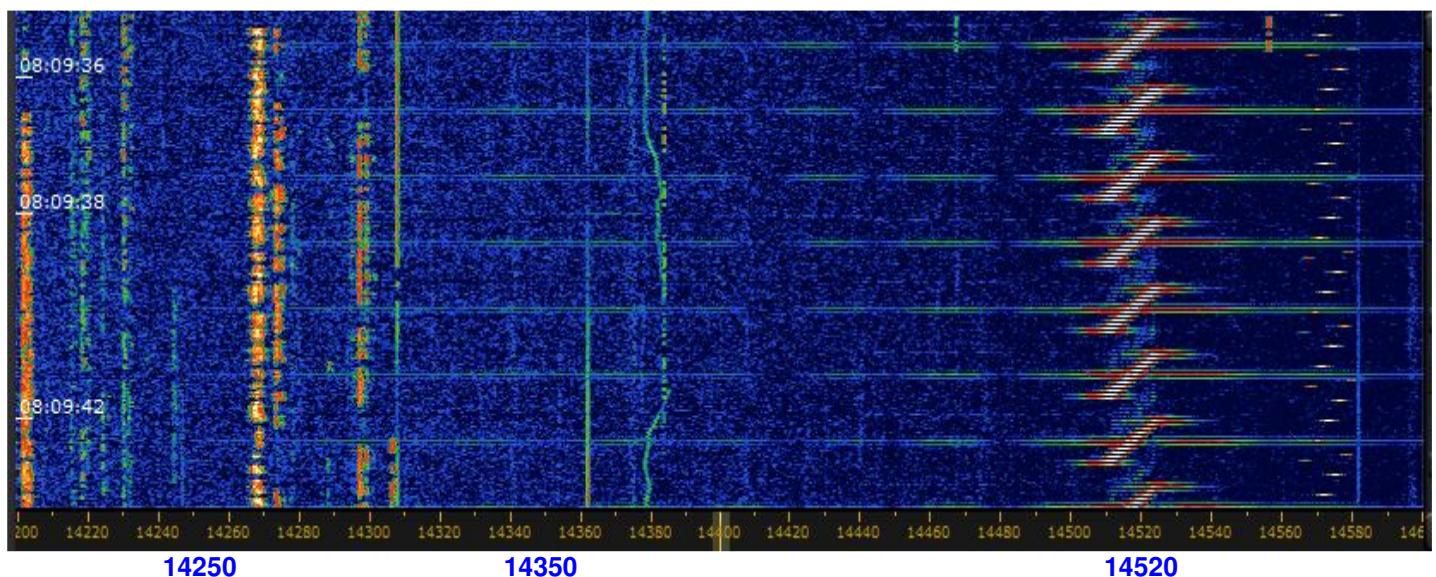
The Portuguese National Communications Authority (ANACOM), in association with the National Maritime Authority (Maritime Police), has been making, since June 1st, several enforcement actions in commercial fishing ports and marinas of the country. The operations took place in Caniçal, Machico and Funchal in Madeira, on the Douro River and held an action in Cascais vessels that were off the coast in full navigation. During these operations were inspected more than 30 fishing vessels, maritime tourism and passenger, have been detected violations, including the use of inadequate equipment or whose channels were running out of the maritime mobile service bands.

These enforcement actions are intended to ensure the proper use of the radio spectrum (frequencies authorized) and the legality of the equipment installed on board vessels, to eliminate / reduce the cases of interference on communications networks installed on land, particularly those which guarantee the activity of the security forces and the air traffic navigation and control communications of which depends all the civil and military aviation. With the completion of these operations is ensured that all radio means, including the relief, are in accordance with the law. The operations are carried out by joint teams of the two Authorities involving 12 enforcement ANACOM agents and 14 of the Maritime Police in total on these actions. Achieving, this type of action has led to a decrease in the number of offenses.

## 3. Russian Radar Contayner with spurious emissions on 14 MHz

The Russian OTH Radar Contayner in Gorodezh was transmitting on 14520 kHz with 50 sps and 13 kHz wide on July 23<sup>rd</sup> at 0800 UTC. The spurious emissions caused awful disturbances down to 14250 kHz.

**Screenshot: DK2OM with Perseus**



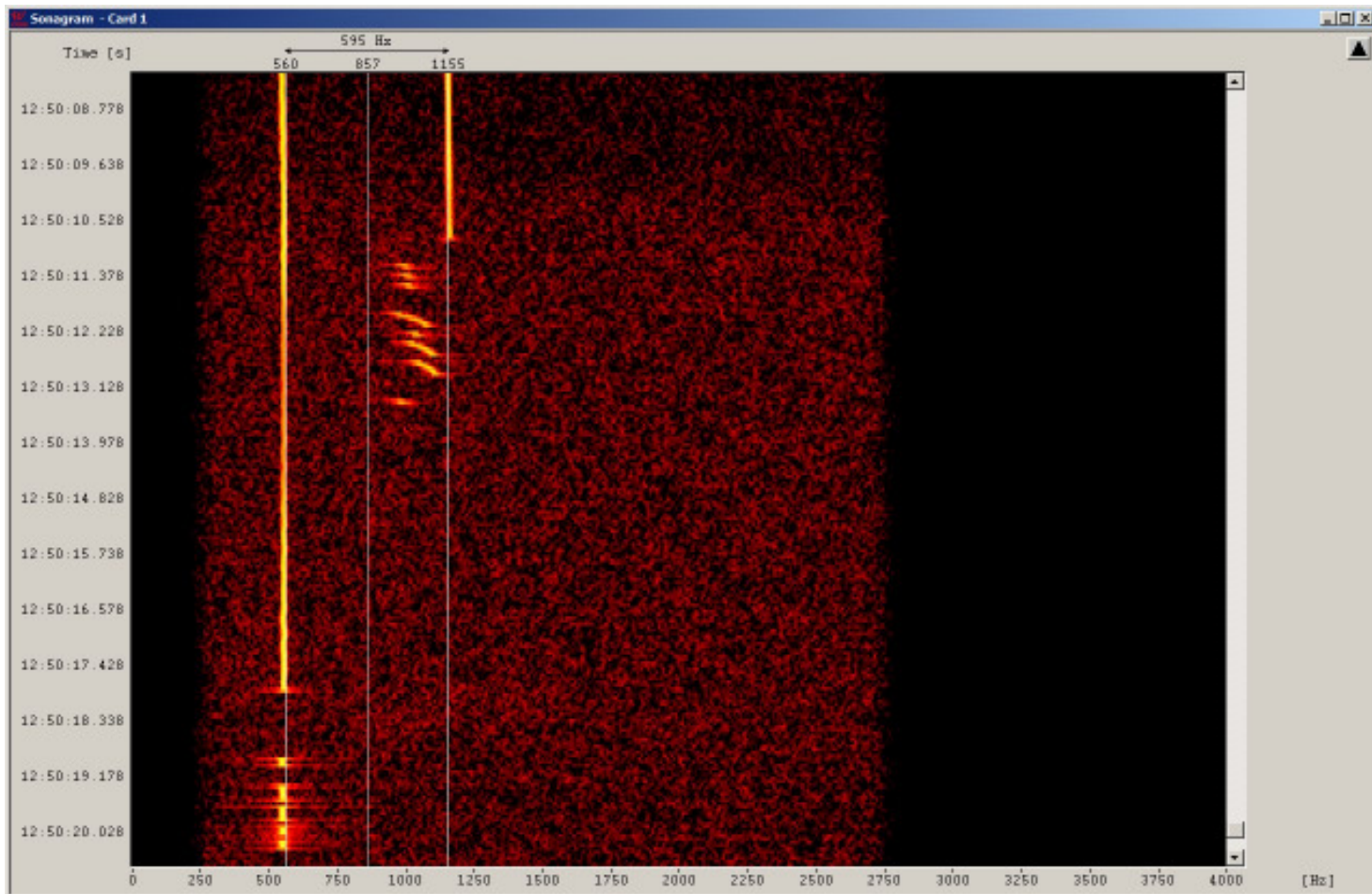


#### 4. Illegal buoys on 28 MHz

Illegal fishery-, GPS- and Datawellwell buoys are still very active on our 10 m-band, of course no change. The screenshot below shows two driftnet buoys on 28040 kHz transmitting carriers and the CW-idents after a short break. Location Atlantic Ocean west of Spain.

Left: buoy "EZ" and right buoy "SYE" - **screenshot DK2OM with Wavcom W-Code**

Please observe the monthly buoy report from DJ7KG: <http://www.iarums-r1.org/iarums/buoys.pdf> and see the entries in my table!



#### 5. Radar Iran on 28960 kHz daily

The Iranian radar was daily transmitting 28960 kHz on FMOP with 150 and 313 sps covering about 50 kHz.

#### 6. CIS taxis on 28 MHz

CIS taxis, mostly from Russia, were daily found on 28000 – 29700 kHz on F3E (= FM) as usual.

#### 7. 14108 – Russian MIL on CW

Russian MIL was often transmitting on CW on 14108.0 kHz with encrypted messages.

#### 8. Mysterious transmissions on 14323.3 USB

We found transmissions on 14323.3 kHz on digital mode RFSM 2400 (bursts) 3300 kHz wide on July 20<sup>th</sup>. Bearings: Baltic region – Many thanks to HB9CET for excellent assistance!

- 9. 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://iaru-r3.org/iaru-region-3-monitoring-system-newsletter/>
- Intruderlogger Region 1 <http://peditio.net/intruder/bluechat.cgi>
- ITU-Monitoring Reports <http://www.itu.int/en/ITU-R/terrestrial/monitoring/Pages/Regular.aspx>

## 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 \*\*\* **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

### ARSK MONITORING OVERVIEW FOR JULY 2016

Radio Hargeisha remained on 7,120 kHz with broadcasts. As usual there were some local or Central African intruders observed on 7,000, 7,074 and 7,075 kHz.

E.H.M. Alleyne, 5Z4NU - ARSK National IARUMS Co-ordinator

#### ARSK – Kenya – 5Z4NU (Ted)

N.A.

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

DG0JBJ (Mario) observed **2** OTH radars on 40 m, **26** OTH radars on 20 m, **17** OTH radars on 17m, **1** OTH radar on 15 m and **1** OTH radar on 10 m in July 2016.

The Iranian radar on 28960 kHz has not been registered. (DK2OM)

#### DARC 2 – 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	1812,0	1830	04	07	RUS		USB LSB			14 tones – hyperbolic radio navigation system – BRAS-3/RS-10 – Kaliningrad – no carrier - daily, all day
DK2OM	1852,0	vt	dly	07	I	IPP	USB			Palermo Radio, weather reports
DK2OM	1855,0	vt	dly	07	I	IQP	USB			San Benedetto Radio, weather reports
DK2OM	1876,0	vt	dly	07	I	IQN	USB			Lampedusa Radio, weather reports
DK2OM	1888,0	vt	dly	07	I	IPD	USB			Civitavecchia Radio, weather reports
DK2OM	1896,5	1945	02	07	D		PSK8	2400	2400	Stanag4285 – 600 bps long – German Navy – daily, all day
DK2OM	1925,0	1919	19	07	I	IPL	USB			Livorno Radio, weather reports
DK2OM	3500,0	---	--	07	F		FMCW		20k	French burst radar, 6 sps, similar Codar sounding, South France
DK2OM	3500,0	vt	dly	07	TUR		FSK8	125	1750	ALE, “2016” “4017” – Turkish Red Crescent – just for info!
DK2OM	3501,0	---	--	07	UKR		FSK8	125	1750	ALE, “H10” “B10” “I10” “D10” “G10”
DK2OM	3503,5	1947	06	07	G	no ITU	FSK8	125	1750	ALE – “XSS” “XPU” “XJR” – British MIL Tascomm – vt, daily - legal!
DK2OM	3503,5	2014	22	07	ISR		PSK4 PSK8	2400 2400	2250 2250	hybrid modem – ISR Navy – PSK4 parallel and PSK8 serial - legal operation

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	3520,0	---	--	07	KAZ		USB			2 women in Russian voice – Kazakhstan - often evenings
DK2OM	3525,0	---	--	07	F		PSK4	75	5800	LINK11-CLEW on both sidebands (5800 Hz wide) – area of Marseille – legal!
DK2OM	3531,0	1906	08	07	RUS	REA4	N0N			unclean carrier - RUS airforce Moscow, ident: 1940 utc - daily
DK2OM	3532,0	1948	01	07	F		PSK4	75	5800	LINK11-CLEW on both sidebands (5800 Hz wide) – area of Brest – legal!
DK2OM	3541,0	2118	01	07			F1B	81	250	
DK2OM	3550,0	0530	dly	07	F		A3E			French amateurs not respecting bandplans - daily
DK2OM	3550,0	vt	vd	07	ALG	no ITU	FSK8	125	1750	ALE, “IU50” “IU52” “FN50”
DK2OM	3553,8	2013	12	07	TUR		PSK8	2400	2400	Stanag4285 – 600 bps long -TUR MIL - Ankara – daily, all day - legal operation
DK2OM	3554,0	1324	17	07	FEa		FMOP		40k	OTH radar – 43 sps – 3554 – 3594kHz – Far East
DK2OM	3576,6	ady	dly	07	I	IZ3DVW	A1A			3576.550 - uncoordinated beacon – disturbing JT65
DK2OM	3580,0	2121	29	07	RUS		PSK2A	120	2600	AT3004D - Kaliningrad
DK2OM	3585,0	1949	09	07	TWN	HLL	F1C		800	WX-fax Taiwan - 120 rpm, IOC 576, - daily, all day - legal!
DK2OM	3586,0	vt	dly	07	G		PSK2A	40	40	encrypted – every evening Great Britain – purpose unknown
DK2OM	3587,0	vt	vd	07	E	no ITU	FSK8	125	1750	ALE, “TVV” “TXX” - Spanish Guardia Civil
DK2OM	3590,0	vt	dly	07	PAK	no ITU	FSK8	125	1750	ALE, “KW” “KHAIBAR” – Pakistan navy
DK2OM	3590,0	1945	13	07	E		USB			Spanish fishery – every evening
DK2OM	3593,7	---	--	07	RUS	D	A1A			Cluster beacon – Sevastopol RUS Navy – “RCV”
DK2OM	3593,8	---	--	07	RUS	P	A1A			Cluster beacon – Kaliningrad RUS Navy – “RMP”
DK2OM	3593,9	---	--	07	RUS	S	A1A			Cluster beacon – Severomorsk RUS Navy – „RIT“
DK2OM	3594,0	---	--	07	RUS	C	A1A			Cluster beacon C - Moscow RUS Navy - “RIW”
DK2OM	3595,0	---	--	07	RUS	K	A1A			Cluster beacon - Petropavlovsk Kamchatskiy - RUS Navy - Pacific fleet - “RCC”
DK2OM	3596,0	vt	dly	07	D		FSK8	125	1750	ALE, “DK0ESD” – just for info!
DK2OM	3596,0	1928	16	07	J		FSK8	125	1750	ALE, “JH1ESB” – just for info!
DK2OM	3617,0	vt	dly	07	HRV	9A5EX	FSK8	125	1750	ALE, “9A5EX” – HAM-ALE - just for info
DK2OM	3622,5	1945	07	07	J	JMH	F1C		800	Tokyo Meteo – 120 rpm – IOC 576 – daily, all day - legal!!!
DK2OM	3637,0	2000	12	07	G		PSK8	2400	2400	Stanag-4285 – 600 bps long – NW North-Sea
DK2OM	3640,0	vt	dly	07	G		FSK8	125	1750	ALE, “XSS” - British MIL Tascomm – just for info!
DK2OM	3642,0	ady	dly	07	CHN		A1A			loop – DKG6 de 3A7D Chinese military – daily, all day
DK2OM	3649,0	vt	vd	07	ALG	no ITU	FSK8	125	1750	ALE, “BI20” PA20”
DK2OM	3658,0	---	--	07	UZB		A1A			beacon “V” - Tashkent
DK2OM	3718,0	vt	vd	07	FEa	7CJK	A1A			loop “7CJK”
DK2OM	3720,0	vt	dly	07	S		FSK8	125	1750	ALE, “YU” “YT” “YV” “DZ” – Swedish MIL
DK2OM	3751,5	vt	dly	07	POL	no ITU	FSK8	125	1750	ALE, “IZ3” “MI3”
DK2OM	3756,0	1915	01	08	RUS		A3E			RUS MIL – channel marker – Tuapse – East Black Sea – night QRG – daily – even audible in Japan
DK2OM	3757,0	ady	dly	07	FEa	RIS9	A1A			“M8JF de RIS9” - loop
DK2OM	3761,5	vt	vd	07	POL	no ITU	FSK8	125	1750	ALE, “NI9” “PL7” “AB2” – Polish MIL

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	3772,0	ady	dly	07	FEa	A4JC	A1A			“A4JC” - loop
DK2OM	3777,0	ady	dly	07	FEa		A1A			“M8JF de RIS9” – loop – dly
DK2OM	3791,0	vt	vd	07	D	DK0ESD	FSK8	125	1750	ALE, “DK0ESD” – daily just for info!
DK2OM	3797,0	ady	dly	07	FEa		A1A			“M8JF de RIS9” – loop
DK2OM	6998,5	vt	dly	07	POL		FSK8 PSK8 USB	125 2400	1750 2400	ALE, “ZE2” “OL1” “GO7” “BU2” “MA3” “SZ4” and MIL-188-110A – until 7001.500 kHz – Polish MIL
DK2OM	7000,0	vt	dly	07	INS		USB LSB			Indonesian pirates – daily – all day - audible in Europe in the evenings
DK2OM	7000,0	1912	03	07	RUS		H3E		3.4 k	buzzer – 1 sec bursts - 118 Hz AF rough sinus – carrier on 6998.0 + upper sideband - with splatters 10 kHz wide – daily, all day - Moscow
DK2OM	7000,0	vt	dly	07	CHN		FSK8	125	1750	ALE, “157” “162”
DK2OM	7000,0	1720	29	07	MRC		USB			Moroccan fishery
DK2OM	7001,5	0700	vd	07	POL		PSK8	2400	2400	RF QRG 6998.5 kHz – 7000.3 kHz center - MIL-188-110A – 600 / 300 bps short – Polish MIL
DK2OM	7001,8	1820	12	07	TUR		PSK8	2400	2400	Stanag-4285 – 600 bps long - Ankara
DK2OM	7005,0	vt	dly	07	INS		USB LSB			Indonesian pirates
DK2OM	7008,0	0530	14	07	RUS		F1B	75	250	Saratov
DK2OM	7010,0	vt	dly	07	INS		USB LSB			Indonesian and Philippine pirates
DK2OM	7010,0	0852	07	07	RUS		PSK2A	120	2600	AT3004D – submode idle and traffic - Kaliningrad
DK2OM	7015,0	vt	dly	07	INS		USB LSB			Indonesian pirates
DK2OM	7016,0	0531	14	07	RUS		F1B	75	250	Moscow
DK2OM	7018,0	---	--	07	RUS	REA4	F1B	100	800	mostly idling – Russian airforce Moscow – ident at full hour + 41 min. on F1A
DK2OM	7018,0	1900	23	07	RUS		PSK2A	120	2600	AT3004D – Ivanovo
DK2OM	7020,0	vt	dly	07	INS		USB LSB			Indonesian pirates
DK2OM	7020,0	---	--	07	ALB		FSK8	125	1750	ALE, “CS004A” “RS008D” “RS0” – Albanian coast - daily
DK2OM	7022,0	0745	18	07	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	7025,0	vt	dly	07	INS		USB LSB			Indonesian pirates
DK2OM	7027,5	1940	31	07	KAZ	„V“	A1A			beacon “V” – Almaty – daily, all day
DK2OM	7030,0	vt	dly	07	INS		LSB			Indonesian pirates
DK2OM	7035,0	vt	dly	07	INS		USB LSB			Indonesian pirates
DK2OM	7039,0	---	--	07	RUS	C	A1A			Cluster beacon C - Moscow RUS Navy - “RIW”
DK2OM	7039,1	---	--	07		A	A1A			beacon “A” - loop
DK2OM	7039,2	---	--	07	RUS	F	A1A			Cluster beacon F - Vladivostok RUS Navy - “RJS”
DK2OM	7039,3	1320	14	07	RUS	K	A1A			Cluster beacon K Petropavlovsk Kamchatskiy - RUS Navy - Pacific fleet - “RCC” - daily
DK2OM	7039,4	1320	14	07	RUS	M	A1A			Cluster beacon M – Magadan RUS Navy – „RTS“ – distorted with spurious emissions
DK2OM	7040,0	vt	dly	07	INS		USB LSB			Indonesian pirates
DK2OM	7040,0	vt	dly	07	F	F6BAZ	FSK8	125	1750	ALE, “F6BAZ” – just for info
DK2OM	7040,0	ady	dly	07	I		A1A			IZ3DVW – uncoordinated and unwanted beacon
DK2OM	7040,5	vt	dly	07	HRV		FSK8	125	1750	ALE, “9A5EX” “9A0ALE” –

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										just for info
DK2OM	7047,37	vt	vd	07	D		FSK8	125	1750	ALE, "DL0NOT" – just for info!
DK2OM	7049,5	vt	vd	07	HRV G F	9A0ALE M1DFO F6BAZ	FSK8	125	1750	Amateur ALE, just for info! daily – various times
DK2OM	<b>7050,0</b>	<b>1945</b>	<b>13</b>	<b>07</b>	<b>RUS UKR</b>		<b>LSB</b>			<b>music transmissions – private war ?</b>
DK2OM	7055,5	vt	vd	07	MEa	no ITU	FSK8	125	1750	ALE, "111" "132" "133" - Kaukasus
DK2OM	7066,0	1608	18	07	FEa		FMCW		32k	Codar like ocean surface radar 2.6 sps – 7066 – 7098 kHz
DK2OM	7070,0	vt	vd	07	GEO	no ITU	FSK8	125	1750	ALE, "MV" "244" "686" "334" "204" "571" – daily active
DK2OM	7078,0	1920	23	07	RUS		PSK2A	120	2600	AT3004D - Kaliningrad
DK2OM	7088,8	---	--	07	S	SL0FRO	A1A			7088.830 kHz - cw-trainee, Sweden - SL0FRO - just for info!
DK2OM	7089,8	---	--	07	TUR CYP		PSK8	2400	2400	Link 11 - SLEW – aircraft – west of Cyprus
DK2OM	7091,5	---	--	07	KAZ	„V“	A1A			loop – ident "V" – Almaty - Kazakhstan
DK2OM	7099,5	vt	dly	07	HRV	9A0ZG	FSK8	125	1750	ALE, "9A0ZG" "9A5EX1P" "9A0OS" – daily - just for info!
DK2OM	7101,8	2100	29	07	G		PSK8	2400	2400	Stanag-4285 – 600 bps – weak in Europe – strong via PY Web- SDR – possibly Falkland Islands
DK2OM	7102,0	vt	dly	07	TWN		FSK8	125	1750	ALE, "BV4AS" – just for info!
DK2OM	7102,0	vt	dly	07	HRV SUI D	9A0MIL	FSK8	125	1750	ALE, "9A0MIL" "9A2KS" "HB9MHB" "9A0ZG" "9A4OS" "DK0ESD" – just for info!
DK2OM	7110,0	vt	dly	07	HRV	9A0ALE	FSK8	125	1750	ALE, "9A0ALE" – just for info
DK2OM	<b>7120,0</b>	<b>vt</b>	<b>dly</b>	<b>07</b>	<b>SOM</b>		<b>A3E</b>		<b>9k</b>	<b>Radio Hargaysa – Somalia – daily – even audible in Australia and Japan</b>
DK2OM	7122,0	---	--	07	FEa	V	A1A			loop "V"
DK2OM	7137,0	vt	dly	07	TWN		FSK8 LSB	125	1750	ALE, "CBIUN" "CBWPC" "CQYTX" "CAPLJ" "CTFOJ" "CEGTO" "CSNYI" "CEIPN" "CRXWT"- Taiwanese navy – daily
DK2OM	7141,0	1317	14	07	RUS		PSK2A	120	2600	AT3004D – Far East Russia
DK2OM	<b>7163,0</b>	---	--	<b>07</b>	<b>UKR</b>		<b>A3E</b>			<b>encrypted MSGs - SZRU in Rivne</b>
DK2OM	7183,0	vt	dly	07	SUI		FSK8	125	1750	ALE, "HB9MHB" – just for info!
DK2OM	7185,5	0740	24	07	D HRV		FSK8	125	1750	ALE, "9A5EX" "DK0ESD" just for info - daily
DK2OM	7197,0	2130	29	07	TUR	no ITU	FSK8	125	1750	ALE, "206102" "318013" "328013" "355013" "365013" "329018" "308013" "331730" "355013" "337013" "381013" "311013" Turkish organisations and Turkish Civil Defense - source: DL8AAM – daily, various times
DK2OM	7198,0	1915	27	07	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	<b>7200,0</b>	---	--	<b>07</b>	<b>MMR</b>		<b>A3E</b>			<b>Myanmar Radio – 0930 – 1500 utc</b>
DK2OM	<b>7200,0</b>	---	--	<b>07</b>	<b>TWN</b>		<b>A3E</b>			<b>Radio Taiwan Int. – 1000 – 1300 utc</b>
DK2OM	<b>7205,0</b>	<b>1920</b>	<b>28</b>	<b>07</b>	<b>IRN</b>		<b>A3E</b>		<b>20k</b>	<b>Voice of Iran with splatters down to 7195 kHz and up to 7215 kHz – 1920 – 1950 utc daily</b>
DK2OM	10100,8	ady	dly	07	D		F1B	50	450	Baudot - German Weatherservice – legal!
DK2OM	10108,0	0748	08	07	RUS		F1B	50	200	Moscow



DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	10110,0	vt	dly	07	SNG	no ITU	FSK8	125	1750	ALE, "CN6" "68" – Singapore Navy - Changi Naval Base
DK2OM	<b>10110,0</b>	<b>---</b>	<b>--</b>	<b>07</b>	<b>TUR</b>		<b>A3E</b>			<b>intermodulation from 9460 and 9785 kHz(2 x 9785 – 9460 = 10110 kHz)</b>
DK2OM	10113,0	vt	vd	07	TUN	no ITU	FSK8	125	1750	ALE, "TUD" "STAT5" "STAT154" – Tunisian MOI
DK2OM	10114,0	vt	dly	07	ALG	no ITU	FSK8	125	1750	ALE, "BSF" "ZEN" "CM2OR2"
DK2OM	10114,8	0740	08	07	RUS		F1B	100	1000	CIS14 – Moscow - daily
DK2OM	10115,0	vt	dly	07	MRC	no ITU	FSK8	125	1750	ALE, "100" "114" "201" "XXZ" – Western Sahara
DK2OM	10116,5	---	--	07	AFS		F7D	54.3	2120	MHF50 – 33 tones - South African navy
DK2OM	10117,0	1606	06	07	RUS		FMCW		13k	OTH radar Contayner - 50 sps Gorodezh – long lasting
DK2OM	10118,0	2008	15	07	RUS		F1B	75	250	Moscow
DK2OM	10120,0	vt	dly	07	ALG	no ITU	FSK8	125	1750	ALE, "CM6" "01012016"
DK2OM	<b>10120,0</b>	<b>---</b>	<b>--</b>	<b>07</b>	<b>IRN</b>		<b>A3E/BC</b>		<b>9k</b>	<b>Voice of Iran - intermod. from 9580 and 9850 kHz – location Zahedan</b>
DK2OM	10123,0	vt	dly	07	ALG	no ITU	FSK8	125	1750	ALE, "CM3" "COF" "BSF" "CM2" "ESA" – Algerian Airforce
DK2OM	10129,0	vt	dly	07	ALG	no ITU	FSK8	125	1750	ALE, "CM1" "CTF" "772"
DK2OM	10130,0	1744	18	07	RUS		FMCW		13k	OTH radar Contayner - 50 sps Gorodezh
DK2OM	10130,0	1855	19	07	F		USB			French amateurs not respecting bandplans
DK2OM	10130,0	1833	31	07	AUS		FMOP		10k	Australian burst radar JORN – 37 sps – 1.8 sec bursts - intro tone – 10125 – 10135 kHz
DK2OM	10131,0	1546	09	07	RUS		F1B	75	250	Irkutsk
DK2OM	10136,0	vt	dly	07	ALG	no ITU	FSK8	125	1750	ALE, "CM3" "BLD" "CNC" "TF2"
DK2OM	10144,0	ady	dly	07	D	DK0WCY	A1A			10144.000 kHz - DK0WCY – German aurora beacon – <b>just for info!</b>
DK2OM	10145,5	vt	dly	07	SUI	HB9MHB	FSK8	125	1750	ALE, "HBMHB" - just for info - daily
DK2OM	10145,5	vt	dly	07	TWN AUS	BV4AS	FSK8	125	1750	ALE, "BV4AS" "VK4SAA" – just for info!
DK2OM	10153,0	1915	16	07	AUS		FMOP		10k	Australian burst radar JORN – 23 sps – 3 sec bursts - intro tone – 10148 – 10158 kHz
DK2OM	13147,0	0900	22	07	RUS		FMCW		13k	OTH radar Contayner on 13147 kHz - 50 sps - Gorodezh splattering over the whole 20 m-band
DK2OM	14000,0	1718	29	07	FEa		USB			pirates from Java Sea - daily
DK2OM	14000,0	2020	01	07	MRC		USB			Moroccan fishery – also 11.07.2016 – 0937 utc
DK2OM	<b>14000,0</b>	<b>1317</b>	<b>07</b>	<b>07</b>	<b>RUS</b>		<b>USB</b>			<b>Russian voice traffic</b>
DK2OM	14000,0	1950	08	07			USB			pirates in Portuguese language
DK2OM	14000,0	1920	19	07	E		USB			pirates in French voice – ship, west of Canary Islands
DK2OM	14006,0	0829	30	07	RUS		PSK2A	120	2600	AT3004D - Kaliningrad
DK2OM	14025,0	0840	13	07	RUS		FMCW		13k	OTH radar Contayner - 50 sps Gorodezh
DK2OM	14026,0	1015	18	07	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	14030,0	1654	21	07	CHN		FSK8	125	1750	ALE, "Y" "473" "853"
DK2OM	14030,0	1335	26	07	RUS		PSK2A	120	2600	AT3004D – Moscow
DK2OM	14050,0	1034	05	07	RUS		F1B	75	250	Chita
DK2OM	14052,0	1019	15	07	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	14064,0	0823	22	07	RUS		F1B	75	200	Novosibirsk
DK2OM	14080,7	0858	14	07	RUS		F1B	75	250	unclean signal - Moscow
DK2OM	14086,0	1354	06	07	RUS		F1B	75	250	Chita



DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	14093,0	0620	14	07	RUS		FMCW		13k	OTH radar Contayner - 50 sps – Gorodezh
DK2OM	14100,0	vt	dly	07	ALG	no ITU	FSK8	125	1750	ALE, “6206” “6204” “6212” “6202” “6203” “6207” “6217” “MTL” “IJ” – Mauritanian border – daily, all day
DK2OM	14100,0	---	--	07	F		FMCW		20k	French OTH burst radar, 6 sps, similar Codar sounding, South France
DK2OM	14108,0	0404	07	07	RUS		A1A			“BXCS de 9KHQ” - RUS MIL area of Moscow – many spurious emissions
DK2OM	14109,0	1513	26	07	TWN	HAM	FSK8	125	1750	ALE, “BV4AS” – just for info!
DK2OM	14109,0	1600	01	08	INS	HAM	FSK8	120	1750	ALE, “YD00XH3” – just for info!
DK2OM	14110,0	2019	14	07	RUS		FMCW		10k	OTH burst radar Contayner - 10 sps - Gorodezh
DK2OM	14110,0	1025	30	07	RUS		FMCW		13k	OTH radar Contayner - 50 sps – Gorodezh – long lasting
DK2OM	14116,0	1025	05	07	RUS		F1B	75	250	Moscow
DK2OM	14116,0	0920	26	07	RUS		F1B	50	250	Moscow
DK2OM	14130,0	1644	16	07	RUS		FMCW		13k	OTH radar Contayner - 50 sps Gorodezh – long lasting
DK2OM	14133,0	1303	19	07	RUS		FMCW		13k	OTH radar Contayner - 50 sps – Gorodezh
DK2OM	14151,3	0904	14	07	RUS		F1B	75	250	unclean signal - Moscow
DK2OM	14160,0	vt	dly	07	MRC		FSK8	125	1750	ALE, “9204” “9228” “9236”
DK2OM	14185,0	1321	28	07	CHN		FMOP		10k	OTH radar – 42 sps – 6 sec bursts
DK2OM	14192,0	vt	dly	07	RUS		F1B	50 75 50 100	500 500 200 500	RUS navy Kaliningrad - daily
DK2OM	14192,0	0922	01	07	RUS		F1B	50	500	RUS navy Kaliningrad – space QRG disturbed by a German amateur with CW dashes – location: area of Wittenberge
DK2OM	14200,0	1235	25	07	RUS		FMCW			OTH radar Contayner - 50 sps Gorodezh – on 14483 with spurious +/- 283 kHz
DK2OM	14201,8	0828	17	07	CHN		PSK2	75	2200	PRC 16 tone modem – USB mode – pilot tone 450 Hz - RF 14200.0 kHz - China – Shanghai - daily
DK2OM	14205,0	vt	dly	07	CHN	no ITU	FSK8	125	1750	ALE, “505” “822”
DK2OM	14213,5	0355	07	07	RUS		OFDM	33.33	2750	OFDM 60 - Irkutsk
DK2OM	14221,0	---	--	07	KGZ		F1B	50	200	CIS-50-50 - Bishkek – daily
DK2OM	14239,0	---	--	07	CHN		PSK4	60	2350	PRC 30 tone modem – LSB mode – LSB QRG – pilot tone 450 Hz
DK2OM	14242,0	0846	23	07	RUS		PSK2A	120	2600	AT3004D – Moscow
DK2OM	14248,6	0857	21	07	RUS		F1B	600	600	DPRK-FSK-600 – DPRK emba Moscow
DK2OM	14250,0	0838	19	07	RUS		FMCW		13k	OTH radar Contayner - 50 sps Gorodezh – on 14593 with spurious +/- 243 kHz
DK2OM	14250,0	0807	23	07	RUS		FMCW		13k	OTH radar Contayner - 50 sps Gorodezh – on 14517 with spurious +/- 267 kHz
DK2OM	14260,0	vt	dly	07	SRB	YU1BI	FSK8	125	1750	ALE, “YU1BI” – just for info!
DK2OM	14272,0	---	--	07	RUS	RCV	A1A			RUS Navy Sevastopol
DK2OM	14295,0	vt	dly	07	SRB	YU1BI	FSK8	125	1750	ALE, “YU1BI” – just for info!
DK2OM	<b>14295,0</b>	<b>1947</b>	<b>22</b>	<b>07</b>	<b>TJK</b>		<b>A3E</b>		<b>9k</b>	<b>3<sup>rd</sup> from Radio Tajik on 4765 kHz – daily, all day</b>
DK2OM	14301,8	---	--	07	CHN		PSK2	75	2200	PRC 16 tone modem – USB mode – pilot tone 450 Hz - RF 14300.0 kHz - China – Shanghai – daily – all day

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	14317,0	1355	21	07	RUS		A1A			encrypted CW - Moscow
DK2OM	14325,1	0945	20	07	NE Europe				3300	14323.3 RF – RFSM 2400 – bursts with intro tones – bearings NE – Baltic region
DK2OM	14330,0	vt	dly	07	TWN		FSK8	125	1750	ALE, “BV4AS” – just for info!
DK2OM	14334,0	vt	vd	07	CHN	no ITU	FSK8	125	1750	ALE, “249” “255” “763”
DK2OM	14340,0	1745	31	07	RUS		PSK2A	120	2600	AT3004D – Vladivostok with spurious emissions +/- 35 kHz and +/- 70 kHz - daily
DK2OM	14344,7	---	--	07	CHN		PSK8	2400	2400	modified MIL-188-110A - 600 bps short – 14344.650 kHz – daily, all day
DK2OM	14345,0	0435	07	07	RUS		PSK2A	120	2600	AT3004D - Vladivostok
DK2OM	14345,5	1030	15	07	RUS		PSK2A	120	2600	AT3004D – Vladivostok
DK2OM	14346,0	1725	14	07	THA	HS0ZEA	A1A			HS0ZEA beacon – 14345.950 kHz - every 5 minutes – daily - just for info!
DK2OM	14346,0	vt	dly	07	POR		FSK8	125	1750	ALE, “CT2IXQ” just for info – various times, daily
DK2OM	14351,7	0856	01	07	E		OFDM PSK4A	30	2700	OFDM 73 + intro tone – HFD+VL - experimental transmissions – Las Palmas – just for info!
DK2OM	18070,0	1243	24	07	TUR		FMCW		20k	OTH radar – 50 and 25 sps - Turkey
DK2OM	18080,0	0600	dly	07	TWN		A3E/BC			Sound of Hope – Taiwan and Chinese BC jammer – daily at 06 utc and later
DK2OM	18080,0	0927	04	07	E		USB			Spanish intruders – “Tenerife cambio...”
DK2OM	18081,7	0938	04	07	E		OFDM PSK4A	30	2700	RF: 18080.0 kHz - OFDM 73 with intro tone – system HFD+VL – University of Las Palmas – Gran Canaria
DK2OM	18100,0	vt	dly	07	MRC	no ITU	FSK8	125	1750	ALE, “A2” “A4” “A5” “A7” “S6” – “C3” “G401” “CD” “09” “G2” “LG6” “G301” “ELJADIDNET4” - daily, various times
DK2OM	18106,0	vt	vd	07	POR	CT2GOY	FSK8	125	1750	ALE, “CT2GOY” – just for info!
DK2OM	18107,0	---	--	07	RUS	RDL	F1B	50	200	CIS-50-200 - Moscow – idle and traffic – Russian navy – various days and times – shared band!
DK2OM	18117,5	vt	vd	07	POR	CT2IXQ	FSK8	125	1750	ALE, “CT2IXQ” – just for info
DK2OM	18140,0	vt	dly	07	SRB	YU1BI	FSK8	125	2600	ALE, “YU1BI” – just for info!
DK2OM	18150,0	---	--	07	RUS		F1B	100	1000	harmonic from 9075 (100 Bd, 500 Hz) - Kaliningrad
DK2OM	21000,0	vt	dly	07	FEa		USB			Far East pirates - daily
DK2OM	21000,0	---	--	07	B		USB			Brazilian pirates – Rio de Janeiro with North Brazil – very often
DK2OM	21000,0	---	--	07	SDN		USB			MFA Sudan – Khartoum with emba Yemen – voice traffic
DK2OM	21000,0	---	--	07	F		FMCW			French OTH burst radar – every 15 minutes – South France
DK2OM	21000,0	1913	20	07	CPV		USB			unid male net – roger beeps Cape Verde
DK2OM	21002,2	---	--	07	SDN	!0000 !9999 !8888	F1B	100	170	21002.15 kHz - Pactor 1 encrypted – MFA Sudan – Khartoum with emba Yemen
DK2OM	21096,0	vt	dly	07	INS	YD00XH	FSK8	125	1750	ALE, “YD00XH3” – daily, various times - just for info!
DK2OM	21131,0	vt	vd	07	CHN	no ITU	FSK8	125	1750	ALE, “A92” “L02” – Chinese diplo
DK2OM	21141,0	---	--	07	GEO		PSK8A	2400	2400	Stanag4538 – GEO MIL with AFG - daily
DK2OM	21145,0	vt	dly	07	MRC	no ITU	FSK8	125	1750	ALE, “B301”, “C3”, “IR4” “T4”

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										“E4” “A2” “CD” “K3” “KB2” “J5” “GS4” “R3” – various times, daily
DK2OM	21145,8	0921	20	07	I	IZ3DVW	A1A			IZ3DVW beacon – 21145,790 kHz – daily, all day - not coordinated with IARU
DK2OM	21160,0	---	--	07	RUS		F1B	100	2000	4th from 5290 kHz (500 Hz shift) – St. Peterburg
DK2OM	21190,0	---	--	07	RUS		F1B	100	1000	harmonic from 10595 kHz - Moscow - daily
DK2OM	21400,0	---	--	07	RUS		F1B	50	2000	harmonic from 5350 kHz – area of Moscow - daily
DK2OM	21403,3	1100	14	07	CHN		PSK4A	75	2250	PRC 4+4 – Chinese ship – area of Djibouti
DK2OM	21409,5	---	--	07	RUS		F1B	100	2000	F1B 100 / 2000 - CIS14 – harmonic from 10704.75 - Jekaterinburg, RUS - daily
DK2OM	21436,0	---	--	07	RUS		PSK2A	120	5200	AT3004D – harmonic from 10718.0 kHz - Sevastopol
DK2OM	21438,0	vt	dly	07	RUS	RCV	A1A			RIP90, RCV, RGX94 - RUS Navy Sevastopol - daily
DK2OM	21446,0	ady	dly	07	THA	HSOZEA	A1A			HSOZEA beacon – every 5 minutes - just for info!
DK2OM	25000,0	ady	dly	07	FIN		A3E			time signal Helsinki – just for info – carrier on 25000 – dots on 25001 and 24999 – daily, all day
DK2OM	28000,0	vt	vd	07	B		A3E			<b>Brazilian CBers – 28000 – 28325 – daily, all day - no change</b>
DK2OM	28000,0	vt	dly	07	CIS		F3E			<b>28000 – 29700 numerous CIS taxi nets – no change</b>
DK2OM	28005,0	1621	12	07	RUS		F3E			RUS taxi
DK2OM	28010,0	---	--	07	POR		F1B	51	300	F1B bursts –west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28020,0	2022	05	07	MRC		USB			Moroccan fishery
DK2OM	28025,0	1416	13	07	POR		F1B	51	300	F1B bursts – 28025.050 kHz - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28030,0	---	--	07	POR		F1B	51	340	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28045,0	---	--	07	POR		F1B	51	280	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28050,0	---	--	07	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28051,5	---	--	07	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28055,0	0755	23	07	RUS		F3E			RUS taxi - daily
DK2OM	28060,0	---	--	07	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28065,1	---	--	07	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28065,4	0841	20	07	GAB		A3E		980	carrier and dots in USB and LSB, bursts every 60 sec – carrier – Gabon – daily and all day
DK2OM	28075,0	---	--	07	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28085,0	1951	09	07	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	28090,1	1926	09	07	POR		F1B	51	320	F1B bursts - 28100.780 kHz - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28100,2	---	--	07	POR		F1B	51	300	F1B bursts - 28100.780 kHz - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28102,1	---	--	07	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28125,0	---	--	07	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28146,0	vt	vd	07	ARG B		FSK8	125	1750	ALE, “LU8EX” “PY2TI” “DL1” – just for info!
DK2OM	28165,0	0833	10	07	RUS		F3E			RUS taxi - daily
DK2OM	28175,0	1742	25	07	RUS		F3E			RUS taxi - daily
DK2OM	28200,0	---	--	07	POR		F1B	51	330	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28205,0	1739	25	07	RUS		F3E			RUS taxi
DK2OM	28215,0	1750	25	07	RUS		F3E			RUS taxi - daily
DK2OM	28224,4	---	--	07	GAB		A3E			carrier and dots +/- 770 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28225,0	1507	25	07	RUS		F3E			RUS taxi
DK2OM	28249,6	1929	01	07	GAB		A3E		1380	carrier and dots +/- 745 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28250,5	1927	08	07	GAB		A3E		1000	carrier and dots +/- 500 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28265,0	0844	23	07	RUS		F3E			RUS taxi - daily
DK2OM	28270,0	1751	25	07	RUS		F3E			RUS taxi
DK2OM	28275,0	1000	05	07	RUS		F3E			RUS taxi
DK2OM	28275,0	0853	20	07	E		A3E			Spanish CBers - daily
DK2OM	28275,1	1931	09	07	AF		F1B	51	320	F1B bursts -Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28295,0	1657	12	07	RUS		F3E			RUS taxi
DK2OM	28312,5	vt	vd	07	POR	CT2IXQ	FSK8	125	1750	ALE. “CT2IXQ” – just for info
DK2OM	28315,0	---	--	07	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28345,1	---	--	07	GAB		A3E		1060	carrier and dots +/- 530 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28435,0	----	--	07	E		F1B	81.9	140	<b>Datawell-buoy “Waverider” – 28435.040 kHz – Costa del Sol – Malaga</b>
DK2OM	28459,8	----	--	07	GAB		A3E		1060	carrier and dots +/- 530 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28459,9	---	--	07	GAB		A3E		1060	carrier and dots +/- 530 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28499,8	---	--	07	MEa		F1B	81.9	140	<b>Datawell-buoy “Waverider” – 28499.875 kHz – Persian Gulf</b>
DK2OM	28701,1	---	--	07	GAB		A3E		1056	carrier and dots +/- 528 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28751,2	---	--	07	GAB		A3E		1080	carrier and dots +/- 540 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28751,3	0854	20	07	GBN		A3E		1040	carrier and dots +/- 520 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28801,5	0859	20	07	GBN		A3E		1090	carrier and dots +/- 545 Hz - bursts every 60 sec – Gabon –



DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										daily and all day
DK2OM	28845,5	---	--	07	GAB		A3E		1060	carrier and dots +/- 530 Hz - bursts every 60 sec - Gabon - daily and all day
DK2OM	28901,1	---	--	07	GAB		A3E		1056	carrier and dots +/- 528 Hz - bursts every 60 sec - Gabon - daily and all day
DK2OM	28960,0	0935	01	07	IRN		FMOP		55k	radar Iran - burst mode - 150 and 313 sps - daily
DK2OM	29114,0	---	--	07	RUS		F1B	100	2000	harmonic from 14557.0 kHz - Moscow
DK2OM	29249,9	1305	13	07	E		F1B	81.9	140	Datawell-buoy "Waverider" - 29249.880 kHz - Spain Fuerteventura - daily, all day
DK2OM	29375,0	---	--	07	I		F1B	81.9	140	Datawell-buoy "Waverider" - 29374.898 kHz - Gallipoli, South Italy - daily, all day
DK2OM	29387,5	---	--	07	IND		F1B	81.9	140	Datawell-buoy "Waverider" - 29387.460 kHz - Indian NW coast, close to Pakistan - daily, all day
DK2OM	29400,0	---	--	07	USA		F1B	81.9	140	Datawell-buoy "Waverider" - 29400.070 kHz - USA north-east coast - NY daily, all day
DK2OM	29450,0	---	--	07	MRC		F1B	81.9	140	Datawell-buoy "Waverider" - 29449.895 kHz - area of El Aaiun - Morocco - daily, all day
DK2OM	29500,0	---	--	07	G		F1B	81.9	140	Datawell-buoy "Waverider" - area of Gibraltar - daily, all day
DK2OM	29525,0	---	--	07	MRC		F1B	81.9	140	Datawell-buoy "Waverider" - 29524.990 kHz - Agadir - Morocco - daily, all day
DK2OM	29625,0	---	--	07	USA		F1B	81.9	140	Datawell-buoy "Waverider" - 29625.024 kHz - USA north-east coast - daily, all day
DK2OM	29685,0	---	--	07	I		VFT		2300	Italian MIL - Brescia
DK2OM	29699,5	---	--	07	I		VFT		1600	Italian MIL - Brescia

### **IRTS – Ireland – EI3GYB (Michael)**

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	DETAILS
IRTS	3535	1345 to 1400	07	07	UK or MM		USB	2 male Scottish fishermen.
IRTS	3536	0735 to 0745 and 1400 to 1440	05	07	UK or MM		USB	Fishermen from Ulster. One is called Mike. Seem to be from the Belfast area. Talk about the EU and "The Free State". Same crowd in the morning and afternoon.
IRTS	3536	1115	07	07	UK or MM		USB	UK fishermen. Ulster accent. One of them is from Belfast. Very good audio. Loud motor noise in the background. Sounds of seagulls all around.
IRTS	3535.5	1740 to 1750	11	07	POR or MM		USB	Portuguese fishermen, 2 male voices.
IRTS	3535.5	1850	11	07	F or MM		USB	French fishermen. 2 males. One had a very good signal with clear audio. Motor noise in the background. The other station is very weak.
IRTS	3545	1210	21	07	F or MM		USB	2 French male fishermen.
IRTS	3560	1900	07	07	POR or MM		USB	2 male Portuguese fishermen. Very strong signals.
IRTS	3569	0825	04	07	F or		USB	2 French fishermen, very loud.

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	DETAILS
					MM			
IRTS	3570	1945 to 2000	06	07	IRL or MM		USB	Irish fishermen, 2 male voices. One is named John, the other Gerald. John has a Galway accent, Gerald is too weak to be understood clearly. "I'll give you a shout when I hear you on Channel 6".
IRTS	3570	1825	16	07	IRL or MM		USB	2 male Irish fishermen. Names: John and Joe. Somewhere SE coast of Eire. Dunmore and Kilmore mentioned.
IRTS	3575	2145 to 2200	26	07	IRL or MM		USB	3 Irish fishermen. Waterford accent. Names Gerry, Mike.
IRTS	3567.8	0225 to 0240	27	07			USB	2 males using a Creole like language with lots of French and Arab words. Probably from the Comoros Islands Republic or Mayotte. Grey line would point towards the area as well.
IRTS	3595	1410 to 1425	11	07	UK or MM		USB	2 UK male fishermen. Ulster accents.
IRTS	3620	2110	06	07	E or MM		USB	2 male Spanish fishermen. 59plus plus signal.
IRTS	3632	0710 to 0802	14	07	UK or MM		USB	Several fishermen in a net. One male, Scottish accent. One other male with Ulster accent. Third one too weak to identify clearly. The sale of the ship "Aloha" (Alora ?) is discussed. Owned by a David Steel ? Isle of Man and Larne mentioned.
IRTS	3641	0850 to 0905	14	07	E or MM		USB	2 male Spanish fishermen.
IRTS	3654	1725	28	07	POR or MM		USB	Portuguese fishermen, 2 male voices. Very strong signals.
IRTS	3688	1358 to 1410	04	07	UK or MM		USB	2 male fishermen. Ulster accent Loud motor noise in the background.
IRTS	3698	1212	21	07	IRL or MM		USB	2 Irish male fishermen. Name: John. "Just signing off for dinner "
IRTS	7050	2145 to 2255.	05	07	UKR /RUS		LSB	Loud music, patriotic songs and propaganda shouting in Russian and Ukrainian. Total chaos created by several stations taking part in the Ukrainian-Russian conflict in Eastern Ukraine. "Fascisti Ukrainskij". Sudden silence at 2255z.
IRTS	7055	1950 to 2100	06	07	UKR /RUS		LSB	Ukrainian- Russian propaganda war like on 7050 kHz yesterday.
IRTS	7055	1125	09	07	UKR /RUS		LSB	Ukrainian- Russo propaganda war already audible this early. Must use high power . Slogans about "fascists" and "revolution".
IRTS	7100	1015 to 1030	23	07	F or MM		USB	Net of 3 French fishermen.
IRTS	7142.5	1740 onwards	28	07			DIGI	Strong digital signals from 7124.5 to 7147.5 kHz. Frequencies not usable.
IRTS	14000	1130 to 1215, on and off.	18	07			USB	Maghreb fishermen, several males. Probably from Morocco. Typical motor noise from several stations. One is called Samir.
IRTS	14175	1820	08	07				Radar from 14175 to 14193 kHz.
IRTS	14192	1650	04	07	RUS		FSK	RUS Navy Kaliningrad. Nearly all day long any day
IRTS	14222	1620	16	07				14222 to 14240 kHz radar. Frequencies not usable.
IRTS	14254	1820	07	07				Radar 14254 to 14290 kHz
IRTS	14265	1655	02	07				Radar from 14265 to 14282 kHz.
IRTS	14344	1115	16	07			Digi	Strong digital signals, probably from a North Korean embassy somewhere in W. Africa.
IRTS	18150	0730	14	07				Very strong radar signals.

### MRASZ – Hungary - HA7PL (Laci)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
MRASZ	3531,0	1938	26	7			OTHR			50 Hz
MRASZ	3537,0	1947	27	7			F1B		200	
MRASZ	3595,0	2004	8	7			USB			russian, female
MRASZ	3599,0	1726	25	7			A1A			"3EAV de WAMC K" 5 letters, cirillic ABC
MRASZ	3600,0	2008	8	7			???			sharp cracks, also on 5393 kHz, hrd: 19
MRASZ	3642,0	1842	12	7			A1A			"DKG7(2x) de 3A7D V" loop
MRASZ	3642,0	1850	19	7			A1A			"DKG7(2x) de 3A7D V" loop
MRASZ	3660,0	1852	19	7			LSB			russian male, numbers
MRASZ	3789,0	1854	19	7			A1A			"81837 59152 82T48"
MRASZ	5362,0	1519	20	7			PSK2			AT3004D just for info
MRASZ	5372,0	1518	20	7			PSK2			AT3004D just for info
MRASZ	7000,0	1702	26	7			LSB			italians, "carissimo Giuseppe"
MRASZ	7000,0	vt	dly	7	RUS		H3E		3,4 k	buzzer
MRASZ	7001,5	1804	12	7	POL		PSK8	2400	2,4 k	
MRASZ	7022,0	1522	17	7	RUS		PSK2			AT3004D
MRASZ	7022,0	1859	19	7	RUS		PSK2			AT3004D
MRASZ	7027,5	vt	dly	7	KAZ	"V"	A1A			beacon "V"
MRASZ	7030,0	0918	24	7			A1A			dash', disturbance
MRASZ	7050,0	vt	dly	7			LSB			russian/ukrainian, chaos, music, curse
MRASZ	7055,0	vt	dly	7			LSB			russian/ukrainian, chaos, music, etc
MRASZ	7120,0	1828	4	7	SOM		A3E			Radio Harg. hrd: 8,10,12,13,17,19,25,26,29
MRASZ	7171,0	1642	10	7			PSK2			AT3004D
MRASZ	7198,0	1939	27	7			PSK2			AT3004D
MRASZ	10101,0	1641	25	7			USB			ui. male
MRASZ	10118,0	0722	24	7			F1B		250	
MRASZ	10120,0	1810	12	7			A3E			ui BC.
MRASZ	10150,0	1812	12	7			USB			unidentified
MRASZ	14008,0	1550	29	7			F1B		200	
MRASZ	14096,0	1837	27	7			OTHR			
MRASZ	14130,0	0734	24	7			OTHR			14120-14140 kHz
MRASZ	14141,8	1817	12	7			A1A			dash's and dott's disturbance
MRASZ	14150,0	1458	30	7			OTHR			14145-14160 kHz
MRASZ	14192,0	1429	17	7	RUS		F1B		500	hrd: 27, 30, RUS Navy, Kaliningrad
MRASZ	14260,0	1824	17	7			OTHR			14250-14270 kHz
MRASZ	14275,0	1840	4	7			OTHR			14265-14285 kHz
MRASZ	14287,5	1804	11	7			OTHR			14280-14295 kHz
MRASZ	14295,0	1812	12	7	TJK		A3E			Radio Tajik, 3rd. Harmonic, hrd:13,17,28
MRASZ	14340,0	1813	12	7			PSK2			AT3004D
MRASZ	28187,5	0748	24	7			OTHR			28175-28200 kHz

### OEVSV – Austria – OE3GSA (Gerd)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
OeVSV	7011.0	0501	14	07		159	J3 E			W X - bedingt wenig, hi

### PZK – Poland – SP9BRP (Jan)

**REF 1 – France – F5MIU (Francis) - F5JBR (Andre)**

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	Baud	Sh /Bw	DETAILS
R.E.F.	7191	1717	14				AM		10kHz	Spanish talking no callsign answer on 7194kHz
R.E.F.	10117	1740	06	07			fmcw		20kHz	OTH radar S9 20 pps
R.E.F.	14000	0751	19				fmcw		20kHz	OTH radar S8, 20 pps
R.E.F.	14130	1713	16				fmcw		20kHz	OTH radar S9+10, 20 pps
R.E.F.	18070	0743	11				fmcw		20kHz	OTH radar S9 20 pps

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REF	3504.0	1443	01	07	RUS	Russian Military	F1B	75	250	Encrypted messages – Frequency enabled for traffic in QYT9 Mode – Qsx on 3676
REF	3526.0	1736	26	07	RUS	Russian Air Defense	CW			318 318 318 11057 and 318 318 318 11057 and 318 318 318 11057
REF	3549.0	1746	26	07	RUS	Russian Military	F1B	75	250	Encrypted messages – Frequency enabled for traffic in QYT9 Mode
REF	3550.0	1451	01	07	RUS	8P3N	CW			8P3N send message for outstation in simplex
REF	3550.0	0822	03	07	RUS	8P3N	CW			8P3N Working 3 outstations (comms checks, Z codes and QTCs) in Simplex
REF	3550.0	0512	16	07	RUS	Russian Military	CIS-12/AT3 004D/USB	120 per channel	2700	Encrypted messages – Traffic in QYT4 Mode
REF	3550.0	1208	19	07	RUS	QOYJ	CW			QOYJ Working 3 outstations (comms checks, Z codes and QTCs) in Simplex
REF	3565.0	0739	03	07	RUS	RBV2	CW			RBV2 Working RFY2 (comms checks) in Duplex – In end traffic send the Z code „ZOR“ en traffic in FSK 50 Bd 500Hz
REF	3565.0	0740	03	07	RUS	RBV2	F1B	50	500	Encrypted messages
REF	3565.0	1240	19	07	RUS	Russian Military	F1B	50	500	Encrypted messages
REF	3567,5	1541	19	07	RUS	KNZA	CW			KNZA Worked 3 outstations (comms checks and QTC : AAAAA 72727) in simplex
REF	3568.0	1734	19	07	RUS	Russian Military	F1B	75	250	Encrypted messages – Frequency enabled for traffic in QYT9 Mode
REF	3578.0	1736	19	07	RUS	Russian Navy	F1B	75	200	Encrypted messages – Frequency enabled for traffic in QYT9 Mode
REF	3584.0	1240	01	07	RUS	FIH6	CW			FIH6 send messages for KGTD in Broadcast : For information : The callsigns FIH6 and KGTD are fixed callsigns(alreay heard on february and march 2016)
REF	3584.0	1800	02	07	RUS	Russian Military	CW			Frequency 8 outstations : comms checks and QTC with the Net station F27N in Duplex – For information the frequency of F27N is 3844 kHz



SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REF	3584.0	1800	03	07	RUS	Russian Military	CW			Frequency 8 outstations : comms checks and QTC with the Net station F27N in Duplex – Validity callsigns : 10 days, change the 1, 11 and 21 of each month - For information the frequency of F27N is 3844 kHz
REF	3584.0	1812	18	07	RUS	Russian Military	CW			Frequency 8 outstations : comms checks and QTC with the Net station FNQ9 in Duplex – Validity callsigns : 10 days, change the 1, 11 and 21 of each month - For information the frequency of FNQ9 is 3844 kHz
REF	3584.0	1801	19	07	RUS	Russian Military	CW			Frequency 8 outstations : comms checks and QTC with the Net station FNQ9 in Duplex – Validity callsigns : 10 days, change the 1, 11 and 21 of each month - For information the frequency of FNQ9 is 3844 kHz
REF	3584.0	1801	28	07	RUS	Russian Military	CW			Frequency 8 outstations : comms checks and QTC with the Net station S42F in Duplex – Validity callsigns : 10 days, change the 1, 11 and 21 of each month - For information the frequency of S42F is on 3844 kHz
REF	3589,5	1737	02	07	RUS	3OT7	F1B			3OT7 Working 9JWU (comms checks and QTC : current message send the code "QJB1" then continues the message Bd FSK 50 250 Hz) in Duplex
REF	3589,5	1737	02	07	RUS	3OT7	F1B	50	250	Encrypted messages
REF	3589,5	0504	03	07	RUS	3OT7	F1B			3OT7 Working 9JWU (comms checks) in Duplex
REF	3594.0	1824	29	07	RUS	RKN64	CW			RKN64 Worked RMP (comms checks and QTCs) in Duplex
REF	3594,5	0531	04	07	RUS	RJD99	CW			RJD99 Worked RBC89 RBE99 RAS82 (comms checks and QTCs) in Duplex – For information the Qsx in on 4537.5 kHz
REF	3595.0	0501	01	07	RUS	Russian Air Defense	USB			Tracking in Russian Voice
REF	3595.0	0515	04	07	RUS	Russian Air Defense	USB			Tracking in Russian Voice
REF	3595.0	0411	05	07	RUS	Russian Air Defense	USB			Tracking in Russian Voice
REF	3595.0	0438	12	07	RUS	Russian Air Defense	USB			Tracking in Russian Voice
REF	3594.5	1801	02	07	RUS	RJD99	CW			RJD99 Worked RBC89 RBE99 RAS82 (comms checks and QTCs) in Duplex – For information the Qsx in on 4537.5 kHz
REF	3599.0	1704	03	07	RUS	BTOM	CW			BTOM working 11 outstations (comms checks and QTCs) in Duplex – For information Qsx on

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
										3211 kHz
REF	3599.0	1711	09	07	RUS	4IBP	CW			4IBP working 11 outstations (comms checks and QTCs) in Duplex – For information Qsx on 3211 kHz
REF	3599.0	1731	30	07	RUS	AAWH	CW			AAWH working 11 outstations (comms checks and QTCs) in Duplex – For information Qsx on 3211 kHz
REF	3608.0	0556	02	07	RUS	Russian Navy	F1B	50	200	Encrypted messages – traffic to nuclear forces
REF	3608.0	0540	04	07	RUS	Russian Navy	F1B	50	200	Encrypted messages – traffic to nuclear forces
REF	3608.0	0435	23	07	RUS	Russian Navy	F1B	50	200	Encrypted messages – traffic to nuclear forces
REF	3608.0	0451	30	07	RUS	Russian Navy	F1B	50	200	Encrypted messages – traffic to nuclear forces
REF	3642.0	1703	02	07	CHN	3A7D	CW			loop – DKG6 de 3A7D - Chinese military
REF	3650.0	1710	28	07	RUS	Russian Military	F1B	100	500	Encrypted messages
REF	3670.0	1406	02	07	RUS	Russian Military	CIS-12/AT3 004D/USB	120 per channel	2700	Encrypted messages – Traffic in QYT4 Mode
REF	3676.0	1446	01	07	RUS	Russian Military	F1B	75	250	Encrypted messages – Frequency enabled for traffic in QYT9 Mode – Qsx on 3504
REF	3703.0	1645	28	07	RUS	NOKL	CW			NOKL worked 11 outstations ( comms checks, messages and Z codes for trafic in numeric mode) in Duplex : – For information : outstations on 4638 kHz and same transmission for NET Station on 4213.5 kHz
REF	3700.5	1737	28	07	RUS	Russian Air Defense	CW			Tracking – Reports : 9700 996029936 9705 996065136 009799 99698332038 ...
REF	3703.5	1703	29	07	RUS	Russian Military	CIS-12/AT3 004D/USB	120 per channel	2700	Encrypted messages – Traffic in QYT4 Mode
REF	3709.0	1805	26	07	RUS	AMAN	CW			AMAN Worked 3 outstations (comms checks and QTCs) in Simplex
REF	3713.0	0814	21	07	RUS	TNKN	CW			TNKN worked 6 outstations (comms checks and QTCs : AAAAA) in Simplex
REF	3714.0	1717	02	07	RUS	RMP	CW			RMP send QTCs (SML) for REO and outstations
REF	3714.0	1732	12	07	RUS	RMP	CW			RMP send QTCs (SML) for REO and outstations
REF	3714.0	1755	26	07	RUS	RMP	CW			RMP send QTCs (SML) for REO and outstations

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REF	3738.0	1740	29	07	RUS	Russian Military	CIS-12/AT3 004D/USB	120 per channel	2700	Encrypted messages – Traffic in QYT4 Mode
REF	3740.0	0513	04	07	RUS	RUA41	F1B	100	500	RUA41 answers the call of RUU76 (frequency: 3300 kHz) and send the code ZHC. Then transmission in FSK 100 Bd 500 Hz
REF	3740.0	0511	18	07	RUS	RUA41	F1B	100	500	RUA41 answers the call of RUU76 (frequency: 3300 kHz) and send the code ZHC. Then transmission in FSK 100 Bd 500 Hz
REF	3741,5	1801	22	07	RUS	3AWM	CW			3AWM working 7 outstations in Duplex : This network also uses the Cyrillic letters (Â Ô Û É Ch) in callsigns
REF	3756.0	1449	01	07	RUS	Russian Navy	F1B	75	200	Encrypted messages – traffic in QYT9 Mode
REF	3756.0	1819	12	07	RUS	VESTNIK	USB			VESTNIK (USB Callsign from RMP) calling MAMAMIAN (USB callsign from RLD63) in Duplex – For information Qsx on 5456 kHz
REF	3762	1757	28	07	RUS	Russian Military	CIS-12/AT3 004D/USB	120 per channel	2700	Encrypted messages – Traffic in QYT4 Mode
REF	3765.0	0623	01	07	RUS	RMRV	CW			RMRV worked RJC66 in Simplex : Frequency activated for Traffic in QRR3 mode : QRR3 mode is automatic telegraphy
REF	3765.0	0440	03	07	RUS	VESTNIK	USB			VESTNIK (USB Callsign from RMP) calling DEDUKTSIYA (USB callsign from RLD64) in Duplex
REF	3765.0	1718	12	07	RUS	Russian Navy	CIS-12/AT3 004D/USB	120 per channel	2700	Encrypted messages – Traffic in QYT4 Mode
REF	3765.0	0442	23	07	RUS	Russian Navy	CIS-12/AT3 004D/USB	120 per channel	2700	Encrypted messages – Traffic in QYT4 Mode
REF	3772.0	0403	05	07	RUS	Russian Navy	F1B	50	200	Encrypted messages – traffic to nuclear forces
REF	3772.0	0440	23	07	RUS	Russian Navy	F1B	50	200	Encrypted messages – traffic to nuclear forces
REF	3772.0	0420	24	07	RUS	Russian Navy	F1B	50	200	Encrypted messages – traffic to nuclear forces
REF	3789.0	1804	26	07	RUS	7CMO	CW			7CMO worked 3 outstations (comms checks) in Simplex
REF	3799,5	1822	19	07	RUS	RJD99	CW			RJD99 worked RAS82 RBE99 RHP86 (comms checks and QTCs) in Duplex – For information Qsx on 4576.5 kHz
REF	3799,5	1802	23	07	RUS	RJD99	CW			RJD99 worked RMB81 (comms checks and QTCs) in Duplex – For information Qsx on 4576.5 kHz
REF	7020.0	0514	17	07	RUS	Russian Military	CIS-12/AT3	120 per	2700	Encrypted messages – Traffic in QYT4 Mode

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
							004D/ USB	chann el		
REF	7076.0	1242	23	07	RUS	Russian Military	CIS- 12/AT3 004D/ USB	120 per chann el	2700	Encrypted messages – Traffic in QYT4 Mode
REF	7076.0	0428	24	07	RUS	Russian Military	CIS- 12/AT3 004D/ USB	120 per chann el	2700	Encrypted messages – Traffic in QYT4 Mode
REF	7108.0	1231	27	07	RUS	Russian Navy	F1B	100	250	Encrypted messages
REF	14028.0	1330	26	07	RUS	Russian Military	CIS- 12/AT3 004D/ USB	120 per chann el	2700	Encrypted messages – Traffic in QYT4 Mode

### REP – Portugal – CT4AN (Jose Francisco)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REP	3517	19.25	14	07	E		J3E-L			Spanish fishery
REP	3520	20.30	06	07	MRC		J3E-U			Fishermen discussing
REP	3535	21.30	28	07			J3E-U			Unid language ops
REP	3560	08.25	13	07	E		J3E-U			Spanish fishery
REP	3575	22.02	23	07			J3E-U			Unid language fishery
REP	3635	20.30	02	07			PSK8			Unid Mil STANAG 4285
REP	3640	21.29	13	07	E		J3E-U			Fishermen
REP	3640	20.43	02	07	G	XSS	MFSK			British Mil Tascom
REP	3744	07.28	15	07	E		J3E-U			Spanish fishery
REP	7018	21.38	23	07	RUS		BPSK	120	x12	AT3004D, Russia Mil
REP	7027	18.11	09	07	RUS		FMCW	15k	50	OTH radar
REP	7027	20.41	05	07	KAZ	V	A1A			ALMATY, ADY, DLY
REP	7039	22.25	03	07	RUS	M	A1A			MAGADAN, ADY, DLY
REP	7055	16.44	04	07	RUS UKR		J3E-L			Unid intruders, DLY Musics, kids crying and talking, abuses
REP	7078	21.57	23	07	RUS	AT3004D	BPSK	120	x12	Russia Mil
REP	7120	18.26	20	07	SOM		8k00 A3EGN			Radio Hargaysa broadcasting
REP	10117	17.02	06	07			FMCW	50	17k	OTH radar
REP	10130	14.18	21	07			J3E-U			Unid French speakers
REP	10140	20.11	26	07			FMCW			OTH radar
REP	10140	19.12	14	07	MRC		J3E-U			Moroccan fishery
REP	10145	10.01	06	07	E		J3E-U			Spanish fishery
REP	14005	10.10	17	07			F1B	300	425	RY RY RY
REP	14050	10.00	04	07	E		J3E-U			Spanish fishery
REP	14050	19.53	23	07			J3E-U			South/Central American fishery
REP	14075	15.15	25	07			FMCW	20k	50	OTH radar
REP	14113	20.58	03	07			FMCW			Busrt mode OTH radar
REP	14134	17.04	06	07			FMCW		10k	Burst mode OTH radar
REP	14140	19.23	10	07	RUS		F1B	75	400	Navy in Kaliningrad
REP	14150	11.00	01	07			FMCW			OTH radar
REP	14164	19.01	14	07			FMCW		12k	OTH radar, burst mode
REP	14283	10.23	15	07			FMCW	20	10k	OTH radar
REP	14314	19.04	14	07			FMCW		12k	OTH radar, burst mode
REP	18080	09.50	04	07	E	HFD VL	OFDM			Las Palmas – Canary Islands
REP	21110	13.03	19	07	E		J3E-U			Fishermen
REP	24925	14.37	21	07			FMCW			OTH radar 10kHz 20sps
REP	28040	10.48	26	07		SYE	A1A			Fishing drift net SYE
REP	28050	14.25	17	07	E		F1B	51	280	Enagal / SERPE GPS buoy cluster
REP	28065	10.08	20	07	E		F1B	51	280	Enagal / SERPE GPS buoy cluster
REP	28102	19.00	14	07	E		F1B	51	280	Enagal / SERPE GPS buoy cluster
REP	28120	10.52	26	07		SYE	A1A			Fishing drift net SYE
REP	28195	18.40	07	07	B		F3E			Brazilian CB'ers FM mode
REP	28255	18.39	07	07	B		A3E			Brazilian CB'ers
REP	28275	09.23	18	07		DM	A1A			Fishing drift net DM - daily
REP	28325	14.12	14	07	RUS		F3E			YL taxi dispatcher DLY
REP	28350	15.04	08	07	B		A3E			Brazilian truckers



SOC	KHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REP	28556	12.34	26	07			J3E-U			Unid language fishery
REP	29045	12.05	14	07	RUS		F3E			Russian taxis
REP	29125	11.55	14	07	RUS		F3E			Russian taxi dispatcher
REP	29250	17.14	12	07			F1B	82,2	140	Datawell Waverider GPS buoy
REP	29250	09.13	18	07			F1B	82,2	140	Datawell Waverider buoy - daily
REP	29500	09.12	18	07			F1B	82,2	140	Datawell Waverider buoy - daily
REP	29625	13.14	14	07			F1B			Datawell buoy

## RSGB - Great Britain – M0VRR (Vaughan)

## SRAL – Finland – OH2BLU (Pekka)

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	REMARKS
SRAL	6998,0	0200-1930	dly	7	RUS	UiTone	R3E			125 Hz tones
SRAL	7000,8	1920	12.	7	ROU	STANAG				
SRAL	7006,5	0840-1135	*	7		UiPTR	F1A/NON		250	Days: 2. 27. 31.
SRAL	7008,0	0415-1200	*	7		UiPTR	F1B		250	Days: 3. 14. 19.
SRAL	7008,0	1240	27.	7		UiMUX	PSK2	120	2600	
SRAL	7010,0	0830-0948/	7.	7		UiMUX	PSK2	120	2600	
SRAL	7013,0	1840	12.	7		UiMUX	PSK2	120	2600	
SRAL	7016,0	0515-1230	14.	7		UiPTR	F1B		250	
SRAL	7018,6	0920-1930	*	7		UiCarr	N0N			Also F1A 250 Hz, days: 12. 13. 17. 18.
SRAL	7020,0	0740	20.	7		UiPTR	F1B		250	
SRAL	7022,0	h24	*	7	RUS	UiMUX	PSK2	120	2600	Days: 17. – 20. 24.
SRAL	7025,0	0815-1445	3. 5.	7		UiPTR	F1B		200	
SRAL	7027,5	/1400-0200	dly	7	UZB	V	A1A			
SRAL	7034,0	1645-1730/	6. 20.	7		UiPTR	F1B			
SRAL	7035,5	1020-1725	22. 30.	7		UiMUX	PSK2	120	2600	
SRAL	7039,0	0715-1530	*	7	RUS	C	A1A			Moscow, days: 2. 10. 14. 20. 23. 27. - 31.
SRAL	7039,5	0810-1930	*	7		UiCW	A1A			Hand keying “T T...”, days: 1. 2. 6. 10. 12. 14. 23. 27.
SRAL	7058,0	h24	*	7		UiCarr	N0N			Days: 22. – 31. Random breaks
SRAL	7059,0	1015	27.	7		UiMUX	PSK2	120	2600	
SRAL	7072,0	1430	27.	7		UiMUX	PSK2	120	2600	
SRAL	7078,0	0530-2400	*	7		UiMUX	PSK2	120	2600	Days: 21. 23. 24. 27. 29.
SRAL	7088,0	0300-0430	3.	7		UiCarr	N0N			
SRAL	7108,0	1210-1430	27.	7		UiPTR	F1B			
SRAL	7108,6	1755	5.	7		UiCarr	N0N			
SRAL	7118,0	1150-1315/	4. 21.	7		UiMUX	PSK2	120	2600	
SRAL	7120,0	0330-0430/	dly	7	SOM	R.Hargeis a	A3E			
SRAL	7120,0	/1900-2100/	*	7	SOM	R.Hargeis a	A3E			Days: 1. – 4. 6.
SRAL	7122,0	1400-1930	*	7	UZB	V	A1A			Days: 6. 17. 18. 20.
SRAL	7124,0	0920	27.	7	RUS	UiMUX	PSK2	120	2600	
SRAL	7152,0	1045-1130	25.	7		UiMUX	PSK2	120	2600	
SRAL	7158,0	0500-0520	15.	7		UiPTR	F1B		250	

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	REMARKS
SRAL	7160,0	0415-0900	7. 20.	7	RUS	RMW32	A1A			5F, 5BL
SRAL	7162,0	0855-1405/	22.	7		UiPTR	F1A/B		250	
SRAL	7169,0	1340-1405/	11.	7		UiPTR	F1B		250	
SRAL	7171,0	0745-1600	*	7		UiMUX	PSK2	120	2600	Days: 8. 9. 11.
SRAL	7178,0	0830	6.	7		UiMUX	PSK2	120	2600	
SRAL	7180,3	1130-1215	6.	7		UiCarr	N0N			
SRAL	7181,6	0430-1530	3. 29.	7		UiCarr	N0N			
SRAL	7198,0	1855-1920	27.	7		UiMUX	PSK2	120	2600	
SRAL	7200,0	/1000-1300/	dly	7	CHN	CNR1	A3E			Used as jammer on TWN
SRAL	7200,0	1300-1500/	dly	7	MMR	R Myanmar	A3E			
SRAL	7200,0	2305	20.	7		UiBC	A3E			
SRAL	7 MHz	2030-0300	7. 8.	7	RUS	29B6	FMCW			50Hz / 15 kHz
SRAL	10 MHz			7	RUS	29B6	FMCW			50Hz / 15 kHz (WebSDR 7 days)
SRAL	14000,0	1105	2.	7	ISR	UiCarr	N0N			
SRAL	14008,0	1015-1415	*	7	RUS	UiPTR	F1B		250	Days: 4. 10. 11.
SRAL	14011,0	1035-1220	26.	7		QFH9	A1A			
SRAL	14015,0	1040-1345	23.	7		UiCarr	N0N			
SRAL	14026,0	1150-1305	23.	7		UiMUX	PSK2	120	2600	
SRAL	14108,0	0550-1200	*	7	RUS	UiCW	A1A			MR 5F 5BL, days: 5. 6. 13. 20. 23. 26. 31.
SRAL	14116,0	0800-1400	*	7	RUS	UiPTR	F1B		250	Days: 5. 11. 14. 26.
SRAL	14118,0	0830-0955	7.	7		C1VY	A1A			
SRAL	14141,0	0900-1000/	4.	7		UiPTR	F1B		500	
SRAL	14150,5	1005-1150	14.	7		UiPTR	F1B		250	
SRAL	14185,5	0920	14.	7		UiPTR	F1B		500	
SRAL	14192,0	0630-1500	*	7	RUS	UiPTR	F1B		500/200	Days: 1. – 6. 20. 23. 30.
SRAL	14211,0	1225	14.	7		UiPTR	F1B			
SRAL	14221,0	0130-0600	dly	7	KGZ	UiPTR	F1B		200	
SRAL	14295,0	0200-1930	dly	7	TJK	R Tojikiston	A3E			3f 4765,00 kHz, Yangiyul TX
SRAL	14339,0	1010	20.	7		UIMUX	PSK2	120	2600	
SRAL	14 MHz	0530-1400	*	7	RUS	29B6	FMCW			50Hz / 15 kHz, days: 3. 4. 8. 14. 18. 19. 24. 26. 30.
SRAL	14 MHz	0545-1430	*	7	RUS	UiOTHR	FMCW			10Hz / 15 kHz, 30 sec transmit with 16 min cycle, days: 3. 5. 7. 22. (WebSDR daily)
SRAL	18 MHz	1310-1400	27.	7	CYP / TUR	UiOTHR	FMCW			25/50Hz / 20 kHz (WebSDR 6 days)
SRAL	21 MHz			7	CYP / TUR	UiOTHR	FMCW			25/50Hz / 20 kHz
SRAL	21438,0	0830-1300	*	7	RUS	RCV	A1A			Days: 2. 10. 14. 20. 23. 31.
SRAL	28160,0	1030-1300	27.	7	IRN	UiOTHR	FMCW			307 & 870 Hz / 60 kHz – 300 kHz
SRAL	28960,0	0530-1900	*	7	IRN	UiOTHR	FMCW			150 & 313 Hz / 60 kHz , days: 1. - 7. 10. 11. 12. 14. 20. 21. 23.

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	REMARKS
										25. 27. 29. 31.
SRAL	28 MHz			7		UiOTHR	FMCW			25/50Hz / 20 kHz, no reports
SRAL	28 MHz	0600-1900	*	7	RUS	Taxi disp.	F3E			Days: 1. - 7. 10. - 13. 21. 23. 25. 27. 30. 100 reports

### USKA – Switzerland – HB9CET (Peter)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
<b>80m band informational only! Primary allocation but shared with other also primary allocated services !</b>										
USKA	3501.8	2110	14	07			PSK8	2400	~2k7	STANAG 4285
USKA	3503.5	2217	21	07			PSK8	2400	~2k7	MIL188-110A mod (Hybrid) preamble 4 tones, 450Hz spacing
USKA	3524.0	1923	14	07			F1B	75	250	often
USKA	3527.0	2049	05	07			F1B	50	200	almost daily
USKA	3532.0	2209	21	07			DQPSK	14x75	5k9	LINK 11 CLEW; often (STANAG 5511) DSB or ISB mode
USKA	3549.0 VFO USB	2053	19	07			PSK8	2400	~2k7	MIL188-110A (Hybrid), almost daily preamble 4 tones, 450Hz spacing
USKA	3553.8	2214	02	07			G1D	2400	~2k4	Stanag 4285; PSK8 almost daily
USKA	3568.0	2304	29	07			F1B	75	200	
USKA	3569.0	2203	02	07			F1B	50	200	often
USKA	3570.5	2257	27	07			F1B	40.5 + 81	250	sometimes also short F1A
USKA	3578.0	1920	14	07			F1B	75	200	often
USKA	3584.5	2029	26	07			J7D	12x120	2k7	BPSK; CIS12
USKA	3608.0	2254	03	07			F1B	50	200	almost daily
USKA	3614.0	2055	05	07			J7D	12x120	2k7	BPSK; CIS12
USKA	3618.0	2052	05	07			J7D	12x120	2k7	BPSK; CIS12
USKA	3637.0	2206	02	07			PSK8	2400	~2k7	STANAG 4285; often
USKA	3644.5	2224	21	07			J7D	12x120	2k7	BPSK; CIS12
USKA	3662.5	1947	13	07			F1B	75	250	
USKA	3725.8	2045	26	07			G1D	2400	~2k4	Stanag 4285; PSK8
USKA	3744.5	2137	12	07			PSK8	2400	~2k7	MIL188-110A (Hybrid), often 4 intro tones (preamble PSK4)
USKA	3767.0	2116	12	07			J7D	12x120	2k7	BPSK; CIS12 often
USKA	3772.0	2216	02	07			F1B	50	200	often
USKA	6998.0 VFO USB	2211	02	07			H3E-U Bursts		~3k6	"Buzzer" up to ≥7001.5kHz daily
USKA	7022.0	2151	15	07			J7D	12x120	2k7	BPSK; CIS12 often
USKA	7027.5	2209	06	07		V	A1A			Beacon V often
USKA	7034.0	2239	07	07			OTHR	50 sps	~13k	OTHR; occup. BW approx 30k
USKA	7036.0	2231	27	07			J7D	12x120	2k7	QPSK; CIS12/AT3104
USKA	7039.2	2157	06	07	RUS	F	A1A			Beacon F - Vladivostok
USKA	7050.0	1928	13	07			J3E-L			Patriotic slogans
USKA	7055.0	2128	06	07			J3E-L			Patriotic music and slogans
USKA	7062.0	2149	15	07			J7D	12x120	2k7	BPSK; CIS12
USKA	7068.0	2155	06	07			F1B	75	200	often
USKA	7070.0	2216	24	07		334	MFSK8	125	1750	MIL 188-141A often
USKA	7070.0	2223	24	07		244	MFSK8	125	1750	MIL 188-141A:To: 288; LQA
USKA	7070.0	2229	24	07		288	MFSK8	125	1750	MIL 188-141A: To: 244; LQA
USKA	7078.0	2157	24	07			J7D	12x120	2k7	BPSK; CIS12 often
USKA	7099.0	0804	15	07			J7D	12x120	2k7	CIS12; idling

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
USKA	7108.0	1519	27	07			F1B	100	250	
USKA	7120.0	1708	05	07	SOM		A3E		10k	Radio Hargaysa often
USKA	7149.0	0753	21	07			A1A			letters only; 27 wpm
USKA	7152.83	2010	14	07			A1A			fast dots; long lasting
USKA	7162.0	0601	16	07			F1B	75	250	
USKA	7176.0	2152	05	07			J7D	12x120	2k7	BPSK; CIS12
USKA	7197.0	2148	06	07	TUR	357013	MFSK8	125	1750	MIL 188-141A
USKA	7197.0	2335	25	07	TUR	123456	MFSK8	125	1750	MIL 188-141A
USKA	7197.0	0016	26	07	TUR	342018	MFSK8	125	1750	MIL 188-141A
USKA	7197.0	0020	26	07	TUR	370013	MFSK8	125	1750	MIL 188-141A
USKA	7197.0	0032	26	07	TUR	ADANA	MFSK8	125	1750	MIL 188-141A
USKA	7197.0	0035	26	07	TUR	321013	MFSK8	125	1750	MIL 188-141A
USKA	14024.0	0856	13	07			OTHR	50 sps	~13k	OTHR; occup. BW appx 30k
USKA	14026.0	0917	29	07			J7D	12x120	2k7	BPSK; CIS12
USKA	14049.0	0636	03	07			OTHR	50 sps	~13k	OTHR; occup. BW appx 30k
USKA	14081.06	1005	14	07			F1B	75	250	unclean signal
USKA	14090.0	0954	25	07			OTHR	50 sps	~13k	OTHR; occup. BW appx 30k
USKA	14112.0	0944	13	07			J7D	12x120	2k7	BPSK; CIS12
USKA	14116.0	1137	11	07			F1B	50	250	often
USKA	14116.0	0944	14	07			F1B	75	250	often
USKA	14118.0	0833	15	07			J7D		2k7	CIS12, idling
USKA	14133.0	1345	19	07			OTHR	50 sps	~13k	OTHR; occup. BW appx 30k
USKA	14151.0	1018	14	07			F1B	75	250	
USKA	14160.0	1007	26	07			F1B	50	250	often
USKA	14161.4	0953	29	07			PSK		~2k4	Burst system; spacing 75 Hz, pre- amble 4x PSK4, spacing 600Hz
USKA	14192.0	0941 1257	02 27	07			F1B	50 100	500	almost daily
USKA	14200.0 VFO USB	0614	03	07			BPSK	16x75	2k2	Burst system; 16 tones, 2 Pilottones when idling short dots every 0.725s
USKA	14217.0	0931	24	07			OTHR		~13k	OTHR; occup. BW appx 30k
USKA	14221.0	2157	02	07			F1B	50	200	often
USKA	14248.5	0850	27	07			F1B	600	600	ARQ system
USKA	14273.0	0938	13	07			FMCW	10 sps	~10k	OTHR; only short period
USKA	14292.0	1139	11	07		BKP3	A1A			several stations
USKA	14295.1	1621	03	07	TDJ		A3E		~9k	3 <sup>rd</sup> from 4765 Radio Tajikistan
USKA	14304.0	2109	12	07			J7D	12x120	2k7	BPSK; CIS12
USKA	14325.0	2247	17	07			PSK8		~ 2k7	Bursts, intro tone (appx 150ms)
USKA	14327.0	1047	26	07			A1A			letters and figures
USKA	14329.0	2301	17	07			PSK8		~ 2k7	Bursts, intro tone (appx 150ms)
USKA	14336.0	1543	28	07			A1A			letters and figures
USKA	14340.0	1627	03	07			J7D	12x120	2k7	BPSK; CIS12 often
USKA	14341.2	0956	21	07			PSK8 ?		~ 2k9	unidentified signal
USKA	14345.5	1034	15	07			J7D	12x120	2k7	BPSK; CIS12,
USKA	18075.0	0951	14	07			FMCW	25 sps	20k	OTHR
USKA	18080.0	0605	16	07	TWN	SOH	A3E		appx 9k	BC: Sound of Hope often
USKA	18100.0	0813	15	07		C3	MFSK8	125	1750	MIL 188-141A often
USKA	18149.0 VFO USB	0803	21	07			FMOP ?	10 sps	160k	OTHR (up to 18309)
USKA	18150.0	0729	01	07			F1B	100	1000	2 <sup>nd</sup> of 9075 kHz (100Bd 500Hz)
USKA	18152.0	1231	25	07			A1A			letters and figures
USKA	21145.0	0834	21	07		A2	MFSK8	125	1750	MIL 188-141A
USKA	21145.0	0844	21	07		L601	MFSK8	125	1750	MIL 188-141A; To: CD
USKA	21295.0	0819	15	07			FMCW	30 + 50 sps	10k	OTHR, intro tone; short bursts, various sweep rates
USKA	21353.5	1402	21	07			F1B	600	600	ARQ system
USKA	21438.0	0904	13	07		RCV	A1A			letters and figures almost daily
USKA	28061.5	1417	21	07			A1A			fast dots only, duration 240ms
USKA	28065.0	1042	20	07		AR	A1A			Fishery buoy
USKA	28135.0	1215	11	07			F3E			Taxi
USKA	28960.0	1015	25	07			OTHR	150 + 315 sps	~ 30-40k	Burst system spattering > 80k often
USKA	29500.0	1820	28	07			F1B	81.92	140	Datawell buoy

## Veron – Netherlands – PA2GRU (Dick)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SHIFT	DETAILS
VERON	7120,0	18.30	8	7	SOM	R.Har	A3E		speech
VERON	10108,0	08.28	1	7	CIS	UiPTR	F1B		Carrier/Revs/Ptr (also 7/7 08.48 22/7 10.22)
VERON	10108,0	10.25	22	7	CIS	UiCW	F1A		UUU XXX (followed by F1B Carrier/Revs/Ptr)
VERON	10115,0	07.45	6	7		UiPTR	F1B		Ptr (also 11/7 08.55)
VERON	14008,0	08.45	4	7	CIS	UiPTR	F1B		Carrier/Revs/Ptr (also 28/7 12.23)
VERON	14108,0	12.04	30	7		UiRadar	FMCW	30k	OTHR; 50sps
VERON	14108,0	08.14	22	7	CIS	UiCW	A1A		5BL (ending 784 RPT AL K
VERON	14108,0	09.38	22	7	CIS	FMLI	A1A		Call's to: X6IB CNZ9 D2FE
VERON	14108,0	10.03	26	7	CIS	FMLI	A1A		SK6I de FMLI RPT aa ? 5BL
VERON	14108,0	10.08	26	7	CIS	TEH6	A1A		FMIW de TEH6 QBE QYT6 K
VERON	14108,0	10.09	26	7	CIS	TEH6	A1A		FMIW de TEH6 ZPO ZPF ZMV QYT6 K
VERON	14108,0	09.50	1	7	RUS	BXCS	A1A		ND1Q DE BXCS QTC 506 42 1 1248 506
VERON	14108,0	09.50	1	7	RUS	BXCS	A1A		BT 775 BT (5BL)
VERON	14108,0	05.33	5	7	RUS	LG9J	A1A		Q9ZH DE LG9J proc
VERON	14108,0	05.34	5	7	RUS	LG9J	A1A		8FK3 DE LG9J proc
VERON	14108,0	05.35	5	7	RUS	LG9J	A1A		ZODC DE LG9J proc
VERON	14108,0	10.14	27	7	RUS	FMLI	A1A		Q51N DE FMLI 526 27 27 1306 526 BT
VERON	14108,0	10.14	27	7	RUS	FMLI	A1A		253 BT (5BL) BT RPT AL
VERON	14108,0	07.31	28	7	RUS	FMLI	A1A		SK6I DE FMLI proc
VERON	14108,00	07.32	28	7	RUS	FMLI	A1A		Q51N DE FMLI proc
VERON	14108,0	07.33	28	7	RUS	FMLI	A1A		OAPY DE FMLI proc
VERON	14108,0	07.34	28	7	RUS	FMLI	A1A		X6IB DE FMLI proc
VERON	14108,0	07.35	28	7	RUS	FMLI	A1A		CNZ9 DE FMLI proc
VERON	14108,0	07.36	28	7	RUS	FMLI	A1A		D2FE DE FMLI proc
VERON	14116,0	12.06	5	7		UiPTR	F1B		Fast Revs (also 22/7 08.16)
VERON	14116,0	07.53	14	7		UiPTR	F1B		Ptr (also 11/7 08.55)
VERON	14141,0	08.47	4	7		UiPTR	F1B		Ptr (also 22/7 09.23)
VERON	14192,0	09.22	10	7	RUS	UiPtr	F1B	500	
VERON	14192,0	14.26	30	7	RUS	UiPtr	F1B	200	
VERON	14221,0	20.43	9	7	KGZ	UiPtr	F1B	200	Idling
VERON	18100,0	20.24	16	7	Brasil	UiLL	j3e-u		Portugese, male voices
VERON	21438,0	08.58	27	7	RUS	RCV	A1A		RBE86 DE RCV QTC 633 37 29 1216 633
VERON	21438,0	08.58	27	7	RUS	RCV	A1A		BT NAWIP BT (etc)

# The monitoring team of IARU Region 1

credits:

Wavecom Elektronik – Buelach – Switzerland

German BNetzA Konstanz

Many thanks for your interest!

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