



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

## January 2018

The 29 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: SP9BRP – Jan ++ RAL: OD5RI – Riri ++ REF: F5MIU – Francis ++ REP: CT4AN – Jose ++ ROARS: A41MA - Younis ++ RSGB: G0MGX - Mark ++ SARRL: ZS6NS - James ++ SRAL: OH2BLU - Pekka ++ SSA – 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 ++ **unofficial member**: ++ ASTRA - DL1BDF - Mustapha ++ PTTs: BAKOM (Swiss) ++ OFCOM (UK) ++ Dutch AT ++ Austrian PTT

Part 1: News and infos

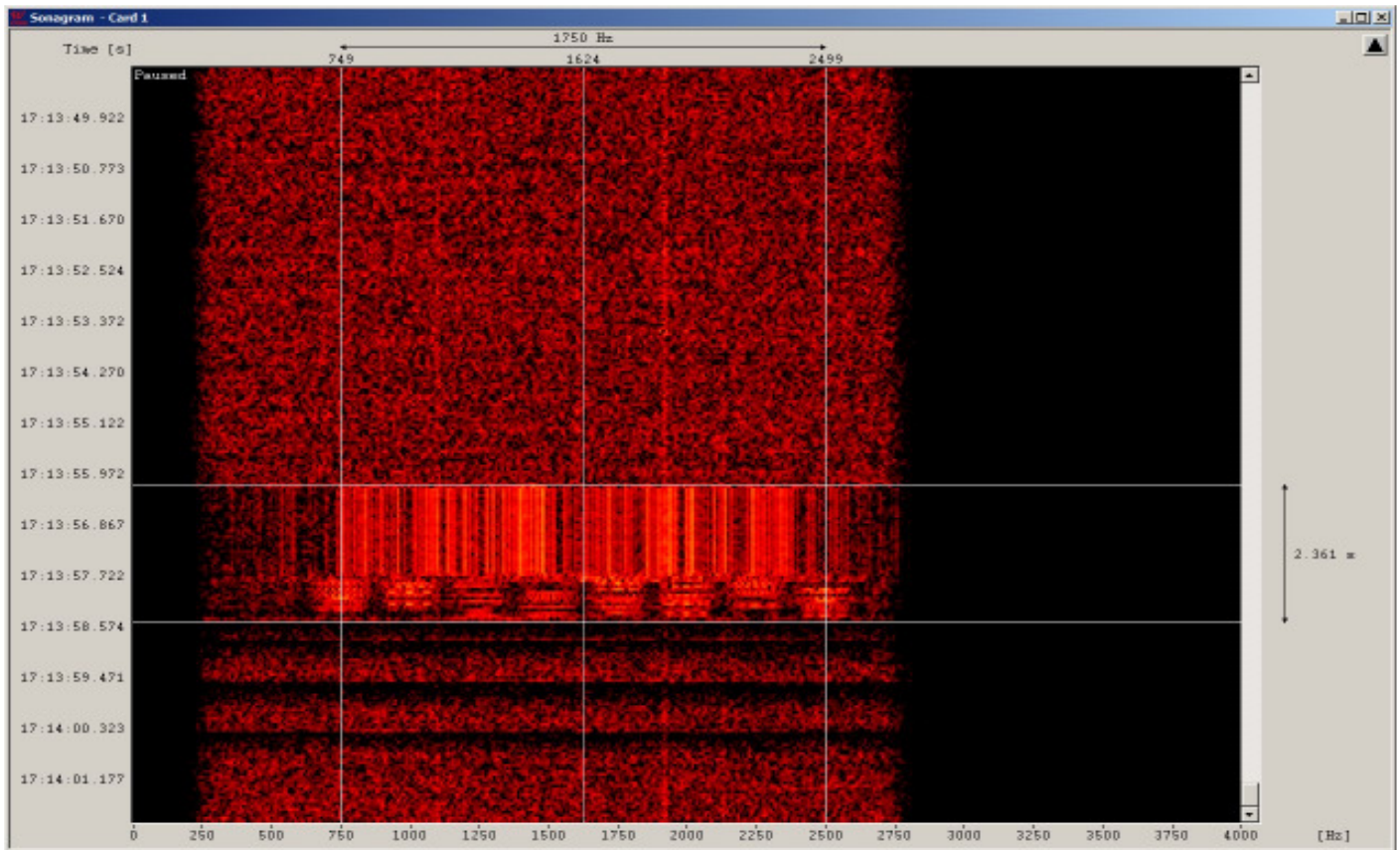
Part 2: Detailed reports of the national co-ordinators

Copyright © IARUMS Region 1 - DK2OM

# Part 1: News and Infos

## 1. Thales-3000 on 13998.4 kHz RF

We found a MIL Thales-3000 system on 13998.4 kHz RF (up to 14000.9 kHz). Date: Jan. 22<sup>nd</sup>  
Location: northwest Africa  
Screenshot: DK2OM with Wavecom W-Code showing the Thales-3000 on burst mode with preamble followed by an FSK 8 (sounding like MIL-188-141A) – modem center: 1625 Hz AF



## 2. Radio Myanmar on 7200 kHz

Radio Myanmar was sometimes audible on 7200 kHz (7195.5 – 7204.5 kHz). Observations were difficult, because we missed reliable schedules and transmitting times.

## 3. Radio Hargeisa on 7120 kHz

Radio Hargeisa in north Somalia was daily active on 7120 kHz.



**Hargeisa is located southeast of Djibouti. Observe the red marker!**

**Source:**

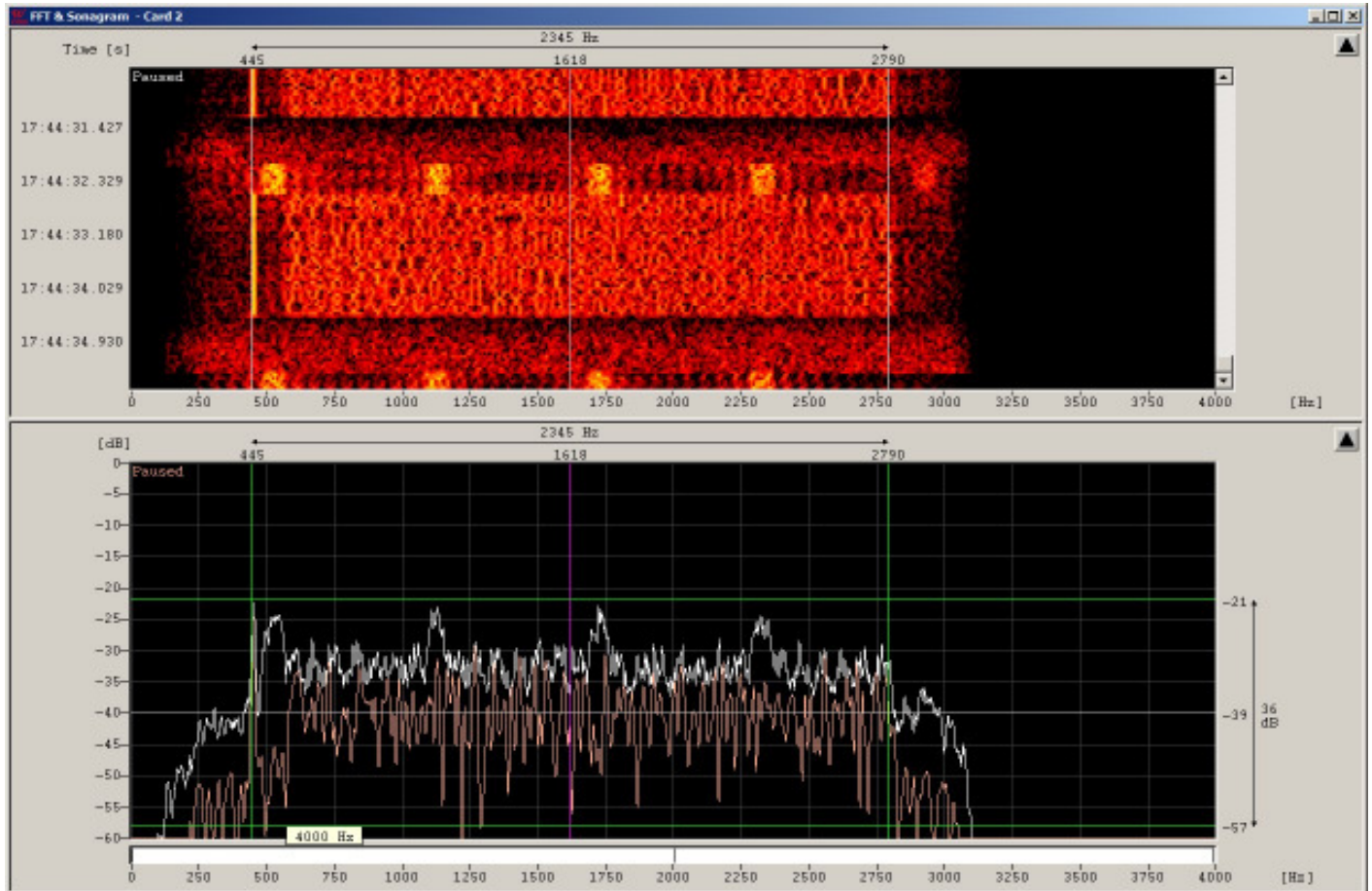
**Google Maps showing the Republic of Somaliland**

## 4. Chinese wideband OTH-radar 14018 kHz

A Chinese wideband OTH radar caused strong problems on 14020 - 14180 kHz with 10 sweeps/sec on Jan. 18<sup>th</sup>. While using a normal receiver with narrow filters you can hear signals like a “woodpecker”. So some amateurs believed that the old Russian woodpecker would be on air again. In such cases the use of SDRs is much better!

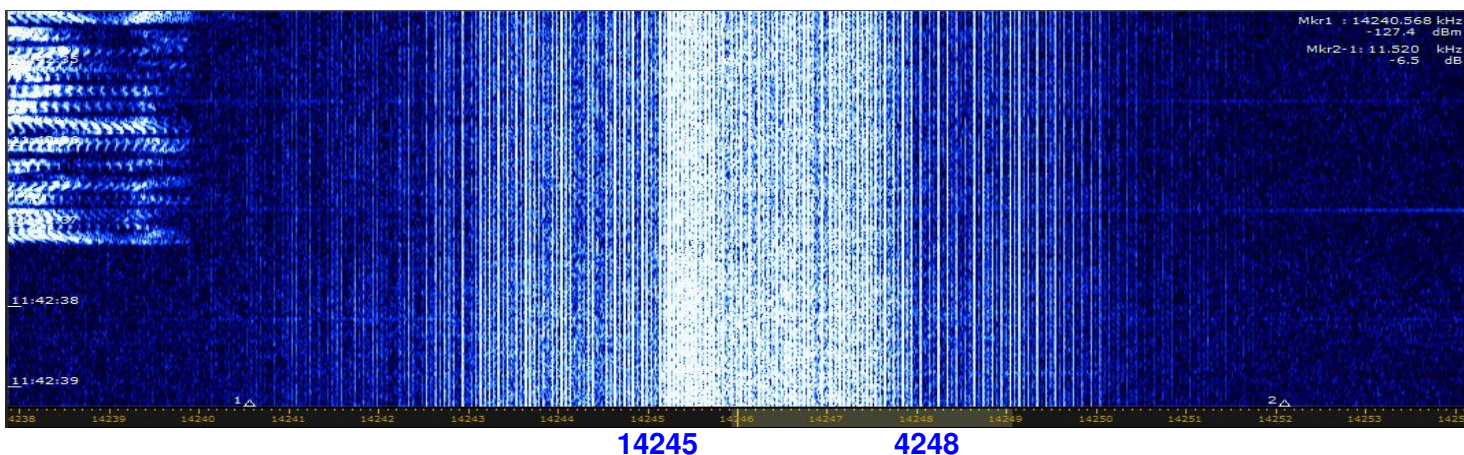
## 5. Chinese PRC30 system on 7099 kHz

The Chinese system PRC30 appeared on 7099.0 kHz on LSB and burst mode. Date and time: Jan. 3<sup>rd</sup> at 1729 utc  
Parameters: Preamble and 30 tones – PSK4A – 60 Bd – covering 2350 Hz together with the pilot tone on 450 Hz AF  
Sonagram and FFT-display with Wavecom W-Code (DK2OM)



## 6. 14246.5 kHz unknown hum noise

EI3GYB observed an unclassified hum noise signal on 14245 - 14248 kHz on Jan. 29<sup>th</sup> with many spurious emissions. Location and source unknown.



## 7. Miscellaneous or bad news:

3560.0 kHz – USB – Spanish fishermen daily at 1600 utc or later (also: 3500, 3535, 3550, 3590 kHz)  
5350.5 kHz – USB – Spanish fishery daily – splattering up to 5353.0 kHz  
7120.0 kHz – Radio Hargeis Somalia – as usual  
7140.0 kHz and 7180 kHz – Radio Eritrea and white noise QRM by Radio Ethiopia  
14295.0 kHz - Radio Tajik (harmonic from 4765 kHz) – no change  
21438.0 kHz – Russian Navy Sevastopol on A1A - as usual

## 8. Homepage IARU Region 1

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 – Kenya – 5Z4BV (Kamweti)

Soc	kHz	UTC	dd	mm	ITU	Identity	MODE	Details
RSK	6.999,00	1330	occasional	1	Tanzania/ E.Africa	?	J3E-u	Mil Swahili message net
RSK	7.002,00	0830	1	1	E. Africa	?	J3E-u	Mil vernacular msg net E. Africa
RSK	7.014,00	a.m./p. m.	29	1	South Sudan / E. Africa	?	J3E-L	Vernacular/English
RSK	7.024,00	0830	10	1	E. Africa	?	J3E-u	Mil Swahili vernacular msg net
RSK	7.017,00	1325	15	1	E. Africa	?	J3E-l	Vernacular mil
RSK	7.027,00	1129	9	1	Central-E. Africa	?	J3E-l	Francophone Vernacular mil
RSK	7.045,00	1205	10	1	E. Africa	?	J3E-u	Swahili Net
RSK	7.070,00	1331	occasional	1	E. Africa	?	J3E-u	Swahili/vernacular
RSK	7.075,00	0600; a.m.	occasional	1	Ethiopia- Kenya	?	J3E-l	Mil Amharic data & weather relay net
RSK	7.120,00	vt	dly	1	Somaliland	Radio Hargeisa	A3E	Broadcast
RSK	7.140,00	vt	dly	1	Eritrea	Voice of the Broad Masses of Eritrea 1	A3E	Broadcast
RSK	7.140,00	a.m.- p.m.	near dly	1	Ethiopia?	?	A3E	Heavy jammer
RSK	7.150,00	1420	23	1	Congo basin	?	J3E-l	Lingala msg net DRC?
RSK	7.180,00	vt	dly	1	Radio Eritrea	Voice of the Broad Masses of Eritrea 2	A3E	Broadcast, occasional QSY 7181.5kHz
RSK	7.180,00	p.m.	near dly	1	Ethiopia?	?	A3E	Heavy jammer

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

DG0JBJ (Mario) observed 0 OTH radars on 40 m, 0 OTH radars on 20 m, 38 OTH radars on 17m, 11 OTH radars on 15 m and 0 OTH radars on 10 m in January 2018.

### 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	ady	dly	01	RUS		USB LSB			14 tones – hyperbolic radio navigation system – BRAS-3/RS-10 – Kaliningrad – no carrier - daily, all day
DK2OM	1852,0	1816	02	01	I	IPP	USB			Palermo Radio, weather reports
DK2OM	1855,0	vt	dly	01	I	IQP	USB			San Benedetto Radio, weather

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										reports - daily
DK2OM	1876,0	1815	02	01	I	IQN	USB			Lampedusa Radio, weather reports - daily
DK2OM	1888,0	1814	02	01	I	IPD	USB			Civitavecchia Radio, weather reports - daily
DK2OM	1896,5	ady	dly	01	D		PSK8	2400	2400	Stanag4285 – 600 bps long – German Navy – daily, all day
DK2OM	1925,0	1814	02	01	I	IPL	USB			Livorno Radio, weather reports - daily
DK2OM	3500,0	11658	18	01	HOL		USB			Dutch fishery – also 22.01.2018 at 2145 utc
DK2OM	<b>3500,3</b>	<b>1952</b>	<b>15</b>	<b>01</b>	<b>CIS</b>		<b>A3E</b>			<b>CIS pirates – unstable carrier</b>
DK2OM	3503,5	vt	dly	01	G	no ITU	FSK8	125	1750	ALE – “XSS” “XPU” “XJR” – British MIL Tascomm – vt, daily - legal!
DK2OM	3525,0	---	--	01	F		PSK4	75	5800	LINK11-CLEW on both sidebands (5800 Hz wide) – area of Marseille – legal!
DK2OM	3527,0	2007	05	01	RUS		F1B	50	200	Severomorsk - daily
DK2OM	3531,0	---	--	01	RUS	REA4	N0N			unclean carrier - RUS airforce Moscow, ident: 1940 utc - daily
DK2OM	3532,0	1935	22	01	F		PSK4	75	5800	LINK11-CLEW on both sidebands (5800 Hz wide) – area of Brest – legal!
DK2OM	<b>3535,0</b>	<b>2120</b>	<b>03</b>	<b>01</b>	<b>E</b>		<b>USB</b>			<b>Spanish fishery</b>
DK2OM	3537,0	1728	25	01			PSK4B	120	2600	AT3104D – submode idle
DK2OM	3540,0	2150	30	01	G		USB			UK fishery
DK2OM	<b>3550,0</b>	<b>0730</b>	<b>dly</b>	<b>01</b>	<b>F</b>		<b>A3E</b>			<b>French amateurs not respecting bandplans - daily</b>
DK2OM	3550,0	vt	vd	01	ALG	no ITU	FSK8	125	1750	ALE, “IU50” “IU52” “FN50”
DK2OM	3550,0	1730	01	01	RUS		PSK2A	120	2600	AT3004D - Crimea
DK2OM	3550,7	1933	22	01	ISR		PSK4 PSK8	75 2400	2400 2400	hybrid modem – ISR Navy – PSK4 parallel and PSK8 serial - legal operation!
DK2OM	3553,8	ady	dly	01	TUR		PSK8	2400	2400	Stanag4285 – 600 bps long -TUR MIL - Ankara – daily, all day - legal operation
DK2OM	<b>3555,0</b>	<b>1916</b>	<b>15</b>	<b>01</b>	<b>E</b>		<b>USB</b>			<b>Spanish fishery</b>
DK2OM	<b>3557,0</b>	<b>1820</b>	<b>04</b>	<b>01</b>	<b>E</b>		<b>USB</b>			<b>Spanish fishery</b>
DK2OM	<b>3560,0</b>	<b>2010</b>	<b>03</b>	<b>01</b>	<b>E</b>		<b>USB</b>			<b>Spanish fishery – daily 1600 utc or later</b>
DK2OM	3561,0	1739	25	01			F1B	75	250	
DK2OM	3576,6	ady	dly	01	I	IZ3DVW	A1A			3576.550 - uncoordinated beacon – disturbing JT65
DK2OM	3585,0	ady	dly	01	TWN	HLL	F1C		800	WX-fax Taiwan - 120 rpm, IOC 576 - daily, all day - legal!
DK2OM	3587,0	vt	vd	01	E	no ITU	FSK8	125	1750	ALE, “TVV” “TXX” - Spanish Guardia Civil
DK2OM	<b>3590,0</b>	<b>1650</b>	<b>24</b>	<b>01</b>	<b>F</b>		<b>A3E</b>			<b>French HAMS in AM not respecting bandplans</b>
DK2OM	3593,7	---	--	01	RUS	D	A1A			Cluster beacon – Sevastopol RUS Navy – “RCV”
DK2OM	3593,8	---	--	01	RUS	P	A1A			Cluster beacon – Kaliningrad RUS Navy – “RMP”
DK2OM	3593,9	---	--	01	RUS	S	A1A			Cluster beacon – Severomorsk RUS Navy – „RIT“
DK2OM	3594,0	---	--	01	RUS	C	A1A			Cluster beacon C - Moscow RUS Navy - “RIW”
DK2OM	3594,2	vt	vd	01	RUS	F	A1A			Cluster beacon F - Vladivostok RUS Navy – “RJS”
DK2OM	3595,0	---	--	01	RUS	K	A1A			Cluster beacon - Petropavlovsk Kamchatskiy - RUS Navy - Pacific fleet - “RCC”
DK2OM	3596,0	vt	dly	01	J		FSK8	125	1750	ALE, “JHIESB” – just for info!
DK2OM	3617,0	vt	dly	01	HRV	9A5EX	FSK8	125	1750	ALE, “9A5EX” – HAM-ALE - just for info
DK2OM	3622,5	ady	dly	01	J	JMH	F1C		800	Tokyo Meteo – 120 rpm – IOC

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										576 – daily, all day - legal!!!
DK2OM	3642,0	ady	dly	01	CHN		A1A			loop – DKG6 de 3A7D Chinese military – daily, all day
DK2OM	3649,0	vt	vd	01	ALG	no ITU	FSK8	125	1750	ALE, “BI20” PA20”
DK2OM	3718,0	vt	vd	01	FEa	7CJK	A1A			loop “7CJK”
DK2OM	3756,0	2000	dly	01	RUS		A3E			RUS MIL – channel marker – Tuapse – East Black Sea – night QRG – daily – even audible in Japan
DK2OM	3757,0	ady	dly	01	FEa	RIS9	A1A			“M8JF de RIS9” - loop
DK2OM	3772,0	ady	dly	01	FEa	A4JC	A1A			“A4JC” - loop
DK2OM	3777,0	vt	dly	01	FEa		A1A			“M8JF de RIS9” – loop
DK2OM	3797,0	ady	dly	01	FEa		A1A			“M8JF de RIS9” – loop
DK2OM	<b>5350,0</b>	<b>2040</b>	<b>03</b>	<b>01</b>	<b>E</b>		<b>USB</b>			<b>Spanish fishery – splattering up to 5353.0 kHz – long lasting – daily – various times – like telephone</b>
DK2OM	<b>5350,5</b>	<b>2130</b>	<b>02</b>	<b>01</b>	<b>E</b>	„Miguel“	<b>USB</b>			<b>Spanish fishery – splattering up – long lasting - daily</b>
DK2OM	5360,0	1528	20	01			F1B	75	240	
DK2OM	5361,8 RF	---	--	01	DNK	OUA15	PSK8A	2400	2400	Stanag-4285 – 600 bps long – assigned to Danish Navy Aarhus - legal – primary user !
DK2OM	6998,5	--	--	01	POL		FSK8  USB	125	1750	MIL-188-141A – “BU2” “OD6” “OL1” “SZ4” “ZE2” “MA3” until 7001.0 kHz – also voice traffic male and female - Polish MIL
DK2OM	6999,0 RF	0807	22	01	RUS		OFDM	29.6	2760	OFDM 60 – PSK4B – until 7002.3 kHz
DK2OM	7000,0	1450	21	01	INS		<b>USB LSB</b>			<b>Indonesian pirates - singing</b>
DK2OM	<b>7000,0</b>	<b>2010</b>	<b>12</b>	<b>01</b>	<b>E</b>		<b>USB</b>			<b>Spanish fishery – also 14.01.2018 at 2100 utc</b>
DK2OM	7001,5	--	---	01	POL		PSK8	2400	2400	RF QRG 6998.5 kHz – 7000.3 kHz center - MIL-188-110A – 600 / 300 bps short – Polish MIL
DK2OM	7005,0	1450	21	01	INS		<b>LSB</b>			<b>Indonesian pirates - singing</b>
DK2OM	7005,0 RF	1243	23	01	ROU		FSK8	125	1750	ALE and Stanag-4539 - Constanta
DK2OM	7010,0	vt	vd	01	ALB	no ITU	FSK8	125	1750	ALE, “RS0” - Tirana
DK2OM	7010,0	1451	21	01	INS		<b>LSB</b>			<b>Indonesian pirates</b>
DK2OM	7010,0	1330	05	01	RUS		PSK2A	120	2600	AT3004D - Kaliningrad
DK2OM	7015,0	1451	21	01	INS		<b>LSB</b>			<b>Indonesian pirates</b>
DK2OM	7018,0	---	--	01	RUS	REA4	F1B	100	800	mostly idling – Russian airforce Moscow – ident at full hour + 41 min. on F1A
DK2OM	7020,0	vt	vd	01	ALB		FSK8	125	1750	ALE, “CS004A” “RS004D” “CS004” - daily
DK2OM	7020,0	1452	21	01	INS		<b>USB LSB</b>			<b>Indonesian pirates</b>
DK2OM	7027,5	---	--	01	UKR	„V“	A1A			beacon “V” – Kyiv
DK2OM	7028,0	1034	11	01	CHN		FMOP		10k	Chinese OTH radar (foghorn) – 66.66 sps – 3.8 sec bursts
DK2OM	7032,0	0952	25	01	RUS		PSK2A	120	2600	AT3004D -
DK2OM	7035,0	1452	21	01	INS		<b>LSB</b>			<b>Indonesian pirates – playing music and talking about telephone</b>
DK2OM	7039,0	---	--	01	RUS	C	A1A			Cluster beacon C - Moscow RUS Navy - “ <b>RIW</b> ”
DK2OM	7039,2	---	--	01	RUS	F	A1A			Cluster beacon F - Vladivostok RUS Navy - “ <b>RJS</b> ”
DK2OM	7039,3	----	--	01	RUS	D	A1A			Cluster beacon D Petropavlovsk Kamchatskiy - RUS Navy - Pacific fleet - “ <b>RCC</b> ” - daily
DK2OM	7039,4	1809	03	01	RUS	M	A1A			Cluster beacon M – Magadan RUS Navy – „ <b>RTS</b> “


DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	<b>7040,0</b>	ady	dly	01	I		A1A			<b>IZ3DVW – uncoordinated and unwanted beacon</b>
DK2OM	7040,0	1452	21	01	INS		USB LSB			Indonesian pirates
DK2OM	7040,5	vt	dly	01	HRV		FSK8	125	1750	ALE, “9A5EX” “9A0ALE” – just for info
DK2OM	7049,5	vt	dly	01	HRV G F	9A0ALE M1DFO F6BAZ	FSK8	125	1750	Amateur ALE, just for info! daily – various times
DK2OM	7050,0	vt	dly	01	KGZ		FSK8	125	1750	ALE, “X” “810” “820615” “810698” – Kyrgyzstan MIL
DK2OM	7070,0	vt	vd	01	GEO	no ITU	FSK8	125	1750	ALE, “MV” “244” “686” “334” “204” “571” – daily active
DK2OM	7088,8	vt	vd	01	S	SL0FRO	A1A			7088.830 kHz - cw-trainee, Sweden - SL0FRO - just for info!
DK2OM	7089,8	---	--	01	TUR CYP		PSK8	2400	2400	Link11 - SLEW – aircraft – west of Cyprus
DK2OM	7091,5	---	--	01	KAZ	„V“	A1A			7091.543 kHz - loop with spurious – ident “V” – Almaty - Kazakhstan
DK2OM	7098,0	1325	23	01	RUS		PSK2A	120	2600	AT3004D - Chelyabinsk
DK2OM	7099,0 LSB	1729	03	01	CHN		PSK4A	60	2350	burst system “PRC-30” – 30 tones – 450 Hz pilot tone
DK2OM	7099,5	vt	dly	01	HRV	9A0ZG	FSK8	125	1750	ALE, “9A0ZG” “9A5EX1P” “9A0OS” – daily - just for info!
DK2OM	7102,0	vt	dly	01	TWN		FSK8	125	1750	ALE, “BV4AS” – just for info!
DK2OM	7102,0	vt	vd	01	HRV SUI D	9A0MIL	FSK8	125	1750	ALE, “9A3MIL” “9A2KS” “HB9MHB” “9A0ZG” “9A4OS” “DK0ESD” – just for info!
DK2OM	7102,0	vt	dly	01	J		FSK8	125	1750	ALE, “JH1ESB” – just for info!
DK2OM	7102,0	1343	05	01	RUS		PSK2A	120	2600	AT3004D – modem idle and traffic - Smolensk
DK2OM	7105,0	1807	1101	01	CHN		FMOP		10k	Chinese OTH radar (foghorn) – 66.66 sps – 3.8 sec bursts
DK2OM	7110,0	vt	dly	01	HRV	9A0ALE	FSK8	125	1750	ALE, “9A0ALE” – just for info
DK2OM	7112,0 LSB	1815	29	01	CHN		PSK4A	60	2350	burst system “PRC-30” – 30 tones – 450 Hz pilot tone
DK2OM	7117,0	---	--	01	RUS	REA4	F1B	100	1000	mostly idling – Russian airforce Moscow – ident on CW at 1640 utc on the mark-QRG
DK2OM	7117,0	1326	23	01	RUS		F1B	75	250	Rostoc na Donu
DK2OM	<b>7120,0</b>	<b>1830</b>	<b>02</b>	<b>01</b>	<b>SOM</b>		<b>A3E</b>		<b>9k</b>	<b>Radio Hargeisa – Somalia – daily – even audible in Australia and Japan</b>
DK2OM	7124,0	0838	01	01	RUS		PSK2A	120	2600	AT3004D - Smolensk
DK2OM	7129,0	0922	10	01	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	7137,0	vt	dly	01	TWN		FSK8 LSB	125	1750	ALE, “EDKLT” “EVSNG” “ECCLT” “EFNGX” “EVNNM” “EVWRK” “EGFXA” “ECQUY” “EFYMO” Taiwanese navy
DK2OM	<b>7140,0</b>	<b>1700</b>	<b>01</b>	<b>01</b>	<b>ERI ETH</b>		<b>A3E</b>		<b>9k</b>	<b>7140.024 kHz - Radio Eritrea disturbed by Radio Ethiopia by white noise emissions - daily</b>
DK2OM	7140,0	1741	04	01	CHN		FMOP		10k	Chinese OTH radar – 42 sps – 12 sec bursts
DK2OM	7142,0	0900	31	01			F1B	75	125	
DK2OM	7148,0	1040	22	01	CHN		FMOP		10k	Chinese OTH radar (foghorn) – 66.66 sps – 3.8 sec bursts
DK2OM	7151,0	1037	11	01	CHN		FMOP		10k	Chinese OTH radar (foghorn) – 66.66 sps – 3.8 sec bursts
DK2OM	7157,0	1806	11	01	CHN		FMOP		10k	Chinese OTH radar (foghorn) – 66.66 sps – 3.8 sec bursts
DK2OM	7159,0	0940	16	01	RUS		F1B	75	200	Kaluga
DK2OM	<b>7181,6</b>	<b>1700</b>	<b>01</b>	<b>01</b>	<b>ERI</b>		<b>A3E</b>		<b>9k</b>	<b>7181,555 kHz - Radio Eritrea</b>

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
					<b>ETH</b>					<b>disturbed by Radio Ethiopia by white noise emissions - daily</b>
DK2OM	7183,0	vt	dly	01	SUI		FSK8	125	1750	ALE, "HB9MHB" – just for info!
DK2OM	7185,5	vt	dly	01	J TWN		FSK8	125	1750	ALE, "BV4AS" "JH1ESB" - just for info - daily
DK2OM	7193,0	1018	01	01	RUS	RDL	F1B	50	200	Kaliningrad – disturbed by a German amateur on the mark QRG with dashes
DK2OM	7198,0	1245	23	01	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	<b>7200,0</b>	<b>1330</b>	<b>24</b>	<b>01</b>	<b>MMR</b>		<b>A3E</b>		<b>9k</b>	<b>Myanmar Radio</b>
DK2OM	10100,8	ady	dly	01	D		F1B	50	450	Baudot - German Weatherservice – legal!
DK2OM	10110,0	vt	dly	01	SNG	no ITU	FSK8	125	1750	ALE, "CN6" "68" – Singapore Navy - Changi Naval Base
DK2OM	10112,0	---	--	01	I		PSK8A	2400	2400	Stanag-4285 – 600 bps long – area of Rome
DK2OM	10113,0	vt	vd	01	TUN	no ITU	FSK8	125	1750	ALE, "TUD" "STAT5" "STAT154"
DK2OM	10114,0	vt	dly	01	ALG	no ITU	FSK8	125	1750	ALE, "BSF" "ZEN" "CM2OR2"
DK2OM	10114,8	0640	dly	01	RUS		F1B	100	1000	CIS14 – Moscow
DK2OM	10115,0	vt	dly	01	MRC	no ITU	FSK8	125	1750	ALE, "100" "114" "203" "XXZ" – Western Sahara
DK2OM	10116,5	---	--	01	AFS		F7D	54.3	2120	MHF50 – 33 tones - South African navy
DK2OM	10120,0	vt	dly	01	ALG	no ITU	FSK8	125	1750	ALE, "CM6" "01012016"
DK2OM	10121,0	0955	25	01			F1B	75	250	
DK2OM	10123,0	vt	dly	01	ALG	no ITU	FSK8	125	1750	ALE, "CM3" "COF" "BSF" "CM2" "ESA" – Algerian Airforce
DK2OM	10124,0	0833	21	01	ALG		FSK8	125	1750	ALE, "OEB" - ALG airforce
DK2OM	10129,0	vt	dly	01	ALG	no ITU	FSK8	125	1750	ALE, "CM1" "CTF" "772"
DK2OM	10136,0	vt	dly	01	ALG	no ITU	FSK8	125	1750	ALE, "CM3" "BLD" "CNC" "TF2"
DK2OM	10140,0	1616	21	01			A1A			only dots every second like a time signal
DK2OM	<b>10144,0</b>	<b>ady</b>	<b>dly</b>	<b>01</b>	<b>D</b>	<b>DK0WCY</b>	<b>A1A</b>			<b>10144.000 kHz - DK0WCY – German aurora beacon – just for info!</b>
DK2OM	10145,5	vt	dly	01		JH1ESB	FSK8	125	1750	ALE, "JH1ESB" - just for info - daily
DK2OM	10145,5	vt	dly	01	TWN AUS	BV4AS	FSK8	125	1750	ALE, "BV4AS" "VK4SAA" – just for info!
DK2OM	13998,4 RF	1709	22	01			FSK8	125	1750	Thales-3000 bursts until 14000.9 kHz
DK2OM	<b>14000,0</b>	<b>1050</b>	<b>19</b>	<b>01</b>	<b>FEa</b>		<b>USB</b>			<b>male persons – Bay of Bengal</b>
DK2OM	14006,0	0927	03	01	RUS		PSK2A	120	2600	AT3004D – submode idle - Moscow
DK2OM	14020,0	0756	18	01	CHN		FMOP		160k	14020 – 14180 - Chinese wideband OTH radar – 10 sps
DK2OM	14026,0	0819	27	01	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	14030,0 RF	1106	23	01	EGY		UI modem		2400	Egypt navy – ui parallel modem
DK2OM	14045,0	0930	10	01	CHN		FMOP		160k	14045 – 14205 - Chinese wideband OTH radar – 10 sps
DK2OM	14084,0	1105	23	01	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	14090,0	0919	10	01	CHN		FMOP		160k	14090 – 14250 - Chinese wideband OTH radar – 10 sps
DK2OM	14100,0	vt	dly	01	ALG	no ITU	FSK8	125	1750	ALE, "6206" "6204" "6212" "6202" "6203" "6207" "6217" "MTL" "IJI" – Mauritanian border – daily, all day
DK2OM	14109,0	vt	dly	01	TWN	HAM	FSK8	125	1750	ALE, "BV4AS" – daily - just for info!
DK2OM	14109,0	vt	dly	01	INS	HAM	FSK8	120	1750	ALE, "YD00XH" – just for info!
DK2OM	14109,0	vt	dly	01	S HRV		FSK8	125	1750	ALE, "SM3FXL" "9A4OS" "9A3BRV" "DK0ESD" - just for



DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
					D					info!
DK2OM	14109,0	vt	vd	01	J		FSK8	125	1750	ALE, "JH1ESB" – just for info
DK2OM	14160,0	vt	dly	01	MRC		FSK8	125	1750	ALE, "9204" "9228" "9236"
DK2OM	14175,0	0759	18	01	CHN		FMOP		160k	14175 – 14335 - Chinese wideband OTH radar – 10 sps
DK2OM	14190,0	0758	18	01	CHN		FMOP		160k	14190 – 14350 - Chinese wideband OTH radar – 10 sps
DK2OM	14192,0	vt	vd	01	RUS		F1B	50 75 50 100 100	500 500 200 500 200	RUS navy Kaliningrad - daily
DK2OM	14215,0	0935	10	01	CHN		FMOP		160k	14215 – 14375 - Chinese wideband OTH radar – 10 sps
DK2OM	14221,0	2020	dly	01	KGZ		F1B	50	200	CIS-50-50 - Bishkek – daily – – mostly idling
DK2OM	14247,0	1142	29	01			QRM		11k	unid hum noise – vy strong
DK2OM	14257,0	1107	23	01	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	14260,0	vt	dly	01	SRB	YU1BI	FSK8	125	1750	ALE, "YU1BI" – just for info!
DK2OM	14260,0	---	--	01	UKR		A3E			female voice with encrypted msgs – figures – "SZRU" = Foreign Intelligence Service of Ukraine in Rivne
DK2OM	14260,9	---	--	01	RUS		OFDM	35.5	2760	OFDM 60 – PSK4B – Moscow
DK2OM	14272,0	---	--	01	RUS	RCV	A1A			RUS Navy Sevastopol
DK2OM	14295,0	vt	dly	01	SRB	YU1BI	FSK8	125	1750	ALE, "YU1BI" – just for info!
DK2OM	14295,2	ady	dly	01	TJK		A3E		9k	3 <sup>rd</sup> from Radio Tajik on 4765 kHz – daily, all day
DK2OM	14330,0	0840	21	01	CHN		FMOP		10k	Chinese OTH radar – 42 sps and 66.66 sps – 6 sec bursts
DK2OM	14340,0	---	--	01	RUS		PSK2A	120	2600	AT3004D – Vladivostok with spurious emissions +/- 35 kHz and +/- 70 kHz - daily
DK2OM	14340,0	1312	23	01			FSK8	125	1750	FSK8 robust - Djibouti
DK2OM	14345,0	0852	23	01	CHN		FMOP		10k	Chinese OTH radar – 50 sps – 5 sec bursts
DK2OM	14346,0	vt	dly	01	POR		FSK8	125	1750	ALE, "CT2IXQ" just for info – various times, daily
DK2OM	14348,0	vt	dly	12	THA	HS0ZEA	A1A			HS0ZEA beacon – 14347.950 kHz - every 5 minutes – daily - just for info!
DK2OM	14351,6	---	--	01	E		OFDM PSK4A	30	2700	OFDM 73 + intro tone – HFD+VL - experimental transmissions – Las Palmas – just for info!
DK2OM	18080,0	---	--	01	TWN		A3E/BC			Sound of Hope – Taiwan and Chinese BC jammer – daily at 06 utc and later
DK2OM	18100,0	vt	dly	01	MRC	no ITU	FSK8	125	1750	ALE, "A2" "A4" "A5" "A7" "S6" – "C3" "R3" "G401" "CD" "09" "G2" "LG6" "G301" "ELJADIDNET4" - daily, various times
DK2OM	18106,0	vt	vd	01	POR	CT2GOY	FSK8	125	1750	ALE, "CT2GOY" – just for info!
DK2OM	18106,2	vt	dly	01	TWN		FSK8	125	1750	ALE, "BV4AS" – just for info!
DK2OM	18107,0	vd	vt	01	RUS	RDL	F1B	50	200	CIS-50-200 - Moscow – idle and traffic – daily - Russian navy – shared band!
DK2OM	18117,5	vt	vd	01	POR	CT2IXQ	FSK8	125	1750	ALE, "CT2IXQ" – just for info
DK2OM	18140,0	vt	dly	01	SRB	YU1BI	FSK8	125	2600	ALE, "YU1BI" – just for info!
DK2OM	18150,0	---	--	01	RUS		F1B	100	1000	harmonic from 9075 (100 Bd, 500 Hz) - Kaliningrad
DK2OM	21000,0	vt	vd	01	B		USB			Brazilian pirates – Rio de Janeiro with North Brazil – very often
DK2OM	21000,0	---	--	01	SDN		USB			MFA Sudan – Khartoum with emba Yemen – voice traffic

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	21002,2	---	--	01	SDN	!0000 !9999 !8888	F1B	100	170	21002.15 kHz - Pactor 1 encrypted – MFA Sudan – Khartoum with emba Yemen
DK2OM	21096,0	vt	dly	01	INS	YD00XH	FSK8	125	1750	ALE, “YD00XH3” – daily, various times - just for info!
DK2OM	21096,0	vt	vd	01	G		FSK8	125	1750	ALE, “MIDFO” – just for info!
DK2OM	21145,0	vt	dly	01	MRC	no ITU	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	21145,8	ady	dly	01	I	IZ3DVW	A1A			IZ3DVW beacon – 21145,790 kHz – daily, all day - not coordinated with IARU
DK2OM	21190,0	---	--	01	RUS		F1B	100	1000	harmonic from 10595 kHz - Moscow
DK2OM	21400,0	---	--	01	RUS		F1B	50	2000	harmonic from 5350 kHz – area of Moscow
DK2OM	21438,0	---	--	01	RUS	RCV	A1A			RIP90 de RCV - RUS Navy Sevastopol - daily
DK2OM	21446,0	ady	dly	01	THA	HS0ZEA	A1A			HS0ZEA beacon – every 5 minutes - just for info!
DK2OM	25000,0	---	--	01	FIN		A3E			time signal Helsinki – just for info – carrier on 25000 – dots on 25001 and 24999 – daily, all day – just for info!
DK2OM	28000,0	vt	vd	01	B		A3E			Brazilian CBers – 28000 – 28325 – daily, all day - no change
DK2OM	28000,0	ady	dly	01	CIS		F3E			28000 – 29700 numerous CIS taxi nets – no change
DK2OM	28025,0	---	--	01	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoy
DK2OM	28051,5	---	--	01	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoy
DK2OM	28075,0	---	--	01	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoy
DK2OM	28085,1	---	--	01	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoy
DK2OM	28146,0	---	--	01	ARG B		FSK8	125	1750	ALE, “LU8EX” “PY2TI” “DL1” – just for info!
DK2OM	28212,0	---	--	01	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoy
DK2OM	28435,0	----	--	01	E		F1B	81.9	140	Datawell-buoy “Waverider” – 28435.040 kHz – Costa del Sol – Malaga
DK2OM	28459,8	---	--	01	GAB		A3E		1060	carrier and dots in USB and LSB, bursts every 60 sec – carrier – Gabon - daily
DK2OM	28499,8	---	--	01	MEa		F1B	81.9	140	Datawell-buoy “Waverider” – 28499.875 kHz – Persian Gulf
DK2OM	28746,5	---	--	01	GAB		A3E			carrier and dots in USB and LSB, bursts every 60 sec – carrier – Gabon
DK2OM	28751,6	---	--	01	GAB		A3E		1080	carrier and dots in USB and LSB, bursts every 60 sec – carrier – Gabon
DK2OM	28960,0	vt	vd	01	IRN		FMOP		50k	Iranian radar bursts – 150 and 313 sps – long lasting - daily
DK2OM	29114,0	---	--	01	RUS		F1B	100	2000	harmonic from 14557.0 kHz - Moscow

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	29249,9	---	--	01	E		F1B	81.9	140	Datawell-buoy "Waverider" – 29249.880 kHz – Spain Fuerteventura - daily, all day
DK2OM	29375,0	---	--	01	I		F1B	81.9	140	Datawell-buoy "Waverider" – 29374.898 kHz – Gallipoli, South Italy - daily, all day
DK2OM	29387,5	---	--	01	IND		F1B	81.9	140	Datawell-buoy "Waverider" – 29387.460 kHz – Indian NW coast, close to Pakistan - daily, all day
DK2OM	29400,0	---	--	01	USA		F1B	81.9	140	Datawell-buoy "Waverider" – 29400.070 kHz - USA north-east coast – NY daily, all day
DK2OM	29450,0	---	--	01	MRC		F1B	81.9	140	Datawell-buoy "Waverider" – 29449.863 kHz - area of El Aaiun – Morocco - daily, all day
DK2OM	29500,0	---	--	01	G		F1B	81.9	140	Datawell-buoy "Waverider" – 29499.974 kHz- area of Gibraltar – daily, all day
DK2OM	29525,0	---	--	01	MRC		F1B	81.9	140	Datawell-buoy "Waverider" – 29524.990 kHz - Agadir - Morocco – daily, all day
DK2OM	29625,0	---	--	01	USA		F1B	81.9	140	Datawell-buoy "Waverider" – 29625.024 kHz - USA north-east coast – daily, all day
DK2OM	29685,0	---	--	01	I		VFT		2300	Italian MIL – Brescia - daily
DK2OM	29699,5	---	--	01	I		VFT		1600	Italian MIL – Brescia - daily
DK2OM	50100,0	vt	dly	12	D		QRM			1.8 - 50 MHz QRM by a neighbouring LED lamp - "many thanks" to German "PTT" Eschborn 

### IRTS – Ireland – EI3GYB (Michael)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	DETAILS
IRTS	1896.5	0255	05	01	D		PSK8	German navy. Very strong signal every day.
IRTS	3550	0808	20	01	F		AM	French Hams still violating the band plan every single morning.
IRTS	3551	1615	23	01	HOL		USB	2 Dutch fishermen chatting.
IRTS	3589.8	1620	23	01	F		USB	2 French fishermen chatting.
IRTS	3690	0405	01	01	RUS/ UKR		LSB	Russian propaganda music is being played. Huge signal.
IRTS	5350.5	1800	05	01	E		USB	Group of Spanish fishermen. Some of them have motor noise in the background. Heard on many days.
IRTS	5360	0301- 0425	15	01	MRC		USB	Moroccan fishermen on and off. Calling always at the full hour and the half hour for a bit of chat. Heard many nights of the month.
IRTS	5400	1012	26	01	F		USB	2 French fishermen right on top of an Irish/UK spot frequency. Heard many days of the month. Always calling on the full and half hour.
IRTS	5398.5	1028	26	01	HOL		USB	A Dutch Ham station calls a SOTA activation using a frequency outside of the Dutch allocation.
IRTS	5405	2234	27	01	POR		USB	2 Portuguese fishermen. Very strong signals and good audio.
IRTS	7050	1334	02	01	RUS/ UKR		LSB	Russian-Ukrainian radio war. Daily event. Plenty of propaganda.
IRTS	7055	1340	02	01	RUS/ UKR		LSB	Russian-Ukrainian radio war. Huge signal- but distorted. Heard daily.
IRTS	7120	1755	14	01	SOM		AM	Radio Hargaysa. Strong in the early morning, late afternoon and early evening with a big signal on a daily basis.
IRTS	7181.5	1748	14	01	ERI		AM	Radio Eritrea with a monster signal. Heard daily in the late afternoon and early evening. Sometimes with white noise jamming from Ethiopia.

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	DETAILS	
IRTS	7200	1240	10	01	BRM		AM	Radio Myanmar, heard nearly daily with medium signal.	
IRTS	7205	1720	26	01	CHN		AM	Radio China International in Esperanto. Splattering down to 7199.3 KHz. Daily. Huge signal.	
IRTS	10101	1022	26	01	E		USB	2 Spanish fishermen chatting.	
IRTS	10117	1232	28	01			FMCW	Radar from 10117-10141 KHz. Big signal.	
IRTS	10123	1214	19	01			FMCW	Radar, 10123-10145 KHz. Very strong.	
IRTS	10142	1343	18	01			FMCW	Radar, 10142-10165 KHz. Huge signals, covering all frequencies.	
IRTS	14175	0926	18	01			FMCW	Radar, 14175-14335 KHz. Medium strength.	
IRTS	14192	1303	04	01	RUS		F1B	Russian navy Kaliningrad. Heard daily during daylight hours with a big signal.	
IRTS	14247	1010-1201	29	01				Strong humming noise, 10 KHz wide. Sounds like a transmitter using an unregulated power supply. Carrier only.	
IRTS	14253	1047-1115	23	01			Digital	Strong digital signal covering everything from 14253-14258 KHz.	
IRTS	14295	1235	10	01	TJK		AM	3 <sup>rd</sup> harmonic of Radio Tajikistan. Daily audible.	
IRTS	18152	1028	03	01			FMCW	Radar from 18152-18175 KHz.	
IRTS	21160	1252	22	01			FMCW	Radar from 21160-21173 KHz. Persistent with medium signal strength.	
IRTS	21222.25	1232	03	01	MRC		USB	2 Moroccan fishermen chatting.	

### KARS – Kuwait – 9K2RR (Faisal)

### MRASZ – Hungary - HA7PL (Laci)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
MRASZ	3502,0	1749	24	1			A3E			serbian language?
MRASZ	3503,0	2027	24	1			A3E			unidentified
MRASZ	3508,0	1718	13	1			USB			russian language
MRASZ	3509,0	1702	22	1			LSB			russian female
MRASZ	3510,0	2028	24	1			A3E			unidentified
MRASZ	3513,0	1526	12	1			F1B		250	
MRASZ	3517,0	1938	22	1			LSB			spanish language?
MRASZ	3521,0	1612	28	1			A3E			unidentified
MRASZ	3522,0	1927	24	1			F1B		250	
MRASZ	3524,0	1556	4	1			PSK2			AT3004D
MRASZ	3524,0	1703	22	1			PSK2			AT3004D
MRASZ	3550,0	1509	1	1			PSK2			AT3004D
MRASZ	3554,0	1748	24	1			F1B		250	
MRASZ	3557,0	1829	22	1			F1B		250	
MRASZ	3561,0	1703	12	1			F1B		250	
MRASZ	3561,0	1757	22	1			F1B		250	
MRASZ	3564,0	1547	23	1			PSK2			AT3004D
MRASZ	3572,0	1511	1	1			A1A			"X6VP de WEEG 64577 85996" "R867? K"
MRASZ	3578,0	1704	22	1			F1B		250	
MRASZ	3578,0	1547	23	1			F1B		250	
MRASZ	3582,0	1554	4	1			F1B		250	
MRASZ	3586,0	1644	25	1			F1B		250	
MRASZ	3593,0	1446	14	1			F1B		250	
MRASZ	3593,0	1632	14	1			F1B		250	
MRASZ	3599,9	1707	22	1			A0A			carrier of a beacon
MRASZ	3600,0	1709	22	1			A3E			french language
MRASZ	3608,0	1756	22	1			F1B		250	
MRASZ	3622,0	1527	12	1			F1B		250	
MRASZ	3622,0	1823	13	1			F1B		250	
MRASZ	3623,8	1827	13	1			F1B		250	
MRASZ	3640,0	1528	12	1			F1B		250	
MRASZ	3640,0	1824	13	1			F1B		250	
MRASZ	3640,0	1446	14	1			F1B		250	

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
MRASZ	3640,0	1716	16	1			F1B		250	
MRASZ	3642,0	1459	14	1	CHN		A1A			"V DKG6 de 3A7D" hrd: 16, 22, 27
MRASZ	3651,0	1701	27	1			A1A			dashes
MRASZ	3658,0	1713	16	1	UZB		A1A			beacon "V", hrd: 22, 27
MRASZ	3702,0	1928	24	1			F1B		250	
MRASZ	3724,0	1645	25	1			F1B		250	
MRASZ	3728,0	1705	27	1			F1B		250	
MRASZ	3738,0	1601	4	1			PSK2			AT3004D
MRASZ	3738,0	1646	25	1			F1B		200	
MRASZ	3785,0	1710	8	1			PSK2			AT3004D
MRASZ	3792,0	1521	1	1			F1B		200	
MRASZ	3792,0	1710	8	1			F1B		200	
MRASZ	3801,0	1706	27	1			PSK2			AT3004D
MRASZ	7030,0	1727	5	1			F1B		250	
MRASZ	7030,0	1759	22	1			PSK2			AT3004D
MRASZ	7030,0	1535	25	1			PSK2			AT3004D
MRASZ	7055,0	1252	14	1			LSB			music
MRASZ	7055,0	1526	23	1			LSB			music + singing
MRASZ	7120,0	1505	dly	1	SOM		A3E			R. Hargaysa,
MRASZ	7140,0	1505	dly	1	ERI		A3E			R. Eritrea
MRASZ	7157,0	1528	23	1			A3E			music + singing
MRASZ	7181,5	1505	dly	1	ERI		A3E			R. Eritrea
MRASZ	7199,0	0939	6	1			F1B		250	+ deliberate HAM B16disturbance on one side
MRASZ	7200,0	1931	24	1			N0N			carrier of a BC
MRASZ	10118,0	1205	28	1			OTHR			10116-10140 kHz
MRASZ	14135,0	0924	25	1			OTHR			14110-14160 kHz
MRASZ	14192,0	1529	12	1	RUS		F1B	50	200	
MRASZ	14230,0	0944	6	1			OTHR			
MRASZ	14255,0	0926	25	1			OTHR			14230-14280 kHz

### OEVSV – Austria – OE3GSA (Gerd)

### PZK – Poland – SP9BRP (Jan)

### REF – France – F5MIU (Francis)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	Baud	Sh /Bw	DETAILS
<b>R.E.F.</b>										<b>January 2018</b>
<b>F5JBR</b>	1793.5	0554	11	01	RUS	MTSM	CW			ZTWM Wkg NUFY (Calling and send Z codes – probably for QSY : ZOB ZEP ZPU)
<b>F5MIU</b>	3590	1655	24			F6FRV	AM		10kHz	Not respecting 80m band plans
<b>F5MIU</b>	3590	1655	24			F6HQE	AM		10kHz	Not respecting 80m band plans
<b>F5MIU</b>	3590	1655	24			F6AII	AM		10kHz	Not respecting 80m band plans
<b>F5JBR</b>	7162.0	0537	11	01	RUS	Russian Air Defense	CW			99 ? 0837 ? 9 ????? = 99 ? 0838 ? 9 ????? = 99 ? 0839 ? 9 ????? = 99 ? 0840 ? 9 ????? = 99 ? 0841 ? 9 ????? = 99 ? 0842 ? 9 ????? =
<b>F5JBR</b>	7162.0	0638	12	01	RUS	Russian Air Defense	CW			99 ? 0948 ? 9 ????? = 99 ? 0949 ? 9 ????? = 99 ? 0950 ? 9 ????? = 99 ? 0951 ? 9 ????? = 99 ? 0952 ? 9 ????? = 99 ? 0953 ? 9 ????? =
<b>F5JBR</b>	7162.0	0710	20	01	RUS	Russian Air Defense	CW			99 ? 1010 ? 9 ????? = 99 ? 1012 ? 9 ????? = 99 ? 1014 ? 9 ????? = 99 ? 1016 ? 9 ????? = 99 ? 1018 ? 9 ????? = 99 ? 1020 ? 9 ????? =
<b>F5JBR</b>	7169	0709	12	01	RUS	Russian Mil	CIS-12/AT3004D/USB	120 per channel	2700	Encrypted messages

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	Baud	Sh /Bw	DETAILS
F5MIU	10130	0909	19				fmcw		20kHz	OTH radar S9+ pulsed 20ms
F5MIU	14100	0850	18				fmcw		100kHz	OTH radar S4 pulsed
F5MIU	18080		17				fmcw		20kHz	OTH radar S8 pulsed 20ms
F5MIU	18160	0900	31				fmcw		20kHz	OTH radar S3 pulsed 20ms
F1GGS	438500		07	1			FM			Piracy : hunting session in Auvergne France

## REP – Portugal – CT4AN (Jose Francisco)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REP	3503	18.43	24	01	G		FSK8	125	2,5	"XSS" Bristish Task Force ALE, legal, just FYI
REP	3527	20.25	29	01	RUS		F1B	50	200	CIS 36-50 Russian mil, idling
REP	3550	07.09	12	01	E		J3E-U			Spanish fishery w/ CRY2000 vocoder
REP	3550	20.27	29	01	ISR		PSK4/8			Israel mil hibrid tx Psk4 / Psk8 serial, legal
REP	3550	07.22	03	01	F		A3E			French amateur ops ignoring Bandplan
REP	3553	20.30	29	01	TUR		PSK8	2400		Stanag 4285 Turkey 600/L, legal
REP	3566	21.48	12	01	J		J3E-U			Japanese fishery N.Atlantic
REP	3578	20.22	29	01	RUS		F1B	50	200	CIS 36-50, Russian mil encrypted
REP	3582	20.33	29	01	RUS		F1B	50	200	CIS 36-50 Russian mil, idling
REP	3673	21.51	12	01	HOL	PBK	J3E-U			Netherlands CG Wx bulletin, legal just FYI
REP	3745	20.37	29	01			PSK2	120	3k	AT3004D 12x120bps
REP	3756	20.15	29	01	RUS		A3E			Russian military channel marker, daily
REP	5352	18.00	31	01			J3E-U			Japanese/Oriental language ops, not ham
REP	5353	07.42	03	01	E		J3E-U			Spanish fishery and other unid arabic language
REP	7000	20.54	29	01	B		J3E-U			Brazilian fishery, talk about tides, ports. Daily
REP	7000	08.02	03	01			J3E-U			Singing, unid language, Indonesian village radio
REP	7010	20.42	29	01			FSK8	125	2,5k	ALE unid 92xx net, 920
REP	7021	19.20	30	01	RUS		PSK4	120	3k	AT3004D russian mil, 12x120bd pilot tone 3k
REP	7037	20.47	17	01	CHN		FMP	10	160	Chinese OTH radar
REP	7038	23.10	20	01	UKR	D	A1A			SEVASTOPOL
REP	7039	23.52	06	01	RUS	C	A1A			MOSCOW
REP	7045	18.56	30	01			FSK8	125	2,5k	ALE unid 92xx. Also second net 2xxx, 1xxx
REP	7053	09.16	26	01	RUS		F1B	50	200	T-600 modem, Russian mil, encrypted
REP	7070	11.04	30	01	GEO		FSK8	125	2,5k	Georgian Border Guards ALE 220 200, 100 dly
REP	7110	20.47	30	01	CHN		PSK			Chinese MIL 30 tone modem, idling
REP	7120	18.13	19	01	SOM		8k00 A3EGN			Radio Hargaysa
REP	7120	18.24	31	01	SOM		8k00 A3EGN			Radio Hargaysa, Somaliland
REP	7132	19.08	30	01			FMOP			Unid OTH radar, variable rate
REP	7140	18.25	31	01	ETH		8k00 A3EGN			Radio of the Broad Masses, Eritreia, dly
REP	7145	Dly	19	01	ETH		8k00 A3EGN			Radio Eritreia jammed by Radio Ethiopia, dly
REP	7175	Dly	19	01	ETH		8k00 A3EGN			Radio Eritreia jammed by Radio Ethiopia, dly
REP	7181	18.23	31	01	ETH		8k00 A3EGN			Radio of the Broad Masses, Eritreia, dly
REP	7197	18.12	24	01	TUR		FSK8	125	2,5	Turkish Red Crescent ALE net "318018" sndng
REP	10102	11.38	17	01	RUS		A1A/FSK	24		Russian mil RGTV bc, FSK CW
REP	10105	11.23	15	01	MRC		J3E-U			Fishery
REP	10120	12.33	15	01	MRC		J3E-U			Fishery
REP	10121	17.56	15	01	MRC		J3E-U			Moroccan fishery
REP	10125	20.04	02	01			FMCW	50	10k	OTH radar
REP	10130	18.44	02	01	MRC		J3E-U			Fishery
REP	10130	18.51	20	01	E		J3E-U			Spanish fishery
REP	10135	11.00	26	01			J3E-U			Unid language amateurs
REP	14000	12.02	19	01			F1B	300	425	RY RY RY
REP	14025	10.28	20	01			J3E-L			Unid language intruders
REP	14130	09.07	19	01			FMCW			OTH radar
REP	14170	09.46	10	01	CHN		FMOP	10	160k	Chinese OTH radar
REP	14185	17.12	20	01	RUS		F1B	50	250	CIS36-50, Russia
REP	14200	10.37	08	01			FMCW		100	WB OTH radar
REP	14210	12.00	26	01			FMCW			OTH radar
REP	14225	07.00	08	01			PSK2	120	x12	AT3004D modem, unid
REP	14308	12.52	31	01	RUS		FSK	75	500	Russian ITA2 encrypted SVR 75/500
REP	14348	18.54	11	01			PSK8			STANAG 4285 NATO 600/long, unid
REP	18110	17.55	21	01	CYP		FMCW	50	20k	OTH radar
REP	28115	20.43	13	01	B		J3E-U			Brazilian truckers, daily
REP	28120	15.20	11	01	E		F1B	50	200	Enagal buoy
REP	28165	11.20	23	01	RUS		F3E			Taxi YL dispatcher

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REP	28175	18.33	09	01	B		A3E			Brazilian truckers, daily
REP	28385	16.02	11	01	NZ ??		A1A			Drifnet buoy
REP	29135	10.51	27	01	RUS		F3E			Taxi dispatcher
REP	29150	15.21	12	01			F1B	82	160	Datawell buoy
REP	29185	11.05	05	01	RUS		F3E			Taxi dispatcher

## RSGB - Great Britain – G0MGX (Mark)

## SRAL – Finland – OH2BLU (Pekka)

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	REMARKS
SRAL	7001.0	0800-0835/	22	1		UiMUX	PSK2	120	2600	
SRAL	7008,0	0615-1400	9 10	1		UiPTR	F1B		250	
SRAL	7008.0	'0840	25	1		UiMUX	2xPSK2	2x120	2x2600	subcarr. +/- 3,3 kHz
SRAL	7012.0	1200-1440/	25	1		UiPTR	F1B/ N0N		250	
SRAL	7014.0	1115-1145	16	1		UiPRT	F1B		250	
SRAL	7018,63	0615-0700/	12	1		UiCarr	N0N			
SRAL	7022.0	1100-1123/	22	1		UiMUX	PSK2	120	2600	
SRAL	7026.0	'0640	3	1		UiMUX	PSK2	120	2600	
SRAL	7029,8	-0647/	16	1		UiCarr	N0N			
SRAL	7030.0	'0620-0650	2	1		UiMUX	PSK2	120	2600	
SRAL	7030.0	'0815-1655	12 20	1		UiPTR	F1B/ N0N		250	
SRAL	7032.0	'0845-1018/	1 25	1		UiMUX	PSK2	120	2600	
SRAL	7033.0	0600-1340	*	1		UiMUX	PSK2	120	2600	days: 16, 19, 20
SRAL	7090.9	1055-1145	12 19	1		UiCarr	N0N			
SRAL	7096.0	1230-1335/	3	1		UiPTR	F1B		250	
SRAL	7098.0	1045-1200	18	1		UiPTR	F1B		200	
SRAL	7099.0	1430-1500	19	1		UiPTR	F1B		200	
SRAL	7111.0	0610-1345	*	1		UiPTR	F1B		250	days: 10, 16, 28
SRAL	7120,0	/0330-0545	dly	1	SOM	R.Hargeisa	A3E			
SRAL	7120,0	/1300-1400/	dly	1	SOM	R.Hargeisa	A3E			
SRAL	7120,0	/1500-2000/	dly	1	SOM	R.Hargeisa	A3E			
SRAL	7122.0	0630-0800/	14	1		UiPTR	F1B		250	4 kHz wide noise
SRAL	7129.0	0750-1015	17	1		UiMUX	PSK2	120	2600	
SRAL	7129.5	0855-1010	25	1		UiMUX	PSK2	120	2600	
SRAL	7140,0	0300-0700	dly	1	ERI	VoBME	A3E			Jammed by ETH
SRAL	7140,0	1300-1835	dly	1	ERI	VoBME	A3E			Jammed by ETH
SRAL	7142.0	0750-1010	17	1		UiPTR	F1B		250	
SRAL	7150.0	1200-1234/	15	1		UiPTR	F1B		250	
SRAL	7156.0	1000-	10	1		UiMUX	PSK2	120	2600	

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	REMARKS
		1545								
SRAL	7159.0	0940-1000	16	1		UiPTR	F1B		200	
SRAL	7160.0	0630-0830	16 17	1		RMW32	A1A			MR, 5BL
SRAL	7161.55	0630-0639/	26	1		UiCarr	N0N			
SRAL	7162.0	0600-1645	4. - 31.	1		PVO '9'	A1A			time stamp
SRAL	7162.0	0710-0905	*	1		UiPTR	F1B		250	days: 18, 22, 24
SRAL	7162.15	0630-0639/	26	1		UiCarr	N0N			
SRAL	7164.0	0855-1425/	*	1		UiMUX	PSK2	120	2600	
SRAL	7166.0	1230-1315	9	1		UiMUX	PSK2	120	2600	
SRAL	7169.0	0800-0950/	8	1		UiPTR	F1B		250	
SRAL	7171.0	0700-1300	*	1		UiPTR	PSK2/ A1A	120	2600	days: 4, 12, 14
SRAL	7172.0	'0720	24	1	RUS	RIR	A1A			
SRAL	7178.0	1325-1400	16	1		UiMUX	PSK2	120	2600	
SRAL	7178.5	0805-1140	16 - 19	1		H67B	A1A			MR 5F, 5BL
SRAL	7180.0	1330-1349/	26	1		UiPTR	F1B		200	
SRAL	7181.6	0230-0720	dly	1	ERI	VoBME	A3E			Jammed by ETH
SRAL	7181.6	1300-1835/	dly	1	ERI	VoBME	A3E			Jammed by ETH
SRAL	7181.63	0610-1340	31	1		UiCarr/ PTR	N0N/ F1B		250	
SRAL	7182.0	1300-1355/	8 26	1		UiMUX	PSK2	120	2600	
SRAL	7186.0	1330	16	1		UiMUX	PSK2	120	2600	
SRAL	7192.9	0815-1430	*	1		UiCarr/ PTR	N0N/ F1B		200	days: 1, 4, 7, 8, 9, 14, 18, 19
SRAL	7196.0	1235-1300	26	1	RUS	RCB	A1A			
SRAL	7198,0	1100-1430	*	1		UiMUX	PSK2	120	2600	days: 16, 17, 19, 23
SRAL	7199.0	1115-1300	13	1		UiPTR	F1B		250	
SRAL	7200.0	1015-1345	*	1	MM R	Myanmar Radio	A3E			days 12 - 25
SRAL	7200.0	/0935-0947/	16	1		UiOTHR	FMCW			50Hz, 10kHz
SRAL	10 MHz	0640-0700	26	1	RUS	29B6	FMCW			25/50Hz ,15 kHz (WebSDR 28d)
SRAL	10102.6	1100-1148/	5	1		UiCarr	N0N			
SRAL	14295,0	0630-1330	dly	1	TJK	R Tojikiston	A3E			3f 4765,00 kHz, Yangiyul TX. Chirpy stand by TX
SRAL	18 MHz			1	CYP / TUR	UiOTHR	FMCW			25/50Hz / 20 kHz, (WebSDR 20d)
SRAL	21 MHz			1	CYP / TUR	UiOTHR	FMCW			25/50Hz / 20 kHz, (WebSDR 10d)
SRAL	21438,0			1	RUS	RCV	A1A			
SRAL	24 MHz			1		UiOTHR	FMCW			(WebSDR 0d)
SRAL	28 MHz			1	IRN	UiOTHR	FMCW			307 & 870 Hz / 60 kHz – 300 kHz
SRAL	28960,0			1	IRN	UiOTHR	FMCW			150 & 313 Hz / 60 kHz
SRAL	28 MHz			1		UiOTHR	FMCW			25/50Hz / 20 kHz



Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	REMARKS
										(WebSDR 0d)
SRAL	28 MHz			1	RUS	Taxi disp.	F3E			0 reports

## USKA – Switzerland – HB9CET (Peter)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
<b>80m band informational only! - Amateur co-primary, shared with other also primary allocated services!</b>										
USKA	3522.0	1702	01	01			F1B	75	250	often
USKA	3524.0	1751	26	01			F1B	75	250	
USKA	3527.0	2241	01	01			F1B	50	200	almost daily
USKA	3525.0	2247	31	01			DQPSK	14x75	5k9	LINK 11 CLEW; DSP Mode often
USKA	3548.0	2354	15	01			F1B	50	200	often
USKA	3553.8	2246	01	01			PSK8	2400	2k4	Stanag 4285, daily
USKA	3561.0	1939	26	01			F1B	75	250	
USKA	3562.0	1704	01	01			F1B	75	250	
USKA	3563.0	1700	01	01			F1B	75	250	
USKA	3568.0	1707	25	01			F1B	75	250	
USKA	3570.5	1708	25	01			F1B	81	250	
USKA	3640.0	2359	15	01			F1B	75	250	
USKA	3680.0	2148	03	01			F1B	81	500	often
USKA	3699.0	2210	03	01			J7D	12x120	2k7	BPSK; CIS12 often
USKA	3727.0 VFO LSB	2208	03	01			BPSK	30x60Bd	~2k5	Burst system; tone spacing 75 Hz preamble 4x PSK 60Bd, spacing 600Hz; Pilotone at 450Hz
USKA	3737.0 VFO LSB	2205	03	01			BPSK	30x60Bd	~2k5	Burst system; tone spacing 75 Hz. Preamble 4x PSK 60Bd, spacing 600Hz; Pilotone at 450Hz
USKA	3743.0 VFO USB	2030	25	01			PSK8	2400	~2k7	MIL 188-110A mod (Hybrid) preamble 4 tones, PSK4 75Bd 450Hz spacing often
USKA	3797.0 VFO USB	1802	25	01			J7D	12x120	2k7	BPSK; CIS12
USKA	7010.0	1758	24	01		920004	MFSK8	125	1750	ALE, MIL 188-141A
USKA	7010.0	1758	24	01		920037	MFSK8	125	1750	ALE, MIL 188-141A
USKA	7010.0	1804	24	01		920001	MFSK8	125	1750	ALE, MIL 188-141A
USKA	7010.0	1848	24	01		920018	MFSK8	125	1750	ALE, MIL 188-141A
USKA	7013.0	2005	25	01			MFSK8	125	1750	ALE, MIL 188-141A
USKA	7033.0	0908	24	01			J7D	12x120	2k7	CIS12
USKA	7036.0	1644	24	01			F1B		250	
USKA	7055.0	0912	24	01			J3E-L		~2k1	Music
USKA	7063.0	1120	04	01			F1B	75	250	
USKA	7095.0	1708	01	01		120718	MFSK8	125	1750	ALE, MIL 188-141A
USKA	7101.0	1428	29	01			J7D	12x120	2k7	BPSK; CIS12
USKA	7120.0	1654	24	01	SOM		A3E			BC; Radio Hargaysa almost daily
USKA	7140.0	1719	13	01	ERI		A3E		~ 10k	African music style often
USKA	7180.0	1649	24	01					~24k	Jammer, white noise often
USKA	7181.5	1649	24	01	ERI		A3E		~9k	BC  almost daily
USKA	7193.0	1114	04	01			F1B	50	200	
USKA	7193.1	1104	04	01			A1A			Jammer; fast dots; stupid and absolutly illegal!
USKA	7205.0	1743	26	01			A3E		> 13k	BC, China Radio International partially in 40m band
USKA	14295.2	1126	22				A3E		ca. 9k	3 <sup>rd</sup> of 4765 – Radio Tajikistan

## Veron – Netherlands – PA2GRU (Dick)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SHIFT	DETAILS
VERON	3505,0	1558	6	1			USB		Voice scrambler
VERON	3510,0	1836	31	1		UiPtr	F1B		Ptr
VERON	3515,0	1641	14	1	F	UiILL	J3e-U		fishery-language French
VERON	3522,0	1556	6	1	RUS	UiPtr	F1B	250	Printer; S9
VERON	3527,0	2022	5	1		UiPTR	F1B		Revs
VERON	3547,0	2024	5	1	CIS	UiCW	A1A		5F
VERON	3547,0	2000	24	1	CIS	RZGB	A1A		Calls to: SZMP B1AI DNAE YAB8 ZMLO
VERON	3566,5	1800	18	1	CIS	UiPTR	F1B		Revs/Ptr
VERON	3578,0	1950	23	1		UiPTR	F1B		Ptr
VERON	3582,0	1606	4	1		UiPTR	F1B		Ptr
VERON	3622,0	1620	11	1		UiPTR	F1B		Ptr
VERON	3640,0	1615	11	1		UiPTR	F1B		Ptr
VERON	3668,0	1550	6	1	RUS	UiPtr	F1B	200	Printer; jammed by HAM !
VERON	3711,0	2004	24	1	CIS	UiCW	A1A		5BL
VERON	3796,0	2020	8	1	CIS	UiCW	A1A		5BL
VERON	7008,0	0814	9	1	RUS	UiPtr	F1B	250	Ptr
VERON	7008,0	1445	10	1	RUS	UiPtr	F1B	250	Ptr
VERON	7012,0	1229	6	1	RUS	UiPtr	F1B	250	Ptr
VERON	7012,0	1612	11	1		UiPTR	F1B		Ptr
VERON	7018,0	1601	11	1		UiCAR	NON		carrier
VERON	7112,0	1601	10	1	RUS	UiPtr	F1B		Ptr
VERON	7112,0	1600	11	1	RUS	UiPtr	F1B		Ptr
VERON	7120,0	1545	25	1	SOM	R.Hargaysa	A3E	9k	E. African speech; S6
VERON	7140,0	1522	6	1	ETH		NON	10k	White noise; S7
VERON	7140,0	1544	25	1	ETH		NON	10k	White noise; S6
VERON	7140,0	1544	25	1	ERI	R.Eritrea	A3E	9k	Very weak; just audible; S2
VERON	7180,0	1516	6	1	ETH		NON	10k	White noise; S5
VERON	7180,0	1542	25	1	ETH		NON	10k	White noise; S7; splattering
VERON	7181,6	1754	6	1	ERI	R.Eritrea	A3E	9k	Male & female speech; S7
VERON	10102,0	1100	22	1		UiCAR	NON		carrier
VERON	10120,0	1651	21	1		OTHR	FMOP		OTHR radar
VERON	10126,0	1553	22	1		OTHR	FMOP		OTHR radar
VERON	10140,0	1645	21	1					pulse 1pps
VERON	14192,0	1133	2	1	CIS	UiPTR	F1B		Revs/Ptr
VERON	14240,0	1005	5	1		UiPTR	F1B		Ptr

# 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 - February 2018**