



# Monitoring System

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The monthly newsletter for Region 1

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## Acknowledgements

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Part 1: News and infos

Part 2: Detailed reports of the national co-ordinators

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# Part 1: News and Infos

## 1. 5 MHz flooded by fishermen

**EI3GYB (Michael) found many fishermen on 5 MHz:**

Frequencies so far:

5362.5;5400;5345.2;5360;5280;5327 KHz- all USB.

5 Mhz is legal for HAMs in Ireland, UK and other countries for a long time already. We have a number of spot frequencies we can use as secondary user. And I keep meeting the fishermen on some of these. The situation on 5 MHz is ideal for the fishermen. Many countries have different allocations for HAMs. On top of this the new 5 MHz band was already opened up in some countries as well. The band is cut into many small segments used by different countries. So the fishermen can hide among the crowd. They do not stick out.

As soon as a DX station or some rare country comes up on 5 MHz, all rules are forgotten by HAMs and everybody just follows the crowd, regardless of legality. Just watch what is going on with CY9C at the moment. As soon as they are on 5 MHz, the chaos unfolds. Allocations are forgotten by a big part of the HAM community.

**The comment of G3PSM (Colin):**

By official I mean the Radio Regulations which come in effect on the 1st January 2017. All other allocations are under Radio Regulation 4.4 which allows any administration to allocate a frequency to any service on the basis on non-interference.

**Wolf's comment:** I tried to find fishery traffic there on Aug. 25<sup>th</sup>, but no success here in DL. There is no entry about legal commercial fishery frequencies in my tables between 5000 and 5800 kHz. But I found another intruder:

A fellow transmitting on AM with a very unstable carrier same as on the CW range of 80 m. Possibly coming from CIS.

## 2. PRC4+4 from China:

We found the Chinese system PRC4+4 on 10, 14 and 21 MHz. Take note: Traffic on 10 MHz legal !

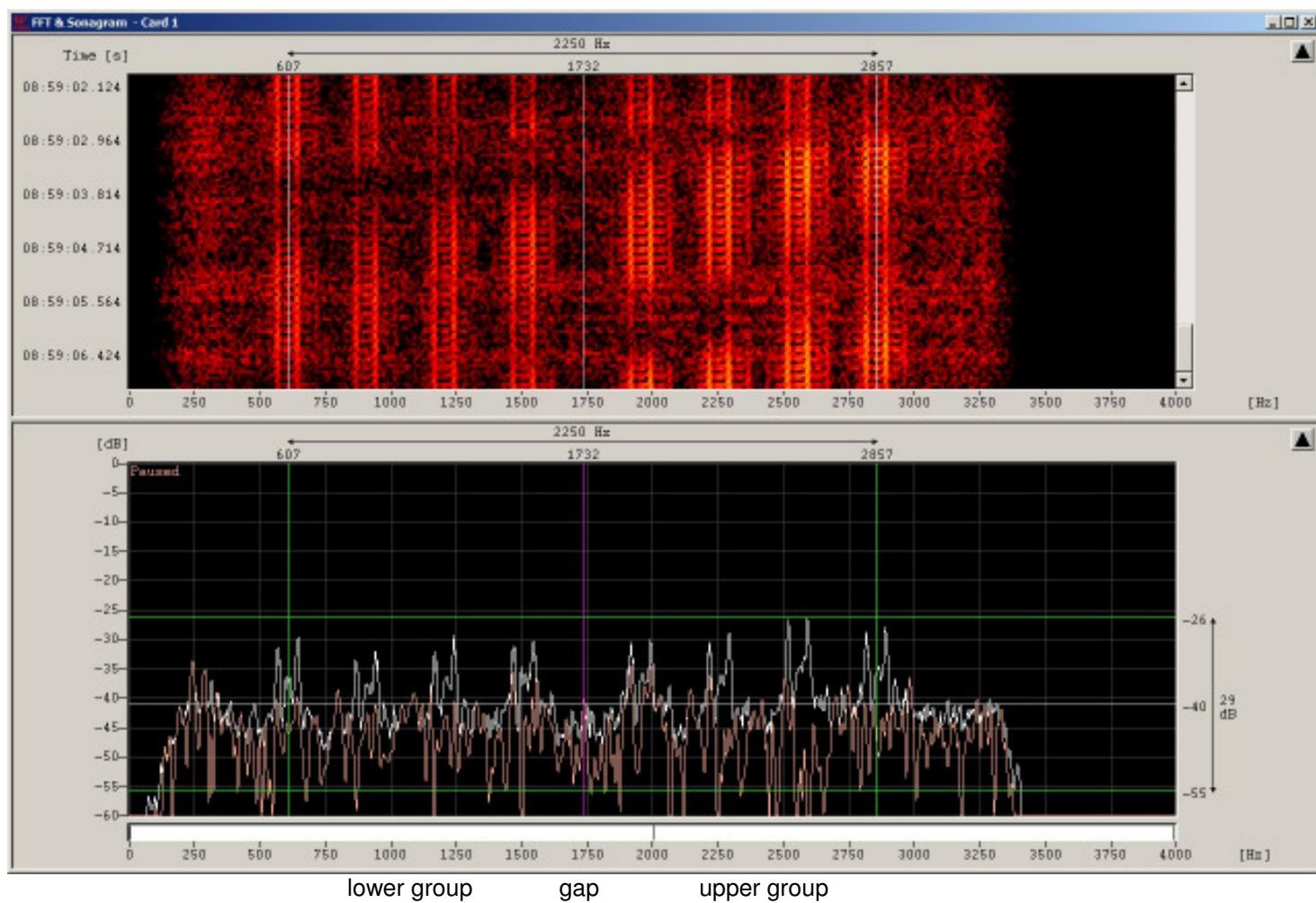
Parameters: Traffic 8 x 75 Bd PSK4A or PSK4B, bandwidth 2250 Hz. Transmission of 4 letter or 4 figure groups.

Idents and confirmation traffic are in plain text. Idle condition 8 x FSK 150 Bd. The system seems to run very stable. Even CW signals from amateurs are not showing any influence. W-Code can decode PRC4+4.

Sonogram and FFT: PRC4+4 in idle condition 8 x FSK 150 Bd (**DK2OM with Wavecom W-Code**)

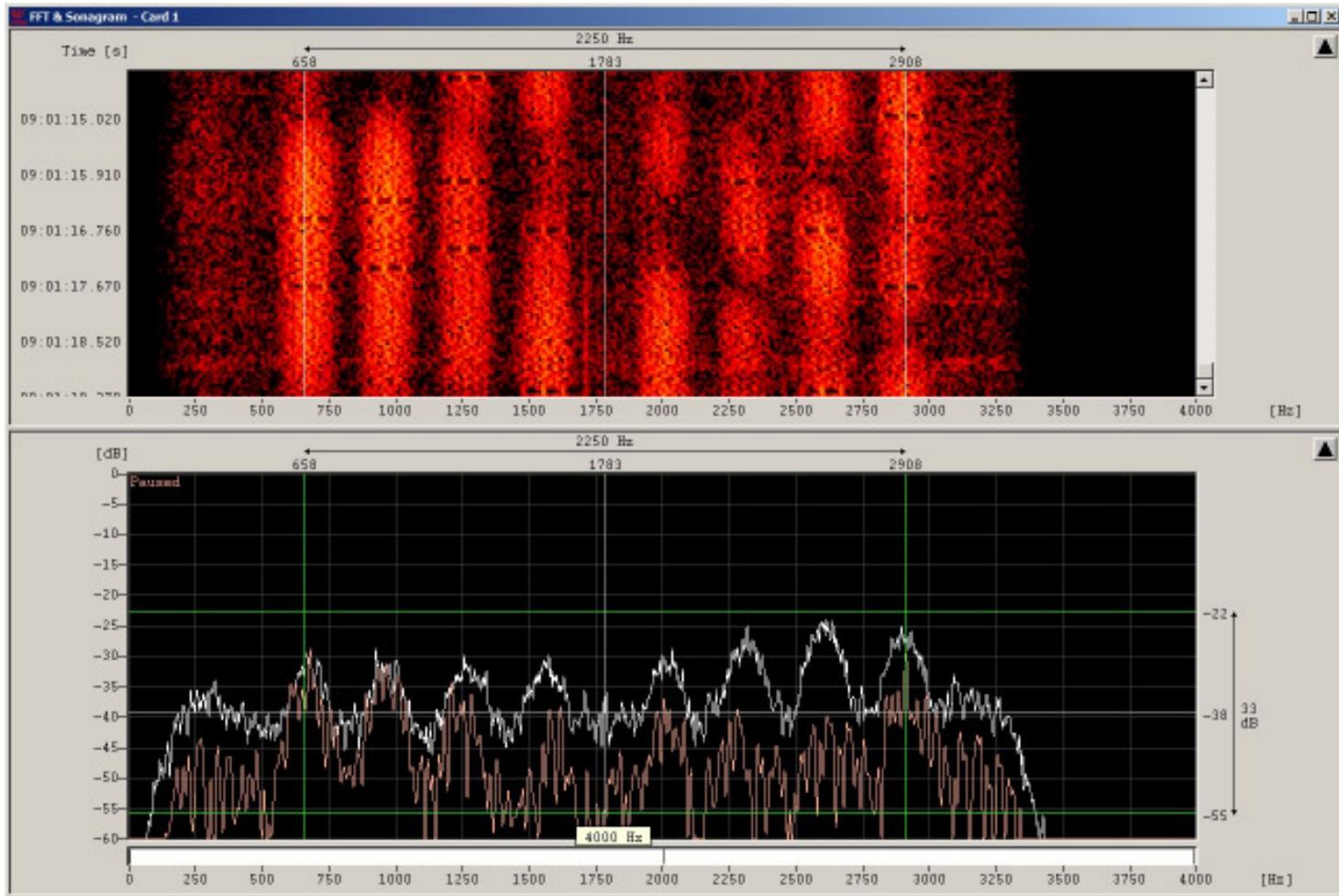
You can see a gap between the upper and the lower group.

**Soundfile:** <http://www.iarums-r1.org/iarums/sound/prc4+4-idle.wav>



PRC4+4 in traffic condition – sonogram and FFT (**DK2OM with Wavcom W-Code**):  
You can see a gap between the upper and the lower group.

Soundfile: <http://www.iarums-r1.org/iarums/sound/mfsk8c.wav>



### 3. Russian Radar Contayner on 7 and 14 MHz

The Russian radar Contayner was again active with long lasting transmissions on 7 and 14 MHz, often with many spurious emissions

### 4. Spanish fishermen on 80 m with voice scrambler

Spanish fishermen were abusing 3510 and 3590 kHz USB with the voice scrambler “CRY 2001”. This scrambler is using a FSK synchro signal, which is audible during every microphone change. The FSK bursts works with 100 Bd and 170 Hz shift.

### 5. Radar Iran on 28960 kHz daily – no change

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

### 6. No changes

3590.0 kHz – USB – Spanish fishery with voice scrambler “CRY 2001” every evening

6998.0 kHz - Russian buzzer – daily and all day

7120.0 kHz – Radio Hargaysa Somalia

7205.0 kHz – RFI = Radio France International) splattering down to 7185 kHz every evening

14295.0 kHz Radio Tajik (harmonic from 4765 kHz)

7. 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** = 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 \* **UILL** = 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 AUGUST 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)

H'd by	kHz	UTC	dd	mm	ITU	Identity	MODE	Details
ARSK	7.000.00	vt	dly	8	E. Africa	?	J3Eu	Inidehnified, KiSwahili, East Africa. Possibly military.
ARSK	7,070.0	1350	14	8		?	J3E	Unknown African language.
ARSK	7,074.00	vt	dly	8	E. Africa ?	?	J3E	Unidentified language,
ARSK	7,075.00	vt	dly	8	E. Africa	?	J3Eu	Unidentified language
ARSK	7,120.00	vt	dly	8	Rep.of Somalia	Hargeisha	A3E	Broadcast
ARSK	7,164.00	vt	dly	8	E. Africa?	?	J3Eu	Military? Phonetics, messages.

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

DG0JBJ (Mario) observed 13 OTH radars on 40 m, 17 OTH radars on 20 m, 35 OTH radars on 17m, 8 OTH radar on 15 m and 5 OTH radar on 10 m in August 2016.

#### 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	1934	01	08	RUS		USB LSB			14 tones – hyperbolic radio navigation system – BRAS-3/RS-10 – Kaliningrad – no carrier - daily, all day
DK2OM	1852,0	vt	dly	08	I	IPP	USB			Palermo Radio, weather reports
DK2OM	1855,0	vt	dly	08	I	IQP	USB			San Benedetto Radio, weather reports
DK2OM	1876,0	vt	dly	08	I	IQN	USB			Lampedusa Radio, weather reports
DK2OM	1888,0	vt	dly	08	I	IPD	USB			Civitavecchia Radio, weather reports
DK2OM	1896,5	1935	01	08	D		PSK8	2400	2400	Stanag4285 – 600 bps long – German Navy – daily, all day
DK2OM	1925,0	1919	19	08	I	IPL	USB			Livorno Radio, weather reports
DK2OM	3500,0	---	--	08	F		FMCW		20k	French burst radar, 6 sps, similar Codar sounding, South France

<b>DK2OM</b>	<b>kHz</b>	<b>UTC</b>	<b>DD</b>	<b>MM</b>	<b>ITU</b>	<b>IDENT</b>	<b>MODE</b>	<b>BD</b>	<b>SH/SP</b>	<b>DETAILS</b>
<b>DK2OM</b>	3500,0	vt	dly	08	TUR		FSK8	125	1750	ALE, "2016" "4017" – Turkish Red Crescent – just for info!
<b>DK2OM</b>	3501,0	---	--	08	UKR		FSK8	125	1750	ALE, "H10" "B10" "I10" "D10" "G10" – just for info!
<b>DK2OM</b>	3503,5	1939	24	08	G	no ITU	FSK8	125	1750	ALE – "XSS" "XPU" "XJR" – British MIL Tascomm – vt, daily - legal!
<b>DK2OM</b>	3506,0	1941	24	08	UKR		PSK2A	120	2600	AT3004D - Kyiv
<b>DK2OM</b>	<b>3510,0</b>	<b>1919</b>	<b>31</b>	<b>08</b>	<b>E</b>		<b>USB</b>			<b>Spanish fishery with voice scrambler CRY 2001</b>
<b>DK2OM</b>	3515,0	2025	15	08	HOL		USB			Dutch fishery
<b>DK2OM</b>	3520,0	1735	12	08	E		USB			Spanish fishery – also 17.08.2016 at 1937 utc
<b>DK2OM</b>	3525,0	---	--	08	F		PSK4	75	5800	LINK11-CLEW on both sidebands (5800 Hz wide) – area of Marseille – legal!
<b>DK2OM</b>	3525,0	1931	31	08			PSK2A	120	2600	AT3004D -
<b>DK2OM</b>	3531,0	1921	01	08	RUS	REA4	N0N			unclean carrier - RUS airforce Moscow, ident: 1940 utc - daily
<b>DK2OM</b>	3532,0	---	--	08	F		PSK4	75	5800	LINK11-CLEW on both sidebands (5800 Hz wide) – area of Brest – legal!
<b>DK2OM</b>	3535,0	0730	30	08	G		USB			UK fishery
<b>DK2OM</b>	3540,0	1730	11	08	E		USB			Spanish fishery
<b>DK2OM</b>	<b>3550,0</b>	<b>0530</b>	<b>dly</b>	<b>08</b>	<b>F</b>		<b>A3E</b>			<b>French amateurs not respecting bandplans - daily</b>
<b>DK2OM</b>	3550,0	vt	vd	08	ALG	no ITU	FSK8	125	1750	ALE, "IU50" "IU52" "FN50"
<b>DK2OM</b>	3550,7	1929	10	08	ISR		PSK4 PSK8	2400 2400	2400 2400	hybrid modem – ISR Navy – PSK4 parallel and PSK8 serial - legal operation
<b>DK2OM</b>	3553,8	ady	dly	08	TUR		PSK8	2400	2400	Stanag4285 – 600 bps long -TUR MIL - Ankara – daily, all day - legal operation
<b>DK2OM</b>	3560,0	1850	13	08	F		USB			French fishery
<b>DK2OM</b>	3569,0	1940	11	08	RUS		F1B	50	200	St. Petersburg
<b>DK2OM</b>	3576,6	ady	dly	08	I	IZ3DVW	A1A			3576.550 - uncoordinated beacon – disturbing JT65
<b>DK2OM</b>	3580,0	0940	17	08			USB			Scandinavian intruders
<b>DK2OM</b>	3582,0	1913	29	08	RUS		PSK2A	120	2600	AT3004D – St. Petersburg
<b>DK2OM</b>	3585,0	1940	12	08	TWN	HLL	F1C		800	WX-fax Taiwan - 120 rpm, IOC 576, - daily, all day - legal!
<b>DK2OM</b>	3586,0	1940	12	08	G		PSK2A	40	40	encrypted – every evening Great Britain – purpose unknown
<b>DK2OM</b>	3587,0	vt	vd	08	E	no ITU	FSK8	125	1750	ALE, "TVV" "TXX" - Spanish Guardia Civil
<b>DK2OM</b>	3590,0	vt	dly	08	PAK	no ITU	FSK8	125	1750	ALE, "KW" "KHAIBAR" – Pakistan navy
<b>DK2OM</b>	<b>3590,0</b>	<b>2000</b>	<b>04</b>	<b>08</b>	<b>E</b>		<b>USB</b>			<b>Spanish fishery – every evening</b>
<b>DK2OM</b>	<b>3590,0</b>	<b>2013</b>	<b>07</b>	<b>08</b>	<b>E</b>		<b>USB</b>			<b>Spanish fishery with voice scrambler CRY 2001</b>
<b>DK2OM</b>	3590,0	1900	15	08	RUS		PSK2A	120	2600	AT3004D – modem idle and traffic - Kaliningrad
<b>DK2OM</b>	3590,4	2054	24	08		V	A1A			beacon "V" on 3590.396 and 3591.307 – parallel -
<b>DK2OM</b>	3593,7	---	--	08	RUS	D	A1A			Cluster beacon – Sevastopol RUS Navy – "RCV"
<b>DK2OM</b>	3593,8	---	--	08	RUS	P	A1A			Cluster beacon – Kaliningrad RUS Navy – "RMP"
<b>DK2OM</b>	3593,9	---	--	08	RUS	S	A1A			Cluster beacon – Severomorsk RUS Navy – „RIT“
<b>DK2OM</b>	3594,0	---	--	08	RUS	C	A1A			Cluster beacon C - Moscow RUS Navy - "RIW"
<b>DK2OM</b>	3595,0	---	--	08	RUS	K	A1A			Cluster beacon - Petropavlovsk Kamchatskiy - RUS Navy - Pacific fleet - "RCC"
<b>DK2OM</b>	3596,0	vt	dly	08	D		FSK8	125	1750	ALE, "DK0ESD" – just for info!
<b>DK2OM</b>	3596,0	vt	dly	08	J		FSK8	125	1750	ALE, "JH1ESB" – just for info!

<b>DK2OM</b>	<b>kHz</b>	<b>UTC</b>	<b>DD</b>	<b>MM</b>	<b>ITU</b>	<b>IDENT</b>	<b>MODE</b>	<b>BD</b>	<b>SH/SP</b>	<b>DETAILS</b>
<b>DK2OM</b>	3617,0	vt	dly	08	HRV	9A5EX	FSK8	125	1750	ALE, "9A5EX" – HAM-ALE - just for info
<b>DK2OM</b>	3622,5	1932	05	08	J	JMH	F1C		800	Tokyo Meteo – 120 rpm – IOC 576 – daily, all day - legal!!!
<b>DK2OM</b>	3640,0	vt	dly	08	G		FSK8	125	1750	ALE, "XSS" - British MIL Tascomm – just for info!
<b>DK2OM</b>	3642,0	ady	dly	08	CHN		A1A			loop – DKG6 de 3A7D Chinese military – daily, all day
<b>DK2OM</b>	3649,0	vt	vd	08	ALG	no ITU	FSK8	125	1750	ALE, "BI20" PA20"
<b>DK2OM</b>	3658,0	---	--	08	UZB		A1A			beacon "V" - Tashkent
<b>DK2OM</b>	3718,0	vt	vd	08	FEa	7CJK	A1A			loop "7CJK"
<b>DK2OM</b>	3720,0	vt	dly	08	S		FSK8	125	1750	ALE, "YU" "YT" "YV" "DZ" – Swedish MIL
<b>DK2OM</b>	3751,5	vt	dly	08	POL	no ITU	FSK8	125	1750	ALE, "IZ3" "MI3"
<b>DK2OM</b>	3756,0	1915	01	08	RUS		A3E			RUS MIL – channel marker – Tuapse – East Black Sea – night QRG – daily – even audible in Japan
<b>DK2OM</b>	3757,0	ady	dly	08	FEa	RIS9	A1A			"M8JF de RIS9" - loop
<b>DK2OM</b>	3761,5	vt	vd	08	POL	no ITU	FSK8	125	1750	ALE, "NI9" "PL7" "AB2" – Polish MIL
<b>DK2OM</b>	3772,0	ady	dly	08	FEa	A4JC	A1A			"A4JC" - loop
<b>DK2OM</b>	3777,0	ady	dly	08	FEa		A1A			"M8JF de RIS9" – loop – dly
<b>DK2OM</b>	3791,0	vt	vd	08	D	DK0ESD	FSK8	125	1750	ALE, "DK0ESD" – daily just for info!
<b>DK2OM</b>	3797,0	ady	dly	08	FEa		A1A			"M8JF de RIS9" – loop
<b>DK2OM</b>	6990,0	1703	04	08	CHN		FMCW		160k	Chinese broadband OTH radar – 10 sps – 6990 – 7150 kHz
<b>DK2OM</b>	6998,5	vt	dly	08	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
<b>DK2OM</b>	7000,0	vt	dly	08	INS		USB LSB			Indonesian pirates – daily – all day - audible in Europe in the evenings
<b>DK2OM</b>	7000,0	1936	01	08	RUS		H3E		3.4 k	<b>buzzer – 1 sec bursts - 118 Hz AF rough sinus – carrier on 6998.0 + upper sideband - with splatters 10 kHz wide – daily, all day - Moscow</b>
<b>DK2OM</b>	7000,0	vt	dly	08	CHN		FSK8	125	1750	ALE, "157" "162"
<b>DK2OM</b>	7000,0	1235	16	08	RUS		PSK2A	120	2600	AT3004D – Far East Russia
<b>DK2OM</b>	7000,8	0830	11	08			PSK8A	2400	2400	MIL-188-110B inverted – 6999.0 kHz RF
<b>DK2OM</b>	7001,5	0700	vd	08	POL		PSK8	2400	2400	RF QRG 6998.5 kHz – 7000.3 kHz center - MIL-188-110A – 600 / 300 bps short – Polish MIL
<b>DK2OM</b>	7005,0	vt	dly	08	INS		USB LSB			Indonesian pirates
<b>DK2OM</b>	7010,0	vt	dly	08	INS		USB LSB			Indonesian and Philippine pirates
<b>DK2OM</b>	7015,0	vt	dly	08	INS		USB LSB			Indonesian pirates
<b>DK2OM</b>	7016,0	1711	23	08	RUS		F1B	75	250	Moscow
<b>DK2OM</b>	7018,0	---	--	08	RUS	REA4	F1B	100	800	mostly idling – Russian airforce Moscow – ident at full hour + 41 min. on F1A
<b>DK2OM</b>	7020,0	vt	dly	08	INS		USB LSB			Indonesian pirates
<b>DK2OM</b>	7020,0	---	--	08	ALB		FSK8	125	1750	ALE, "CS004A" "RS008D" "RS0" – Albanian coast - daily
<b>DK2OM</b>	7022,0	0745	18	08	RUS		PSK2A	120	2600	AT3004D – East Black-Sea
<b>DK2OM</b>	7025,0	vt	dly	08	INS		USB LSB			Indonesian pirates
<b>DK2OM</b>	7027,5	1859	15	08	KAZ	,,V“	A1A			beacon "V" – Almaty – daily, all day
<b>DK2OM</b>	7030,0	vt	dly	08	INS		LSB			Indonesian pirates

<b>DK2OM</b>	<b>kHz</b>	<b>UTC</b>	<b>DD</b>	<b>MM</b>	<b>ITU</b>	<b>IDENT</b>	<b>MODE</b>	<b>BD</b>	<b>SH/SP</b>	<b>DETAILS</b>
<b>DK2OM</b>	<b>7035,0</b>	<b>vt</b>	<b>dly</b>	<b>08</b>	<b>INS</b>		<b>USB LSB</b>			Indonesian pirates
<b>DK2OM</b>	7035,0	0803	31	08	RUS		FMCW		10k	OTH burst radar Contayner - 10 sps - Gorodezh
<b>DK2OM</b>	7039,0	---	--	08	RUS	C	A1A			Cluster beacon C - Moscow RUS Navy - "RIW"
<b>DK2OM</b>	7039,1	---	--	08		A	A1A			beacon "A" - loop
<b>DK2OM</b>	7039,3	---	--	08	RUS	K	A1A			Cluster beacon K Petropavlovsk Kamchatskiy - RUS Navy - Pacific fleet - "RCC" - daily
<b>DK2OM</b>	7039,4	1828	20	08	RUS	M	A1A			Cluster beacon M - Magadan RUS Navy - „RTS“ - distorted with spurious emissions
<b>DK2OM</b>	7039,8	1304	28	08	RUS	F	A1A			Cluster beacon F - Vladivostok RUS Navy - "RJS"
<b>DK2OM</b>	<b>7040,0</b>	<b>vt</b>	<b>dly</b>	<b>08</b>	<b>INS</b>		<b>USB LSB</b>			Indonesian pirates
<b>DK2OM</b>	7040,0	vt	dly	08	F	F6BAZ	FSK8	125	1750	ALE, "F6BAZ" - just for info
<b>DK2OM</b>	<b>7040,0</b>	<b>ady</b>	<b>dly</b>	<b>08</b>	<b>I</b>		<b>A1A</b>			<b>IZ3DVW – uncoordinated and unwanted beacon</b>
<b>DK2OM</b>	7040,5	vt	dly	08	HRV		FSK8	125	1750	ALE, "9A5EX" "9A0ALE" - just for info
<b>DK2OM</b>	7041,0	1905	25	08	FEa		FMCW		32k	Codar like ocean surface radar 2.6 sps - 7041 - 7073 kHz
<b>DK2OM</b>	7047,37	vt	vd	08	D		FSK8	125	1750	ALE, "DL0NOT" - just for info!
<b>DK2OM</b>	7049,5	vt	vd	08	HRV G F	9A0ALE M1DFO F6BAZ	FSK8	125	1750	Amateur ALE, just for info! daily – various times
<b>DK2OM</b>	<b>7050,0</b>	<b>1904</b>	<b>02</b>	<b>08</b>	<b>RUS UKR</b>		<b>LSB</b>			<b>music transmissions – private war ?</b>
<b>DK2OM</b>	7055,5	vt	vd	08	MEa	no ITU	FSK8	125	1750	ALE, "111" "132" "133" - Kaukasus
<b>DK2OM</b>	7056,8	0735	18	08	UKR		PSK8	2400	2400	MIL-188-141B
<b>DK2OM</b>	7060,0	1611	18	08	RUS		PSK2A	120	2600	AT3004D – traffic and submode idle - Moscow
<b>DK2OM</b>	7060,0	1823	20	08	FEa		FMCW		32k	Codar like ocean surface radar 2.6 sps - 7060 - 7092 kHz
<b>DK2OM</b>	7062,0	1940	09	08	RUS		FMCW		13k	OTH radar Contayner - 50 sps - Gorodezh
<b>DK2OM</b>	7064,0	1934	23	08	RUS		PSK2A	120	2600	AT3004D – Far East Russia
<b>DK2OM</b>	7070,0	vt	vd	08	GEO	no ITU	FSK8	125	1750	ALE, "MV" "244" "686" "334" "204" "571" – daily active
<b>DK2OM</b>	7072,0	1630	29	08	RUS		PSK2A	120	2600	AT3004D - Kaliningrad
<b>DK2OM</b>	7078,0	1333	14	08	FEa		FMCW		32k	Codar like ocean surface radar 2.6 sps - 7078 - 7110 kHz
<b>DK2OM</b>	7088,8	1935	17	08	S	SL0FRO	A1A			7088.830 kHz - cw-trainee, Sweden - SL0FRO - just for info!
<b>DK2OM</b>	7089,8	---	--	08	TUR CYP		PSK8	2400	2400	Link11 - SLEW – aircraft – west of Cyprus
<b>DK2OM</b>	7091,5	---	--	08	KAZ	„V“	A1A			loop – ident "V" – Almaty - Kazakhstan
<b>DK2OM</b>	7099,5	vt	dly	08	HRV	9A0ZG	FSK8	125	1750	ALE, "9A0ZG" "9A5EX1P" "9A0OS" – daily - just for info!
<b>DK2OM</b>	7102,0	vt	dly	08	TWN		FSK8	125	1750	ALE, "BV4AS" – just for info!
<b>DK2OM</b>	7102,0	vt	dly	08	HRV SUI D	9A0MIL	FSK8	125	1750	ALE, "9A0MIL" "9A2KS" "HB9MHB" "9A0ZG" "9A4OS" "DK0ESD" – just for info!
<b>DK2OM</b>	7110,0	vt	dly	08	HRV	9A0ALE	FSK8	125	1750	ALE, "9A0ALE" – just for info
<b>DK2OM</b>	<b>7120,0</b>	<b>vt</b>	<b>dly</b>	<b>08</b>	<b>SOM</b>		<b>A3E</b>		<b>9k</b>	<b>Radio Hargaysa – Somalia – daily – even audible in Australia and Japan</b>
<b>DK2OM</b>	7122,0	---	--	08	FEa	V	A1A			loop "V"
<b>DK2OM</b>	7123,0	2035	25	08	RUS		FMCW		13k	OTH radar Contayner - 50 sps - Gorodezh
<b>DK2OM</b>	7137,0	vt	dly	08	TWN		FSK8	125	1750	ALE, "CBIUN" "CBWPC"

<b>DK2OM</b>	<b>kHz</b>	<b>UTC</b>	<b>DD</b>	<b>MM</b>	<b>ITU</b>	<b>IDENT</b>	<b>MODE</b>	<b>BD</b>	<b>SH/SP</b>	<b>DETAILS</b>
							LSB			“CQYTX” “CAPLJ” “CTFOJ” “CEGTO” “CSNYI” “CEIPN” “CRXWT”- Taiwanese navy – daily
<b>DK2OM</b>	7150,0	1940	14	08	FEa		FMCW		32k	Codar like ocean surface radar 2.6 sps – 7150 – 7182 kHz
<b>DK2OM</b>	7162,0	1420	02	08	RUS		F1B	75	250	Kaliningrad – “RDL QCZ”
<b>DK2OM</b>	<b>7163,0</b>	<b>---</b>	<b>--</b>	<b>08</b>	<b>UKR</b>		<b>A3E</b>			<b>encrypted MSGs - SZRU in Rivne</b>
<b>DK2OM</b>	7164,0	0842	18	08	RUS		PSK2A	120	2600	AT3004D - Moscow
<b>DK2OM</b>	7183,0	vt	dly	08	SUI		FSK8	125	1750	ALE, “HB9MHB” – just for info!
<b>DK2OM</b>	7185,5	0740	24	08	D HRV		FSK8	125	1750	ALE, “9A5EX” “DK0ESD” just for info - daily
<b>DK2OM</b>	7191,5	1320	21	08	D		PSK8	2400	2400	Stanag-4285 – 600 bps long – area of Wuerzburg
<b>DK2OM</b>	7197,0	vt	dly	08	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
<b>DK2OM</b>	<b>7205,0</b>	<b>1940</b>	<b>02</b>	<b>08</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>
<b>DK2OM</b>	<b>7205,0</b>	<b>2005</b>	<b>27</b>	<b>08</b>	<b>F</b>	<b>RFI</b>	<b>A3E</b>		<b>40k</b>	<b>Radio France International splattering down to 7185 kHz</b>
<b>DK2OM</b>	10100,8	ady	dly	08	D		F1B	50	450	Baudot - German Weatherservice – legal!
<b>DK2OM</b>	10101,0	1854	08	08			USB			traffic in Arabic voice
<b>DK2OM</b>	10101,2	0859	08	08	Euro pe		F1B	184.6	850	ARQ-E – idling – disturbing F1B German Weatherservice
<b>DK2OM</b>	10110,0	vt	dly	08	SNG	no ITU	FSK8	125	1750	ALE, “CN6” “68” – Singapore Navy - Changi Naval Base
<b>DK2OM</b>	10110,0	1845	05	08	E		USB			Spanish fishery
<b>DK2OM</b>	10113,0	vt	vd	08	TUN	no ITU	FSK8	125	1750	ALE, “TUD” “STAT5” “STAT154”
<b>DK2OM</b>	10114,0	vt	dly	08	ALG	no ITU	FSK8	125	1750	ALE, “BSF” “ZEN” “CM2OR2”
<b>DK2OM</b>	10114,8	0745	09	08	RUS		F1B	100	1000	CIS14 – Moscow - daily
<b>DK2OM</b>	10115,0	vt	dly	08	MRC	no ITU	FSK8	125	1750	ALE, “100” “114” “201” “XXZ” – Western Sahara
<b>DK2OM</b>	10116,5	---	--	08	AFS		F7D	54.3	2120	MHF50 – 33 tones - South African navy
<b>DK2OM</b>	10120,0	vt	dly	08	ALG	no ITU	FSK8	125	1750	ALE, “CM6” “01012016”
<b>DK2OM</b>	10120,0	1525	04	08	RUS		PSK2A	120	2600	AT3004D - Moscow
<b>DK2OM</b>	10123,0	vt	dly	08	ALG	no ITU	FSK8	125	1750	ALE, “CM3” “COF” “BSF” “CM2” “ESA” – Algerian Airforce
<b>DK2OM</b>	10123,0	1632	26	08	FEa		USB			Far East male persons
<b>DK2OM</b>	10124,3	1607	26	08	CHN		PSK4A	75	2250	10124.275 kHz center - PRC4+4 – traffic and idle
<b>DK2OM</b>	10126,0	1530	03	08	RUS		PSK2A	120	2600	AT3004D - Severomorsk
<b>DK2OM</b>	10129,0	vt	dly	08	ALG	no ITU	FSK8	125	1750	ALE, “CM1” “CTF” “772”
<b>DK2OM</b>	10131,0	1416	05	08	RUS		F1B	75	250	Irkutsk
<b>DK2OM</b>	10131,2	1841	14	08	FEa		USB			Far East pirates
<b>DK2OM</b>	10132,0	0932	15	08	F		USB			French amateurs not respecting bandplans
<b>DK2OM</b>	10133,0	0834	29	08	CIS		PSK2A	120	2600	AT3004D -
<b>DK2OM</b>	10135,0	1944	14	08	FEa		FMOP		50k	Far East OTHR – 10135 – 10185 kHz – 43 sps
<b>DK2OM</b>	10136,0	vt	dly	08	ALG	no ITU	FSK8	125	1750	ALE, “CM3” “BLD” “CNC” “TF2”
<b>DK2OM</b>	10136,0	1838	14	08	RUS		F1B	50	200	Far East Russia – also 31.08.2016 at 1014 utc

<b>DK2OM</b>	<b>kHz</b>	<b>UTC</b>	<b>DD</b>	<b>MM</b>	<b>ITU</b>	<b>IDENT</b>	<b>MODE</b>	<b>BD</b>	<b>SH/SP</b>	<b>DETAILS</b>
<b>DK2OM</b>	10142,0	1307	28	08	AUS		FMOP		10k	Australian burst radar JORN – 20 sps – 5.4 sec bursts - intro tone – 10137 – 10147 kHz
<b>DK2OM</b>	<b>10144,0</b>	<b>ady</b>	<b>dly</b>	<b>08</b>	<b>D</b>	<b>DK0WCY</b>	<b>A1A</b>			<b>10144.000 kHz - DK0WCY – German aurora beacon – just for info!</b>
<b>DK2OM</b>	10145,5	vt	dly	08	SUI	HB9MHB	FSK8	125	1750	ALE, “HBMHB” - just for info - daily
<b>DK2OM</b>	10145,5	vt	dly	08	TWN AUS	BV4AS	FSK8	125	1750	ALE, “BV4AS” “VK4SAA”– just for info!
<b>DK2OM</b>	13925,0	1717	06	08	RUS		FMCW		13k	OTH radar Contayner - 50 sps – Gorodezh – splattering up to 14500 kHz
<b>DK2OM</b>	13993,0	1845	31	08	RUS		FMCW		160k	OTH radar Contayner - 50 sps – Gorodezh – splattering +/- 80 kHz
<b>DK2OM</b>	14000,0	vt	vd	08	FEa		USB			pirates from Java Sea - daily
<b>DK2OM</b>	14000,0	2001	10	08	E		USB			Spanish fishery
<b>DK2OM</b>	14000,0	2040	11	08	B		USB			pirates from Brazil
<b>DK2OM</b>	14000,0	1905	15	08	MRC		USB			Moroccan fishery – also 71.08.2016 at 1920 utc
<b>DK2OM</b>	14002,0	1000	29	08			PSK2	120	2600	AT3004D – submode idle
<b>DK2OM</b>	14008,0	0749	06	08	RUS		F1B	50	250	Moscow
<b>DK2OM</b>	14015,0	1500	24	08	CHN		FSK8	125	1750	ALE, “714” “871” - China
<b>DK2OM</b>	14021,3	1307	18	08	CHN		PSK4	75	2250	14021.275 kHz center - PRC4+4 – traffic “TIAW de VKGW” and idle
<b>DK2OM</b>	14026,0	0708	03	08	RUS		PSK2A	120	2600	AT3004D – Moscow – also 25.08.2016 at 0937 utc
<b>DK2OM</b>	14030,0	vt	vd	08	CHN		FSK8	125	1750	ALE, “Y” “473” “853”
<b>DK2OM</b>	14048,0	0712	03	08	RUS		FMCW		13k	OTH radar Contayner - 50 sps – Gorodezh
<b>DK2OM</b>	14090,0	1752	05	08	RUS		FMCW		13k	OTH radar Contayner - 50 sps Gorodezh
<b>DK2OM</b>	14100,0	vt	dly	08	ALG	no ITU	FSK8	125	1750	ALE, “6206” “6204” “6212” “6202” “6203” “6207” “6217” “MTL” “IJI” – Mauritanian border – daily, all day
<b>DK2OM</b>	14100,0	---	--	08	F		FMCW		20k	French OTH burst radar, 6 sps, similar Codar sounding, South France
<b>DK2OM</b>	14108,0	0836	09	08	RUS		A1A			“BXCS de 9KHQ” - RUS MIL area of Moscow – many spurious emissions
<b>DK2OM</b>	14109,0	vt	dly	08	TWN	HAM	FSK8	125	1750	ALE, “BV4AS” – just for info!
<b>DK2OM</b>	14109,0	1600	01	08	INS	HAM	FSK8	120	1750	ALE, “YD0OXH3” – just for info!
<b>DK2OM</b>	14109,0	1010	06	08	S HRV D		FSK8	125	1750	ALE, “SM3FXL” “9A4OS” “9A3BRV” “DK0ESD” - just for info!
<b>DK2OM</b>	14111,0	1000	16	08	RUS		FMCW		13k	OTH radar Contayner - 50 sps – Gorodezh
<b>DK2OM</b>	14116,0	0842	09	08	RUS		F1B	75	250	Moscow – also 19.08.2016 at 0858 utc
<b>DK2OM</b>	14116,0	1245	31	08	RUS		F1B	50	250	Moscow – many splatters
<b>DK2OM</b>	14118,0	1005	18	08	RUS		PSK2A	120	2600	AT3004D - Moscow
<b>DK2OM</b>	14122,0	1250	09	08	RUS		FMCW		13k	OTH radar Contayner - 50 sps – Gorodezh
<b>DK2OM</b>	14122,0	1304	19	08	RUS		FMCW		20k	OTH radar Contayner - 50 sps – Gorodezh – splatters covering the whole band
<b>DK2OM</b>	14139,0	1335	26	08	RUS		FMCW		13k	OTH radar Contayner - 50 sps – Gorodezh
<b>DK2OM</b>	14148,5	1323	02	08	RUS		F1B	600	600	DPRK-FSK-600 – North Korean emba Moscow
<b>DK2OM</b>	14160,0	vt	dly	08	MRC		FSK8	125	1750	ALE, “9204” “9228” “9236”
<b>DK2OM</b>	14192,0	vt	dly	08	RUS		F1B	50	500	RUS navy Kaliningrad - daily

<b>DK2OM</b>	<b>kHz</b>	<b>UTC</b>	<b>DD</b>	<b>MM</b>	<b>ITU</b>	<b>IDENT</b>	<b>MODE</b>	<b>BD</b>	<b>SH/SP</b>	<b>DETAILS</b>
								75 50 200 100 500 100	500 200 500 200	
<b>DK2OM</b>	14200,0	1343	03	08	RUS		FMCW		13k	OTH radar Contayner - 50 sps Gorodezh – on 14574 with spurious down to 14200 kHz
<b>DK2OM</b>	14201,8	0852	02	08	CHN		PSK2	75	2200	PRC 16 tone modem – USB mode – pilot tone 450 Hz - RF 14200.0 kHz - China – Shanghai - daily
<b>DK2OM</b>	14205,0	vt	dly	08	CHN	no ITU	FSK8	125	1750	ALE, “505” “822”
<b>DK2OM</b>	14221,0	---	--	08	KGZ		F1B	50	200	CIS-50-50 - Bishkek – daily
<b>DK2OM</b>	14239,0	---	--	08	CHN		PSK4	60	2350	PRC 30 tone modem – LSB mode – LSB QRG – pilot tone 450 Hz
<b>DK2OM</b>	14242,0	1006	18	08	RUS		PSK2A	120	2600	AT3004D – Novosibirsk
<b>DK2OM</b>	14247,0	1409	05	08	RUS		FMCW		13k	OTH radar Contayner - 50 sps Gorodezh – long lasting
<b>DK2OM</b>	14260,0	1507	30	08	RUS		FMCW		10k	OTH burst radar Contayner - 10 sps - Gorodezh
<b>DK2OM</b>	14260,0	vt	dly	08	SRB	YU1BI	FSK8	125	1750	ALE, “YU1BI” – just for info!
<b>DK2OM</b>	14262,0	0730	17	08	FEa		FMCW		10k	OTHR - 50 sps – 5 sec bursts
<b>DK2OM</b>	14268,0	1005	25	08	RUS		FMCW		13k	OTH radar Contayner - 50 sps Gorodezh
<b>DK2OM</b>	14272,0	---	--	08	RUS	RCV	A1A			RUS Navy Sevastopol
<b>DK2OM</b>	14292,0	0713	03	08	RUS	D8M	A1A			encrypted CW - Moscow
<b>DK2OM</b>	14295,0	vt	dly	08	SRB	YU1BI	FSK8	125	1750	ALE, “YU1BI” – just for info!
<b>DK2OM</b>	<b>14295,0</b>	<b>0830</b>	<b>11</b>	<b>08</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>
<b>DK2OM</b>	14301,8	---	--	08	CHN		PSK2	75	2200	PRC 16 tone modem – USB mode – pilot tone 450 Hz - RF 14300.0 kHz - China – Shanghai – daily – all day
<b>DK2OM</b>	14330,0	vt	dly	08	TWN		FSK8	125	1750	ALE, “BV4”
<b>DK2OM</b>	14331,4	1323	03	08	RUS		F1B	600	600	DPRK-FSK-600 – North Korean emba Moscow
<b>DK2OM</b>	14334,0	vt	vd	08	CHN	no ITU	FSK8	125	1750	ALE, “249” “255” “763”
<b>DK2OM</b>	14340,0	1245	01	08	RUS		PSK2A	120	2600	AT3004D – Vladivostok with spurious emissions +/- 35 kHz and +/- 70 kHz - daily
<b>DK2OM</b>	14340,0	1003	31	08	CHN		FSK8	125	1750	ALE, “106” “591”
<b>DK2OM</b>	14346,0	vt	dly	08	THA	HS0ZEA	A1A			HS0ZEA beacon – 14345.950 kHz - every 5 minutes – daily - just for info!
<b>DK2OM</b>	14346,0	vt	dly	08	POR		FSK8	125	1750	ALE, “CT2IXQ” just for info – various times, daily
<b>DK2OM</b>	<b>14347,0</b>	<b>0800</b>	<b>16</b>	<b>08</b>	<b>UKR</b>		<b>A3E</b>			<b>female voice with encrypted msgs – figures – “SZRU” = Foreign Intelligence Service of Ukraine in Rivne</b>
<b>DK2OM</b>	<b>14351,7</b>	---	--	<b>08</b>	<b>E</b>		<b>OFDM PSK4A</b>	<b>30</b>	<b>2700</b>	<b>OFDM 73 + intro tone – HFD+VL - experimental transmissions – Las Palmas – just for info!</b>
<b>DK2OM</b>	<b>18080,0</b>	<b>0600</b>	<b>dly</b>	<b>08</b>	<b>TWN</b>		<b>A3E/BC</b>			<b>Sound of Hope – Taiwan and Chinese BC jammer – daily at 06 utc and later</b>
<b>DK2OM</b>	18080,0	1020	28	08	TUR		FMCW		20k	OTH radar West-Turkey – 50 sps
<b>DK2OM</b>	18090,0	1511	30	08	TUR		FMCW		20k	OTH radar – 50 sps - Turkey
<b>DK2OM</b>	18100,0	vt	dly	08	MRC	no ITU	FSK8	125	1750	ALE, “A2” “A4” “A5” “A7” “S6” – “C3” “G401” “CD” “09” “G2” “LG6” “G301” “ELJADIDNET4” - daily, various times
<b>DK2OM</b>	18106,0	vt	vd	08	POR	CT2GOY	FSK8	125	1750	ALE, “CT2GOY” – just for info!
<b>DK2OM</b>	18107,0	---	--	08	RUS	RDL	F1B	50	200	CIS-50-200 - Moscow – idle and

<b>DK2OM</b>	<b>kHz</b>	<b>UTC</b>	<b>DD</b>	<b>MM</b>	<b>ITU</b>	<b>IDENT</b>	<b>MODE</b>	<b>BD</b>	<b>SH/SP</b>	<b>DETAILS</b>
										traffic – Russian navy – various days and times – shared band!
<b>DK2OM</b>	<b>18117,5</b>	<b>vt</b>	<b>vd</b>	<b>08</b>	<b>POR</b>	<b>CT2IXQ</b>	<b>FSK8</b>	<b>125</b>	<b>1750</b>	ALE, “CT2IXQ” – just for info
<b>DK2OM</b>	<b>18140,0</b>	<b>vt</b>	<b>dly</b>	<b>08</b>	<b>SRB</b>	<b>YU1BI</b>	<b>FSK8</b>	<b>125</b>	<b>2600</b>	ALE, “YU1BI” – just for info!
<b>DK2OM</b>	<b>18150,0</b>	<b>0811</b>	<b>02</b>	<b>08</b>	<b>RUS</b>		<b>F1B</b>	<b>100</b>	<b>1000</b>	harmonic from 9075 (100 Bd, 500 Hz) - Kaliningrad
<b>DK2OM</b>	<b>21000,0</b>	<b>1242</b>	<b>31</b>	<b>08</b>	<b>INS</b>		<b>USB</b>			Indonesian pirates - daily
<b>DK2OM</b>	<b>21000,0</b>	---	--	<b>08</b>	<b>B</b>		<b>USB</b>			Brazilian pirates – Rio de Janeiro with North Brazil – very often
<b>DK2OM</b>	<b>21000,0</b>	---	--	<b>08</b>	<b>SDN</b>		<b>USB</b>			MFA Sudan – Khartoum with emba Yemen – voice traffic
<b>DK2OM</b>	21000,0	---	--	08	F		FMCW			French OTH burst radar – every 15 minutes – South France
<b>DK2OM</b>	<b>21000,0</b>	<b>1458</b>	<b>23</b>	<b>08</b>	<b>UKR</b>		<b>USB</b>			male voice spelling figures – UKR MIL
<b>DK2OM</b>	<b>21002,2</b>	---	--	<b>08</b>	<b>SDN</b>	<b>!0000 !9999 !8888</b>	<b>F1B</b>	<b>100</b>	<b>170</b>	21002.15 kHz - Pactor 1 encrypted – MFA Sudan – Khartoum with emba Yemen
<b>DK2OM</b>	21096,0	vt	dly	08	INS	YD0OXH	FSK8	125	1750	ALE, “YD0OXH3” – daily, various times - just for info!
<b>DK2OM</b>	21096,0	1219	27	08	G		FSK8	125	1750	ALE, “M1DFO” – just for info!
<b>DK2OM</b>	21131,0	vt	vd	08	CHN	no ITU	FSK8	125	1750	ALE, “A92” “L02” – Chinese diplo
<b>DK2OM</b>	21145,0	vt	dly	08	MRC	no ITU	FSK8	125	1750	ALE, “B301”, “C3”, “IR4” “T4” “E4” “A2” “CD” “K3” “KB2” “J5” “GS4” “R3” – various times, daily
<b>DK2OM</b>	21145,8	1418	05	08	I	IZ3DVW	A1A			IZ3DVW beacon – 21145,790 kHz – daily, all day - not coordinated with IARU
<b>DK2OM</b>	21160,0	---	--	08	RUS		F1B	100	2000	4th from 5290 kHz (500 Hz shift) – St. Petersburg
<b>DK2OM</b>	21190,0	---	--	08	RUS		F1B	100	1000	harmonic from 10595 kHz - Moscow - daily
<b>DK2OM</b>	21318,5	1058	18	08	BGD		F1B	600	600	DPRK-FSK-600 - Bangladesh
<b>DK2OM</b>	21400,0	---	--	08	RUS		F1B	50	2000	harmonic from 5350 kHz – area of Moscow - daily
<b>DK2OM</b>	21401,5	1201	18	08	CHN		PSK4A	75	2250	PRC4+4
<b>DK2OM</b>	21409,5	0800	31	08	RUS		F1B	100	2000	F1B 100 / 2000 - CIS14 – harmonic from 10704.75 - Jekaterinburg, RUS - daily
<b>DK2OM</b>	21436,0	---	--	08	RUS		PSK2A	120	5200	AT3004D – harmonic from 10718.0 kHz - Sevastopol
<b>DK2OM</b>	21438,0	vt	dly	08	RUS	RCV	A1A			RIP90, RCV, RGX94 - RUS Navy Sevastopol - daily
<b>DK2OM</b>	21446,0	ady	dly	08	THA	HS0ZEA	A1A			HS0ZEA beacon – every 5 minutes - just for info!
<b>DK2OM</b>	<b>25000,0</b>	<b>ady</b>	<b>dly</b>	<b>08</b>	<b>FIN</b>		<b>A3E</b>			time signal Helsinki – just for info – carrier on 25000 – dots on 25001 and 24999 – daily, all day – just for info!
<b>DK2OM</b>	<b>28000,0</b>	<b>vt</b>	<b>vd</b>	<b>08</b>	<b>B</b>		<b>A3E</b>			<b>Brazilian CBers – 28000 – 28325 – daily, all day</b>
<b>DK2OM</b>	<b>28000,0</b>	<b>vt</b>	<b>dly</b>	<b>08</b>	<b>CIS</b>		<b>F3E</b>			<b>28000 – 29700 numerous CIS taxi nets – no change</b>
<b>DK2OM</b>	28000,0	2045	04	08	I		A3E			Italian CBers – also 12.08.2016 at 1615 utc
<b>DK2OM</b>	<b>28000,0</b>	<b>1927</b>	<b>11</b>	<b>08</b>	<b>E</b>		<b>USB</b>			Spanish CBers
<b>DK2OM</b>	28010,1	1350	07	08	POR		F1B	51	300	F1B bursts –west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
<b>DK2OM</b>	28025,0	---	--	08	POR		F1B	51	300	F1B bursts – 28025.050 kHz - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
<b>DK2OM</b>	28030,0	---	--	08	POR		F1B	51	340	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS

<b>DK2OM</b>	<b>kHz</b>	<b>UTC</b>	<b>DD</b>	<b>MM</b>	<b>ITU</b>	<b>IDENT</b>	<b>MODE</b>	<b>BD</b>	<b>SH/SP</b>	<b>DETAILS</b>
										buoys - daily
<b>DK2OM</b>	28045,0	---	--	08	POR		F1B	51	280	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
<b>DK2OM</b>	28050,0	---	--	08	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
<b>DK2OM</b>	28051,5	---	--	08	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
<b>DK2OM</b>	28060,0	---	--	08	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
<b>DK2OM</b>	28065,1	---	--	08	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
<b>DK2OM</b>	28065,8	1308	05	08	GAB		A3E		980	carrier and dots in USB and LSB, bursts every 60 sec – carrier – Gabon – daily and all day
<b>DK2OM</b>	28075,0	---	--	08	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
<b>DK2OM</b>	28085,0	1951	09	08	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
<b>DK2OM</b>	28090,1	1926	09	08	POR		F1B	51	320	F1B bursts - 28100.780 kHz - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
<b>DK2OM</b>	28100,0	2047	04	08	I		F3E LSB			Italian CBers
<b>DK2OM</b>	28100,2	---	--	08	POR		F1B	51	300	F1B bursts - 28100.780 kHz - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
<b>DK2OM</b>	28102,1	---	--	08	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
<b>DK2OM</b>	28115,0	0910	18	08	E		A3E			Spanish CBers
<b>DK2OM</b>	28125,0	---	--	08	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
<b>DK2OM</b>	28146,0	vt	vd	08	ARG B		FSK8	125	1750	ALE, “LU8EX” “PY2TI” “DL1” – just for info!
<b>DK2OM</b>	28165,0	1505	06	08	RUS		F3E			RUS taxi - daily
<b>DK2OM</b>	28175,0	0807	14	08	RUS		F3E			RUS taxi - daily
<b>DK2OM</b>	28200,0	---	--	08	POR		F1B	51	330	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
<b>DK2OM</b>	28215,0	1833	05	08	RUS		F3E			RUS taxi - daily
<b>DK2OM</b>	28224,4	---	--	08	GAB		A3E			carrier and dots +/- 770 Hz - bursts every 60 sec – Gabon – daily and all day
<b>DK2OM</b>	28249,6	1929	01	08	GAB		A3E		1380	carrier and dots +/- 745 Hz - bursts every 60 sec – Gabon – daily and all day
<b>DK2OM</b>	28250,5	1927	08	08	GAB		A3E		1000	carrier and dots +/- 500 Hz - bursts every 60 sec – Gabon – daily and all day
<b>DK2OM</b>	28275,0	1720	18	08	RUS		F3E			RUS taxi
<b>DK2OM</b>	28275,1	---	--	08	AF		F1B	51	320	F1B bursts -Atlantic Ocean - Enagal GPS buoys - daily
<b>DK2OM</b>	28312,5	vt	vd	08	POR	CT2IXQ	FSK8	125	1750	ALE. “CT2IXQ” – just for info
<b>DK2OM</b>	28315,0	---	--	08	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
<b>DK2OM</b>	28335,0	1852	09	08	E		F3E			Spanish CBers with roger beeps talking about echo-microphones
<b>DK2OM</b>	28345,1	---	--	08	GAB		A3E		1060	carrier and dots +/- 530 Hz -

<b>DK2OM</b>	<b>kHz</b>	<b>UTC</b>	<b>DD</b>	<b>MM</b>	<b>ITU</b>	<b>IDENT</b>	<b>MODE</b>	<b>BD</b>	<b>SH/SP</b>	<b>DETAILS</b>
										bursts every 60 sec – Gabon – daily and all day
<b>DK2OM</b>	<b>28435,0</b>	----	--	<b>08</b>	E		<b>F1B</b>	<b>81.9</b>	<b>140</b>	<b>Datawell-buoy “Waverider” – 28435.040 kHz – Costa del Sol – Malaga</b>
<b>DK2OM</b>	28459,8	----	--	08	GAB		A3E		1060	carrier and dots +/- 530 Hz - bursts every 60 sec – Gabon – daily and all day
<b>DK2OM</b>	28459,9	---	--	08	GAB		A3E		1060	carrier and dots +/- 530 Hz - bursts every 60 sec – Gabon – daily and all day
<b>DK2OM</b>	<b>28499,8</b>	---	--	<b>08</b>	MEa		<b>F1B</b>	<b>81.9</b>	<b>140</b>	<b>Datawell-buoy “Waverider” – 28499.875 kHz – Persian Gulf</b>
<b>DK2OM</b>	28701,1	---	--	08	GAB		A3E		1056	carrier and dots +/- 528 Hz - bursts every 60 sec – Gabon – daily and all day
<b>DK2OM</b>	28745,3	1706	02	08	GAB		A3E		1060	carrier and dots +/- 530 Hz - bursts every 60 sec – Gabon – daily and all day
<b>DK2OM</b>	28751,2	---	--	08	GAB		A3E		1080	carrier and dots +/- 540 Hz - bursts every 60 sec – Gabon – daily and all day
<b>DK2OM</b>	28751,3	---	--	08	GBN		A3E		1040	carrier and dots +/- 520 Hz - bursts every 60 sec – Gabon – daily and all day
<b>DK2OM</b>	28801,5	---	--	08	GBN		A3E		1090	carrier and dots +/- 545 Hz - bursts every 60 sec – Gabon – daily and all day
<b>DK2OM</b>	28845,5	---	--	08	GAB		A3E		1060	carrier and dots +/- 530 Hz - bursts every 60 sec – Gabon – daily and all day
<b>DK2OM</b>	28901,1	---	--	08	GAB		A3E		1056	carrier and dots +/- 528 Hz - bursts every 60 sec – Gabon – daily and all day
<b>DK2OM</b>	28960,0	0830	02	08	IRN		FMOP		55k	radar Iran – burst mode – 150 and 313 sps - daily
<b>DK2OM</b>	29114,0	---	--	08	RUS		F1B	100	2000	harmonic from 14557.0 kHz - Moscow
<b>DK2OM</b>	<b>29249,9</b>	<b>1651</b>	<b>02</b>	<b>08</b>	E		<b>F1B</b>	<b>81.9</b>	<b>140</b>	<b>Datawell-buoy “Waverider” – 29249.880 kHz – Spain Fuerteventura - daily, all day</b>
<b>DK2OM</b>	<b>29375,0</b>	---	--	<b>08</b>	I		<b>F1B</b>	<b>81.9</b>	<b>140</b>	<b>Datawell-buoy “Waverider” – 29374.898 kHz – Gallipoli, South Italy - daily, all day</b>
<b>DK2OM</b>	<b>29387,5</b>	---	--	<b>08</b>	IND		<b>F1B</b>	<b>81.9</b>	<b>140</b>	<b>Datawell-buoy “Waverider” – 29387.460 kHz – Indian NW coast, close to Pakistan - daily, all day</b>
<b>DK2OM</b>	<b>29400,0</b>	---	--	<b>08</b>	USA		<b>F1B</b>	<b>81.9</b>	<b>140</b>	<b>Datawell-buoy “Waverider” – 29400.070 kHz - USA north-east coast – NY daily, all day</b>
<b>DK2OM</b>	<b>29450,0</b>	---	--	<b>08</b>	MRC		<b>F1B</b>	<b>81.9</b>	<b>140</b>	<b>Datawell-buoy “Waverider” – 29449.895 kHz - area of El Aaiun – Morocco - daily, all day</b>
<b>DK2OM</b>	<b>29500,0</b>	<b>1850</b>	<b>09</b>	<b>08</b>	G		<b>F1B</b>	<b>81.9</b>	<b>140</b>	<b>Datawell-buoy “Waverider” – area of Gibraltar – daily, all day</b>
<b>DK2OM</b>	<b>29525,0</b>	---	--	<b>08</b>	MRC		<b>F1B</b>	<b>81.9</b>	<b>140</b>	<b>Datawell-buoy “Waverider” – 29524.990 kHz - Agadir - Morocco – daily, all day</b>
<b>DK2OM</b>	<b>29625,0</b>	---	--	<b>08</b>	USA		<b>F1B</b>	<b>81.9</b>	<b>140</b>	<b>Datawell-buoy “Waverider” – 29625.024 kHz - USA north-east coast – daily, all day</b>
<b>DK2OM</b>	29685,0	1314	05	08	I		VFT		2300	Italian MIL - Brescia
<b>DK2OM</b>	29699,5	1314	05	08	I		VFT		1600	Italian MIL - Brescia

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

<b>SOC</b>	<b>kHz</b>	<b>UTC</b>	<b>DD</b>	<b>MM</b>	<b>ITU</b>	<b>IDENT</b>	<b>MODE</b>	<b>DETAILS</b>
<b>IRTS</b>	3490	1310	02	08	POR or MM		USB	2 Portuguese fishermen. Note: No HAM frequency- just for info.
<b>IRTS</b>	3498	0820	08	08	E or MM		USB	2 male Spanish fishermen. Very strong. Bad audio. Signal bleeds across the spectrum up to 3500 KHz into HAM band.
<b>IRTS</b>	3512	1740	04	08	E or MM		USB	2 male Spanish fishermen.
<b>IRTS</b>	3535	0915	09	08	UK or MM		USB	Scottish fishermen. 2 male voices, very strong. “Talk to you soon again! ”
<b>IRTS</b>	3535	1240 to 1308	13	08	E or MM		USB	2 male Spanish fishermen. Very strong signals.
<b>IRTS</b>	3536	1220 to 1225	15	08	UK or MM		USB	2 male Ulster fishermen. “ See you later ! ”
<b>IRTS</b>	3536	1445	24	08	UK or MM		USB	Ulster fishermen, very strong. One male, keeps calling for others. No answer.
<b>IRTS</b>	3536	0745 to 0800	25	08	UK or MM		USB	Ulster fishermen. 2 male voices. Talking about boxing. One of them is always whistling a funny tune. Name: Ed. From both ships loud motor noise.
<b>IRTS</b>	3558	1615	11	08	F or MM		USB	2 French male fishermen
<b>IRTS</b>	3560	1852	03	08	HOL or MM		USB	2 male Dutch fishermen
<b>IRTS</b>	3560	1600	25	08	E or MM		USB	2 male Spanish fishermen.
<b>IRTS</b>	3560	0845 to 0915	27	08	POR or MM		USB	2 male Portuguese fishermen. Very strong signals.
<b>IRTS</b>	3598	2030	10	08	HOL or MM		USB	Dutch fishermen in a net. Several male voices. All signals very strong.
<b>IRTS</b>	3636	1440	22	08	E or MM		USB	2 male Spanish fishermen, very strong signals.
<b>IRTS</b>	3675	0850	17	08	F or MM		USB	Net of several French fishermen
<b>IRTS</b>	3677	1935	11	08	HOL or MM		USB	2 male Dutch fishermen.
<b>IRTS</b>	3698	1640	06	08	IRL or MM		USB	2 Irish fishermen. West of Ireland accent. Shannon Coastguard on VHF in background. “ I'll talk to you later ! ”
<b>IRTS</b>	3698	1852 to 2100	10	08	IRL or MM		USB	2 male Irish fishermen. Waterford accent. Endless monologues with loads of “ Fuck ” and “ Shite ” from each side in return. Motor noise clearly audible from both boats. One fisher is called David. One of them might spend the night in the harbour due to bad WX. Mentioned : Dromore
<b>IRTS</b>	3698	1150 to 1222	13	08	IRL or MM		USB	2 male Irish fishermen, South Irish accent . Very strong signals. VHF announcements in the background. One of them recently spent the night in a place called “ Ballintaggart House ” in Dingle. Name mentioned of one of them was Sean. “ That's the story, Morning Glory ! ” ( Name of one of the ships ??? )
<b>IRTS</b>	3735	1745	06	08	POR or MM		USB	2 Portuguese fishermen. Very loud.
<b>IRTS</b>	3739	0815	04	08	E or		USB	2 male Spanish fishermen. Very strong signals.

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	DETAILS	
				MM			USB	Loud motor noise in the background.	
IRTS	3739	1625	11	08	POR or MM			2 male Portuguese fishermen. Very loud.	
IRTS	5280	0930	17	08	F or MM		USB	Several French fishermen, all very strong. Motor noise audible. Right on Irish HAM spot frequency and also inside UK allocation.	
IRTS	5280	0010	26	08	F or MM		USB	2 male French fishermen, using an Irish HAM spot frequency for 5 MHz.	
IRTS	5327	1605	25	08	F or MM		USB	2 male French fishermen. Inside 5 MHz allocation for several European countries, like BUL, DNK, NOR or others.	
IRTS	5345.2	0930 to 1000	11	08	F or MM		USB	2 male French fishermen. Motor noise in the background. Frequency is in the HAM block allocation of several countries, i.e. NOR, DNK, ISL and others.	
IRTS	5345.2	1325	14	08	F or MM		USB	2 male French fishermen. Inside HAM allocation for some European countries, ie. BUL, CRO, SVK and others.	
IRTS	5354	2100 to 2120	31	08	E or MM		USB	2 male Spanish fishermen. Loud motor noise in the background. Strong signals. Frequency is inside the new HAM 5 MHz allocation, which is already in use in several countries.	
IRTS	5360	2050	16	08	E or MM		USB	2 male Spanish fishermen. Inside the new international HAM allocation on 5 MHz.	
IRTS	5362.5	0925 to 1115	08	08	F or MM		USB	2 French fishermen, on and off for hours. Frequency is in the new international 5 MHz allocation.	
IRTS	5400	0550	09	08	E or MM		USB	2 Spanish fishermen, huge signals. Frequency is allocated to Irish Hams on 5 MHz.	
IRTS	5400	0900	17	08	E or MM		USB	2 male Spanish fishermen. Right on an Irish HAM spot frequency.	
IRTS	7000	0305	04	08	RUS		AM	Buzzer	
IRTS	7050	2100	24	08	UKR /RUS		LSB	Russian - Ukrainian radio war with music, slogans, BC transmissions.	
IRTS	7075	2321	04	08				Radar from 7075 to 7100 KHz. Still running at 0415z.	
IRTS	7090	0400	10	08			USB	Net of Arab voices. Several male voices in lively discussion. "Inscha' Allah ! "	
IRTS	14028	0740	03	08				RADAR from 14028 to 14063 KHz.	
IRTS	14058	1735	03	08				Radar from 14058 to 14068 KHz.	
IRTS	14089	1010	13	08				Radar from 14089 to 14130 KHz.	
IRTS	14093.5	1215	15	08				Radar from 14093.5 to 14111 KHz. Short bursts.	
IRTS	14119	2130	21	08				Radar from 14119 to 14132 KHz.	
IRTS	14192	1015	02	08	RUS		FSK	RUS Navy Kaliningrad. Nearly all day long, any day.	
IRTS	14252	1310	03	08				Radar from 14252 to 14268 KHz. Strong, short bursts.	
IRTS	14254	2321	04	08				Radar 14254 to 14290 kHz	
IRTS	14341	1320	02	08			Digi	Strong digital signals. Probably DPR Korea in West Africa.	
IRTS	21297	1100	13	08				Radar from 21297 to 21318 kHz.	
IRTS	28105	1045	05	08	F		AM	French CBers. Several stations active.	
IRTS	28275	1300	05	08	I		FM	Italian language, male voices. Sounds like the HQ of a taxi company or delivery centre.	

### KARS – Kuwait – 9K2RR (Faisal)

### MRASZ – Hungary - HA7PL (Laci)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SH	DETAILS
MRASZ	3506,0	1936	24	8			PSK2		AT3004D
MRASZ	3524,0	1751	29	8			F1B	250	
MRASZ	3525,0	1934	31	8			PSK2		AT3004D

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SH	DETAILS
MRASZ	3543,0	1908	26	8			PSK2		AT3004D
MRASZ	3560,5	1936	10	8			PSK2		AT3004D
MRASZ	3563,0	1908	26	8			PSK2		AT3004D
MRASZ	3564,0	1932	1	8			F1B	250	
MRASZ	3564,0	1935	10	8			F1B	250	
MRASZ	3568,0	1749	29	8			F1B	200	
MRASZ	3588,0	1810	15	8			F1B	250	
MRASZ	3590,0	1934	1	8			LSB		italian male
MRASZ	3590,0	1901	15	8			PSK2		AT3004D
MRASZ	3595,0	1902	15	8			F1B	250	
MRASZ	3599,0	1936	1	8			???		sharp cracks, also on 5393 kHz, hrd: 5
MRASZ	3599,0	1748	29	8			A1A		"T8891 54T71 5T426"
MRASZ	3603,0	1857	26	8			F1B	250	
MRASZ	3608,0	2019	31	8			F1B	200	
MRASZ	3618,0	1834	5	8			A1A		"NIDTT TVUGV UNKAG RÜYLI"
MRASZ	3618,0	1746	11	8			A1A		"I4AC 227 52 11 2T 35 227"
MRASZ	3624,0	2018	31	8			PSK2		AT3004D
MRASZ	3642,0	1932	10	8			A1A		"DKG7(2x) de 3A7D V" loop
MRASZ	3659,0	1907	26	8			F1B	200	
MRASZ	3660,0	1959	31	8			A1A		"VVV K" "QRJ K" "QYT4 K"
MRASZ	3692,5	1944	10	8			A1A		"9YO3 de WVHT QTC k"
MRASZ	3788,0	1938	1	8			PSK2		AT3004D
MRASZ	7000,0	1952	10	8			PSK2		AT3004D
MRASZ	7000,0	1827	18	8			A1A		"testing best dx+" somebody practise
MRASZ	7000,0	1746	26	8			LSB		ui male
MRASZ	7000,0	vt	dly	8	RUS		H3E	3,4 k	buzzer
MRASZ	7005,0	1824	18	8			A1A		"xxx xxx gyuj gyuj 87598 tre kotuj"
MRASZ	7008,0	756	8	8			F1B	250	
MRASZ	7010,0	1831	18	8			LSB		ui.language
MRASZ	7027,5	vt	dly	8	KAZ	"V"	A1A		beacon "V"
MRASZ	7046,0	1912	15	8			LSB		italian male, non ham
MRASZ	7050,0	vt	dly	8			LSB		russian/ukrainian, chaos, music, curse
MRASZ	7055,0	vt	dly	8			LSB		russian/ukrainian, chaos, music, etc
MRASZ	7058,0	0757	8	8			F1B	250	
MRASZ	7060,0	1908	10	8			PSK2		AT3004D
MRASZ	7076,0	1739	11	8			F1B	250	
MRASZ	7120,0	1836	4	8	SOM		A3E		Radio Harg. hrd: 11, 15, 18, 26, 29
MRASZ	7192,0	1838	18	8			PSK2		AT3004D
MRASZ	7193,8	1933	24	8			NON		
MRASZ	7205,0	1818	1	8			A3E		splatter down 10 k
MRASZ	7205,0	1928	31	8			A3E		splatter 5-10 kHz down
MRASZ	10108,0	0813	8	8			NON		
MRASZ	10114,7	0751	8	8			F1B	1000	
MRASZ	10118,0	1452	10	8			F1B	260	
MRASZ	10120,0	1439	4	8			PSK2		AT3004D
MRASZ	10131,0	0750	8	8			F1B	250	
MRASZ	10143,0	1415	22	8			F1B	250	
MRASZ	14000,6	0850	8	8			A1A		"TEST HB9DGP" continuously till 0852
MRASZ	14008,0	0745	8	8			F1B	250	
MRASZ	14017,0	1922	31	8			OTHR		14000-14034 kHz
MRASZ	14098,8	0858	8	8			A1A		"IZ0HCC/B (3X) JN61GP ROMA"
MRASZ	14110,0	0929	8	8			OTHR		14100-14120 kHz
MRASZ	14115,0	0934	8	8			ALE?		
MRASZ	14116,0	0901	19	8			F1B	250	
MRASZ	14192,0	1818	1	8			F1B	200	hrd: 8, 10
MRASZ	14192,0	1935	24	8			F1B	500	hrd: 25
MRASZ	14295,0	vt	dly	8	TJK		A3E		Radio Tajik, 3rd. Harmonic

## OEVSV – Austria – OE3GSA (Gerd)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
oevsv	14015.0	0526	15	08	BY	unid	J3E			chinese male voice
oevsv	14015.0	0607	19	08	unid	unid	J3E			mixed with dig. transmissions
oevsv	14050.0	0513	23	08	unid	unid	F3E			RTTY fast
oevsv	14050.0	0700	01	08	unid	unid	FMCW			OTHR
oevsv	18080.0	0735	01	08	BY		A3A			old friends - chinese BC
oevsv	18080.0	0526	15	08	BY		A3A			as allmost every day

## PZK – Poland – SP9BRP (Jan)

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

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

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REP	3518	07.00	16	08	E		J3E-U			Spanish fishery
REP	3580	08.54	17	08	E		J3E-U			Spanish fishery, CRY2000 encruption
REP	3610	08.10	10	08	E		J3E-U			Spanish fishery
REP	3620	07.43	27	08	E		J3E U			Spanish fishery, CRY2000 encruption
REP	7000	18.10	12	08			BPSK			AT3004D modem
REP	7038	23.22	24	08	UKR	D	A1A			SEVASTOPOL
REP	7038	21.00	04	08	RUS	P	A1A			MURMANSK
REP	7039	21.42	14	08	RUS	C	A1A			MOSCOW
REP	7050	19.09	10	08	CHN		FMCW	10	160k	Chinese wide OTH radar
REP	7050	20.12	29	08	RUS		J3E-U			Russian BC rebroadcast, dit jammers
REP	7091	18.22	14	08	KAZ	V	A1A			ALMATY
REP	7095	22.05	17	08			A1A			Letter and numbers groups code
REP	7135	18.04	09	08	RUS		F1B	50	200	CIS36-50 mode
REP	10100	15.02	22	08	MRC		J3E-U			Morrocian fishery
REP	10100	23.18	04	08			A3E			Letters Station - 5 letters groups
REP	10101	07.42	11	08	MRC		J3E-U			Moroccan fishery
REP	10110	09.11	04	08			FMCW	50	20k	OTH radar
REP	10118	10.02	23	08			J3E-U			Unid arabic language
REP	10128	19.37	17	08	B		J3E-U			Brazilian comms, moved here from 10130
REP	10130	19.28	17	08	B		J3E-U			Brazilian comms, phone patch
REP	14000	09.01	18	08			J3E-U	100	170	SELCALL
REP	14008	10.51	07	08	RUS		F1B	50	250	CIS36, Russian mil
REP	14030	18.03	12	08	RUS		BPSK	120		Mil station
REP	14100	16.30	22	08	RUS		J3E-U			Russian language speech
REP	14120	07.13	12	08			FMCW		10k	Short burst OTH radar
REP	14192	09.15	28	08	RUS		F1B	50	250	CIS36, Russian mil
REP	14192	17.20	28	08	RUS		F1B	50	500	CIS50, Russian mil
REP	14265	09.23	19	08			FMCW			OTH radar
REP	18090	09.33	28	08			FMCW	50	20k	OTH radar
REP	18108	09.38	11	08	RUS		F1B	50	200	CIS36-50 modem
REP	21125	14.41	20	08	MRC		J3E-U			Fishermen
REP	21200	15.22	04	08			FMCW			OTH radar 50sps/20kHz
REP	24940	18.08	15	08			FMCW			OTH radar 50sps/20kHz
REP	28010	10.09	05	08	F		F1B	51	300	GPS buoy, west of Brest, France
REP	28010	18.56	08	08		BP	A1A			Drifnet
REP	28025	17.42	02	08	E		F1B	51	300	GPS Buoy, Bay of Biscay
REP	28025	17.42	02	08		NYA	A1A			Drifnet NYA
REP	28035	16.30	04	08	B		A3E			Brazilian CB's
REP	28045	19.19	21	08	B		J3E-U			Brazilian CB's
REP	28050	10.00	08	08			F1B	50	270	Enagal GPS buoy, Atlantic ocean
REP	28065	15.35	19	08	B		A3E			Brazilian CB rs
REP	28065	17.31	22	08	POR		F1B	51	300	GPS buoy, off coast of Portugal, Peniche
REP	28070	11.10	08	08	RUS		F3E			Taxi dispatcher
REP	28102	19.30	28	08	SRL		F1B	51	300	GPS Buoy, off coast Sierra Leone
REP	28102	10.31	05	08	POR		F1B	51	300	GPS buoy, off coast Portugal, Sagres

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REP	28105	15.34	19	08	B		A3E			Brazilian CB's
REP	28150	11.07	08	08	RUS		F3E			Russian taxis dispatchers
REP	28175	15.36	19	08	B		A3E			Brazilian CB's
REP	28285	15.36	19	08	B		A3E			Brazilian CB's
REP	28305	15.37	19	08	B		A3E			Brazilian CB's
REP	29150	11.28	11	08			FMCW			OTH radar
REP	29150	11.53	06	08			F1B	82	142	Datawell Waverider buoy
REP	29175	10.01	30	08	RUS		F3E			Russian YL taxi dispatcher

### RSGB - Great Britain – M0VRR (Vaughan)

### SRAL – Finland – OH2BLU (Pekka)

Society	QRG	TIME	DD	MM	CTRY	IDENT	MODE	BD	SH	REMARKS
SRAL	6998,0	h24	dly	8	RUS	UiTone	R3E			125 Hz tones
SRAL	7000,0	1350	17.	8		UiMUX	PSK2	120	2600	
SRAL	7001,0	0815-0830	11.	8		UiMUX	PSK2	120	2600	
SRAL	7008,0	0500-1930	4. 8. 9.	8		UiPTR	F1B		250	
SRAL	7010,0	1345-1440/	2.	8	RUS	P	A1A			
SRAL	7010,0	1440-1510	27.	8		UiMUX	PSK2	120	2600	
SRAL	7016,0	0815-1620	8. 9. 23.	8		UiPTR	F1B		250	
SRAL	7019,0	1130	28.	8		UiPTR	F1A/N0N		250	
SRAL	7020,0	0500-1630	*	8		UiPTR	F1B		250	Days: 3. 15. 17. 18. 19. 27.
SRAL	7022,0	1120-1200	16.	8		UiMUX	PSK2	120	2600	
SRAL	7027,5	/1400-0200	dly	8	UZB	V	A1A			
SRAL	7039,0	0745-1500	6. 7. 20.	8	RUS	C	A1A			Moscow
SRAL	7039,5	0900-1230	6. 7.	8		UiCW	A1A			Hand keying "T T"
SRAL	7058,0	0345-1900	1. 2. 21.	8		UiCarr	N0N			
SRAL	7058,0	0800-1450	8. 18.	8		UiPTR	F1B		250	
SRAL	7060,0	0415-1000	4. 11.	8		UiMUX	PSK2	120	2600	
SRAL	7067,0	1805-1930	9.	8		UiPTR	F1B		250	
SRAL	7076,0	0400-1400	2. 11.	8		UiPTR	F1B		250	
SRAL	7087,0	1800-1830	9.	8		UiPTR	F1B			
SRAL	7099,0	1030-1050	19.	8		UiPTR	F1B		200	
SRAL	7113,0	0500-0537/	15.	8		UiMUX	PSK2	120	2600	
SRAL	7118,0	0945-1000	25.	8		UiMUX	PSK2	120	2600	
SRAL	7120,0	0320-0430/	dly	8	SOM	R.Hargeisa	A3E			
SRAL	7120,0	1500-1900/	dly	8	SOM	R.Hargeisa	A3E			
SRAL	7132,0	1745-1802/	22.	8		UiMUX	PSK2	120	2600	
SRAL	7160,0	1345-1500	17.	8		UiMUX	PSK2	120	2600	

Society	QRG	TIME	DD	MM	CTRY	IDENT	MODE	BD	SH	REMARKS
<b>SRAL</b>	7160,0	0645-1030	16. 17.	8	RUS	RMW32	A1A			5F, 5BL
<b>SRAL</b>	7162,0	0930-1400	2.	8	RUS	UiPTR	F1B		250	
<b>SRAL</b>	7164,0	0830-0944/	13. 18.	8		UiMUX	PSK2	120	2600	
<b>SRAL</b>	7169,0	1400	8.	8		UiPTR	F1B		250	
<b>SRAL</b>	7169,0	0815	16.	8		UiMUX	PSK2	120	2600	
<b>SRAL</b>	7172,0	0835	20.	8		UiMUX	PSK2	120	2600	
<b>SRAL</b>	7178,0	0830	6.	8		UiMUX	PSK2	120	2600	
<b>SRAL</b>	7182,0	0830-100	20.	8		UiMUX	PSK2	120	2600	
<b>SRAL</b>	7187,5	1515-1540/	5.	8		UiPTR	F1B		200	
<b>SRAL</b>	7192,0	1750-1810	18.	8		UiMUX	PSK2	120	2600	
<b>SRAL</b>	7200,0	/1000-1300/	dly	8	CHN	CNR1	A3E			Used as jammer on TWN
<b>SRAL</b>	7200,0	1300-1500/	dly	8	MMR	R Myanmar	A3E			
<b>SRAL</b>	7200,0	2300-2400/	dly	8	MMR	R Myanmar	A3E			
<b>SRAL</b>	7 MHz	1915-0500	*	8	RUS	29B6	FMCW			50Hz / 15 kHz, days: 11. 24. 28. (WebSDR 7 days)
<b>SRAL</b>	10 MHz	1115	22.	8	RUS	29B6	FMCW			50Hz / 15 kHz (WebSDR 7 days)
<b>SRAL</b>	14008,0	0800-1045	*	8	RUS	UiPTR	F1B/ N0N		250	Days: 6. 7. 11. 20. 22.
<b>SRAL</b>	14026,0	0640-1040	3. 26.	8		UiMUX	PSK2	120	2600	
<b>SRAL</b>	14108,0	0750-1200	*	8	RUS	UiCW	A1A			MR 5F 5BL, days: 4. 5. 11. 20. 23. 30.
<b>SRAL</b>	14116,0	0615-1200	*	8	RUS	UiPTR	F1B		250	Days: 3. 5. 6. 11. 19.
<b>SRAL</b>	14118,0	0830	25.	8		UiMUX	PSK2	120	2600	
<b>SRAL</b>	14141,0	0920	11.	8		UiPTR	F1B		500	
<b>SRAL</b>	14177,0	0905-100	7. 11.	8		UiPTR	F1B			
<b>SRAL</b>	14192,0	0500-1900	dly	8	RUS	UiPTR	F1B		500/2 00	
<b>SRAL</b>	14221,0	2330-0600/	dly	8	KGZ	UiPTR	F1B		200	
<b>SRAL</b>	14242,0	0825	25.	8		UiMUX	PSK2	120	2600	
<b>SRAL</b>	14295,0	0230-1930	dly	8	TJK	R Tojikiston	A3E			3f 4765,00 kHz, Yangiyul TX
<b>SRAL</b>	14 MHz	0500-1505/	*	8	RUS	29B6	FMCW			50Hz / 15 kHz, days: 1. 3. 7. 13. 16. 19. 31.
<b>SRAL</b>	14 MHz	0400-1400	dly	8	RUS	UiOTHR	FMCW			10Hz / 15 kHz, 30 sec transmit with 16 min cycle
<b>SRAL</b>	18 MHz	0730-1145	*	8	CYP / TUR	UiOTHR	FMCW			25/50Hz / 20 kHz, days: 20. 26. 29. (WebSDR 10 days)
<b>SRAL</b>	21 MHz			8	CYP / TUR	UiOTHR	FMCW			25/50Hz / 20 kHz
<b>SRAL</b>	21438,0	/0830-1630	dly	8	RUS	RCV	A1A			
<b>SRAL</b>	24 MHz			8		UiOTHR	FMCW			No reports
<b>SRAL</b>	28160,0			8	IRN	UiOTHR	FMCW			307 & 870 Hz / 60 kHz – 300 kHz
<b>SRAL</b>	28960,0	0530-1900	*	8	IRN	UiOTHR	FMCW			150 & 313 Hz / 60 kHz , days: 4. - 6. 10. - 14. 16. 18. 23. - 25. 27.
<b>SRAL</b>	28 MHz	0700-0800	20.	8		UiOTHR	FMCW			25/50Hz / 20 kHz
<b>SRAL</b>	28 MHz	0515-1830	*	8	RUS	Taxi disp.	F3E			Days: 1. 2. 4. - 6. 10. - 16. 18. 23. 24. 26. 27. 29. 80 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	3503.5	2236	06	08		XSS	MFSK8	125	1750	MIL 188-141A
USKA	3525.0	2303	15	08			F1B	50	200	
USKA	3527.0	2221	14	08			F1B	50	200	almost daily
USKA	3532.0 VFO USB	2215	14	08			DQPSK	14x75	5k9	LINK 11 CLEW; often (STANAG 5511) mode
USKA	3549.0 VFO USB	2349	09	08			PSK8	2400	~2k7	MIL188-110A (Hybrid), preamble 4 tones, 450Hz spacing
USKA	3552.0	2235	03	08			J7D		2k7	CIS12 idling
USKA	3553.8	2149	01	08			G1D	2400	~2k4	Stanag 4285; PSK8 almost daily frame format mostly 600bps/long
USKA	3568.0	2352	09	08			F1B	75	200	
USKA	3569.0	2238	03	08			F1B	50	200	
USKA	3572.0	2255	15	08			F1B	75	250	
USKA	3578.0	2259	15	08			F1B	75	250	
USKA	3590.0	2357	09	08			J7D	12x120	2k7	BPSK; CIS12
USKA	3608.0	2224	14	08			F1B	50	200	almost daily
USKA	3610.0	2232	03	08			DQPSK	14x75	5k9	LINK 11 CLEW; (STANAG 5511) DSB mode
USKA	3610.0	2241	03	08			F1B	40.5	250	
USKA	3633.6	2359	09	08			PSK8	2400	~2k7	MIL188-110A (Hybrid), often preamble 4 tone PSK4
USKA	3637.0	2151	01	08			PSK8	2400	~2k7	STANAG 4285; often frame format 600bps/long
USKA	3788.0	2155	01	08			J7D	12x120	2k7	BPSK; CIS12
USKA	7008.0 VFO LSB	1102	31	08			J7D	12x120	2k7	BPSK; CIS12 (maybe DSB)
USKA	7008.0 VFO USB	1103	31	08			J7D	12x120	2k7	BPSK; CIS12 (maybe DSB)
USKA	7022.0	1042	16	08			J7D	12x120	2k7	BPSK; CIS12 often
USKA	7039.2	2115	06	08	RUS	F	A1A			Beacon F Vladivostok
USKA	7039.3	2120	06	08	RUS	K	A1A			Beacon K Petropavlovsk
USKA	7039.4	2117	06	08	RUS	M	A1A			Beacon M Magadan
USKA	7058.0	2247	03	08			F1B	75	200	
USKA	7067.0	2339	09	08			F1B	75	240	
USKA	7110.0	2226	03	08			J7D	12x120	2k7	BPSK; CIS12
USKA	7120.0	1512	16	08	SOM		A3E		10k	Radio Hargaysa often
USKA	7149.5	1517	16	08			J7D	12x120	2k7	BPSK; CIS12
USKA	7186.0	2251	03	08			J7D	12x120	2k7	BPSK: CIS12
USKA	7200.0	2331	09	08			A3E		~10k	BC, lower sideband down to 7195 asian style music and voice
USKA	14008.0	1137	10	08			F1B	50	250	
USKA	14048.0	0834	01	08			FMCW	50 sps	~13k	OTHR; occup. BW appx 30k
USKA	14090.0	0647	31	08			FMOP		10k	OTHR
USKA	14111.0	0947	16	08			FMCW	50 sps	~13k	OTHR; occup. BW appx 30k
USKA	14116.0	0819	19	08			F1B	75	250	
USKA	14120.0	1239	09	08			FMCW	50 sps	~13k	OTHR; occup. BW appx 30k
USKA	14136.0	1448	07	08			FMCW	50 sps	~13k	OTHR; occup. BW appx 30k
USKA	14150.0	1510	16	08			FMOP	10 sps	~10k	OTHR; only short period
USKA	14190.0	1000	16	08			FMCW	67 sps	10k	OTHR; Bursts: BD 3.9s BRI 17s
USKA	14192.0	0831	01	08			F1B	50	200	
USKA	14192.0	1011	18	08			F1B	50	500	
USKA	14201.8	1527	04	08			BPSK	16x75	2k2	Burst system; 16 tones, 2 Pilottones
USKA	14221.0	2244	03	08			F1B	50	200	
USKA	14240.0 VFO USB	1013	18	08			J7D	12x120	2k7	BPSK; CIS12 with carrier Pilottone at 3300Hz
USKA	14275.0	1547	05	08			FMOP	10 sps	~10k	OTHR; only short period
USKA	14303.5	2207	01	08			J7D	12x120	2k7	BPSK; CIS12
USKA	14340.0	0826	01	08			J7D	12x120	2k7	BPSK; CIS12 often
USKA	14341.0	0917	16	08			A3E		appx 3k	unident language; long lasting
USKA	18069.0	0911	16	08			FMCW	50 sps	20k	OTHR

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
USKA	18075.0	0956	09	08			FMCW	50 sps	20k	OTHR
USKA	18150.0	0809	19	08			F1B	100	1000	2 <sup>nd</sup> of 9075 kHz (100Bd 500Hz)
USKA	21145.0	0851	09	08		A2	MFSK8	125	1750	MIL 188-141A; LQA
USKA	21145.0	0855	09	08		C3	MFSK8	125	1750	MIL 188-141A
USKA	21145.0	0914	09	08		F301	MFSK8	125	1750	MIL 188-141A; LQA
USKA	21353.5	1501	16	08			F1B	600	600	ARQ system
USKA	21438.0	1659	10	08		RCV	A1A			letters and figures almost daily
USKA	28320.1	0943	09	08		SRT	A1A			Fishery buoy
USKA	28330.03	0946	09	08		MOR	A1A			Fishery buoy
USKA	29500.0	1308	09	08			F1B	81.92	140	Datawell buoy

### Veron – Netherlands – PA2GRU (Dick)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SHIFT	DETAILS
VERON	3519,0	20.20	18	8		UiPTR	F1B		Revs
VERON	3564,0	20.21	18	8		UiPTR	F1B		Revs
VERON	3608,0	20.23	18	8	CIS	UiPTR	F1B		Revs/Ptr
VERON	3772,0	20.25	18	8		UiPTR	F1B		Revs
VERON	7027,6	16.38	26	8	?	V	A1A		slow v's (16 per minute). Goes on for long
VERON	7175,0	06.40	26	8	?	?	A1A		long time dotter
VERON	10115,0	07.57	16	8		UiPTR	F1B		Ptr
VERON	10118,0	07.44	10	8		UiPTR	F1B		Ptr
VERON	14008,0	07.51	10	8	CIS	UiPTR	F1B		Carrier/Revs/Ptr (also 17/8 14.01 UTC)
VERON	14008,0	11.04	10	8	RUS	UiCAR	NON		carrier
VERON	14008,0	08.22	11	8	RUS	UiPTR	F1B		Ptr
VERON	14008,0	09.00	11	8	RUS	UiCAR	NON		carrier
VERON	14008,0	09.23	13	8	RUS	UiPTR	F1B	200	Ptr
VERON	14008,0	07.40	14	8	RUS	UiPTR	F1B	200	Ptr, dots
VERON	14011,0	07.44	16	8	CIS	M7M8	A1A		5BL (ending 320 RPT AL K)
VERON	14011,0	08.41	16	8	CIS	M7M8	A1A		6YJK de M7M8 QRV K
VERON	14011,0	09.52	16	8	CIS	M7M8	A1A		QTC 789 27 161240 789 bt 948 bt 5BL
VERON	14011,0	10.11	16	8	CIS	M7M8	A1A		Calls to: CQ2J XRGV DWLJ OW5J
VERON	14050,0	06.48	1	8		OTHR	FMCW		radar
VERON	14053,0	06.50	17	8		OTHR	FMCW		radar
VERON	14063,0	10.15	16	8		UiPTR	F1B		Idle
VERON	14092,0	07.31	25	8	RUS	UiPTR	F1B	500	Ptr
VERON	14108,0	09.41	1	8	RUS	ACEL	A1A		BPWO DE ACEL K (proc)
VERON	14108,0	09.44	1	8	RUS	ACEL	A1A		4PSU DE ACEL K (proc)
VERON	14108,0	09.45	1	8	RUS	ACEL	A1A		D9MT DE ACEL K (proc)
VERON	14108,0	09.47	1	8	RUS	ACEL	A1A		MHGC DE ACEL K (proc)
VERON	14108,0	09.50	1	8	RUS	ACEL	A1A		LQ1U DE ACEL K (proc)
VERON	14108,0	09.56	1	8	RUS	Y1CQ	A1A		Y1CQ ZNS ZNR ZXK K
VERON	14108,0	10.05	1	8	RUS	WEGI	A1A		XXX WEGI 55961 BUMOVREC 2259 0865
VERON	14108,0	10.10	1	8	RUS	WEWI	A1A		XXX WEGI 23926 SWOBODNYJ 6145 6882
VERON	14108,0	10.22	1	8	RUS	Y1CQ	A1A		Y1CQ ZPL ZNO ZWG K
VERON	14108,0	10.21	10	8	RUS	ACEL	A1A		MHGC DE ACEL QTC 685 46 10 1306 685
VERON	14108,0	10.21	10	8	RUS	ACEL	A1A		BT 054 BT (5BL)
VERON	14108,0	07.35	23	8	RUS	5RAN	A1A		3HQ3 DE 5RAN ZBG ZQS ZJL QYT9 K
VERON	14108,0	07.43	23	8	RUS	5RAN	A1A		IELO DE 5RAN (proc)
VERON	14108,0	12.30	1	8	CIS	UiCW	A1A		MMMMM 5BL (ending 958 K)
VERON	14108,0	08.12	5	8	CIS	UiCW	A1A		Y1CQ QTC ZPG AR
VERON	14108,0	08.15	5	8	CIS	ACEL	A1A		QTC 059 5BL
VERON	14108,0	08.18	5	8	CIS	ACEL	A1A		Calls to: BPWO D9MT 4PSU KHVH LQ1U
VERON	14108,0	11.57	5	8	CIS	UiCW	A1A		5BL (ending 455 RPT AL K)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SHIFT	DETAILS
VERON	14108,0	07.59	16	8	CIS	FNMS5	A1A		Calls to: VSHY NPXS LIFC 8HQ8 4NIW
VERON	14108,0	10.19	28	8	RUS	UiCW	A1A		5F traffic
VERON	14116,0	08.00	5	8		UiPTR	F1B		Fast Revs/ Ptr
VERON	14118,0	08.48	16	8	CIS	NEN8	A1A		5BL
VERON	14121,0	12.28	19	8		UiRadar	FMCW	30k	OTHR; 50sps
VERON	14141,0	08.45	26	8		UiPTR	F1B		Ptr
VERON	14192,0	15.27	3	8	CIS	UiPTR	F1B		Revs/Ptr also 18/8 26/8 29/8
VERON	14192,0	17.34	6	8	RUS	UiPtr	F1B	200	
VERON	14192,0	12.09	19	8	RUS	UiPtr	F1B	500	
VERON	14192,0	06.34	5	8	RUS	UiPTR	F1B	200	Ptr
VERON	14221,0	20.42	6	8	KGZ	UiPtr	F1B	200	Idling
VERON	21438,0	09.08	10	8	RUS	RCV	A1A		RIP90 DE RCV QTC 358 41 30 1254 BT
VERON	21438,0	09.08	10	8	RUS	RCV	A1A		358 BT NAWEREA (etc)
VERON	21438,0	15.30	23	8	RUS	RCV	A1A		RIL90 DE RCV QTC 414 31 25 1200 404
VERON	21438,0	15.30	23	8	RUS	RCV	A1A		BT NAWIP (etc)
VERON	21438,0	13.40	24	8	RUS	RCV	A1A		RKZ DE RCV QTC 160 20 24 1521 160 BT
VERON	21438,0	13.40	24	8	RUS	RCV	A1A		SML BT CHTVRMOWNE PREDUPREVD
VERON	21438	13.40	24	8	RUS	RCV	A1A		ENCE NR 687 S21/24 (etc)
VERON	21438,0	11.51	5	8	RUS	RCV	A1A		QTC 957 chTORMOWOE PREDU

# The monitoring team of IARU Region 1

## credits:

Wavecom Elektronik – Buelach – Switzerland

German BNetzA Konstanz

Many thanks for your interest!

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