



Monitoring System

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The monthly newsletter for Region 1

February 2015

The 28 members of the IARUMS Region 1 Monitoring Team:



Acknowledgements

ARI: DH7SA – Salvatore ++ ARSK: 5Z4NU - Ted ++ ASTRA: DL1BDF – Mustapha ++ DARC: DK2OM – Wolf ++ ERASD: SU1SA – Sayed ++ HRS: 9A5DGZ – Gianluca ++ IARC: 4Z1AB – Amos ++ IRTS: EI9GSB - Lisa ++ KARS: 9K2RR – Faisal ++ MARL: 9H1M – Dominic ++ MRASZ: HA7PL - Laci ++ NARS: 5N9AYM – Yusuf ++ NRRL: LA4EU – Hans Arne ++ OEHSV: OE3GSA – Gerd ++ PZK: SP9BRP – Jan ++ RAL: OD5RI – Riri ++ REF: F5MIU – Francis ++ REP: CT4AN – Jose ROARS: A41MA - Younis ++ RSGB: M0VRR - Vaughan ++ SARL: ZS4GJA - Gideon ++ SRAL: OH2BLU - Pekka ++ SSA – Ullmar ++ UBA: ON4PN - Patrick URE: EB1TR - Fabian ++ USKA: HB9CET - Peter ++ VERON: PA2GRU - Dick ++ ZRS: S56ZDB – Darko ++ G3VZV – Graham (satellite) ++ TG9ADV – Jorge (Co-ordinator Region 2) ++ VK3MV – Peter (Co-ordinator Region 3) ++ DF8FE – (Webmaster assis.) ++ DL8AAM (ALE) ++ DJ7KG (BUOYS) ++ DF5SX (BC) ++ DARC (server support) ++ OD5TE (Hani) ++ VE6SH – Tim (IARU President) ++ 9K2RR – Faisal (EC-IARU-R1 ++ PTTs: BAKOM (Swiss), BNetzA Konstanz (Germany) ++ OFCOM (UK) ++ Dutch AT ++ SK6AW – DX-Cluster ++ YO9RIJ – Petrica

Part 1: News and Infos

1. Now 28 members in our team!

The IARU Monitoring System Region 1 has now 28 members. 9A5DGZ - **Gianluca Zaimovic** is now the national MS Coordinator of the Croatian Amateur Society HRS.

Welcome to our team dear Gianluca!

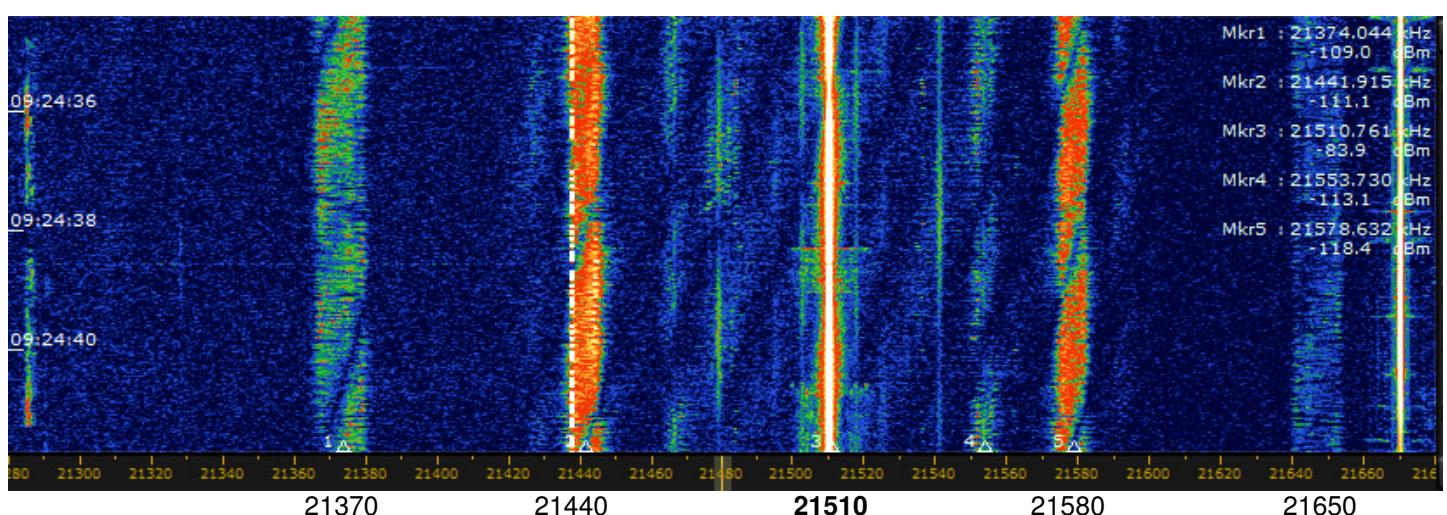
Gianluca operating his equipment.



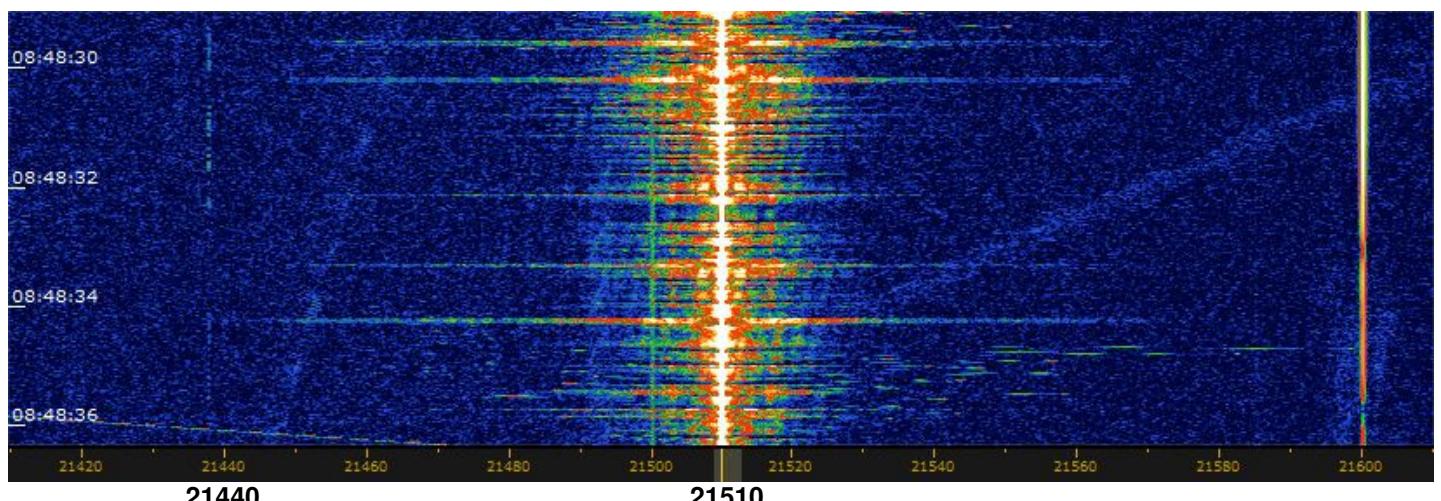
2. Iranian BC transmitter repaired

A BC-transmitter operated by IRIB Tehran on 21510 kHz caused severe spurious emissions on 21440 and 21380 kHz in December und January. After a complaint by the German BNetzA Konstanz the transmitter was repaired. **Many thanks to the German BNetzA and the technicians from IRIB!**

The situation in December 2014 and February 2015 (screenshots DK2OM):



The situation on Feb. 26th 2015:



The spurious emissions are no longer visible, but now some splatters appeared on the upper part of our 21 MHz-band. The transmitter seems to be overmodulated.

3. Indonesian Village Radio - by HB9CET, Peter

As a result of the excellent propagations during the last few months, we very often found CB-like radio communication in LSB or also USB in Indonesian language, obviously not being ham traffic. Typically they often say something like "doo-ah". John/VK4TJ and John/ZL1GWE checked some audio samples and confirmed that it was typical daily "village radio" from the wide area of the Indonesian island world. Many different frequencies between 7000 to 7100 kHz are confirmed as very popular for this kind of illegal traffic between families or colleagues. It's also regularly mentioned in monitoring reports of IARUMS Region 3.

4. Far East pirates

Far East pirates from Indonesia and Philippines are also abusing 14000 kHz USB and several QRGs in our 21 MHz-band. Pirates from Vietnam were also abusing the 10 MHz-band. Chinese voice traffic was found on the 10 m-band on FM often in the mornings.

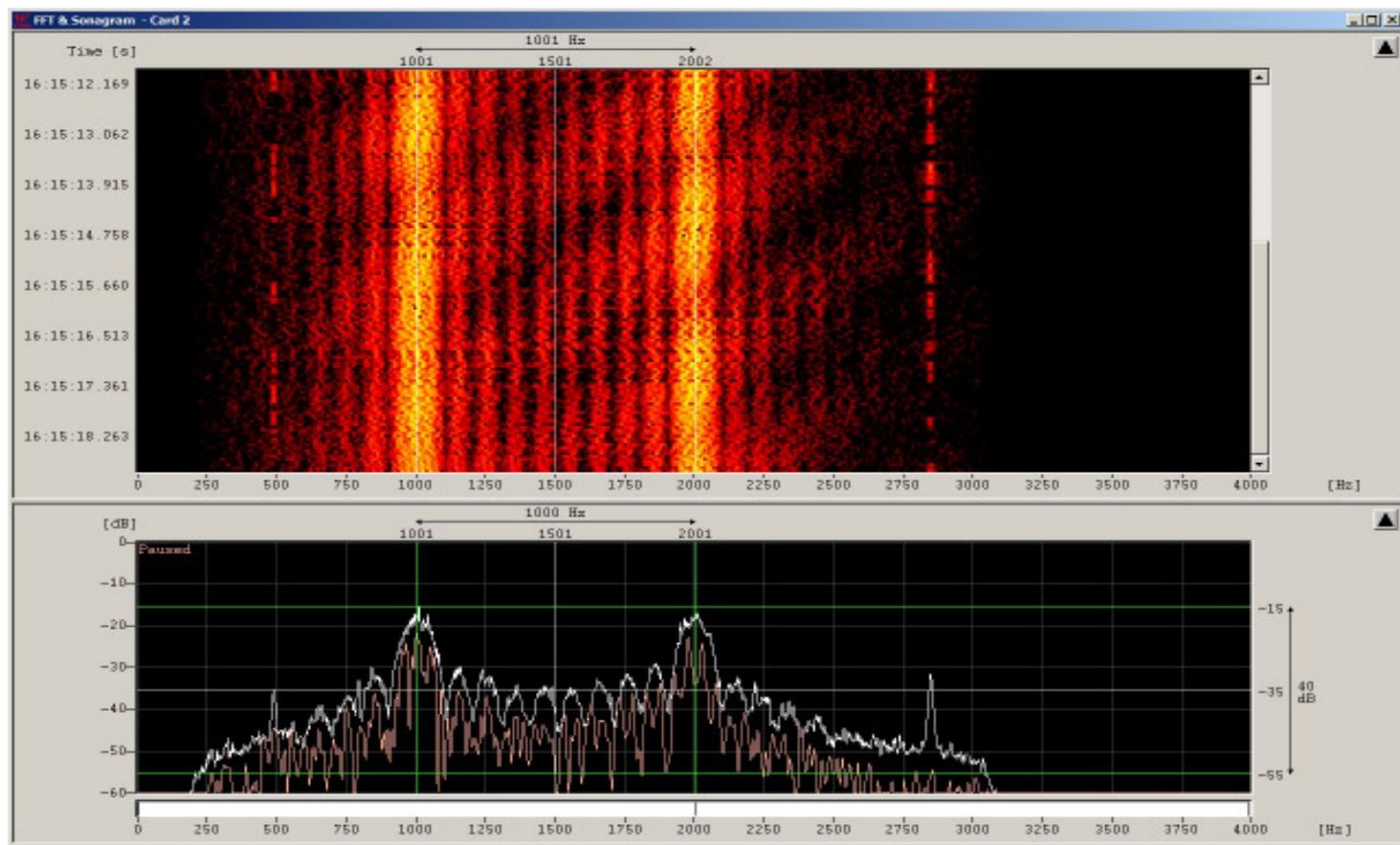
5. REA4 still on 7018 kHz during February

The Russian Airforce Moscow (ident: REA4) was still transmitting on 7018 kHz.

Parameters: FSK, 100 Bd, 1000 Hz shift, very unclean signal, daily audible in Europe at 1400 utc.

An official complaint by the German BNetzA brought no change.

REA4 analysed by W-Code from Wavecom – screenshot: DK2OM showing sonogram and FFT



6. 7 MHz band in Region 3

Chinese digital systems (possibly military) are very busy on our 40 m-band in Region 3. OFDM30 is one of them. Parameters: bursts with 60 Bd, 2400 Hz shift

7. North Korean diplo traffic on our exclusive bands

North Korean embassies are daily active on our bands, here 2 examples:

14318.5 kHz embassy Damaskus (Syria) and 21448.5 kHz embassy Tripolis (Libya).

Parameters: DPRK-FSK bursts are operated with 600 Bd and 600 Hz shift (= DPRK-FSK 600), also 1200 Bd and 1200 Hz shift (= DPRK-FSK 1200).

8. French amateurs and bandplans

French amateurs are daily transmitting on 3550.0 on AM and 10132 on USB not respecting our bandplans. They are no intruders, but their behavior is ruthless and a shame.

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

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

Homepage IARUMS Region 2 <http://www.iaru-r2.org/>

Homepage IARUMS Region 3 <http://iaru-r3.org/iaru-region-3-monitoring-system-newsletter/>

Intruderlogger Region 1 <http://peditio.net/intruder/bluechat.cgi>

ITU-Monitoring Reports:

<http://www.itu.int/ITU-R/index.asp?category=terrestrial&rlink=terrestrial-monitoring&lang=en>

Part 2: Detailed reports of the national Co-ordinators

DD = day *** **MM** = month *** **dly** = daily *** **vt** = various times *** **vd** = various days *** **BD** = Baud *** **SH** = shift *** **SP** = spacing *** **Mode** = mode of transmission *** **A3E** = AM *** **A1A** = CW *** **J3E-U** = USB *** **J3E-L** = LSB *** **FSK** (F1B) = frequency shift keying *** **PSK** = phase shift keying *** **OFDM** = orthogonal frequency division multiplex **ALE (MIL-188-141A)** = automatic link establishment *** **MUX** = multiplex *** **Ui (unid)** = unidentified *** **Illicit** = illegal *** **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 *** **pps** = pulses per second (earlier radar systems) *** **sps** = sweeps/sec (radar systems) *** **FMCW** = frequency modulated continuous wave (OTH and coastal Radars) *** **5BL** = cyrillic 5 lettergroups

ARSK MONITORING OVERVIEW FOR February 2015

Radio Hargeisha returned in full force on 7,120 kHz with broadcasts both by day and night. Unidentified stations were again heard on 7,000, 7040 and 7075 kHz. Those on 7,000 kHz were heard more strongly at the coast and may be Kenya military or Police using both English and KiSwahili with phonetics.

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	02	E. Africa	?	J3Eu	Inidehtified, KiSwahili, East Africa. Possibly Kenya military or Police.
ARSK	7,040.00	1245	6	02	E. Africa	?	J3Eu	Inidehtified, KiSwahili and vernacular, East Africa.
ARSK	7,075.00	vt	dly	02	E. Africa	?	J3Eu	Unknown African language
ARSK	7,120.00	vt	dly	02	Rep.of Somalia	Hargeisha	A3E	Broadcast

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

DG0JBJ (Mario) observed 52 OTH radars on 20 m, 79 OTH radars on 15 m and 165 OTH radars on 10 m in February 2015. A Chinese OTH radar disturbed 160 kHz of our 7 MHz-band on several evenings. The Russian OTH radar Contayner caused strong interference on 7 MHz on several evenings.

DARC 2 – Germany - DK2OM (Wolf)

FSK transmissions -> center frequency between mark and space

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

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

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

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	1814,0	2127	01	02	RUS		USB LSB			14 tones – hyperbolic radio navigation system – BRAS-3/RS-10 – Kaliningrad – daily, all day
DK2OM	1852,0	2122	17	02	I	IPP	USB			Palermo Radio, weather reports
DK2OM	1855,0	2123	17	02	I	IQP	USB			San Benedetto Radio, weather reports
DK2OM	1876,0	2015	18	02	I	IQN	USB			Lampedusa Radio, weather reports
DK2OM	1880,0	2120	04	02	BEL		PSK8	2400	2400	Stanag4285 – 600 bps long – area of Brugge – Belgium – daily
DK2OM	1888,0	2051	22	02	I	IPD	USB			Civitavecchia Radio, weather reports
DK2OM	1896,5	2045	05	02	D		PSK8	2400	2400	Stanag4285 – 600 bps long – German Navy

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	1925,0	1928	11	02	I	IPL	USB			Livorno Radio, weather reports – daily, vt
DK2OM	3500,0	vt	dly	02	TUR		FSK8	120	1750	ALE, “201” - Turkish Red Crescent – legal!
DK2OM	3500,0	1852	16	02	F		USB			French fishery
DK2OM	3502,0	1815	19	02	RUS		PSK2A	120	2600	AT3004D - Kaliningrad
DK2OM	3503,5	vt	dly	02	G	no ITU	FSK8	125	1750	ALE – “XSS” “XPU” “XJR” – British MIL Tascomm – vt, daily - legal!
DK2OM	3510,5	2054	19	02	UKR		USB			man in RUS voice – figures - Kharkov
DK2OM	3512,4	2038	19	02	BLR		PSK4A	1200	1200	Minsk
DK2OM	3512,5	1920	17	02			PSK2	120	2600	AT3004D – submode idle -
DK2OM	3517,0	1924	24	02	FEa		A1A			5 letter groups
DK2OM	3520,0	1802	20	02	E		USB			Spanish fishery
DK2OM	3522,0	1704	24	02	D		PSK8	2400	2400	Stanag4285 - Rostock
DK2OM	3524,0	1735	24	02	RUS		PSK2	120	2600	AT3004D – modem idle - Smolensk
DK2OM	3525,5	1809	20	02	HOL		USB			Dutch fishery
DK2OM	3530,0	vt	dly	02			FSK8	125	1750	ALE, “11141”
DK2OM	3533,8	2029	02	02	F		PSK4	75	2300	LINK11-CLEW – area of Brest
DK2OM	3540,0	2115	03	02	F		USB			male persons in French voice
DK2OM	3548,0	2133	12	02	RUS		F1B	50	200	Severomorsk
DK2OM	3549,0	2045	18	02	ISR		A1A			slip “vvv de 4XZ” and encrypted MSGs – ISR Navy disturbed by an amateur with CW-dots
DK2OM	3550,0	vt	vd	02	ALG	no ITU	FSK8	125	1750	ALE, “IU50” “IU52” “FN50”
DK2OM	3550,0	0600	dly	02	F		A3E			French amateurs not respecting bandplans - daily
DK2OM	3561,0	2015	02	02	RUS		F1B	75	250	Kaliningrad
DK2OM	3567,0	vt	dly	02	CHN ?	no ITU	FSK8	125	1750	ALE, “103” “106”
DK2OM	3570,5	2040	17	02	RUS		F1B	81	250	Kaliningrad
DK2OM	3574,5	2035	17	02	RUS		PSK2A	120	2600	AT3004D - Sevastopol
DK2OM	3576,4	ady	dly	02	I	IZ3DVW	A1A			uncoordinated beacon
DK2OM	3585,0	2016	11	02	TWN	HLL	F1C			120 rpm, IOC 576, WX-fax - daily - legal!
DK2OM	3587,0	vt	vd	02	E	no ITU	FSK8	125	1750	ALE, “TVV” “TXX” - Spanish Guardia Civil
DK2OM	3590,0	vt	dly	02	PAK	no ITU	FSK8	125	1750	ALE, “KW” “KHAIBAR” – Pakistan navy
DK2OM	3590,0	1923	17	02			PSK2A	120	2600	AT3004D
DK2OM	3594,0	---	--	02	RUS	C	A1A			Cluster beacon - Moscow RUS Navy - “RIW”
DK2OM	3594,3	---	--	02	RUS	D	A1A			Cluster beacon – Sevastopol RUS Navy – “RCV”
DK2OM	3595,0	vt	dly	02	D		FSK8	125	1750	ALE – German customs
DK2OM	3595,0	---	--	02	RUS		USB			woman in Russian voice – often spelling figures - St. Peterburg - daily
DK2OM	3596,0	vt	dly	02	D, S, HRV		FSK8	125	1750	ALE, “DK3CW” “SA6CBK” “9A0PZ” – just for info!
DK2OM	3596,0	1925	17	02			PSK2	120	2600	AT3004D – submode idle
DK2OM	3606,7	1517	12	02	CHN		OFDM	60	2400	OFDM30 – USB mode – pilottone 450 Hz - China
DK2OM	3617,0	vt	dly	02	HRV	9A5EX	FSK8	125	1750	ALE, “9A5EX” – HAM-ALE - just for info
DK2OM	3622,5	2016	11	02	J	JMH	F1C			Tokyo Meteo – 120 rpm – IOC576 – daily, legal!!!
DK2OM	3626,0	1918	08	02	CHN		FMCW		63k	Chinese OTH radar – 43.5 sps 3626 – 3689 kHz
DK2OM	3633,0	1805	14	02	CHN		FMCW		89k	Chinese OTH radar – 43.5 sps 3633 – 3722 kHz
DK2OM	3640,0	2028	07	02	G		FSK8	125	1750	ALE, “XSS” - British MIL Tascomm – just for info!
DK2OM	3642,0	1941	11	02	CHN		A1A			endless slip – DKG6 de 3A7D Chinese military – daily, all day

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	3649,0	2143	12	02	ALG	no ITU	FSK8	125	1750	ALE, "BI20" PA20"
DK2OM	3662,0	1923	24	02	FEa		A1A			endless slip – RA5J de BP2S
DK2OM	3709,0	1918	24	02	CHN		OFDM	60	2400	OFDM30 – LSB mode – pilottone 450 Hz
DK2OM	3712,0	1920	03	02	F		PSK4	75	5800	LINK11-CLEW on both sidebands (5800 Hz wide) - Marseille
DK2OM	3714,0	1856	17	02			F1B	75	250	
DK2OM	3716,0	1926	17	02			PSK2A	120	2600	AT3004D
DK2OM	3720,0	vt	dly	02	S		FSK8	125	1750	ALE, "YU" "YT" "YV" "DZ" – Swedish MIL
DK2OM	3730,0	1928	17	02			PSK2A	120	2600	AT3004D
DK2OM	3734,0	2032	17	02			PSK2A	120	2600	AT3004D - St. Peterburg
DK2OM	3739,0	0855	22	02	E		USB			Spanish fishery
DK2OM	3751,5	vt	dly	02	POL	no ITU	FSK8	125	1750	ALE, "IZ3" "MI3"
DK2OM	3756,0	dly	ady	02	UKR		A3E			UKR – pip – 14 tones – hyperbolic navigation system – BRAS-2/RS-10 – 3756.022 kHz – daily – all day
DK2OM	3761,5	vt	vd	02	POL	no ITU	FSK8	125	1750	ALE, "NI9" "PL7" "AB2" – Polish MIL
DK2OM	3777,0	2014	11	02	FEa		A1A			"RIS9 de M8JF" – endless slip – rcvd via JA
DK2OM	3786,0	2114	19	02			PSK2	120	2600	AT3004D – submode idle -
DK2OM	3791,0	vt	vd	02	D	DK0ESD	FSK8	125	1750	ALE, "DK0ESD" – just for info!
DK2OM	3799,0	2019	17	02			PSK2A	120	2600	AT3004D – St. Peterburg
DK2OM	6998,0	vt	dly	02	GRC		FSK8	125	1750	ALE, "GEF" "EK9" – highest tone on 7000.5 kHz – Greek military
DK2OM	6999,0	vt	dly	02			FSK8	125	1750	ALE, "537" "725" – signal center = 7000.625 kHz
DK2OM	7000,0	vt	dly	02	?	no ITU	FSK8	125	1750	ALE, "210" "20989" "2205" "203"
DK2OM	7000,0	2050	07	02	INS		USB LSB			Indonesian pirates – daily – audible in Europe in the evenings
DK2OM	7000,0	2113	17	02	ALG		USB			male persons in Arabic voice
DK2OM	7000,0	2055	20	02	RUS	D	A1A			spurious from Cluster beacon – Sevastopol RUS Navy – "RCV" on 7038.7 kHz
DK2OM	7000,0	1619	03	03	ISR		NON			carrier – long lasting - Israel
DK2OM	7000,0	1030	16	02	G		USB			unid voice – English Channel
DK2OM	7000,7	1938	24	02	MRC		USB			Moroccan fishery
DK2OM	7001,5	1842	02	02	ALG		PSK4A	62.5	1750	Clover 2000 – 8 x 62.5 Bd – Algeria – daily, vt
DK2OM	7008,0	0903	20	02	RUS		F1B	50	250	Bryansk
DK2OM	7018,0	1345	24	02	RUS	REA4	F1B	100	1000	mostly idling – Russian airforce Moscow – ident at full hour + 40 min.
DK2OM	7030,0	1740	12	02	INS		LSB USB			Indonesian pirates
DK2OM	7030,0	1850	28	02	RUS		FMCW		13k	OTH radar "Contayner" – 50 sps – Nizhny Novgorod
DK2OM	7038,7	1648	03	02	RUS	D	A1A			Cluster beacon – Sevastopol RUS Navy – "RCV" - daily – all day
DK2OM	7038,8	---	--	02	RUS	P	A1A			Cluster beacon – 7038.780 kHz - Kaliningrad RUS Navy – "RMP"
DK2OM	7038,9	1730	03	02	RUS	S	A1A			Cluster beacon – Severomorsk RUS Navy – „RIT“
DK2OM	7039,0	1546	03	02	RUS	C	A1A			Cluster beacon - Moscow RUS Navy - "RIW"
DK2OM	7039,2	1545	03	02	RUS	F	A1A			Cluster beacon - Vladivostok RUS Navy - "RJS"
DK2OM	7039,3	2024	08	02	RUS	K	A1A			Cluster beacon - Petropavlovsk Kamchatskiy -

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										RUS Navy - Pacific fleet - "RCC"
DK2OM	7039,4	1955	08	02	RUS	M	A1A			Cluster beacon - Magadan RUS Navy - „RTS“
DK2OM	7040,0	vt	dly	02	F	F6BAZ	FSK8	125	1750	ALE, "F6BAZ" - just for info
DK2OM	7040,0	ady	dly	02	I		A1A			IZ3DVW – uncoordinated and unwanted beacon
DK2OM	7040,5	vt	dly	02	HRV		FSK8	125	1750	ALE, "9A5EX" "9A0ALE" - just for info
DK2OM	7047,0	2000	10	02	RUS		FMCW		13k	OTH radar "Contayner" - 50 sps - Nizhny Novgorod - splatters from 6800 - 7200 kHz
DK2OM	7047,37	vt	vd	02	D		FSK8	125	1750	ALE, "DL0NOT" - just for info!
DK2OM	7049,5	vt	dly	02	HRV G F	9A0ALE M1DFO F6BAZ	FSK8	1250	1750	Amateur ALE, just for info!
DK2OM	7055,0	1528	01	02	RUS UKR		LSB			amateurs from Russia and Ukraine with slanging matches
DK2OM	7055,5	vt	vd	02	MEa	no ITU	FSK8	125	1750	ALE, "111" "132" "133" - Kaukasus
DK2OM	7065,0	1610	07	02	RUS		PSK2A	120	2600	AT3004D - Far East Russia
DK2OM	7070,0	2049	12	02	GEO	no ITU	FSK8	125	1750	ALE, "MV" "244" "686" "334" "204" "571" - daily active
DK2OM	7072,0	1350	17	02	RUS		PSK4B	120	2600	AT3104D - submode idle and traffic - Moscow
DK2OM	7077,4	2056	20	02	RUS	D	A1A			spurious from Cluster beacon - Sevastopol RUS Navy - "RCV" on 7038.7 kHz
DK2OM	7078,0	2026	28	02	FEa		FMCW		32k	Codan like ocean surface radar 2.6 sps - 7078 - 7110 kHz
DK2OM	7080,0	2048	14	02	RUS		FMCW		260k	splatters from OTH radar Contayner on 6820 kHz
DK2OM	7088,8	---	---	02	S	SL0FRO	A1A			7088.830 - cw-trainee, Sweden - kHz - SL0FRO - just for info!
DK2OM	7089,8	vt	dly	02	TUR		PSK8	2400	2400	Link11 - SLEW - aircraft - area of Izmir
DK2OM	7091,5	1950	07	02	KAZ	V	A1A			beacon "V" endless - Almaty - Kazakhstan - daily, all day
DK2OM	7092,0	vt	vd	02			FSK8	125	1750	ALE, "3014"
DK2OM	7097,0	1936	11	02	FEa		FMCW		30k	Codan like ocean surface radar 2.6 sps - 7097 - 7127 kHz
DK2OM	7099,5	vt	dly	02	HRV	9A0ZG	FSK8	125	1750	ALE, "9A0ZG" "9A5EX1P" "9A0OS" - daily - just for info!
DK2OM	7102,0	1820	02	02	HRV SUI D	9A0ALE	FSK8	125	1750	ALE, "9A0ALE" "9A2KS" "HB9MHB" "9A0ZG" "9A4OS" "DK0ESD" - just for info!
DK2OM	7110,0	2053	03	02	RUS		FMCW		13k	OTH radar Contayner - 50 sps - Nizhny Novgorod - also 04.02.2015 at 2000 utc
DK2OM	7110,0	vt	dly	02	HRV	9A0ALE	FSK8	125	1750	ALE, "9A0ALE" - just for info
DK2OM	7110,0	vt	dly	02			FSK8	125	1750	ALE, "1101" "1112"
DK2OM	7114,0	1945	07	02	FEa		FMCW		32k	Codan like ocean surface radar 2.6 sps - 7114 - 7146 kHz
DK2OM	7120,0	1700	01	02	SOM		A3E			Radio Hargaysa – Somalia - daily
DK2OM	7121,0	2000	01	02	CHN		OFDM	60	2400	OFDM30 – LSB mode – LSB QRG - pilottone 450 Hz - China
DK2OM	7137,0	vt	dly	02	TWN	no ITU	FSK8	125	1750	LSB – ALE , "ACCENT" "ABLAZE" "ABOUND" "AGHAST" "ARTIST" "ANYWAY" "ABJECT" "ADROIT" – Taiwanese navy – daily – various times - tnx for info: DL8AAM
DK2OM	7140,0	2030	28	02	CHN		OFDM	60	2400	OFDM30 – LSB mode – LSB

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										QRG - pilottone 450 Hz - China
DK2OM	7172,0	1400	11	02	RUS		PSK2	20	2600	AT3004D – modem idle - Moscow
DK2OM	7178,0	1955	07	02	RUS		FMCW		13k	OTH radar Contayner - 50 sps – Nizhny Novgorod
DK2OM	7183,0	vt	dly	02	SUI		FSK8	125	1750	ALE, “HB9MHB” – just for info!
DK2OM	7185,5	1804	06	02	D HRV		FSK8	125	1750	ALE, “9A5EX” “DK0ESD” just for info - daily
DK2OM	7192,0	1830	02	02	TUR		A3E			Voice of Turkey from 7205 kHz
DK2OM	7195,5	1520	02	02	IRN		A3E		9k	Voice of Iran from 7200.0 kHz
DK2OM	7197,0	vt	dly	02	TUR	no ITU	FSK8	125	1750	ALE, “8241” “206102” “8151” “3021” “3761” “8021” “8141” “3061” “3241” “8411” – Turkish Sivil Avunma = Turkish Civil Defense - source: DL8AAM – daily, various times
DK2OM	10100,8	ady	dly	02	D		F1B	50	450	Baudot - German Weatherservice – legal!
DK2OM	10110,0	vt	dly	02	SNG	no ITU	FSK8	125	1750	ALE, “CN6” “68” – Singapore Navy - Changi Naval Base
DK2OM	10113,0	vt	dly	02	TUN	no ITU	FSK8	125	1750	ALE, “TUD”
DK2OM	10114,0	0723	21	02		no ITU	FSK8	125	1750	ALE, “BSF” “ZEN” “CM2OR2”
DK2OM	10114,8	0730	28	02	RUS		F1B	100	1000	CIS14 – Moscow - daily
DK2OM	10115,0	vt	vd	02		no ITU	FSK8	125	1750	ALE, “2001” “2002”
DK2OM	10116,5	vt	vd	02	AFS		F7D	54.3	2120	MHF50 – 33 tones - South African navy
DK2OM	10120,0	2051	12	02		no ITU	FSK8	125	1750	ALE, “9066” “9067” “8001” “2001”
DK2OM	10120,0	1928	27	02	AF					unid voice traffic - ship – St. Helena
DK2OM	10121,0	0732	19	02	RUS		F1B	75	250	Moscow
DK2OM	10123,0	vt	dly	02	ALG	no ITU	FSK8	125	1750	ALE, “CM3” “COF” “BSF” “CM2” “ESA”
DK2OM	10129,0	vt	dly	02	ALG	no ITU	FSK8	125	1750	ALE, “CM1” “CTF” “772”
DK2OM	10130,0	1925	27	02	MRC		FSK8	125	1750	Thales 3000 – West Sahara – daily - vt
DK2OM	10130,0	vt	dly	02	MLE	no ITU	FSK8	125	1750	ALE, “001” “068” – Kuala Lumpur
DK2OM	10130,0	1920	27	02			USB			Arabic voice traffic
DK2OM	10135,0	vt	dly	02			FSK8	125	1750	ALE, ?
DK2OM	10136,0	vt	dly	02	ALG	no ITU	FSK8	125	1750	ALE, “CM3” “BLD” “CNC” “TF2”
DK2OM	10144,0	ady	dly	02	D	DK0WCY	A1A			10143.986 kHz - DK0WCY – German aurora beacon – just for info!
DK2OM	10145,5	vt	dly	02	HRV S / D F / G	9A5EX	FSK8	125	1750	ALE, “9A5EX” “SM5VRH” “DK0ESD” “F6BAZ” “M1DFO”- just for info - daily
DK2OM	14000,0	1330	14	02	PHL		USB LSB			Philippine pirates – daily 1300 utc and later
DK2OM	14000,0	1638	13	02	E		USB			Spanish fishery - daily
DK2OM	14000,0	1500	10	02			USB			Arabic male voice traffic
DK2OM	14000,0	1750	10	02	E		USB			Spanish fishery with scrambler CRY2001
DK2OM	14000,0	1450	16	02	E		USB			Spanish fishery
DK2OM	14001,8	1500	10	02	MEa		PSK8	2400	2400	Kairo ans ship Red Sea
DK2OM	14024,0	0943	01	02	RUS		F1B	75	500	Moscow – long lasting
DK2OM	14026,0	0730	12	02	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	14060,0	vt	vd	02	ISR	no ITU	FSK8	125	1750	ALE, “AAA” - Israel
DK2OM	14100,0	1136	27	02	ALG	no ITU	FSK8	125	1750	ALE, “6206” – “6204” - “6202” “6207” “6217” “MTL” “IJT” – Mauritanian border
DK2OM	14101,5	vt	dly	02	ALG		PSK4A	62.5	1750	Clover 2000 – 8 x 62.5 Bd –

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										Moroccan border
DK2OM	14105,0	1226	18	02	RUS		FMCW		10k	OTH burst radar Contayner - 10 sps – Nizhny Novgorod
DK2OM	14109,0	1328	26	02	ISR	4X1	FSK8	125	1750	ALE, “4X1” “CT2IXQ” – just for info!
DK2OM	14109,0	vt	dly	02	CAN		FSK8	125	1750	ALE, “VE3GDZ” – just for info!
DK2OM	14109,0	1652	22	02	RUS	RV3APM	FSK8	120	1750	ALE, “RV3APM” – just for info!
DK2OM	14110,0	0755	09	02	RUS		FMCW		10k	OTH burst radar Contayner - 10 sps – Nizhny Novgorod
DK2OM	14110,0	1052	17	02	RUS		FMCW		13k	OTH radar Contayner - 50 sps – Nizhny Novgorod
DK2OM	14116,0	1038	16	02	RUS		F1B	50	250	Moscow
DK2OM	14130,0	1646	17	02	RUS		FMCW		10k	OTH burst radar Contayner - 10 sps – Nizhny Novgorod
DK2OM	14134,0	0750	17	02	RUS		FMCW		13k	OTH radar Contayner - 50 sps – Nizhny Novgorod
DK2OM	14160,0	1047	27	02	RUS		F1B	75	200	Vologda
DK2OM	14171,0	0740	10	02	RUS		PSK2A	12	2600	AT3004D - Moscow
DK2OM	14192,0	1102	01	02	RUS		F1B	50	200	RUS navy Kaliningrad – vd, vt
DK2OM	14205,0	vt	dly	02	CHN ?	no ITU	FSK8	125	1750	ALE, “505” “822” – 60 deg. from DL - CHN ?
DK2OM	14222,0	1526	09	02	RUS		FMCW		13k	OTH radar Contayner - 50 sps – Nizhny Novgorod – splatters from 14000 – 14350 kHz
DK2OM	14260,0	vt	dly	02	SRB	YU1BI	FSK8	125	1750	ALE, “YU1BI” – just for info!
DK2OM	14260,9	0734	03	02	RUS		OFDM	35.56	2770	OFDM60 - Kaliningrad
DK2OM	14261,0	0745	09	02	RUS		OFDM	35.56	2770	OFDM60 - Kaluga – also 19.02.2015 at 1000 utc
DK2OM	14265,0	vt	vd	02	TUR	no ITU	FSK8	125	1750	ALE, “526”
DK2OM	14275,0	0913	04	03	RUS		FMCW		15k	OTH radar Contayner - 50 sps – Nizhny Novgorod – many splatters
DK2OM	14280,0	1005	25	02	UKR		A3E			female voice with encrypted msgs – figures – “SZRU” = Foreign Intelligence Service of Ukraine at Rivne – every Wednesday at 1005 utc
DK2OM	14282,0	1030	18	02	RUS		FMCW		13k	OTH radar Contayner - 50 sps – Nizhny Novgorod – splatters 500 kHz wide
DK2OM	14285,0	1056	19	02	RUS		OFDM	35.55	2770	OFDM60 - Kaluga
DK2OM	14295,0	vt	dly	02	SRB	YU1BI	FSK8	125	1750	ALE, “YU1BI” – just for info!
DK2OM	14295,2	0940	01	02	TJK		A3E			3rd from Radio Tajik on 4765 kHz – daily, all day
DK2OM	14301,7	1005	25	02	CHN		OFDM	60	2400	OFDM30 – USB mode – pilottone 450 Hz - China - daily
DK2OM	14308,0	0732	12	02	RUS		F1B	75	500	Moscow
DK2OM	14322,0	vt	dly	02	CHN	no ITU	FSK8	125	1750	ALE, “402”
DK2OM	14328,0	vt	dly	02	CHN	no ITU	FSK8	125	1750	ALE, “139” “534” “772” – West China
DK2OM	14330,0	vt	dly	02			FSK8	125	1750	ALE, “BV4”
DK2OM	14334,0	1210	04	02	CHN	no ITU	FSK8	125	1750	ALE, “249” “255” “763”
DK2OM	14344,7	vt	dly	02	CHN		PSK8	2400	2400	modified MIL-188-110A - 600 bps short – 14344.650 kHz – daily, all day
DK2OM	14346,0	vt	dly	02	HRV RUS D		FSK8	125	1750	ALE, “9A0ZG” “RX3ARZ” “DK0ESD” – just for info – various times, daily
DK2OM	14346,0	vt	dly	02	THA	HS0ZEA	A1A			HS0ZEA beacon – 14345.950 kHz - every 5 minutes – just for info!
DK2OM	18100,0	vt	dly	02	MRC	no ITU	FSK8	125	1750	ALE, “CD” “C3” “R3” “G3” “E4” “E5” “Z2” “FORD” – daily, various times
DK2OM	18107,0	---	--	02	RUS	RDL	F1B	50	200	Moscow – idle and traffic – Russian navy – various days

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										and times – legal operation
DK2OM	18117,5	vt	vd	02	POR	CT2IXQ	FSK8	125	1750	ALE, “CT2IXQ” – just for info
DK2OM	18140,0	vt	dly	02	SRB	YU1BI	FSK8	125	2600	ALE, “YU1BI” – just for info!
DK2OM	21000,0	1706	02	03	SDN		USB			MFA Sudan – Khartoum with emba Yemen – voice traffic – daily, vt
DK2OM	21000,0	---	--	02	B		USB			Brazilian pirates – Rio de Janeiro with North Brazil
DK2OM	21002,2	---	--	02	SDN	!0000	F1B	100	170	21002.15 kHz - Pactor 1 encrypted – MFA Sudan – Khartoum with emba Yemen – daily, vt
DK2OM	21096,0	vt	dly	02	INS	YD0OXH	FSK8	125	1750	ALE, “YD0OXH3” – daily, various times - just for info!
DK2OM	21131,0	vt	vd	02	CHN	no ITU	FSK8	125	1750	ALE, “A92” “L02” – Chinese Navy?
DK2OM	21140,9	1010	09	02	GEO		PSK8A	2400	2400	Stanag4538 – GEO MIL with AFG - daily
DK2OM	21145,0	dly	vt	02	MRC	no ITU	FSK8	125	1750	ALE, “B301”, “C3”, “IR4” “T4” “E4” “A2” “CD” “K3” “KB2” “J5” “GS4” “R3” – various times, daily
DK2OM	21145,8	vt	dly	02	I	IZ3DVW	A1A			21145.764 kHz – IZ3DVW uncoordinated and unwanted beacon
DK2OM	21190,0	0757	09	02	RUS		F1B	100	1000	harmonic from 10595 kHz - Moscow - daily
DK2OM	21295,0	0851	26	02	AUS		FMCW		10k	Australian OTH burst radar
DK2OM	21346,0	ady	dly	02	THA	HS0ZEA	A1A			beacon “HS0ZEA” – just for info!
DK2OM	21400,0	---	--	02	RUS		F1B	50	2000	harmonic from 5350 kHz – area of Moscow - daily
DK2OM	21409,5	---	--	02	RUS		F1B	100	2000	F1B 100 / 2000 - CIS14 – harmonic from 10704.75 - Jekaterinburg, RUS - daily
DK2OM	21432,5	vt	dly	02	SUI	HB9	FSK8	125	1750	ALE, “HB9” – missing complete ident – just for info
DK2OM	21436,0	---	--	02	RUS		PSK2A	120	5200	AT3004D – harmonic from 10718.0 kHz - Sevastopol
DK2OM	21438,0	vt	dly	02	RUS	RCV	A1A			RIP90 de RCV - RUS Navy Sevastopol - daily
DK2OM	21440,0	0820 1020	25	02	IRN		A3E			spuriuos from IRIB Tehran on 21510 kHz – no longer on Feb. 25th – transmitter repaired – but now splatters
DK2OM	21446,0	ady	dly	02	THA	HS0ZEA	A1A			HS0ZEA beacon – every 5 minutes - just for info!
DK2OM	21448,5	1035	25	02	LBY		F1B	600	600	21448.465 kHz - DPRK-FSK 600 – embassy Tripolis
DK2OM	25000,0	0850	19	02	FIN		A3E			time signal Helsinki – just for info – carrier on 25000 – dots on 25001 and 24999 – daily, all day
DK2OM	28000,0	vt	dly	02	CIS		F3E			28000 – 29700 numerous CIS taxi nets – mostly Russia
DK2OM	28000,0	ady	dly	02	B		A3E			Brazilian CBers – 28000 – 28315 – no change
DK2OM	28025,0	1734	01	02	POR		F1B	51	300	F1B bursts - 28100.160 kHz - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28030,0	0955	11	02	POR		F1B	51	340	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28045,0	1449	01	02	POR		F1B	51	280	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28050,0	vt	dly	02	POR		F1B	51		F1B bursts - west of Lisbon –

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28051,5	vt	dly	02	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28065,0	vt	dly	02	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28085,0	vt	vd	02	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28101,0	1519	18	02	POR		F1B	51	320	F1B bursts - 28100.780 kHz - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28102,1	1546	06	02	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28111,0	0850	28	02	CLN		LSB			Sinhala fishery
DK2OM	28125,0	1050	04	02	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28146,0	vt	vd	02	ARG B		FSK8	125	1750	ALE, “LU8EX” “PY2TI” “DL1” – just for info!
DK2OM	28200,0	vt	vd	02	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28235,0	0945	11	02	E		A3E			Spanish CBers
DK2OM	28270,0	0940	17	02	IRN		FMCW		50k	OTH radar Iran – 307 and 870 sps – splattering +/- 300kHz – also audible in USA east-coast, Chile and Australia
DK2OM	28272,0	0925	20	02	IRN		FMCW		50k	OTH radar Iran – 307 and 870 sps – splattering +/- 300kHz
DK2OM	28274,0	1106	19	02	IRN		FMCW		50k	OTH radar Iran – 307 and 870 sps – splattering +/- 300kHz
DK2OM	28275,1	vt	vd	02	AF		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28312,5	1047	25	02	POR	CT2IXQ	FSK8	125	1750	ALE. “CT2IXQ” – just for info
DK2OM	28315,0	vt	dly	02	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28435,0	----	--	02	E		F1B	81.9	140	Datawell-buoy “Waverider” – 28435.040 kHz – Costa del Sol – Malaga
DK2OM	28499,9	---	--	02			F1B	81.9	140	Datawell-buoy “Waverider” – 29524.990 kHz – south-east
DK2OM	29250,0	----	--	02	E		F1B	81.9	140	Datawell-buoy “Waverider” – 29249.905 kHz – Fuerteventura - daily, all day
DK2OM	29375,0	----	--	02	I		F1B	81.9	140	Datawell-buoy “Waverider” – 29374.898 kHz – Gallipoli, South Italy - daily, all day
DK2OM	29387,5	---	--	02	IND		F1B	81.9	140	Datawell-buoy “Waverider” – 29387.460 kHz – Indian NW coast, close to Pakistan - daily, all day
DK2OM	29400,0	---	--	02	USA		F1B	81.9	140	Datawell-buoy “Waverider” – 29400.070 kHz - USA north-east coast – NY daily, all day
DK2OM	29450,0	---	--	02	MRC		F1B	81.9	140	Datawell-buoy “Waverider” – 29449.870 kHz - area of El Aaiun – Morocco - daily, all day
DK2OM	29500,0	---	--	02	G		F1B	81.9	140	Datawell-buoy “Waverider” – area of Gibraltar – daily, all day
DK2OM	29525,0	---	--	02	MRC		F1B	81.9	140	Datawell-buoy “Waverider” –

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										29524.990 kHz - Agadir - Morocco – daily, all day
DK2OM	29625,0	---	--	02	USA		F1B	81.9	140	Datawell-buoy "Waverider" – 29625.024 kHz - USA north-east coast – daily, all day
DK2OM	29685,5	---	--	02	I				2000	serial modem, Italian MIL Brescia – report: SWL
DK2OM	29699,8	---	--	02	I				2000	serial modem, Italian MIL Brescia - report: SWL

IRTS – Ireland – EI9GSB (Lisa)

KARS – Kuwait – 9K2RR (Faisal)

MRASZ – Hungary - HA7PL (Laci)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
MRASZ	3510,0	1856	13	2			A3E			Ui language
MRASZ	3514,0	1736	28	2			A3E			Ui language, unstable carrier
MRASZ	3525,0	2002	16	2			A3E			russian language
MRASZ	3547,9	1928	27	2			A1A			dashes, deliberate disturbance
MRASZ	3600,0	1714	5	2			LSB			russian, germany language
MRASZ	7000,0	1758	13	2	UKR	D	A1A			"D" beacon hrd: 20,22,25,27,28
MRASZ	7000,1	1521	22	2			LSB			italians
MRASZ	7001,5	0838	5	2			NON			
MRASZ	7018,0	1648	5	2			F1B		850	Ui, hrd: 8, 12, 13, 16, 20, 24, 25, 27, 28
MRASZ	7030,0	1855	25	2			OTHR			7000 - 7060 kHz
MRASZ	7038,7	vt	dly	2	UKR	D	A1A			"D" beacon
MRASZ	7038,9	1650	5	2	RUS	S	A1A			"S" beacon, hrd: 9, 13 ,22, 25, 27, 28
MRASZ	7039,0	vt	dly	2	RUS	C	A1A			"C" beacon
MRASZ	7039,2	1650	5	2	RUS	F	A1A			"F" beacon, hrd on: 9,10,12,13,16,20
MRASZ	7040,0	1031	19	2			LSB			"hallo testing"
MRASZ	7046,0	1454	20	2			LSB			russian, count from one till five
MRASZ	7050,0	vt	dly	2			LSB			russian, often chaotic, music, singing
MRASZ	7050,0	2045	10	2			OTHR			7040 - 7060 kHz
MRASZ	7055,0	vt	dly	2			LSB			russian, chaotic, often with curse
MRASZ	7077,5	1906	13	2	UKR	D	A1A			"D" beacon hrd: 22,25,27,28
MRASZ	7091,5	vt	dly	2	KAZ	V	A1A			"V" beacon
MRASZ	7120,0	1654	13	2	SOM		A3E			Radio Hargaysa, hrd: 16,22,24,25,28
MRASZ	7163,0	1814	16	2			NON			
MRASZ	7193,0	0834	5	2			F1B		200	Ui
MRASZ	7193,0	1043	19	2			NON			
MRASZ	10130,0	1815	16	2			USB			Ui language
MRASZ	14024,0	0935	1	2			F1B		500	Ui.
MRASZ	14116,0	1013	27	2			F1B		250	
MRASZ	14160,0	1018	27	2	CIS		FB	75	200	
MRASZ	14192,0	0938	1	2	RUS		F1B		200	hrd:5,8,12,19,22,27,
MRASZ	14220,0	1757	28	2			F1B		250	
MRASZ	14240,0	1748	28	2			F1B		250	
MRASZ	14260,0	1748	28	2			F1B		250	stop at 1756

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
MRASZ	14260,0	1749	28	2			A3E			"Radio National"? french lang. stop at 1756
MRASZ	14292,0	1314	22	2			N0N			
MRASZ	14295,1	1750	24	2	TJK		A3E			Radio Tajikistan
MRASZ	14308,0	0940	12	2			F1B		500	
MRASZ	14344,0	1007	5	2			F1B		250	Ui
MRASZ	18120,0	1700	5	2			OTHR			
MRASZ	21320,0	1247	1	2			OTHR			
MRASZ	28135,0	1302	1	2			F3E			russian taxi
MRASZ	28165,0	1039	19	2			F3E			russian taxi
MRASZ	28250,0	1023	27	2			OTHR			28220 - 28320 kHz
MRASZ	28265,0	1316	1	2			F3E			russian taxi
MRASZ	28300,0	1037	19	2			OTHR			28200 - 28400 kHz
MRASZ	28300,0	1501	20	2			OTHR			

OEVSV – Austria – OE3GSA (Gerd)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
oevsv	7120.0	0408	12	02	SOM		A3A			BC music and voice
oevsv	7120.0	1811	22	02	SOM		A3A			BC Radio Harg.
oevsv	10101.0	0600	20	02	unid	unid	J3Eu			male voice
oevsv	10130.0	0610	04	02	unid	unid	J3Eu			below K1N

PZK – Poland – SP9BRP (Jan)

REF 1 – France – F5MIU (Francis)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	Baud	Sh Hz	DETAILS
REF	7035	1835	6	02		Russia?	fmcw		40kHz	OTHR Mil S9+20 bad spectrum
REF	7070	1802	19	02			LSB		3kHz	Intermittent Prayer and Muslim songs S9+10
REF	7110	1850	04	02		Russia	fmcw		40kHz	OTHR Mil S9+30 bad spectrum Pulses at 38Hz
REF	7120	1826	10	02			AM			Broadcast music S9
REF	10141.5	0851	20	02			USB			Spanish fischermans ?
REF	14000	1855	04	02			USB			Foreign lang. fisherman ?
REF	14205	1555	6	02		Russia?	fmcw		40kHz	OTHR Mil S9+30 bad spectrum
REF	21100	0856	19	02			fmcw		200kHz	OTHR 307+870 sweep/sec
REF	21200	0842	18	02			fmcw		200kHz	OTHR 307+870 sweep/sec
REF	28275	0855	14	02		Iran?	fmcw		100kHz	OTHR Mil S9 2 rates pulses
REF	28520	0849	5	02			LSB			Long TX in "Russian"? no call
REF	28710	0850	14	02			fmcw		30kHz	OTHR Mil S8

REF 2 – France – F5JBR (Andre)

REP – Portugal – CT4AN (Jose Francisco)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REP	3510	08.00	20	02	E		J3E-U			Fishermen
REP	3550	18.34	01	02			J3E-U			Unid comms
REP	3551	10.42	23	02	F		J3E-U			French fishery, background engine noise
REP	3666	09.39	10	02	F		J3E-U			French fishery
REP	3700	09.00	12	02	RUS		J3E-U			MIL - Russian Navy
REP	3712	11.13	23	02	E		J3E-U			Spanish fishery
REP	7015	20.17	12	02	E		J3E-U			Females talking with fishermen
REP	7025	19.05	08	02			F1B	75	240	Unid FSK
REP	7035	21.14	20	02			FMCW			OTH radar
REP	7038	22.00	04	02	RUS	S	A1A			KALININGRAD, ADY, DLY

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REP	7038	22.10	04	02	UKR	D	A1A			SEVASTOPOL, ADY, DLY
REP	7038	22.15	04	02	RUS	P	A1A			MURMANSK, ADY, DLY
REP	7039	22.38	17	02	RUS	C	A1A			MOSCOW, ADY, DLY
REP	7039	22.03	18	02	RUS	F	A1A			KAMCHATSKY, ADY, DLY
REP	7039	23.40	11	02	RUS	K	A1A			VOLGOGRAD, ADY, DLY
REP	7039	23.55	11	02	RUS	M	A1A			MAGADAN, ADY, DLY
REP	7070	15.00	19	02	I		J3E-L			MUSIC jamming QSO's
REP	7070	15.42	14	02	I		J3E-L			MUSIC jamming QSO's
REP	7070	10.26	13	02	E		J3E-U			UK fishermen talking abt boat problems
REP	7075	18.24	26	02	POR		J3E-L			MUSIC jamming QSO's
REP	7090	10.25	10	02			A1A			17 wpm letters and numbers groups, no id
REP	7091	17.18	Dly	02	KAZ	V	A1A			ALMATY - Beacon
REP	10101	13.02	11	02	MRC		J3E-U			Morrocian fishery
REP	10115	23.44	22	02			A3E			Letters Station - 5 letters transmission
REP	10125	12.19	29	02			J3E-U			Unid arabic language
REP	10130	18.40	09	02			FMCW			OTH radar
REP	10132	10.40	Dly	02	F	Fxxx	J3E-U			Amateurs not respecting Band Plan
REP	10135	20.05	16	02	MRC		J3E-U			Fishery
REP	10135	19.49	07	02			FMCW			OTH radar 20kHz wide
REP	10143	20.11	10	02			FMCW			OTH radar
REP	14010	10.26	04	02			J3E-U			Unid language ops
REP	14110	1059	17	02	RUS		FMCW			OTH radar 50 sps
REP	21110	14.45	27	02			FMCW			OTH radar
REP	21125	13.33	20	02	MRC		J3E-U			Fishermen on sea
REP	21220	11.15	15	02			FMCW			OTH radar
REP	21250	14.37	07	02			FMCW			OTH radar 50sps/20kHz
REP	24955	14.47	07	02			FMCW			OTH radar 50sps/20kHz
REP	28000	16.02	06	02	B		J3E-U			Fishermen
REP	28065	11.29	08	02	RUS		F3E			Russian language taxi dispatcher
REP	28115	14.28	24	02	B		A3E			Big mess of multiple signals Brazil
REP	28150	11.53	24	02	RUS		F3E			Russian taxis dispatchers
REP	28185	13.53	13	02	IRN		FMCW			OTH radar
REP	29150	13.00	22	02			FMCW			OTH radar
REP	29250	11.59	08	02			F1B	82	142	Datawell Waverider buoy
REP	29375	11.24	08	02			FMCW			OTH radar 50sps/20kHz
REP	29555	14.29	22	02			FMCW			OTH radar 20kHz wide
REP	28 to 29xxx		Dly	02	B		A3E			Brazilian CB's
REP	28 to 29xxx		Dly	02	RUS		F3E			Russian language taxi dispatchers

RSGB - Great Britain – M0VRR (Vaughan)

SRAL – Finland – OH2BLU (Pekka)

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	REMARKS
SRAL	7018,0	1100-0615	dly	2	RUS	REA4	F1B/NON		1000	
SRAL	7032,0	1200-1500	13.28.	2		UiMUX	PSK2	120	2600	
SRAL	7038,7	h24	dly	2	RUS	D	A1A			Sevastopol, spur. +/- 38.7 kHz
SRAL	7038,8			2	RUS	P	A1A			Kaliningrad, not heard
SRAL	7038,9	0100-1800	*	2	RUS	S	A1A			Severomorsk, days: 1. 8. 10. 13. 19. 24. 27.
SRAL	7039,0	0400-2030	dly	2	RUS	C	A1A			Moscow
SRAL	7060,0	0935	13.	2		UiCW	A1A			5BL
SRAL	7072,0	1230-1300	17.	2		UiMUX	PSK2	120	2600	
SRAL	7089,0	0630-1440	8.	2		UiMUX	PSK2	120	2600	
SRAL	7098,0	0730-0845	8.	2		UiPTR	F1B			
SRAL	7099,0	1200	18.	2		UiPTR	F1B		200	

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	REMARKS
SRAL	7012,0	1450-1900/	10.-28.	2	SOM	R.Hargeisa	A3E			
SRAL	7122,0	0520	27.	2		UiPTR	F1B		250	
SRAL	7150,0	0655-0705	*	2		186	R3E-u			Fridays: 6. 13. 27.
SRAL	7160,0	0650-1100	17.	2	RUS	RMW32	A1A			5BL
SRAL	7162,0	0650-0800/	18.	2		UiPTR	F1B		250	
SRAL	7169,0	0900-0905/	13.	2		UiPTR	F1B			
SRAL	7172,0	0515-1418/	11.12.	2		UiMUX	PSK2	120	2600	
SRAL	7184,0	0745-1500	17.	2		UiMUX	PSK2	120	2600	
SRAL	7193,0	0745-1500	*	2		UiPTR	F1B/N0N		200	Days: 4. 8. 9. 11. 13. 16. 18. 19. 20.
SRAL	7198,0	0945-1015	5. 26.	2		UiMUX	PSK2	120	2600	
SRAL	7200,0	/1520-1620/	dly	2	IRN	IRIB	A3E			
SRAL	7200,0	1400-1520/	1.-15.	2	SDN	R Sudan	A3E			
SRAL	7200,1	1400-1500	*	2	MYA	Myanmar Radio	A3E			Days: 10. 13. 14. 15. 19. 25. 26. 28.
SRAL	7 MHz	1815-2030	*	2	RUS	29B6	FMCW			50Hz / 15 kHz, days: 3. 6. 7. 22. 27.
SRAL	14000,0	0940-1100	12.	2		UiCarr	N0N			
SRAL	14024,0	0840-1540	1. 9.	2		UiPTR	F1B		500	
SRAL	14036,0	1250	19.	2	RUS	REA4	F1B		2000	2f
SRAL	14052,0	0755-0940	12.16.	2		UiMUX	PSK2	120	2600	
SRAL	14058,0	0915	24.	2		UiMUX	PSK2	120	2600	
SRAL	14084,0	0915	24.	2		UiPTR	F1B		250	
SRAL	14116,0	1120-1130	27.	2	RUS	UiPTR	F1B			
SRAL	14141,0	1215-1310/	27.	2		UiPTR	F1B		200	
SRAL	14192,0	0630-1500	dly	2	RUS	UiPTR	F1B		200	
SRAL	14221,0	0540	13.	2		UiPTR	F1B			
SRAL	14242,0	0940-1030/	5.	2		UiMUX	PSK2	120	2600	
SRAL	14260,0	0635	16.	2		UiMUX	PSK2	120	2600	
SRAL	14295,2	050-1530	dly	2	TJK	R Tojikiston	A3E			3f 4765,07 kHz, Yangiyul TX
SRAL	14308,0	0655-1010/	12.	2		UiPTR	F1B		500	
SRAL	14 MHz	0600-1630	*	2	RUS	29B6	FMCW			50Hz / 15 kHz, days: 5. 8. 11. 12. 13. 17. 18. 21.
SRAL	14 MHz	0700-1530	dly	2	RUS	UiOTHR	FMCW			10Hz / 15 kHz, mostly 30 sec bursts (16 min. / cycle)
SRAL	18 MHz	0830-1215	*	2	CYP / TUR	UiOTHR	FMCW			25/50Hz / 20 kHz , days: 11. 22. 25.
SRAL	18 MHz	0955	15.	2	RUS	UiOTHR	FMCW			10Hz / 15 kHz, 30 sec burst
SRAL	21 MHz	0700-1430	*	2	CYP / TUR	UiOTHR	FMCW			25/50Hz / 20 kHz, days: 1. 9. 11. 18.
SRAL	21438,0	0900-1000	*	2	RUS	RCV	A1A			Days: 9. 13. 15. 16. 17. 18. 22. 27.
SRAL	24 MHz	0900-0905	18.	2	CYP / TUR	UiOTHR	FMCW			50Hz / 20 kHz
SRAL	28 MHz	0630-1445	*	2	CYP / TUR	UiOTHR	FMCW			25/50Hz / 20 kHz, days: 1. - 4. 7. 8. 10. 14. 18. 20. 22. - 28.
SRAL	28 MHz	0630-1540	*	2	IRN	UiOTHR	FMCW			307 & 870 Hz / 60 kHz, days: 1. - 4. 15. - 18. 20. -

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	REMARKS
										23. 25. - 28.
SRAL	28 MHz	0735-1240	*	2	RUS	Taxi disp.	F3E			17 reports, days: 6. 8. 9. 10. 15.

USKA – Switzerland – HB9CET (Peter)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
USKA	3527.0	2212	26	02			F1B	50	200	
USKA	3532.0	2247	14	02			DQPSK	14x75	~5k9	LINK 11 CLEW DSB mode
USKA	3548.0	1847 1849	14	02			F1B	36 50	200	CIS 36-50, jammed
USKA	3548.1	1848	14	02			A1A			Jammer, fast dots only
USKA	3552.0 VFO USB	2237	14	02			PSK8	2400	~2k4	Stanag 4285 600 bps/long often
USKA	3574.0	1849	17	02			J7D	12x120	2k7	PSK-2: CIS12 – AT3004D
USKA	7000.0	2128	02	02		D	A1A			Beacon ID "D", spurious daily
USKA	7000.0	2223	05	02			J3E-U			Indonesian village radio
USKA	7000.0	2314	09	02			NON			long lasting carrier often
USKA	7000.0 VFO USB	1435 1024	04 06	02			PSK8	2400	~2k4	1800Hz single tone 2400Bd waveform (unident)
USKA	7000.0	0112	11	02		21001	MFSK8	125	1750	MIL 188-141A
USKA	7000.0	0118	11	02		21093	MFSK8	125	1750	MIL 188-141A
USKA	7000.0	0135	11	02		509	MFSK8	125	1750	MIL 188-141A
USKA	7000.0	0137	11	02		21079	MFSK8	125	1750	MIL 188-141A
USKA	7000.0	0203	11	02		120	MFSK8	125	1750	MIL 188-141A
USKA	7001.5	2113	02	02			BPSM QPSM	8x62.5	1k75	Clover 2000 often 8 tones, spacing 250Hz
USKA	7005.0	1851	02	02			J3E-U			Indonesian village radio ?
USKA	7008.0	1507	08	02			F1B	75	250	
USKA	7013.0	0747	26	02			J7D	12x120	2k7	PSK-2: CIS12 – AT3004D often
USKA	7018.0	2347	01	02		REA4	F1B	100	1000	ID in F1A daily
USKA	7030.0	2247	09	02			J7D	12x120	2k7	PSK-2: CIS12 – AT3004D often
USKA	7030.0	2258	12	02		Names	J3E-L			Indonesian village radio often
USKA	7032.0	1753	06	02			J7D	12x120	2k7	PSK-2: CIS12 – AT3004D
USKA	7038.7	2351	01	02	UKR	D	A1A			Beacon D Sevastopol daily
USKA	7039.0	2218	20	02	RUS	C	A1A			Beacon C Moscow often
USKA	7039.2	2221	20	02	RUS	F	A1A			Beacon F Vladivostok daily
USKA	7039.4	0011	02	02	RUS	M	A1A			Beacon M Magadan daily
USKA	7050.0	2221	04	02			J3E-L			Indonesian village radio
USKA	7050.0	0748	26	02			J3E-L		≥ 3k3	Music, voice, insults QRM often
USKA	7055.0	1705	03	02			J3E-L		~ 3k	Russian voice, insults QRM
USKA	7079.0	2232	04	02			J7D	12x120	2k7	PSK-2: CIS12 – AT3004D
USKA	7089.0	1232	03	02			J7D	12x120	2k7	PSK-2: CIS12 – AT3004D often
USKA	7090.285	1358	03	02			NON			Jammer, setting carrier over Pilotone of CIS12 at 7989.0
USKA	7091.500	2353	01	02		V	A1A			Beacon ID "V"; every 3.2s daily
USKA	7100.0	2326	06	02			J3E-L			Indonesian village radio
USKA	7109.0	2012	03	02			FMOP	50 sps	~ 13k	OTHR, affected BW ~ 40k
USKA	7120.0	1704	27	02	SOM		A3E			BC: Radio Hargaysa
USKA	7121.0 VFO LSB	1355	04	02			OFDM30 BPSK	60	~2k4	Burst system; spacing 75Hz preamble 4x PSK4 60Bd, spacing 600Hz; Pilottone at 450Hz
USKA	7166.0	1147	28	02			DQPSK	14x75	~5k9	LINK 11 CLEW (DSB or ISB mode)
USKA	7171.0	0750	26	02			J7D	12x120	2k7	PSK-2: CIS12 – AT3004D
USKA	7186.0	2034	13	02			J7D	12x120	2k7	PSK-4: CIS12 = AT3104D with carrier at 7084.0
USKA	7193.0	0857	06				F1B	50	200	jammed often
USKA	7193.1	0857	06				A1A			Jammer, fast dots only
USKA	7195.0	2049	02	02			A3E			BC: english; (weak)
USKA	7200.0	2000	03	02	SDN		A3E		10k	BC: Radio Rep of Sudan, lower sideband ~4k inside 40m band
USKA	7200.09	0003	18	02	MYA		A3E		~10k	BC: Radio Myanmar, lower side-

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
USKA	7205.0	2012	02	02	TUR		A3E		30k	band ~4k5 inside the 40m band
USKA	14000.0	1752	05	02			J3E-U			BC: Voice of Turkey, down to 7190! 2015 qrt; tx 2017 off
USKA	14026.0	1038	05	02			J7D	12x120	2k7	Portuguese, maybe Brasilian
USKA	14118.0	1334	04	02			J7D	12x120	2k7	PSK-2: CIS12 = AT3004D often
USKA	14160.0	1054	27	02			F1B	50	200	PSK-2: CIS12 = AT3004D
USKA	14192.0	1214	02	02			F1B	50	200	CIS 50-50 daily
USKA	14259.0 VFO USB	0901	04	02			OFDM60	35.56	~3k3	Spacing 44.45Hz; Carrier 14259.0 and Pilottone
USKA	14260.0	1306	18	02			FMOP	50 sps	~13k	OTHR, affected BW approx 30k
USKA	14260.9	0801	03	02			OFDM60	35.56	~2k8	Spacing ~ 44.45Hz; Pilottone
USKA	14268.0	1524	06	02			FMOP	50 sps	~13k	OTHR, affected BW approx 30k
USKA	14286.0	0707	09	02	220		MFSK8	125	1750	MIL 188-141A; To: 834
USKA	14345.0	0943	06	02			FMCW		10k	OTHR, bursts BD ~5.5s
USKA	21030.0	1137	15	02			FMCW	50 sps	20k	OTHR
USKA	21145.0	1124	08	02		C3	MFSK8	125	1750	MIL 188-141A often
USKA	21145.0	1207	08	02		C4	MFSK8	125	1750	MIL 188-141A often
USKA	21200.0	0843	09	02			A1			long lasting dots (150ms)
USKA	21318.55	1011 1015	06	02			PSK-2 F1B	1200 600	1200 600	ARQ system FSK and PSK, changing
USKA	21413.0	0949	06	02			F1B	50	200	
USKA	28270.0	0837	18	02			?	307 sps 870 sps	app 50k	OTHR Burst system; affected BW > 100k almost daily
USKA	29480.0	1141	08	02			FMCW	25 sps	20k	OTHR, affected BW approx 30k
USKA	29530.0	1027	08	02			FMCW	25 sps	20k	OTHR, affected BW approx 30k
USKA	29570.0	1236	28	02			FMCW	50 sps	20k	OTHR, affected BW ~ 35k
USKA	29616.0	1326	02	02			F1B	50	250	

Veron 1 – Netherlands – PA2GRU (Dick)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	DETAILS
VERON	3538,0	19.17	18	2		UiPTR	F1B			Revs
VERON	3564,0	19.26	18	2		UiPTR	F1B	50		Ptr ITA2 (non Amateur)
VERON	3593,7	00.00	8	2	RUS	D	A1A			Beacon Sevastopol
VERON	3606,0	19.19	18	2		UiPTR	F1B			Revs
VERON	3712,5	19.20	18	2		UiCW	A2A			Continuous E R E T
VERON	7018,0	14.40	2	2	RUS	REA4	F1A			REA4 02130 99900 5F
VERON	7018,0	15.41	24	2	RUS	REA4	F1A			REA4 24140 99900 5F
VERON	7030,0	19.11	25	2	RUS	OTHR	FMCW			Contayner, loc. Nizhny Novgorod 20 KHz
VERON	7036,0	19.16	18	2		UiPTR	F1B			Revs
VERON	7038,7	20.04	21	2	RUS	D	A1A			Beacon Sevastopol
VERON	7038,7	14.38	2	2	UKR	D	A1A			D-beacon (also 9/2, 18/2, 24/2)
VERON	7038,9	20.04	21	2	RUS	S	A1A			Beacon Severomorsk
VERON	7039,0	20.04	21	2	RUS	C	A1A			Beacon Moscow
VERON	7039,0	19.15	18	2	RUS	C	A1A			C-beacon (also 24/2)
VERON	7085,0	19.55	27	2		OTHR	FMCW			radar, 30 KHz spreading
VERON	7120,0	18.49	21	2		UiBc	A3E			Arab. speech; weak S3
VERON	14024,0	09.15	1	2	RUS	UiPtr	F1B	75	500	Ptr
VERON	14025,0	10.41	5	2	RUS	UiMUX	PSK2			12 MPSK AT3004-D nr. Moscow
VERON	14116,0	10.18	27	2		UiPtr	F1B		200	Ptr
VERON	14141,0	11.35	18	2		UiPtr	F1B		200	Ptr
VERON	14141,0	15.00	19	2		UiPTR	F1B			Ptr

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	DETAILS
VERON	14160,0	11.23	27	2		UiPtr	F1B		200	Ptr
VERON	14169,0	09.33	9	2		UiPTR	F1B			Fast Revs
VERON	14185,0	10.14	25	2		OTHR	FMCW			radar
VERON	14192,0	11.18	2	2	RUS	UiPtr	F1B		200	Ptr, Navy Kaliningrad
VERON	14192,0	10.38	23	2	RUS	UiPtr	F1B		200	Revs
VERON	14192,0	vt	vd	2	RUS	UiPtr	F1B		200	Printer
VERON	14192,0	vt	vd	2	CIS	UiPTR	F1B			Revs/Ptr (almost daily)
VERON	14205,0	16.20	6	2		OTHR	FMCW			radar
VERON	14220,0	14.25	21	2		UiRadar	FMCW		30k	OTHR; 50sps
VERON	14243,0	09.25	5	2		UiPTR	F1B			Ptr
VERON	14260,0	14.35	22	2	RUS		FMCW		15k	OTHR; 10sps; Contayner
VERON	14275,0	10.40	18	2		OTHR	FMCW			radar, 50 p/sec
VERON	14277,0	10.59	22	2	RUS		FMCW		15k	OTHR; 10sps; Contayner
VERON	14281,0	14.06	21	2	RUS		FMCW		10k	OTHR; 10sps; Contayner
VERON	14288,0	15.55	7	2	RUS		FMCW		15k	50sps; Contayner; platters spreading 30k
VERON	14308,0	10.07	12	2	RUS	UiPtr	F1B		500	Ptr
VERON	14308,0	09.49	12	2		UiPTR	F1B			Ptr
VERON	14335,0	15.24	5	2	RUS		FMCW		15k	50sps; Contayner; platters spreading 40k
VERON	18099,0	15.58	19	2		UiRadar	FMCW		25k	OTHR; 50sps
VERON	21000,0	15.05	14	2	Italy	UiILL	J3e-U			Italian language, male voices
VERON	21358,0	10.41	8	2						Frequency hopper
VERON	28050,0	10.15	25	2		OTHR	FMCW			radar
VERON	28065,0	09.47	9	2		UiPTR	F1B			Revs/Ptr (short bursts)
VERON	28115,0	15.39	20	2	RUS	Taxi	F3E			taxi tfc female
VERON	28165,0	10.12	23	2	RUS	Taxi	F3E			taxi tfc female
VERON	28175,0	10.20	27	2	RUS	Taxi	F3E			taxi tfc female
VERON	28185,0	10.14	27	2	RUS	Taxi	F3E			taxi tfc female
VERON	28215,0	08.25	27	2	RUS	Taxi	F3E			taxi tfc female
VERON	28225,0	10.12	23	2	RUS	Taxi	F3E			taxi tfc female
VERON	28450,0	10.36	22	2	CYP	UiRadar	FMCW		35k	OTHR; 50sps
VERON	28452,0	12.36	1	2						Frequency hopper
VERON	28592,0	15.48	19	2						Frequency hopper
VERON	29065,0	10.32	23	2	RUS	Taxi	F3E			taxi tfc female

The monitoring team of IARU Region 1

credits:

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Many thanks for your interest!

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