



Monitoring System

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

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

The monthly newsletter for Region 1

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The 29 members of the IARUMS Region 1 Monitoring Team:



Acknowledgements

ARAT: 3V8CB – Ahmed ++ ARI: DH7SA – Salvatore ++ ARSK: 5Z4NU - Ted ++ ASTRA: DL1BDF – Mustapha ++ DARC: DK2OM – Wolf ++ ERASD: SU1SA – Sayed ++ HRS: 9A5DGZ – Gianluca ++ IARC: 4Z1AB – Aмос ++ IRTS: EI3GYB - Michael KARS: 9K2RR – Faisal ++ MARL: 9H1M – Dominic ++ MRASZ: HA7PL - Laci ++ NARS: 5N9AYM – Yusuf ++ NRRL: LA4EU – Hans Arne ++ OEVS: OE3GSA – Gerd ++ PZK: SP9BRP – Jan ++ RAL: OD5RI – Riri ++ REF: F5MIU – Francis ++ REP: CT4AN – Jose ++ ROARS: A41MA - Younis ++ RSGB: M0VRR - Vaughan ++ SARL: ZS6NS - James ++ SRAL: OH2BLU - Pekka ++ SSA – Ullmar ++ UBA: ON8IM – Ivan +++ URE: EB1TR - Fabian ++ USKA: HB9CET - Peter ++ VERON: PA2GRU - Dick ++ ZRS: S56ZDB – Darko ++ G3VZV – Graham (satellite) ++ TG9ADV – Jorge (Co-ordinator Region 2) ++ YB3PET – Titon (Co-ordinator Region 3) ++ DF8FE – (Webmaster assis.) ++ DL8AAM (ALE) ++ DJ7KG (BUOYS) ++ DF5SX (BC) ++ DARC (server support) ++ OD5TE (Hani) ++ VE6SH – Tim (IARU President) ++ 9K2RR – Faisal (EC-IARU-R1 ++ PTTs: BAKOM (Swiss), BNetzA Konstanz (Germany) ++ OFCOM (UK) ++ Dutch AT ++ YO9RIJ – Petrica

Part 1: News and Infos

1. YB3PET – Now Co-ordinator of IARUMS Region 3

YB3PET – Titon – is the new IARUMS Co-ordinator of Region 3. He is the successor of VK3MV – Peter. Welcome to our worldwide monitoring system dear Titon! Many thanks dear Peter für your work during the last years!

Now read Titon's introduction:

Name	Dr. Titon Dutono
Callsign	YB3PET
Age	55
Family	My wife Suhintam is a veterinarian. She works as a lecturer in the Faculty of Medicine Airlangga National University in Surabaya, but unfortunattely she is not a member of Amateur Radio. My son, Catra YD3CAD has accomplished his bachelor in computer engineering, and now he is working as an IT auditor in a state owned bank in Indonesia.
Expertise	Radio Communication, Speech Coding, Data Communication, Signal Processing, Computer Networks.
Hobby	Talking about the philosophy of Amateur Radio, field day, hamfest, untill homebrewing the devices.



Education

1. 1997 Doctor of Engineering, in the field of Speech Compression and Coding, from Kumamoto Unversity Japan.
2. 1995 Master of Engineering, in the field of Speech Compression and Coding, from Kumamoto Unversity Japan
3. 1985 Bachelor of Engineering, in the field of Radio Communication, from ITS Surabaya Indonesia.

Employment history

No.	Position	Period
1.	Deputy Director General for Spectrum Policy and Planning, Minister of Communication and Information Technology (MCIT)	2011 – now
2.	Deputy Director General for Telecommunication, MCIT	2008 – 2011
3.	Principal of Electronics Engineering Polytecnic Institute of Surabaya (EEPIS)	2002 – 2008

My Amateur Radio Activity History

I have been interested in SWL since I was in Elementry School

During my study period in Japan, I was active to support HAM Club within the school when they have a field QSO activity.

Now, I am in charged in Amateur Radio licencing examination including the development of examination materials.

I was also in charged as Head of Delegation of Indonesian Administration during WRC-15 in Geneve last November. Moreover, during WRC-15 I was personally in charged intensively in Agenda Item 1.4 regarding the possibility new allocation to amateur service on a secondary basis within the band 5250 – 5450 kHz.

A common opinion says that Amateur Radio is a smart sociaty that difficult to be regulated. It is said that they always have a “distance” with Government/regulator. This condition also happen in my country. Now I am standing in bothsides. So I have opportunity to be a liaison between Amateur Radio and Government. I have many discussion with them regarding the current and future condition.

My Working Conditions

RIG: IC-7850, IC-7410, IC-7100, IC-2820H

Digital interface: Signalink-USB by Tigertronics, Desktop PC

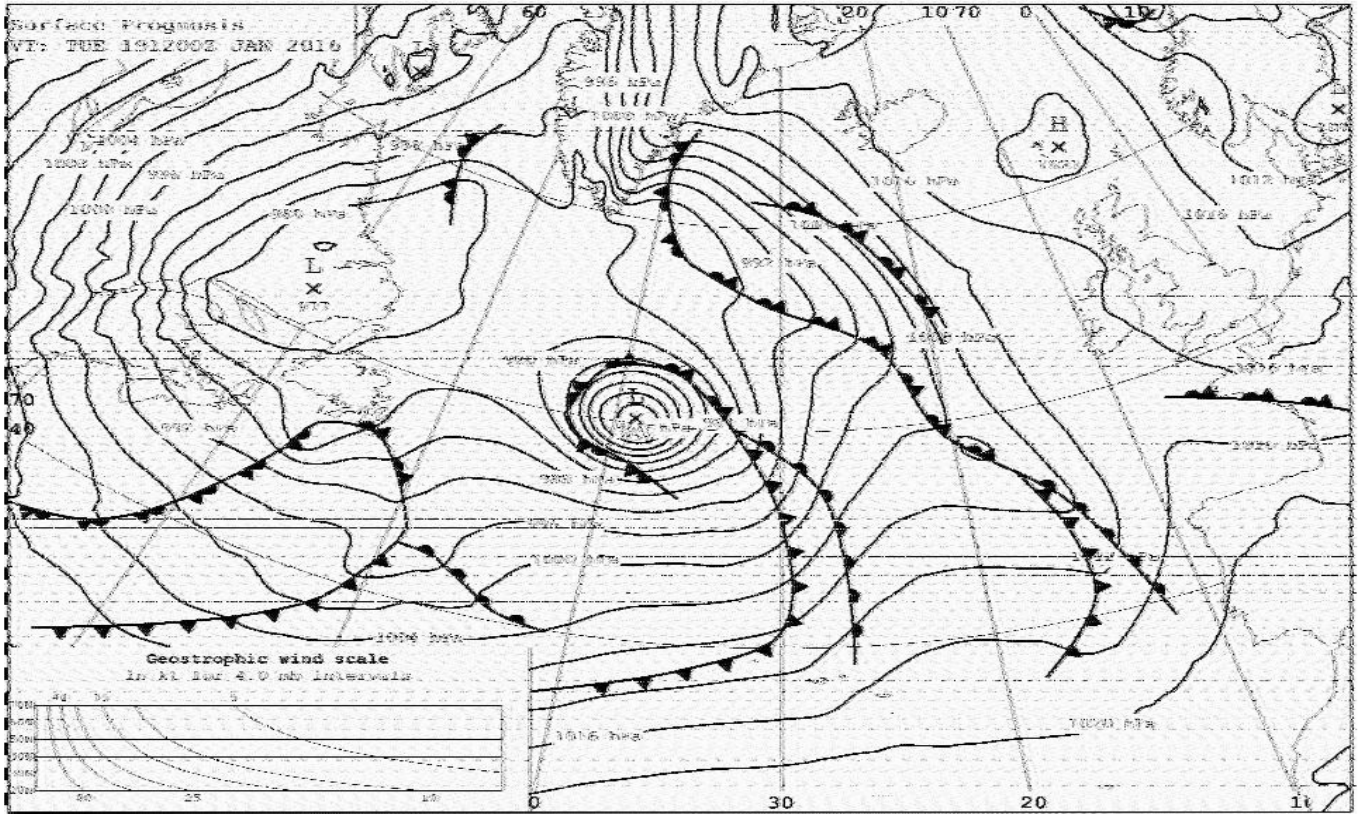
Morse key: straight key Hi-mound HK-702, lambic Bencher BY-2

HF ANT: 3 elements 4 banders HIDAKA

2. Weather fax on 7101.9 kHz

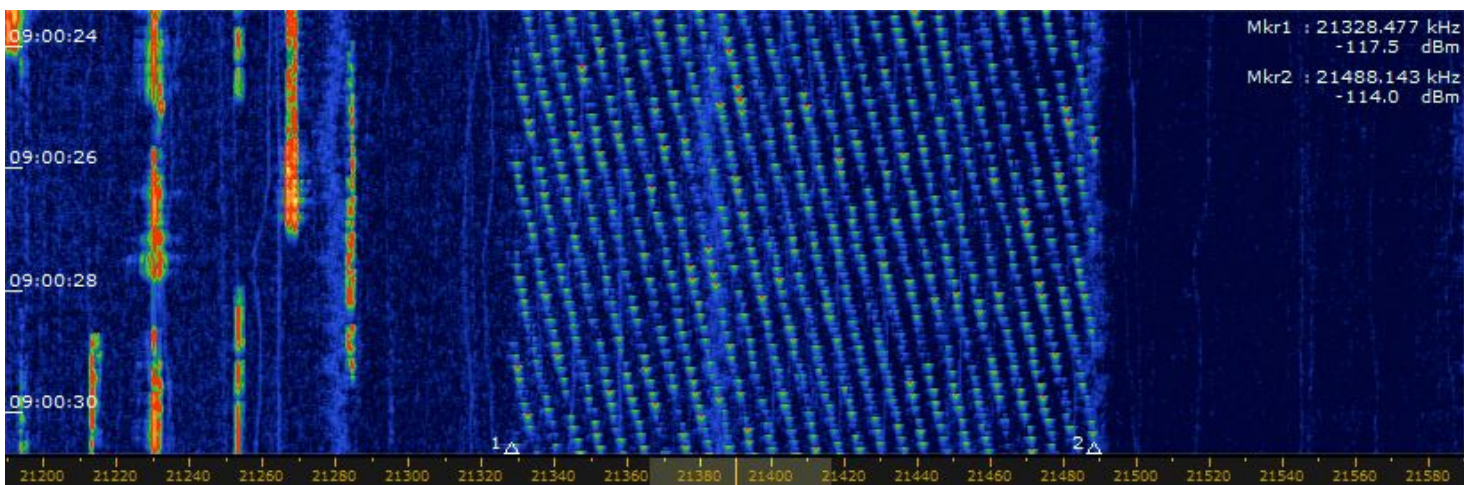
We found a weather fax on 7101.9 kHz – center QRG – on Jan. 16th. Parameters: 120 rpm, IOC 576, location: Great Britain – The charts were showing the North Atlantic weather. The German PTT was informed. The system disappeared on Jan. 18th in the noon. Many thanks to the German PTT, CT4AN and HB9CET for assistance!

WX fax received by DK2OM with Wavecom W-Code on Jan. 18th at 0800 UTC.



3. Chinese broadband OTH radar on 21 MHz

Chinese broadband OTH radar 21328 – 21488 kHz (160 kHz wide) with FMCW and 10 sps. The system was audible in Region 3 and Europe. Screenshot: DK2OM with Perseus on Jan. 23rd at 0900 UTC.



4. Homepage IARU Region 1
- Homepage IARUMS Region 1
- Homepage IARUMS Region 2
- Homepage IARUMS Region 3
- Intruderlogger Region 1
- ITU-Monitoring Reports

<http://www.iaru-r1.org/>

<http://www.iarums-r1.org>

<http://www.iaru-r2.org/>

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

<http://peditio.net/intruder/bluechat.cgi>

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

Part 2: Detailed reports of the national Co-ordinators

DD = day *** MM = month *** dly = daily *** vt = various times *** vd = various days *** BD = Baud *** SH = shift *** SP = spacing *** Mode = mode of transmission *** A3E = AM *** A1A = CW *** J3E-U = USB *** J3E-L = LSB *** FSK (F1B) = frequency shift keying *** PSK = phase shift keying *** OFDM = orthogonal frequency division multiplex
ALE (MIL-188-141A) = automatic link establishment *** MUX = multiplex *** **Ui (unid)** = unidentified *** **Illicit** = illegal *** **UiILL** = unidentified illegal *** **BC** = broadcast *** **MIL** = military *** **PTR** = printer *** **NGO** = non governmental organization *** **ITU** = ITU country abbreviation *** **PRC** = People's Republic of China *** **PLA** = People's Liberation Army *** **MFA** = Ministry of Foreign Affairs *** **MOI** = Ministry of Interior *** **MOPO** = Ministry of Public Order *** **IARUMS** = IARU Monitoring System *** **UTC** = Universal Time Coordinated *** **PRF** = pulse repetition frequency (radar) = **sps** *** **sps** = sweeps/sec (radar systems) *** **FMCW** = frequency modulated continuous wave (OTH radars)
FMP = frequency modulation on pulse (OTH radars) *** **5BL** = cyrillic 5 lettergroups

ARSK MONITORING OVERVIEW FOR JANUARY 2016

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

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

ARSK – Kenya – 5Z4NU (Ted)

N.A.

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

DG0JBJ (Mario) observed 17 OTH radars on 40 m, 22 OTH radars on 20 m, 44 OTH radars on 17m, 74 OTH radars on 15 m and 7 OTH radars on 10 m in January 2016. Chinese OTH radars often appeared on the 15, 20, 40 and 80 m-bands.

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	1915	20	01	RUS		USB LSB			14 tones – hyperbolic radio navigation system – BRAS-3/RS-10 – Kaliningrad – no carrier - daily, all day
DK2OM	1852,0	vt	dly	01	I	IPP	USB			Palermo Radio, weather reports
DK2OM	1855,0	1951	01	01	I	IQP	USB			San Benedetto Radio, weather reports
DK2OM	1876,0	1952	01	01	I	IQN	USB			Lampedusa Radio, weather reports
DK2OM	1888,0	1952	01	01	I	IPD	USB			Civitavecchia Radio, weather reports
DK2OM	1896,5	1950	01	01	D		PSK8	2400	2400	Stanag4285 – 600 bps long – German Navy – daily, all day
DK2OM	1925,0	1953	01	01	I	IPL	USB			Livorno Radio, weather reports – daily, vt
DK2OM	3500,0	1708	07	01	E		USB			Spanish fishery – daily, various times
DK2OM	3500,0	---	--	01	F		FMCW		20k	French burst radar, 6 sps, similar Codar sounding, South France
DK2OM	3500,0	vt	dly	01	TUR		FSK8	120	1750	ALE, “201” - Turkish Red Crescent – legal!
DK2OM	3500,0	0750	09	01	I		USB			Italian pirates
DK2OM	3500,0	1840	31	01	E		USB			Spanish fishery
DK2OM	3501,0	2124	23	01	UKR		FSK8	125	1750	ALE, “H10” “B10” “I10” “D10” “G10”
DK2OM	3501,1	2131	23	01	CIS		A3E			CIS pirates – unstable carrier
DK2OM	3502,0	1915	09	01	RUS		PSK2	120	2600	AT3004D – modem idle and traffic – Moscow

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	3503,5	1921	18	01	G	no ITU	FSK8	125	1750	ALE – “XSS” “XPU” “XJR” – British MIL Tascomm – vt, daily - legal!
DK2OM	3507,0	1918	25	01	RUS		PSK4B	120	2600	AT3104D - Moscow
DK2OM	3509,0	1821	23	01	CHN		PSK4B	44.44	2200	PRC 39 – USB mode – pilot tone 450 Hz
DK2OM	3511,0	1838	23	01	CHN		FSK8	125	1750	ALE, “477” “457” “169” “632”
DK2OM	3517,4	2028	05	01	E		LSB			Spanish fishery
DK2OM	3518,1	1742	21	01	CIS		A3E			CIS pirates – unstable carrier
DK2OM	3520,0	1850	08	01	F		USB			French fishery
DK2OM	3520,0	1622	11	01	RUS		FMOP		60k	OTH radar – 43 sps - 3520 – 3580 kHz - Makhachkala
DK2OM	3522,0	1435	12	01	RUS		F1B	75	250	
DK2OM	3525,0	1432	12	01	RUS		FMOP		53k	RUS OTH radar – 43 sps 3525 – 3578 kHz - Makhachkala
DK2OM	3525,0	0958	26	01	FEa		FMOP		50k	FEa OTHR – 43 sps – 3525 – 3575 kHz
DK2OM	3527,0	1850	29	01	CHN		FSK8	125	1750	ALE, “507” “658”
DK2OM	3527,0	1853	2901	01	CHN		PSK4B	44.44	2200	PRC 39 – USB mode – pilot tone 450 Hz
DK2OM	3531,0	---	--	01	RUS	REA4	N0N			unclean carrier - RUS airforce Moscow, ident: 1940 utc - daily
DK2OM	3531,0	1822	06	01	CHN		PSK4B	44.44	2200	PRC 39 – USB mode – pilot tone 450 Hz
DK2OM	3532,0	1707	02	01	CHN		FSK8	125	1750	ALE, “592” “315”
DK2OM	3532,0	2008	29	01	F		PSK4	75	5800	LINK11-CLEW on both sidebands (5800 Hz wide) – area of Brest – legal!
DK2OM	3533,0	1806	18	01	CHN		FSK8	125	1750	ALE, “240” “246” “353”
DK2OM	3535,0	1843	06	01	E		USB			Spanish fishery – also on 27.01.2016 at 2145 utc
DK2OM	3540,0	1928	10	01	E		USB			Spanish fishery – very often
DK2OM	3540,0	2055	06	01	RUS		FMOP		60k	OTH radar – 43 sps – 3540 – 3600 kHz - Makhachkala
DK2OM	3540,0	1801	18	01	CHN		FSK8	125	1750	ALE, “429” “997”
DK2OM	3543,0	1829	29	01	CHN		PSK4B	44.44	2200	PRC 39 – USB mode – pilot tone 450 Hz
DK2OM	3545,0	2035	02	01	RUS		FMOP		55k	RUS OTH radar – 43 sps 3545 – 3600 kHz – Makhachkala
DK2OM	3545,0	2042	05	01	HOL		USB			Dutch fishery
DK2OM	3545,0	1725	13	01	F		USB			French fishery
DK2OM	3548,0	2040	05	01			F1B	50	200	disturbed by a German amateur on the mark QRG
DK2OM	3550,0	vt	vd	01	ALG	no ITU	FSK8	125	1750	ALE, “IU50” “IU52” “FN50”
DK2OM	3550,0	0744	18	01	F		A3E			French amateurs not respecting bandplans - daily
DK2OM	3550,0	1639	22	01	CHN		PSK4	60	2350	PRC 30 tone modem – LSB mode – pilot tone 450 Hz
DK2OM	3550,0	1833	29	01	CHN		FSK8	125	1750	ALE, “254”
DK2OM	3550,7	1943	17	01	ISR		PSK4 PSK8	75 2400	2600 2600	hybrid modem – ISR Navy – PSK4 parallel and PSK8 serial – legal operation
DK2OM	3553,8	2020	05	01	TUR		PSK8	2400	2400	Stanag4285 – 600 bps long -TUR MIL - Ankara – daily, all day - legal operation
DK2OM	3557,0	1816	02	01	RUS		F1B	75	250	Moscow - disturbed by a German amateur – dashes on the space QRG
DK2OM	3559,0	2117	28	01	RUS		PSK4B	120	2600	AT3104D – area of Smolensk
DK2OM	3563,0	1635	18	01	RUS		PSK2A	120	2600	AT3004D - Kaliningrad
DK2OM	3567,0	vt	dly	01	CHN	no ITU	FSK8	125	1750	ALE, “103” “106”
DK2OM	3568,0	1702	02	01	CHN		FSK8	125	1750	ALE, “117” “736”
DK2OM	3570,0	1648	14	01	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	3570,0	1834	25	01	F		USB			French fishery
DK2OM	3570,5	1812	19	01	BLR		F1B	81	250	Minsk
DK2OM	3570,5	1830	25	01	BLR		F1B	73	73	Minsk
DK2OM	3572,0	2106	23	01	RUS		A1A			encrypted short msg - figures

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	3576,6	2240	18	01	I	IZ3DVW	A1A			3576.550 - uncoordinated beacon – disturbing JT65
DK2OM	3579,0	1437	29	01	CHN		PSK4	60	2350	PRC 30 tone modem – LSB mode – pilot tone 450 Hz -
DK2OM	3580,0	1839	29	01	CHN		FSK8	125	1750	ALE, “du0” “282” “MTm” “634”
DK2OM	3585,0	1751	08	01	TWN	HLL	F1C		800	WX-fax Taiwan - 120 rpm, IOC 576, - daily, all day - legal!
DK2OM	3586,0	vt	dly	01	G		PSK2A	40	40	encrypted – every evening Great Britain – purpose unknown
DK2OM	3587,0	vt	vd	01	E	no ITU	FSK8	125	1750	ALE, “TVV” “TXX” - Spanish Guardia Civil
DK2OM	3590,0	vt	dly	01	PAK	no ITU	FSK8	125	1750	ALE, “KW” “KHAIBAR” – Pakistan navy
DK2OM	3593,7	2120	06	01	RUS	D	A1A			Cluster beacon – Sevastopol RUS Navy – “RCV”
DK2OM	3593,8	1707	03	01	RUS	P	A1A			Cluster beacon – Kaliningrad RUS Navy – “RMP”
DK2OM	3593,9	---	--	01	RUS	S	A1A			Cluster beacon – Severomorsk RUS Navy – „RIT“
DK2OM	3594,0	2115	06	01	RUS	C	A1A			Cluster beacon C - Moscow RUS Navy - “RIW”
DK2OM	3595,0	vt	dly	01	D		FSK8	125	1750	ALE – German customs
DK2OM	3596,0	vt	dly	01	D, S, HRV		FSK8	125	1750	ALE, “DK3CW” “SA6CBK” “9A0PZ” – just for info!
DK2OM	3596,0	2020	31	01	RUS		FMOP		54k	OTH radar – 43 sps – 3596 – 3650 kHz - Makhachkala
DK2OM	3598,0	1639	14	01	BLR		F1B	49.2	500	async. - Minsk
DK2OM	3603,0	1920	29	01	CHN		PSK4B	44.44	2200	PRC 39 – USB mode – pilot tone 450 Hz
DK2OM	3604,0	1642	18	01	RUS		PSK2A	120	2600	AT3004D – Kaliningrad – traffic and submode idle
DK2OM	3606,0	1916	20	01	RUS		F1B	50	250	Moscow
DK2OM	3609,0	1835	29	01	CHN		FSK8	125	1750	ALE, “822” “973”
DK2OM	3615,0	1850	18	01	CHN		FSK8	125	1750	ALE, “749”
DK2OM	3617,0	vt	dly	01	HRV	9A5EX	FSK8	125	1750	ALE, “9A5EX” – HAM-ALE - just for info
DK2OM	3622,5	1820	06	01	J	JMH	F1C		800	Tokyo Meteo – 120 rpm – IOC 576 – daily, all day - legal!!!
DK2OM	3623,0	1828	15	01	RUS		FMOP		55k	OTH radar – 43 sps - 3623 – 3678 kHz
DK2OM	3630,0	1926	04	01	FEa		FMOP		87k	OTH radar – 43 sps 3630 – 3717 kHz
DK2OM	3632,8	2100	05	01	ISR		PSK4A PSK8B	75 2400	2400 2400	hybrid modem – ISR Navy – PSK4 parallel and PSK8 serial - legal operation
DK2OM	3640,0	1653	11	01	G		FSK8	125	1750	ALE, “XSS” - British MIL Tascomm – just for info!
DK2OM	3640,0	0958	26	01	FEa		FMOP		42k	FEa OTHR – 43 sps – 3640 – 3682 kHz
DK2OM	3642,0	ady	dly	01	CHN		A1A			loop – DKG6 de 3A7D Chinese military – daily, all day
DK2OM	3648,0	---	--	01	ARS		FSK8 LSB	125	1750	ALE, “AAF” “AAN”
DK2OM	3649,0	vt	vd	01	ALG	no ITU	FSK8	125	1750	ALE, “BI20” PA20”
DK2OM	3658,0	vt	vd	01	UZB		A1A			beacon “V” - Tashkent
DK2OM	3680,0	1645	11	01	RUS		FMOP		60k	OTH radar – 43 sps - 3680 – 3740 kHz - Makhachkala
DK2OM	3684,0	1430	12	01	RUS		FMOP		46k	RUS OTH radar – 43 sps - 3684 – 3730 kHz - Makhachkala
DK2OM	3696,0	1635	14	01	CHN		PSK4	60	2350	PRC 30 tone modem – USB mode – pilot tone 450 Hz
DK2OM	3700,0	1809	23	01	RUS		FMOP		108k	OTH radar – 43 sps - 3700 – 3808 kHz – 2 systems with alternating sweeps - Makhachkala
DK2OM	3700,0	2040	24	01	RUS		FMOP		105k	OTH radar – 43 sps - 3700 – 3808 kHz – 2 systems with alternating sweeps - Makhachkala
DK2OM	3704,0	1347	03	01	FEa	OBCD	A1A			loop “OBCD” - daily

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	3705,0	2031	09	01	CHN		FSK8	125	1750	ALE, "103" "189" "165" "124"
DK2OM	3720,0	1750	14	01	RUS		FMOP		50k	OTH radar – 43 sps 3720 – 3770 kHz - Makhachkala
DK2OM	3720,0	vt	dly	01	S		FSK8	125	1750	ALE, "YU" "YT" "YV" "DZ" – Swedish MIL
DK2OM	3737,0	1644	22	01	CHN		PSK4	60	2350	PRC 30 tone modem – LSB mode – pilot tone 450 Hz - daily
DK2OM	3740,0	1940	08	01	RUS		FMOP		60k	OTH radar – 43 sps – 3740 – 3800 kHz -
DK2OM	3751,0	vt	vd	01	FEa		A1A			"99 ?? 2T48 ??" - loop
DK2OM	3751,5	vt	dly	01	POL	no ITU	FSK8	125	1750	ALE, "IZ3" "MI3"
DK2OM	3756,0	2019	09	01	RUS		A3E			RUS MIL – channel marker – Tuapse – East Black Sea – night QRG – daily – even audible in Japan
DK2OM	3757,0	1656	02	01	FEa	RIS9	A1A			"M8JF de RIS9" - loop
DK2OM	3758,0	1811	14	01	CHN		FSK8	120	1750	ALE, "699"
DK2OM	3761,5	vt	vd	01	POL	no ITU	FSK8	125	1750	ALE, "NI9" "PL7" "AB2" – Polish MIL
DK2OM	3772,0	ady	dly	01	FEa	A4JC	A1A			"A4JC" - loop
DK2OM	3777,0	1654	02	01	FEa		A1A			"M8JF de RIS9" – loop – dly
DK2OM	3781,0	1816	06	01	CHN		PSK4B	44.44	2200	PRC 39 – USB mode – pilot tone 450 Hz
DK2OM	3791,0	vt	vd	01	D	DK0ESD	FSK8	125	1750	ALE, "DK0ESD" – daily just for info!
DK2OM	3797,0	ady	dly	01	FEa		A1A			"M8JF de RIS9" – loop – rcvd via JA
DK2OM	3800,0	1910	12	01	CHN		PSK4	60	2350	PRC 30 tone modem – LSB mode – pilot tone 450 Hz - daily
DK2OM	6980,0	2013	11	01	IRN		FMCW		40k	OTH radar Iran – 338 sps – 180 sec blocks – 6980 – 7020 kHz - Bushehr
DK2OM	6998,5	0834	12	01	POL		FSK8 PSK8 USB	125 2400	1750 2400	ALE, "ZE2" "OL1" "GO7" "MA3" and MIL-188-110A – until 7001.500 kHz – Polish MIL
DK2OM	7000,0	vt	dly	01	?	no ITU	FSK8	125	1750	ALE, "210" "20989" "2205" "203"
DK2OM	7000,0	1433	05	01	INS		USB LSB			Indonesian pirates – daily – all day - audible in Europe in the evenings
DK2OM	7000,0	1850	05	01	RUS		H3E		3.4 k	buzzer – 1 sec bursts - 118 Hz AF rough sinus – carrier on 6998.0 + upper sideband - with splatters 10 kHz wide – daily, all day - Moscow
DK2OM	7000,0	0837	12	01	TUR		USB			male Turkish persons
DK2OM	7001,5	---	--	01	ALG		PSK4A	62.5	1750	Clover 2000 – 8 x 62.5 Bd – Algeria – daily, vt
DK2OM	7001,5	0840	27	01	POL		PSK8	2400	2400	RF QRG 6998.5 kHz – 7000.3 kHz center - MIL-188-110A – 600 / 300 bps short – Polish MIL
DK2OM	7001,8	1947	27	01	TUR		PSK8A	2400	2400	Stanag-4285 – 600 bps long – Antalya
DK2OM	7005,0	1433	05	01	INS		USB LSB			Indonesian pirates
DK2OM	7010,0	1434	05	01	INS		USB LSB			Indonesian and Philippine pirates
DK2OM	7010,0	0900	16	01	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	7012,0	1105	23	01	RUS		PSK2A	120	2600	AT3004D - Moscow
DK2OM	7014,0	1508	01	01	RUS		PSK2A	120	2600	AT3004D – Far East Russia
DK2OM	7015,0	1352	05	01	INS		USB LSB			Indonesian pirates
DK2OM	7015,5	---	--	01	AFG		PSK4A FSK	62.5 100	1750 170	Clover 2000 – 8 x 62.5 Bd Codan 8580 selcall
DK2OM	7018,0	---	--	01	RUS	REA4	F1B	100	1000	mostly idling – Russian airforce Moscow – ident at full hour + 40 min.
DK2OM	7020,0	1435	05	01	INS		USB			Indonesian pirates

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
							LSB			
DK2OM	7020,0	1802	27	01	ALB		FSK8	125	1750	ALE, "CS004A" "RS008D" "RS0" – Albanian coast
DK2OM	7025,0	1436	05	01	INS		USB LSB			Indonesian pirates
DK2OM	7027,0	1654	01	01	RUS		F1B	100	1000	Moscow
DK2OM	7027,5	---	--	01	KAZ	„V“	A1A			beacon "V" - Almaty
DK2OM	7030,0	1436	05	01	INS		LSB			Indonesian pirates
DK2OM	7032,0	1153	30	01	E		USB			Spanish fishery
DK2OM	7035,0	1815	10	01	RUS		FMCW			OTH radar Contayner - 50 sps Gorodezh – many splatters – also 30.01.2016 at 1715 utc
DK2OM	7035,0	1437	05	01	INS		USB LSB			Indonesian pirates
DK2OM	7039,0	1915	02	01	RUS	C	A1A			Cluster beacon C - Moscow RUS Navy - "RIW"
DK2OM	7039,1	2154	13	01		A	A1A			beacon "A" - loop
DK2OM	7039,3	2031	04	01	RUS	K	A1A			Cluster beacon - Petropavlovsk Kamchatskiy - RUS Navy - Pacific fleet - "RCC" - daily
DK2OM	7039,4	1659	01	01	RUS	M	A1A			Cluster beacon – Magadan RUS Navy – „RTS“
DK2OM	7040,0	vt	dly	01	F	F6BAZ	FSK8	125	1750	ALE, "F6BAZ" – just for info
DK2OM	7040,0	ady	dly	01	I		A1A			IZ3DVW – uncoordinated and unwanted beacon
DK2OM	7040,0	1437	05	01	INS		USB LSB			Indonesian pirates
DK2OM	7040,0	1939	11	01	RUS		FMCW		13k	OTH radar Contayner - 50 sps Gorodezh
DK2OM	7040,5	vt	dly	01	HRV		FSK8	125	1750	ALE, "9A5EX" "9A0ALE" – just for info
DK2OM	7045,0	1438	05	01	INS		LSB			Indonesian pirates
DK2OM	7047,37	vt	vd	01	D		FSK8	125	1750	ALE, "DL0NOT" – just for info!
DK2OM	7049,5	vt	vd	01	HRV G F	9A0ALE M1DFO F6BAZ	FSK8	1250	1750	Amateur ALE, just for info! daily – various times
DK2OM	7050,0	1439	05	01	INS		USB			Indonesian pirates
DK2OM	7055,5	vt	vd	01	MEa	no ITU	FSK8	125	1750	ALE, "111" "132" "133" - Kaukasus
DK2OM	7058,0	1749	13	01	FEa		FMCW		32k	Codan like ocean surface radar 2.6 sps – 7058 – 7090 kHz
DK2OM	7070,0	vt	vd	01	GEO	no ITU	FSK8	125	1750	ALE, "MV" "244" "686" "334" "204" "571" – daily active
DK2OM	7088,8	---	--	01	S	SL0FRO	A1A			7088.820 - cw-trainee, Sweden – kHz – SLOFRO - just for info!
DK2OM	7089,0	1530	18	01	RUS		PSK2A	120	2600	AT3004D – SE of Penza
DK2OM	7089,8	---	--	01	TUR		PSK8	2400	2400	Link11 - SLEW – aircraft – west of Cyprus - often
DK2OM	7091,5	---	--	01	KAZ	„V“	A1A			loop – ident "V" – Almaty - Kazakhstan
DK2OM	7092,0	vt	vd	01			FSK8	125	1750	ALE, "3014"
DK2OM	7096,5	1517	06	01	FEa		PSK2	80	2400	Codan-80 Bd - bursts – Far East
DK2OM	7099,5	vt	dly	01	HRV	9A0ZG	FSK8	125	1750	ALE, "9A0ZG" "9A5EX1P" "9A0OS" – daily - just for info!
DK2OM	7099,5	2155	11	01	RUS		PSK2A	120	2600	AT3004D - Sevastopol
DK2OM	7101,8	1650	28	01	NSea		PSK8	2400	2400	Stanag-4285 – 600 bps long – ship – North Sea
DK2OM	7101,9	1509	16	01	G		F1C		800	WX-Fax – 120 rpm – IOC 576 – North Atlantic WX charts – finished on Jan. 18th
DK2OM	7102,0	vt	dly	01	HRV SUI D	9A0ALE	FSK8	125	1750	ALE, "9A0ALE" "9A2KS" "HB9MHB" "9A0ZG" "9A4OS" "DK0ESD" – just for info!
DK2OM	7102,0	1125	13	01	TWN		FSK8	125	1750	ALE, "BV4AS" – just for info!
DK2OM	7110,0	vt	dly	01			FSK8	125	1750	ALE, "1101" "1112"
DK2OM	7110,0	vt	dly	01	HRV	9A0ALE	FSK8	125	1750	ALE, "9A0ALE" – just for info
DK2OM	7120,0	1617	07	01	SOM		A3E		9k	Radio Hargaysa – Somalia –

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										daily – even audible in Australia and Japan
DK2OM	7122,0	---	--	01	FEa	V	A1A			loop “V”
DK2OM	7137,0	0740	20	01	RUS		PSK2A	120	2600	AT3004D – North Caucasus
DK2OM	7137,0	0951	30	01	TWN		FSK8	125	1750	LSB - ALE, “CBIUN” “CQYTX” “CAPLJ” “CTFOJ” - Taiwanese navy – daily
DK2OM	7142,0	0903	21	01	RUS		F1B PSK2A	75 120	250 2600	Ufa AT3004D - Ufa
DK2OM	7156,0	2153	27	01	FEa		FMCW		10k	OTH radar – 40 sps – 6 sec bursts every 32 sec
DK2OM	7162,0	1004	30	01	FEa	99	A1A			loop: 99? 2313? 99??
DK2OM	7163,0	---	--	01	UKR		A3E			encrypted MSGs - SZRU in Rivne
DK2OM	7174,0	0938	16	01	RUS		F1B	75	200	Far East Russia
DK2OM	7176,0	1715	10	01	RUS		F1B	75	250	Orsk
DK2OM	7180,0	1925	05	01	CHN		PSK4	60	2350	PRC 30 tone modem – LSB mode – pilot tone 450 Hz - daily
DK2OM	7180,0	0847	29	01	RUS		FMCW		10k	OTH radar Contayner - 10 sps Gorodezh
DK2OM	7182,0	1622	21	01	RUS		PSK4B	120	2600	AT3104D – submode idle and traffic - Moscow
DK2OM	7183,0	vt	dly	01	SUI		FSK8	125	1750	ALE, “HB9MHB” – just for info!
DK2OM	7185,0	1925	19	01	RUS		FMCW		13k	OTH radar Contayner - 50 sps Gorodezh
DK2OM	7185,5	0903	24	01	D HRV		FSK8	125	1750	ALE, “9A5EX” “DK0ESD” just for info - daily
DK2OM	7186,0	1556	03	01	RUS		PSK2A	120	2600	AT3004D - Severomorsk
DK2OM	7197,0	vt	dly	01	TUR	no ITU	FSK8	125	1750	ALE, “8241” “206102” “8151” “3021” “3761” “8021” “8141” “3061” “3241” “8411” – Turkish organisations and Turkish Civil Defense - source: DL8AAM – daily, various times
DK2OM	7198,3	0810	20	01	D		PSK8	2400	2400	Stanag 4285 - Freising
DK2OM	7200,0	1401	05	01	MMR		A3E			Myanmar Radio – 0930 – 1500 utc
DK2OM	7200,0	1030	07	01	TWN		A3E			Radio Taiwan Int. – 1000 – 1300 utc
DK2OM	10095,0	1340	09	01	CHN		FMCW		160k	Chinese OTH radar – 10 sps – 10095 – 10255 kHz – 50 sec blocks
DK2OM	10100,8	ady	dly	01	D		F1B	50	450	Baudot - German Weatherservice – legal!
DK2OM	10110,0	vt	dly	01	SNG	no ITU	FSK8	125	1750	ALE, “CN6” “68” – Singapore Navy - Changi Naval Base
DK2OM	10113,0	0955	13	01	TUN	no ITU	FSK8	125	1750	ALE, “TUD” “STAT5” “STAT154”
DK2OM	10114,0	vt	dly	01		no ITU	FSK8	125	1750	ALE, “BSF” “ZEN” “CM2OR2”
DK2OM	10114,8	0730	21	01	RUS		F1B	100	1000	CIS14 – Moscow - daily
DK2OM	10115,0	1704	20	01	MRC	no ITU	FSK8	125	1750	ALE, “100” “114” “201” “XXZ” – Western Sahara
DK2OM	10116,5	---	--	01	AFS		F7D	54.3	2120	MHF50 – 33 tones - South African navy
DK2OM	10117,0	1009	28	01	RUS		PSK2A	120	2600	AT3004D – submode idle and traffic - Sevastopol
DK2OM	10119,6	1440	16	01			LSB			male persons in Russian voice
DK2OM	10120,0	0830	13	01	ALG	no ITU	FSK8	125	1750	ALE, “CM6” “01012016”
DK2OM	10120,0	2037	28	01	MRC		USB			male persons in Arabic voice
DK2OM	10123,0	vt	dly	01	ALG	no ITU	FSK8	125	1750	ALE, “CM3” “COF” “BSF” “CM2” “ESA” – Algerian Airforce
DK2OM	10125,0	1017	06	01	RUS		PSK2A	120	2600	AT3004D - Kaliningrad
DK2OM	10125,0	1027	18	01	E		USB			Galician fishery
DK2OM	10126,8	1719	12	01	?		USB			male net – Far East language
DK2OM	10129,0	vt	dly	01	ALG	no ITU	FSK8	125	1750	ALE, “CM1” “CTF” “772”
DK2OM	10130,0	1701	31	01	CYP		FMCW		20k	OTH radar Cyprus – 50 sps

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	10130,0	1037	06	01	F		USB			French amateurs not respecting bandplans
DK2OM	10133,0	1957	26	01	AUS		FMCW		10k	Australian OTH radar JORN – 3.0 sec bursts – 22 sps – intro tones
DK2OM	10136,0	vt	dly	01	ALG	no ITU	FSK8	125	1750	ALE, “CM3” “BLD” “CNC” “TF2”
DK2OM	10136,0	ady	dly	01	RUS		F1B	50	200	CIS-50-200 - Chita – daily, all day
DK2OM	10140,0	vt	vd	01	CHN ?		FSK8	125	1750	ALE, “205” “201” “LT”
DK2OM	10144,0	ady	dly	01	D	DK0WCY	A1A			10143.986 kHz - DK0WCY – German aurora beacon – just for info!
DK2OM	10144,9	0932	27	01	RUS		MFSK16	32.9	2625	10143.0 RF - Moscow
DK2OM	10145,5	1401	24	01	SUI	HB9MHB	FSK8	125	1750	ALE, “HBMHB” - just for info - daily
DK2OM	10146,0	0915	27	01	RUS		PSK2	120	2600	AT3004D - submode idle -
DK2OM	10150,0	1721	15	01	CYP		FMCW		20k	OTH radar Cyprus – 50 sps
DK2OM	14000,0	0748	25	01	RUS		FMCW		10k	OTH radar Contayner - 10 sps Gorodezh – long lasting
DK2OM	14000,0	1950	31	01	B		USB			Brazilian pirates
DK2OM	14006,0	1022	25	01	RUS		PSK2	120	2600	AT3004D – Moscow
DK2OM	14045,0	1010	03	01	FEa		F1B	91.2	400	F1B bursts – GPS buoys?
DK2OM	14050,0	0901	15	01	RUS		FMCW		10k	OTH radar Contayner - 10 sps Gorodezh
DK2OM	14060,0	1610	27	01			FMCW		30k	OTH radar – 50sps -
DK2OM	14070,0	1505	10	01	RUS		FMCW		30k	OTH Contayner - 50 sps - Gorodezh – disturbing digital modes
DK2OM	14100,0	vt	dly	01	ALG	no ITU	FSK8	125	1750	ALE, “6206” – “6204” - “6202” “6207” “6217” “MTL” “IJI” – Mauritanian border – daily, all day
DK2OM	14105,0	---	--	01	F		FMCW		20k	French burst radar, 6 sps, similar Codar sounding, South France
DK2OM	14105,0	0912	16	01	CHN		FMCW		100k	CHN OTHR – 25 sps – 14105 – 14205 kHz
DK2OM	14109,0	1123	16	01	S	HAM	FSK8	125	1750	ALE, “SM3FXL” – just for info!
DK2OM	14109,0	vt	dly	01	RUS	RV3APM	FSK8	120	1750	ALE, “RV3APM” – just for info!
DK2OM	14127,0	1120	22	01	RUS		FMOP		20k	RUS OTH radar - 50 sps – splattering +/- 100 kHz
DK2OM	14139,0	vt	dly	01	CHN		FSK8	125	1750	ALE, “809”
DK2OM	14160,0	vt	dly	01	MRC		FSK8	125	1750	ALE, “9204” “9228” “9236”
DK2OM	14175,0	vt	vd	01	CHN ?		FSK8	125	1750	ALE, “147”
DK2OM	14192,0	1424	29	01	RUS		F1B	50 75	500 500	RUS navy Kaliningrad - daily
DK2OM	14205,0	vt	dly	01	CHN ?	no ITU	FSK8	125	1750	ALE, “505” “822” – 60 deg. from DL - CHN ?
DK2OM	14221,0	---	--	01	KGZ		F1B	50	200	CIS-50-50 - Bishkek – daily
DK2OM	14223,5	0900	07	01	RUS		F1B	600	600	DPRK-FSK 600 - DPRK emba Moscow
DK2OM	14239,0	0818	07	01	CHN		PSK4	60	2350	PRC 30 tone modem – LSB mode – LSB QRG – pilot tone 450 Hz
DK2OM	14260,0	vt	dly	01	SRB	YU1BI	FSK8	125	1750	ALE, “YU1BI” – just for info!
DK2OM	14265,0	vt	vd	01	TUR	no ITU	FSK8	125	1750	ALE, “526”
DK2OM	14280,0	1005	Wed.	01	UKR		A3E			female voice with encrypted msgs – figures – “SZRU” = Foreign Intelligence Service of Ukraine in Rivne – every Wednesday at 1005 utc
DK2OM	14285,0	0830	22	01	RUS		F1B	50	500	Moscow
DK2OM	14295,0	vt	dly	01	CHN		FSK8	125	1750	ALE, “320” – “532”
DK2OM	14295,0	vt	dly	01	SRB	YU1BI	FSK8	125	1750	ALE, “YU1BI” – just for info!
DK2OM	14295,2	ady	dly	01	TJK		A3E		9k	3rd from Radio Tajik on 4765 kHz – daily, all day – exact

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
										(14295.174 kHz on Nov. 13th)
DK2OM	14301,8	0820	07	01	CHN		PSK2	75	2200	PRC 16 tone modem – USB mode – pilot tone 450 Hz - RF 14300.0 kHz - China – Shanghai – daily – all day
DK2OM	14310,0	0915	14	01	MRC		USB			Moroccan pirates – fishery?
DK2OM	14322,0	vt	dly	01	CHN	no ITU	FSK8	125	1750	ALE, “402”
DK2OM	14328,0	vt	dly	01	CHN	no ITU	FSK8	125	1750	ALE, “139” “534” “772” – West China
DK2OM	14330,0	vt	dly	01			FSK8	125	1750	ALE, “BV4”
DK2OM	14334,0	vt	vd	01	CHN	no ITU	FSK8	125	1750	ALE, “249” “255” “763”
DK2OM	14340,0	1115	11	01	RUS		PSK2A	120	2600	AT3004D – Vladivostok
DK2OM	14340,0	0915	21	01	RUS		PSK2A	120	2600	RUS ship south of Taiwan
DK2OM	14344,7	--	---	01	CHN		PSK8	2400	2400	modified MIL-188-110A - 600 bps short – 14344.650 kHz – daily, all day
DK2OM	14346,0	vt	vd	01	HRV RUS D		FSK8	125	1750	ALE, “9A0ZG” “RX3ARZ” “DK0ESD” – just for info – various times, daily
DK2OM	14346,0	1400	24	01	THA	HS0ZEA	A1A			HS0ZEA beacon – 14345.950 kHz - every 5 minutes – daily - just for info!
DK2OM	14351,7	1010 ady	01 dly	01	E		OFDM	30	2700	OFDM 73 + intro tone – experimental transmissions – Las Palmas – just for info!
DK2OM	18080,0	1010	27	01	MRC		USB			Moroccan fishery - daily
DK2OM	18100,0	vt	dly	01	MRC	no ITU	FSK8	125	1750	ALE, “CD” “C3” “R3” “G3” “E4” “E5” “Z2” “FORD” – daily, various times
DK2OM	18106,0	vt	vd	01	POR	CT2GOY	FSK8	125	1750	ALE, “CT2GOY” – just for info!
DK2OM	18107,0	vt	vd	01	RUS	RDL	F1B	50	200	CIS-50-200 - Moscow – idle and traffic – Russian navy – various days and times – shared band!
DK2OM	18117,5	vt	vd	01	POR	CT2IXQ	FSK8	125	1750	ALE, “CT2IXQ” – just for info
DK2OM	18140,0	vt	dly	01	SRB	YU1BI	FSK8	125	2600	ALE, “YU1BI” – just for info!
DK2OM	21000,0	vt	vd	01	B		USB			Brazilian pirates – Rio de Janeiro with North Brazil – also: 24.09.2015 at 1650 utc
DK2OM	21000,0	vt	vd	01	SDN		USB			MFA Sudan – Khartoum with emba Yemen – voice traffic
DK2OM	21000,0	1210	11	01	FEa		USB			Far East pirates - daily
DK2OM	21002,0	1115	20	01	FEa		USB			Far East pirates
DK2OM	21002,2	vt	vd	01	SDN	!0000 !9999 !8888	F1B	100	170	21002.15 kHz - Pactor 1 encrypted – MFA Sudan – Khartoum with emba Yemen
DK2OM	21050,0	0950	31	01	CYP		FMCW		20k	OTH radar Cyprus – 50 sps
DK2OM	21060,0	1050	20	01	CYP		FMCW		20k	OTH radar Cyprus - 25 sps
DK2OM	21096,0	vt	dly	01	INS	YD00XH	FSK8	125	1750	ALE, “YD00XH3” – daily, various times - just for info!
DK2OM	21100,0	0740	11	01	CYP		FMCW		20k	OTH radar Cyprus – 50 sps
DK2OM	21131,0	vt	vd	01	CHN	no ITU	FSK8	125	1750	ALE, “A92” “L02” – Chinese diplo
DK2OM	21141,0	---	--	01	GEO		PSK8A	2400	2400	Stanag4538 – GEO MIL with AFG - daily
DK2OM	21145,0	vt	dly	01	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	ady	dly	01	I	IZ3DVW	A1A			IZ3DVW beacon – 21145,75 kHz - not coordinated with IARU
DK2OM	21190,0	---	--	01	RUS		F1B	100	1000	harmonic from 10595 kHz - Moscow - daily
DK2OM	21210,0	1048	25	01	CYP		FMCW		20k	OTH radar Cyprus – 50 sps
DK2OM	21240,0	0925	29	01	CHN		FMCW		160k	Chinese OTH radar – 10 sps 21240 – 21400 kHz
DK2OM	21285,0	1118	16	01	AUS		FMCW		10k	Australian OTH radar JORN – 1.3 sec bursts – 50 sps – intro tones

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	21328,0	0840	23	01	CHN		FMCW		160k	Chinese OTH radar – 10 sps 21328 – 21488 kHz
DK2OM	21353,5	1400	21	01	GAB		F1B	600 600	600 1200	DPRK-FSK 600 - Libreville DPRK-FSK 1200
DK2OM	21370,0	0902	22	01	CYP		FMCW		20k	OTH radar Cyprus – 50 sps
DK2OM	21372,0	0920	29	01	CHN		FMCW		160k	Chinese OTH radar – 10 sps 21372 – 21532 kHz
DK2OM	21400,0	0810	04	01	E		USB			Spanish fishery
DK2OM	21400,0	---	--	01	RUS		F1B	50	2000	harmonic from 5350 kHz – area of Moscow - daily
DK2OM	21409,5	---	--	01	RUS		F1B	100	2000	F1B 100 / 2000 - CIS14 – harmonic from 10704.75 - Jekaterinburg, RUS - daily
DK2OM	21436,0	---	--	01	RUS		PSK2A	120	5200	AT3004D – harmonic from 10718.0 kHz - Sevastopol
DK2OM	21438,0	0843	12	01	RUS	RCV	A1A			RIP90 de RCV - RUS Navy Sevastopol - daily
DK2OM	21446,0	ady	dly	01	THA	HSOZEA	A1A			HSOZEA beacon – every 5 minutes - just for info!
DK2OM	25000,0	vt	vd	01	FIN		A3E			time signal Helsinki – just for info – carrier on 25000 – dots on 25001 and 24999 – daily, all day
DK2OM	28000,0	vt	vd	01	B		A3E			Brazilian CBers – 28000 – 28315 – daily, all day - no change
DK2OM	28000,0	0930	dly	01	CIS		F3E			28000 – 29700 numerous CIS taxi nets – no change
DK2OM	28000,0	1011	01	01	I		USB			Italian pirates
DK2OM	28025,0	---	--	01	POR		F1B	51	300	F1B bursts – 28025.050 kHz - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28030,0	---	--	01	POR		F1B	51	340	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28045,0	---	--	01	POR		F1B	51	280	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28050,0	---	--	01	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28051,5	---	--	01	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28060,0	---	--	01	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28065,2	---	--	01	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28065,6	---	--	01	GAB		A3E		980	carrier and dots in USB and LSB, bursts every 60 sec – carrier – Gabon – daily and all day
DK2OM	28075,0	---	--	01	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28085,0	---	--	01	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28100,2	---	--	01	POR		F1B	51	300	F1B bursts - 28100.780 kHz - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28102,1	---	--	01	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28125,0	---	--	01	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28135,0	1017	12	01	RUS		F3E			RUS taxi - daily

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	28146,0	vt	vd	01	ARG B		FSK8	125	1750	ALE, "LU8EX" "PY2TI" "DL1" – just for info!
DK2OM	28200,0	vt	vd	01	POR		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28224,4	---	--	01	GAB		A3E			carrier and dots +/- 770 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28249,6	---	--	01	GAB		A3E		1060	carrier and dots +/- 530 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28250,5	---	--	01	GAB		A3E		1060	carrier and dots +/- 530 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28275,1	---	--	01	AF		F1B	51	300	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28312,5	vt	vd	01	POR	CT2IXQ	FSK8	125	1750	ALE. "CT2IXQ" – just for info
DK2OM	28315,0	vt	dly	01	POR		F1B	51	320	F1B bursts - west of Lisbon – Atlantic Ocean - Enagal GPS buoys - daily
DK2OM	28345,1	---	--	01	GAB		A3E		1060	carrier and dots +/- 530 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28435,0	----	--	01	E		F1B	81.9	140	Datawell-buoy "Waverider" – 28435.040 kHz – Costa del Sol – Malaga
DK2OM	28459,8	----	--	01	GAB		A3E		1060	carrier and dots +/- 530 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28459,9	---	--	01	GAB		A3E		1060	carrier and dots +/- 530 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28499,8	---	--	01	MEa		F1B	81.9	140	Datawell-buoy "Waverider" – 28499.875 kHz – Persian Gulf
DK2OM	28701,1	---	--	01	GAB		A3E		1056	carrier and dots +/- 528 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28751,2	---	--	01	GAB		A3E		1080	carrier and dots +/- 540 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28845,5	---	--	01	GAB		A3E		1060	carrier and dots +/- 530 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	28901,1	---	--	01	GAB		A3E		1056	carrier and dots +/- 528 Hz - bursts every 60 sec – Gabon – daily and all day
DK2OM	29114,0	---	--	01	RUS		F1B	100	2000	harmonic from 14557.0 kHz - Moscow
DK2OM	29249,9	---	--	01	E		F1B	81.9	140	Datawell-buoy "Waverider" – 29249.890 kHz – Fuerteventura - daily, all day
DK2OM	29375,0	---	--	01	I		F1B	81.9	140	Datawell-buoy "Waverider" – 29374.898 kHz – Gallipoli, South Italy - daily, all day
DK2OM	29387,5	---	--	01	IND		F1B	81.9	140	Datawell-buoy "Waverider" – 29387.460 kHz – Indian NW coast, close to Pakistan - daily, all day
DK2OM	29400,0	---	--	01	USA		F1B	81.9	140	Datawell-buoy "Waverider" – 29400.070 kHz - USA north- east coast – NY daily, all day
DK2OM	29450,0	---	--	01	MRC		F1B	81.9	140	Datawell-buoy "Waverider" – 29449.880 kHz - area of El Aaiun – Morocco - daily, all day
DK2OM	29500,0	---	--	01	G		F1B	81.9	140	Datawell-buoy "Waverider" – area of Gibraltar – daily, all day

DK2OM	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DK2OM	29525,0	---	--	01	MRC		F1B	81.9	140	Datawell-buoy "Waverider" – 29524.990 kHz - Agadir - Morocco – daily, all day
DK2OM	29625,0	---	--	01	USA		F1B	81.9	140	Datawell-buoy "Waverider" – 29625.024 kHz - USA north-east coast – daily, all day

IRTS – Ireland – EI3GYB (Michael)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	DETAILS
IRTS	7200	1345-1400	01	01	CHN		AM	China Radio/BC station. Closed down at 1400 UTC.
IRTS	7187	1815	03 and 04	01	RUS		Digi	Renders frequency completely unusable. Monster signal. RUS Navy Severomorsk. System AT3004D. Heard from 1815 UTC on the 3rd to about 1500 UTC on 4 th . All quite afterwards.
IRTS	7200	1330-1400	04	01	CHN		AM	Chinese Radio/BC station. Heard until s/off at 1400 UTC
IRTS	21310	1400	04	01	E or MM		USB	Span. Fishermen in CRY 2001
IRTS	3600	1740	05	01	F or MM		USB	French fishermen
IRTS	14350	1400	06	01			USB	Digital signal, all day during daylight hours. Every single day, also Sats and Suns. Huge signal all the time. The frequencies from 14347 to out of band 14352 kHz are unusable.
IRTS	18160	1145	07	01				Radar up to 18188 kHz, very strong
IRTS	10134	1040-1055	08	01			USB	Arab voices exchanging information.
IRTS	21348	1400	08	01			Digital	Probably N. Korean embassy in W. Africa
IRTS	21353	1405	08	01			Digital	Probably another N. Korean embassy in Africa
IRTS	7058	1515	08	01	RUS		Digi	RUS Navy
IRTS	7000	1520	08	01	RUS		H3E	Buzzer, all day in the background. Gets stronger in the darkness. Not that strong as it used to be last year.
IRTS	21306	1115	09	01	E or MM		USB	Spanish fishermen using CRY 2001
IRTS	1980	1450-1510	10	01	UK or MM		USB	Scottish fishermen. Motor noise in the background.. Rough language with long breaks between sentences. Two persons.
IRTS	7023	1511	10	01				Radar, 7023 to 7044 kHz. Strong pulsing noise.
IRTS	10148	1515-1540	10	01			USB	Arab voices on 10151.5 with bad audio, splattering all over the place down to 10148 kHz
IRTS	10130	1955-2005	10	01			USB	2 male voices, Arab language
IRTS	7040	2100	11	01	RUS			Radar from 7022 to 7062 kHz
IRTS	7101	2100	11	01	RUS		Digi	RUS Navy
IRTS	7099.5	2210	11	01	RUS		BPSK	System AT3004D. Sevastopol RUS MIL.
IRTS	10126.6	1550-1720	12	01			USB	Two male persons. Conversation. Probably in Korean. Went on for hours.
IRTS	10120	1610	12	01			USB	2 male voices. Arab with Maghreb accent. One person is called Ahmed.
IRTS	10150	1615	12	01			USB	2 male voices. Arab. Loads of "Al Hamdullilah"
IRTS	10125	1900-2245	13	01			USB	Arab conversation. Maghreb accent. Endless talk.
IRTS	10131.5	2025	13	01			USB	Asian language, 2 persons. Probably Korean
IRTS	10150	0100	14	01			USB	Arab voices
IRTS	10126.6	1615 to 1715	14	01			USB	2 male voices. Probably Korean.
IRTS	3545	2020	14	01		F or MM	USB	French fishermen. Stopped transmitting when I called CQ all the time.
IRTS	3520	2025-2030	14	01			USB	Arab voices, 2 persons. Maghreb accent. One station quite weak, the other very strong.
IRTS	3681	2035	14	01				Radar, very strong. 3681 to 3683 kHz.
IRTS	7101	1945	16	01		UK		WX station with weather fax.

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	DETAILS
		running for hours						
IRTS	7088	1651	18	01				Radar from 7088 to 7094 kHz, very strong. Frequencies unusable.
IRTS	7178	2033	19	01				Radar, strong, from 7178 to 7195 kHz. Frequencies unusable.
IRTS	3535	2230	19	01		E or MM		Spanish fishermen, very loud.
IRTS	14156	0930	21	01				Very strong Radar from 14156 to 14210 kHz. Frequencies unusable.
IRTS	3565	1930-1940	21	01		POR or MM		Portuguese fishermen. Went QRT when I kept calling CQ.
IRTS	21330	1000	24	01				Radar, running from 21330 up to 21450 kHz and beyond.
IRTS	3570	2000-2011	25	01		F or MM		French fishermen. Went QRT after I called CQ all the time.
IRTS	18157	1300	27	01				Radar from 18157 to 18168 kHz and beyond the band to 18180 kHz.
IRTS	7148	1400	27	01		RUS	PSK2A	RUS military
IRTS	10139.7	1410	27	01				Strong flow of data
IRTS	7120	1830	27	01		SOM	AM	Radio Hargaysa BC station
IRTS	3570	1825	27	01		F or MM	USB	French fishermen
IRTS	3521	2200	27	01			AM	Loud pop music
IRTS	3535	2205-2225	27	01		E or MM	USB	Spanish fishermen
IRTS	3624.5	0730	28	01			LSB	Loud music
IRTS	3556.6	0745	28	01		POR or MM	USB	Portuguese fishermen
IRTS	3640	0750	28	01			USB	Japanese Fishermen
IRTS	3570	0820	28	01		F or MM	USB	French fishermen. „Dans le port de ...“. Did not get the harbour.
IRTS	24936	0900	28	01				Radar from 24936 to 24960 kHz
IRTS	3756	1625	28	01		RUS	AM	The Pip- every afternoon, evening and night. 24/365
IRTS	10100.90	1815-1840	28	01			USB	Male voices in an Asiatic language, possible Korean.
IRTS	10111	2100	28	01			USB	Male voices, same as above
IRTS	10125	2100	28	01		B	USB	Male voices in Brazilian Portuguese
IRTS	14145	1245 to 1310	30	01		RUS	USB	Broadcast of an Evangelical mass in English, with simultaneous translation into Russian. Huge signal 59 plus plus.
IRTS	7024	1925	30	01				Radar from 7024 to 7052 kHz, very strong. Running for hours and rendered this section of the band unusable.
IRTS	3567	1935-1943	30	01		IRL	USB	Irish fishermen. 3 male voices, one is called Pat. Discussion about the ship "Ocean Venture". At least one of the persons is in Galway. Rude language, a lot of "fucking".
IRTS	3567	2130-2203	30	01		IRL	USB	Same 3 persons as above. Discussing WX and the coming storm. One of the persons has a friend who worked on the ship "Crystal Patrick".

KARS – Kuwait – 9K2RR (Faisal)

MRASZ – Hungary - HA7PL (Laci)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	DETAILS
MRASZ	3504,0	1936	13	1			USB	Ui. language
MRASZ	3507,0	1811	25	1			PSK2	AT3004D
MRASZ	3516,0	1736	25	1			PSK2	AT3004D
MRASZ	3525,0	1632	2	1			USB	Ui. language
MRASZ	3530,0	1956	28	1			A3E	Music
MRASZ	3537,0	1941	15	1			A3E	Ui. language, instable carrier
MRASZ	3540,0	1953	18	1			LSB	Ui. language

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	DETAILS
MRASZ	3540,0	2045	18	1			LSB	Spanish fishery
MRASZ	3572,0	1749	28	1			A1A	"97T5996517148" "97999698665T"
MRASZ	3593,8	vt	dly	1	RUS	P	A1A	Cluster beacon – Kaliningrad, Navy
MRASZ	3594,1	1948	18	1	RUS	A	A1A	Cluster beacon – Astrakhan
MRASZ	3598,0	1744	17	1			A3E	French hams
MRASZ	3642,0	1704	12	1	CHN		A1A	"DKG6 de 3A7D"
MRASZ	3658,0	vt	dly	1	UZB	V	A1A	Beacon "V" - Tashkent
MRASZ	7000,0	1333	14	1	RUS		H3E	Buzzer, hrd: 17, 22, 25, 28
MRASZ	7050,0	1647	25	1			LSB	Music
MRASZ	7055,0	1640	25	1			LSB	Russian cursing
MRASZ	7120,0	1538	3	1	SOM		A3E	Radio Hargaysa, hrd: 8, 12, 15, 22, 25
MRASZ	14005,0	1321	3	1			OTHR	14000-14010 kHz
MRASZ	14020,0	1406	31	1			OTHR	
MRASZ	14295,1	1453	31	1	TJK		A3E	Radio Tajik, 3 rd. harmonic
MRASZ	14300,0	0851	24	1			OTHR	14288-14305 kHz
MRASZ	14346,0	1430	31	1			A1A	"VVV de HS0ZEA/B OK05QO" beacon

OEVSV – Austria – OE3GSA (Gerd)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
oevsv	7000.0	0435	28	01	unid	unid	FMCW			OTHR
oevsv	7039.0	0650	11	01	RUS	C	A1A			strong on dead band
oevsv	7040.0	0514	31	01	unid	unid	FMCW			OTHR
oevsv	7187.0	0750	04	01	unid	unid	?			sready rattling
oevsv	10000.0	1722	25	01	unid	unid	J3Eu			male calling ALPHA
oevsv	10130.0	1725	07	01	unid	unid	J3E			arabic dialect
oevsv	14100.0	0810	16	01	unid	unid	?			like former woodpecker

PZK – Poland – SP9BRP (Jan)

REF 1 – France – F5MIU (Francis)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	Baud	Sh /Bw	DETAILS
R.E.F.										January 2016
F5MIU	3570	1738	19	01			USB		3kHz	French fishermen from Arcachon area
	7035	1547	10				fmcw		30kHz	OTHR S9, 20pps
	7040	1746	11				fmcw		18kHz	OTHR S8, 20sps
	7120	1746	07				AM		10kHz	BCL station :Radio Hargaysa Somalia ?
	7120	1804	26				AM		10kHz	BCL station : Radio Hargaysa
	7185	1729	19				fmcw		20kHz	OTHR S9, 20sps
	10102	0844	20				USB		3kHz	Spanish, non OM
	10111	0845	20				USB		3kHz	Spanish, non OM
	10120	0846	20				USB		3kHz	Arabic ? , non OM
	10126.	1742	07				usb		3kHz	Short Arabic messages, S2
	10130	0905	07				usb		3kHz	Short Arabic messages, fisherman's ?
	10132	1035	09				USB		3kHz	F6BAQ-F6EPQ- FxEDW
	14002	0858	25				fmcw		10kHz	OTHR S8, 3sps
	18165	0848	26				fmcw		20kHz	OTHR S7, 20sps
	21000	0848	28				fmcw		20kHz	OTHR S7, 20sps
	21070	0840	07				fmcw		20kHz	OTHR S7, 20pps
	28710	0847	21				fmcw		20kHz	OTHR S9, 20sps

REF 2 – France – F5JBR (Andre)

REP – Portugal – CT4AN (Jose Francisco)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REP	3500	20.06	07	01	E		J3E-U			Spanish fishery
REP	3540	19.25	10	01	E		J3E-U			Spanish fishery, Galicia
REP	3572	17.37	26	01	E		J3E-U			Spanish fishery, Galicia
REP	3610	08.11	07	01	E		J3E-U			Spanish fishery
REP	3625	08.31	22	01	F		J3E-U			French fishery
REP	6999	19.03	11	01	RUS		A3E		3.4k	Russian buzzer spilt into 40m
REP	7001	10.50	27	01	E		J3E-U			Spanish fishery, unid dialect
REP	7005	08.57	26	01			J3E-U			Unid language ops
REP	7030	22.30	16	01			FMCW	50	20k	OTH radar
REP	7038	23.00	22	01	UKR	D	A1A			SEVASTOPOL
REP	7038	22.50	03	01	RUS	P	A1A			MURMANSK
REP	7039	23.52	11	01	RUS	C	A1A			MOSCOW
REP	7080	19.20	09	01			A1A			Letter and numbers groups code
REP	7090	22.38	08	01	KAZ	V	A1A			ALMATY
REP	7100	14.43	16	01	G		F1C			Weather Fax unid IOC576/DRUM 120
REP	7100	20.00	16	01	G		J3E-U (F1C)			WxFAX maps, LPM=120 / IOC=576 during all weekend
REP	7120	18.25	21	01	SOM		8k00 A3EGN			Broadcasting
REP	7120	17.08	14	01	SOM		8k00 A3EGN			Radio Hargeysa, Somalia
REP	7135	13.00	21	01	RUS		F1B	50	200	CIS36-50 modem
REP	10100	12.04	13	01	MRC		J3E-U			Morrocan fishery
REP	10106	21.50	01	01			FMCW			OTH radar
REP	10115	20.11	17	01			A3E			Letters Station - 5 letters code
REP	10120	19.56	18	01	E		J3E-U			Spanish fishery
REP	10125	10.27	18	01	E		J3E-U			Spanish fishery, Galicia
REP	10130	19.13	16	01			FMCW			OTH radar 20kHz wide
REP	10132	10.32	06	01	F	F6xx, etc	J3E-U			French amateurs ignoring Band Plans
REP	10130	10.36	06	01	F	F6xx, etc	J3E-U			As above, moved here
REP	14000	08.01	08	01			J3E-U	100	170	SELCALL
REP	14020	13.38	10	01			J3E-U			Unid language
REP	14025	18.05	14	01	RUS		BPSK	120		Mil station
REP	14126	13.28	31	01	RUS		J3E-U			American/Russian religious speech
REP	14135	10.20	26	01			FMCW		10k	Short burst OTH radar
REP	18080	13.59	25	01			FMCW	50	20k	OTH radar
REP	18105	10.00	28	01	RUS		F1B	50	200	CIS36-50 modem
REP	18200	11.00	23	01			FMCW			OTH radar 50 kHz wide
REP	21000	17.28	18	01	B		J3E-U			Brazilian fishery, weak sigs
REP	21025	12.58	07	01	MRC		J3E-U			Fishermen
REP	21210	13.40	12	01			FMCW			OTH radar
REP	24940	17.41	18	01			FMCW			OTH radar 50sps/20kHz
REP	28050	11.09	28	01			F1B	50	270	Enagal GPS buoy on Atlantic Ocean
REP	28065	10.50	22	01	RUS		F3E			Taxi dispatcher
REP	28150	10.03	14	01	RUS		F3E			Russian taxis dispatchers
REP	29185	11.20	26	10			FMCW			OTH radar 50sps/20kHz
REP	29190	10.55	01	10	RUS		F3E			Russian YL taxis dispatcher
REP	29255	10.05	25	10			F1B	82	142	Datawell buoy
REP	28x-29x		Dly	Dly			F3E/A3E			Russian taxi and brazilian truckers, daily

RSGB - Great Britain – M0VRR (Vaughan)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SHIFT	DETAILS
RSGB	6998 – 7002	0850	27	01			FMCW			Wideband pulse @ 1 sec intervals 130 Hz PRF
RSGB	6998 – 7002	0907	29	01			FMCW			Wideband pulse @ 1 sec intervals 130 Hz PRF

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SHIFT	DETAILS
RSGB	7008	0844	16	01			J2X			12 x PSK + 3300 Hz Pilot
RSGB	7011	0908	12	01			J2X			12 x PSK + 3300 Hz Pilot
RSGB	7014	0903	11	01			J2X			12 x PSK + 3300 Hz Pilot
RSGB	7031.5	0903	21	01			J2X			12 x PSK + 3300 Hz Pilot
RSGB	7087	1726	18	01			J2X			12 x PSK + 3300 Hz Pilot
RSGB	7087	0909	29	01			J2X			12 x PSK + 3300 Hz Pilot
RSGB	7100	0905	17	01			F1C			Northwood Weather Fax
RSGB	7158	0859	17	01			J2X			12 x PSK + 3300 Hz Pilot
RSGB	7177	0841	14	01			J2X			12 x PSK + 3300 Hz Pilot
RSGB	7184	0859	04	01			J2X			12 x PSK + 3300 Hz Pilot
RSGB	7193	0842	14	01			F1B	50	250	sync cipher tfc & revs
RSGB	13996 – 14007	0854	25	01			FMCW			OTHR 10 Hz PRF
RSGB	14004	1021	25	01			J2X			12 x PSK + 3300 Hz Pilot
RSGB	14085	0922	18	01			J2X			12 x PSK + 3300 Hz Pilot
RSGB	14144 – 14154	1353	31	01			FMCW			OTHR 10 Hz PRF
RSGB	14192	ady	dly	01			F1B	50	250	sync cipher tfc & revs
RSGB	14219 – 14229	0919	22	01			FMCW			OTHR 10 Hz PRF
RSGB	18159 – 18181	0900	26	01			FMCW			OTHR 50 HZ PRF
RSGB	21438	ady	vd	01			A1A			Russian Naval net
RSGB	24939 – 24961	0859	28	01			FMCW			OTHR 50 Hz PRF

SRAL – Finland – OH2BLU (Pekka)

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	REMARKS
SRAL	6998,0	0610-2030	dly	1	RUS	UiTone	R3E			125 Hz tones
SRAL	7008,0	0930-1015/	28.	1		UiPTR	F1B		250	
SRAL	7010,0	0800-1315	2. 16.	1		UiMUX	PSK2	120	2600	
SRAL	7014,0	1130-1200	28.	1		UiPTR	F1A		250	
SRAL	7014,0	0750-1245	13. 15.	1		UiMUX	PSK2	120	2600	
SRAL	7018,62	1410-1520/	25.	1		UiCarr	N0N/ F1A		250	
SRAL	7027,0	1300-1330	1.	1		UiPTR	F1A		1000	
SRAL	7030,0	/1300-1440/	12.- 31.	1	PAK	VoJ&K	A3E			Islamabad tx
SRAL	7039,0	0630-1500	dly	1	RUS	C	A1A			Moscow
SRAL	7054,0	0700-0715	1.	1		UiMUX	PSK2	120	2600	
SRAL	7098,0	1200-1314/	3.	1		UiPTR	F1B		250	
SRAL	7099,5	/1840-1900	11.	1	RUS	UiMUX	PSK2	120	2600	
SRAL	7099,5	0600-0800	12.	1	RUS	UiMUX	PSK2	120	2600	
SRAL	7101,9	0800-0915/	18.	1	G	WXFAX	F1C			
SRAL	7110,8	0645	19.	1		UiCarr	N0N			
SRAL	7120,0	/0330-	dly	1	SOM	R.Hargeis	A3E			

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	REMARKS
		0500/				a				
SRAL	7120,0	/1500-1900/	dly	1	SOM	R.Hargeis a	A3E			
SRAL	7135,0	0700-0730	1.	1		UiMUX	PSK2	120	2600	
SRAL	7142,0	0830-0905	21.	1		UiPTR	F1B		250	
SRAL	7144,0	1100-1200/	21.	1		UiMUX	PSK2	120	2600	
SRAL	7160,0	0645-1100	*	1	RUS	RMW32	A1A			Days: 19. 20.28.
SRAL	7160,0	0750-0815	17.	1		UiMUX	PSK2	120	2600	
SRAL	7167,0	0630-0815/	20. 22.	1		UiPTR	F1B		250	
SRAL	7169,0	1150	22.	1		UiCW	A1A			5BL
SRAL	7176,0	0630-0900	20.	1		UiPTR	F1B		250	
SRAL	7181,6	0805-0904/	26.	1		UiCarr	N0N			
SRAL	7186,0	0630-1300	3. 4.	1		UiMUX	PSK2	120	2600	Carrier on 7184 kHz
SRAL	7193,0	0745-1300	13.	1		UiPTR	F1B			
SRAL	7200,0	/0950-1400/	dly	1	CHN	CNR1	A3E			Used as jammer on TWN
SRAL	7201,0	0755	5.	1		UiMUX	PSK2	120	2600	
SRAL	7 MHz	0705	1.	1	RUS	UiOTHR	FMCW			10Hz / 15 kHz, 30 sec burst
SRAL	7 MHz	1440-0615	10. 17.	1	RUS	29B6	FMCW			50Hz / 15 kHz
SRAL	10 MHz	1625-1932/	11.	1		UiOTHR	FMCW			50 Hz / 15 kHz
SRAL	14192,0	1250	10.	1	RUS	UiPTR	F1B		200	
SRAL	14295,0	0630-1300	dly	1	TJK	R Tojikiston	A3E			3f 4765,00 kHz, Yangiyul TX
SRAL	14 MHz	1010-1200	23.	1	RUS	29B6	FMCW			50Hz / 15 kHz
SRAL	14 MHz	/0625-0920/	25.	1	RUS	UiOTHR	FMCW			10Hz / 15 kHz, non stop
SRAL	18 MHz	0645-1200	5.- 9.	1	CYP / TUR	UiOTHR	FMCW			25/50Hz / 20 kHz
SRAL	21 MHz	1050-1130	24.	1	CYP / TUR	UiOTHR	FMCW			25/50Hz / 20 kHz
SRAL	21438,0	0900-1300	*	1	RUS	RCV	A1A			Days: 6. 12. 15.
SRAL	24 MHz			1		UiOTHR	FMCW			no reports
SRAL	28 MHz			1	IRN	UiOTHR	FMCW			(307 &) 870 Hz / 60 kHz – 300 kHz, daily on 27470 kHz
SRAL	28 MHz			1		UiOTHR	FMCW			25/50Hz / 20 kHz, no reports
SRAL	28 MHz			1	RUS	Taxi disp.	F3E			no reports

USKA – Switzerland – HB9CET (Peter)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
USKA	3502.5	1038	09	01			J7D	12x120	2k7	PSK-2: CIS12 – AT3004D
USKA	3548.0	2213	07	01			F1B	75	250	
USKA	3554.0	2217	07	01			PSK8	2400	~2k4	Stanag 4285 daily
USKA	3570.0	1711	08	01			J7D	12x120	2k7	PSK-2: CIS12 – AT3004D
USKA	3591.0	1956	09	01			DQPSK	14x75	~5k9	LINK 11 CLEW DSB
USKA	3593.8	1718	08	01	RUS		A1A			Beacon P daily
USKA	3707.0	0149	06	01			F1B	75	250	
USKA	3779.0	1728	08	01			OTHR	43 sps	~ 60k	
USKA	6998.0	0002	05	01			H3E-U Bursts		~3k6	"Buzzer" up to ≥7001.5kHz modulated with 120Hz BD 1.2", BRI 3" Pause 1.8s
USKA	6998.5	0832	29	01		MA3	MFSK8	125	1750	MIL 188-141A, To OL1

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
						(various)				partially in 40m band
USKA	6998.5	0837	29	01			J3E-U		2k4	unidentified language
USKA	7000.3	0843	29	01			PSK8	2400	2k4	MIL 188-110A
USKA	7004.0	0918	17	01			F1B	50	1000	
USKA	7008.0	1004	31	01			F1B	75	250	
USKA	7010.0	0904	16	01			J7D	12x120	2k7	PSK-2: CIS12 – AT3004D
USKA	7014.0	1234	13	01			J7D	12x120	2k7	PSK-2: CIS12 – AT3004D
USKA	7017.0	1630	27	01			A1A			long lasting fast dots only
USKA	7020.0	0815	19	01			J3E-U		2k4	unid. language
USKA	7020.0	1453	28	01		CS004A	MFSK8	125	1750	MIL 188-141A To:RS008D
USKA	7020.0	2312	28	01			J3E-L		2k4	unid language, "asian"
USKA	7021.0	0813	19	01			J7D	(12x120)	2k7	CIS12 idling (13 carriers only)
USKA	7030.0	1625	27	01			OTHR	50 sps	~13k	OTHR
USKA	7030.0	2308	28	01			J3E-L		2k4	unid language, "asian"
USKA	7039.4	2238	03	01	RUS	C	A1A			Beacon C Moscow
USKA	7039.4	2247	03	01	RUS	M	A1A			Beacon M Magadan
USKA	7045.0	2333	17	01			J7D	12x120	2k7	PSK-2: CIS12 = AT3004D
USKA	7050.0	1443	20	01			J3E-L			Music and voice (no ham)
USKA	7089.0	1109	18	01			J7D	12x120	2k7	PSK-2: CIS12 = AT3004D
USKA	7100.0 VFO USB	0811	17	01	G		F1C	120rpm	± 400Hz	Wefax IOC 576 drum 120lpm
USKA	7100.0 VFO USB	1745	28	01			J3E-U		2K4	Weather forecast, english
USKA	7101.8	1739	28	01			PSK8	2400	~2k4	Stanag 4285, frame format 600 bps/long
USKA	7105.0	0951	04	01			OTHR	100 sps	38k	OTHR (weak)
USKA	7105.0	1007	04	01			FMCW	48 sps	10k	OTHR
USKA	7120.0	1752	31	01	SOM		A3E			BC: Radio Hargaysa daily
USKA	7122.0	1735	17	01			FMOP	50	~13k	OTHR
USKA	7133.8 VFO LSB	2216	09	01		CIF	MFSK8	125	1750	MIL 188-141A
USKA	7134.0	2050	09	01			F1B	50	200	
USKA	7137.0 VFO LSB	2101	09	01		CAVPE	MFSK8	125	1750	MIL 188-141A
USKA	7137.0 VFO LSB	2110	09	01		CSN	MFSK8	125	1750	MIL 188-141A
USKA	7147.0	1633	27	01			J7D	(12x120)	2k7	CIS12 system idling
USKA	7160.0	0801	17	01			J7D	(12x120)	2k7	CIS12 idling. 13 carriers only
USKA	7172.0	0539	16	01			J7D	(12x120)	2k7	CIS12 system idling
USKA	7180.0 VFO LSB	2251	03	01			BPSK	30x60 Bd	~2k4	Burst system; spacing 75 Hz preamble 4x PSK4 60Bd, spacing 600Hz; Pilottone at 450Hz
USKA	7186.0	1014	04	01			J7D	(12x120)	2k7	CIS12 idling
USKA	7193.0	0824	18	01			F1B	50	200	
USKA	7197.0	2141	07	01	TUR	334513	MFSK8	125	1750	MIL 188-141A
USKA	7198.0	0954	29	01			J7D	(12x120)	2k7	CIS12 idling
USKA	7200.0	1001	04	01			A3E		~20k	BC: (TWN, CHN and/or MYA)
USKA	7200.0	1138	15	01			A3E		~20k	BC: 2 stations (down to 7190)
USKA	13399.0	0624	19	01			J7D	12x120	2k7	PSK-2: CIS12 = AT3004D partially in the 20m band
USKA	14192.0	0939	04	01			F1B	50	200	CIS 50-50 often
USKA	14192.0	0844	15	01			F1B	50	500	CIS 50-50 often
USKA	14295.0	0851	15	01	TJK		A3E			BC: 3 rd of Radio Tajik at 4765 kHz
USKA	14300.0 VFO USB	0948	04	01			BPSK	16x75	2k2	Burst system; 16 tones, tone spacing appx 114Hz; 2 pilottones
USKA	14340.0	0851	19	01			J7D	12x120	2k7	PSK-2: CIS12 = AT3004D
USKA	18090.0	0749	29	01			FMCW	50	20k	OTHR
USKA	18100.0	1008	19	01		FESJEEPNET4	MFSK8	125	1750	MIL 188-141A; LQA; To: C3
USKA	18100.0	1014	29	01		C3	MFSK8	125	1750	MIL 188-141A; LQA; To: R3
USKA	21090.0	0804	17	01			FMCW	50	20k	OTHR
USKA	21145.0	1002	29	01		A201	MFSK8	125	1750	MIL 188-141A, LQA; To: C3
USKA	21145.0	1011	29	01		C3	MFSK8	125	1750	MIL 188-141A, LQA; To: R3
USKA	21209.0	1413	31	01			FMCW?	varying	~9k	OTHR; short bursts only; intro-tone
USKA	21224.0	1418	31	01			FMCW?		~12k	OTHR; Burst system
USKA	21318.6	0941	13	01			F1B	600	600	ARQ Burst system often

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
USKA	21438.0	1117	06	01		RCV	A1A			letters and figures almost daily
USKA	21450.0	0959	29	01			FMCW	50	20k	OTHR

Veron 1 – Netherlands – PA2GRU (Dick)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SHIFT	DETAILS
VERON	3570,5	18.44	25	1		UiPTR	F1B		Revs
VERON	3593,8	18.11	6	1	RUS	P	A1A		P-becon (also at 14/1 and 25/1)
VERON	3593,8	19.15	30	1	RUS	P	A1A		Beacon Kaliningrad
VERON	3602,0	18.26	30	1		UiPrinter	F1B	250	Printer
VERON	3654,0	18.10	6	1		UiPTR	F1B		Ptr
VERON	3743,0	18.05	6	1	CIS	UiCW	A1A		5BL (ending rpt al k)
VERON	3757,0	18.26	27	1		UiCW	A1A		Time Signal
VERON	7008,0	09.45	31	1	RUS	UiPtr	F1B	250	Ptr
VERON	7033,0	18.05	30	1		Uiradar	FMCW	20k	OTHR; 50sps
VERON	7035,0	15.03	10	1	RUS	OTHR	FMCW		radar
VERON	7038,5	vt	vd	1		UiCar	NON		Unstable carrier; S3-5 QSB
VERON	7039,0	15.40	3	1	RUS	C	A1A		C-beacon
VERON	7039,0	21.30	2	1	RUS	C	A1A		Beacon Moscow
VERON	14001,0	15.47	3	1		UiPTR	F1B		Ptr
VERON	14074,0	15.46	3	1		UiCW	A1A		Very high speed Morse
VERON	14160,0	14.02	2	1		UiRadar	FMCW	10k	OTHR; 10sps
VERON	14192,0	15.43	3	1	CIS	UiPTR	F1B		Revs/Ptr (also at 8/1 and 21/1)
VERON	14192,0	vt	vd	1	RUS	UiPrinter	F1B	200/500	Printer
VERON	14317,0	12.57	28	1		OTHR	FMCW		radar
VERON	18070,0	10.56	8	1		OTHR	FMCW		radar
VERON	18075,0	11.44	6	1		OTHR	FMCW		radar
VERON	21010,0	09.54	17	1		OTHR	FMCW		radar
VERON	21204,0	13.02	31	1		UiRadar	FMCW	??	Bursts; alternating 50/66 sps
VERON	21438,0	13.15	18	1	RUS	RCV	A1A		RLA88 de RCV QRV k
VERON	21438,0	09.31	19	1	RUS	RCV	A1A		RBE86 de RCV QTC 710 Nawarea 038 8
VERON	21438,0	09.38	21	1	RUS	RCV	A1A		RIP90 de RCV QTC 348 Nawarea 032 10
VERON	21438,0	09.49	21	1	RUS	RCV	A1A		RIP90 de RCV QTC 329 Nawarea 032 7

The monitoring team of IARU Region 1

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Many thanks for your interest!

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