



Monitoring System

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The monthly newsletter for Region 1

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Acknowledgements

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++ IRTS: EI4GXB - Ger ++ KARS: 9K2RR – Faisal ++ MARL: 9H1M – Dominic ++ MRASZ: HA7PL - Laci ++
++ NARS: 5N9AYM – Yusuf ++ OEVS: OE3DMA – Alex ++ PZK: SP3SUZ – Wladyslaw ++ RAL: OD5MV – Hani ++
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++ PB2T – Hans (IARU R1 President) ++ G3PSM - Colin (EC-IARU-R1) ++ German PTT (BNetzA) ++

Part 1: News and infos

Part 2: Detailed reports from the national co-ordinators

Part 1: News and Infos

1. Carrier problems

DJ9KR observed a long lasting carrier on 7050.0 kHz (Netherlands). The German PTT filed an official complaint. On Feb. 23rd the Dutch carrier disappeared. DK2OM found another carrier on 14000.890 kHz (Israel). The carrier from Israel left our band on Feb. 28th. Many thanks to the German PTT(BNetzA) for assistance!

2. OTH Radar systems on 10 and 18 MHz

OTH Radar systems from Cyprus and Turkey often disturbed 10 and 18 MHz with long lasting transmission periods. Parameters: Mode = FMCW, 50 pulses/sec and 20 kHz wide.

3. Spanish fishery with vocoder CRY2001

Spanish fishermen tried to occupy 7000.0 kHz with illegal emissions in USB and the vocoder CRY2001 for about 10 days. Someone affected the inband key exchange daily. So they gave up on Feb. 16th. Two ships from the area of Cape Verde Islands were involved. Spanish fishermen were also active on 3535.0 and 3574.0 kHz in USB and vocoder CRY2001 in the evening hours, but not very successful.

4. MIL-188-110A from China

A modified MIL-188-110A system was daily active on 14343.0 kHz (USB), sounding HF-Acars like (intro tone). Parameters: PSK8, 2400 Bd, 2400 Hz shift, 600 bps short, encrypted MSGs. Observed and measured by HB9CET and DK2OM. Location: China. Depending on an ITU footnote commercial and MII traffic is allowed between 14250 and 14350 kHz in Region 3.

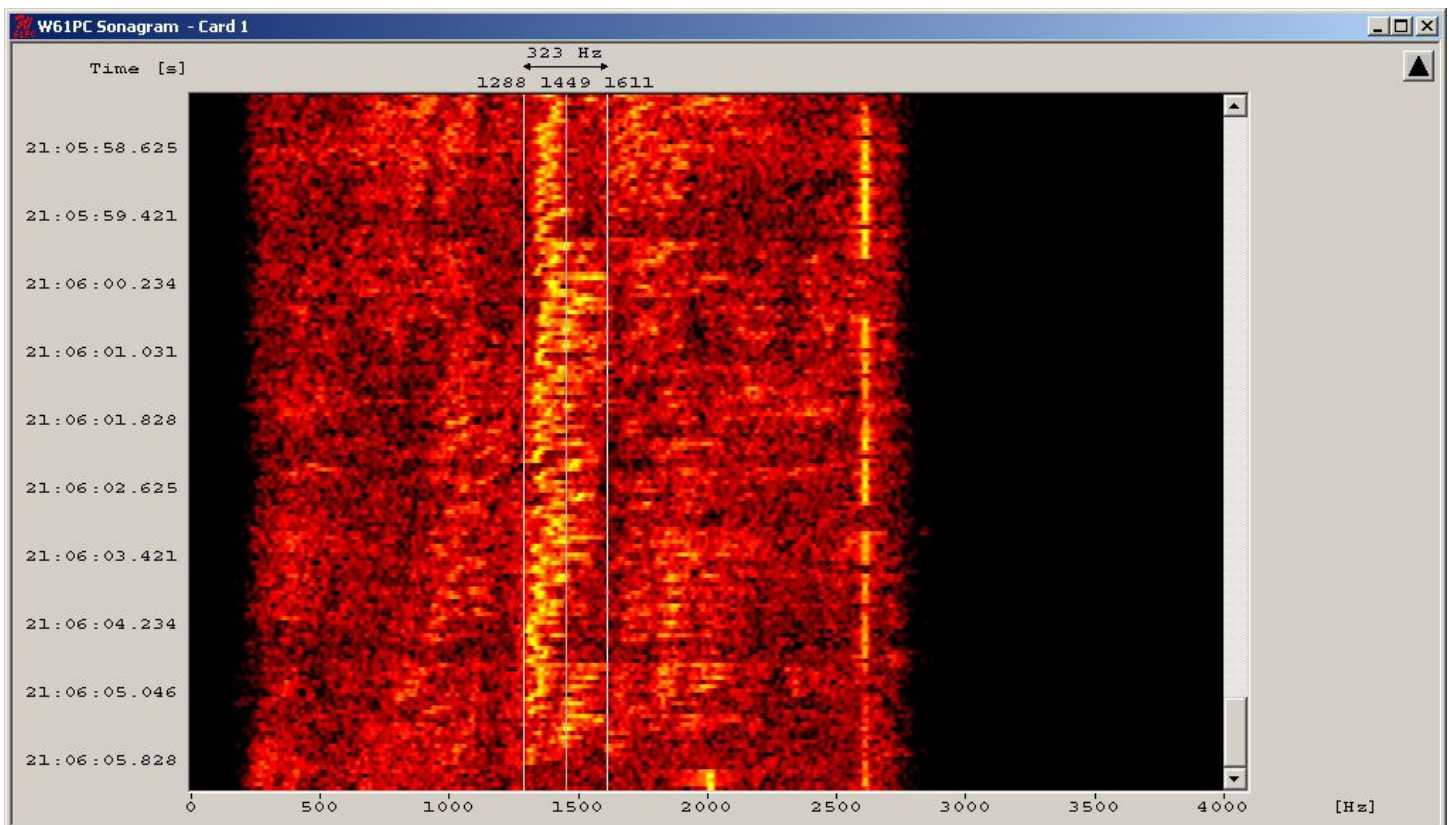
5. Mysterious clandestine on 14280 kHz

A mysterious clandestine appeared on 14280 kHz in A3E every Wednesday at 1006 UTC. A female voice was spelling figures and letters. Location: Rivne, Ukraine. Purpose: unknown.

6. 3500 kHz disturbed by illegal A3E traffic

3500 – 3505 kHz was daily abused by illegal A3E-traffic. The traffic is in Russian voice, audible every evening. Location possibly Belorussia, Moldavia or Ukraine. The equipments of these people seem to be very primitive, perhaps homemade transmitters. **Observe the sonagram below!**

**The sonagram shows a very unstable carrier and both sidebands.
Carrier drift about of 300 Hz! Screenshot from W61 on 3501.5 kHz by DK2OM.**



- 7. Homepage IARU Region 1 <http://www.iaru-r1.org/>
- Homepage IARUMS Region 1 <http://www.iarums-r1.org>
- Homepage IARUMS Region 2 <http://www.intruder-watch.org/>
- Homepage IARUMS Region 3 <http://www.iaru-r3.org/ms/>

Part 2: Detailed reports from the national Co-ordinators

DD = day *** MM = month *** dly = daily *** vt = various times *** vd = various days *** pps = pulses per second (radar systems) *** 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 *** MPSK12 (J7D) = 12 channel phase shift keying *** 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

ARSK MONITORING OVERVIEW FOR February 2011

Radio Uganda by day on 7195 kHz was heard briefly at the beginning of the month but not since and is believed to have left the frequency. Khartoum broadcast on 7200 kHz was heard daily but Addis Ababa and VOBM seemed to suffer from propagation anomalies. Otherwise the usual level of intruders in Somalia, Sudan and Central Africa were noticed as usual.

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	6999.0	1300	23	2	East Africa	UiPHONE	J3Eu	KiSwahili. Military?
ARSK	7007.0	vt	*	2	DRC	UiPHONE	J3Eu	Vernacular. *3,9,13,23,
ARSK	7007.0	0927	6	2	SOM	UiPHONE	J3Eu	Somalis.
ARSK	7011.0	0853	23	2	SOM	UiPHONE	J3Eu	Somalis.
ARSK	7012.0	0839	4	2	DRC	UiPHONE	J3Eu	French, vernacular.
ARSK	7025.0	vt	*	2	DRC	UiPHONE	J3E	Vernacular.*3,
ARSK	7027.0	vt	*	2	DRC	UiPHONE	J3Eu	French, Selcal.*9,
ARSK	7028.0	vt	*	2	SOM	UiPHONE	J3Eu	Somalis. *9,13,
ARSK	7037.0	1317	12	2	SOM	UiPHONE	J3Eu	Somalis.
ARSK	7040.0	vt	*	2	DRC	UiPHONE	J3E	Vernacular.*18,
ARSK	7045.0	vt	*	2	DRC	UiPHONE	J3E	Vernacular.*3,9,
ARSK	7064.0	0849	18	2	SOM	UiPHONE	J3Eu	Somalis.
ARSK	7065.0	vt	*	2	DRC	UiPHONE	J3E	French, vernacular.*6,18,
ARSK	7066.0	vt	*	2	SOM	UiPHONE	J3Eu	Somalis. *13,,24,
ARSK	7074.0	1318	12	2	SDN	UiPHONE	J3E	Vernacular.
ARSK	7080.0	0850	23	2	DRC	UiPHONE	J3Eu	Vernacular.
ARSK	7085.0	0929	6	2	SOM	UiPHONE	J3Eu	Somalis.
ARSK	7096.0	vt	6	2	SDN	UiPHONE	J3E	Phonetics. Vernacular, English.
ARSK	7100.0	0700	10	2	SOM	UiPHONE	J3Eu	Somalis, some music.
ARSK	7104.0	0923	9	2	DRC	UiPHONE	J3Eu	Vernacular. V. Weak.
ARSK	7130.0	0847	4	2	DRC	UiPHONE	J3Eu	French, vernacular.
ARSK	7137.0	0805	*	2	SDN	UiPHONE	J3Eu	Vernacular, Selcal.
ARSK	7170.0	vt	*	2	SOM	UiPHONE	J3Eu	Somalis.*9,
ARSK	7195.0	vt	2	2	UGA	Kampala	A3E	Radio Uganda. Complaint lodged with UCC and now appears to have moved.
ARSK	7200.0	vt	dly	2	SDN	Khartoum	A3E	Broadcast in Arabic, Khartoum.

DARC 1 – Germany – DJ9KR (Ui)

BC transmissions, IM products, harmonics = blue

Great success: Voice of Russia has left 7200 kHz!

CLUB	kHz	UTC	DD	MM	ITU	Call Sign	MODE	Remarks and Comments
DARC	1810,0	1653	17	02		UiILL	J3E-U	unid pirate
DARC	3500,0	2045	20	02	I	UiILL	J3E-L	Italian pirates, SSB-LSB, so outside ham band
DARC	3500,0	vt	vd	02	N.Eu	UiILL	J3E-U	Scandinavians heard, 02 18 at 0953, 1655
DARC	3500,0	vt	vd	02	E	UiILL	J3E-U	Spanish fishery heard 12 18 23 27 at 1845, 00824, 1702, 1827

CLUB	kHz	UTC	DD	MM	ITU	Call Sign	MODE	Remarks and Comments
DARC	3501,0	2040	12	02	G	UiILL	J3E-U	UK fishery
DARC	3501,0	2110	13	02		UiILL	J3E-U	intruder calling "8250" in English voice, also talks about flights
DARC	3502,4	2223	16	02	CIS	UiILL	A3E	male person in Russian voice, very unstable carrier
DARC	3505,0	1638	10	02	E	UiILL	J3E-U	Spanish fishery
DARC	3510,0	1755	15	02	E	UiILL	J3E-U	Spanish fishery
DARC	3511,0	2027	17	02	CIS	UiILL	J3E-U	male person in Russian voice
DARC	3518,0	0852	10	02	N.Eu	UiILL	J3E-U	Scandinavians heard
DARC	3535,0	1005	14	02	F	UiILL	J3E-U	French fishery
DARC	3535,0	2005	23	02	HOL	UiILL	J3E-U	Dutch fishery
DARC	3535,0	2130	23	02	E	UiILL	J3E-U	Spanish fishery with voice scrambler CRY-2001
DARC	3540,0	1700	01	02	F	UiILL	J3E-U	French fishery
DARC	3540,0	1083	16	02	CIS	UiILL	J3E-U	male person spelling numbers in Russian voice, is carrier plus upper sideband!
DARC	3540,0	vt	vd	02	E	UiILL	J3E-U	Spanish fishery heard 10 11 13 at 1954, 1912, 2115
DARC	3545,0	1830	16	02		UiILL	J3E-U	voice scrambler
DARC	3545,0	1855	28	02	N.Eu	UiILL	J3E-U	Scandinavians
DARC	3545,0	vt	vd	02	F	UiILL	J3E-U	French fishery heard 14 15 at 1849, 1845
DARC	3550,0	0816	08	02	F	French Lis Amateurs	A3E	French lis amateurs in AM, heard F5DQH, F5LIN
DARC	3550,0	0827	23	02	F	French Lis Amateurs	A3E	French lis amateurs, AM in CW-section, pas bon!
DARC	3550,0	0840	25	02	F	French Lis Amateurs	A3E	French lis amateurs, AM in CW-section, pas bon!
DARC	3555,0	2057	23	02	G	UiILL	J3E-U	UK fishery
DARC	3555,5	1808	11	02	F	UiILL	J3E-U	French fishery
DARC	3558,0	2031	17	02	F	UiILL	J3E-U	French fishery
DARC	3565,0	2231	17	02	G	UiILL	J3E-U	UK fishery, very obscene
DARC	3570,0	vt	vd	02	F	UiILL	J3E-U	French fishery with engine noise, heard 11 16 28 at 1800, 1927, 2043
DARC	3571,0	2058	28	02	E	UiILL	J3E-U	Spanish fishery
DARC	3574,0	2215	22	02	E	UiILL	J3E-U	Spanish fishery with voice scrambler CRY-2001
DARC	3575,0	0816	08	02	F	French Lis Amateurs	A3E	French lis amateurs in AM
DARC	3585,0	2210	17	02	E	UiILL	J3E-U	Spanish fishery
DARC	3585,0	1801	28	02	F	UiILL	J3E-U	pirates in French voice, SSB-USB
DARC	3600,0	2210	10	02	POR	UiILL	J3E-U	male net in Portuguese voice, no ham calls
DARC	7000,0	1427	02	02	I	UiILL	J3E-L	Italian male net, SSB-LSB used (so not in ham band...)
DARC	7000,0	1750	02	02	PAK	Azad Kashmir	A3E	IM from Pakistan
DARC	7000,0	1645	05	02	F	UiILL	J3E-U	pirates in French voice, SSB-USB
DARC	7000,0	1730	05	02	MRC	UiILL	J3E-U	Moroccan fishery
DARC	7000,0	2000	08	02	CIS	UiILL	J3E-U	male person in Russian voice, "priom"
DARC	7000,0	1823	10	02		UiILL	J3E-U	male persons in Arabic voice
DARC	7000,0	1556	17	02	INS	UiILL	J3E-U	drunken INS pirates singing
DARC	7000,0	vt	17	02		UiCAR	N0N	carrier S9+10dB heard 1705 - 1724
DARC	7000,0	0706	18	02		UiCAR	N0N	long lasting carrier h24
DARC	7000,0	vt	19	02		UiCAR	N0N	carrier 1850 - 2232
DARC	7000,0	1525	20	02	I	UiILL	J3E-U	male voices in Italian
DARC	7000,0	1738	27	02		UiILL	J3E-U	unid pirates, weak signal, difficult to identify
DARC	7000,0	vt	vd	02	E	UiILL	J3E-U	Spanish fishery with voice scrambler CRY-2001, heard/reported 05 - 16 at 1800 - 2039, 10 reports - is not active on weekends!
DARC	7000,0	vt	vd	02	B	UiILL	J3E-U	pirates from Brazil, heard 10 15 at 2040, 2024 - phone patches male to female
DARC	7000,5	1346	21	02		UiILL	J3E-L	Italian station testing "uno, due, proba"
DARC	7004,0	1840	28	02	E	UiILL	J3E-L	Spanish fishery, SSB-LSB
DARC	7018,0	2304	05	02	RUS	REA4	F1B	unid printer
DARC	7018,0	0123	16	02	RUS	REA4	F1B	printer with fast reversals
DARC	7020,0	1747	02	02	IRN	V.o.IRIB	A3E	IM from Iran
DARC	7029,0	0715	08	02	CIS	UiILL	J3E-U	female spelling in Russian voice

CLUB	kHz	UTC	DD	MM	ITU	Call Sign	MODE	Remarks and Comments
DARC	7030,0	0717	08	02	CIS	UiILL	J3E-U	male person counting in Russian voice
DARC	7030,5	2108	10	02	F.Ea	UiILL	J3E-U	Far East pirate, South Korea?
DARC	7038,9	0715	15	02	RUS	S	A1A	beacon Murmansk
DARC	7039,0	0715	15	02	RUS	C	A1A	beacon Moscow
DARC	7050,0	vt	21	02	HOL	UiCAR	N0N	long lasting carrier, heard h24, days: 03, 15 – 23 – solved by the German and Dutch PTT
DARC	7050,0	1002	24	02	HOL	UiCAR	N0N	carrier has gone!
DARC	7054,0	0123	16	02	RUS	UiPTR	F1B	printer with fast reversals
DARC	7098,0	0730	08	02		UiPTR	F1B	unid printer
DARC	7100,0	0623	14	02		UiBC	A3E	weak BC
DARC	7100,0	vt	16	02		UiBC	A3E	IM?, 2 programs at the same time, German & Italian program S9+10dB
DARC	7105,0	2045	01	02		UiBC	A3E	weak
DARC	7105,0	2200	08	02	CHN	R.China	A3E	Chinese program s/on
DARC	7105,0	2200	08	02	TWN	Sound-of-Hope	A3E	Chinese program s/on
DARC	7105,0	1955	14	02	TUN	RTV Tunisia	A3E	Ar program with Al-Qur'an recitals, found // 7225
DARC	7105,0	2200	15	02	CHN	R.China	A3E	Chinese program s/on
DARC	7105,0	2200	15	02	TWN	Sound-of-Hope	A3E	Chinese program s/on
DARC	7105,0	2233	19	02	CHN	R.China	A3E	Chinese px
DARC	7105,0	2233	19	02	TWN	Sound-of-Hope	A3E	Chinese px
DARC	7115,0	2307	05	02		UiMUX	FSK	ALE heard
DARC	7118,0	0840	18	02		UiPTR	F1B	unid printer
DARC	7120,0	1548	01	02	ERI	VOBME	A3E	found // 7165, 7175, 7185
DARC	7120,0	1501	04	02	ERI	VOBME	A3E	Al-Qur'an recitals, // heard on 7165, 7175, 7185
DARC	7120,0	1501	04	02	ETH	ETH Govt. Jammer	JAM	white noise jammer on VOBME
DARC	7120,0	0537	10	02	ETH	ETH Govt. Jammer	JAM	white noise jammer on VOBME
DARC	7120,0	1735	14	02	ERI	VOBME	A3E	all transmissions // 7155, 7175 - Ar program
DARC	7120,0	vt	14	02		UiBC	A3E	Chinese music and voice, also En voice, heard 1958 - 2000 s/off
DARC	7120,0	0337	15	02	ERI	VOBME	A3E	found // 7155, 7175
DARC	7120,0	vt	17	02	CVA	Vatican Radio	A3E	jingle and German program heard, S9+, s/off at 1700
DARC	7120,0	1502	20	02	ETH	ETH Govt. Jammer	JAM	white noise jammer on VOBME
DARC	7125,0	vt	08	02	GUI	R. Conakry	A3E	Fr program heard 0719 - 0728 s/off
DARC	7125,0	0709	09	02	GUI	R. Conakry	A3E	Vernacular voice
DARC	7125,0	0728	10	02	GUI	R. Conakry	A3E	Vernacular voice
DARC	7125,0	0626	11	02	GUI	R. Conakry	A3E	African music 0626 - 0737
DARC	7125,0	0724	14	02	GUI	R. Conakry	A3E	S9+10dB-signal, QSB
DARC	7125,0	0715	15	02	GUI	R.Conakry	A3E	French program, S9+15dB, at 0810: nil
DARC	7125,0	vt	16	02	GUI	R.Conakry	A3E	is active 0630 - 0730
DARC	7130,0	1720	07	02	ERI	VOBME	A3E	all transmissions // 7150, 7175
DARC	7130,0	1717	08	02	ERI	VOBME	A3E	all transmissions // 7150, 7175,
DARC	7130,0	vt	17	02	ERI	VOBME	A3E	heard 1659 - 1726, all transmissions // 7155, 7175
DARC	7140,0	0626	11	02		UiBC	A3E	
DARC	7150,0	1720	07	02	ERI	VOBME	A3E	all transmissions // 7130, 7175
DARC	7150,0	1717	08	02	ERI	VOBME	A3E	all transmissions // 7130, 7175
DARC	7155,0	0623	14	02		UiBC	A3E	2 program at the same time, S9
DARC	7155,0	1735	14	02	ERI	VOBME	A3E	all transmissions // 7120, 7175 - Ar program
DARC	7155,0	0337	15	02	ERI	VOBME	A3E	found // 7120, 7175
DARC	7155,0	vt	17	02	ERI	VOBME	A3E	heard 1659 - 1726, all transmissions // 7130, 7175
DARC	7155,0	0436	20	02	ETH	ETH Govt. Jammer	JAM	white noise jammer on VOBME
DARC	7155,0	1502	20	02	ETH	ETH Govt. Jammer	JAM	white noise jammer on VOBME
DARC	7164,0	0630	16	02	RUS	UiMUX	PSK1	AT-3004-D, location Chelyabinsk
DARC	7165,0	1548	01	02	ERI	VOBME	A3E	found // 7120, 7175, 7185

CLUB	kHz	UTC	DD	MM	ITU	Call Sign	MODE	Remarks and Comments
DARC	7165,0	1501	04	02	ERI	VOBME	A3E	Al-Qur'an recitals, // heard on 7120, 7175, 7185
DARC	7165,0	1503	10	02	ETH	ETH Govt. Jammer	JAM	white noise jammer on VOBME
DARC	7174,6	1556	22	02		UiCAR	N0N	carrier heard with weak ticking pulses
DARC	7175,0	1548	01	02	ERI	VOBME	A3E	found // 7120, 7165, 7185
DARC	7175,0	1501	04	02	ERI	VOBME	A3E	Al-Qur'an recitals, // heard on 7120, 7165, 7185
DARC	7175,0	1501	04	02	ETH	ETH Govt. Jammer	JAM	white noise jammer on VOBME
DARC	7175,0	1720	07	02	ERI	VOBME	A3E	all transmissions // 7130, 7150
DARC	7175,0	1717	08	02	ERI	VOBME	A3E	all transmissions // 7130, 7150
DARC	7175,0	0537	10	02	ETH	ETH Govt. Jammer	JAM	white noise jammer on VOBME
DARC	7175,0	1735	14	02	ERI	VOBME	A3E	all transmissions // 7120, 7155 - Ar program
DARC	7175,0	0337	15	02	ERI	VOBME	A3E	found // 7120, 7155
DARC	7175,0	1658	17	02	ERI	VOBME	A3E	is active under wn-jammer
DARC	7175,0	1658	17	02	ETT	ETH Govt. Jammer	JAM	wn-jammer against VOBME
DARC	7175,0	vt	17	02	ERI	VOBME	A3E	heard 1659 - 1726, all transmissions // 7130, 7155
DARC	7175,0	0436	20	02	ETH	ETH Govt. Jammer	JAM	white noise jammer on VOBME
DARC	7175,0	0436	20	02	ERI	VOBME	A3E	slightly audible under wn jammer
DARC	7175,0	1502	20	02	ETH	ETH Govt. Jammer	JAM	white noise jammer on VOBME
DARC	7179,0	2147	10	02	RUS	V.o.Russia	A3E	Russian program, IM 6090 x 1089, heard all month 2100 - 2233, 10 reports all month
DARC	7179,0	2233	19	02	RUS	V.o.Russia	A3E	is IM of 6090 and 1089, station Krasnodar-Armavir - report of "knitting pattern" by DL5SX
DARC	7179,0	vt	dly	02	RUS	V.o.Russia	A3E	is IM of 6090 and 1089, station Krasnodar-Armavir - report of "knitting pattern" by DL5SX
DARC	7180,0	1850	02	02	E	UiILL	J3E-U	Spanish persons, using SSB-USB
DARC	7180,0	2103	03	02	Af	UiILL	J3E-U	male net in French, also using CODAN beep
DARC	7180,0	0623	14	02		UiBC	A3E	2 program at the same time, one program is French
DARC	7185,0	1548	01	02	ERI	VOBME	A3E	found // 7120, 7165, 7175
DARC	7185,0	0800	03	02	F	UiILL	J3E-U	French fishery
DARC	7185,0	1501	04	02	ERI	VOBME	A3E	Al-Qur'an recitals, // heard on 7120, 7165, 7175
DARC	7189,7	0134	09	02	CLN	SLBC Sri Lanka	A3E	is audible
DARC	7189,7	0123	16	02	CLN	SLBC Sri Lanka	A3E	is audible
DARC	7190,0	1332	09	02	I	Italian Lis Amateurs	A3E	active in AM, common frequency!
DARC	7190,0	2002	14	02		UiBC	A3E	unid BC
DARC	7195,0	1545	01	02	UGA	R. Uganda	A3E	African music, drums, vocal - 1545 - 1604
DARC	7195,0	0609	04	02		UiBC	A3E	weak
DARC	7200,0	2045	01	02	IRN	V.o.IRIB	A3E	Spanish program
DARC	7200,0	2045	01	02	SDN	R.Omdurman	A3E	Ar program, audible under V.o.IRIB
DARC	7200,0	vt	01	02	RUS	Golos Rossii	A3E	Ru program S9+35dB 0800 - 1500
DARC	7200,0	0750	02	02	RUS	Golos Rossii	A3E	carrier with measuring tone, 0800: s/on Russian program
DARC	7200,0	1121	04	02	RUS	Golos Rossii	A3E	Ru program S9+15dB
DARC	7200,0	1500	04	02	SDN	R.Omdurman	A3E	S9-signal, Ar program
DARC	7200,0	0757	05	02	RUS	Golos Rossii	A3E	carrier with measuring tone, 0800: s/on Russian program
DARC	7200,0	0835	06	02	RUS	Golos Rossii	A3E	music heard
DARC	7200,0	1720	07	02	IRN	V.o.IRIB	A3E	Farsi program
DARC	7200,0	1720	07	02	SDN	R.Omdurman	A3E	slightly audible under Farsi program of IRIB
DARC	7200,0	0814	08	02	RUS	Golos Rossii	A3E	Ru program S9+35dB
DARC	7200,0	1717	08	02	SDN	R.Omdurman	A3E	Ar program
DARC	7200,0	1018	09	02	RUS	Golos Rossii	A3E	has left QRG after complaints by BNetzA and DARC MonSys - is now on 7265

CLUB	kHz	UTC	DD	MM	ITU	Call Sign	MODE	Remarks and Comments
DARC	7200,0	1735	14	02	IRN	V.o.IRIB	A3E	Bosnian program, S9+35dB
DARC	7200,0	1735	14	02	SDN	R.Omdurman	A3E	audible under V.o.IRIB
DARC	7200,0	1945	14	02	SDN	R.Omdurman	A3E	S9+20dB
DARC	7200,0	0337	15	02	SDN	R.Omdurman	A3E	Ar program
DARC	7200,0	vt	17	02	IRN	V.o.IRIB	A3E	Farsi program at 1722, Spanish program at 2106
DARC	7200,0	0546	19	02	SDN	R.Omdurman	A3E	Ar program
DARC	7200,0	1625	21	02	IRN	V.o.IRIB	A3E	Tajik program
DARC	7200,0	2124	22	02	IRN	V.o.IRIB	A3E	Spanish program S9+25dB
DARC	7200,0	vt	dly	02	SDN	R.Omdurman	A3E	ILG-B10 says - sked: 0245 - 2300, 2300 - 0230 - Arabic program
DARC	7200,0	vt	dly	02	IRN	V.o.IRIB	A3E	1600 - 1730: Tajik program
DARC	7200,0	vt	dly	02	IRN	V.o.IRIB	A3E	1730 - 1830: Bosnian program
DARC	7200,0	vt	dly	02	IRN	V.o.IRIB	A3E	2030 - 2130: Spanish program (for Europe) - pse hit http://spanish.irib.ir/home/frecuencia
DARC	7200,0	vt	dly	02	RUS	V.o.Russia	A3E	from 01 - 08 February 0800 - 1500 UTC Russian program - location is St. Petersburg
DARC	7210,7	0405	01	02	RUS	V.o.Russia	A3E	Spanish program "La Voz de Russia", rocking and chirping carrier, harmful splatters into ham band
DARC	7210,7	0143	09	02	RUS	V.o.Russia	A3E	very overmodulated program, carrier rocking, Spanish program, splatters into ham band
DARC	7210,7	0123	16	02	RUS	V.o.Russia	A3E	Spanish program, carrier rocking, overmodulated and splattering into ham band
DARC	10110,2	2120	11	02	MRC	UiILL	J3E-U	Moroccan fishery
DARC	10120,0	2114	28	02	E	UiILL	J3E-U	Spanish fishery
DARC	10139,9	1630	06	02		UiBC	A3E	BC-IM, 10139,930 kHz exactly
DARC	10150,0	2000	09	02	E	UiILL	J3E-U	Spanish fishery, talking about "barcos" - is not in ham band, just info!
DARC	10150,0	1620	10	02	S.As	UiILL	J3E-U	2 male persons, S.As language, Indian? - just info, is out of ham band!
DARC	10150,0	0925	20	02	E	UiILL	J3E-U	Spanish fishery
DARC	10150,0	0822	22	02		UiOTH	P0N	chirping pulses 66,66 pps
DARC	10150,0	1003	24	02	E	UiILL	J3E-U	2 Spanish male persons, is not ham band as SSB-USB, just info!
DARC	14000,0	1645	01	02	E	UiILL	J3E-U	Spanish fishery
DARC	14000,0	1422	06	02	HRV	UiILL	J3E-U	male persons in Serbo-Croatian voice
DARC	14000,0	0843	12	02	CIS	UiILL	J3E-U	male person in Russian voice
DARC	14000,0	1459	24	02	F.Ea	UiILL	J3E-U	Far East pirates
DARC	14000,0	1733	27	02	MRC	UiILL	J3E-U	Moroccan fishery
DARC	14000,8	0929	06	02	Af	UiILL	J3E-U	pirates in Vernacular voice and French, not Arabic engine noise
DARC	14000,9	vt	22	02	ISR	UiCAR	N0N	carrier heard 0829 - 1601, location Sarajevo
DARC	14020,0	0719	08	02	IRN	V.o.IRIB	A3E	French voice found // 15560, IM 7380 x 7200; IM also found on 13810
DARC	14280,0	vt	09	02	CIS	729	J3E-U	5F spelling in Russian voice, female, each gp twice, S9+60dB with DG3DW
DARC	14280,0	1006	16	02	UKR	UiILL	A3E	female voice in A3E spelling figures, calling every Wednesday at 1006 UTC
DARC	14295,2	ady	dly	02	TJK	R.Tajikistan	A3E	3rd harmonic from 4765
DARC	14350,0	1421	17	02		UiILL	J3E-U	rock music, 070 degs. from DL
DARC	14350,0	vt	vd	02		UiILL	J3E-U	reproducing BC station, heard 24 26 28 at 0936, 0951, 1508
DARC	21000,0	1330	19	02	F.Ea	UiILL	J3E-U	pirates from Far East
DARC	21000,0	0856	25	02	F.Ea	UiILL	J3E-U	Far East pirates
DARC	21010,0	1514	17	02	E	UiILL	J3E-U	Spanish fishery
DARC	21011,0	0955	05	02	MRC	UiILL	J3E-U	Moroccan fishery
DARC	21230,0	1004	24	02		UiOTH	P0N	chirping pulses heard 21230 - 21290
DARC	21325,0	vt	21	02		UiOTH	P0N	strings of pulses, heard 0754 - 0912
DARC	21401,0	0816	18	02		UiPTR	F1B	is harmonic of 10700,5
DARC	21424,0	0816	18	02		UiPTR	F1B	is harmonic of 10712
DARC	28045,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi
DARC	28065,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi
DARC	28135,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi

CLUB	kHz	UTC	DD	MM	ITU	Call Sign	MODE	Remarks and Comments
DARC	28135,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi
DARC	28245,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi
DARC	28275,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi
DARC	28305,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi
DARC	28315,0	0835	18	02		UiOTH	P0N	s/on at 0835
DARC	28330,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi
DARC	28335,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi
DARC	28655,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi
DARC	28685,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi
DARC	28705,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi
DARC	28755,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi
DARC	28835,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi
DARC	28995,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi
DARC	29415,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi
DARC	29585,0	vt	18	02	CIS	taxi bizniz	F3E	Russian traffic heard 1040 - 1048, female person at base station, male in taxi

DARC 2 – Germany - DK2OM (Wolf)

PSE observe:

FSK transmissions -> center frequency between mark and space

PSK transmissions -> center frequency (subtract the modem frequency!)

ALE (MIL188-141A) -> USB frequency – exclusive bands: black – nonexclusive: blue

SH = shift --- SP = spread (radar)

DARC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DARC	1812,0	vt	vd	02	POL		A3E			Polish “PIP” – 10 tones – North-Poland – Baltic coast - POL Navy ?
DARC	1876,8	ady	dly	02	G		PSK8	2400	2400	Stanag4285 - 1200 bps long - Scotland
DARC	1896,5	ady	dly	02	D		PSK8	2400	2400	Stanag4285 - 600 bps long - German Navy
DARC	3500,0	vt	dly	02	TUR	no ITU	FSK8	125	1750	ALE, “2015” “2016” “1020”- Turkish Red Crescent - legal
DARC	3500,0	1752	24	02			FMCW			unid water surface Radar, 6.5 pps 3300 – 3500 kHz
DARC	3500,0	1823	27	02			FMCW			unid Radar - 6.7 pps
DARC	3501,5	2038	22	02						frequency hopper
DARC	3503,5	vt	dly	02	G	no ITU	FSK8	125	1750	ALE – “XSS” “XPU” – British MIL Tascomm
DARC	3509,5	1709	01	02	ISR		PSK4	75	2400	MIL-188-110A hybrid
DARC	3510,0	vt	dly	02	ALG		FSK8	125	1750	ALE, “JE30” “PT30”
DARC	3511,0	2134	16	02	RUS		PSK2	120	2600	AT3004D - Black Sea
DARC	3511,6	1730	28	02	F		FSK8	125	1750	Thales Skymaster – burst system and French voice traffic in USB
DARC	3516,3	1714	28	02	MKD		PSK8	2400	2400	MIL-188-110A – 1200 bps short area of Macedonia
DARC	3517,0	1645	10	02	UKR		PSK2	120	2600	AT3004D - Sevastopol
DARC	3517,7	2236	01	02	G		F1B	75	850	Baudot - encrypted slip – English Channel – possibly ship
DARC	3522,0	2235	06	02	BLR		F1B	75	250	north of Minsk
DARC	3527,0	2230	10	02	RUS		F1B	50	200	Severomorsk - daily

DARC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DARC	3530,0	1838	13	02						frequency hopper
DARC	3533,0	vt	dly	02	E	no ITU	FSK8	125	1750	ALE, "TZSC2" "TWBZ1" - Spanish Guardia Civil
DARC	3535,0	1705	09	02	BLR		PSK2	120	2600	AT3004D – north of Minsk
DARC	3536,8	1953	01	02	ISR		PSK4	75	2700	MIL-188-110A hybrid
DARC	3538,0	1916	11	02						frequency hopper
DARC	3540,5	1515	11	02	BLR		PSK2	120	2600	AT3004D
DARC	3542,0	1657	16	02	BLR		PSK2	120	2600	AT3004D - Minsk
DARC	3545,0	vt	dly	02	ALG		FSK8	125	1750	ALE, "FL49" "FL57" "PT50" - ALG MIL + voice traffic USB and scrambler
DARC	3550,0	1733	24	02	RUS		PSK2	120	2600	AT3004D - ship "Black Sea"
DARC	3550,8	1658	01	02	ISR		PSK4	75	2400	MIL-188-110A hybrid
DARC	3553,8	ady	dly	02	TUR		PSK8	2400	2400	Stanag4285 – TUR MIL - Ankara
DARC	3555,8	2137	dly	02	KGZ		F1B	150	150	ACF = 324 - Bishkek
DARC	3556,5	2029	08	02	UKR		PSK4	120	2600	AT3104D - Ukraine
DARC	3558,0	vt	dly	02			FSK8	125	1750	ALE, "102" "206"
DARC	3568,5	1958	04	02	RUS		PSK4	120	2600	AT3104D - area of Jekaterinburg
DARC	3576,5	2232	22	02						frequency hopper
DARC	3577,0	ady	dly	02	I	IZ3DVW	A1A			IZ3DVW – beacon not coordinated with IARU
DARC	3578,0	1720	16	02	UKR		PSK2	120	2600	AT3004D
DARC	3585,0	1700	dly	02	TWN	HLL	FIC			120 rpm, IOC 576, Wxfax - legal!
DARC	3590,0	vt	dly	02	PAK	no ITU	FSK8	125	1750	ALE, "KW" "BABUR" "KHA" "KHAIBAR" "BADR" "NASR"
DARC	3591,5	vt	vd	02	F		OFDM	44.4	1800	OFDM27 - area of Lille / North France
DARC	3593,7	2222	14	02	UKR	D	A1A			beacon "D" - Sevastopol – RUS naval base
DARC	3595,0	vt	dly	02	D	no ITU	FSK8	125	1750	ALE, „ZLST“ „ZPRI“ „ZSHO“ „ZBOR“ „ZEMD“ „ZHEL“ „ZKNI“ „ZBOR“ „BPLEZS“ German customs – North-Germany
DARC	3596,0	vt	dly	02	HRV	9A0ALE	FSK8	125	1750	Croatian emergency ALE-net --- for info!
DARC	3603,0	vt	vd	02	D	DA0EC	PSK8	2000	2000	RFSM 8000 – amateur emergency net - Berlin - legal operation - just for info!!!
DARC	3603,0	2124	24	02	ALG?	no ITU	FSK8	125	1750	ALE, "PT01JL94" "JL05JL94"
DARC	3606,0	1503	10	02	BLR		F1B	50	250	Minsk
DARC	3608,0	vt	dly	02	RUS		F1B	50	200	Kaliningrad
DARC	3611,5	vt	dly	02	D		PSK8	200	500	German APRS Net in Robust Packet - just for info!
DARC	3622,5	2100	24	02	J	JMH	FIC			Tokyo Meteo – 120 rpm – IOC576 – daily, legal!!!
DARC	3642,0	2007	05	02			PSK2	120	2600	AT3004D
DARC	3642,0	2010	05	02	RUS ?		A1A			DKG6 de 3A7D - endless slip - bearings difficult
DARC	3698,3	2029	24	02	?		FSK8	125	1750	Thales Skymaster - burst system
DARC	3756,0	ady	dly	02	UKR		A3E			UKR – pip – 10 tones
DARC	3782,0	ady	dly	02	POR	CTP	F1B	75	850	POR Navy headquarter Lisbon
DARC	3798,25	vt	dly	02		no ITU	FSK8	125	1750	ALE, "049"
DARC	5196,0	2247	08	02	RUS		F1B	75	1750	Kaliningrad ?
DARC	7000,0	vt	dly	02	IRQ	no ITU	FSK8	125	1750	ALE, "MEDOPS" "BMROPS" "LNGKNF" "EAGLE" "HFCFSR" "R23747" "R24594" US MIL
DARC	7000,0	2025	06	02	IND		noise			6900 - 7200 kHz covered by white noise from East India
DARC	7002,0	2226	14	02						frequency hopper
DARC	7016,0	0535	02	02	RUS		OFDM			OFDM93 - Stavropol
DARC	7018,0	vt	dly	02	RUS	REA4	F1B	50	1000	Russian Airforce Moscow

DARC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DARC	7034,0	0938	28	02	RUS		PSK2	120	2600	AT3004D - Voronezh
DARC	7038,7	ady	dly	02	UKR	D	A1A			Cluster beacon – Sevastopol RUS Navy – “RCV”
DARC	7038,8	ady	dly	02	RUS	P	A1A			Cluster beacon – Kaliningrad RUS Navy – “RMP”
DARC	7038,8	1600	02	02	RUS	M	A1A			Cluster beacon – Magadan RUS Navy – „RTS“
DARC	7038,9	ady	dly	02	RUS	S	A1A			Cluster beacon – Murmansk RUS Navy – „RIT“
DARC	7039,0	ady	dly	02	RUS	C	A1A			Cluster beacon - Moscow RUS Navy - “RIW”
DARC	7039,1	vt	dly	02	KGZ	A	A1A			Cluster beacon – Bishkek RUS Navy –
DARC	7039,2	ady	dly	02	RUS	F	A1A			Cluster beacon - Vladivostok RUS Navy - “RJS”
DARC	7039,3	vt	dly	02	RUS	K	A1A			Cluster beacon - Petropavlovsk Kamchatskiy - RUS Navy - Pacific fleet - “RCC”
DARC	7039,4	1437	03	02	RUS	M	A1A			Cluster beacon – Magadan RUS Navy – „RTS“
DARC	7039,9	ady	dly	02	I	IZ3DVW	A1A			IZ3DVW – beacon not coordinated with IARU
DARC	7044,0	vt	dly	02	RUS	REA4	A1A			only dots, RUS Airforce - Omsk
DARC	7049,5	vt	dly	02	F	F4BXW	FSK8	1250	1750	ALE, amateur net, just for info!
DARC	7050,0	1830	02	02	BEL		N0N			strong carrier - north of Ostende - English Channel - possibly ship
DARC	7050,0	1019	17	02	HOL		N0N			carrier - Netherlands
DARC	7053,0	0711	23	02	RUS		PSK4	120	2600	AT3104D - Kaliningrad
DARC	7054,0	2112	05	02	RUS		F1B	50	200	CIS50-50 idling - RUS MIL Moscow
DARC	7088,8	1400	dly	02	S		CW			CW-trainee from Sweden – just for info!
DARC	7089,0	0920	03	02	RUS		PSK4	120	2600	AT3104D - Kaliningrad
DARC	7098,0	1054	07	02	RUS		F1B	75	250	Kaliningrad
DARC	7099,5	vt	dly	02	HRV	9A0ZG	FSK8	125	1750	ALE, “9A0ZG” – just for info!
DARC	7101,0	0812	03	02						frequency hopper
DARC	7102,0	vt	dly	02	EU		FSK8	125	1750	ALE, “F4BXW” “SQ5EBM” “9A0ALE” “9A5EX” – amateur-ALE, just for info!
DARC	7095.7	1347	11	02			OFDM	22.2	3060	OFDM98 -
DARC	7110,5	vt	dly	02	HRV	9A0ALE	FSK8	125	1750	ALE, amateur net, just for info!
DARC	7111,9	vt	dly	02	KWT	no ITU	FSK8	125	1750	ALE, “UDAIRI” “ATFOPS” – UDAIRI = US MIL Camp Buehring / Kuwait
DARC	7112,0	0907	04	02	RUS		PSK2	120	2600	AT3004D - area of Ryazan
DARC	7113,0	1024	23	02	RUS		PSK2	120	2600	AT3004D - strong QRM
DARC	7140,0	vt	dly	02		no ITU	FSK8	125	1750	ALE, “1101”
DARC	7142,0	1423	22	02	RUS		F1B	100	250	area of Moscow
DARC	7144,0	1135	22	02	RUS		PSK4	120	2600	AT3004D - Kaliningrad
DARC	7173,0	1421	06	02						frequency hopper
DARC	7180,0	vt	dly	02	MRC		FSK8	125	1750	ALE, “9201” “6350” “RC1”
DARC	7181,0	1733	03	02						frequency hopper
DARC	7190,0	1518	15	02	RUS		PSK2	120	2600	AT3004D - Kaliningrad
DARC	7193,0	1032	23	02	RUS		F1B	50	200	Kaliningrad – also: 24.02. at 1456 utc
DARC	7194,0	0800	10	02	UKR	?	F1B			reversals
DARC	7198,0	0826	25	02	RUS		PSK2	120	2600	AT3004D - Kaliningrad
DARC	10106,0	vt	dly	02	ALG	no ITU	FSK8	125	1750	ALE, “OG100A” “OR200B” - Algerian MIL
DARC	10107,0	0935	10	02						frequency hopper
DARC	10113,0	0847	07	02	RUS		PSK2	120	2600	AT3004D - Volgograd
DARC	10115,0	0750	dly	02	RUS		FSK4	100	1500	CIS14 - Moscow
DARC	10119,0	1210	28	02	RUS		PSK2	120	2600	AT3004D - Moscow
DARC	10120,0	2012	24	02	CYP		FMCW		20k	OTH Radar Cyprus, 50 pps
DARC	10124,0	1750	28	02	RUS		F1B	50	200	Murmansk

DARC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DARC	10125,0	0906	16	02	RUS		PSK2	120	2600	AT3004D - Moscow
DARC	10125,0	vt	dly	02	LBY	no ITU	FSK8	125	1750	ALE, "MOBILE8" "MOBILE16" - Libyan GMMRA
DARC	10134,0	vt	dly	02	ALG	no ITU	FSK8	125	1750	ALE, "CM4" "COF" - Algerian Airforce
DARC	10135,0	1838	07	02	TUR		FMCW		20k	OTH Radar Turkey, 50 pps
DARC	10140,0	2210	28	02	CYP		FMCW			OTH Radar Cyprus , 50 pps
DARC	10145,0	vt	dly	02	F	F4BXW	FSK8	125	1750	ALE, "F4BXW" - just for info!
DARC	10147,0	vt	dly	02			PSK2	500	500	PSK-MAIL 500 – HAM-Mode – just for info
DARC	10147,0	1433	07	02						frequency hopper
DARC	10148,0	1100	07	02	RUS		F1B	75	500	south of Moscow
DARC	10150,0	vt	dly	02			FSK8	125	1750	ALE, "CFA" "CTA"
DARC	10150,0	0830	22	02	RUS		FMCW		10	RUS OTH Radar, 66.77 pps bursts and pulse rates – also active on 10200 kHz
DARC	14000,0	vt	dly	02			FSK8	125	1750	ALE, "091"
DARC	14000,9	ady	17	02	ISR		NON			carrier - area of
DARC	14027,0	1425	09	02	RUS		PSK2	120	2600	
DARC	14055,0	0855	04	02	RUS		FMCW		10k	OTH Radar 50 pps – 2.7 sec bursts - every 30 sec
DARC	14056,6	0844	24	02	RUS		MFSK	40	1300	CIS36 - Kaliningrad
DARC	14230,0	1207	20	02						frequency hopper
DARC	14233,8	1358	12	02	TUR		PSK8	2400	2400	Stanag4285 - 2400 bps long - area of Istanbul
DARC	14248,5	1330	dly	02	RUS		F1B	600	600	DPRK-FSK600 - KRE emba Moscow
DARC	14300,0	0850	18	02	RUS		F1B	50	500	Far East Russia
DARC	14310,0	0841	05	02	ARG		FMCW		10k	OTH Radar Argentina, 66.7 pps – burst length 1.8 sec
DARC	14312,0	0826	05	02	RUS		A1A			5 letter and figure groups
DARC	14344,0	1105	24	02			NON			unid weak carrier, 14343.995 kHz
DARC	14344,7	1130	16	02	CHN		PSK8	2400	2400	MIL-188-110A – 600 bps short - intro tone ACARS like – burst system
DARC	18068,0	0943	24	02	CYP		FMCW		20k	OTH Radar Cyprus, 50 pps
DARC	18075,0	0845	12	02	CYP		FMCW		20k	OTH Radar Cyprus, 50 pps
DARC	18090,0	1017	24	02	CYP		FMCW		20k	OTH Radar Cyprus, 50 pps
DARC	21000,0	0907	07	02	RUS	RAZ2	F1B	39	1000	harmonic from 10500 - idling - Mitschurinsk - daily
DARC	21002,0	vt	dly	02						frequency hopper
DARC	21031,0	0819	24	02						frequency hopper
DARC	21045,0	0951	16	02	TUR		FMCW		20k	OTH Radar Istanbul, 50 pps
DARC	21072,0	1502	12	02						frequency hopper
DARC	21100,0	1114	08	02	TUR		FMCW		20k	OTH Radar Turkey, 50 pps, area of Ankara
DARC	21115,0	0937	15	02	CYP		FMCW		20k	OTH Radar Cyprus, 50 pps
DARC	21115,0	0941	15	02						frequency hopper
DARC	21190,0	0746	10	02	RUS		F1B	100	1000	harmonic from 10595 – Moscow
DARC	21211,0	0805	03	02						frequency hopper
DARC	21300,0	1522	27	02	CYP		FMCW		20k	OTH Radar Cyprus, 50 pps
DARC	21445,0	1039	11	02	CYP		FMCW		20k	OTH Radar Cyprus, 50 pps

IRTS – Ireland – EI4GXB (Ger)

KARS – Kuwait – 9K2RR (Faisal)

MRASZ – Hungary - HA7PL (Laci)

CLUB	kHz	UTC	DD	MM	MODE	ITU	IDENT	BD	SH	DETAILS
MRASZ	7000,0	VT	VD	02	FSK8 (ALE)	Ui	UiMUX	125	1750	BMROPS, FUZZY, DEFAULT, EAGLE, LNGKNF,
MRASZ	7026,0	VT	VD	02	FSK8 (ALE)	Ui	UiMUX	125	1750	417 – 314 UNID
MRASZ	7045,0	VT	VD	02	FSK8 (ALE)	Ui	UiMUX	125	1750	1???, 2??? 4 FIGURES NET
MRASZ	7070,0	VT	VD	02	FSK8 (ALE)	GEO	UiMUX	125	1750	244-NET: 244 – 00, 204, 334, 514, 686, 494, 571, 288
MRASZ	7080,0	VT	VD	02	FSK8 (ALE)	ALB	UiMUX	125	1750	5810
MRASZ	7090,0	VT	VD	02	FSK8 (ALE)	Ui	UiMUX	125	1750	2??? NET
MRASZ	7092,0	VT	VD	02	FSK8 (ALE)	Ui	UiMUX	125	1750	RC1, Z21, Z31, 3, 4, 120. UNID.
MRASZ	7102,0	VT	VD	02	FSK8 (ALE)	Ui	UiMUX	125	1750	1???, 2??? 4 FIGURES NET
MRASZ	7115,0	VT	VD	02	FSK8 (ALE)	UZB	UiMUX	125	1750	110-NET UZBEK FORCES
MRASZ	7116,0	VT	VD	02	FSK8 (ALE)	Ui	UiMUX	125	1750	1101, 1102, 1103, 1104 UNID
MRASZ	7149,0	VT	VD	02	FSK8 (ALE)	ALB	UiMUX	125	1750	5810
MRASZ	7197,0	VT	VD	02	FSK8 (ALE)	Ui	UiMUX	125	1750	123466, 9850, 83401, 83412, 123456
MRASZ	14000,0	VT	VD	02	FSK8 (ALE)	USAF	UiMUX	125	1750	CROSPR, ICZSPR, PLASPR, JDGSPR

OEVSV – Austria – OE3DMA (Alex)

PZK – Poland – SP3UZ (Wladyslaw)

REP – Portugal – CT4AN (Jose Francisco) and CT1JTQ (Angelo)

SOC	KHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REP	3500,0	07.31	10	02	SPA		J3E-U			Spanish fishers
REP	3500,0	23.19	23	02	SPA		J3E-U			Spanish fishers
REP	3501,0	07.10	17	02	MAR		J3E-U			Marroco fishers
REP	3501,0	00.08	11	02	POR SPA		A3E			Spanish and Portuguese fishermen
REP	3502,0	08.25	16	02	MAR		J3E-U			Maroco fishers
REP	3505,0	08.18	05	02	SPA		J3E-U			Spanish fishers
REP	3533,0	23.55	12	02	SPA		FSK	125	1750	Guardia Civil ??
REP	3575,0	07.21	5	02	F		A3E			French Amateurs INFRINGE IARU BAND PLAN
REP	5370,0	00.55	28	02	GRE		---			CODAR Radar ?? - ramp flutter freq. signal
REP	7038,6	07.10	4	02	RUS	S	A1A			MURMANSK, ADY, DLY 0.2uV S1
REP	7038,6	09.22	12	02	RUS	S	A1A			MURMANSK, ADY, DLY 3.1uV S5
REP	7038,7	03.16	16	02	UKR	D	A1A			SEVASTOPOL, ADY, DLY 0.2uV S1
REP	7038,7	07.11	20	02	UKR	D	A1A			SEVASTOPOL, ADY, DLY 3.1uV S5
REP	7039,0	08.02	23	02	RUS	C	A1A			MOSCOW, ADY, DLY 6.3uV S6
REP	7039,1	23.51	15	02	RUS	A	A1A			VOLGOGRAD, ADY, DLY 6.3uV S6
REP	7039,1	21.17	11	02	RUS	A	A1A			VOLGOGRAD, ADY, DLY 3.1uV S5

SOC	KHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REP	7100,0	01.18	15	02	PAK		8k00 A3EGN			Radio Pakistan - Kashmir
REP	7101,0	00.30	23	02	IND		8k00 A3EGN			Radio India ??
REP	7105,0	23.25	5	02	CHN		8k00 A3EGN			R.China
REP	7105,0	22.45	7	02	TWN		8k00 A3EGN			Sound of Hope - English lang
REP	7105,0	22.30	18	02	CHN		8k00 A3EGN			Radio China Chinese language
REP	7106,0	23.00	18	02	n.i.		A3E			NI with fade – Spanish lang
REP	7110,0	00.16	16	02	ETH		8k00 A3EGN			Radio Ethiopia ??
REP	7125,0	23.18	17	02	CHN		CW			Continuous Carrier 5000uV S9+40dB
REP	7125,0	22.10	12	02	GUI		8k00 A3EGN			Radio Guinea - Konakry 25uV S8
REP	7132,0	22.16	12	02	MLA		8k00 A3EGN			Radio Sarawak ?? 25uV S8
REP	7190,0	23.30	8	02	MAR		8k00 A3EGN			Radio news and music
REP	7200,0	21.25	15	02	CHN		8k00 A3EGN			Spanish lang. Broadcast R.C.I. ??
REP	10105,0	23.00	3	02	MAL		J3E-U			Fishery
REP	10131,0	22.09	15	02	n.i.		J3E-U			Asiatic talks
REP	14002,0	08.22	19	02	MAR		J3E-U			Fishermen talks
REP	14007,0	08.05	13	02	SPA		J3E-U			Net from fishermen
REP	14131,0	21.07	20	02	n.i.		J3E-U			Several voices – English language
REP	14140,0	20.30	27	02	ITA		J3E-U			Talks to a ship
REP	28070,0	00.06	4	02	FRA		A3E			CB's inside Ham Bands
REP	28070,0	00.10	4	02	SPA		A3E			CB's inside Ham Bands
REP	28175,0	12.20	24	02	HRV		A3E			Radio-Taxis
REP	28274,0	09.24	21	02	SPA		A3E			Taxis
REP	28319,0	19.30	26	02	ITA		A3E			Family talks
REP	28350,0	17.40	2	02	RUS		A3E			Russian

RSGB - Great Britain – G4BOH (Chris)

SRAL – Finland – OH2BLU (Pekka)

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	REMARKS
SRAL	7000,0	0530-2000	*	2		UiCarr	N0N			Days 2, 18-20, 22
SRAL	7000,0	0830-0956	8, 15	2		UiPTR	F1B		250	
SRAL	7008,0	1030-1100	16	2		UiPTR	F1B		250	
SRAL	7018,0	1100-1800	dly	2	RUS	REA4	F1B/A		1000	MR at h+40
SRAL	7032,0	0830-1600	17	2		UiMUX	J7D	12x120	12x200	
SRAL	7038,7	0500-1800	dly	2	UKR	D	A1A			Sevastopol
SRAL	7038,9	0500-1800	dly	2	RUS	S	A1A			Severomorsk
SRAL	7039,0	0500-1800	dly	2	RUS	C	A1A			Moscow
SRAL	7044,0	1100-1630	dly	2	RUS	REA4	A1B			25 Hz dotter, Omsk
SRAL	7050,0	0600-2000	1-23	2		UiCarr	N0N			
SRAL	7053,0	0700-	23	2	RUS	UiMUX	J7D	12x120	12x200	Kaliningrad

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	REMARKS
		1730								
SRAL	7054,0	0530-0600	10-28	2	RUS	UiPTR	F1B		200	Moscow
SRAL	7070,0	0600-0617	11	2		234	R3E-u			
SRAL	7098,0	0700-1300	3, 7-9	2	RUS	UiPTR	F1B		200/250	
SRAL	7100,0	1500-1830	1, 2	2	PAK	R.Kashmir	A3E			
SRAL	7112,0	0700-1300	4	2		UiMUX	J7D	12x120	12x200	
SRAL	7113,0	0930-1210	13, 14	2		UiMUX	J7D	12x120	12x200	
SRAL	7116,0	1300	1, 3, 22	2	RUS	RJF94	A1A			
SRAL	7118,0	0730-1100	27	2		UiPTR	F1B		250	
SRAL	7120,0	1415-1802	dly	2	ERI	VoBME 1	A3E			QSY to 7130 days 2 – 10, jammed by ETH
SRAL	7125,0	1800-2010	*	2	GUI	Conakry	A3E			Days 6, 25, 26
SRAL	7127,0	1230-1300	14	2	RUS	UiPTR	F1B		250	
SRAL	7142,0	0740-1410	6,14, 22	2	RUS	UiPTR	F1B		250	
SRAL	7150,0	0700	4	2		147	R3E-u			
SRAL	7150,0	0700	25	2		187	R3E-u			
SRAL	7150,0	1430-1800	4 -10	2	ERI	VoBME	A3E			Jammed by ETH
SRAL	7155,0	1430-1800	12-25	2	ERI	VoBME	A3E			Jammed by ETH
SRAL	7162,0	0700-1330	1, 5, 18	2		UiPTR	F1B		250	
SRAL	7165,0	1430-1800	*	2	ETH	R Ethiopia	A3E			Days 1 – 10, 25 – 28, jammed by ETH
SRAL	7167,0	1300-1330	5	2		UiPTR	F1B		250	
SRAL	7170,0	1630-1800	27, 28	2	ERI	VoBME	A3E			Jammed by ETH
SRAL	7175,0	1430-1800	dly	2	ERI	VoBME 2	A3E			Jammed by ETH
SRAL	7176,0	0930-1030	1	2		UiPTR	F1B		250	
SRAL	7185,0	1430-1804	1-10, 26	2	ERI	VoBME	A3E			Jammed by ETH
SRAL	7188,0	0630-1000	2,16, 24	2		UiPTR	F1B		250	
SRAL	7193,0	0930-1330	*	2		UiPTR	F1B		200	Days 23, 24, 28
SRAL	7198,0	0700-0830	3, 25	2	RUS	UiMUX	J7D	12x120	12x200	
SRAL	7200,0	0750-1500	1-8	2	RUS	R.Rossii	A3E			St. Peterburg
SRAL	7200,0	1400-1530	dly	2	SDN	R Sudan	A3E			
SRAL	7200,0	1730-2100	dly	2	SDN	R Sudan	A3E			
SRAL	7200,0	1600-1730	dly	2	IRN	IRIB	A3E			
SRAL	7200,0	1729-1830	dly	2	IRN	IRIB	A3E			
SRAL	7200,0	2030-	dly	2	IRN	IRIB	A3E			
SRAL	14000,0	1300	1	2		UiCarr	N0N			
SRAL	14295,2	0600-11515	dly	2	TJK	R Tojikiston	A3E			3f 4765,07 kHz, Yangiyul TX

USKA – Switzerland – HB9CET (Peter)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
USKA	7000.0	1635	03	02			J3E-U			unid language; various stations
USKA	7000.0	2314	02	02		MEDOPS	MFSK8	125	1750	MIL 188-141A daily
USKA	7000.0	2349	02	02		EAGLE	MFSK8	125	1750	MIL 188-141A daily
USKA	7000.0	2356	02	02		BMROPS	MFSK8	125	1750	MIL 188-141A daily
USKA	7000.0	1643	03	02		LNGKNF	MFSK8	125	1750	MIL 188-141A daily
USKA	7000.0	1624	17	02			J3E-U			Spanish often
USKA	7000.0	1612	11	02		000	MFSK8	125	1750	MIL 188-141A TO: 001
USKA	7000.0	1643	11	02		001	MFSK8	125	1750	MIL 188-141A TO: 318
USKA	7000.0	1708	17	02		004	MFSK8	125	1750	MIL 188-141A TO: 319
USKA	7000.0	1709	17	02			NON			Long lasting carrier
USKA	7001.5	1641	17	02			F1B		200	unid
USKA	7014.0	1037	09	02			J7D	12x120	2600	PSK-2: CIS 12 = AT3004D
USKA	7014.0	1454	09	02			J7D	12x120	2600	PSK-4: CIS 12 = AT3104D
USKA	7018.0	2257	02	02	RUS	REA4	F1B	50	1000	(ID in F1A) daily
USKA	7038.7	2301	02	02	UKR	D	A1A			Beacon D Sevastopol daily
USKA	7038.8	1452	09	02	RUS	P	A1A			Beacon P Kaliningrad daily
USKA	7038.9	2302	02	02	RUS	S	A1A			Beacon S Murmansk daily
USKA	7039.0	2306	02	02	RUS	C	A1A			Beacon C Moscow daily
USKA	7039.1	2248	10	02	KGZ	A	A1A			Beacon A Kyrgyzstan daily
USKA	7039.2	2036	03	02	RUS	F	A1A			Beacon F Vladivostok daily
USKA	7039.4	2246	10	02	RUS	M	A1A			Beacon M Magadan daily
USKA	7044.0	2256	02	02	RUS		A1A		50	fast dots PRI 40ms PD 20ms
USKA	7050.0	1032	03	02			NON			long lasting carrier (several days)
USKA	7053.0	1703	23	02			J7D	12x120	2600	PSK-4: CIS 12 = AT3104D
USKA	7054.0	2349	09	02			F1B	50	200	unid
USKA	7068.0	2220	17	02			F1B	50	200	unid
USKA	7070.0	1745	02	02		244	MFSK8	125	1750	MIL 188-141A TO: 571
USKA	7070.0	1749	02	02		244	MFSK8	125	1750	MIL 188-141A TO: 204
USKA	7070.0	1746	03	02		571	MFSK8	125	1750	MIL 188-141A
USKA	7070.0	1948	03	02		514	MFSK8	125	1750	MIL 188-141A TO: 244
USKA	7070.0	2336	09	02		M5C	MFSK8	125	1750	MIL 188-141A TO: 571
USKA	7095.7	1311	11	02			OFDM	22.22	~3200	Spacing: 31.2 Hz
USKA	7098.0	0908	05	02			F1B	75	250	unid
USKA	7105.0	2241	10	02			A3E			BC (2 stations) daily
USKA	7105.0	2241	10	02			A3E			BC (2 stations) daily
USKA	7111.9	1454	03	02		ATFOPS	MFSK8	125	1750	MIL 188-141A
USKA	7111.9	1726	07	02		UDAIRI	MFSK8	125	1750	MIL 188-141A
USKA	7120.0	1636	03	02			A3E			BC
USKA	7120.0	1637	03	02			Noise		10 kHz	Jammer often
USKA	7125.0	2043	03	02			A3E			BC unid
USKA	7130.0	1716	10	02			A3E			Voice of the Broad Masses
USKA	7138.0	1724	10	02			FMCW	66.66	10 kHz	OTHR PD 3.75 s PRI 35 s
USKA	7153.0	1438	09	02			J7D		2600	CIS 12 idling only, followed by conversation in russian language
USKA	7165.0	1641	03	02	ERI		A3E			Voice of the Broad Masses daily
USKA	7175.0	1642	03	02	ERI		A3E			Voice of the Broad Masses daily
USKA	7175.0	1643	03	02			Noise		10 kHz	Jammer often
USKA	7179.0	2242	10	02			A3E			BC (weak) daily
USKA	7185.0	1643	03	02	ERI		A3E			Voice of the Broad Masses daily
USKA	7185.0	1644	03	02			Noise		10 kHz	Jammer
USKA	7189.0	1003	24	02			F1B	75	250	unid
USKA	7195.0	1711	11	02			A3E			BC
USKA	7200.0	1108	02	02	RUS		A3E		9 kHz	Radio Rossii splattering down to 7195 (left QRG)
USKA	7200.0	2030	03	02	IRN	IRIB	A3E		9 kHz	IRIB splattering down to 7195 Farsi (ident as Iran)
USKA	7200.0	2102	07	02	IRN	IRIB	A3E		9 kHz	IRIB splattering down to 7195 In spanish language
USKA	14305.0	0854	05	02			FMCW	66.66	10 kHz	OTHR PD 1.85 s PRI 30 s
USKA	14344.65	1503	17	02			PSK-8	2400	2400	Burst Duration 2.6s, Pilot 180ms Burst interval aprox. 6.8s;
USKA	14350.0	1213	19	02			J3E-U			"Radio Baltic Sea" (Pirate?) Music + Voice

Veron 1 – Netherlands – PA0GRU (Dick)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SHIFT	DETAILS
VERON	1876,5	19.13	13	2		Stanag	PSK		Stanag 4285 Scotland
VERON	3505,0	20.00	16	2		UiCW	A1A		5F 715 31952 111 etc
VERON	3553,0	19.10	4	2		Stanag	PSK		Stanag 4285
VERON	3554,0	18.53	22	2			PSK		Stanag 4285
VERON	3564,0	17.48	25	2		UiPTR	F1B		Ptr
VERON	3566,0	19.11	4	2		UiPTR	F1B	200	Ptr
VERON	3580,0	19.12	4	2		UiPTR	F1B	250	Ptr
VERON	3590,0	19.14	4	2		UiMUX	PSK		12 MPSK
VERON	3782,0	19.19	4	2	POR	CTP	F1B	850	Portugal Lisboa Navy HQ
VERON	7018,0	vt	vd	2		UiPTR	F1B		Revs/Dotter
VERON	7018,0	17.42	25	2	RUS	REA4	F1A		5F (followed by F1B Revs)
VERON	7038,7	vt	vd	2	UKR	D	A1A		D-beacon, 10 days
VERON	7038,9	vt	vd	2	RUS	S	A1A		S-beacon, 9 days
VERON	7039,0	vt	vd	2	RUS	C	A1A		C-beacon, 13 days
VERON	7054,0	20.01	15	2	RUS	UiPTR	F1B	200	Revs/Dotter
VERON	7083,0	10.12	4	2		UiMUX	PSK		12 MPSK
VERON	7117,0	08.22	28	2		UiPTR	F1B	200	Ptr
VERON	7121,0	16.50	28	2			PSK	1600	Stanag 4285
VERON	7125,0	19.45	25	2		UiBC	A3E		piano music
VERON	7128,0	16.45	6	2		Stanag	PSK		Stanag 4285
VERON	7200,0	09.37	4	2	RUS	VOR	A3E		Voice of Russia speech Russian
VERON	7200,0	16.52	14	2	IRN	IRIB	A3E		Iran BC with jamming signal
VERON	7200,0	18.45	2	2	TUR	V.O.T.	A3E		BC Stimme der Turkei, also 5-2
VERON	7200,0	20.36	25	2	IRN		A3E		Islamic Republic of Iran Spanish program
VERON	7200,0	vt	vd	2	RUS	VOR	A3E		Voice of Russia, 5 days heard
VERON	7200,0	vt	vd	2		UiBC	A3E		Chinese speech, 3 days
VERON	10125,0	15.37	9	2		OTHR	PON		OTHR radar
VERON	14000,5	07.14	21	2	Israel	UiCAR	NON		carrier
VERON	14232,0	10.39	22	2		UiPTR	F1B		Ptr
VERON	14233,0	10.40	22	2		OFDM			OFDM
VERON	14260,0	09.37	9	2		OFDM			OFDM
VERON	14299,0	10.30	25	2		UiCAR	NON		carrier, S9
VERON	14312,0	11.40	9	2	CIS	UiCW	A1A		Proc
VERON	18086,0	10.53	24	2		OTHR	PON		OTHR radar
VERON	18167,0	10.37	11	2		OTHR	PON		OTHR radar
VERON	21122,0	11.22	19	2		UiILL	J3E/u		Maroccon fishery
VERON	21245,0	11.12	19	2		UiILL	J3E/u		Spanish male-female voices
VERON	21425,0	10.45	28	2		UiILL	J3E/u		Spanish, male voice

Veron 2 – Netherlands – PA0GRU (Dick)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SHIFT	DETAILS
VERON	3564,0	17.48	25	2		UiPTR	F1B		Ptr
VERON	3782,0	20.09	5	2	POR	CTP	F1B	850	Printer
VERON	7014,0	15.11	9	2		UiOTHR	PON		40pps system; 3k spread
VERON	7018,0	vt	vd	2		UiPTR	F1B		Revs/Dotter
VERON	7018,0	15.40	1	2	RUS	REA4	F1A		5F (followed by F1B Revs)
VERON	7018,0	12.40	11	2	RUS	REA4	F1A		5F (followed by F1B Revs)
VERON	7018,0	20.45	4	2	RUS	REA4	F1A	1000	REA4= (5F)= REA-4 K, also 11/2
VERON	7018,0	13.42	16	2	RUS	REA4	F1A	1000	REA4= 16230 20069 (etc) 5F REA4 K
VERON	7018,0	11.41	26	2	RUS	REA4	F1A	1000	REA4=5F REA4 K
VERON	7038,7	20.47	26	2	UKR	D	A1A		Beacon Sevastopol
VERON	7038,9	15.09	9	2	RUS	S	A1A		Beacon Murmansk
VERON	7039,0	15.09	9	2	RUS	C	A1A		Beacon Moscow
VERON	7039,1	20.48	26	2	KGZ	A	A1A		Beacon Bishek
VERON	7039,2	16.18	15	2	RUS	F	A1A		F-beacon
VERON	7039,4	07.59	3	2	RUS	M	A1A		M-beacon
VERON	7044,0	14.40	23	2	RUS	REA4	A1A		REA4=23140 20069 etc 5F

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SHIFT	DETAILS
									REA4 K
VERON	7054,0	21.14	5	2	RUS	UiPtr	F1B	200	Dotter; bad filtered
VERON	7105,0	vt	vd	2	CHN	R. China	A3E		s6-s9; around 22.00 utc
VERON	7105,0	vt	vd	2	TWN	Sound of Hope	A3E		s5-s7; around 22.00 utc
VERON	7120,0	15.06	9	2	ETH		JAM		Rushing noise; 16k spread
VERON	7130,0	14.37	5	2	ETH		JAM		Rushing noise; 20k spread
VERON	7136,0	10.53	6	2					frequency hopper
VERON	7150,0	17.35	5	2		UiBC	A3E		Weak signal; s4
VERON	7159,0	11.08	15	2		UiPtr	F1B	250	Ptr
VERON	7175,0	15.09	5	2	ETH		JAM		Rushing noise; 40k spread
VERON	7175,0	15.55	5	2	ERI	VOBME	A3E		male&female speech; E.African music; s9
VERON	7175,0	15.34	27	2	ETH		JAM		Rushing noise; 32k spread
VERON	7193,0	09.35	27	2	RUS	UiPtr	F1B	200	Printer
VERON	7200,0	12.47	5	2	RUS	R. Rossia	A3E		s9+; splatter 10k down
VERON	7200,0	17.32	5	2	IRN	IRIB	A3E		male speech & Asian music; s9+
VERON	7200,0	20.38	26	2	IRN	IRIB	A3E		Spabish speech; s9+
VERON	7200,0	08.03	3	2	RUS	Radio Rosii	A3E		Voice of Russia, speech and music
VERON	7200,0	16.15	14	2		UiBC	A3E		Speech and music, very strong
VERON	14052,0	12.53	8	2		UiMux	PSK8	2k4	
VERON	14099,8	11.23	8	2	F?		J3E-1		French dialect; fishery?
VERON	14289,0	13.09	8	2					frequency hopper
VERON	14312,0	11.40	9	2	CIS	UiCW	A1A		5BL (ending: rpt all QLN ar)
VERON	18164,0	14.48	23	2		UiOTHR	PON		50pps system; 22k spread
VERON	21033,0	12.46	8	2		UiOTHR	PON		50pps system; 25k spread
VERON	21098,0	11.08	8	2		UiOTHR	PON		50pps system; 25k spread
VERON	21199,5	14.08	23	2		UiMux	PSK2	1k	Bursts of 800ms
VERON	21232,0	14.07	11	2					frequency hopper
VERON	21265,0	15.06	20	2					frequency hopper
VERON	21274,0	14.06	23	2					frequency hopper
VERON	21434,0	10.58	20	2		UiOTHR	PON		25pps system; 32k spread
VERON	21450,0	14.52	9	2					frequency hopper

IARUMS Region 1

Many thanks for your interest!

The monitoring team of IARU Region 1

credits:

Wavecom Elektronik – Buelach – Switzerland

SSB-Electronic – Iserlohn – Germany

BAZ – Special Antennas – Bad Bergzabern - Germany

FTS – Funktechnik Seipelt – Hoppegarten - Germany

German PTT (BNetzA = Federal Network Agency)

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