



# Monitoring System

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The monthly newsletter for Region 1

## May 2011

### The members of the IARUMS Region 1 Monitoring Team:



### Acknowledgements

++ ARI: DH7SA – Salvatore ++ ARSK: 5Z4NU - Ted ++ DARC: DJ9KR - Uli ++ CAST: DL1BDF – Mustapha ++  
++ EARA: SU1SA – Sayed ++ IRTS: EI4GXB - Ger ++ KARS: 9K2RR – Faisal ++ MARL: 9H1M – Dominic ++  
++ MRASZ: HA7PL - Laci ++ NARS: 5N9AYM – Yusuf ++ OEVSV: OE3DMA – Alex ++ PZK: SP3SUZ – Wladyslaw ++  
++ RAL: OD5MV – Hani ++ REP: CT4AN – Jose ++ RSGB: G4BOH - Chris ++ SARL: ZS1FCS - Fred ++  
++ SRAL: OH2BLU - Pekka ++ URE: EA5DY - Salvador ++ USKA: HB9CET - Peter ++ VERON: PA0GRU - Dick ++  
++ ZRS: S56ZDB – Darko ++ G3VZV – Graham (satellite intrusions) ++ TG9AJR – Juan (Co-ordinator Region 2) ++  
++ VK3MV – Peter (Co-ordinator Region 3) ++ DF8FE – Martin (Webmaster assistance) ++ DL8AAM (ALE) ++  
++ DJ7KG (BUOYS) ++ DF5SX (BC) ++ DARC (server support) ++ IARU Region 1 assistance ++  
++ 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. Tunisian Monitoring System

DL1BDF, Mustapha, is the new MS Coordinator of CAST, the Tunisian Amateur Association. Mustapha is well known the worldwide amateur community for many actions. Dear Mustapha, you are welcomed to our Region 1 Monitoring Team! The IARU Region 1 Monitoring System has now 21 members!

## 2. 21001.5 Yakhta disappeared

The Russian system Yakhta (vocoder and F1B) disappeared. Many thanks to the German PTT (BNetzA) for the official complaint!

## 3. Brazilian intruders on 28 MHz

Now they are back: Brazilian CBers audible from 28000 – 28415 kHz, often in AM with roger-beeps and echo-microphones. I even found them on 29695 kHz in AM! Every evening you can hear these fellows. Many of them seem to be drunken.

## 4. Fishery buoys

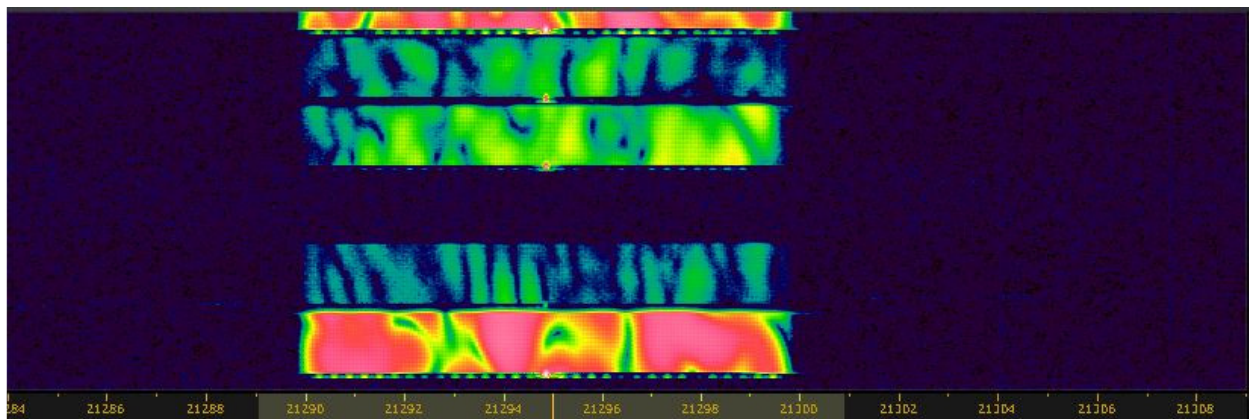
We expected fishery driftnet buoys again on 28 MHz. Of course we found them between 28000 and 28500 kHz. Bearings and other observations showed the South Atlantic region. Many thanks to Georg, DJ7KG, who is observing the buoys for several years. More infos: <http://www.iarums-r1.org/iarums/buoys.pdf>

## 5. AT3004D in DSB-mode on 14 MHz

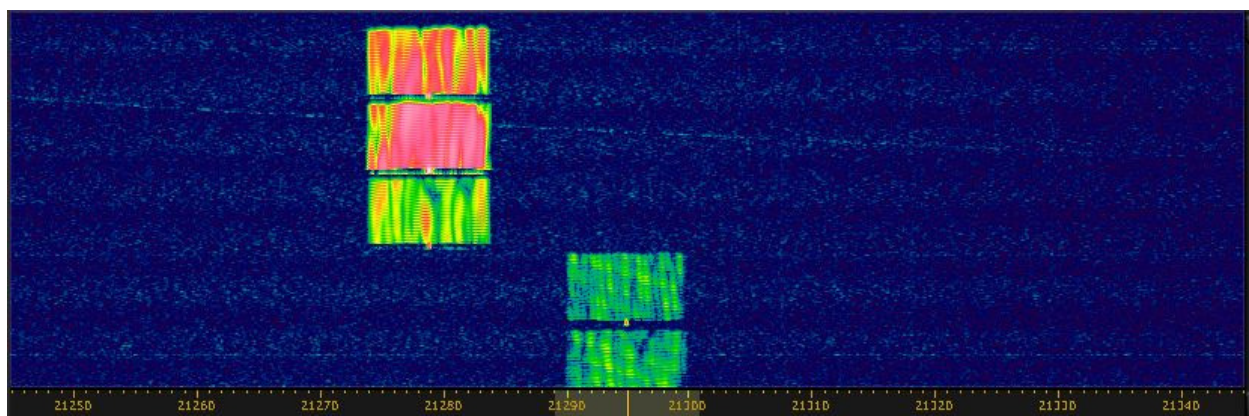
We observed an AT3004D system (12 x 120 Bd BPSK + pilottone) on 14338 kHz in USB and LSB. Parameters: 24 x 120 Bd BPSK and 2 pilottones, stretching over 5600 Hz. Location: Chabarovsk, East-Russia. We were not amused.

## 6. JORN from Australia on 21 MHz

On May 25<sup>th</sup> I found a JORN radar system from Australia on 21279 and 21295 MHz at 0900 UTC. **JORN = Jindalee Operational Radar Network**. The radar was transmitting bursts of 1.2 sec length and 50 pps. Bearings by the German PTT confirmed my results. The bursts were 10 kHz wide. **Please observe the Perseus screenshots below! (DK2OM with Perseus)**



21295



21279

21295

## 7. Homepage IARU Region 1

Homepage IARUMS Region 1

Homepage IARUMS Region 2

Homepage IARUMS Region 3

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

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

<http://www.intruder-watch.org/>

<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 MAY 2011

There was no appreciable change in the situation, and propagation was indifferent on 40 meters. Khartoum, Addis Ababa and Eritrea maintained their broadcasts in the range 7100 – 7200 kHz.

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

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### ARSK – Kenya – 5Z4NU (Ted)

H'd by	kHz	UTC	dd	mm	ITU	Identity	Mode	Details
ARSK	6999.0	0905	31	5	East Africa	UiPHONE	J3Eu	KiSwahili. Military? Spreads into band.
ARSK	7007.0	vt	31	5	DRC	UiPHONE	J3Eu	Vernacular.
ARSK	7008.0	1445	21	5	DRC	UiPHONE	J3E	Vernacular.
ARSK	7011.0	1430	8	5	SOM	UiPHONE	J3Eu	Somalis.
ARSK	7027.0	vt	*	5	DRC	UiPHONE	J3Eu	French, Selcal.*11,31,
ARSK	7028.0	vt	31	5	SOM	UiPHONE	J3Eu	Somalis.
ARSK	7040.0	vt	*	5	DRC	UiPHONE	J3E	Vernacular.*16,
ARSK	7045.0	1231	24	5	DRC	UiPHONE	J3Eu	Vernacular.
ARSK	7049.0	vt	*	5	DRC	UiPHONE	J3E	Vernacular.*9,
ARSK	7050.0	1250	20	5	DRC	UiPHONE	J3E	Vernacular.
ARSK	7057.0	1230	24	5	SOM	UiPHONE	J3Eu	Somalis.
ARSK	7074.0	vt	20	5	SDN	UiPHONE	J3Eu	NGO. Vernacular, English, phonetic messages, possibly encrypted.
ARSK	7075.0	vt	*	5	ERI?	UiPHONE	J3Eu	Vernacular.*8,9,15.16,22,24,
ARSK	7077.0	1400	17	5	SOM	UiPHONE	J3Eu	Somalis.
ARSK	7080.0	0956	28	5	DRC	UiPHONE	J3Eu	Vernacular.
ARSK	7110.0	vt	1	5	ERI?	UIBC	A3E	Broadcast.
ARSK	7120.0	vt	*	5	ETH	UIBC	A3E	Broadcast.*14,24,
ARSK	7129.0	1403	17	5	SOM	UiPHONE	J3Eu	Somalis.
ARSK	7130.0	vt	*	5	ERI?	UIBC	A1E	Broadcast.*15,16,
ARSK	7139.0	0817	16	5	DRC	UiPHONE	J3Eu	Vernacular.
ARSK	7175.0	vt	dly	5	ERI?	UIBC	A3E	Broadcast.
ARSK	7185.0	0954	28	5	SOM	UiPHONE	J3Eu	Somalis.
ARSK	7200.0	vt	dly	5	SDN	Khartoum	A3E	Broadcast in Arabic, Khartoum.

### DARC 1 – Germany – DJ9KR reports:

The “Voice of Turkey” on 10110 kHz and 14210 kHz with two Intermodulation Products has gone. Big Signals with S9+35dB!

On April 6<sup>th</sup> Wolf Hadel, DK2OM, found a strong BC station on **10110 kHz**. The transmitter was carrying a program in Turkish language. On April 8<sup>th</sup> Gerhard Schweidler, OE3GSA, from OeVSV reported another strong BC on **14210 kHz** also in Turkish language to me. It was also carrying a program in Turkish language. I checked the frequencies. The jingles of the BCs told me, that the “Voice of Turkey” was broadcasting on two amateur radio frequencies. I immediately informed the German telecommunications authorities “Federal Network Agency” (Bundesnetzagentur) and, by means of Internet, the intruder watches of IARU Regions 1, 2,



and 3. I realized that on both frequencies besides the very loud program in Turkish voice there was also audible a second program very faintly in the background: On 10110 kHz a program in English voice, and on 14210 kHz a program in German voice. So I was sure that both frequencies were not fundamentals or harmonics, but intermodulation products (IMs). I looked for the same program in Turkish language lower and higher than 10100 kHz and quickly found "Voice of Turkey" on **9460 kHz** with S9+50dB. By means of this frequency I was able to find out the other frequencies which had led to the two IMs:

$$9785 \text{ kHz} \times 2 - 9460 \text{ kHz} = 10110 \text{ kHz}$$

$$11835 \text{ kHz} \times 2 - 9460 \text{ kHz} = 14210 \text{ kHz}$$

### The "knitting pattern" of the Intermodulation:

The program in Turkish language was already in course on 9460 kHz. When 9785 kHz (English voice) was switched on, 10110 kHz was "generated". When 11835 kHz (German language) was switched on, 14210 kHz was "generated". When the interference had already lasted longer than one month, I sent letters by post and email to the Turkish Radio Television Corporation in Ankara and also to the Turkish amateur radio club. I never got an answer from the "Voice of Turkey". From the President of the Turkish Amateur Radio Society, OM Aziz Sasa TA1E, I received an email by May 26<sup>th</sup>. He asked me, if the interference was still lasting on. In the evening of May 26<sup>th</sup> I checked both frequencies, and, **oh wonder, 10110 kHz and 14210 kHz were without interference!** Of course I do not exactly know who finally helped to QSY the Voice of Turkey off our ham bands. My sincere thanks go to Gerhard Schweidler, OE3GSA, and Alex Wagner, OE3DMA, from OeVSV-Austria bandwatch, to Wolf Hadel, DK2OM, "my" vice coordinator of DARC-MS. Also I want to thank engineer Edmund Grim of Federal Network Agency at Konstanz, Germany and his office. Thanks also to everybody who has helped in this case.

### DARC 2 – Germany – DJ9KR (Uli)

BC transmissions, IM products, harmonics, IM-products = blue

CLUB	kHz	UTC	DD	MM	ITU	Call Sign	MODE	BD	SH	Remarks and Comments
DARC	3500,0	0750	02	05	G	UiILL	J3E-U			UK fishery
DARC	3500,0	2055	03	05	G	UiILL	J3E-U			UK fishery
DARC	3500,0	vt	vd	05	E	UiILL	J3E-U			Spanish fishery heard 10 19 23 at 1000, 2010, 0702
DARC	3506,4	2125	21	05	CIS	UiILL	A3E			CIS pirates in AM (A3E)
DARC	3510,0	2046	12	05	N.Eu	UiILL	J3E-U			Scandinavian fishery
DARC	3515,0	2132	18	05	E	UiILL	J3E-U			Spanish fishery
DARC	3520,0	2016	12	05	N.Eu	UiILL	J3E-U			Scandinavian fishery
DARC	3535,5	vt	vd	05	E	UiILL	J3E-U			Spanish fishery heard 13 17 30 at 1958, 1935, 2100
DARC	3550,0	0720	07	05	F	French Lis Amateurs	A3E			daily, AM in CW-section
DARC	3560,0	1918	25	05	N.Eu	UiILL	J3E-U			Scandinavians
DARC	3575,0	2016	11	05	N.Eu	UiILL	J3E-U			Scandinavian fishery
DARC	3588,0	2007	25	05	F	French Lis Amateurs	A3E			French Lis Amateurs in SSB-LSB in CW section
DARC	6999,0	1555	15	05	I	UiILL	J3E			"proba uno, due, tre", Italian voice, using SSB-U and later SSB-L
DARC	7000,0	0615	03	05	E	UiILL	J3E-U			Spanish fishery with vocoder system CRY-2001
DARC	7000,0	1707	04	05	MRC	UiILL	J3E-U			Moroccan fishery
DARC	7000,0	1645	18	05	E	UiILL	J3E-U			Spanish fishery
DARC	7000,0	2132	25	05	I	UiILL	F3E			Italian pirates in FM (F3E)
DARC	7005,5	2056	02	05	I	IT9RYH	J3E-L			IT9RYH, OP Nino, calling CQ in SSB-LSB to provoke lis amateurs
DARC	7009,0	2005	10	05	RUS	V.o.Russia	A3E			Russian px, S9, is IM
DARC	7009,0	2012	15	05	RUS	V.o.Russia	A3E			Ru px, divine service
DARC	7009,0	2052	25	05	RUS	V.o.Russia	A3E			Russian px, S9, is IM
DARC	7010,0	vt	02	05	I	IT9RYH	J3E-L			"CQ 40 m band" in SSB-LSB, heard 1956 - 2005, no tape as "Nino" is answering to complaining hams, just info!
DARC	7020,0	0000	26	05		UiBC	A3E			French px, S9, weak modulation

CLUB	kHz	UTC	DD	MM	ITU	Call Sign	MODE	BD	SH	Remarks and Comments
DARC	7022,0	2011	14	05	RUS	UiMUX	PSK2			location Orenburg
DARC	7038,7	0115	30	05	UKR	beacon D	A1A			beacon Sevastopol
DARC	7039,0	0115	30	05	RUS	beacon C	A1A			beacon Moscow
DARC	7054,0	2055	17	05	RUS	UiPTR	F1B	50	200	unid printer RUS MIL Moscow
DARC	7105,0	2055	17	05	TUN	RTV Tunisia	A3E			Ar px
DARC	7120,0	vt	16	05	ERI	VOBME	A3E			"Voice of Broad Masses of Eritrea" VOBME barely audible under white noise jammer, heard 1613 - 1651
DARC	7120,0	vt	16	05	ETH	ETH Govt. Jammer	JAM			white noise jammer heard 1613 - 1615
DARC	7120,0	2104	23	05	ERI	VOBME	A3E			typical music, S9+15dB, found // 7175, however weak modulation
DARC	7125,0	1952	02	05		UiBC	A3E			unid BC heard
DARC	7125,0	2005	10	05	GUI	R.Conakry	A3E			Fr px S9+10dB
DARC	7125,0	vt	17	05	GUI	R.Conakry	A3E			heard 0611 (weak), 2055 with French px S9+10dB
DARC	7125,0	2115	28	05	GUI	R.Conakry	A3E			French px S9+20dB
DARC	7125,0	2101	29	05	GUI	R.Conakry	A3E			French px
DARC	7130,0	1550	15	05	ETH	ETH Govt. Jammer	JAM			white noise jammer on VOBME
DARC	7130,0	1550	15	05	ERI	VOBME	A3E			barely detectable under white noise jammer of Ethiopia
DARC	7132,0	2038	01	05	RUS	UiMUX	PSK2			AT-3004-D, location Voronezh
DARC	7165,0	0659	11	05	RUS	UiMUX	PSK2			AT-3004-D
DARC	7175,0	1731	11	05		UiBC	A3E			Ar px S9+20dB
DARC	7175,0	1550	15	05	ETH	ETH Govt. Jammer	JAM			white noise jammer on VOBME
DARC	7175,0	1550	15	05	ERI	VOBME	A3E			barely detectable under white noise jammer of Ethiopia
DARC	7175,0	2104	23	05	ERI	VOBME	A3E			typical music, S9+30dB, found // 7120
DARC	7180,0	vt	16	05	ERI	VOBME	A3E			barely audible under white noise jammer, heard 1613 - 1651
DARC	7180,0	vt	16	05	ETH	ETH Govt. Jammer	JAM			white noise jammer heard 1613 - 1651
DARC	7180,0	1513	17	05	ERI	VOBME	A3E			barely audible under white noise jammer
DARC	7180,0	1513	17	05	ETH	ETH Govt. Jammer	JAM			white noise jammer
DARC	7185,8	vt	27	05	BRM	Myanma Radio	A3E			QRG 7185,75 kHz, heard/reported 1211 - 1330 s/off by Ron Howard, CA, USA - not heard in DL even during night time - .wav-file under: <a href="http://www.box.net/shared/x0eg4zfgo8">www.box.net/shared/x0eg4zfgo8</a>
DARC	7189,7	0113	30	05	CLN	SLB Sri Lanka	A3E			typical Sri Lankan music
DARC	7190,0	2012	15	05		UiBC	A3E			IM?, En px heard
DARC	7195,0	1952	02	05		UiBC	A3E			unid BC heard
DARC	7200,0	vt	02	05	SDN	R.Omdurman	A3E			Ar px, good audio, S9+30dB, heard 1840 - 1952
DARC	7200,0	2054	25	05	SDN	R.Omdurman	A3E			Ar px S9+30dB, but weak modulation
DARC	7200,0	2053	29	05	SDN	R.Omdurman	A3E			is active
DARC	10105,0	1921	11	05	E	UiILL	J3E-U			2 male persons in Spanish voice, DIESEL engine noise so possibly Fishery
DARC	10105,0	2043	12	05	E	UiILL	J3E-U			Spanish fishery
DARC	10110,0	1833	02	05	TUR	TRT Ankara	A3E			2 px, Ar and En
DARC	10110,0	1904	14	05	TUR	TRT Ankara	A3E			Turkish px S9+10dB
DARC	10110,0	vt	22	05	TUR	TRT Ankara	A3E			s/on at 1825, Turkish (strong) and English (weak): "Voice of Turkey", found // 9785

CLUB	kHz	UTC	DD	MM	ITU	Call Sign	MODE	BD	SH	Remarks and Comments
DARC	10110,0	vt	25	05	TUR	TRT Ankara	A3E			Turkish px and jingle, s/on at 1825, at 1830 jingle and ann: "This is the Voice of Turkey", found // 9785
DARC	10110,0	vt	26	05	TUR	TRT Ankara	A3E			has gone, no tx-ions any more
DARC	10110,0	vt	dly	05	TUR	TRT Ankara	A3E			IM-occurs: 1723 - 1823, QRGs involved 9460 kHz (Turkish) and 9785 kHz (English)
DARC	10120,0	1940	14	05	E	UiILL	J3E-U			Spanish fishery
DARC	10121,8	1904	14	05	E	UiILL	J3E-U			Spanish fishery - report SP3SUZ
DARC	10122,8	1840	25	05	G	UiILL	J3E-U			male persons in English (British) voice, UK fishery?
DARC	10130,0	1824	15	05		UiOTH R	FMCW			S9+30dB, 30 kHz spread
DARC	10130,0	1914	20	05	E	UiILL	J3E-U			2 male persons in Spanish voice
DARC	10132,1	1840	02	05	E	UiILL	J3E-U			2 male persons in Spanish voice
DARC	10132,2	1852	01	05	E	UiILL	J3E-U			Spanish fishery
DARC	10135,5	1838	22	05		UiBC	A3E			French px S8
DARC	10145,0	0755	22	05	CIS	UiILL	J3E-U			2 male persons in Russian voice, S9+10dB-signal
DARC	10147,2	1835	02	05		UiBC	A3E			Greek px, vy distorted, much FM on modulation
DARC	10149,9	1750	18	05		UiILL	J3E-U			unid pirates
DARC	10150,0	vt	vd	05	E	UiILL	J3E-U			Spanish fishery heard 06, 10 at 0740, 0945
DARC	10151,0	1750	18	05		UiILL	J3E-U			unid pirates, just info, not ham band!
DARC	14000,0	0725	01	05		UiCAR	N0N			long lasting carrier S9+20dB
DARC	14000,0	vt	vd	05		UiILL	J3E-U			unid MIL traffic, codan beeps, heard 22 23 at 1019, 1730
DARC	14001,0	1533	22	05		UiILL	J3E-U			unid pirates, QTE 120 degs.
DARC	14008,0	0725	01	05	RUS	UiPTR	F1B	50	250	RUS MIL Moscow, printer is active
DARC	14008,0	vt	01	05	RUS	UiPTR	N0N			carrier heard 0647, 0726 S9+30dB
DARC	14028,0	1148	17	05	RUS	UiPTR	F1B	75	250	printer location Penza
DARC	14053,0	vt	02	05	S.As	UiILL	J3E-U			2 male persons in S.As voice
DARC	14056,2	1522	24	05	INS	UiILL	J3E-U			pirates from Indonesia
DARC	14058,0	1148	17	05		UiPTR	F1B			unid printer
DARC	14075,0	1214	16	05		UiBC	A3E			German px, S8-signal
DARC	14116,0	0802	12	05		UiPTR	F1B			unid printer S9+20dB
DARC	14120,0	0803	03	05	RUS	UiPTR	F1B	75	250	printer loated Moscow
DARC	14122,0	0912	12	05	RUS	UiMUX	PSK2			AT-3004-D, location Moscow, S9+10dB
DARC	14210,0	vt	15	05	TUR	TRT Ankara	A3E			s/on at 1729, 9460 is active, 11835 s/on at the same time as 14210 with German py, S9+20dB
DARC	14210,0	1724	16	05	TUR	TRT Ankara	A3E			s/on at 1724 with jingle, s/on with 11835
DARC	14210,0	vt	25	05	TUR	TRT Ankara	A3E			Turkish px and jingle, s/on at 1725 with Turkish px, Ge px weak, 1728 ann.: "Hier ist die Stimme der Türkei", found // 11835 - S9+25dB overall signal on 14210
DARC	14210,0	vt	26	05	TUR	TRT Ankara	A3E			has gone, no tx-ions any more
DARC	14210,0	vt	dly	05	TUR	TRT Ankara	A3E			IM occurs: 1723 - 1823, QRGs involved 9460 kHz (Turkish) and 11835 (German)
DARC	14228,0	1728	14	05	RUS	UiMUX	PSK2			AT-3004-D, mux, roaring noise, location Moscow
DARC	14253,0	0823	03	05	RUS	UiMUX	PSK4			AT-3004-D, area of Astana
DARC	14272,0	0803	03	05		UiPTR	F1B			unid printer
DARC	14295,1	ady	dly	05	TJK	R.Tajik	A3E			S8-signal , is 3f of 4765
DARC	14320,0	1733	14	05	ROU	YO3CZW	J3E-L			S9+20dB-signal, distorted modulation, DJ9KR found

CLUB	kHz	UTC	DD	MM	ITU	Call Sign	MODE	BD	SH	Remarks and Comments
										fundamental on 7160 - just info
DARC	14325,1	1820	24	05	F.Ea	UiILL	J3E-U			Far East pirates, voice traffic, also ALE used
DARC	14336,0	vt	12	05	RUS	UiPTR	F1B			printer heard 0802 - 0914, location is Chita
DARC	14350,0	vt	31	05	E	UiILL	J3E-L			female in Spanish voice, reading lyric text 0703 - 0707
DARC	18061,6	1605	16	05		UiCAR	N0N			long lasting carrier S6
DARC	18168,0	vt	14	05		lis amateurs with LW6DX	J3E-U			LW6DX, Daniel, contacting M0CVK, K2CAF, EI3KE - USB is out-of-band operation, just info!
DARC	21000,0	1850	01	05	E	UiILL	J3E-U			Spanish fishery
DARC	21000,0	1100	02	05	MRC	UiILL	J3E-U			Moroccan fishery
DARC	21000,0	2036	06	05	B	UiILL	J3E-U			illicit stations from Brazil, commercials?
DARC	21000,0	1957	08	05	B	UiILL	J3E-U			illicit stations from Brazil, commercials?
DARC	21000,0	1835	11	05	KOR	UiILL	J3E-U			Korean ships
DARC	21000,0	1430	13	05	F.Ea	UiILL	J3E-U			Far East pirates
DARC	21000,0	1050	18	04	SDN	Sudanese MFA	J3E-U			calling SDN Emba in Yemen, traffic starts by whistling
DARC	21000,0	1916	18	05	POR	UiILL	J3E-U			Pirates in Port. Voice
DARC	21000,5	1630	01	05	F.Ea	UiILL	J3E-U			pirates from Far East
DARC	21205,0	1445	15	05	ARS	SABS Riyadh	A3E			spurious of 21505, S3-signal
DARC	21205,0	1214	16	05	ARS	SABS Riyadh	A3E			heard // 21505
DARC	21205,0	vt	16	05		UiOTH Radar	FMCW			radar heard 0746 s/on - 0851s/off, see 21305!
DARC	21275,0	0806	28	05		UiOTH Radar	FMCW			wobble, chirping pulses in short strings, 4 pps
DARC	21280,0	0652	31	05		UiOTH Radar	FMCW			chirping pulses in short strings
DARC	21292,0	1721	11	05		UiPTR	F1B			unid printer
DARC	21295,0	1445	15	05	ARS	SABS Riyadh	A3E			spurious of 21505
DARC	21295,0	1153	17	05	ARS	SABS Riyadh	A3E			spurious of 21505, s/on at 1153
DARC	21305,0	1427	01	05	ARS	SABS Riyadh	A3E			Ar px, S6-signal, s/on at 1427, found // 21505
DARC	21305,0	1226	02	05	ARS	SABS Riyadh	A3E			S6-signal, found // 21505
DARC	21305,0	1445	15	05	ARS	SABS Riyadh	A3E			spurious of 21505, S4-signal
DARC	21305,0	vt	16	05		UiOTH Radar	FMCW			radar heard 0720 - 0746 s/off, S9+30dB, 30 kHz spread
DARC	21305,0	1153	17	05	ARS	SABS Riyadh	A3E			spurious of 21505, s/on at 1153
DARC	21330,0	vt	15	05		UiOTH Radar	FMCW			heard 1445 - 1551, S9+30dB, 20 kHz spread
DARC	21350,0	1723	14	05	CIS	UiILL	J3E-L			2 male persons in Russian voice
DARC	21370,0	1723	14	05		UiOTH Radar	FMCW			rattling pulses S9+10dB
DARC	21405,0	1327	01	05	ARS	SABS Riyadh	A3E			Ar px, S6-signal, s/on at 1427, found // 21505
DARC	21405,0	1445	15	05	ARS	SABS Riyadh	A3E			spurious of 21505
DARC	21405,0	1153	17	05	ARS	SABS Riyadh	A3E			spurious of 21505, s/on at 1153
DARC	21410,5	0606	19	05	RUS	UiPTR	F1B			is 2f of 10705,25
DARC	21421,4	1445	15	05	S.As	UiILL	J3E-U			male person, As language
DARC	21453,5	1327	01	05	ARS	SABS Riyadh	A3E			Ar px, S3-signal, s/on at 1427, found // 21505
DARC	24860,0	0623	12	05		UiOTH Radar	FMCW			chirping pulses, strong ones and weaker ones "answering" like echos

CLUB	kHz	UTC	DD	MM	ITU	Call Sign	MODE	BD	SH	Remarks and Comments
DARC	28000,0	1706	10	05	E	UiILL	A3E			CB-ers from Spain
DARC	28000,0	1350	26	05	CIS	UiILL	A3E			pirates in Russian voice
DARC	28005,0	1022	20	05	I	UiILL	F3E			CB-ers from Italy
DARC	28005,0	1026	20	05	E	UiILL	A3E			CB-ers from Spain
DARC	28005,0	vt	vd	05	B	UiILL	A3E			Brazilian CB-ers, heard 01, 10 11, 12 at 1948, 1728, 1918, 1940, mentioning "Sao Paulo"
DARC	28015,0	1948	15	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28015,0	0810	27	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	28025,0	0931	11	05	E	UiILL	A3E			CB-ers from Spain
DARC	28035,3	1928	06	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28045,0	1914	06	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28045,0	1946	27	05	B	UiILL	J3E-U			CB-ers
DARC	28050,0	1641	31	05		UiILL	J3E-U			vocoder Yakhta, voice with F1B-synchro
DARC	28050,0	1645	31	05	CIS	UiILL	A3E			Russian voice
DARC	28055,0	1930	05	05	B	UiILL	A3E			Brazilian CB-ers
DARC	28055,0	1450	26	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	28065,0	1927	06	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28075,0	1936	06	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28076,0	1917	06	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28085,0	1517	26	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	28095,0	1948	15	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28095,0	2002	15	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28105,0	1925	01	05	B	UiILL	A3E			Brazilian CB-ers
DARC	28105,0	1915	06	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28105,0	1443	31	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	28111,0	1836	10	05	B	UiILL	J3E-U			CB-ers from Brazil
DARC	28115,0	1846	01	05	E	UiILL	A3E			Spanish CB-ers
DARC	28115,3	vt	vd	05	B	UiILL	A3E			Brazilian CB-ers, heard 01, 09 at 1927, 2058, 1953
DARC	28120,0	1850	10	05	B	UiILL	A3E			CB-ers from Brazil disturbing PSK-31
DARC	28135,0	1522	26	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	28145,2	1928	05	05	B	UiILL	A3E			Brazilian CB-ers
DARC	28145,3	1940	13	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28155,0	2036	09	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28155,0	1514	26	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	28165,0	1020	26	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	28174,0	1900	01	05	B	UiILL	A3E			Brazilian CB-ers
DARC	28180,0	1512	26	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	28185,0	1847	01	05	B	UiILL	A3E			Brazilian CB-ers
DARC	28185,0	1906	06	05	E	UiILL	A3E			Spanish CB-ers
DARC	28195,0	1518	26	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	28204,4	1113	01	05	B	UiILL	J3E-L			Portuguese male voice, roger beep, to 28304,4
DARC	28205,0	1519	26	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	28205,5	1901	01	05	B	UiILL	A3E			Brazilian CB-ers
DARC	28214,5	1902	01	05	B	UiILL	A3E			Brazilian CB-ers
DARC	28235,0	0827	27	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	28255,5	vt	vd	05	B	UiILL	A3E			Brazilian CB-ers, heard 01 06 at 1926, 1915
DARC	28265,5	1925	01	05	B	UiILL	A3E			Brazilian CB-ers
DARC	28285,0	vt	vd	05	B	UiILL	A3E			Brazilian CB-ers, heard 01, 26 at 1927, 1959
DARC	28295,0	1926	06	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28295,0	1942	13	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28295,0	0828	27	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	28295,0	1932	27	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28300,0	1923	26	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	28304,4	1120	01	05	B	UiILL	J3E-L			Portug. male voice, roger beep, to 28308,4
DARC	28305,0	2004	15	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28308,4	vt	01	05	B	UiILL	J3E-L			Portuguese male voice, roger beep, from 28304,4 - heard 1120 - 1126



CLUB	kHz	UTC	DD	MM	ITU	Call Sign	MODE	BD	SH	Remarks and Comments
DARC	28310,0	1933	26	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	28315,0	2050	09	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28315,0	1938	26	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	28320,0	1936	16	05	B	UiILL	A3E			CB-ers from Brazil
DARC	28340,0	2118	11	05	I	UiILL	F3E			CB-ers from Italy, from 28350
DARC	28350,0	2109	11	05	I	UiILL	F3E			CB-ers from Italy, to 28340 after activity by ham
DARC	28395,0	0814	27	05	CIS	UiILL	F3E			male persons in Russian voice
DARC	28875,0	1520	26	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	29100,0	1521	26	05	CIS	UiILL	F3E			taxi business in Russian voice
DARC	29695,0	1946	22	05	B	UiILL	A3E			CB-ers from Brazil

### DARC 3 – 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	05	POL		A3E			Polish “PIP” – 10 tones – North-Poland – Baltic coast - POL Navy ?
DARC	1876,8	ady	dly	05	G		PSK8	2400	2400	Stanag4285 - 1200 bps long - Scotland
DARC	1896,5	ady	dly	05	D		PSK8	2400	2400	Stanag4285 - 600 bps long - German Navy
DARC	3500,0	vt	dly	05	TUR	no ITU	FSK8	125	1750	ALE, “2015” “2016” “1020”- Turkish Red Crescent - legal
DARC	3503,5	vt	dly	05	G	no ITU	FSK8	125	1750	ALE – “XSS” “XPU” – British MIL Tascomm
DARC	3510,0	vt	dly	05	ALG	no ITU	FSK8	125	1750	ALE, “JE30” “PT30”
DARC	3527,0	1900	dly	05	RUS		F1B	50	200	Severomorsk - daily
DARC	3531,0	1924	16	05	RUS		A1A			33 dots/sec - Kaliningrad
DARC	3533,0	vt	dly	05	E	no ITU	FSK8	125	1750	ALE, “TZSC2” “TWBZ1” - Spanish Guardia Civil
DARC	3544,8	1917	15	05	TUR		PSK8	2400	2400	Stanag4285 - north-west of Ankara
DARC	3545,0	vt	dly	05	ALG	no ITU	FSK8	125	1750	ALE, “FL49” “FL57” “PT50” - ALG MIL + voice traffic USB and scrambler
DARC	3550,7	1930	23	05	ISR		PSK4	75	2600	MIL-188-110A - hybrid
DARC	3553,8	ady	dly	05	TUR		PSK8	2400	2400	Stanag4285 – TUR MIL - Ankara
DARC	3555,8	1931	03	05	KGZ		F1B	201.5	200	
DARC	3558,0	vt	dly	05		no ITU	FSK8	125	1750	ALE, “102” “206”
DARC	3564,0	1924	31	05	?		F1B	81	125	system 81
DARC	3569,0	2038	09	05	RUS	P	F1B			beacon “P” - Kaliningrad – F1B/A1A
DARC	3570,0	1900	08	05	RUS		PSK2	120	2600	AT3004D - Kaliningrad
DARC	3577,0	ady	dly	05	I	IZ3DVW	A1A			IZ3DVW – beacon not coordinated with IARU
DARC	3585,0	1700	dly	05	TWN	HLL	FIC			120 rpm, IOC 576, Wxfax - legal!
DARC	3590,0	vt	dly	05	PAK	no ITU	FSK8	125	1750	ALE, “KW” “BABUR” “KHA” “KHAIBAR” “BADR” “NASR”
DARC	3595,0	vt	dly	05	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	05	HRV	9A0ALE	FSK8	125	1750	Croatian emergency ALE-net --- for info!

DARC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DARC	3603,0	vt	vd	05	D	DA0EC	PSK8	2000	2000	RFSM 8000 – amateur emergency net - Berlin - legal operation - just for info!!!
DARC	3603,0	2124	24	05	ALG?	no ITU	FSK8	125	1750	ALE, “PT01JL94” “JL05JL94”
DARC	3611,5	vt	dly	05	D		PSK8	200	500	German APRS Net in Robust Packet - just for info!
DARC	3617,0	vt	dly	05	HRV	9A5EX	FSK8	125	1750	ALE, “9A5EX1P” – HAM-ALE - just for info
DARC	3622,5	2100	24	05	J	JMH	F1C			Tokyo Meteo – 120 rpm – IOC576 – daily, legal!!!
DARC	3756,0	ady	dly	05	UKR		A3E			UKR – pip – 10 tones
DARC	3782,0	ady	dly	05	POR	CTP	F1B	75	850	POR Navy headquarter Lisbon
DARC	7000,0	vt	dly	05	IRQ	no ITU	FSK8	125	1750	ALE, “MEDOPS” “BMROPS” “LNGKNF” “EAGLE” “HFCFSR” “R23747” “R24594” US MIL
DARC	7008,0	0558	12	05			F1B	100	250	west of Moscow
DARC	7013,0	0610	12	05	RUS		PSK4	120	2600	AT3104D - Kaliningrad
DARC	7016,5	2125	23	05	ISR		PSK4	75	2600	MIL-188-110A hybrid - ISR navy
DARC	7022,0	2334	14	05	RUS		PSK2	120	2600	AT3004D - Orenburg
DARC	7023,0	2125	25	05	RUS		PSK2	120	2600	AT3004D - idling - Novosibirsk
DARC	7034,0	0928	12	05	RUS		F1B	75	250	Moscow
DARC	7038,7	ady	dly	05	UKR	D	A1A			Cluster beacon – Sevastopol RUS Navy – “RCV”
DARC	7038,8	ady	dly	05	RUS	P	A1A			Cluster beacon – Kaliningrad RUS Navy – “RMP”
DARC	7038,9	ady	dly	05	RUS	S	A1A			Cluster beacon – Murmansk RUS Navy – „RIT“
DARC	7039,0	ady	dly	05	RUS	C	A1A			Cluster beacon - Moscow RUS Navy - “RIW”
DARC	7039,1	vt	dly	05	KGZ	A	A1A			Cluster beacon – Bishkek RUS Navy –
DARC	7039,2	ady	dly	05	RUS	F	A1A			Cluster beacon - Vladivostok RUS Navy - “RJS”
DARC	7039,3	vt	dly	05	RUS	K	A1A			Cluster beacon - Petropavlovsk Kamchatskiy - RUS Navy - Pacific fleet - “RCC”
DARC	7039,4	1437	03	05	RUS	M	A1A			Cluster beacon – Magadan RUS Navy – „RTS“
DARC	7039,9	ady	dly	05	I	IZ3DVW	A1A			IZ3DVW – beacon not coordinated with IARU
DARC	7040,0	1315	12	05	RUS		F1B	100	250	north of Moscow
DARC	7049,5	vt	dly	05	F	F4BXW1	FSK8	125	1750	ALE, “F4BXW1” - just for info!
DARC	7054,0	1900	dly	05	RUS		F1B F7B	50	200	CIS50-50 idling - RUS MIL Moscow
DARC	7072,0	1704	06	05	RUS		PSK2	120	2600	AT3004D - Kaliningrad
DARC	7080,0	1924	04	05	RUS		F1B	50	200	
DARC	7088,0	1535	25	05	UKR		F1B	100	150	system Yakhta, Shitomir
DARC	7091,5	1240	30	05	CIS		F1B	40.5	250	system Frost1, weak signal, no QTF
DARC	7092,0	vt	dly	05	TUR	no ITU	FSK8	125	1750	ALE, “4016” – Turkish Red Crescent
DARC	7102,0	0809	12	05	HRV		FSK8	125	1750	ALE, “9A3COL” – just for info!
DARC	7110,5	vt	dly	05	HRV	9A0ALE	FSK8	125	1750	ALE, amateur net, just for info!
DARC	7111,0	0633	06	05	RUS		F1B	75	250	Mitchurinsk
DARC	7111,9	vt	dly	05	KWT	no ITU	FSK8	125	1750	ALE, “UDAIRI” “ATFOPS” – UDAIRI = US MIL Camp Buehring / Kuwait
DARC	7124,0	1830	07	05	RUS		PSK2	120	2600	AT3004D - Murmansk, also 29.05. at 1724 utc
DARC	7132,0	1857	01	05	RUS		PSK2	120	2600	AT3004D - Voronezh
DARC	7147,0	1335	12	05	RUS		F1B	100	250	Moscow
DARC	7152,5	1340	12	05	RUS		F1B	75	250	north of Jekaterinburg
DARC	7166,0	2335	14	05	RUS		A1A			encrypted figures - St. Petersburg
DARC	7178,0	1715	04	05	RUS		PSK2	120	2600	AT3004D - Kaliningrad

DARC	KHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DARC	7178,0	1928	04	05	RUS		PSK2	120	2600	AT3004D - Smolensk
DARC	7180,0	vt	dly	05	MRC	no ITU	FSK8	125	1750	ALE, "9201" "6350" "RC1"
DARC	7181,0	1540	25	05	UKR		F1B	6.75	120	CIS-81 – idling - Charkov
DARC	7184,5	1720	04	05	RUS		PSK2	120	2600	AT3004D - modem idling – Baltic coast
DARC	7186,0	0812	12	05	RUS		PSK4	120	2600	AT341004D - Severomorsk
DARC	7197,0	vt	dly	05	TUR	no ITU	FSK8	125	1750	ALE, "3651" - Red Crescent - West-Turkey
DARC	10106,0	vt	dly	05	ALG	no ITU	FSK8	125	1750	ALE, "OG100A" "OR200B" - Algerian MIL
DARC	10108,0	1420	19	05	RUS		F1B	50	200	
DARC	10109,0	1505	19	05						frwquency hopper
DARC	10111,0	1827	26	05						frequency hopper
DARC	10112,0	ady	dly	05	TUR		PSK8	2400	2400	Stanag4285 – 600 bps long – TUR MIL - Izmir
DARC	10114,8	0604	26	05	RUS		F1B	50	1000	south west of Moscow
DARC	10115,0	0640	dly	05	RUS		FSK4	100	1500	CIS14 group - Moscow
DARC	10115,0	0832	19	05	RUS		F1B	50	200	Moscow
DARC	10120,0	2129	14	05						frequency hopper
DARC	10120,0	vt	dly	05			FSK2	125	1750	ALE, "9066" "9067"
DARC	10122,8	1553	09	05	CYP		PSK8	2400	2400	Stanag4285 - area of Cyprus
DARC	10125,0	vt	dly	05	LBY	no ITU	FSK8	125	1750	ALE, "MOBILE8" "MOBILE16" - Libyan GMMRA
DARC	10125,0	1625	21	05	TUR		FMCW		20k	OTH Radar Istanbul, 50 pps
DARC	10126,6	0750	06	05			F1B	100	600	
DARC	10130,0	0620	14	05	USA		F1B	50	850	USA - Maine
DARC	10134,0	vt	dly	05	ALG	no ITU	FSK8	125	1750	ALE, "CM4" "COF" - Algerian Airforce
DARC	10136,5	vt	dly	05	F	F4BXW	FSK8	125	1750	ALE, "F4BXW" - just for info!
DARC	10146,0	1945	04	05			FSK8	125	1750	Thales 3000
DARC	10150,0	1850	01	05	TUR		FMCW		20k	OTH Radar Turkey, 50 pps
DARC	10150,0	vt	dly	05		no ITU	FSK8	125	1750	ALE, "CFA" "CTA"
DARC	14000,0	vt	dly	05		no ITU	FSK8	125	1750	ALE, "091" "1010"
DARC	14000,0	1552	16	05						frequency hopper
DARC	14000,0	1145	06	05	CYP		FMCW		20k	OTH Radar Cyprus, 50 pps
DARC	14008,0	0849	01	05	RUS		F1B	50	250	Moscow
DARC	14016,0	0648	04	05	RUS		PSK2	120	2600	AT3004D - Moscow
DARC	14026,0	1010	30	05	RUS		PSK2	120	2600	AT3004D - Moscow
DARC	14028,0	vt	18	05	RUS		F1B	75	250	Penza – daily
DARC	14037,0	vt	dly	05			FSK8	125	1750	ALE, "313" "132" "932"
DARC	14037,0	1030	09	05	FEa		OFDM	44.5	2400	OFDM42 - Far East
DARC	14052,0	0910	16	05	RUS		PSK2	120	2600	AT3004D - Kazan
DARC	14066,0	0913	14	05	RUS		PSK2	120	2600	AT3004D - Novosibirsk
DARC	14100,0	2001	26	05			FMCW			unid OTH radar, 16.7 pps, bursts of 4sec - 220 deg. fom DL
DARC	14118,0	1422	15	05	RUS		PSK2	120	2600	AT3004D - area of Jekaterinburg
DARC	14120,0	0836	03	05	RUS		F1B	75	250	Moscow
DARC	14122,0	0652	04	05	RUS		PSK2	120	2600	AT3004D - Moscow
DARC	14141,0	0915	19	05	RUS		F1B	75	500	
DARC	14153,0	0820	03	05	RUS		PSK4	120	2600	AT3104D - Ufa
DARC	14167,0	1250	03	05	RUS		F1B	50	200	Moscow
DARC	14192,0	1826	15	05	RUS		F1B	50	200	CIS50-50 - RUS Navy Kaliningrad
DARC	14196,0	0945	12	05	RUS		F1B	75	250	Moscow
DARC	14203,8	1845	17	05	RUS		OFDM	44.5	2400	OFDM40 - Novosibirsk
DARC	14206,0	0714	06	05	RUS		PSK2	120	2600	AT3004D - Murmansk
DARC	14222,0	0820	15	05	RUS		PSK2	120	2600	AT3004D - south of Jekaterinburg
DARC	14233,0	1345	12	05	RUS		F1B	75	250	Moscow
DARC	14253,0	0819	03	05	KAZ		PSK4	120	2600	AT3104D - area of Astana
DARC	14304,0	vt	dly	05	CHN	no ITU	FSK8	125	1750	ALE, "247" "633" "981"
DARC	14305,0	0620	25	05	?		FMCW		20k	defective OTH Radar, 50 pps,
DARC	14316,0	vt	dly	05		no ITU	FSK8	125	1750	ALE, "601" "611"
DARC	14320,0	0630	17	05	UKR		F1B	300	500	area of Kiev

DARC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/SP	DETAILS
DARC	14325,1	1826	24	05	FEa	no ITU	FSK8	125	1750	ALE, "776" "699" "475"
DARC	14328,4	1750	24	05	RUS		OFDM	50	2250	OFDM31 -
DARC	14336,0	0848	12	05	RUS		F1B	100	250	Chita
DARC	14338,0	1401	13	05	RUS		PSK2	120	6600	2 x AT3004D - both sidebands - Chabarovsk
DARC	14340,0	1925	22	05	RUS		PSK2	120	2600	AT3004D - Chita
DARC	14342,0	1829	19	05	RUS		FMCW		10k	OTH Radar – area of Jekaterinburg
DARC	14344,7	ady	dly	05	CHN		PSK8	2400	2400	MIL-188-110A – 600 bps short - intro tone ACARS like – burst system
DARC	18070,0	0725	11	05	CYP		FMCW		20k	OTH Radar Cyprus, 50 pps
DARC	18081,6	1600	16	05	RUS		N0N			long lasting – area of Moscow – also 18.05. at 0630 utc
DARC	18099,0	1824	14	05						frequency hopper
DARC	21000,0	0805	17	05	RUS	RAZ2	F1B	39	1000	harmonic from 10500 - idling - Mitchurinsk - daily
DARC	21000,0	vt	dly	05						frequency hopper
DARC	21000,0	1530	22	05	TUR		FMCW		20k	OTH Radar Istanbul, 50 pps
DARC	21000,0	0752	21	05	CYP		FMCW		20k	OTH Radar Cyprus, 25 pps
DARC	21000,0	1725	22	05			FMCW			unid OTH radar, 16.7 pps, bursts of 4sec - 220 deg. fom DL
DARC	21002,2	vt	dly	05	SDN		FSK	100	200	Pactor1 encrypted, SDN-MFA + SDN-emba Yemen
DARC	21030,0	1020	29	05	TUR		FMCW		20k	OTH Radar Istanbul, 50 pps
DARC	21035,0	1018	31	05	TUR		FMCW		20k	OTH Radar Turkey - 50 pps
DARC	21115,0	1530	23	05	TUR		FMCW		20k	OTH Radar SE Turkey, 25 pps
DARC	21128,0	0609	10	05	RUS		F1B	75	500	Jekaterinburg
DARC	21150,0	0613	27	05	TUR		FMCW		20k	OTH Radar Istanbul, 50 pps
DARC	21200,0	1619	10	05	TUR		FMCW		20k	OTH Radar Istanbul, 50 pps
DARC	21210,0	0637	18	05	CYP		FMCW		20k	OTH Radar Cyprus, 50 pps
DARC	21235,0	1002	25	05			FMCW			unid OTH Radar bursts, 10 kHz wide
DARC	21279,0	0900	25	05	AUS		FMCW		10k	OTH Radar Australia, 50 pps, 1.2 sec bursts – changing between 21279 and 21295
DARC	21287,0	1350	12	05	TUR					frequency hopper - SW Turkey
DARC	21295,0	0842	25	05	AUS		FMCW		10k	OTH Radar - Australia, 50 pps, 1.2 sec bursts – "JORN"
DARC	21330,0	1446	15	05	CYP		FMCW		20k	OTH Radar Cyprus, 25 pps
DARC	21385,0	0640	18	05	RUS		FMCW		10k	OTH Radar - Nizhniy Novgorod – 50 pps bursts – 3.6 sec duration
DARC	21390,0	1024	09	05			FMCW		20k	OTH Radar Cyprus, 25 pps
DARC	21409,5	0605	dly	05	RUS		F1B		2000	harmonic from 5352.375
DARC	21415,0	1241	09	05	CYP		FMCW		20k	OTH Radar Cyprus, 25 pps
DARC	24902,0	0848	27	05						frequency hopper
DARC	28050,0	1642	31	05	CIS		F1B	100	150	vocoder Yakhta, voice + F1B synchro
DARC	28100,8	2130	26	05	POR		F1B	50.6	300	F1B bursts - area of Lisbon
DARC	28300,0	1345	11	05	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	5	FSK8 (ALE)	IRQ	UiMUX	125	1750	DEFAULT SOUNDED. FUZZY SOUNDED. MEDOPS SOUNDED. T1Z171, T1Z185
MRASZ	7000,0	VT	VD	5	FSK8 (ALE)	I	UiMUX	125	1750	2214, 2425: ITALIAN CARABINIERI
MRASZ	7014,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	4413: 4 FIGURES NET
MRASZ	7045,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	4 FIGURES NET 20??-NET
MRASZ	7045,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	1001, 1005, 1014 SOUNDED.
MRASZ	7055,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	134 – 168, 145 – 134, 168 – 132 UNID NET
MRASZ	7070,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	244-NET
MRASZ	7080,0	VT	VD	5	FSK8 (ALE)	ALB	UiMUX	125	1750	ALBANIAN MOPO: 5810
MRASZ	7090,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	4001 SOUNDED.
MRASZ	7092,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	4 FIGURES NET 20??-NET
MRASZ	7095,0	VT	VD	5	FSK8 (ALE)	UZB	UiMUX	125	1750	110-NET UZBEK FORCE
MRASZ	7097,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	3ST
MRASZ	7102,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	4 FIGURES NET
MRASZ	7107,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	437802, 437805 SOUNDED. UNID
MRASZ	7115,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	Z31, Z41, 3, 4, 35, 77 SOUNDED. UNID.
MRASZ	7115,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	0772036056, 0778432266 SOUNDED. UNID
MRASZ	7115,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	1234, 5070, 6350 SOUNDED. UNID
MRASZ	7115,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	22222, SOUNDED. UNID
MRASZ	7116,0	VT	VD	5	FSK8 (ALE)	UZB	UiMUX	125	1750	1101, 1102, 1103, 1104 UNID
MRASZ	7140,0	VT	VD	5	FSK8 (ALE)	UZB	UiMUX	125	1750	110-NET UZBEK FORCE: 1101, 1102, 1103, 1703, 1704, 1707, 1714.
MRASZ	7141,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	7801, 7803, 7863, 7872 4 FIGURES NET
MRASZ	7149,0	VT	VD	5	FSK8 (ALE)	ALB	UiMUX	125	1750	ALBANIAN MOPO: 5810
MRASZ	7150,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	GDD – 500. UNID.
MRASZ	7197,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	103 – 106, 4FIGURES NET
MRASZ	7197,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	33450, 43402 SOUNDED. 43402 – 3061. UNID123456, 123466, 206102 SOUNDED.
MRASZ	14000,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	1010
MRASZ	14001,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	JNR SOUNDED (SALINAS).CROSPR SOUNDED. RAF (Croughton) (AFSCN) Remote Tracking Station USAF
MRASZ	14001,0	VT	VD	5	FSK8 (ALE)	Ui	UiMUX	125	1750	UK FOREST MOORE TASCOMM HF HQ. XSS CALLSIGN

## OEVSV – Austria – OE3DMA (Alex)

## PZK – Poland – SP3UZ (Wladyslaw)

## REP – Portugal – CT4AN (Jose Francisco)

SOC	KHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH	DETAILS
REP	3500,0	17.11	04	05	SPA		A3E			Spanish fishers
REP	3501,0	20.20	07	05	MAR		J3E-U			Marroco talks fishers to harbour
REP	3501,0	19.18	13	05	SPA		A3E			Spanish fishermen
REP	3505,0	07.48	15	05	SPA		J3E-U			Spanish fishers
REP	3550	08.00	10	05	FRA		A3E			French Amateurs <b>INFRINGE !</b>
REP	3550	07.23	15	05	FRA		A3E			French Amateurs <b>INFRINGE !</b>
REP	3550	07.33	18	05	FRA		A3E			French Amateurs <b>DLY INFRINGE !</b>
REP	3575,0	06.59	08	05	FRA		A3E			French Amateurs <b>INFRINGE IARU BAND PLAN !</b>
REP	7010	20.44	22	05	SPA		J3E-U			Spanish fishermen talking with family
REP	7014	21.11	25	05	n.i		J3E-L			Arabs
REP	7020	18.32	27	05	SPA		J3E-L			Spanish fishers – Sea to sea
REP	7022,5	18.40	15	05	RUS		PSK	120	2500	Russian
REP	7025	22.24	24	05	n.i.		J3E-U			Arabs
REP	7038,6	08.11	14	05	RUS	S	A1A			MURMANSK, ADY, DLY 3.1uV S5
REP	7038,6	08.22	11	05	RUS	S	A1A			MURMANSK, ADY, DLY 3.1uV S5
REP	7038,7	01.18	26	05	UKR	D	A1A			SEVASTOPOL, ADY, DLY 0.2uV S1
REP	7038,7	07.51	24	05	UKR	D	A1A			SEVASTOPOL, ADY, DLY 3.1uV S5
REP	7039,0	08.12	24	05	RUS	C	A1A			MOSCOW, ADY, DLY 3.1uV S5
REP	7039,1	23.58	11	05	RUS	A	A1A			VOLGOGRAD, ADY, DLY 6.3uV S6
REP	7039,1	22.29	12	05	RUS	A	A1A			VOLGOGRAD, ADY, DLY 3.1uV S5
REP	7106,0	20.50	17	05	n.i.		A3E			Spanish lang
REP	7125,0	20.20	17	05	GUI		8k00 A3EGN			Radio Guinea 50uV S9
REP	7190,0	23.28	16	05	MAR		8k00 A3EGN			News and music (female voice) 25uV S8
REP	7200,0	21.15	02	05	CHN		8k00 A3EGN			Broadcast programs with music and speach 6.3uV S6
REP	10105,0	22.00	08	05	MRC		J3E-U			Fishers
REP	14002,0	07.12	07	05	MRC		J3E-U			Fishermen
REP	14005,0	07.55	14	05	SPA		J3E-U			Fishermen with family
REP	14037,0	20.14	01	05	n.i.	CIS50-50	FSK8	125	1750	ALE 132, 313, 601, 610
REP	14131,0	21.19	21	05	n.i.		J3E-U			Scrambled voices
REP	14195,0	19.20	22	05	RUS		F1B	50	200	Navy
REP	18106,5	21.40	02	05	RUS		F1B	50	250	Russian Navy
REP	28070,0	09.22	09	05	FRA		A3E			CB's inside Ham Band
REP	28270,0	09.10	07	05	n.i.	?	F3E			Religious transmission with church musics English language
REP	28275,0	09.34	27	05	SPA		A3E			Taxis Central
REP	28310,0	19.27	23	05	ITA		A3E			Several talks
REP	28350,5	19.10	26	05	RUS		A3E			Russian male discussion

## RSGB - Great Britain – G4BOH (Chris)

## SRAL – Finland – OH2BLU (Pekka)

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	REMARKS
SRAL	7000,0	1200-1305	17	5		UiMUX	J7D	12x120	12x200	
SRAL	7010,0	0330-1815	*	5		UiMUX	J7D	12x120	12x200	Also A1A: "QRJ? K". days 6, 7, 10, 14, 28
SRAL	7013,0	0530-1720	5,10,12	5		UiMUX	J7D	12x120	12x200	
SRAL	7018,0	0400-1745	*	5		UiMUX	J7D	12x120	12x200	Days 4, 7, 19, 24, 30
SRAL	7020,0	1315-1715	20,25	5		UiPTR	F1B		250	
SRAL	7022,0	0245-2000	*	5		UiMUX	J7D	12x120	12x200	Days 1, 4, 10, 14 - 17
SRAL	7034,0	0800-	10,	5		UiPTR	F1B		250	

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	REMARKS
		1630	12							
SRAL	7038,7	H24	dly	5	UKR	D	A1A			Sevastopol
SRAL	7038,9	H24	dly	5	RUS	S	A1A			Severomorsk
SRAL	7039,0	H24	dly	5	RUS	C	A1A			Moscow
SRAL	7054,0	0300-0500	dly	5	RUS	REA4	F1B		200	Moscow
SRAL	7054,0	1900-2100	dly	5	RUS	REA4	F1B		200	Moscow
SRAL	7062,0	0745-0920	7,18,28	5		UiPTR	F1B		250	
SRAL	7076,0	1310-1430	20	5		UiPTR	F1B		250	
SRAL	7080,0	0640	6	5		RMW46	A1A			Calls RGR94
SRAL	7091,5	1020-1545	*	5		UiPTR	F1B		250	Days 8, 18, 27, 28, 30
SRAL	7098,0	0650-1915	6, 12	5		UiMUX	J7D	12x120	12x200	
SRAL	7098,0	1145-1530	16, 31	5		UiPTR	F1B		250	
SRAL	7111,0	1100-1315	17, 26	5		UiPTR	F1B		250	
SRAL	7120,0	0245-0500	dly	5	ERI	VoBME 1	A3E			
SRAL	7120,0	1500-1810	dly	5	ERI	VoBME 1	A3E			QSY to 7100 – 7135, jammed by ETH to 1700, 23 rd & 24 th - 2000
SRAL	7122,0	1300-1715	25, 31	5		UiPTR	F1B		250	On 31 N0N –1840 ( 7121,88 kHz )
SRAL	7124,0	0430-1930	7-9, 29	5		UiMUX	J7D	12x120	12x200	Severomorsk
SRAL	7125,0	1800-1930	dly	5	GUI	R. Conakry	A3E			
SRAL	7132,0	0400-1930	1-3, 24	5		UiMUX	J7D	12x120	12x200	Voronezh
SRAL	7145,0	1830-1900	*	5		UiBC	A3E			Days 1, 9, 11 – 18, 27, 28
SRAL	7162,0	0630-1330	1, 5, 7	5		UiPTR	F1B		200/250	
SRAL	7165,0	0245-0500	1 - 10	5	ERI	VoBME	A3E			
SRAL	7165,0	1500-1805	1 - 10	5	ERI	VoBME	A3E			QSY to 7145 – 7165, jammed by ETH to 1700
SRAL	7166,0	1615-1930	25-28	5	RUS	PVO “9”	A1A			Timestamp (UTC + 4h)
SRAL	7175,0	0245-0500	dly	5	ERI	VoBME 2	A3E			
SRAL	7175,0	1500-1805	dly	5	ERI	VoBME 2	A3E			QSY to 7165 - 7185, jammed by ETH to 1700, 23 rd & 24 th - 2000
SRAL	7178,0	1600-1930	1, 4	5		UiMUX	J7D	12x120	12x200	
SRAL	7186,0	0330-2000	11-23	5		UiMUX	J7D	12x120	12x200	Severomorsk
SRAL	7188,0	0530-1100	7,10,16	5		UiPTR	F1B		250	
SRAL	7200,0	0230-0600	dly	5	SDN	R Sudan	A3E			
SRAL	7200,0	1440-1530	dly	5	SDN	R Sudan	A3E			
SRAL	7200,0	1730-2000	dly	5	SDN	R Sudan	A3E			
SRAL	14000,0	0630-0725	3	5	CYP	UiOTHR	P0N			50 Hz , 20 kHz wide
SRAL	14016,0	1135-1330	4, 5	5		UiMUX	J7D	12x120	12x200	

Society	kHz	UTC	DD	MM	ITU	IDENT	MODE	BAUD	SHIFT	REMARKS
SRAL	14028,0	0630-1200	2, 5, 17	5	RUS	UiPTR	F1B		250	Penza
SRAL	14066,0	0955-1330	15	5		UiMUX	J7D	12x120	12x200	Novosibirsk
SRAL	14292,0	0545-0550	30	5		UiCW	A1A			MR 5BL
SRAL	14295,1	0245-1930	dly	5	TJK	R Tojikiston	A3E			3f 4765,05 kHz, Yangiyul TX
SRAL	21090,0	0830-0935	7	5		UiMUX	J7D	12x120	12x200	
SRAL	21305,0	1320-1330	7	5	CYP	UiOTHR	P0N			50 Hz , 20 kHz wide
SRAL	21250,0	1200-1237	14	5	CYP	UiOTHR	P0N			25 Hz
SRAL	28005-28265	1025-1340	21	5	CIS	UiVOX	F3E			23 reports
SRAL	29100,0	1050	21	5		UiBC	A3E			TX intermod. 2 PX's

### USKA – Switzerland – HB9CET (Peter)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
USKA	6999.0	2142	25	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D up into 40m band
USKA	7000.0	2304	01	05		FUZZY	MFSK8	125	1750	MIL 188-141A daily
USKA	7000.0	2309	01	05		T1Z171	MFSK8	125	1750	MIL 188-141A
USKA	7000.0	2221	02	05		MEDOPS	MFSK8	125	1750	MIL 188-141A
USKA	7000.0	2311	07	05			J3E-U			German
USKA	7000.0	1942	20	05		LNGKNF	MFSK8	125	1750	MIL 188-141A daily
USKA	7000.0	0044	30	05		2214	MFSK8	125	1750	MIL 188-141A often
USKA	7000.0	0110	30	05		T1Z185	MFSK8	125	1750	MIL 188-141A daily
USKA	7001.8	2217	03	05			PSK-8	2400	2400	MIL 188-110A
USKA	7008.0	2106	22	05			F1B	50	250	unid
USKA	7008.0	0756	23	05			F1B	75	250	unid
USKA	7016.5	2124	25	05			PSK-4 / PSK-8	75 / 2400	2k6	Mil 188-110A Hybrid; Bursts
USKA	7018.0	2045	03	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D
USKA	7020.4	1550	17	05			A1A			lasting dots only
USKA	7022.0	2109	15	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D often
USKA	7023.0	2134	25	05			J7D		2k6	CIS 12 system, idling only
USKA	7029.0	0948	12	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D
USKA	7030.0	2255	04	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D
USKA	7038.3	1512	11	09	RUS	K	A1A			Beacon K Petropavlovsk
USKA	7038.7	2243	01	05	UKR	D	A1A			Beacon D Sevastopol daily
USKA	7038.9	2244	01	05	RUS	S	A1A			Beacon S Murmansk daily
USKA	7039.0	2242	01	05	RUS	C	A1A			Beacon C Moscow daily
USKA	7039.2	2240	02	05	RUS	F	A1A			Beacon F Vladivostok
USKA	7039.4	1946	09	05	RUS	M	A1A			Beacon M Magadan
USKA	7053.9	2248	19	05			A1A			unwanted cw jammer
USKA	7054.0	2147	19	05			F1B	50	200	unid
USKA	7062.0	0727	11	05			F1B	100	250	unid
USKA	7062.125	0727	11	05			A1A			unwanted cw jammer
USKA	7070.0	1550	08	05		244	MFSK8	125	1750	MIL 188-141A TO: 204
USKA	7070.0	2142	08	05		244	MFSK8	125	1750	MIL 188-141A TO: 686
USKA	7070.0	2145	08	05		514	MFSK8	125	1750	MIL 188-141A TO: 244
USKA	7079.875	2147	27	05			A1A			unwanted cw jammer
USKA	7080.0	1634	04	05			F1A		200	unid; letters and figures
USKA	7080.0	2134	27	05			F1B	50	250	unid often
USKA	7087.995	2154	18	05			A1A	34 wpm		letters only, 2211 QRT
USKA	7088.810	0651	09	05			A1A			cw training emission
USKA	7091.5	1451	27	05			F1B	75	250	unid
USKA	7100.0	1632	04	05			A3E			BC (jammed)
USKA	7100.0	1632	04	05			Noise		10 kHz	Jammer
USKA	7105.0	2242	01	05		CHN	A3E			BC (2 stations) daily
USKA	7105.0	2242	01	05		TWN	A3E			BC (2 stations) daily



SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
USKA	7110.0	1504	11	05			A3E			BC, jammed
USKA	7110.0	1504	11	05			Noise		10 kHz	Jammer
USKA	7111.9	2207	03	05		UDAIRI	MFSK8	125	1750	MIL 188-141A daily
USKA	7120.0	1641	17	05			A3E			BC, jammed
USKA	7120.0	1641	17	05			Noise		10 kHz	Jammer
USKA	7124.0	2319	07	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D often
USKA	7125.0	2155	02	05	GUI		A3E			Radio Conakry daily
USKA	7125.0	1639	26	05			Noise		10 kHz	Jammer
USKA	7132.0	2157	02	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D
USKA	7142.0	2053	03	05			F1B	75	250	unid
USKA	7155.0	1623	04	05			A3E			BC (jammed)
USKA	7155.0	1623	04	05			Noise		10 kHz	Jammer
USKA	7165.0	1529	18	05			A3E			BC, jammed
USKA	7165.0	1529	18	05			Noise		10 kHz	Jammer
USKA	7166.0	1511	11	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D
USKA	7170.0	1529	18	05			Noise		10 kHz	Jammer
USKA	7175.0	1725	21	05			A3E			BC
USKA	7178.0	2152	04	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D
USKA	7180.0	1457	11	05			Noise		10 kHz	Jammer often
USKA	7180.0	1457	11	05			A3E			BC, jammed
USKA	7185.0	1644	17	05	ERI		A3E			Voice of the Broad Masses
USKA	7185.0	1644	17	05			Noise		10 kHz	Jammer
USKA	7186.0	1453	11	05	RUS		J7D	12x120	2k6	QPSK: CIS12 = AT3104D daily
USKA	7186.0	0824	21	05	RUS		J7D	12x120	2k6	BPSK: CIS12 = AT3004D daily
USKA	7190.0	1629	04	05			A3E			BC (jammed)
USKA	7190.0	1629	04	05			Noise		10 kHz	Jammer
USKA	7200.0	1904	21	05			A3E			BC
USKA	10150.0	2041	29	05			FMCW	50 pps	20 kHz	OTHR
USKA	14008.0	0741	04	05			F1B	50	200	unid
USKA	14008.0	0757	05	05			F1B	50	250	unid
USKA	14026.0	1124	05	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D
USKA	14026.0	1034	31	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D
USKA	14028.0	0644	02	05	RUS		F1B	75	250	unid often
USKA	14030.0	0724	13	05			J7D		2k6	CIS 12 idling only
USKA	14046.0	0823	05	05			J7D	12x120	2k6	CIS 12 (weak)
USKA	14052.0	0743	16	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D often
USKA	14058.0	1105	02	05			F1B	75	250	unid
USKA	14066.0	1133	14	05			J7D	12x120	2k6	QPSK: CIS 12 = AT3104D
USKA	14118.0	1225	15	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D
USKA	14120.0	0852	03	05	RUS		F1B	75	250	near Moscow often
USKA	14122.0	0728	04	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D often
USKA	14171.9	0905	18	05			A1A			letters in groups
USKA	14187.0	0742	17	05			FMCW	83.3 pps	20 kHz	OTHR Bursts: PD 3s, PRI 28s
USKA	14192.0	1716	03	05			F1B	50	200	unid
USKA	14192.0	1839	09	05			F1B	100	500	unid
USKA	14192.0	1713	21	05			F1B	50	500	unid
USKA	14233.0	1029	12	05			F1B	75	250	unid (51°)
USKA	14242.0	0937	19	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D
USKA	14253.0	0821	03	05			J7D	12x120	2k6	QPSK: CIS 12 = AT3104D
USKA	14262.0	0914	31	05			A1A			letters + figures in groups
USKA	14295.135	2300	19	05			N0N			long lasting carrier
USKA	14306.0	0755	05	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D
USKA	14318.590	0903	21	05			N0N			
USKA	14320.625	0836	21	05			A1A			fast dots only
USKA	14338.0	1542	13	05			J7D	2x 12x120	6600	CIS 12 = AT3004D in DSB mode special mode or malfunction?
USKA	14340.0	1832	09	05			J7D	12x120	2k6	BPSK: CIS 12 = AT3004D often
USKA	14344.7	1107	17	05			PSK-8	2400	2400	MIL 188-110A mod., Burst interval 6.8s; Burst duration 2.6s
USKA	14344.7	1240	21	05			PSK-8	2400	2400	MIL188-110A modified; Frame format 600bps short
USKA	18081.628	1522	18	05	RUS		N0N			
USKA	18101.0	0801	11	05			FMCW	50 pps	20 kHz	OTHR
USKA	18107.0	0921	02	05			F1B	50	200	CIS 35-50 (BEE, T600)
USKA	21311.0	0739	16	05			FMCW	50 pps	20 kHz	OTHR
USKA	28124.0	1416	26	05			J3E-U			unid language

## Veron 1 – Netherlands – PA0GRU (Dick)

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SH	DETAILS
VERON	3771,6	22.06	14	5	RUS	P	A1A		Beacon Kaliningrad
VERON	3772,0	21.48	21	5		UiPtr	F1B	200	Ptr; bad filtered
VERON	3782,0	22.23	7	5	POR	UiPtr	F1B	850	Ptr; also heard on day 14, 21.
VERON	7020,0	17.30	25	5		UiPtr	F1B	250	Ptr
VERON	7021,0	19.20	14	5		UiMux	PSK		12 MPSK AT 3004-D
VERON	7021,8	16.25	16	5		UiMux	J7D		20.40 utc, 3.3 KHZ wide pilots 7020,1 7023,4
VERON	7021,8	19.35	17	5		UiMux	J7D		12 MPSK AT 3004-D, 3.3 KH wide
VERON	7038,7	vt	vd	5	UKR	D	A1A		Beacon Sevastopol, 15 days
VERON	7038,9	vt	vd	5	RUS	S	A1A		beacon, 8 days
VERON	7039,0	vt	vd	5	RUS	C	A1A		Beacon Moscow, 15 days
VERON	7041,0	13.30	2	5		DYOQ	A1A		to FHCC, SDCV, I5SN, 2X5F,NTIF, proc calls
VERON	7041,0	13.37	2	5		XWR8	A1A		XWR8 ZAB ZDY ZJM (many times)
VERON	7041,0	13.52	2	5		JB1R	A1A		to 2X5F: ZGD ZEL ZSQ QYT9 K proc
VERON	7041,0	13.30	5	5		DYOQ	A1A		to FHCC, SDCV, I5SN, 2X5F,2X5F, NTIF
VERON	7054,0	vt	vd	5	RUS	UiPtr	F1B	200	Ptr
VERON	7054,0	04.30	vd	5	RUS	UiPtr	F1B	250	Revs/Ptr, 11 days, 20.40 utc
VERON	7054,0	19.00	23	5	RUS	UiPtr	F1B	250	Revs starts at 19.00 utc
VERON	7054,0	04.55	24	5	RUS	UiPtr	F1B	250	Revs stops at 05.00 utc
VERON	7070,0	14.17	14	5		UiBC	A3E		Music&speech;weak/disturbed;harmo nic BC?
VERON	7096,0	06.20	21	5		UiCW	A1A		QRJ? QYT6
VERON	7122,0	17.45	25	5		UiPtr	F1B	250	Ptr
VERON	7165,0	17.35	14	5	ERI	VOBME	A3E		E.African speech, male; s8
VERON	7172,0	17.48	25	5	RUS	RGR74	A1A		5BL, Z-codes
VERON	7172,0	14.23	27	5		RIR2	A1A		to RHC93"Z-codes+ cyrillic letters
VERON	7172,0	14.24	27	5		RHC93	A1A		to RIR2: Z-codes+cyrillic letters
VERON	7175,0	16.57	8	5	ETH		JAM		White noise jammer; 24k wide
VERON	7180,0	17.36	8	5	ERI	VOBME	A3E		E. African music
VERON	7185,5	20.28	21	5		UiMux	PSK12		3k4 spread
VERON	7187,0	17.32	14	5		UiMux	PSK8		3k spread
VERON	7200,0	17.34	8	5	SDN	R.Omdur man	A3E		Arab. Speech, male
VERON	7200,0	19.13	21	5	SDN	R.Omdur man	A3E		Arab. Speech, male; s8
VERON	10110,0	18.25	9	5	TUR	UiBC	A3E		starting program 18.25 utc every day
VERON	10110,0	18.26	22	5		UiBC	A3E		Turkish BC nr Ankara speech ILLEGAL
VERON	10112,0	14.38	26	5	TUR	UiMux	PSK8		2k4 spread
VERON	10122,9	14.39	26	5	UK/I RL?	UiLL	J3E-u		English speech, 2 males; no ham calls
VERON	14026,0	12.25	5	5		UiMux	J7D		12 MPSK AT 3004-D, pilot carrier 14027,4
VERON	14096,0	07.20	11	5		I1J3	A1A		to 5HJC: QTC ZQP = (5BL)
VERON	14096,0	07.33	11	5		I1J3	A1A		to Z4LN: 133 28 11 1129 133=146 (5BL) etc
VERON	14096,0	04.59	24	5	F.Eas t?	HJT3	A1A		to CL6Y:proc, 4F (short figs) QTE N. East
VERON	14096,0	05.00	26	5		UiCW	A1A		R OK QSL 1305 K HR 7YGA 7GNR 0853 etc
VERON	14097,0	14.28	26	5		UiCar	NON		Unstable carrier, bad filtered; s9
VERON	14100,0	11.19	12	5		CHEM	A1A		XXX CHEM 94522 STEREOSKOP 4235 4481K
VERON	14108,0	07.10	9	5		UiCW	A1A		5BL Ends with 718 K (key clicks)
VERON	14108,0	09.09	9	5		IIFO	A1A		to XTLO: QTC ZXF K
VERON	14108,0	09.11	9	5		IIFO	A1A		IIFO 992 209 1304 992= ZXF 056= (5BL)
VERON	14108,0	09.16	9	5		Y1CQ	A1A		Y1CQ QTC AR (many times)
VERON	14108,0	09.19	9	5		IIFO	A1A		IIFO 674 199 1248 674= 056= (5BL)
VERON	14108,0	09.20	9	5		IIFO	A1A		to D45X, 6JXU,MZO8,

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SH	DETAILS
VERON	14108,0	07.12	10	5		IIFO	A1A		to FL9B:IIFO 425 19 10 1104 425=708=5BL
VERON	14108,0	06.57	11	5		STDC	A1A		to ZTK1,EH50,3HG6,QUGH,SVYM,D PLT etc
VERON	14108,0	07.07	11	5		YZJC	A1A		to SRCF, QTC 231 20 11 1050 231 ZVT 146=
VERON	14108,0	07.13	11	5		YZJC	A1A		to ZTK1: 5BL 166 rpt ALL K
VERON	14108,0	06.05	12	5		STDC	A1A		to ZTK1,EH50,3HG6,QUGH,SVYM,D PLT etc
VERON	14108,0	06.12	13	5		STDC	A1A		to ZTK1, 3HG6, QUGH, etc:proc
VERON	14108,0	07.07	16	5		STDC	A1A		A3TG de STDC QTC 175 2316 1048 175 ZTW
VERON	14108,0	06.52	17	5		Y1CQ	A1A		Y1CQ QTC AR (many times)
VERON	14108,0	06.54	17	5		STDC	A1A		STDC 851 16 17 1048 851= (5BL)
VERON	14108,0	06.56	17	5		STDC	A1A		to ZTK1, EH50,etc proc
VERON	14108,0	06.56	18	5		SVQR	A1A		to A3TG:QTC 004 2018 1048 004 zvt 343 5BL
VERON	14108,0	06.26	19	5		STDC	A1A		to EH50, 3HG6, etc proc
VERON	14108,0	08.27	20	5		XS6V	A1A		XXX SX6V 53464 rohoba 6253 6793 RPT+K
VERON	14108,0	09.00	20	5		STDC	A1A		to ZTK1,EH50, 3HG6, etc: proc
VERON	14108,0	05.09	21	5		XOAU	A1A		to 2RBU:ZWC ZSC ZJF QYT9 K (many times)
VERON	14108,0	06.48	23	5		9FSM	A1A		to IZH4, 2RBU,X31M, TOPT,KEO1,IXA9 proc
VERON	14108,0	06.40	24	5		9FSM	A1A		to TOPT: ZSR ZQB ZQF QYT6 K
VERON	14108,0	04.57	25	5		9FSM	A1A		to ALIV; 5BL
VERON	14108,0	04.58	26	5		Y1CQ	A1A		Y1CQ QTC ZLL AR (many times)
VERON	14108,0	05.00	26	5		9FSM	A1A		9FSM 664 17 26 0848 664=ZLL 664 (5BL)
VERON	14108,0	08.56	27	5		9FSM	A1A		to KEA1: QTC ZCLK K (5BL)
VERON	14108,0	09.30	27	5		9FSM	A1A		to IZH4 etc: proc
VERON	14108,0	07'06	30	5		9FSM	A1A		to IXA9 : 5BL
VERON	14108,0	07.14	30	5		Y1CQ	A1A		Y1CQ QTC ZVQ AR
VERON	14108,0	07.14	30	5		9FSM	A1A		5BL
VERON	14108,0	06.08	31	5		9FSM	A1A		to IZH4, 2RBU, X31M, proc
VERON	14118,0	05.38	10	5		N6PW	A1A		to SES5:proc (bad key clicks)
VERON	14118,0	06.50	10	5		N6PW	A1A		N6PW 285 3410 1048 285 ZRV 283 5BL 271
VERON	14118,0	06.46	11	5		B16J	A1A		to 9CSR: QTC 790 34 11 1044 790=ZJJ 050
VERON	14118,0	07.25	12	5		B16J	A1A		to 9CSR:131 34 12 1120 131 ZPT 764 5BL
VERON	14118,0	05.46	13	5		B16J	A1A		to 9CSR : calls v's
VERON	14118,0	07.18	16	5		B16J	A1A		9CSR de B16J 820 34 16 1110 820 ZWC etc
VERON	14118,0	08.11	17	5		B16J	A1A		to 9CSR: v's calls
VERON	14118,0	06.16	18	5		B16J	A1A		to 9CSR: v's calls
VERON	14120,0	10.10	3	5		UiPtr	F1B	250	Ptr
VERON	14122,0	09.20	12	5	RUS	UiMux	PSK		12 MPSK AT 3004-D
VERON	14155,0	18.56	21	5			J3E-u		Vocoder
VERON	14155,0	19.05	21	5		UiMux	PSK2		
VERON	14166,0	16.54	30	5		UiCW	A1A		9920549
VERON	14166,0	16.56	30	5		UiCW	A1A		9920569
VERON	14166,0	16.58	30	5		UiCW	A1A		9920589
VERON	14166,0	20.18	30	5		UiCW	A1A		9920589
VERON	14169,0	07.40	16	5		UiPtr	F1B		Ptr, narrow shift
VERON	14172,0	09.05	18	5		ZQHZ	A1A		S9ZQ de ZQHZ 3418 1300 776 ZSU 195=5BL
VERON	14240,0	13.52	8	5					Frequency hopper
VERON	14242,0	10.31	19	5		UiMux	PSK		12 MPSK AT 3004-D
VERON	14262,0	08.21	26	5		UiCW	A1A		VHWUB XTAHQ 5F (cyrillic) etc
VERON	14262,0	07.51	21	5		UiCW	A1A		RJLRY KOLXM SRZJE WAKEV QTU K
VERON	14292,0	08.00	31	5		UiCW	A1A		5F

SOC	kHz	UTC	DD	MM	ITU	IDENT	MODE	SH	DETAILS
VERON	18072.0	08.20	17	5		OTHR	PON		radar, wide 18060-18080 KHz
VERON	18095.0	07.47	25	5		OTHR	PON		
VERON	21089.0	17.07	8	5		UiRadar	PON		OTHR; 50 pps
VERON	21226.0	16.54	14	5					Frequency hopper
VERON	14210.0	17.20	8	5					Frequency hopper

# IARUMS Region 1

Many thanks for your interest!

**The monitoring team of IARU Region 1**

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Wavecom Elektronik – Buelach – Switzerland

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