

IARU Monitoring System Region 1



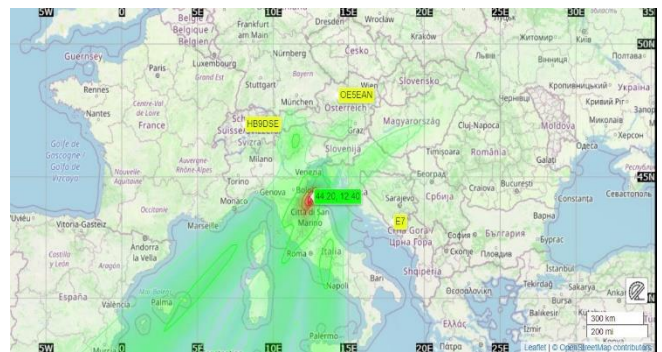
Monthly Newsletter - January 2022

News and info

Successful action: clandestine radio station stops transmissions

In December 2021 and January 2022, a clandestine radio station appeared on 3500 and 7000 kHz. The broadcasts were unusually in USB and could be heard throughout Europe. The radio program in Italian and English was directed against government COVID measures.

Daniel Möller, DL3RTL, IARUMS Coordinator from DARC (Deutschen Amateur-Radio-Club e.V.; Germany) informed that the radio direction service unit of DARC Intruder Monitoring had been able to determine the approximate location of these transmissions, whereupon the DARC Intruder Monitoring cooperated with the German PTT (BNetzA) to have them stopped. The BNetzA was then able to work with their Italian colleagues to obtain measures that led to the stop of these transmissions.



TDoA of the clandestine station by DARC Intruder Monitoring

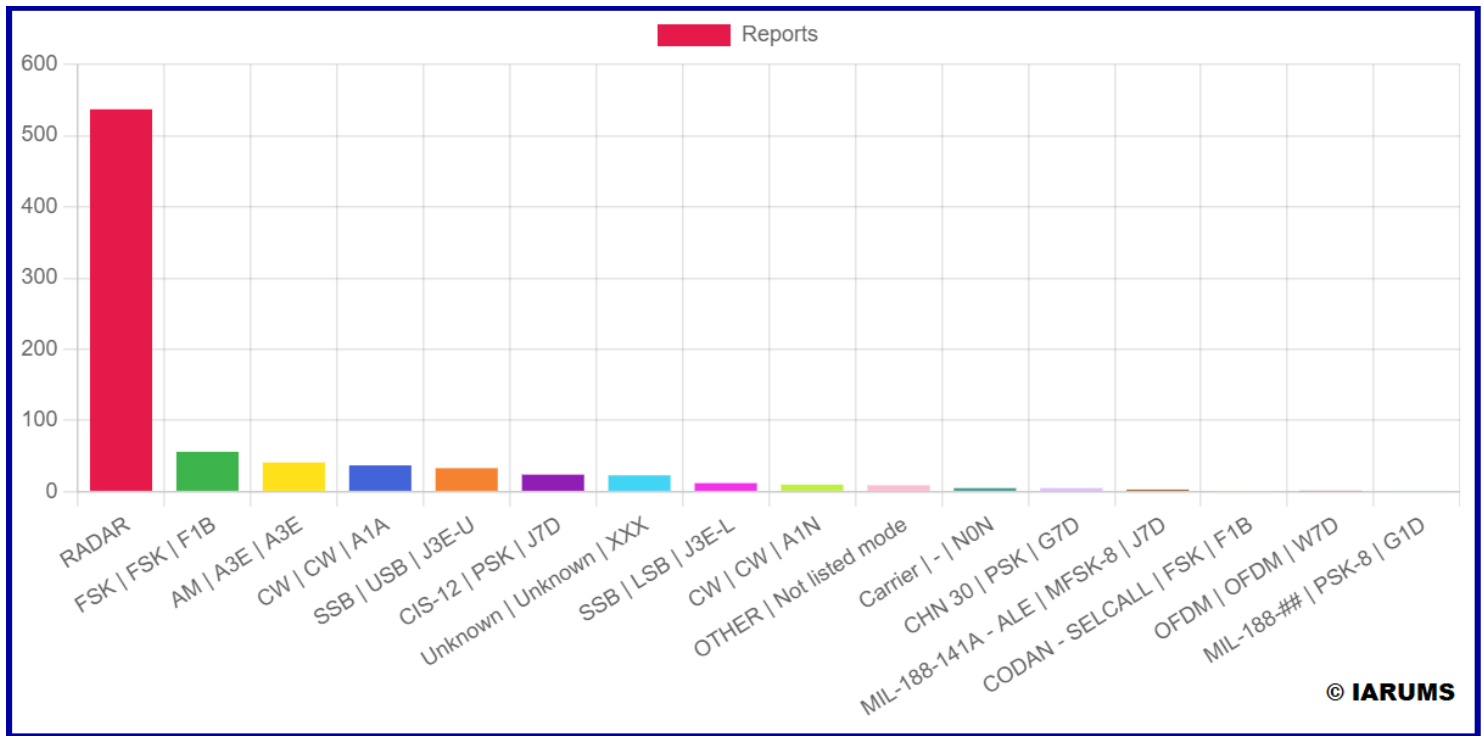
ANACOM acts to eradicate interference and abuse of radio spectrum

José Francisco de Almeida, CT4AN, IARUMS Coordinator from REP (Rede dos Emissores Portugueses; Portugal), informed that ANACOM (Portuguese Communications Authority) acts to eradicate interference and the abuse of several frequencies, including deeply protecting the amateur bands.



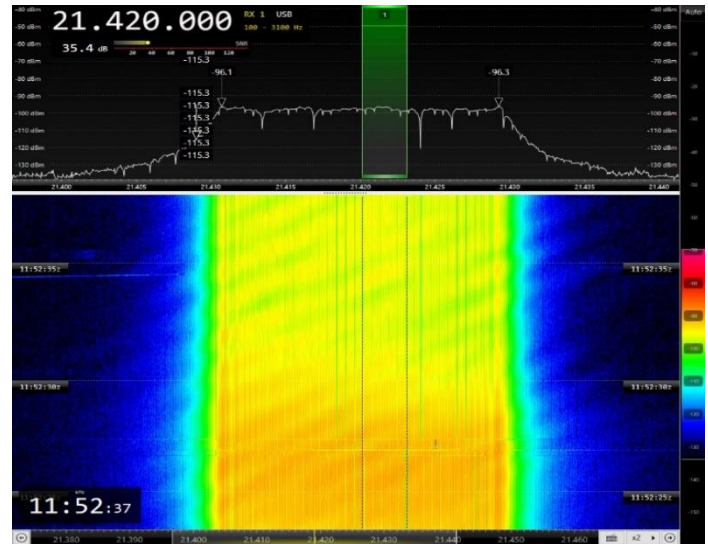
“ANACOM, the Portuguese National Authority for Communications, carried out a series of inspections with the Maritime Police, in an area between the ports of Caminha and Peniche. The actions in question aimed at verifying the status, operability and correct use of radiocommunications equipment installed on board vessels. In these actions, the most frequently detected violations or anomalies are related to the use of frequencies not authorized or not assigned to the maritime mobile service.” Read more here: <https://www.iaru-r1.org/2022/anacom-acts-to-eradicate-interference-and-abuse-of-radio-spectrum/>

January was no exception: the most damaging and annoying intrusions to the amateur bands that were reported, both because of the high power used in their transmissions and their bandwidth as for the number of times they took place, were the OTH radar transmissions, as seen in the statistical graph in our database:



These were the most reported radars throughout the month:

- Contayner. RUS. BW = 12KOE. 40 sps. Mostly on 40 m but also on 20 and 15 m.
- Pluto. G. (UK RAF bases in Cyprus). BW = 10KOE. 25 or 50 sps. Mostly on 15 m.
- CHN short burst system (nicknamed "Foghorn"). BW = 10KOE. Mostly 66.7 and 50 sps, but also 41.7 or 83.3 sps. Mostly on 20 m but also on 40 and 15 m.
- CHN 10KOE 40 sps (20m)
- CHN 10KOE 50 sps (20m)
- IRN 45KOE, 150 and 313 sps, alternating. Transmitting daily on 28860 kHz CF, but sometimes observed jumping along the whole 10 meters



OTHR Pluto (G; UK Sovereign Base Areas, Cyprus) on 15 m

We also received the unfortunately usual CIS-## FSK transmissions, mostly on 40 meters, as well as other CIS-12 on 40 and 20 m, DPRK-FSK 600 AR and DPRK-PSK 1200 (very often on 14098.5 kHz CF and 14298.5 kHz CF), CHN-30, MIL-188-141A ALE and some other MIL digital modes (please, see screenshots in the last page).

The broadcasting stations Radio Ethiopia (ETH) and Voice if Broad Masses (ERI) kept going with their transmissions, respectively on 7110 kHz and 7140.02 kHz

Detailed reports of national coordinators

Abbreviations used (as per IARUMS definitions)

aka = also known as | **BC** = Broadcast | **BD** = Baud, (or also Burst duration) | **BRI** = Burst repetition interval | **BW** = Bandwidth | **ca** = approximate | **CHN** = **PRC** = People's Republic of China | **CF** = Center frequency | **DF** = Direction finding (radio location; see also TDoA) | **FMCW** = frequency modulated continuous wave | **FMOP** = frequency modulated on pulse | **OTHR** = over the horizon radar | **Radar** = if exact mode unknown | **SH** = Shift (Hz) | **sps** = sweeps per second | **TDoA** = Time difference of arrival | **ui** = unidentified.

DARC; Daniel, DLRT. Credit to monitors: **DF5JL, Tom; DB4UP, Christoph; DO7RWE, Jens; DO1LR, Christian; DG2MB, Martin; DF5SF, Uli; OE8ACT, Patrick; DL2SCH, Jürgen; DB3TA, Alex**

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7000,0	0812	15	01	I		J3E-U		2k7	Clandestine COVID
7020,0	1533	23	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
7020,0	2040	24	01	RUS		FMOP	40	12k	OTHR Contayner
7027,0	2205	26	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
7034,0	1620	08	01	RUS		FMOP	40	12k	OTHR Contayner
7037,8	1740	31	01			PSK		2k6	OTHR Contayner
7037,8	1740	31	01			PSK		2k6	CIS-12
7046,0	2015	31	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
7055,0	1355	01	01	UKR		J3E-L		2k9	UKR/RUS radio war
7057,0	1556	24	01	RUS		FMOP	40	12k	OTHR Contayner
7061,0	1534	08	01	RUS		FMOP	40	12k	OTHR Contayner
7062,0	1958	31	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
7063,0	1554	01	01	RUS		FMOP	40	12k	OTHR Contayner
7065,0	1832	19	01	RUS		FMOP	40	12k	OTHR Contayner
7066,0	1520	29	01	RUS		FMOP	40	12k	OTHR Contayner
7084,0	1726	29	01	RUS		FMOP	40	12k	OTHR Contayner
7093,0	1545	28	01	RUS		FMOP	40	12k	OTHR Contayner
7095,0	1355	01	01	CHN		FMOP	50	10k	OTHR 2,5s bursts
7096,0	2149	26	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
7097,0	1432	02	01	CHN		FMOP	41,67	10k	OTHR 6,1s bursts
7098,0	1632	14	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
7100,0	1720	24	01	RUS		FMOP	40	12k	OTHR Contayner
7101,0	1715	26	01	RUS		FMOP	40	12k	OTHR Contayner
7102,0	1656	28	01	RUS		FMOP	40	12k	OTHR Contayner
7104,0	2216	26	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
7107,0	2148	12	01			FMOP	47,62	10k	OTHR 2,63s bursts
7110,0	1712	08	01	ETH		A3E		9k	Radio Ethiopia
7118,0	1710	28	01	RUS		FMOP	40	12k	OTHR Contayner
7122,0	2148	26	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
7123,0	2038	31	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
7125,0	2038	31	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
7128,0	1535	13	01	RUS		FMOP	40	12k	OTHR Contayner
7133,0	1835	19	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
7134,0	1314	23	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
7140,0	1607	23	01	ERI		A3E			VoBM Eritrea

DARC; Daniel, DLRT. Credit to monitors: DF5JL, Tom; DB4UP, Christoph; DO7RWE, Jens; DO1LR, Christian; DG2MB, Martin; DF5SF, Uli; OE8ACT, Patrick; DL2SCH, Jürgen; DB3TA, Alex

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7142,0	1612	02	01	RUS		FMOP	40	12k	OTHR Contayner
7147,0	1553	29	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
7147,0	1757	30	01	RUS		FMOP	40	12k	OTHR Contayner
7148,0	2204	26	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
7178,0	1536	28	01	RUS		FMOP	40	12k	OTHR Contayner
7184,0	1753	01	01	RUS		FMOP	40	12k	OTHR Contayner
7185,0	1519	16	01	RUS		FMOP	40	12k	OTHR Contayner
7185,0	1547	22	01						OTHR
7186,2	1142	08	01			PSK		2k6	CIS-12
7187,0	1757	30	01	RUS		FMOP	40	12k	OTHR Contayner
7192,0	1632	14	01	RUS		FMOP	40	12k	OTHR Contayner
7193,0	2228	26	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
7195,0	1556	24	01	RUS		FMOP	40	12k	OTHR Contayner
7195,7	1142	04	01			PSK		2k6	CIS-12
7196,0	1515	01	01	RUS		FMOP	40	12k	OTHR Contayner
7197,8	0935	29	01			PSK		2k6	CIS-12
10105,0	0900	02	01			PSK		2k6	CIS-12
14029,0	0935	25	01	CHN		FMOP	10	40k	OTHR
14091,0	0924	16	01	CHN		FMOP	41,67	10k	OTHR 6,1s bursts
14102,0	0748	02	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
14105,0	0806	02	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
14108,0	0834	05	01	CHN		FMOP	41,67	10k	OTHR 6,1s bursts
14113,0	0850	04	01	CHN		FMOP	41,67	10k	OTHR 6,1s bursts
14120,0	0847	05	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
14127,0	0750	02	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
14127,0	0942	29	01			FMOP	10	40k	OTHR
14136,0	0748	02	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
14136,0	0834	05	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
14145,0	0808	09	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
14148,0	0848	09	01	CHN		FMOP	41,67	10k	OTHR 6,1s bursts
14150,0	0815	09	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
14156,0	1420	02	01	RUS		FMOP	40	12k	OTHR Contayner
14161,0	1232	02	01	RUS		FMOP	40	12k	OTHR Contayner
14177,0	1025	05	01	RUS		FMOP	40	12k	OTHR Contayner
14183,0	1225	22	01						OTHR
14185,0	0912	09	01	CHN		FMOP	41,67	10k	OTHR 6,1s bursts
14188,0	0906	27	01				10	10k	OTHR
14227,0	0857	04	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
14233,0	0821	09	01	CHN		FMOP	41,67	10k	OTHR 6,1s bursts
14235,0	0818	09	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
14242,0	0810	09	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
14251,0	0913	09	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
14256,0	0850	04	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
14258,0	0848	02	01	CHN		FMOP	41,67	10k	OTHR 6,1s bursts
14259,0	0846	05	01	CHN		FMOP	50	10k	OTHR 5,1s bursts

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kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14265,0	0915	04	01	CHN		FMOP	41,67	10k	OTHR 6,1s bursts
14266,0	0849	02	01	CHN		FMOP	41,67	10k	OTHR 6,1s bursts
14290,0	0819	09	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
14291,0	0817	09	01	CHN		FMOP	41,67	10k	OTHR 6,1s bursts
14294,0	0912	09	01	CHN		FMOP	41,67	10k	OTHR 6,1s bursts
14300,0	0945	04	01	CHN		FMOP	50	10k	OTHR 10,2s bursts
14300,0	0846	09	01	CHN		FMOP	41,67	10k	OTHR 6,1s bursts
14302,0	0844	09	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
14305,0	0924	16	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
14306,0	0810	09	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
14307,0	0808	09	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
14308,0	0852	04	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
14317,0	0851	04	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
14329,0	0924	16	01	CHN		FMOP	41,67	10k	OTHR 6,1s bursts
14332,0	0851	04	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
14339,0	0835	05	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
14340,0	0827	09	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
14345,0	0815	09	01	CHN		FMOP	41,67	10k	OTHR 6,1s bursts
14345,0	0945	29	01	CHN		FMOP	50	10k	OTHR 5,1s bursts
18168,0	0945	01	01					20k	OTHR, possibly Pluto CYP
21122,0	1050	29	01	RUS		FMOP	40	12k	OTHR Contayner
21130,0	0911	21	01						OTHR
21153,0	1317	22	01						OTHR
21158,0	1030	26	01	RUS		FMOP	40	12k	OTHR Contayner
21159,0	0830	16	01	RUS		FMOP	40	12k	OTHR Contayner
21163,0	1111	16	01	RUS		FMOP	40	12k	OTHR Contayner
21166,0	1120	09	01	RUS		FMOP	40	12k	OTHR Contayner
21280,0	0848	05	01	CYP		FMCW	50	20k	OTHR Pluto Cyprus
21304,0	0956	22	01	CYP				20k	OTHR Pluto Cyprus
21390,0	1236	04	01	CYP		FMCW	50	20k	OTHR Pluto Cyprus
21390,0	0823	09	01	CHN		FMOP	66,67	10k	OTHR 3,8s bursts
21390,0	1256	30	01	CYP			50	20k	OTHR Pluto Cyprus

IRTS; Michael, EI3GYB

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3752	1630	2	1	F		LSB			DQRM. Replaying of old QSOs, fire sirens, machine sounds. Just like the last few months- nearly on a daily basis for up to two hours. Also heard on 3762 kHz on some days.
7045	1930	2	1	RUS		RADAR			"Sunflower" radar from 7045 to 7070 kHz. Medium signal, persistent.
7055	820	26	1	RUS/ UKR		LSB			Russian-Ukrainian radio war. Slogans, propaganda music. All day long every day.
7078	1710	29	1			RADAR			Radar from 7078 to 7096 kHz.Strong and

IRTS; Michael, EI3GYB									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
									persistent.
7090	1805	21	1			RADAR			“Sunflower“ radar from 7090 to 7110 kHz. Strong.
7110	1705	22	1	ETH		AM			Radio Ethiopia. Heard daily with a big signal. Also heard in the morning around 0400z.
7140	1730	29	1	ERI		AM			Radio Eritrea. Strong signal. Often. Also heard some days on 0435z in the morning.
7178	1320	15	1			RADAR			Radar from 7178 to 7194 kHz. Strong pulses, on and off.
7189	1925	3	1			RADAR			“Sunflower“ radar from 7189 to 7205 kHz. Medium strength. Persistent.
14126	1310	7	1			RADAR			Radar from 14126 to 14163 kHz. Strong and persistent signals.
14185	1420	19	1			RADAR			Radar from 14185 to 14197 kHz. Medium signal, intermittent.
14260	1020	14	1			RADAR			Radar from 14260 to 14272 kHz. Very strong pulses, on and off.
14323	1330	7	1			RADAR			Radar from 14323 to 14350 kHz. Strong, on and off.
18155	1210	5	1			RADAR			Radar from 18155 to 18180 kHz. Medium strength. Persistent.
21438	1220	5	1	UKR		CW			Russian Navy in Sevastopol. Medium signal. Heard daily.

OeVSV; Christoph, OE1VMC									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
28500.0	0900	02	01	INS		A3E		10K0	One of many on this day
21295.0	0840	04	01	G		RADAR		20K0	
21171.0	10550	04	01	RUS		RADAR		15K0	
144019.0	1349	07	01	AUT		NON			Presumably a “water activator”: unmodulated carrier since Oct 2021, several times per day for 10-15min. duration, observed by OE5AJP.
28335.0	08818	09	01	G		RADAR		40K0	
28860.0	0911	09	01	IRN		RADAR		40K0	
21270.0	1226	10	01	G		RADAR		20K0	
18147.0	0902	15	01			RADAR		10K0	Short pulses each 3 minutes
24979.0	0907	15	01	INS		A3E			Intruders in AM
21438.0	1010	18	01	RUS		A1A			
10111.1	1630	21	01			J3E-U		2700	Voice net of several stations, no call signs
21408.0	1232	22	01	RUS		RADAR		10K0	
14275.0	0651	23	01	INS		A3E		5000	Indonesian intruders in AM
28435.0	0951	29	01	INS		A3E		5000	Fishermen? Taxi driver?
28574.0	0956	29	01	INS		A3E		5000	Fishermen? Taxi driver?
28425.0	1002	29	01	INS		A3E		5000	Fishermen? Taxi driver?
28545.0	0935	31	01			RADAR		80K0	Bursts, QTF 90
28425.0	1015	31	01			RADAR		50K0	Short bursts, QTF 90

OeVSV; Christoph, OE1VMC

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
21010.0	0929	31	01			RADAR			
21087.0	9231	31	01			RADAR			

PZK; SP3AMO, SP5GNI

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7020.0	2005	24	01			RADAR	40	12k0E	RSQ 595
7032.0	1000	29	01			PSK		2K9	CIS-12 pilot 7033,3 S9
7037.0	1730	31	01			PSK	120	2k70E	RSQ 595
7056.0	1538	24	01			RADAR	50	12k0E	RSQ 595
7085.0	1723	29	01			RADAR		12K0E	S9
7089.0	1230	27	01			PSK		2K9	CIS-12 pilot 7090,3 S7
7103.0	2027	18	01			RADAR		10K0E	S6 short bursts
7112.0	0947	14	01			PSK		2K9	CIS-12 pilot 7113,3 S9
7142.0	1540	02	01	RUS		RADAR	50	12k0E	S9
7150.0	1716	31	01			RADAR	50	12k0E	RSQ 595
7162.0	2026	18	01			RADAR		20K0E	S5
7170.0	1530	05	01			RADAR		10K0E	S6 short bursts
7171.0	1595	10	01			RADAR		8K0E	short burst
7174.0	1534	05	01			RADAR		12K0E	S9+10dB
7178.0	0947	13	01			PSK		2K9	CIS-12 pilot 7079,3 S7 (vd, Vt)
7186.0	1530	05	01			PSK		2K9	CIS-12 pilot 7087,3 S9 (vd, vt)
7195.0	1554	24	01			RADAR	50	12k0E	RSQ 595
14093.9	1105	06	01			FSK		200	S7
14105.0	0955	19	01			RADAR		10K0E	S9 continous
14110.0	0855	24	01			RADAR		10K0E	S6 short bursts also 14311.0
14110.4	1135	26	01			FSK		200	S9
14135.0	0851	28	01			RADAR	10	40K0	S7 continous from 08:30
14140.0	1434	15	01			RADAR		12K0E	S9 burst
14150.0	1103	06	01			RADAR		10K0E	S9 short burst
14159.0	1220	27	01			RADAR		10K0E	S6 short bursts
14162.0	1102	06	01			RADAR		10K0E	S9 short burst
14165.0	1227	14	01			RADAR		12K0E	S9 burst
14172.0	1214	18	01			RADAR		10K0E	S9 burst also 14164.0
14183.0	1055	06	01			RADAR		12K0E	S9 11:04 ended
14184.0	1957	04	01			RADAR		12K0E	S5
14190.0	1200	10	01			RADAR		8K0E	short burst
14219.0	0900	17	01			XXX			Two tones
14220.0	0835	09	01			PSK	120	2k70E	S9
14226.0	1135	19	01			RADAR		10K0E	S7 bursts also 14279.0
14230.0	0955	20	01			RADAR		10K0E	S6 continous
14235.0	0845	21	01			RADAR	66	10k0E	Bursts
14255.0	0819	28	01			RADAR	66	10k0E	RS 57
14260.0	0805	03	01			RADAR	50	10k0E	Bursts
14268.0	0735	13	01			PSK	120	2k70E	S9+ [08.07 UTC QRT]
14275.0	0814	21	01	CHN		RADAR	66	10k0E	Bursts

PZK; SP3AMO, SP5GNI									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14295.0	0902	17	1			RADAR	66	10k0E	Bursts
14301.0	0908	14	01			RADAR		10K0E	S6 short bursts
14301.0	1307	18	10			RADAR		14K0E	S7
14309.0	0950	19	01			RADAR		10K0E	S6 short bursts
14320.0	0855	21	01			RADAR	50	10k0E	Bursts
14328.0	0950	14	01			RADAR		10K0E	S6 short bursts
14340.0	0942	11	01			RADAR		10K0E	S6 short bursts
14343.0	0850	28	01			RADAR		10K0E	S6 short bursts
14348.0	0956	14	01			RADAR		12K0E	S9 burst
14350.0	0947	05	01			RADAR		10K0E	S6 short bursts
18115.0	1119	28	01			RADAR		10K0E	S9 burst
18152.0	0747	25	01			RADAR	50	10k0E	S3
18155.0	0918	22	01			RADAR		10K0E	S7 bursts
18164.0	0825	28	01			RADAR	50	10k0E	Bursts
18170.0	0805	09	01			RADAR	50	20k0E	08:05 UTC QRT
21000.0	0803	25	01		UI	J3E-U		2K70E	RS 46
21050.0	1024	17	01			RADAR	50	20k0E	S9 [10.29 UTC QRT]
21108.0	0925	17	01			RADAR	50	10k0E	Bursts
21130.0	0908	21	01			RADAR	3	20k0E	S9 [09.12 UTC QRT]
21147.0	0857	30	01			RADAR		10K0E	S9 burst
21180.0	0935	05	01			RADAR		20K0E	Strong S9+5dB (vd, vt)
21197.0	0805	28	01			RADAR	40	10k0E	Bursts
21200.0	0955	17	01			RADAR	50	10k0E	Bursts
21298.0	0910	17	01			RADAR	50	10k0E	Bursts
21315.0	1208	18	01			RADAR		10K0E	S5 short bursts also 21385.0 (vd, vt)
21327.0	0940	21	01			RADAR		10K0E	S5 short bursts also 21285.0
21345.0	0945	17	01			RADAR	50	10k0E	Bursts
21350.0	0735	03	01	G		RADAR	50	20k0E	S 9+
21390.0	1220	30	01			RADAR		20K0E	S9 continous
21405.0	1005	19	01			RADAR		20K0E	S9+10dB
21410.0	0805	07	01			RADAR	50	20k0E	S9 - QRV 1 min
21418.0	0920	17	01			RADAR	50	10k0E	Bursts
21437.5	0730	13	01			A3E			S2
21445.0	0705	23	01			RADAR		20K0E	S6 continous
28335.0	0808	09	01			RADAR	25	20k0E	S9 08:24 UTC QRT
28860.0	0918	14	01			RADAR		60K0E	S7 (also 09&24&30.01.2022)
29010.0	0805	03	01			RADAR	10	20k0E	S9+
29050.0	0825	09	01			RADAR	25	20k0E	S9+

REF; Francis, F5MIU									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7184	1730	1	1			fmcw	40	20kHz	OTH Radar pulsed 25ms, S8
7195	1705	2	1			fmcw	40	12kHz	OTH Radar pulsed 25ms, S8
7195	1739	3	1			fmcw	40	12kHz	OTH Radar pulsed 25ms, S8
21438	0900	4	1			cw			Russian Navy HQ Sevastopol

REF; Francis, F5MIU									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
									S9+ (every days)
21180	0848	5	1			fmcw	50	12kHz	OTH Radar pulsed 20ms, S8
7133	1725	5	1			fmcw	40	12kHz	OTH Radar pulsed 25ms, S4
21370	0857	12	1			fmcw	50	20kHz	OTH Radar pulsed 20ms, S9+
14030	0904	14	1			fmcw	10	50kHz	OTH Radar pulsed 100ms, S9+
14150	0915	15	1			fmcw	10	50kHz	OTH Radar pulsed 100ms, S8
14105	0837	19	1			fmcw	50	12kHz	OTH Radar pulsed 20ms, S9+10
7183	1615	21	1			fmcw	40	12kHz	OTH Radar pulsed 25ms, S9+20
14145	0848	28	1			fmcw	10	50kHz	OTH Radar pulsed 100ms, S9+10
7155	1626	28	1			fmcw	40	12kHz	OTH Radar pulsed 25ms, S8
7140	1626	28	1			fmcw	40	12kHz	OTH Radar pulsed 25ms, S6
7100	1655	28	1			fmcw	40	12kHz	OTH Radar pulsed 25ms, S+20
14130	0857	29	1			fmcw	10	50kHz	OTH Radar pulsed 100ms, S8

RSGB; Richard, G4DYA									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3510.0	1640	01	01			J3E		2K70E	USB 'The Air Horn'. Daily. Also heard 181946z, 241658z.
3756.0	1640	01	01			J3E		1K70E	USB 'The Pip'. Daily. Also heard 181604z, 241658z.
7006.5	0809	23	01			F1B		250	FSK
7008.0	1744	07	01	RUS		P0N	40	12K0E	Container pulse radar
7032.0	0955	29	01			J7D		2K70E	USB 7030.0 / CIS-12
7036.0	1655	24	01			F1B		250	FSK
7037.0	1641	31	01			J7D		2K70E	USB 7035.0 / CIS-12
7041.0	0823	26	01					2K75	Unidentified. 6 main carriers spaced 500 Hz.
7046.0	0825	11	01			F1B		250	FSK
7062.0	0830	19 26	01	RUS		H3E		3K00E	USB (full carrier) Numbers station, female voice. Every Wednesday.
7063.0	1555	01	01	RUS		P0N	40	12K0E	Container pulse radar
7066.0	1646	31	02			F1B		200	FSK
7068.0	0853	27	01			J7D		2K70E	USB 7066.0 / CIS-12
7074.988	0806	02	01			A1N			Continuous dashes
7075.009	0813	04	01			A1N			Continuous dashes
	0947	09							
7075.033	0824	03	01			A1N			Continuous dashes
7075.083	1047	01	01			A1N			Continuous dashes
7092.0	1643	31	01	CHN		F3N	50	10K0E	FMCW radar bursts
7094.0	1146	01	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
7095.0	1145	01	01	CHN		F3N	50	10K0E	FMCW radar bursts
7099.0	0803	28	01			F1B		200	FSK
7110.0	1600	01	01	ETH	R. Ethiopia	A3E			BC daily. Also heard 061719z, 071746z, 091618z, 181601z, 241652z, 261604z, 311644z.
7110.0	1728	24	01	RUS		P0N	40	12K0E	Container pulse radar
7131.0	1616	09	01	RUS		P0N	40	12K0E	Container pulse radar

RSGB; Richard, G4DYA									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7136.0	1553	26	01	CHN		F3N	47.6/50	10K0E	FMCW bursts, alternating sps
7140.02	1601	01	01	ERI	VoBM	A3E			BC daily. Also heard 071742z, 091619z, 181602z, 241654z, 311645z.
7144.0	0825	19	01			J7D		2K70E	USB 7142.0 / CIS-12
7144.0	1648	31	01			F3N	66.7	10K0E	FMCW radar bursts
7159.0	0858	18	01			F1B		200	FSK
7174.0	1535	05	01	RUS		P0N	40	12K0E	Container pulse radar
7178.0	0937	13	01			J7D		2K70E	USB 7176.0 / CIS-12
7185.65	1526	05	01			R7D		3K30	USB 7184.0 / CIS-12
7190.0	1559	26	01			N0N			Plain carrier
7192.0	1700	31	01	RUS		P0N	40	12K0E	Container pulse radar
7193.0	1043	01	01			F1B		200	FSK. Also heard 040810z, 070850z, 140839z, 160935z, 180900z, 190826z.
7195.0	1942	28	01	RUS		P0N	40	12K0E	Container pulse radar
7196.0	1651	24	01	RUS		P0N	40	12K0E	Container pulse radar
7198.0	0958	29	01			J7D		2K70E	USB 7196.0 / CIS-12
7199.994	1042	01	01			A3E			BC. 1030-1058z daily. Also heard 121044z, 251035z, 281030z, 291031z.
14029.0	0913	25	01	CHN		F3N	10	40K0E	FMCW radar
14034.0	0821	14	01	CHN		F3N	10	40K0E	FMCW radar
14041.0	0825	13	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14091.0	0917	16	01	CHN		F3N	41.7	10K0E	FMCW radar bursts
14102.0	0820	02	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14105.0	0814	19	01	CHN		F3N	50	10K0E	FMCW radar
14108.0	0831	05	01	CHN		F3N	47.6	10K0E	FMCW radar bursts
14110.0	0911	20	01	CHN		F3N	50	10K0E	FMCW radar bursts
14113.0	0848	04	01	CHN		F3N	47.6	10K0E	FMCW radar bursts
14120.0	0848	05	01	CHN		F3N	50	10K0E	FMCW radar bursts
14127.0	0805	29	01	CHN		F3N	10	40K0E	FMCW radar
14127.9	0813	11	01			J7D		2K80E	USB 14126.0 / Unidentified digital mode with 3300 Hz pilot
14130.0	0849	27	01	CHN		F3N	50	10K0E	FMCW radar
14135.0	0817	28	01	CHN		F3N	10	40K0E	FMCW radar
14136.0	0812	02	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14136.0	0834	05	01	CHN		F3N	50	10K0E	FMCW radar bursts
14139.0	0934 1010	10 27	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14140.0	0923	07	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14144.0	0821	11	01	CHN		F3N	50	10K0E	FMCW radar bursts
14150.7	0901	20	01					1K20E	Unidentified
14151.0	0838	07	01	CHN		F3N	50	10K0E	FMCW radar bursts
14155.0	0856	15	01	CHN		F3N	10	40K0E	FMCW radar
14170.0	1512	30	01	RUS		P0N	40	12K0E	Container pulse radar
14175.0	0819	14	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14186.0	1430	04	01	RUS		P0N	40	12K0E	Container pulse radar
14200.0	0932	10	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14200.0	0832	13	01	RUS		P0N	40	12K0E	Container pulse radar
14204.0	0819	03	01	CHN		F3N	50	10K0E	FMCW radar bursts

RSGB; Richard, G4DYA									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14209.0	0906	15	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14216.0	0941	09	01	CHN		F3N	50	10K0E	FMCW radar bursts
14230.0	0847	20	01	CHN		F3N	50	10K0E	FMCW radar
14248.0	0845	11	01	CHN		F3N		10K0E	FMCW radar bursts alternating between 62.5 and 66.7 sps
14251.0	0831	17	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14253.0	0819	28	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14256.0	0830	04	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14257.0	0932	10	01	CHN		F3N	50	10K0E	FMCW radar bursts
14258.0	0848	02	01	CHN		F3N	41.7	10K0E	FMCW radar bursts
14258.0	0832	19	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14259.0	0845	05	01	CHN		F3N	50	10K0E	FMCW radar bursts
14260.0	0818	03	01	CHN		F3N	50	10K0E	FMCW radar bursts
14265.0	0831	14	01	CHN		F3N	41.7	10K0E	FMCW radar bursts
14266.0	0848	02	01	CHN		F3N	41.7	10K0E	FMCW radar bursts
14270.0	0816	19	01			J7D		2K70E	USB 14268.0 / CIS-12
14275.0	0815	21	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14277.0	0859	04	01	CHN		F3N	50	10K0E	FMCW radar bursts
14277.0	0843	10	01	CHN		F3N	62.5	10K0E	FMCW radar bursts
14285.0	0847	14	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14285.0	0907	18	01	CHN		F3N	50	10K0E	FMCW radar bursts
14293.0	0931	13	01	CHN		F3N	41.7	10K0E	FMCW radar bursts
14294.0	0840	07	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14296.0	0921	16	01	CHN		F3N	50	10K0E	FMCW radar bursts
14298.5	0813	21	01					1K20E	Unidentified bursts
14300.0	0829	05	01	CHN		F3N	50	10K0E	FMCW radar bursts
14301.0	0833 0819	14 19	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14304.0	0843	05	01	CHN		F3N	50	10K0E	FMCW radar bursts
14305.0	0819	11	01	CHN		F3N	50	10K0E	FMCW radar bursts
14305.0	0922	16	01	CHN		F3N	47.6	10K0E	FMCW radar bursts
14309.0	0944	09	01	CHN		F3N	50	10K0E	FMCW radar bursts
14309.0	0828	17	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14309.0	0821	19	01	CHN		F3N	40	10K0E	FMCW radar bursts
14310.0	0921	27	01	CHN		F3N	41.7	10K0E	FMCW radar bursts
14312.0	0853	20	01	CHN		F3N	50	10K0E	FMCW radar bursts
14314.0	1048	25	01	CHN		F3N	62.5	10K0E	FMCW radar bursts
14315.0	0843	26	01	CHN		F3N	50	10K0E	FMCW radar bursts
14317.0	0901	04	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14319.0	0855	10	01	CHN		F3N	41.7	10K0E	FMCW radar bursts
14319.0	0851	20	01	CHN		F3N	47.6	10K0E	FMCW radar bursts
14322.0	0953	25	01	CHN		F3N	83.3	10K0E	FMCW radar bursts
14322.0	0845	26	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14325.0	0856	10	01	CHN		F3N	62.5	10K0E	FMCW radar bursts
14325.0	0910	15	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14326.0	0851	05	01	CHN		F3N	41.7	10K0E	FMCW radar bursts
14329.0	0919	16	01	CHN		F3N	41.7	10K0E	FMCW radar bursts

RSGB; Richard, G4DYA									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14330.0	0644	07	01	CHN		F3N	41.7	10K0E	FMCW radar bursts
14330.0	0817	19	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14331.0	0822	28	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14332.0	0832	04	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14336.0	0833	04	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14336.0	0822	14	01	CHN		F3N	50	10K0E	FMCW radar bursts
14337.0	0925	15	01	CHN		F3N	47.6	10K0E	FMCW radar bursts
14337.0	1030	25	01	CHN		F3N	62.5	10K0E	FMCW radar bursts
14337.0	0815	26	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14338.0	0823	02	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14339.0	0840	05	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14340.0	0817	11	01	CHN		F3N	47.6	10K0E	FMCW radar bursts
14342.0	0943	09	01	CHN		F3N	50	10K0E	FMCW radar bursts
14344.0	0851	27	01			F1B		250	FSK
14345.0	0832	10	01	CHN		F3N	41.7	10K0E	FMCW radar bursts
14345.0	0957	29	01	CHN		F3N	50	10K0E	FMCW radar bursts
14348.0	0821	03	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
14348.0	0854	18	01	CHN		F3N	50	10K0E	FMCW radar bursts
14349.0	0956	25	01	CHN		F3N	41.7	10K0E	FMCW radar bursts
18076.0	0844	25	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
18156.0	0938	09	01	CHN		F3N	50	10K0E	FMCW radar bursts
18164.0	0836	28	01	CHN		F3N	50	10K0E	FMCW radar bursts
18170.0	0921 0841	07 26	01	G		F3N	50	20K0E	FMCW radar, UK SBA, Cyprus
21122.0	1054	29	01	RUS		P0N	40	12K0E	Container pulse radar
21135.0	1356	29	01	G		F3N	25	20K0E	FMCW radar, UK SBA, Cyprus
21159.0	1029	27	01	RUS		P0N	40	12K0E	Container pulse radar
21161.0	0840	10	01	RUS		P0N	40	12K0E	Container pulse radar
21180.0	0835	05	01	G		F3N	50	20K0E	FMCW radar, UK SBA, Cyprus
21180.0	0932	13	01	G		F3N	25	20K0E	FMCW radar, UK SBA, Cyprus
21330.0	0911	18	01	G		F3N	50	20K0E	FMCW radar, UK SBA, Cyprus
21350.0	0814	03	01	G		F3N	50	20K0E	FMCW radar, UK SBA, Cyprus
21370.0	1008	27	01	CHN		F3N	66.7	10K0E	FMCW radar bursts
21390.0	0826 1201	06 30	01	G		F3N	50	20K0E	FMCW radar, UK SBA, Cyprus
21409.0	0934	13	01	RUS		P0N	40	12K0E	Container pulse radar
21427.0	0910	02	01	CHN		F3N	50	10K0E	FMCW radar bursts
21438.0	0839	02	01	RUS	RCV	A1A			Morse. Also heard 050838z, 180851z, 250954z.
24950.0	0814	03	01	G		F3N	50	20K0E	FMCW radar, UK SBA, Cyprus
28750.0	0816	02	01	G		F3N	25	20K0E	FMCW radar, UK SBA, Cyprus

RSK; Kamweti, 5Z4BV									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7000	vt	19	1	KEN		PSK		2K5E	STANAG 4285
7024	vt	19	1	KEN		PSK		2K7E	STANAG 4285

RSK; Kamweti, 5Z4BV

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7110	vt	vd	1	ETH		A3E		12kE	Radio Ethiopia National Service
7140	vt	vd	1	ERI		A3E		10kE	Radio Eritrea Voice of Broad Masses
7150	vt	vd	1	KEN		MFSK	128	2k2	2G ALE Call transmission
14100	0839	19	1			RADAR	40sps	10K0E	FMOP-OTHR Russian Contayner

SRAL; Pekka, OH2BLU

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7 MHz	1515-0550	*	1	RUS		RADAR	40sps	13k0E	*) Days: 1. - 6. 9. 10. 12. 17. 19. - 22. 24. 26. 28. 30. (WebSDR 28d)
7 MHz	1100-1600	*	1	RUS		RADAR	10sps	10k0E	*) Days: 1. 2. 3. 6. - 9. 12. - 15. 27. 30.
7 MHz	1115-1930	*	1	CHN		RADAR	50/67sps	10k0E	*) Days: 1. - 4. 10. - 12. 17. 19. 22. 24. 'foghorn'
7000.0	1115-1630	*	1	RUS		NON			*) Days: 6. 7. 17. - 19.
7006.5	1230-1340	24	1	RUS		F1A/ NON		250	
7010.0	1100-1745	03 19	1	RUS		J7D	120	2k60E	
7011.0	0745-0805/	14	1	RUS		J3E-u		3k0E	Russian vox
7015.0	0800-0815/	08	1	RUS	RIT	A1A		20H	
7021.0	1315-1340	27	1	RUS		F1B		500H	
7030.0	0715-0810/	23	1	RUS		F1B		250H	
7031.0	0625-1315	*	1	RUS		J3E-u		3k0E	*) Days: 16. - 19. Russian vox and brum
7032.0	1015-1045	29	1	RUS		J7D	120	2k60E	
7037.0	1015-1705/	31	1	RUS		J7D	120	2k60E	
7046.0	0720-1915	*	1	RUS		F1B/ NON		200/ 250H	*) Days: 10. 11. 20. 22. 31.
7050.5	1050-1110/	10	1	RUS		J7D	120	2k60E	
7067.0	0840-0930	31	1	RUS		J7D	120	2k60E	Until 0846 BW 8k0E
7068.0	0915-0930	20	1	RUS		J7D	120	2k60E	
7089.0	1230	27	1	RUS		J7D	120	2k60E	
7095.5	0830-1020	04 18	1	RUS		J7D	120	2k60E	
7099.0	0815-0900	03	1	RUS		A1A		20H	
7099.0	0600-1600/	07 28	1	RUS		F1B		200H	
7110.0	0400-0700	01 - 31	1	ETH	R. Ethiopia	A3E		9k0	
7110.0	1315-1805/	01 - 31	1	ETH	R. Ethiopia	A3E		9k0	Mostly 1500 – 1600 off air

SRAL; Pekka, OH2BLU									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7122.0	0720-0820/	27	1	RUS		F1B		250H	
7140.0	0430-0700	01 - 31	1	ERI	VoBME	A3E		9k0	+20Hz offset
7140.0	1330-1835/	01 - 31	1	ERI	VoBME	A3E		9k0	+20Hz offset
7144.0	0845-0900	19	1	RUS		J7D	120	2k60E	
7160.0	0800-0815	18	1	RUS	RBL88	A1A	16 wpm	20H	5BL
7168.0	0745-0805/	21	1	RUS	MZOI	F1A/ N0N		200h	
7169.0	1130-1205/	04	1	RUS		F1B		250H	
7170.0	1400	20	1	RUS		J7D	120	2k60E	
7171.0	1435	21	1	RUS		J7D	120	2k60E	
7176.0	1340-1355/	14	1	RUS		F1A		250H	
7178.0	0900-1025/	13 22	1	RUS		J7D	120	2k60E	
7182.0	0615-1900	*	1	RUS	8JÜS	F1A/N0N		200H	5BL
7186.0	1030-1410/	08	1	RUS		J7D	120	2k60E	
7188.0	1240-1250	04 28	1	RUS		F1B		250H	
7193.0	0845-2000	*	1	RUS		F1B/ N0N		200H	*) Days: 4. 6. - 9. 14. 17. - 19.
7198.0	1000-1045	29	1	RUS		J7D		2k60E	
7200.0	1020-1100/	01 - 31	1	TWN	RTI	A3E		9k0	Radio Taiwan International, to 1030 N0N
10 MHz	*	*	1	G		RADAR	50sps	20k0	*) not heard (WebSDR 4d)
10 MHz	*	*	1	RUS		RADAR	40sps	13k0E	*) not heard (WebSDR 2d)
14 MHz	0830-1745	*	1	RUS		RADAR	40sps	13k0E	*) Days: 2. 3. 6. 12. 13. 19. 21. 22. 30. (WebSDR 13d)
14 MHz	0745-1200	*	1	RUS		RADAR	10sps	10k0E	*) Days: 1. 3. - 4. 8. - 15. 17. - 21. 24. 26. 28. 29. 31.
14 MHz	0610-1030	*	1	CHN		RADAR	50/67sps	10k0E	*) Days: 1. 3. 4. 5. 8. - 15. 17. - 21. 24. 26. 27. 28. 31. 'foghorn'
14 MHz	0600-1000	*	1	CHN		RADAR	10sps	40/160k0	*) Days: 14. 15. 22. 25. 26. 28. 29.
14 MHz	0620-1000	*	1	CHN		RADAR	50sps	10k0	*) Days: 14. 19. 20. 27. 30.
14056.0	0715-0800/	13	1	RUS		J7D	120	6k60E	DSB, subcarries +/- 3.3 kHz
14210.0	0715	21	1			RADAR	10sps	6k0	Superdarn
14221.0	0515-0600/	*	1	KAZ		F1B		200H	*) Days: 4. 12. 23. 31.
18 MHz	0730-1000	*	1	G		RADAR	25/50sps	20k0	*) Days: 6. 7. 14. 26. (WebSDR 10d)
18 MHz	*	*	1	RUS		RADAR	40sps	13k0E	Not heard, (WebSDR 3d)
21 MHz	0630-	*	1	G		RADAR	25/50sp	20k0	*) Days: 1. 2. 3. 5. 6. 11. 13. 20. 22. 26. 27.

SRAL; Pekka, OH2BLU									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
	1400						s		29. 30. (WebSDR 27d)
21 MHz	1045-1430	*	1	RUS		RADAR	40sps	13k0E	*) Days: 14. 22. 26. 29. (WebSDR 6d)
21438.0	/0830-1430	*	1	RUS	RCV	A1A	20	20H/1k0E	*) Days: 1. - 16. 18. 19. 22. - 27. 29. 31. lately with 405 Hz tone
28 MHz	0700-1000	*	1	IRN		RADAR	150/313	60k0E	*) Days: 2. 9. 10. 13. 19. 31. alternating fq
28860.0	0600-1430	*	1	IRN		RADAR	150/313	60k0E	*) Days: 1. 5. 9. 10. 11. 13. 17. 18. 23. 25. 29. 30. 31.
28 MHz	*	*	1	RUS	Taxi disp.	F3E		3k0E	*) No reports

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
6996.0	16:41	27	01	RUS		RADAR	40	12K0E	OTHR Contayner. Also on 7163 kHz CF
6998.0	15:50	28	01			XXX		CA16K0E	6998 kHz CF. XXX: BW ca 16K0E.
7000.0	08:04	18	01			NON			
7000.4	16:15 vt*	17 vd*	01			J3E-U			Male voice. Italian language. Anti COVID-vaccination propaganda. *Also on 19 and 19/01, vt
7002.0	16:10	13	01	RUS		RADAR	40	12K0E	OTHR Contayner
7002.0	07:56	19	01			XXX		CA2K50E	70002 kHz USB. BW ca 2K50E. Digital bursts
7020.0	20:31	24	01	RUS		RADAR	40	12K0E	OTHR Contayner
7026.6	18:51	24	01			J7D		1K75E	
7027.0	22:14	26	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
7036.0	15:56	28	01			XXX		CA16K0E	7036 kHz CF. XXX: BW ca 16K0E. Same signal as on 6998 kHz CF
7042.0	22:25	11	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
7046.0	18:54 vt*	24 vd*	01			F1B		200	*Also on 28/01, 2011 UTC
7055.0	18:56 vt*	01 vd*	01			J3E-L			UKR/RUS "radiowar" *Often
7057.0	20:40	21	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
7057.0	16:03	28	01	RUS		RADAR	40	12K0E	OTHR Contayner
7058.0	16:06	05	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
7064.0	19:15	06	01	RUS		RADAR	40	12K0E	OTHR Contayner
7066.0	15:19	29	01	RUS		RADAR	40	12K0E	OTHR Contayner
7075.0	08:06 vt*	01 vd*	01			A1N			Continuous dashes *Often
7085.0	17:00 vt*	12 vd*	01	RUS		RADAR	40	12K0E	OTHR Contayner *Also on 28/01, 2009 UTC; 29/01, 1718 UTC
7089.0	19:15	01	01	RUS		RADAR	40	12K0E	OTHR Contayner
7093.0	15:44	28	01	RUS		RADAR	40	12K0E	OTHR Contayner. Also on 7178 kHz CF
7096.0	16:12	05	01	CHN		RADAR		10K0E	Short bursts. "Foghorn"
7100.0	10:53	02	01			J3E-L			Several UI st playing loops and recordings. French language. Male voice. Long-lasting
7102.0	17:58	04	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
7104.0	22:16	26	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7106.0	20:58	21	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
7107.0	21:00	21	01	CHN		RADAR	66.7	10K0E	Short bursts, "Foghorn"
7108.0	20:05	21	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
7110.0	17:56 vt*	04 vd*	01	ETH		A3E			BC. Ethiopia radio *Often
7111.0	20:11 vt*	27 vd*	01			G7D	60	2K35E	7111 kHz LSB: CHN 30 *Also on 28/01, 1829 UTC
7115.0	19:51	03	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
7116.0	18:26	28	01	RUS		RADAR	40	12K0E	OTHR Contayner
7121.0	19:52	04	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
7122.0	07:26	27	01	RUS		F1B	50	250H	SH = 250 Hz. Bd = 50
7127.0	15:42 vt*	17 vd*	01	RUS		RADAR	40	12K0E	OTHR Contayner *Also on 27/10, 2010 UTC
7128.0	15:39	13	01	RUS		RADAR	40	12K0E	OTHR Contayner
7131.0	20:06	21	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
7136.0	15:43	26	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
7140.02	16:42	10	01			NON			Carrier. Most probably, from BC st "VoBM1"
7140.02	15:40 vt*	13 vd*	01	ERI		A3E			BC. "VoBM1". ERI *Often
7148.0	22:05	26	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
7154.0	16:09	05	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
7163.0	16:35	27	01	RUS		RADAR	40	12K0E	OTHR Contayner
7170.0	15:56	13	01	RUS		RADAR	40	12K0E	OTHR Contayner
7174.0	15:34	05	01	RUS		RADAR	40	12K0E	OTHR Contayner
7175.0	19:49	26	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
7178.0	15:36	28	01	RUS		RADAR	40	12K0E	OTHR Contayner
7182.0	16:43	10	01	RUS		RADAR	40	12K0E	OTHR Contayner
7187.0	22:09	26	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
7192.0	17:13	14	01	RUS		RADAR	40	12K0E	OTHR Contayner
7193.0	18:53 vt*	01 vd*	01	RUS		RADAR	40	12K0E	OTHR Contayner *Also on 13/01, 1645 UTC
7195.0	19:49	03	01	RUS		RADAR	40	12K0E	OTHR Contayner
10124.0	18:58 vt*	01 vd*	01			RADAR	6.98	10K0E	OTHR sweeps. BW = 10K0E. 6.98 sps *Also on 12/01, 2012 UTC
10126.0	19:50	12	01			RADAR	6.9	10K0E	OTHR sweeps. BW = 10K0E. 6.9 sps
13920.0	07:39	26	01			XXX		CA360K	XXX. BW ca 360 kHz. Video: https://www.youtube.com/watch?v=hN7qkJIB5WQ
14009.0	07:18	10	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14017.9	09:31	25	01			J7D		2K70E	CIS-12. Submode Idle
14029.0	09:18	25	01	CHN		RADAR	10	40K0E	
14031.0	07:57	03	01	CHN		RADAR	50	10K0E	OTHR. Just QRT
14034.0	08:11	14	01	CHN		RADAR	10	40K0E	OTHR. BW = 40K0E. 10 sps
14042.9	07:19	24	01			XXX			XXX: BW ca 2.5 kHz. Same signal as XXX around 14045.5 kHz CF
14045.5	07:58 vt*	12 vd*	01			XXX		CA2K0E	XXX. Broken system, often around 14045.5 kHz CF. *Often

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14049.0	09:01	01	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14050.0	07:54	12	01	CHN		RADAR	62.5	10K0E	Short bursts. "Foghorn"
14056.0	08:24 vt*	24 vd*	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn" *Also on 25/01, 0737 UTC
14057.0	07:18 vt*	10 vd*	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn" *Also on 14/01, 0725 UTC
14061.0	07:03	12	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14098.5	07:31 vt*	03 vd*	01			F1B	600	600H	DPRK-FSK 600 ARQ *Very often
14098.5	07:35	19	01			XXX		1K20E	DPRK-1200
14100.0	08:57	01	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14102.0	07:16	14	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14104.0	08:08	01	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14105.0	07:14 vt*		01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn" *Also on 19/01, 0736 UTC
14110.0	07:45	24	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14112.0	09:04	14	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
14113.0	08:53	01	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14113.5	07:19	14	01			F1B	600	600H	DPRK-FSK 600 ARQ. Just QRT
14114.0	14:58	18	01	RUS		RADAR	40	12K0E	OTHR Contayner
14115.0	09:08	18	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14117.0	09:03	14	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14120.0	07:02	12	01	CHN		RADAR	10	40K0E	
14127.0	07:47	29	01	CHN		RADAR	10	40K0E	OTHR
14127.9	07:25	11	01			W7D		2K80E	CIS-60
14128.0	09:29	05	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14130.0	08:44	27	01	CHN		RADAR	50	10K0E	CHN OTHR. BW = 10K0E. 50 sps
14132.0	07:59	03	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14135.0	09:20	28	01	CHN		RADAR	10	40K0E	OTHR
14139.0	09:43	27	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14139.0	09:27	28	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14140.0	09:32	18	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14141.0	08:55	27	01		RAA	A1A RJD93	18		Encrypted QTC. Numbers. "RJD93 DE RAA"
14144.0	08:14	11	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14147.0	07:42	25	01			XXX		CA5K0E	XXX. BW ca 5K0E. Drifting. Long-lasting. Also observed on several EU KiwiSDR.
14150.0	09:21	05	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14150.0	07:18	12	01	CHN		RADAR	62.5	10	Short bursts. "Foghorn"
14150.7	07:38	20	01			XXX		1K20E	XXX. BW = 1K20E. Continuous signal. 3 carriers. Video : https://www.youtube.com/watch?v=D5rsUD-8QGU
14151.0	08:37	07	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14153.0	07:34 vt*	25 vd*	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn" *Also on 25/01, 0803 UTC
14158.0	12:39	12	01	RUS		RADAR	40	12K0E	OTHR Contayner
14169.0	07:39	19	01			F1B	50	200H	SH = 200 Hz. Bd = 50

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14170.0	14:34	30	01	RUS		RADAR	40	12K0E	OTHR Contayner
14171.0	07:15	24	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14175.0	08:16 vt*	14 vd*	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn" *Also on 14/01, 0846 UTC
14185.0	07:33	14	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14187.0	07:53	03	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
14190.0	07:21	12	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14192.0	07:57	12	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14197.6	07:08	31	01			F1B		900H	
14198.5	07:32	27	01			F1B	600	600H	DPRK-FSK 600 ARQ
14204.0	07:38	03	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14216.0	07:42	18	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14219.5	07:46	27	01			XXX		CA3K0E	XXX. Drifting. Also observed in some EU KiwiSDR
14220.0	07:12	24	01			RADAR		5K0E	SuperDARN. Very weak, QSB
14225.0	07:49	25	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14230.0	07:25	20	01	CHN		RADAR	50	10K0E	OTHR
14240.0	07:05	12	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14240.5	08:19	19	01			XXX		CA9K0E	XXX. Continuous long-lasting signal (like white noise). BW ca9K0E. Also observed in several EU KiwiSDR. Same as on 14300.5 kHz CF
14247.0	07:46	25	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14248.0	08:37	11	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14251.0	07:24	26	01	CHN		RADAR	10	40K0E	CHN OTHR. BW = 40K0E. 10 sps
14252.0	07:32	06	01	CHN		RADAR	62.5	10K0E	Short bursts. "Foghorn"
14255.0	08:08	24	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14256.0	08:23	04	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14258.0	08:26	19	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14260.0	07:28	03	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14262.0	08:47	07	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14266.0	08:09	04	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14270.0	08:21	19	01			J7D	120	2K70E	CIS-12. With carrier at 14268 kHz
14272.0	07:37	10	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14272.0	08:09	26	01			J7D		2K70E	CIS-12. Submode Idle
14275.0	07:42	31	01		RA3TLB	A1A			""RA3TLB" loop. (Beacon?)
14276.0	07:43	06	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14280.0	08:49	06	01	CHN		RADAR	42.1	10K0E	Short bursts. "Foghorn"
14280.0	10:06	26	01			A3E		10K0E	14280 kHz CF. Numbers station "S06s" aka "RUS lady". Female voice. RUS lang. figures. Video: https://www.youtube.com/watch?v=JEE5ueyrcZ8
14284.0	07:16	03	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14285.0	08:42	14	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14285.0	09:00	18	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14294.0	08:35	07	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14295.0	07:03	03	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14295.0	07:55	12	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14298.5	08:22 vt*	01 vd*	01			OTHER		1K20E	DPRK-1200 *Often
14298.5	08:01 vt*	03 vd*	01			F1B	600	600H	DPRK-FSK 600 ARQ *Often
14300.5	08:16	19	01			XXX		CA9K0E	XXX. Continuous long-lasting signal (like white noise). Also observed in several EU KiwiSDR
14301.0	08:45 vt*	14 vd*	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn" *Also on 19/01, 0744 UTC and 31/01, 0658 UTC
14305.0	07:17	11	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14305.0	08:10	11	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14308.0	07:16 vt*	10 vd*	01			F1B	50	500H	*Also on 24/01, 0831 UTC
14309.0	07:06	12	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14309.0	08:13	19	01	CHN		RADAR	40	10K0E	Short bursts. "Foghorn"
14310.0	07:40	06	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14310.0	09:44	27	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
14311.0	08:09 vt*	01 vd*	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn" *Also on 31/10, 0809 UTC
14313.0	07:31	03	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14313.0	07:16 vt*	24 vd*	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn" *Also on 30/01, 1001 UTC
14315.0	08:49	26	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14317.0	08:10 vt*	04 vd*	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn" *Also on 04/01, 0854 UTC and 06/01, 0847 UTC
14317.5	07:40	03	01			XXX		CA1K20E	XXX. Carriers. Also observed on several EU KiwiSDR
14322.0	07:44	18	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14322.0	08:21	26	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14325.0	08:52	10	01	CHN		RADAR	62.5	10K0E	Short bursts. "Foghorn"
14326.0	09:02	01	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14326.0	09:59	01	01	CHN		RADAR	66.7	20K0E	Short bursts. "Foghorn" BW = 20K0E. 66.7 sps
14328.0	07:17	24	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14330.0	08:32	06	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14330.0	08:36	07	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
14330.0	07:44	19	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14330.0	08:24	29	01			XXX		8K0E	XXX. BW ca 8K0E
14332.0	08:15	04	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14335.0	08:23	24	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14335.0	09:05	26	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14336.0	08:21	04	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14336.0	08:17	14	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14337.0	07:56	26	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14339.0	09:17	05	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14340.0	09:52	01	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14340.0	08:00	11	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14344.0	08:32	27	01			F1B		250H	SH = 250 Hz
14345.0	08:34	10	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
14347.0	07:50	06	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14348.0	08:29 vt*	03 vd*	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn" *Also on 12/01, 0723 UTC
14348.0	08:58	18	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14350.0	09:39	05	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
18070.0	07:21	11	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
18070.0	14:30	30	01	G		RADAR	25	20K0E	OTHR Pluto. UK SBA, Cyprus.
18075.0	07:59	06	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
18076.0	08:45	25	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
18087.0	07:09	20	01			RADAR	50	10K0E	Short bursts. "Foghorn"
18090.0	07:10	12	01	G		RADAR	25	20K0E	OTHR Pluto. UK SBA, Cyprus
18108.5	11:07	13	01			F1B	600	600H	DPRK-FSK 600 ARQ
18118.5	11:30	13	01			F1B	600	600H	DPRK-FSK 600 ARQ.
18146.0	08:00	06	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
18152.0	07:51	25	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
18167.0	08:04	06	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
18170.0	09:49 vt*	01 vd*	01	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus *Also on 07/01, 0927 UTC. 13/01, 1035 UTC. 26/01, 0838 UTC
18175.0	08:39	12	01	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
21052.0	07:53	31	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
21102.0	08:15	25	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21105.0	13:40	03	01	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
21110.0	08:13	12	01	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
21122.0	12:20	29	01	RUS		RADAR	40	12K0E	OTHR Contayner
21125.0	08:16	20	01	CHN		RADAR	62.5	10K0E	Short bursts. "Foghorn"
21126.0	12:11	11	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21129.0	07:14	20	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21129.0	08:22	27	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
21130.0	07:48	26	01	G		RADAR	25	20K0E	OTHR Pluto. UK SBA, Cyprus.
21130.0	08:39	27	01	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
21132.0	08:45 vt*	26 vd*	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn" *Also on 26/01, 0852 UTC
21140.0	07:50	29	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
21144.0	07:26 vt*	Vd*	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn" *Also on 31/01, 0754 UTC
21148.0	09:34	28	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21155.0	09:36	11	01	RUS		RADAR	40	12K0E	OTHR Contayner
21155.0	10:17	14	01	G		RADAR	50	20K0E	OTHR pluto. UK SBA,Cyprus
21155.0	09:35	28	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21157.0	10:41	14	01	RUS		RADAR	40	12K0E	OTHR Contayner
21157.0	07:28	31	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21158.0	11:40 vt*	13 vd*	01	RUS		RADAR	40	12K0E	OTHR Contayner *Also on 26/01, 1026 UTC

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
21159.0	08:26	01	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21161.0	10:02 vt*	01 vd*	01	RUS		RADAR	40	12K0E	OTHR Contayner *Also on 10/01, 0841 UTC
21162.0	11:01	01	01	RUS		RADAR	40	12K0E	OTHR Contayner
21165.0	08:10	20	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
21171.0	10:15	04	01	RUS		RADAR	40	12K0E	OTHR Contayner
21180.0	09:12 vt*	05 vd*	01	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus *Also on 12/10, 1209 UTC
21183.0	08:21	20	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
21186.0	08:26	26	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
21190.0	13:56	30	01	G		RADAR	25	20K0E	OTHR Pluto. UK SBA, Cyprus
21222.0	07:52	29	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
21237.0	08:16	24	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21250.0	08:14	12	01	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
21270.0	12:19 vt*	10 vd*	01	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus *Also on 11/01, 0806 UTC
21275.0	07:14	20	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
21300.0	07:09 vt*	03 vd*	01	G		RADAR	50	20K0E	OTHR Pluto, UK SBA, Cyprus *Also on 04/01, 0843 UTC
21315.0	08:10	25	01	CHN		RADAR	47.5	10K0E	Short bursts. "Foghorn"
21328.0	07:58	26	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
21330.0	09:11	18	01	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
21330.0	07:37	27	01	CHN		RADAR	62.5	10K0E	Short bursts. "Foghorn"
21333.0	09:41	27	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
21340.0	12:41	01	01	G		RADAR	25	20K0E	OTHR PLUTO. UK SBA Cyprus
21350.0	07:34	03	01	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
21355.0	07:53 vt*	29 vd*	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn" *Also on 29/01, 0831 UTC
21360.0	10:15	03	01	G		RADAR	25	20K0E	OTHR Pluto. UK SBA, Cyprus
21363.0	07:55	27	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
21365.0	09:58	30	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21369.0	08:59	20	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
21370.0	11:25 vt*	01 vd*	01	G		RADAR	25	20K0E	OTHR Pluto. UK SBA Cyprus *Also on 28/01, 1329 UTC
21372.0	07:48	18	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
21376.0	08:22	31	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
21390.0	12:09 vt*	04 vd*	01	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus *Also on 06/01, 0815 UTC
21390.0	09:11	20	01	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
21390.0	12:40	30	01	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
21393.0	07:23	31	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21395.0	08:18	25	01	CHN		RADAR	47.5	10K0E	Short bursts. "Foghorn"
21401.0	08:29	29	01	CHN		RADAR	47.7	10K0E	Short bursts. "Foghorn"
21402.0	08:11	20	01	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
21405.0	12:55	01	01	G		RADAR	50	20K0E	OTHR Pluto. UK SBA Cyprus
21411.0	13:17 vt*	04 vd*	01	RUS		RADAR	40	12K0E	OTHR Contayner *Also on 05/01, 0936 UTC
21411.0	07:30	26	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
21420.0	11:51	31	10	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
21421.0	11:54	15	01	RUS		RADAR	40	12K0E	OTHR Contayner
21421.0	09:22	27	01	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
21430.0	10:24	12	01	G		RADAR	25	20K0E	OTHR Pluto. UK SBA, Cyprus
21438.0	08:46 vt*	18 vd*	01	RUS	RCV	A1A			"RCV" QTC.RUS navy. Since 24/01, overdriven. *Almost daily
21446.0	09:04	20	01	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
24903.0	08:19	01	01	RUS		RADAR	40	12K0E	OTHR Contayner
24904.0	09:36	04	01	RUS		RADAR	40	12K0E	OTHR Contayner
24910.0	07:35	20	01	G		RADAR	25	20K0E	OTHR Pluto. UK SBA, Cyprus
24950.0	08:20	03	01	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
24975.0	11:45	04	01	RUS		RADAR	40	12K0E	OTHR Contayner
28600.0	08:36 vt*	14 vd*	01	IRN		RADAR	870	45K0E	OTHR IRN. BW = 45K0E. 870 and 313 sps, alternating *Often
28960.0	08:51	19	01	IRN		RADAR	150	45K0E	OTHR IRN. BW = 45K0E. 150 and 313 sps. alternating
29010.0	08:15	03	01	G		RADAR	25	20K0E	OTHR Pluto. UK SBA, Cyprus. BW = 20K0E. 25 sps
29500.0	08:23	03	01	G		RADAR	25	20K0E	OTHR Pluto. UK SBA, Cyprus

USKA; Peter, HB9CET									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7000.0	0957	17	01			J3E-U		2k7	Italian language often
7000.0	1829 1656	17 18	01			NON			Long lasting carrier
7002.0	1634	13	01			FMOP	40	12k0E	OTHR; Contayner
7006.0	1513	20	01			FMOP	40	12k0E	OTHR; Contayner
7024.0	1414	28	01			Radar	10	ca 40k	OTHR; weak signal;
7036.0	1547	11	01			F1B	x	250H	
7037.0	1224	31	01			J7D	12x120 Bd	2k70E	CIS12
7038.0	2221	30	01			OTHR	50	10k0E	OTHR; Bursts
7039.3	1815	10	01	RUS	K	A1A		10H	Petropavlovsk; Letter beacon
7039.4	2342	11	01	RUS	M	A1A		10H	Magadan; Letter beacon
7046.0	0909 0830	10 11	01			F1B	x	250H	often
7046.0	1253	31	01			F1B	50	200H	often
7049.0	1633	29	01			FMOP	40	12k0E	OTHR; Contayner
7050.0 LSB	1452	29	01			J3E-L		ca. 3k0E	Radio War
7055.0 LSB	1640 1103	01 06	01			J3E-L		ca. 3k0E	RUS-UKR Radio War Voice and music
7057.0	2147	02	01			Radar	50	10k0E	OTHR, Bursts
7061.0	1537	08	01			FMOP	40	12k0E	OTHR; Contayner
7065.0	0757	31	01			J7D	12x120 Bd	2k70E	CIS12, idling. stopped at 0800z

USKA; Peter, HB9CET									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7066.0	1525	29	01			FMOP	40	12k0E	OTHR; Contayner
7085.0	1729	29	01			FMOP	40	12k0E	OTHR; Contayner
7092.0	2309	27	01			FMOP	40	12k0E	OTHR; Contayner
7094.0	2354	05	01			FMOP	40	12k0E	OTHR; Contayner
7097.0	1806	21	01			FMOP	40	12k0E	OTHR; Contayner
7098.0	1658	14	01			OTHR	50	10k0E	OTHR; Bursts
7099.0	1225	28	01			F1B	75 Bd	200H	
7110.0	1656 1628	05 16	01	ETH		A3E		ca 9k0E	BC: Radio Ethiopia daily
7111.0 LSB	2305	27	01	CHN		G7D PSK-4	30x60 Bd	ca 2k50E	CHN30 (aka PRC30); Burst system;
7112.0	0923	14	01			J7D	12x120 Bd	2k70E	CIS12; idling only
7117.0	1715	28	01			FMOP	40	12k0E	OTHR; Contayner
7119.0	2136	02	01			FMOP	40	12k0E	OTHR; Contayner
7119.0	2315	27	01			J7D	12x120 Bd	2k70E	CIS12
7122.0	0741	27	01			F1B	75 Bd	250H	
7127.0	1554	17	01			FMOP	40	12k0E	OTHR; Contayner
7131.0	1625	11	01			OTHR	50	10k0E	OTHR; Bursts
7140.0	1639 1737	01 29	01	ERI	VOBM 1	A3E		ca 9k0E	BC: Voice of the broad Masses 1 almost daily
7145.0	1851	24	01			FMCW	50	10k0E	OTHR; Bursts
7152.0	2140	02	01			FMCW	50	10k0E	OTHR, Bursts
7158.0	1557	17	01			FMCW	50	10k0E	OTHR; Bursts
7159.0	0907	18	01			F1B	x	200H	
7165.0	2131	02	01			FMOP	40	12k0E	OTHR; Contayner
7172.0	1638	01	01			FMOP	40	12k0E	OTHR; Contayner; long lasting
7184.0	1459	06	01			FMCW	50	10k0E	OTHR; Bursts
7186.0	1549	08	01			J7D		2k70E	CIS12; submode idling; additional carrier at 7084 kHz
7192.1	1601	16	01			F1B		340H	Short Bursts only
7193.0	0943	13	01		RDL	F1B F1A	50 Bd	200H	FSK followed by FSK-CW emission TDoA: Kaliningrad often
7198.0	1005	29	01			J7D	12x120 Bd	2K70E	CIS12
7200.0	1039	05	01			A3E			Female voice; Lower sideband in 40m band
14056.0	0734	13	01			J7D	12x120 Bd	6k70E	CIS 12 in DSB mode
14127.0	0953	29	01			Radar	10	40k0E	OTHR;
14135.0	0925	28	01			Radar	10	40k0E	OTHR;
14144.0	0819	11	01			FMCW	50	10k0E	OTHR; Bursts
14177.0	1008	05	01			FMOP	40	12k0E	OTHR; Contayner
14183.0	1052	06	01			FMOP	40	12k0E	OTHR; Contayner
14209.0	0917	15	01			FMCW	50	10k0E	OTHR; Bursts
14270.0	0752	13	01			J7D	12x120 Bd	2K70E	CIS 12
14280.0	1012	05	01			A3E		ca 10k	Female voice: encrypted msgs (figures); Russian language often
14296.0	0952	17	01			FMOP	66.66	10k0E	OTHR; Bursts

USKA; Peter, HB9CET

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14311.0	0813	31	01			FMOP	66.66	10k0E	OTHR; Bursts
14319.0	1100	14	01			FMOP	66.66	10k0E	OTHR; Bursts
14325.0	0903	10	01			OTHR	61	10k0E	OTHR; Bursts
14344.0	0837	27	01			F1B	x	250H	
14344.0	0921	28	01			FMCW	50	10k0E	OTHR; Bursts
14345.0	0844	10	01			FMOP	41	10k0E	OTHR; Bursts
18170.0	1039	13	01	G		FMCW	50	20k0E	OTHR; UK base Cyprus; partially in 17m band
21115.0	1019	14	01	G		FMCW	50	20k0E	OTHR; UK base Cyprus
21115.0	1443	29	01			FMOP	40	12k0E	OTHR; Contayner
21118.0	1020	26	01			FMCW	50	10k0E	OTHR; Bursts
21122.0	1211	29	01	G		FMOP	40	12k0E	OTHR; Contayner
21125.0	1011	02	01	G		FMCW	50	20k0E	OTHR; UK base Cyprus
21129.0	0821	27	01			FMCW	x	10k0E	OTHR; Bursts;
21130.0	0842	27	01	G		FMCW	50	20k0E	OTHR; UK base Cyprus
21145.0	1044	11	01	MRC	various	MFSK 8 J7D	125	1k75	ALE; MIL188-141A often
21155.0	0935	11	01			FMOP	40	12k0E	OTHR; Contayner
21157.0	1052	14	01			FMOP	40	12k0E	OTHR; Contayner
21158.0	1036	26	01			FMOP	40	12k0E	OTHR; Contayner
21330.0	0914	18	01	G		FMCW	50	20k0E	OTHR,UK-base Cyprus
21369.0	0955	20	01			OTHR	66.66	10k0E	OTHR, Bursts; "Foghorn"
21438.0	0902	10	01		RCV	A1A		10H	TDoA: Area of Sevastopol daily
28860.0	0834 0959	11 28	01	IRN		?	150 + 313	ca 45k	OTHR, Bursts; long lasting, sweep rate alternating often

VERON: Ruud PG1R. Credits to observers Dick PA0GRU, Joeke PA0VDV, Kees PA2CHM, Arie PA3CNK, Rene PA3EQO

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3608.0	2010	03	01	RUS		F1B			UiPtr; Revs
3642.0	1751	09	01						Strange noise; also 1821UTC.
3673.0	2145	29	01	HOL		J3E-U			Dutch Coastguard; weather forecast Northsee; legal, shared band.
7000.0	1533	19	01	I		J3E-U			Male voice; Italian; S8.
7046.0	1234	10	01	RUS		F1B			Revs/UiPtr
7046.0	1848	24	01			F1B		200	UiPrinter
7055.0	1632	18	01			J3E-L			Patriotic slogans; UKR/RUS radiowar.
7070.0	1522	29	01	RUS		Radar	40	12k0E	CF; OTHR Contayner.
7099.0	1240	28	01			F1B		200	UiPtr
7195.0	1714	27	01	RUS		Radar	40	12k0E	CF; OTHR Contayner.
14300.0	1310	18	01	RUS		Radar		12k0E	CF; TDoA: near border Kazachstan, area Wolgograd/Saratov.
14341.0	1008	27	01			F1B		250	UiPtr
21436.0	1112	10	01	RUS		F1B			UiPtr; Revs
21438.0	0926	11	01	RUS	RCV	A1A			RIP90 de RCV rcv qtc 405 43 8 1248 405 = Nawip 033 32 ARTA 322 32221
21438.0	0930	11	01	RUS	RCV	A1A			RIP90 de RCV QTC 306 53 b6 1348 306 = Nawarea 030 15 Karta 30304

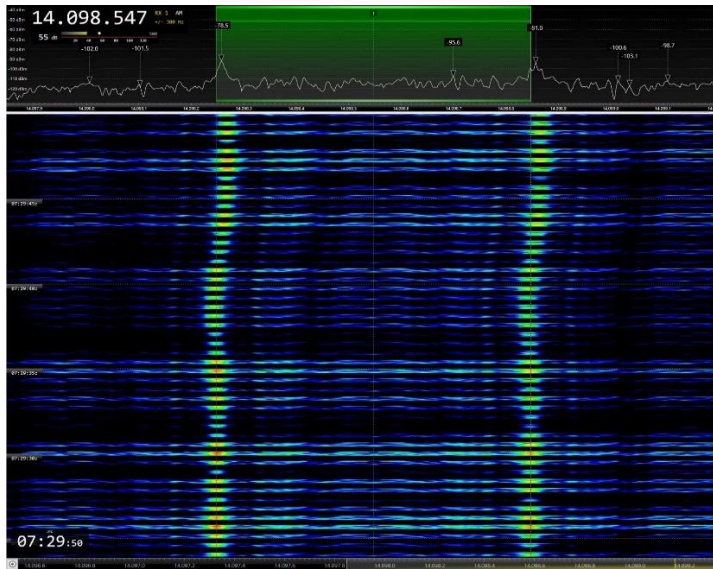
VERON: Ruud PG1R. Credits to observers Dick PA0GRU, Joeke PA0VDV, Kees PA2CHM, Arie PA3CNK, Rene PA3EQO

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
21438.0	1052	17	01	RUS	5F	A1A			S4; also at 1416UTC
28950.0	0845	19	01	IRN		Radar	150/315	50k0E	Iranian OTHR; CF; alternating sps; weak signal with QSB: S2-4.

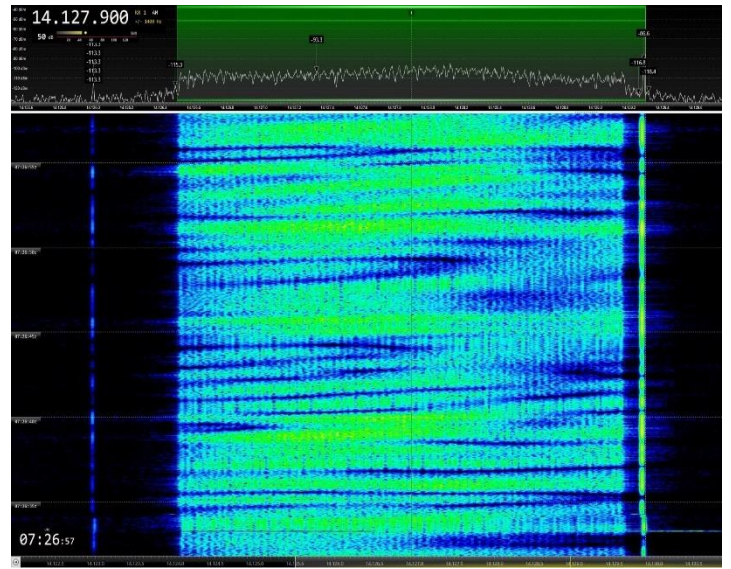
Contact: Gaspar Miró, EA6AMM, ea6amm@iaru-r1.org

IARUMS R1 Coordinators: <https://www.iaru-r1.org/spectrum/monitoring-system/iarums-region-1-coordinators/>

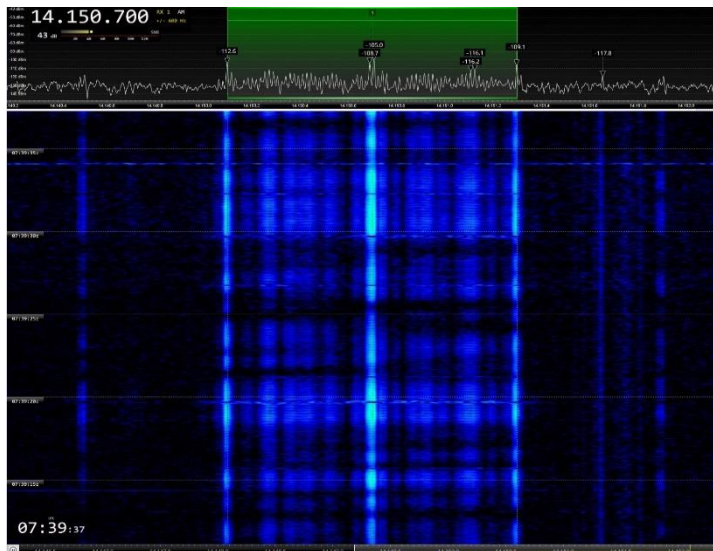
Visit our website: <https://www.iaru-r1.org/about-us/committees-and-working-groups/iarums/>



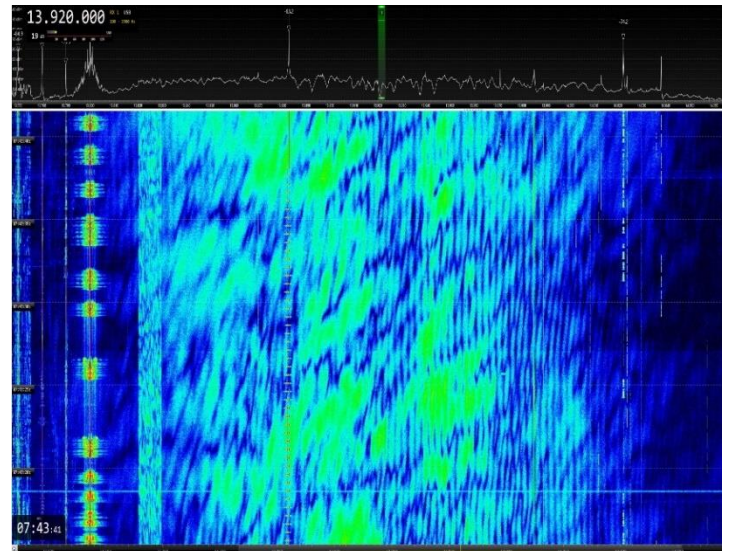
DPRK-FSK 600 ARQ. SH = 600 Hz. 600 Bd. (Slightly drifting). Often on 14098.5 kHz CF and 14298.5 kHz CF



OFDM. CIS- 60 aka RUS High Data Rate modem. BW = 2K80E



January 20, 0739 UTC BW = 1K20E. Wolf DK2OM informed it was PSK-2, 2 x 600 Bd



January 27, 0743 UTC. XXX. BW ca 360K0E. Partially on 20 m