



# IARU Monitoring System Region 1

## Monthly Newsletter 10 - October 2021

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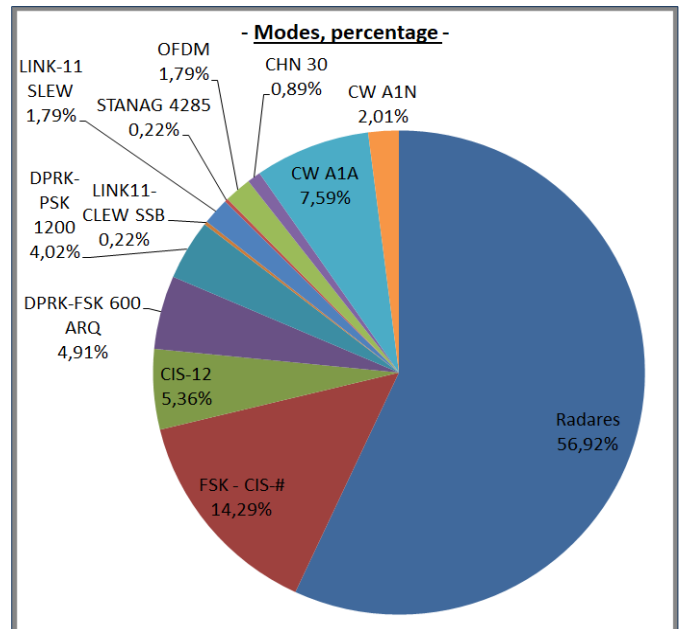
### News and Info's

October also brought us a large number of "trouble-makers" that often massively interfere with amateur radio. As always, in the first place were the over-the-horizon radars (OTHR), especially of course the well-known Russian Contayner OTHR. Also the British radar from UK base Cyprus was massively more often active, particularly in the 15, 17 and 20m band, using 25 and 50 sps.

Different OTHR from China were present daily on several frequencies, so the one known under the nickname "Foghorn" obviously also using different sweep rates, e.g. 20 or 50 sps, mostly 10 kHz wide. In addition, we were often badly influenced by 160 kHz wideband radar with 10 sps, a shame.

On 10m the Iranian OTHR was visible almost daily, mostly for hours - and recently on other frequencies and with partly new sweep rates, so alternately 150+313 sps as well as 225+334 sps or 315+870 sps were observed. It also changes frequencies more often and no longer transmits for hours on a single QRG.

However, we must be aware that we are not talking about hundreds of different radars, but objectively only a few sites that operate on different frequencies and with partly different sweep rates. This is also true for many other digital emissions. So let's not fool ourselves, it would be a self-deception! In addition to OTHR, as usual, numerous digital transmissions from east and



Percentage of the most frequent intruders (©EA6AMM)

west were also noticeable - mostly military -such as CIS12, CHN30, LINK11-SLEW and -CLEW, MIL 188-110, and various FSK stations with different bandwidths and baud rates (BW: 200, 250 and 500Hz, 36, 50, 75, 100, 600Bd), origin mostly from CIS states etc.

Depending on propagation conditions, some well known familiar broadcast stations were also audible almost daily in Europe. Including Radio Ethiopia on 7110 kHz with an often very strong signal. Also other stations were heard from time to time, if conditions permitted.↵

### Detailed reports of national coordinators

**Abbreviations used** (as per IARUMS definitions; please do not use "own, home brew" or other abbreviations)

**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** = **unid** = unidentified.

**CF:** Frequencies of digital signals are usually Center Frequencies (CF) unless otherwise specified!

**DARC;** Credits to monitors: DK2OM Wolf, DF5JL Tom, DK2ZR Rainer, DK7ST Stefan, DL2SCH Juergen, DE2TRF Torsten, DE1MGS Manfred, DO2FRK Frank, DO1LR Christian, DF5SF Uli, DG2RON Ronny, DL3RTL Daniel, DB3TA Alex

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7001.5	1608	18	10			F1B		200	unid ARQ-Mode
7003.0	1606	18	10	I		J3E-L			italian Pirates
7022.0	1401	05	10	RUS		PSK2A	120	2k6	CIS-12 - submode idle - Kaliningrad
7025.0	2058	17	10	RUS		FMOP	40	12k	OTHR Contayner
7025.8	1732	01	10				1200	2k6	CIS-12 aka AT-3004D 12 tone modem - QPSK 120 Bd per channel - 10 channels traffic. 2 channels sync
7032.0	1926	26	10			FMOP	40	12k	OTHR
7033.0	1818	07	10	CHN		FMOP	68.2	10k	Chinese OTH radar - 3.8 sec bursts
7038.0	1820	04	10	CHN		FMOP	10	160k	Chinese wideband OTHR
7050.0	1332	24	10	UKR		J3E-L		2k9	UKR/RUS radio war
7054.0	1848	19	10	RUS		F1B	50	200	F1B RUS
7055.0	0640	03	10	UKR		J3E-L		2k9	UKR/RUS radio war
7063.0	2134	07	10	RUS		FMOP	40	12k	OTH radar Contayner - W of Saransk
7065.0	2045	04	10	RUS		FMOP	40	12k	OTHR Contayner
7066.0	2008	17	10			FMOP	40	12k	OTHR
7074.8	1213	27	10			A1A		200	continuous dashes. 19 wpm
7075.0	2020	03	10	CHN		FMOP	10	160k	Chinese wideband OTHR
7080.0	2014	03	10	RUS		F1B	50	200	Kaliningrad - very often
7086.9	1855	10	10			PSK		2k6	CIS-12 (partly on idle)
7086.9	1830	12	10	RUS		OFDM	40	2760	RF 7085.0 - OFDM 60 - w of Kaluga
7088.0	1705	13	10			F1B		250	CIS-36-50
7089.8	1435	08	10			PSK		2k6	LINK11 SLEW TDoA ship NE of Tripolis
7091.0	1633	09	10	CHN		FMOP	67.3	10k	Chinese OTH radar - 7086 - 7096 kHz - 3.8 sec bursts
7092.0	1739	08	10	CHN		FMOP	66.66	10k	Chinese OTH radar - 3.8 sec bursts
7100.0	1710	27	10	UKR		J3E-L		2k9	UKR/RUS radio war
7102.0	1618	14	10	RUS		F1B	75	200	Severomorsk
7104.0	2132	29	10			FMOP	40	12k	OTHR
7107.0	1840	19	10	RUS		FMOP	40	12k	OTHR Contayner
7110.0	1518	12	10	ETH		A3E		9k	Radio Ethiopia
7111.7	1528	09	10			PSK		2k6	CIS-12 on idle
7114.0	520	02	10	RUS	RDL	F1B	50	200	ident on F1A "RDL" - Kaliningrad
7115.0	1854	17	10	RUS		FMOP	40	12k	OTHR Contayner
7121.0	2043	26	10	RUS		FMOP	40	12k	OTHR Contayner
7122.0	1613	12	10	CHN		FMOP	50.3	10k	Chinese OTH radar - 5.1 sec bursts
7124.0	2008	17	10	RUS		FMOP	40	12k	OTHR Contayner
7125.0	1628	09	10	CHN		FMOP	10	160k	Chinese wideband OTHR - 7045 - 7205 kHz - long lasting
7133.0	1822	26	10	RUS		FMOP	40	12k	OTHR Contayner
7137.0	1703	06	10	RUS		F1B	50	200	CIS-36-50
7139.0	1730	14	10			F1B		250	FSK Signal
7150.0	1730	07	10	CHN		FMOP	67.3	10k	Chinese OTH radar - 3.8 sec bursts

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kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7150.0	2215	26	10					12k	OTHR
7153.8	1502	14	10			PSK		2k4	CIS-12
7160.0	1827	08	10	CHN		FMOP	67.3	10k	Chinese OTH radar - 3.8 sec bursts
7169.0	1658	12	10	RUS		FMOP	40	12k	OTH radar Contayner - W of Saransk
7171.0	1732	07	10	CHN		PSK4A	60	2400	PRC 30 tone modem - LSB mode - pi- lot tone 450 Hz
7175.0	1454	08	10	RUS		FMOP	10	12k	OTHR 14.5s burst
7176.0	1925	29	10	RUS		FMOP	40	12k	OTHR Contayner
7178.0	1739	13	10			FMOP	10	12k	OTHR 14.5s burst
7181.0	1823	26	10			FMOP	40	12k	OTHR
7183.0	1907	17	10	RUS		FMOP	40	12k	OTHR Contayner
7186.0	1649	02	10	CHN		PSK4A	60	2k4	PRC 30 tone modem - LSB mode - pi- lot tone 450 Hz
7186.0	2118	07	10	RUS		FMOP	40	14k	OTHR Contayner
7189.0	1959	29	10	RUS		FMOP	40	12k	OTHR Contayner
7191.0	1840	19	10			FMOP	40	12k	OTHR
7192.0	1738	13	10			FMOP	10	12k	OTHR 14.5s burst
7198.1	0842	31	10			PSK8A		2k2	ALE 2G
10205.0	1349	12	10	CHN		FMOP	10	160k	Chinese wideband OTHR
14000.0	1930	04	10	B		USB			Brazilian fishermen - daily 1930 utc and later - traffic starts with "oiiii" = "hello"
14098.0	0856	15	10	RUS		PSK2A	120	2k6	CIS-12
14098.5	1335	08	10	RUS		F1B	600	600	DPRK-FSK 600 - possibly DPRK embas- sary Moscow (relay)
14101.9	1017	12	10	RUS		OFDM	40	2760	RF 14100.0 - OFDM 60 - W of Kaluga
14106.0	1252	12	10	RUS		FMOP	40	12k	OTH radar Contayner - W of Saransk
14108.0	0940	08	10	CHN		FMOP	66.67	10k	OTHR 3.8s bursts
14115.0	0842	08	10	CHN		FMOP	50	10k	OTHR 5.1s bursts
14118.0	0723	08	10	CHN		FMOP	66.67	10k	OTHR 3.8s bursts
14125.0	0725	08	10	CHN		FMOP	83.34	10k	OTHR 3.06s bursts
14152.0	0840	08	10	CHN		FMOP	66.67	10k	OTHR 3.8s bursts
14155.0	1634	11	10					12k	OTHR
14156.0	1548	11	10	RUS		FMOP	40	12k	OTH radar Contayner - W of Saransk
14180.0	0844	08	10	RUS		FMOP	10	12k	OTHR 14.5s burst
14190.0	1745	13	10	RUS		FMOP	40	12k	OTHR Contayner
14191.0	1015	08	10	RUS		FMOP	10	12k	OTHR 14.5s burst
14201.0	0845	08	10	RUS		FMOP	10	12k	OTHR 14.5s burst
14201.7	1006	04	10	CHN		PSK2A	75	2k2	PRC 16 tone modem - USB mode - pi- lot tone 670 Hz - RF 14200.0 kHz - China - Shanghai - daily
14250.0	0908	03	10	CHN		FMOP	50	10k	OTHR.
14261.0	1055	08	10	CHN		FMOP	50	10k	OTHR 5.1s bursts
14271.0	0712	08	10	CHN		FMOP	66.67	10k	OTHR 3.8s bursts
14287.0	0748	08	10	CHN		FMOP	66.67	10k	OTHR 3.8s bursts
14294.0	0928	08	10	CHN		FMOP	50	10k	OTHR continuous mode TDoA 34.5 N 114.0 E
14303.0	954	11	10	CHN		FMOP	66.66	10k	Chinese OTH radar- 3.8 sec bursts

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kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14305.0	0840	08	10	CHN		FMOP	83.34	10k	OTHR 3.06s bursts
14338.0	0723	08	10	CHN		FMOP	66.67	10k	OTHR 3.8s bursts
14347.0	0723	08	10	CHN		FMOP	66.67	10k	OTHR 3.8s bursts
18070.0	1513	11	10	CYP		FMOP	50	20k	UK OTH radar Cyprus
18107.0	1306	04	10	RUS	RDL	F1B	36/50	200	CIS-36-50 - Moscow - idle and traffic - often - Russian navy
18155.0	1022	08	10	RUS		FMOP	40	12k	OTH radar Contayner - W of Saransk
18199.0	0931	06	10	CHN		FMOP	10	160k	Chinese wideband OTHR
21001.0	1511	01	10	CYP		FMOP	25	20k	UK OTH radar Cyprus
21104.0	0904	31	10			FMOP	10	12k	OTHR 14.5s burst
21127.0	1005	10	10	RUS		FMOP	10	12k	OTHR 14.5s burst
21162.0	1253	10	10	RUS		FMOP	40	12k	OTHR Contayner TDoA Saransk
21163.0	1511	10	10	RUS		FMOP	40	12k	OTH radar Contayner - W of Saransk
21165.0	0950	10	10	CYP		FMOP	50	20k	OTHR Pluto Cyprus
21166.0	0936	10	10	CYP		FMOP	50	20k	UK OTH radar Cyprus
21175.0	1100	10	10	CYP		FMOP	50	20k	OTHR Pluto Cyprus
21176.0	1130	24	10					20k	OTHR
21230.0	0936	30	10	CYP		FMCW	50	20k	OTHR Pluto Cyprus
21334.0	1458	14	10	RUS		FMOP	40	12k	OTHR Contayner
21365.0	1145	10	10	CYP		FMOP	50	20k	OTHR Pluto Cyprus
21370.0	0950	10	10	CYP		FMOP	50	20k	OTHR Pluto Cyprus
21371.0	0942	10	10	CYP		FMOP	50	20k	UK OTH radar Cyprus
21408.0	1434	10	10			FMOP	10	12k	OTHR 14.5s burst
21409.0	1004	10	10	RUS		FMOP	10	12k	OTHR 14.5s burst
21412.0	1149	10	10			FMOP	10	12k	OTHR 14.5s burst
21413.0	0949	10	10	RUS		FMOP	5	12k	RUS radar burst - jumper - Makhachkala - Caspian Sea
28000.0	1000	22	10	IRN				46k	Iranian OTHR
28005.0	0840	24	10	IRN				46k	Iranian OTHR
28010.0	1026	02	10	IRN		AMOP	150 313		Iranian radar - 150 and 313 sps alternating
28057.0	1008	07	10	IRN		AMOP	150 313	46k	Iranian radar - 150 and 313 sps alternating
28600.0	0858	17	10			PON		40k	Iranian OTHR
28860.0	1036	04	10	IRN		AMOP	150 313	46k	Iranian radar 150 sps and 313 sps alternating - North Iran - daily
28864.0	1124	31	10	IRN			150 313	46k	Iranian OTHR
29505.0	1354	06	10	IRN		AMOP	150 313	46k	Iranian radar 150 and 313 sps alternating
29550.0	1001	07	10	IRN		AMOP	225 333	46k	Iranian radar - 225 and 333 sps alternating
29555.0	1400	06	10	IRN		AMOP	150 313	46k	Iranian radar 150 and 313 sps alternating
29600.0	1012	09	10	IRN		AMOP	150 313	46k	Iranian radar 150 and 313 sps alternating
29685.0	1022	09	10	IRN		AMOP	150 313	46k	Iranian radar 150 and 313 sps alternating

IRTS; Michael, EI3GYB									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3690	2250	29	10	RUS/ UKR		LSB			Russian-Ukrainian radio war with loud music and shouting of propaganda slogans in Russian.
7055	1850	05	10	RUS/ UKR		LSB			Russian-Ukrainian radio war. Daily all day long. Big signals. Shouting of slogans like "1-2-3- Russenschwein" in German and English. Rebroadcasts of Russian radio shows. Each side brands the other as "Nazi".
7076	2200	28	10			RADAR			Radar from 7076 to 7098 kHz. Strong and persistent.
7088	1915	10	10			PSK			Link-11 Clew. Huge signal, persistent.
7103	2000	14	10			FSK			Medium signal, persistent.
7110	0415	14	10	ETH		AM			Radio Ethiopia. Heard very often with varies signal strength. Also in the evenings after 1600z.
7139	1340	14	10			F1B			Strong and persistent. Still on 15th at 1100z.
7146	2130	25	10			RADAR			Radar from 7146 to 7176 kHz. Huge and persistent signals.
7152	1620	06	10			LSB			DQRM. Rebroadcasting of howling wolves. Goes on for over an hour until 1735z.
7170	1540	16	10			RADAR			Radar from 7170 to 7188 kHz. Intermittent.
7190	2235	23	10			RADAR			Radar from 7190 to 7208 kHz. Strong and persistent.
7205	2145	23	10	F		AM			Radio France International, splattering down to 7195 kHz. Daily.
14000	1357	13	10	CHN		AM			China Radio International with mixing product. Medium signal. Daily until 1559z.
14000	2105	05	10	B		USB			Brazilian CBers. Strong. Daily.
14115	1245	17	10			RADAR			Radar from 14115 to 14127 kHz. Medium signal. Persistent.
14130	1250	20	10			USB			Rebroadcasting of a religious programme in Russian. Big signal. Clear audio. Ends 1313z.
14132	1530	29	10			RADAR			Radar from 14132 to 14146 kHz. Medium signal. Persistent.
14241	1030	13	10			PSK			Huge and persistent signal.
14317	1500	03	10			PSK			Strong and persistent.
14323.5	1200	02	10			F1B			Persistent, medium signal.
18100	1330	08	10	CYP		RADAR			Radar from 18100 to 18200 kHz. System "Pluto".Huge monster signal 59plus 60.Wipes the band completely clean of any traffic.Persistent. Still active at 1430z.
18140	1115	25	10			RADAR			Radar from 18140 to 14186 kHz. Huge and persistent. Stops at 1200z.
18141	0915	29	10			RADAR			Radar from 18141 to 18193 kHz.Huge and persistent signal.
18155	1015	18	10			RADAR			Radar from 18155 to 18181 kHz. Very strong and persistent.
21000	1040	31	10	E or MM		USB			Spanish fishermen. Loud. Motor noise audible. Mention of "Vigo".
21168	1415	27	10			RADAR			Radar from 21168 to 21181 kHz. Medium signal, persistent.
21210	1110	11	10			RADAR			Radar from 21210 to 21240 kHz.Huge and persistent.
21314	1535	29	10			RADAR			Radar from 21314 to 21326 kHz. Medium signal. Persistent.

**IRTS; Michael, EI3GYB**

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
21400	1125	27	10	E or MM		USB			Spanish fishermen. Very strong signals from both ships. Loud motor noise from one of the ships.
21417	1020	28	10			RADAR			Radar from 21417 to 21440 kHz. Strong and persistent.
21438	0925	01	10	UKR		CW			Russian navy Sevastopol. Heard nearly daily with very good signals.
24938	0700	29	10			RADAR			Radar from 24938 to 24959 kHz. Very strong and persistent. Faded out around 0900z.
28800	1430	02	10	IRN		RADAR			AM mode radar from 28800 to 29050 kHz. Short burst, moving up and down the band. Heard very often during the month from about 0900 to 1700z with medium strength.
29265	1455	03	10	CHN		AM			China Radio International with a mixing product. Medium signal.
29449	1450	02	10			F1B			Medium signal, persistent.

**OeVSV; Christoph, OE1VMC**

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3512.5	2100	10	10	CZE		XXX		3K50E	QTH: CZE, SVK, HNG or POL. Transmitting for several hours.
7064.0	2000	04	10	RUS		RADAR	40	12K0E	Kontayner ;S9+40 dB
7141.0	1819	28	10			RADAR		20K0E	
7186.0	2145	21	10	RUS		RADAR		12K0E	Kontayner
18153.0	0901	10	10			RADAR		12K50E	
18155.0	1744	08	10			RADAR		80K0E	

**PZK; (SP3AMO, SP5GNI)**

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
5356.5	1910	26	10			PSK		2K6	S9 Stanag
7000	0950	27	10			PSK		2K9	CIS-12 S7
7016.1	0605	23	10		UI	PSK			
7021.0	0845	31	10			PSK	120	2K7	
7025.0	0655	11	10			PSK		4K0	RSQ 595, 07.49 UTC QRT, End QRG 7047,0 kHz
7032	1913	26	10			RADAR		10K0E	
7049	0820	28	10			PSK		2K9	CIS-12
7057.0	1825	15	10			RADAR	40	14K0E	RSQ 595
7088.5	0620	18	10			PSK		2K7	
7089.0	1818	10	10			PSK		3K2	RS 59
7101.8	1640	14	10			F1B	75	200	RSQ 595
7101.8	0535	15	10			F1B	75	200	RSQ 595
7108	1945	23	10			RADAR		10K0E	S7
7113.0	1900	08	10			RADAR	40	12K0E	
7126	1800	29	10			RADAR		14K0E	S9+ continous
7127.5	0625	22	10			A1A			20 wpm
7138.0	0530	15	10	RUS		F1B	75	250	RSQ 575
7154	1315	13	10			PSK		2K9	CIS-12 pilot 7155,3 S9
7155.0	1833	15	10			RADAR	40	14K0E	RSQ 959 + 20dB
7187	1854	29	10			RADAR		10K0E	burst
7190.0	0520	08	10			RADAR	40	16k0E	RSQ 595 [7190,0 - 7206,0 kHz, 05.36 UTC QRT]

**PZK; (SP3AMO, SP5GNI)**

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
10105	1450	17	10			PSK		2K9	CIS-12 S9
10123	1236	08	10			PSK		2K9	CIS-12 pilot 14124,3 S7
10123	1450	22	10			PSK		2K9	CIS-12 S7
10149.7	1239	08	10			UI		400	Also on 10148,8 S7
14008.0	0749	17	10			F1B	50	500	
14090	1512	07	10			RADAR		10K0E	3 sec. bursts weak
14092.9	1310	13	10			FSK		200	S9+
14095.0	0640	25	10			PSK		2K4	RSQ545
14097.0	0700	21	10			PSK		2K4	RSQ 565
14097.0	0754	26	10			PSK		1K2	
14098.0	0813	22	10			PSK	120	2K7	RSQ 565
14106.8	1310	13	10			UI		1000	
14124.0	0735	21	10			RADAR	40	12K0E	RSQ 595
14142	1300	13	10			RADAR		10K0E	one 4 sec. burst observed
14151	1500	07	10			RADAR		10K0E	3 sec. bursts
14156.0	1630	11	10			RADAR	40	12K0E	RSQ 585
14161	1515	07	10			RADAR		10K0E	3 sec. bursts
14174	1114	23	10			RADAR		10K0E	Bursts
14183.0	1518	07	10			RADAR	40	16K0E	RSQ 545 [15.22 UTC QRT]
14192	1114	23	10			RADAR		10K0E	Bursts
14200	1458	07	10			RADAR		20K0E	S9 +20dB continous and strong 1512 finished
14203.5	0803	12	10			RADAR		10K0E	short bursts
14235	0802	12	10			RADAR		10K0E	short bursts
18070	1510	11	10			RADAR		20K0E	S8
18080.0	0610	07	10			A3E			RS 43 + QSB
18080.0	0755	13	10	CHN		A3E			RS 46 QSB
18080.0	0620	23	10	CHN		A3E			RS 33 QSB
18080.0	0640	24	10	CHN		A3E			RS 33 QSB
18107.8	0630	18	10			F1B	50	200	06.35 UTC QRT
18123.0	1155	08	10			RADAR	40	16K0E	RSQ 595+45dB
18125	1228	08	10			RADAR		14K0E	S7
18142.0	1145	08	10			RADAR	50	30K0E	
18146.0	0614	06	10			RADAR	50	10K0E	
18155	1228	08	10			RADAR		14K0E	S7
18163.0	0643	10	10			RADAR	50	20K0E	RSQ 595 [18163,0 - 18183,0 kHz] 06.48 UTC QRT
18165	0950	29	10			RADAR		20K0E	S9+ continous
18170	1230	27	10			RADAR		20K0E	S9+ continous
21008.0	0837	14	10			PSK		2K0	sps 40 Hz
21076.2	1000	27	10			UI		3K0	S9
21100.0	0814	31	10			RADAR	50	20K0E	RSQ 595
21150.0	0605	25	10			RADAR	50	20K0E	RSQ 595, 07.27 UTC QRT
21155	1440	12	10			RADAR		20K0E	S9+ continous and strong
21160	0835	12	10			RADAR		20K0E	S9 continous and strong
21170.0	1455	06	10			RADAR	50	20K0E	RSQ 575

<b>PZK; (SP3AMO, SP5GNI)</b>									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
21180	1148	24	10			RADAR		20K0E	S9
21185.0	1625	04	10			A3E			RS 36 + QSB
21230	0640	30	10			RADAR		20K0E	9
21230.0	0610	30	10			RADAR	50	20K0E	RSQ 585
21279.0	0915	04	10			RADAR	50	20K0E	RSQ 595
21319.0	0635	10	10			RADAR	50	20K0E	06.38 UTC QRT
21330.0	0650	25	10			RADAR	50	20K0E	RSQ 595, QSY 21410 kHz, 07.09 UTC QRT
21350.0	0730	14	10			RADAR	50	20K0E	RSQ 595
21365	1018	15	10			A3E		6K0	S5 language not recognized
21370.0	0930	07	10			RADAR	50	20K0E	RSQ 585
21410.0	0648	25	10			RADAR	50	20K0E	06.48 UTC QRT
21430	1430	09	10			RADAR		20K0E	S8
21430	1020	15	10			RADAR		20K0E	S9+ continuous and strong
21430.0	1035	24	10			RADAR	50	20K0E	RSQ 585
21437.5	0745	15	10			J3E-U			RS 23 QSB
21437.6	0710	24	10			A3E			RS 23 QSB
21437.6	0830	24	10	RUS		A1A			20 wpm RST 459, start 08.30 UTC, QTC Navy RA
28000	vt	vd	10			RADAR		80K0E	S7
28000.0	vt	vd	10			RADAR	150/300	46K0E	
28010	1024	07	10			RADAR		45K0E	S4
28253.0	0915	15	10			RADAR	150/300	50K0E	QRG 28040,0 - 29140,0 kHz
28860	vt	vd	10			RADAR		45K0E	S6
29450	0800	12	10			RADAR		45K0E	S5

<b>REF; Francis, F5MIU</b>									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD/SPS	SH /BW	DETAILS
21175	0733	01	10			FMCW	50	20kHz	OTH Radar pulsed 20ms, S9+20
18150	0739	01	10			FMCW	40	20kHz	OTH Radar pulsed 25ms, S9
14200	0750	01	10			FMCW	10	150kHz	OTH Radar pulsed 100ms, S8
21000	1628	01	10			FMCW	25	20kHz	OTH Radar pulsed 40ms, S8
14250	0755	05	10			FMCW	50	10kHz	OTH Radar pulsed 20ms, S9+
18168	0747	06	10			FMCW	20	20kHz	OTH Radar pulsed 50ms, S9
18160	0750	09	10			FMCW	40	15kHz	OTH Radar pulsed 25/50ms, S9+10
14155	1600	10	10			FMCW	40	20kHz	OTH Radar pulsed 25ms, S9
7167	1640	12	10			FMCW	40	20kHz	OTH Radar pulsed 25/50ms, S9+20
7096	1644	12	10			FMCW	40	20kHz	OTH Radar pulsed 25/50ms, S9+20 synchronal as 7167MHz
21350	0739	14	10			FMCW	50	25kHz	OTH Radar pulsed 20ms, S9+10
18160	0740	16	10			FMCW	50	20kHz	OTH Radar pulsed 20ms, S8
10105	1632	19	10			FMCW	50	15kHz	OTH Radar pulsed 20ms, S9
10144	0752	22	10			?		1kHz	Pulsing QRM on DK0WCY S8
14182	1618	22	10			FMCW		10kHz	OTH Radar pulsed 25/50ms, S9
21105	0803	23	10			FMCW	40	15kHz	OTH Radar pulsed 25ms, S9+10
28130	0810	25	10			FMCW	25	20kHz	OTH Radar pulsed 40ms, S9+10
28000	0826	27	10			FMCW	var	50kHz	OTH Radar pulsed mix rate, S9
21130	0740	30	10			FMCW	50	20kHz	OTH Radar pulsed 20ms, S9



<b>RSGB; Richard, G4DYA</b>									
<b>kHz</b>	<b>UTC</b>	<b>DD</b>	<b>MM</b>	<b>ITU</b>	<b>IDENT</b>	<b>MODE</b>	<b>BD /sps</b>	<b>SH / BW</b>	<b>DETAILS</b>
3510.0	1750 1849	15 26	10			J3E		2K70E	USB "The Air Horn"
3756.0	1750 1850	15 26	10			J3E		1K70E	USB "The Pip"
5362.0	1602	01	10			J7D		2K70E	USB 5360.0 / CIS-12. For info: primary user
5363.6	1857 0727	26 27	10	DNK		G1D		2K40E	For info: Stanag 4285, primary user
6995.0	1923	02	10	RUS		P0N	40	12K0E	Container pulse radar
7000.0	0813	03	10			J7D		2K70E	USB 6998.0 / CIS-12
7000.0	0705	23	10			J3E			USB / pirates
7013.0	2226	26	10	RUS		P0N	40	12K0E	Container pulse radar
7022.0	1358 0851	05 31	10			J7D		2K70E	USB 7020.0 / CIS-12
7026.0	1541 1620	01 28	10			J7D		2K70E	USB 7024.0 / CIS-12
7044.0	1251 1347	03 04	10			F1B		250	FSK
7046.0	1310 0921	01 14	10			F1B		200	FSK
7049.0	1442	27	10			F1B	50	250	FSK
7052.0	1911	19	10			F1B	50	250	FSK
7065.0	2225	26	10	RUS		P0N	40	12K0E	Container pulse radar
7066.0	2237	28	10	RUS		P0N	40	12K0E	Container pulse radar
7074.795	0820	25	10			A1N			Continuous dashes
7074.798	0751	24	10			A1N			Continuous groups of dashes
7074.819	0708	23	10			A1N			Continuous dashes
7074.840	1239	28	10			A1N			Continuous dashes
7074.852	0850	31	10			A1N			Continuous dashes
7074.856	0832	30	10			A1N			Continuous dashes
7074.871	0841	29	10			A1N			Continuous dashes
7074.995	0832	16	10			A1N			Continuous dashes
7074.997	0724	27	10			A1N			Continuous dashes
7074.998	0738	03	10			A1N			Continuous dashes
7075.003	0712 0754 1006	13 17 26	10			A1N			Continuous dashes
7075.005	0815	06	10			A1N			Continuous dashes
7075.006	0747	01	10			A1N			Continuous dashes
7075.007	0925	09	10			A1N			Continuous dashes
7075.031	0830	22	10			A1N			Continuous dashes
7075.033	0708	20	10			A1N			Continuous dashes
7075.601	1544	01	10			A1N			Continuous dashes
7075.616	0909	02	10			A1N			Continuous dashes
7080.0	1944 1903	02 19	10			F1B		200	FSK
7080.0	1704 1747	07 15	10			F1B		250	FSK
7087.0	2223	26	10	RUS		P0N	40	12K0E	Container pulse radar
7089.8	0758 0635 0945	11 12 18	10			G1D		2K40E	USB 7088.0 / Link 11 SLEW
7110.0	vt	vd	10	ETH	R. Ethiopia	A3E			BC

<b>RSGB; Richard, G4DYA</b>									
<b>kHz</b>	<b>UTC</b>	<b>DD</b>	<b>MM</b>	<b>ITU</b>	<b>IDENT</b>	<b>MODE</b>	<b>BD /sps</b>	<b>SH / BW</b>	<b>DETAILS</b>
7112.0	1441	27	10			F1B		250	FSK
7112.8	1908	26	10			NON			Plain carrier
7115.0	1953	02	10	RUS		P0N	40	12K0E	Container pulse radar
7137.0	vt	vd	10			F1B		200	FSK
7138.0	0915 0909	14 15	10			F1B		250	FSK
7159.0	0746 1924	01 02	10			J7D		2K40E	USB 7159.0 / Link 11 CLEW
7159.0	0905 1432 1443	25 26 27	10			B7D		6K00E	DSB / Link 11 CLEW
7181.0	1852	26	10	RUS		P0N	40	12K0E	Container pulse radar
7186.0	1419	26	10			J7D		2K70E	USB 7184.0 / CIS-12
7192.0	1839	26	10			F1B		250	
7194.0	1906	19	10	RUS		P0N	40	12K0E	Container pulse radar
10120.0	1243	28	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
14008.0	vt	vd	10			F1B		500	FSK
14052.0	0816	11	10			F1B		500	FSK
14091.0	0911	14	10			J7D		2K70E	USB 14089.0 / CIS-12
14098.0	vt	vd	10			J7D		2K70E	USB 14096.0 / CIS-12
14118.0	0801	08	10	CHN		F3N	66.7	10K0E	"Foghorn" FMCW radar bursts
14120.0	0712	26	10	CHN		F3N	50	10K0E	"Foghorn" FMCW radar bursts
14122.0	0909 0806	14 19	10			Q3N	20	10K0E	Unidentified FMOP radar. See also 18074 kHz.
14152.0	0859	08	10	CHN		F3N	66.7	10K0E	"Foghorn" FMCW radar bursts
14169.0	0815	11	10			F1B		200	FSK
14172.0	0845	13	10	CHN		F3N	66.7	10K0E	"Foghorn" FMCW radar bursts
14181.0	0841	01	10	CHN		F3N	10	160KE	FMCW radar bursts
14182.0	0919	21	10	RUS		P0N	40	12K0E	Container pulse radar
14189.0	0903	21	10	RUS		P0N	40	12K0E	Container pulse radar
14198.0	0757	05	10	CHN		F3N	10	160KE	FMCW radar bursts
14219.0	0853	01	10	CHN		F3N	66.7	10K0E	"Foghorn" FMCW radar bursts
14223.0	0838	29	10	CHN		F3N	50	10K0E	FMCW radar (continuous)
14257.0	0809	06	10	CHN		F3N	50	10K0E	"Foghorn" FMCW radar bursts
14265.0	0949	18	10	CHN		F3N	50	10K0E	"Foghorn" FMCW radar bursts
14266.0	0823	17	10	CHN		F3N	50	10K0E	"Foghorn" FMCW radar bursts
14289.0	0818	18	10	CHN		F3N	66.7	10K0E	"Foghorn" FMCW radar bursts
14290.0	0852	29	10	CHN		F3N	50	10K0E	FMCW radar (continuous)
14294.0	0911	08	10	CHN		F3N	50	10K0E	FMCW radar (continuous)
14298.5	0811	06	10			---		1K20E	Unidentified bursts
14298.5	0803	08	10			F1-		600	Unidentified FSK bursts
14301.9	0740	20	10			J7D		2K80E	USB 14300.0 / CIS-60
14305.0	0822	08	10	CHN		F3N	83.3	10K0E	"Foghorn" FMCW radar bursts
14310.0	0841	22	10	CHN		F3N	10	160KE	FMCW radar bursts 14230-14390
14311.0	0721	27	10	CHN		F3N	66.7	10K0E	"Foghorn" FMCW radar bursts
14337.0	1037	26	10	CHN		F3N		10K0E	"Foghorn" FMCW radar bursts. Sweep rate cycling between 50 / 41.7 sps
14346.0	1008	26	10	CHN		F3N		10K0E	"Foghorn" FMCW radar bursts. Sweep rate cycling between 66.7 / 50 / 41.7 sps
14347.0	1023	08	10	CHN		F3N	50	10K0E	"Foghorn" FMCW radar bursts
14402.0	0835	23	10	CHN		F3N	10	160KE	FMCW radar bursts 14322-14482

**RSGB; Richard, G4DYA**

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14418.0	0914	21	10	CHN		F3N	10	160KE	FMCW radar bursts 14338-14498
18063.0	0826	30	10	RUS		P0N	40	12K0E	Container pulse radar
18064.0	0731	03	10	RUS		P0N	40	12K0E	Container pulse radar
18065.0	0947	05	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
18066.0	0806	06	10	RUS		P0N	40	12K0E	Container pulse radar
18070.0	0830	25	10	CHN		F3N	50	10K0E	"Foghorn" FMCW radar bursts
18074.0	0907	14				Q3N	20	10K0E	Unidentified FMOP radar. See also 14122 kHz.
	0809	17	10						
	0809	19							
18075.0	0849	29	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
18080.0	vt	vd	10			A3E			BC
18085.0	0742	17	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
18107.0	vt	vd	10	RUS	RDL	F1B		200	FSK
18130.0	0732	05	10	RUS		P0N	40	12K0E	Container pulse radar
18141.0	0850	07	10	CHN		F3N	66.7	10K0E	"Foghorn" FMCW radar bursts
18147.0	0820	17	10	RUS		P0N	40	12K0E	Container pulse radar
18155.0	0757	08	10	RUS		P0N	40	12K0E	Container pulse radar
18170.0	0717	13				F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
	1417	15	10	G					
	0915	16							
18170.0	1345	26	10	G		F3N	25	20K0E	FMCW radar, RAF Akrotiri, Cyprus
18171.0	0828	27	10	RUS		P0N	40	12K0E	Container pulse radar
18230.0	0946	08	10	CHN		F3N	10	160KE	FMCW radar bursts 18150-18310
18235.0	0839	22	10	CHN		F3N	10	160KE	FMCW radar bursts 18155-18315
21000.0	1538	01	10	G		F3N	25	20K0E	FMCW radar, RAF Akrotiri, Cyprus
21054.0	1133	14	10	RUS		P0N	40	12K0E	Container pulse radar
21130.0	0639	23	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
21160.0	0841	13	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
21167.0	1305	01	10	RUS		P0N	40	12K0E	Container pulse radar
21170.0	0915	07	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
	1012	25							
21175.0	0742	01	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
21180.0	0913	08	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
21190.0	1407	05	10	G		F3N	25	20K0E	FMCW radar, RAF Akrotiri, Cyprus
	1447	27							
21215.0	0956	08	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
21230.0	0820	30	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
21235.0	0936	18	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
21250.0	0822	06	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
21270.0	0906	09	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
	1015	18							
21305.0	0638	23	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
21312.0	0824	23	10	RUS		P0N	40	12K0E	Container pulse radar
21325.0	1421	05	10	G		F3N	25	20K0E	FMCW radar, RAF Akrotiri, Cyprus
21339.0	0637	23	10	RUS		P0N	40	12K0E	Container pulse radar
21350.0	0843	22	10	G		F3N	25	20K0E	FMCW radar, RAF Akrotiri, Cyprus
21350.0	0901	26	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
21370.0	1247	04	10	G		F3N	25	20K0E	FMCW radar, RAF Akrotiri, Cyprus
21370.0	0932	07	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
21400.0	0917	07				F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
	0952	08	10	G					
	1006	16							
21438.0	vt	vd	10	RUS	RCV	A1A			Morse

**RSGB; Richard, G4DYA**

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
21450.0	0835	29	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus
29645.0	0824	11	10	G		F3N	50	20K0E	FMCW radar, RAF Akrotiri, Cyprus

**RSK; Kamweti, 5Z4BV**

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH/ BW	DETAILS
7000	1600	12	10	RUS		RADAR	40sps	20K0E	FMOP-OTHR Russian Contayner
7110	vt	vd	10	ETH		A3E		12kE	Ethiopia Broadcasting Corporation
7150	vt	vd	10	KEN		MFSK	128	2k2	2G ALE Call transmission
7172	vt	17	10			J3E-U		2k5	Vernacular/French/Kiswahili QSO
14310	0913	27	10			RADAR	40sps	5K0E	FMOP-OTHR short bursts
18200	0953	6	10	RUS		RADAR	5sps	160K0E	FMOP-OTHR Russian Contayner
21286	0920	27	10	RUS		RADAR	40sps	22K0E	FMOP-OTHR Russian Contayner
21375	vt	6	10			A3E		5K0E	unid phone/voice

**SRAL; Pekka, OH2BLU**

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/BW	DETAILS
7 MHz	1445-0430	*	10	RUS		RADAR	40sps	13k0E	*) Days: 12. 20. - 22. 26. 27. 29.(WebSDR 29d) Kontainer
7 MHz	0630-1815	*	10	RUS		RADAR	10sps	10k0E	*) Days: 3. 4. 9. 10. 14. 15. 22.
7 MHz	1700-1800	25	10	CHN		RADAR	50/67sps	10k0E	"Foghorn"
7 MHz	1715-1930	28 31	10	CHN		RADAR	10sps	160k0	
7000.0	1430-1500	07 27	10	RUS		J7D	120	2k60E	
7000.0	1000-1100/	*	10	RUS		A1A	20	20H	*) Days: 16. 20. 22. 5F
7022.0	1230-1415/	07	10	RUS		F1B		250H	
7024.0	1640-1715	01	10	RUS		F1B		250H	
7026.0	1600-1620	28	10	RUS		J7D	120	2k60E	
7046.0	1015-1345	13 14	10	RUS		F1B/ NON		200H	
7049.0	0830-1045	28	10	RUS		J7D	120	2k60E	
7052.0	0845	09	10	RUS		A1A		20H	5BL
7059.0	0915	07	10	RUS		F1B			
7061.0	0520-1300	07 29	10	RUS		J7D	120	2k60E	
7087.0	1800-1815	12	10	RUS		J7D	120	2k60E	
7088.0	1715-1800	13	10	RUS		F1B		200H	
7089.8	0500-1815	*	10	IW		G7D		3k40E	LINK, ship
7100.0	0715	25	10	RUS		J7D	120	2k60E	
7102.0	0530-1700	14 15	10	RUS		F1B		200H	
7110.0	0400-0615	dly	10	ETH	R. Ethiopia	A3E		9k0	

SRAL; Pekka, OH2BLU									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/BW	DETAILS
7110.0	1330-1800	dly	10	ETH	R. Ethiopia	A3E		9k0	
7112.0	1615-1630	26	10	RUS		F1B		250H	
7114.0	0515-1830	13 17	10	RUS		F1B		250H	
7118.0	1135-1240/	22	10	RUS		J7D	120	2k60E	
7127.0	0500-1600	dly	10	RUS	ZINS etc	A1A	18	20H	5F, 5BL
7138.0	0440-1930	14 15	10	RUS		F1B		250H	
7140.0	0500-0530	4	10	ERI	VoBM	A3E		9k0	
7140.0	1430-1835/		10	ERI	VoBM	A3E		9k0	Not heard
7149.5	1450-1520	25	10	RUS		J7D	120	2k60E	
7159.0	1445-1715	*	10	IW		G7D		6k40E	*) Days: 25. 26. 27. LINK, usb/dsb, ship
7160.0	0740	20	10	RUS	RBL88	A1A	19	20H	5F
7160.0	1745-1815/	22	10			A3E		9k0	MX
7162.0	0520	19	10	RUS		A1A		20H	5BL
7164.0	1745-1815	23	10	RUS		J7D	120	2k60E	
7168.0	0515-0518/	06	10	RUS		F1B/ NON		200H	Spurious +/- 1800 Hz
7176.0	0820	23	10	RUS		F1B		200H	
7182.45	0510-0515/	17	10	RUS		F1B		340H	
7188.0	1115	26	10	RUS		F1B		250H	
7196.0	1005-1300/	6 25	10	RUS	NVTI	A1A	10	20H	
7198.0	1350	08	10	RUS		J7D	120	2k60E	
7200.0	1145-1405/	16	10			A3E		9k0	Non stop "Oh Susannah"
14 MHz	0820-1915	*	10	RUS		RADAR	40sps	13k0E	*) Days: 11. - 13. 17. 20. 22. 26. (WebSDR 12d) Kontainer
14 MHz	0500-1300	*	10	RUS		RADAR	10sps	10k0E	*) Days: 3. 15. 16. 17. 21. 23. 28. 29.
14 MHz	0500-1415	*	10	CHN		RADAR	50/67sps	10k0E	*) Days: 1. 11. 13. 16. 25. - 27. 29. "Foghorn"
14 MHz	0700-1110	*	10	CHN		RADAR	10sps	160k0	*) Days: 1. 5. 12. 15. c. 1 min burst
14 MHz	0510-1100	*	10	CHN		RADAR	50sps	10k0E	*) Days: 6. 8. 20. 26. 27. 28.
14000.0	/1357-1457/	dly	10	CHN	CRI	A3E		9k0	TX intermod. 13710 & 13855 kHz
14008.0	0515-1035	*	10	RUS		F1B		500H	*) Days: 13. 21. 24.
14210.0	0500-1030	dly	10			RADAR	10sps	5k0E	SuperDARN

**SRAL; Pekka, OH2BLU**

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH/BW	DETAILS
14212.0	1210-1215	4	10		482	R3E-u		3k0E	Synthetic female
14221.0	0445-0600/	dly	10	KAZ		F1B		200H	
14260.0	0745-0805/	28	10		217	R3E-u		3k0E	Synthetic female
18 MHz	0515-1300	*	10	CYP		RADAR	25/50sps	20k0	*) Days: 8. 13. 14. 15. 16. 27. 29.(WebSDR 13d)
18 MHz	0600-1400	*	10	RUS		RADAR	40sps	13k0E	*) Days: 8. 17. 24. 26. 31. (WebSDR 13d)
18080.0	0600-0800/	*	10	TWN		A3E		9k0	*) Days: 2. 3. 5. 9. 10. 13. 15. 17. 19. 20. 22. - 30. jammed by CNR
21 MHz	0515-1810	*	10	CYP		RADAR	25/50sps	20k0	*) Days: 1. 4. - 14. 16. 17. 19. 22. 27. 29. 30. 31. (WebSDR 25d)
21250.0	1015-1120	14	10	CHN		RADAR	50 sps	20k0E	
21438.0	/0830-1600	dly	10	RUS	RCV	A1A	20	20H	
28 MHz	0445-1430	*	10	IRN		RADAR	150/ 313	60k0E	*) Days: 2. 7. 9. 10. 13. 14. 17. 21. - 31. alternating fq
28000.0	0445-1400	*	10	IRN		RADAR	306/ 870	60k0E	*) days: 22. - 31. (WebSDR 10d)
28535.0	0825-0835/	11	10	CYP		RADAR	50	20k0	
28860.0	0445-1400	*	10	IRN		RADAR	150/ 313	60k0E	*) Days: 2. 3. 6. 7. 9. 10. 11. 13. 14. 17. 20. 31. (WebSDR 13d)

**URE; Gaspar, EA6AMM**

kHz	UTC	DD	MM	ITU	Ident	Mode	Bd/sps	SH/BW	Details
6995.0	1926	02	10	RUS		RADAR	40	12K0E	OTHR Contayner
7002.0	1601	12	10	RUS		RADAR	40	12K0E	OTHR Contayner
7002.6	1934	06	10			J7D		CA2K0E	7002.6 kHz CF. QRT 1934 UTC
7024.0	1705	01	10	RUS		F1B	75	200H	TDoA: Area of Moscow
7025.0	2101	17	10	RUS		RADAR	40	12K0E	OTHR Contayner
7026.0	1527	01	10	RUS		J7D		2K70E	CIS-12. Submode Idle
7035.0	1730	11	10	RUS		F1B	75	250	FSK. SH = 250 Hz
7041.0	0738	11	10			XXX		CA4K0E	Unknown digital signal. Slowly drifting up (from 7037 to 7041 kHz CF in 10 min). Broken system?
7050.0	0606 vt	14 vd	10			J3E-L			UKR/RUS "radiowar". Often
7063.0	2040	27	10	RUS		RADAR	40	12K0E	OTHR Contayner
7066.0	2007	17	10	RUS		RADAR	40	12K0E	OTHR Contayner
7074.8	0758	24	10			A1A			16 dashes loop
7074.8	0654	25	10			A1N			Continuous dashes
7075.0	0638 vt*	01 vd*	10			A1N			Continuous dashes. *Often
7080.0	1733	01	10	RUS	RDL	F1B	50	200H	
7086.0	1745	08	10			G7D		2K40E	7086 kHz LSB
7086.9	1823	12	10	RUS		W7D		2K80E	CIS-60. TDoA: Area of Moscow
7088.0	1517	13	10			F1B	75	250H	FSK. SH = 250 Hz. Bd = 75
7089.8	1542 vt*	08 vd*	10			G1D	2400	2K40E	LINK-11 SLEW. 7089.8 kHz CF. *Also on 09,10, 11, 12, 17 and 18/10. Long lasting

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	Ident	Mode	Bd/sps	SH/BW	Details
7096.0	1642	12	10	RUS		RADAR	40	12K0E	OTHR Contayner (Also on 7168 kHz CF)
7101.0	1836	14	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
7101.0	2043	24	10	RUS		RADAR	40	12K0E	OTHR Contayner
7102.0	1837 vt*	14 vd*	10			F1B	75	200H	*Also on 15/10, 0631 UTC
7103.0	2003	15	10	RUS		RADAR	40	12K0E	OTHR Contayner
7107.0	1924	27	10	RUS		RADAR	40	12K0E	OTHR Contayner
7109.0	2208	16	10	RUS		RADAR	40	12K0E	OTHR Contayner
7110.0	1721 vt*	01 vd*	10	ETH		A3E			BC. Ethiopia Radio *Often
7112.0	1458	27	10			F1B		250H	
7114.0	1952	03	10	RUS		F1B	50	200H	
7121.0	2043	26	10	RUS		RADAR	40	12K0E	OTHR Contayner
7124.0	2008	17	10	RUS		RADAR	40	12K0E	OTHR Contayner. Also on 7066 kHz CF
7130.0	1752	27	10			J3E-L		2K80E	Music
7133.0	1813	26	10	RUS		RADAR	40	12K0E	OTHR Contayner
7137.0	1913	02	10			F1B		200H	
7138.0	0940 vt*	14 vd*	10			F1B	75	250H	*Also on 15/10, 0610 UTC
7154.0	1630	11	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
7159.0	1840	01	10			G7D		2K31E	LINK-11 CLEW. *Also on 02/10, 1834 UTC
7165.0	1949	03	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
7168.0	1640	12	10	RUS		RADAR	40	12K0E	OTHR Contayner
7182.0	1847	26	10	RUS		RADAR	40	12K0E	OTHR Contayner
7183.0	1857	14	10	RUS		RADAR	40	12K0E	OTHR Contayner
7184.0	1953	17	10	RUS		RADAR	40	12K0E	OTHR Contayner
7186.0	1647 LSB vt*	02 vd*	10			G7D	60	2K40E	CHN-30. *Also on 15/10, 2005 UTC and 16/10, 1751 UTC
7192.0	1740	12	10	RUS		RADAR	40	12K0E	OTHR Contayner
7192.0	1814	26	10			F1B	75	250H	
7196.0	1803	19	10	RUS		RADAR	40	12K0E	OTHR Contayner
7200.0	1605	12	10			XXX		ca 2K40E	XXX: Continuous unknown signal
10112.0	1552	06	10	RUS		RADAR	40	12K0E	OTHR Contayner
10150.0	1716	23	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
10155.0	1702	18	10	RUS		RADAR	40	12K0E	OTHR Contayner
13971.0	1127	01	10			RADAR	12.5	80K0E	OTHR
14000.0	1403 vt*	12 vd*	10	CHN		A3E			BC. "China Radio International" intermodulation. *Often
14001.8	0628	13	10			OTHER	2400	2K40E	ISR Navy Hybrid modem
14006.0	1234	09	10	RUS		J7D	120	2K70E	CIS-12. TDoA: area of Moscow
14007.8	0733	25	10			NON			Most probably from 14008 kHz CF F1B SH = 500, bd = 50 RUS system
14008.0	0739 vt*	13 vd*	10	RUS		F1B	50	500H	*Also on 14, 16, 20, 24 and 31/10. v.t.
14010.0	1728	02	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14016.0	0740	04	10			NON			
14026.0	1753	06	10	RUS		J7D	120	2K70E	CIS-12
14027.0	0811	16	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14052.0	0954	13	10			J7D	120	2K70E	Cis-12. With carrier at 14050 kHz
14061.0	0700 vt*	15 vd*	10			J7D	120	2K70E	CIS_12. Long-lasting *Also on 20, 21, 22 and 25 / 10, vt

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	Ident	Mode	Bd/sps	SH/BW	Details
14072.0	0740 vt*	07 vd*	10			F1B	50	200H	FSK. SH = 200 Hz *Also on 13/10, 0749 UTC. 27/10, 0752 UTC
14079.7	1035	25	10	F	FDE2	A1A			VVV VVV VVV de FDE2 FDE2 FDE2 ar loop
14091.0	0924	14	10			J7D		2K70E	CIS-12. Submode Idle
14096.0	1355	12	10	RUS		RADAR	40	12K0E	OTHR Contayner
14098.0	0612 vt*	15 vd*	10			J7D	120	2K70E	CIS-12. Long-lasting. *Also on 18,20, 21, 22 and 25/10. Vt
14098.5	0745 vt*	01 vd*	10			F1B		1K20E	DPRK-PSK 600 ARQ *Often
14098.5	0738 vt*	02 vd*	10			XXX		1K20E	DPRK-PSK 1200 ARQ *Often
14101.9	0734	05	10			W7D		CA2K80E	CIS-60 OFDM HDR modem. *Also on 12, 13 and 14/10. Vt.
14103.5	1335 vt*	08 vd*	10			XXX		1K20E	DPRK-1200 *Often
14103.5	0736 vt*	15 vd*	10			F1B	600	600H	DPRK_FSK 600 ARQ *Often
14106.0	1239	12	10	RUS		RADAR	40	12K0E	OTHR Contayner
14108.0	0931	08	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14113.8	1410	08	10			F1B	600	600H	DPRK-FSK-600 ARQ. Drifting
14117.0	1520	12	10	RUS		RADAR	40	12K0E	OTHR Contayner
14118.0	0739	08	10	CHN		RADAR		10K0E	Short bursts. "Foghorn"
14122.0	0715 vt*	14 vd*	10	CHN		RADAR	20	10K0E	Radar bursts. BD = 90 sec. BRI = 7 min. *Also on 17, 18 and 19/10.
14135.0	0826 vt*	15 vd*	10			J7D	120	2K70E	CIS-12 *Also on 20, 21, 25 and 27/10,
14140.0	1825	02	10	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
14143.0	1123	07	10	CHN		RADAR	10	160K0E	CHN Wideband OTH. BW = 160K0E 10 sps.
14152.0	0848	08	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14152.0	1526	13	10	RUS		RADAR	40	12K0E	OTHR Contayner (Just QRT)
14155.0	0749	06	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14156.0	1555	11	10	RUS		RADAR	40	12K0E	OTHR Contayner
14157.0	1833	01	10	RUS		RADAR	40	12K0E	OTHR Contayner
14158.0	0804	04	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14164.0	0736	25	10	CHN		RADAR	65	10K0E	Short bursts. "Foghorn"
14167.0	0818	22	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14167.0	0941	23	10	CHN		RADAR	10	160K0E	Wideband OTHR
14169.0	0819	11	10			F1B	50	200	
14171.0	0727	12	10			J7D		2K70E	CIS-12. Submode Idle
14172.0	1755	02	10	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
14172.0	0904	13	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14172.0	1001	27	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14176.0	0912	27	10	CHN		RADAR	10	160K0E	Wideband OTHR
14180.0	0749	01	10	CHN		RADAR	10	160K0E	Wideband OTHR
14182.0	0916	21	10	RUS		RADAR	40	12K0E	OTHR Contayner
14184.0	1732	24	10	RUS		RADAR	40	12K0E	OTHR Contayner
14187.0	1413	12	10	RUS		RADAR	40	12K0E	OTHR Contayner *Also on 17/10, 1558 UTC
14190.0	1915	13	10	RUS		RADAR	40	12K0E	OTHR Contayner
14191.0	1437	20	10	RUS		RADAR	40	12K0E	OTHR Contayner
14198.0	0731	05	10	CHN		RADAR	10	160K0E	Wideband OTHR
14198.0	1617	17	10	RUS		RADAR	40	12K0E	OTHR Contayner



URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	Ident	Mode	Bd/sps	SH/BW	Details
14198.5	0636 vt*	07 vd*	10			XXX		1K20E	DPRK-PSK 1200 *Often
14198.5	0631 vt*	12 vd*	10			F1B	600	600H	DPRK-FSK 600 ARQ *Often
14200.0	1456	07	10	RUS		RADAR	40	12K0E	OTHR Contayner
14203.0	0727	13	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14210.0	0627 vt*	01 vd*	10			RADAR		4K50E	SuperDARN-like radar: *Almost daily
14214.0	0650	06	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14220.0	1613	19	10			A3E			BC. Unknown st.
14221.0	0538	27	10			F1B	50	200H	
14235.0	0727	13	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14238.0	0702	25	10	CHN		RADAR	10	160K0E	Wideband OTHR
14242.0	0951	13	10			J7D	120	2K70E	CIS-12
14251.0	0802	20	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14255.0	0559	28	10	CHN		RADAR	50	10K0E	OTHR
14257.0	0647	06	10	CHN		RADAR	50	10K0E	OTHR
14258.0	0651	07	10	CHN		RADAR	50	10K0E	OTHR
14258.0	0915	21	10	CHN		RADAR	10	160K0E	Wideband OTHR
14261.0	1054	08	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14262.0	0905	20	10	CHN		RADAR	50	10K0E	OTHR
14266.0	0823	17	10	CHN		RADAR	50	10K0E	OTHR
14278.0	0650	18	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn" *Also on 08/10, 0737 UTC
14289.0	1246	13	10	RUS		RADAR	40	12K0E	OTHR Contayner
14294.0	0922	08	10	CHN		RADAR	50	10K0E	OTHR
14295.0	0958	27	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14298.4	0642 vt*	01 vd*	10			XXX		1K20E	DPRK-PSK 1200 ARQ *Often
14298.5	0807 vt*	04 vd*	10			F1B	600	600H	DPRK_FSK 600 ARQ *Often
14301.0	0733	06	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14301.9	0735 vt*	06 vd*	10			W7D		2K80E	CIS-60. *Also on 13/10, 0726 UTC & 20/10, 0728 UTC
14303.0	0714	12	10	CHN		RADAR	83.3	10K0E	Short bursts. "Foghorn"
14305.0	0852	08	10	CHN		RADAR	83.3	10K0E	Short bursts. "Foghorn"
14307.0	1031	25	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14309.0	0716	22	10	CHN		RADAR	10	160K0E	Wideband OTHR
14311.0	1353	21	10			NON			Two carriers. Spacement 550 Hz. Long-lasting
14311.0	0632	27	10	CHN		Radar	66.7	10K0E	Short bursts. "Foghorn"
14314.0	0753	16	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn" (10 sec; -95 dBm)
14324.0	1115	02	10			F1B	75	500H	F1B. SH = 500 Hz
14328.0	0731	04	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14330.0	1319	18	10	CHN		RADAR	10	160K0E	Wideband OTHR
14332.0	0917	06	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14333.0	0807	10	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14341.0	0741	16	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn" (10 sec)
14344.0	1430	19	10	RUS		RADAR	40	12K0E	OTHR Contayner (QRT: 1430)
14352.0	1059	08	10	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
14392.0	0849	23	10	CHN		RADAR	10	160K0E	Wideband OTHR
14402.0	0832	23	10	CHN		RADAR	10	160K0E	Wideband OTHR
14418.0	0914	21	10	CHN		RADAR	10	160K0E	Wideband OTHR

<b>URE; Gaspar, EA6AMM</b>									
kHz	UTC	DD	MM	ITU	Ident	Mode	Bd/sps	SH/BW	Details
18064.0	0729	03	10	RUS		RADAR	40	12K0E	OTHR Contayner
18066.0	0742	06	10	RUS		RADAR	40	12K0E	OTHR Contayner
18070.0	0709	25	10			RADAR	50	10K0E	Short bursts. "Foghorn"
18074.0	0626 vt*	14 vd*	10	CHN		RADAR	20	10K0E	Radar bursts. BD = 90 sec. BRI = 7 min. *Also on 17, 18 and 19/10.
18080.0	0645 vt*	01 vd*	10		Sound of Hope	A3E			BC. "Sound of Hope". *Very often.
18090.0	1204	07	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus.
18107.0	0629 vt*	01 vd*	10	RUS	RDL	F1B F1A	50	200H	F1B with F1A ID = "RDL" *Daily
18125.0	1307	08	10	RUS		RADAR	40	12K0E	OTHR Contayner
18137.0	0739	06	10	RUS		RADAR	40	12K0E	OTHR Contayner
18141.0	0813	05	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn". *Also on 07/10, 0905 UTC
18145.0	0711	18	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
18147.0	0822	17	10	RUS		RADAR	40	12K0E	OTHR Contayner
18149.0	0614	14	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
18150.0	0746	06	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
18153.0	0945	16	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
18155.0	0801	08	10	RUS		RADAR	40	12K0E	OTHR Contayner
18160.0	0708	16	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
18162.0	0749	09	10	RUS		RADAR	40	12K0E	OTHR Contayner
18165.0	1038	01	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus.
18170.0	0715	13	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus. *Also on 15 & 27/10
18171.0	0730 vt*	02 vd*	10	RUS		RADAR	40	12K0E	OTHR Contayner *Also on 27/10, 0822 UTC
18174.0	0742	03	10	RUS		RADAR	40	12K0E	OTHR Contayner
18175.0	0745	15	10	RUS		RADAR	40	12K0E	OTHR Contayner
18230.0	0959	08	10	CHN		RADAR	10	160K0E	Wideband OTHR
18235.0	0822	22	10	CHN		RADAR	10	160K0E	Wideband OTHR
21000.0	1727	01	10	G		RADAR	25	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21010.0	0923	07	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21050.0	0642	17	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21054.0	1129	14	10	RUS		RADAR	40	12K0E	OTHR Contayner
21058.0	0808	23	10	RUS		RADAR	40	12K0E	OTHR Contayner. Also on 21107 kHz CF
21107.0	0759	23	10	RUS		RADAR	40	12K0E	OTHR Contayner
21108.0	0920	07	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21119.0	0817	08	10	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
21120.0	0914	06	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21124.0	0726	27	10	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
21125.0	0634	13	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21125.0	1245	13	10	RUS		RADAR	40	12K0E	OTHR Contayner
21130.0	0941 vt*	08 vd*	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus. *Also on 27/10, 0900 UTC

<b>URE; Gaspar, EA6AMM</b>									
kHz	UTC	DD	MM	ITU	Ident	Mode	Bd/sps	SH/BW	Details
21134.0	0910	13	10	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
21134.0	1327	25	10	RUS		RADAR	40	12K0E	OTHR Contayner
21149.0	0715	27	10	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
21150.0	0621	14	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21150.0	0711 vt*	15 vd*	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus. *Also on 18, 19 and 25/10. Vt.
21155.0	0726	17	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus. BW = 20K0E. 50 sps
21155.0	0735	17	10			RADAR	100	10K0E	OTHR
21160.0	0842	13	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21162.0	1307	10	10	RUS		RADAR	40	12K0E	OTHR Contayner
21163.0	1043	01	10	RUS		RADAR	40	12K0E	OTHR Contayner
21165.0	0935	10	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21165.0	1239	22	10	RUS		RADAR	40	12K0E	OTHR Contayner
21166.0	0751	08	10	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
21170.0	0914	07	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21174.0	1205	01	10	RUS		RADAR	40	12K0E	OTHR Contayner
21175.0	0722	01	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus. *Also on 10/10, 1100 UTC
21176.0	1138	03	10	RUS		RADAR	40	12K0E	OTHR Contayner
21180.0	0920	08	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21186.8	1915	14	10			G1D	2400	2K40E	STANAG-4285
21190.0	0719	14	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21215.0	0956	08	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21235.0	0940	18	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus.
21250.0	0820	06	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus.
21250.0	1017	14	10	G		RADAR	12.5	40K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus.
21260.0	0823	16	10			A3E			BC. UI st. Asian language and music. Sounds with echo: harmonic? Intermodulation? Also on 22/10., 0849 UTC
21270.0	0918	09	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21271.0	0709	15	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21280.0	0952	14	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21285.0	0916	27	10	G		RADAR	50	10K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21320.0	1433	20	10	G		RADAR	25	20K0E	UK Sovereign Base Area of Akrotiri
21325.0	1422	05	10	G		RADAR	25	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21325.0	0758	23	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	Ident	Mode	Bd/sps	SH/BW	Details
21330.0	0908	13	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21330.0	1232	15	10	G		RADAR	25	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus. QRT: 1231 UTC
21335.0	1249	14	10	RUS		RADAR	40	12K0E	OTHR Contayner
21336.0	0658	14	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21345.0	0707	03	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
21345.0	0659	14	10	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
21350.0	0844	22	10	G		RADAR	25	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21356.0	1046	02	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21365.0	0931	01	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21365.0	0938	06	10			A3E			BC. Unidentified station.
21365.0	0914	19	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21370.0	0926 vt*	07 vd*	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus. *Also on 10, 13 and 25/10. Vt.
21370.0	1237	22	10	G		RADAR	25	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus.
21375.0	0654	06	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21375.0	0742	27	10	CHN		RADAR	10	160K0E	Wideband OTHR
21383.0	0850	13	10	CHN		RADAR	83.3	10K0E	Short bursts. "Foghorn"
21390.0	0833	12	10			RADAR	12.5	40	OTH. BW = 40K0E. 12.5 sps
21390.0	1052	25	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
21391.0	0703	14	10	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
21395.0	0723	18	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus.
21400.0	0916	07	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus. *Also on 08/10, 0945 UTC and 16/10, 0949 UTC
21406.0	0818	15	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21408.0	0621	15	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21411.0	0746	03	10	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
21420.0	0800	25	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of AKrotiri, Cyprus
21426.0	0728	01	10	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21438.0	0849 vt*	02 vd*	10	RUS	RCV	A1A			"RCV" QTC. *Almost daily
21448.5	1253	09	10			F1B	600	600H	DPRK-FSK 600 ARQ
21460.0	1353	18	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus. Splatter to 21245 kHz USB.
24971	1035	27	10	RUS		RADAR	40	12K0E	OTHR Contayner
28000.0	1046 vt*	23 vd*	10	IRN		RADAR	307/869	CA45K0E	OTHR. 307 and 869 sps alternating. *Also on 25, 27 and 31/10, v.t.
28069.8	1609	17	10		EZ	A1A			Fishing buoy
28079.8	0952	07	10			A1A			Fishing buoy
28130.0	1121	23	10	G		RADAR	25	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
28136.3	0808	15	10		AL	A1A			Fishing buoy
28179.6	0948	07	10		FA	A1A			Fishing buoy
28199.9	0855	09	10		FA	A1A			Fishing buoy

<b>URE; Gaspar, EA6AMM</b>									
kHz	UTC	DD	MM	ITU	Ident	Mode	Bd/sps	SH/BW	Details
28200.0	0816	17	10	IRN		RADAR	150/313	CA45K0E	OTHR. 150 and 313 sps, alternating . Jumping every 4 min.
28219.5	0733	16	10		FA	A1A			Fishing buoy
28275.0	0913	09	10	RUS		F3E			Taxi. Female voice
28299.8	0819	17	10		ET	A1A			Fishing buoy
28299.8	0820	17	10		FA	A1A			Fishing buoy
28299.8	0829	17	10		FT	A1A			Fishing buoy
28360.7	0947	07	10		EZ	A1A			Fishing buoy
28380.0	0928	12	10	IRN		RADAR	150/313	CA45K0E	150 and 313 sps. Jumping every 4 minutes
28399.8	0907	09	10		EZ	A1A			Fishing buoy
28400.0	1613	11	10	IRN		RADAR	150/313	45K0E	OTHR. 150 and 313 sps, alternating. Jumping. *Also on 14/10, 0933 UTC
28409.6	0945	07	10		EB	A1A			Fishing buoy
28409.6	0957	07	10			A1A			Fishing buoy
28415.0	1206	15	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
28560.0	0925	12	10	IRN		RADAR	150/313	CA45K0E	OTHR. 150 and 313 sps, alternating
28860.0	0910 vt*	07 vd*	10	IRN		RADAR	150/313	45K0E	OTHR. 150 and 313 sps, alternating *Often
28990.0	0746	25	10	G		RADAR	25	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
29110.0	0936	31	10	IRN		RADAR	226/333	45K0E	OTHR. 226 AND 333 sps, alternating
29450.0	1459	19	10	IRN		RADAR	226/333	CA45K0E	OTHR. 226 and 313 sps, alternating. Jumping
29550.0	1012	07	10	IRN		RADAR	226/333	CA45K0E	OTHR. 226 and 333 sps, alternating. *also on 08/10, 0905 UTC
29645.0	0800	11	10	G		RADAR	50	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus
29670.0	1213	15	10	G		RADAR	25	20K0E	OTHR Pluto. UK Sovereign Base Area of Akrotiri, Cyprus

<b>USKA; Peter, HB9CET</b>									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS
7022.0	1359	05	10			J7D	12x120	2k70E	CIS12; BPSK or QPSK
7032.0	1528	25	10			J7D	12x120	2k70E	CIS12; idling only
7033.0	1444	28	10			J7D	12x120	2k70E	CIS12; BPSK or QPSK
7064.0	1537	25	10			J7D	12x120	2k70E	CIS12; BPSK or QPSK
7080.0	2002	05	10			F1B		200H	often
7089.8	0939	10	10			G1D PSK8	2400	ca 2k60E	LINK11 SLEW; 1800Hz single tone waveform (7088. kHz USB)
7110.0	0439 1451	06 29	10	ETH		A3E		ca 9k0E	BC: unid language; Radio Ethiopia
7137.0	1621	11	10		RDL	F1B		200H	
7137.0	1635	18	10			FMOP	40 sps	12k0E	OTHR; Contayner; strong, up to -20dBm!
7138.0	1005	14	10			F1B		250H	almost daily
7149.5	1512	25	10			J7D	12x120	2k70E	CIS12; idling only; pilot at 3300Hz
7164.0	1633	25	25			OTHR	50	10k0E	OTHR, bursts
7171.0 LSB	1609	29	10	CHN		G7D PSK-4	30x60	ca 2k50E	CHN30 (PRC30); Burst system; tone spacing 75 Hz; Preamble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz
7176.0	1917	29	10			FMOP	40 sps	12k0E	OTHR; Contayner
7180.0	1643	25	25			OTHR	50	10k0E	OTHR, bursts
7187.5	1016	29	10			J7D	12x120	2k70E	CIS12; with additional carrier

**USKA; Peter, HB9CET**

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS
7189.0	1955	05	10			FMOP	40 sps	12k0E	OTHR; Contayner; weak
7195.5	0912	30	10			G1D		ca 2k50E	unid PSK
7197.5	0914	22	10			G1D		ca 2k50E	unid 1800Hz single tone PSK; followed by ALE 188-141A
7198.5	0917	22	10			G1D		ca 2k50E	unid 1800Hz single tone PSK; followed by ALE 188-141A
14000.0	1441	15	10	CHN?	CRI?	A3E		ca 9k0E	BC: China Radio International - inter-modulation of 13855 and 13710 kHz: 13855 x 2 -13710 = 14000 kHz often
14008.0	0922 0839	14 31	10			F1B		500H	often
14061.0	0944	22	10			J7D	12x120	2k70E	CIS12; BPSK or QPSK
14091.0	0923	14	10			J7D	12x120	2k70E	CIS12; idling
14098.0	0806 0850	15 22	10			J7D	12x120	2k70E	CIS12; BPSK or QPSK often
14101.9	0931 0919	12 14	10			W7D		2k	OFDM60; tone spacing 44.4Hz
14122.0	0748	19	10			FMOP	20 sps	10k0E	OTHR
14135.0	0952	25	10			J7D	12x120	2k70E	CIS12
14210.0	0827	26	10			Radar	10 sps	ca 4k	SuperDarn Radar?, long lasting often
14220.0	1607	19	10			A3E			weak, fading
14265.0	0941	18	10			FMOP	66.66 sps	10k0E	OTHR; Bursts "Foghorn"
14326.0	1321	18	10			OTHR	10 sps	160k0E	Wideband OTHR
18063.0	0843	31	10			FMOP	40 sps	12k0E	OTHR; Contayner; partially in 17m band
18071.0	0955	31	10			FMCW	50 sps	20k0E	OTHR (UK-base Cyprus)
18074.0	0800	19	10			FMOP	20 sps	10k0E	OTHR
18075.0	0920	20	10			FMCW	50 sps	20k0E	OTHR (UK-base Cyprus)
18084.0	0934	08	10			F1B		500H	
18107.0	1104	08	10		RDL	F1B	36 + 50	200H	CIS 36-50, few F1A (FSK CW) often
18109.0	1622	16	10			A3E		ca 9k0E	BC: sounds like arabian music + voice
18155.0	1102	08	10			FMOP	40 sps	12k0E	OTHR; Contayner
18170.0	1208	16	10			FMCW	50 sps	20k0E	OTHR (UK-base Cyprus)
18170.0	1347	26	10			FMCW	25 sps	20k0E	OTHR (UK-base Cyprus)
21000.0	0831	31	10			J3E-U		ca 2k70E	Spanish dialect, probably Fishing: often
21170.0	1011	25	10			FMCW	50 sps	20k0E	OTHR (UK-base Cyprus)
21235.0	0944	18	10			FMCW	50 sps	20k0E	OTHR (UK-base Cyprus)
21250.0	1029	14	10			Radar	12.5 sps	ca 40k0E	OTHR
21260.0	0854	22	10			A3E		ca 9k0E	BC: weak, fading; max -110dBm
21310.0	1023	25	10			FMCW	50 sps	20k0E	OTHR (UK-base Cyprus)
21350.0	0844	22	10			FMCW	25 sps	20k0E	OTHR (UK-base Cyprus) often
21350.0	0849	26	10			FMCW	50 sps	20k0E	OTHR (UK-base Cyprus) often
21370.0	1012	10	10			FMCW	50 sps	20k0E	OTHR (UK-base Cyprus)
21438.0	0831	07	10		RCV	A1A		10H	TDoA: Area of Sevastopol daily
21450.0	1501	11	10			FMCW	25 sps	ca 20k0E	OTHR (UK-base Cyprus)
28002.0	0908 0936	22 29	10	IRN		?	307 + 870 sps	ca 45k	OTHR, Bursts; long lasting, sweep rate alternating; partially in 10m band. often
28860.0	0915	14	10	IRN		?	150 + 313 sps	ca 45k	OTHR, Bursts; long lasting, sweep rate alternating often

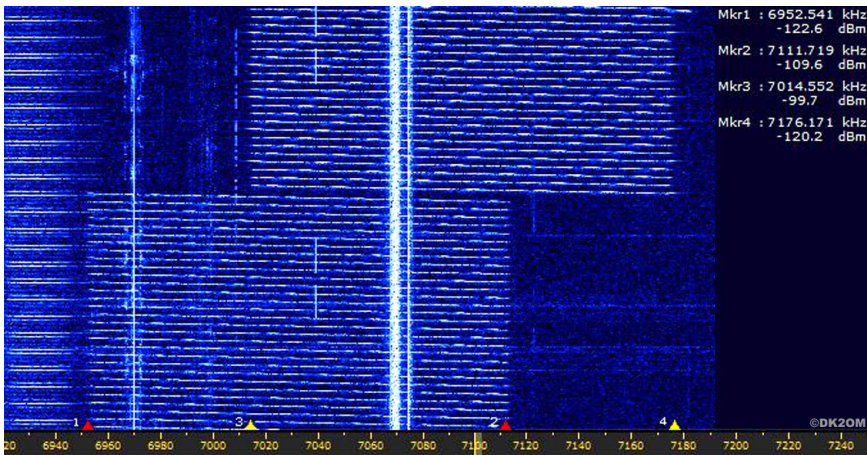
**VERON: Ruud, PG1R, Credits to observers Dick PA0GRU, Joeke PA0VDV, Kees PA2CHM, Arie PA3CNK, Rene PA3EQO**

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3548.0	1740	08	10			F1A			XXX followed by F1B PT#; unidentified
3548.0	2005	29	10	RUS	RDL	F1A			RDL 84086 94658 K

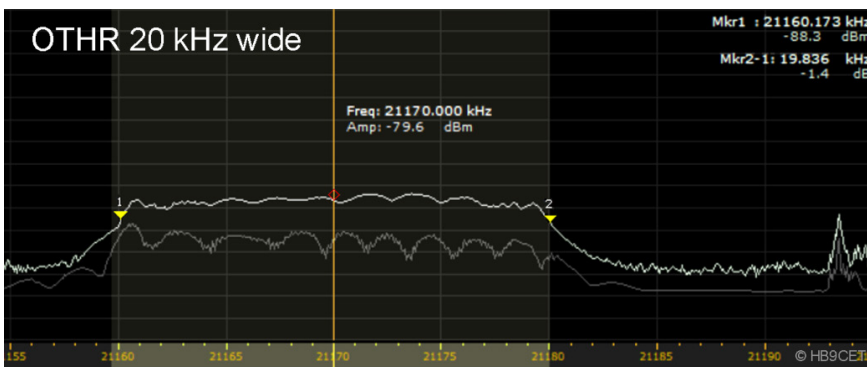
**VERON: Ruud, PG1R, Credits to observers Dick PA0GRU, Joeke PA0VDV, Kees PA2CHM, Arie PA3CNK, Rene PA3EQO**

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3564.0	1743	08	10			A1A			Strings of Figure groups various length; unidentified
3568.0	1758	08	10			F1B			Ptr; unidentified
7055.0	1354	10	10	UKR		J3E-L			"Radiowar"; 2 TX on equal frequency.
7055.0	1038	17	10	UKR		J3E-L			Political comments
7182.0	1852	26	10	RUS		RADAR	40	12K0E	OTHR; CF
18070.0	1514	11	10			RADAR			OTHR
18107.0	1306	28	10			F1B		200	Printer; shared band.
21390.0	1046	25	10	CYP		RADAR	50	20K0E	OTHR; CF
21438.0	1020	02	10			A1A			Weather forecast; unidentified
21438.0	0933	04	10	RUS	RCV	A1A			RIP90 de RCV QTC 387 45 29 1350 387 = Nawip 033 1189 Karta 32225
21438.0	1020	04	10	RUS	RCV	A1A			RMU59 de RCV QSU1 QSX 6200 QWH 4363 K QSU1 SK
21438.0	1038	04	10	RUS	RCV	A1A			RMU59 de RCV QSX 6255 QWH 5312 QYT4 K
21438.9	1003	04	10	RUS	RCV	A1A			RMU59 de RCV QTC 430 25 4 0924 430 = 5BL
28017.0	1100	30	10	IRN		RADAR	150/313	27K0E	OTHR; Alternating sps; CF
28090.0	0954	17	10	IRN		RADAR		30K0E	Wide band OTHR; CF

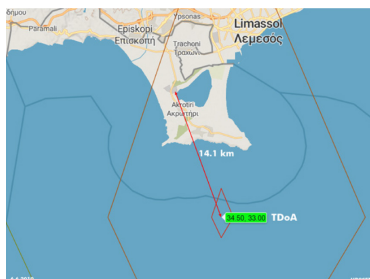
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 Peter Jost, HB9CET, hb9cet@iaru-r1.org



◀ 160 kHz Wideband Radar, shifting frequency (Source: © DK2OM)



◀ OTHR, 20 kHz wide; FMCW from UK base Cyprus (Source HB9CET)



◀ TD0A

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