

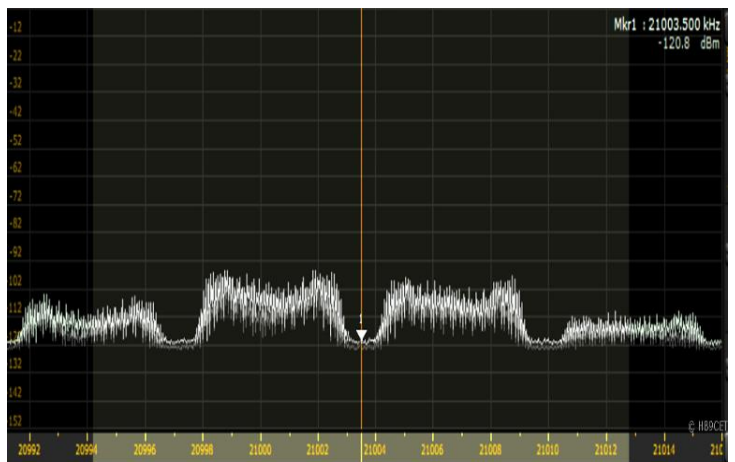
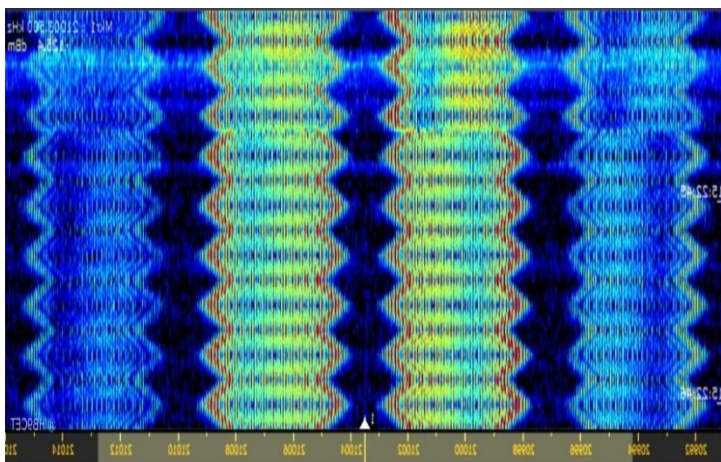
IARU Monitoring System Region 1



Monthly Newsletter - June 2022

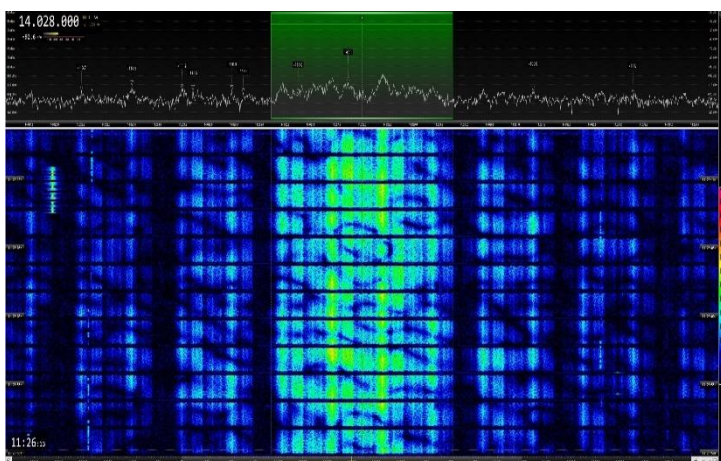
News and info

In June we received a new unknown signal on the 15 meters band. Never received before, it was present on 21003.5 kHz CF for several days with long – lasting transmissions, and it was also received several times in the vicinity of 21122 kHz CF. Although it is probably a radar transmission, as we cannot officially confirm it, we report it as an unknown signal, XXX. TDoA radiolocations taken seem to show the area of Iran for this signal:

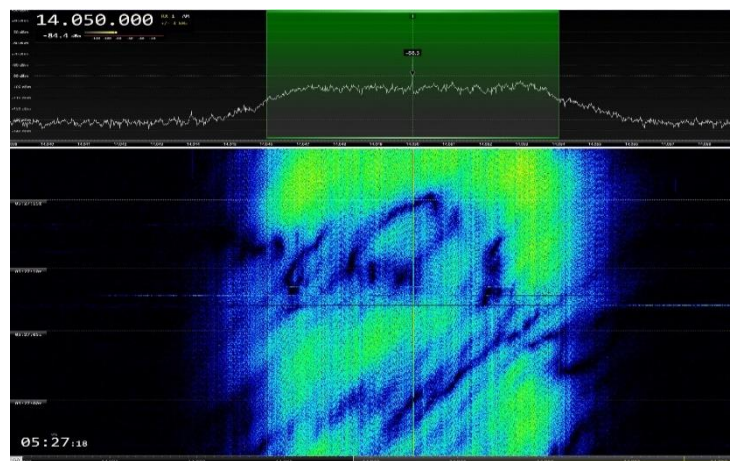


XXX. BW ca 12K0E. Maybe Over The Horizon radar. Screenshots by Peter HB9CET, USKA

We also received, as usual since February 2022, several unknown signals on the 40 meters and 20 meters bands:

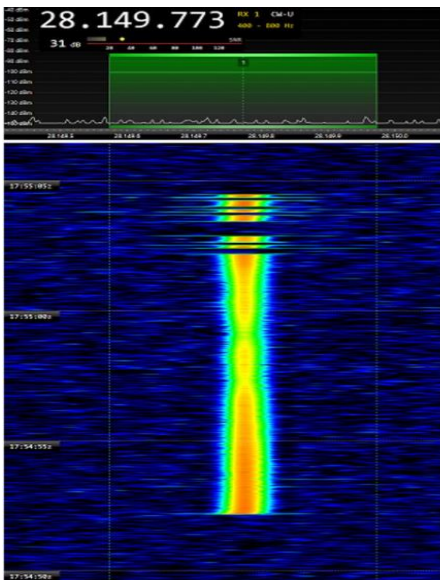


XXX. Burst system. BW ca 3K0E

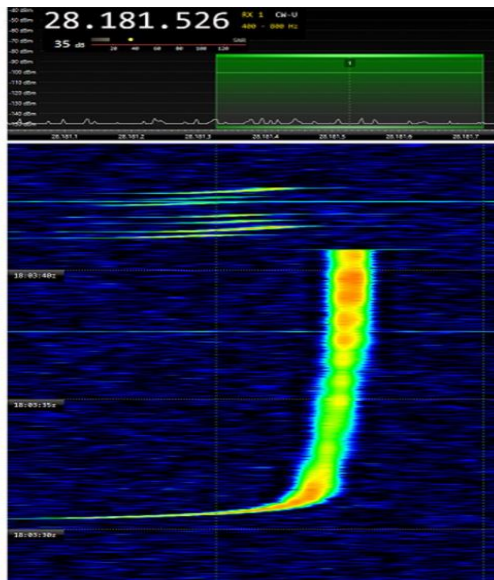


XXX: BW ca 8K0E. With central carrier

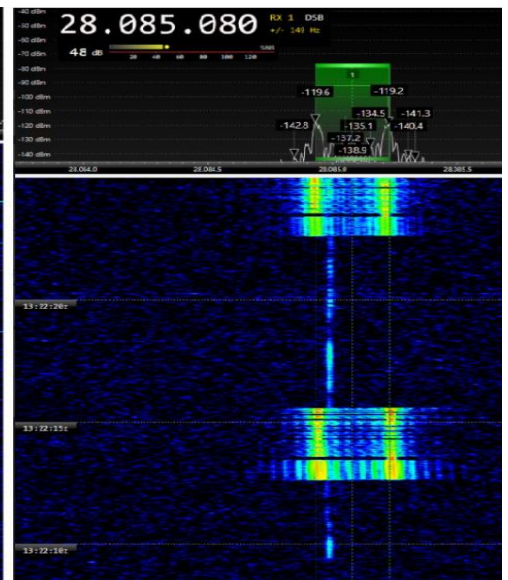
For many years, June has been characterised by the reception on the 10-metre band of lots of fishing buoys which illegally transmit radio signals sent in A1A mode (CW; short carrier plus one, two or three letters in Morse code) or F1B mode (FSK) to inform fishermen about their gear's position. Those using Morse code are the most numerous. In Region 1 they are usually received throughout the summer, due to the propagation increase in this band during the season. They use to operate from 28000 kHz to 28450 kHz.



Fishing buoys. A1A (CW)

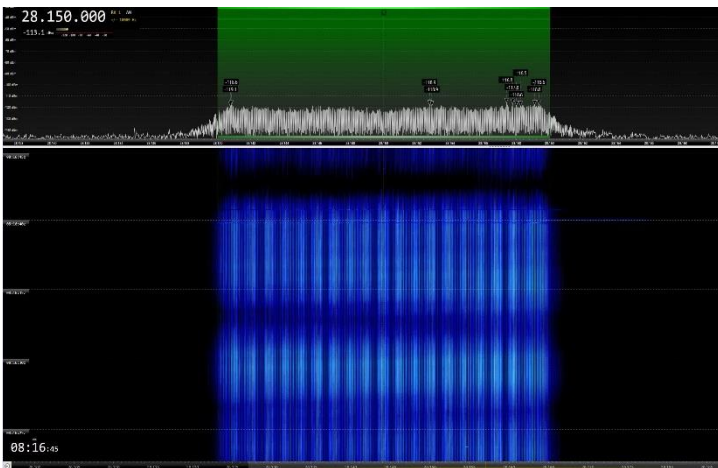


Fishing buoy. F1B (FSK). SH = 300 Hz.

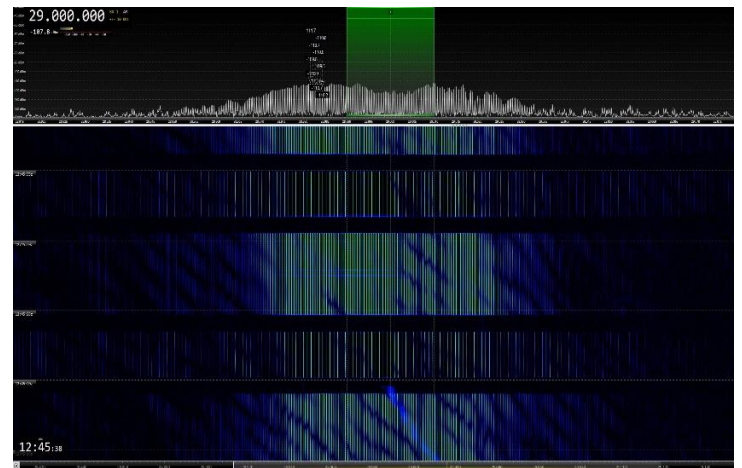


Regarding the other signals that unfortunately cause damage to our HF amateur radio bands regularly, we highlight once again the large amount of transmissions sent by different Over The Horizon radars and note that the Contayner OTHR (RUS; BW = 12K0E, 40 sps) was observed numerous times sending short transmissions and fastly hopping along the whole 20 m band, apart from being received making its usual long-lasting transmissions in this band as well as on 40 and 15 meters.

The Iranian OTHR transmitting daily on 28860 kHz CF (IRN, BW = 45K0E, alternating 150 and 313 sps bursts) was also received on several occasions on 28000 kHz CF using a different sps rate (alternating 307 and 870 bursts), as well as hopping along the whole 10 m



OTHR UK SBA, Cyprus (G). BW = 20K0E. 50 sps.



OTHR IRN. BW = 45K0E. Alternating 150 and 313 sps bursts. Hopping

The OTHR transmitting from the UK Sovereign Base Areas in Cyprus (G. BW = 20K0E, 50 or 25 sps) was also observed numerous times on the 15 and 17 m bands but also sometimes on the 10 m band.

Transmissions sent by several CHN OTHR (BW = 10K0E. 41.7, 50, 66.6 or 83.3 sps short bursts) on those bands, as well as on 40 and 20 m (they sound like a ship's foghorn; that's why we usually nickname them "Foghorn") were also received.

In addition to these transmissions, we also received transmissions sent on several CIS - ## F1B modes in the 40 and 20 meters bands as well as numerous CIS - 12 transmissions (BW = 2K70E; 12 x 120 bd), DPRK-FSK 600 ARQ (F1B. SH = 600 Hz. Bd = 600) and DPRK-PSK 1200 ARQ (PSK. BW = 1K20E. Bd = 1200) as well as other MIL modes, as the RUS OFDM CIS-60.

We also received on several occasions the broadcasting station "Sound of Hope" (A3E. AM) on 18080 kHz CF, as well as the Ethiopian "Ethiopia Radio" on 7110 kHz CF and the Eritrean station "Voice of Broad Masses 1" on 7140.02 kHz CF.

See more screenshot of signals received along June 2022 at the bottom of this Newsletter

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** = **unid** = unidentified.

DARC; Daniel DL3RTL. Credit to monitors: DF5JL, Tom; F4FPR, Benjamin; DL8LAQ, Norbert; DL4HG, Olaf; DL2SCH, Jürgen; DL9MGE, Jan; DB3TA, Alex

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7007,0	1635	03	06					7k	unid
7017,0	1731	22	06					2k7	unid
7021,0	1733	18	06					2k4	unid
7024,8	1621	08	06	RUS		PSK		2k4	CIS-12
7031,0	2113	25	06	RUS		FMOP	40	12k	OTHR Contayner
7065,0	2252	20	06	RUS		FMOP	40	12k	OTHR Contayner
7066,0	2033	17	06	UKR		J3E-L		3k	RUS/UKR radio war
7075,0	2043	16	06					2k7	unid
7075,0	2043	16	06					17k	unid, overlaying the unid 2k7 sig
7075,0	2032	21	06			A1A			continous dashes
7089,7	1812	02	06			PSK		2k4	LINK11 SLEW
7090,0	1909	03	06			PSK		2k4	LINK11 SLEW
7100,0	vt	vd	06				50	48k	OTHR 41s burst every 5 min
7146,8	2013	18	06	RUS		PSK		2k4	CIS-12 on idle
7154,8	1636	03	06	RUS		PSK		2k4	CIS-12 on idle
7170,0	1716	05	06	RUS		F1B	75	200	CIS75-200
7198,5	1520	20	06			PSK8A	2400	2k8	STANAG-4285
14006,1	1141	18	06	RUS				3k2	unid, TDoA w of Wolgograd
14021,0	1129	19	06	RUS				18k	unid, TDoA w of Wolgograd
14029,0	0655	19	06					16k	unid
14032,5	2232	20	06					4k	unid
14044,0	1358	26	06	CHN		FMCW	50	10k	OTHR 5,1s bursts
14047,0	1911	05	06	CHN		FMCW	66,67	10k	OTHR 3,8s bursts
14051,8	0750	05	06	RUS		PSK		2k4	CIS-12
14091,0	2009	02	06	RUS		FMOP	40	12k	OTHR Contayner
14100,0	0852	05	06					7k	unid
14100,0	1845	05	06	RUS		FMOP	40	12k	OTHR Contayner
14102,0	1922	05	06	RUS		FMOP	40	12k	OTHR Contayner
14103,0	1911	05	06	RUS		FMOP	40	12k	OTHR Contayner
14105,0	1940	02	06	RUS		FMOP	40	12k	OTHR Contayner
14106,0	2032	05	06	RUS		FMOP	40	12k	OTHR Contayner
14111,0	1955	07	06	RUS		FMOP	40	12k	OTHR Contayner
14113,0	2001	02	06	RUS		FMOP	40	12k	OTHR Contayner
14119,0	1926	05	06	RUS		FMOP	40	12k	OTHR Contayner
14121,0	1915	05	06	RUS		FMOP	40	12k	OTHR Contayner
14127,0	1840	05	06	RUS		FMOP	40	12k	OTHR Contayner
14129,0	1953	05	06	RUS		FMOP	40	12k	OTHR Contayner

DARC; Daniel DL3RTL. Credit to monitors: DF5JL, Tom; F4FPR, Benjamin; DL8LAQ, Norbert; DL4HG, Olaf; DL2SCH, Jürgen; DL9MGE, Jan; DB3TA, Alex

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14133,0	2000	02	06	RUS		FMOP	40	12k	OTHR Contayner
14134,0	1928	03	06	RUS		FMOP	40	12k	OTHR Contayner
14138,0	1945	02	06	RUS		FMOP	40	12k	OTHR Contayner
14140,0	1535	13	06	RUS		FMOP	40	12k	OTHR Contayner
14146,0	1902	01	06	CHN		FMCW	41,67	10k	OTHR 6,1s bursts
14147,0	1405	18	06	RUS		FMOP	40	12k	OTHR Contayner
14148,0	1555	13	06	RUS		FMOP	40	12k	OTHR Contayner
14149,0	1601	13	06	RUS		FMOP	40	12k	OTHR Contayner
14160,0	1902	01	06	CHN		FMCW	41,67	10k	OTHR 6,1s bursts
14161,8	0730	05	06	RUS		PSK		2k4	CIS-12
14164,0	1830	07	06	RUS		FMOP	40	12k	OTHR Contayner
14166,0	1551	13	06	RUS		FMOP	40	12k	OTHR Contayner
14167,0	1557	13	06	RUS		FMOP	40	12k	OTHR Contayner
14170,0	0935	04	06	RUS		FMOP	40	12k	OTHR Contayner
14170,8	0718	06	06	RUS		PSK		2k4	CIS-12
14172,0	1031	04	06	RUS		FMOP	40	12k	OTHR Contayner
14172,0	0916	13	06					2k	unid
14173,0	1600	13	06	RUS		FMOP	40	12k	OTHR Contayner
14178,0	1602	13	06	RUS		FMOP	40	12k	OTHR Contayner
14182,0	1747	08	06	RUS		FMOP	40	12k	OTHR Contayner
14183,0	1100	08	06	RUS		FMOP	40	12k	OTHR Contayner
14184,0	0956	06	06	RUS		FMOP	40	12k	OTHR Contayner
14185,0	1350	26	06	RUS		FMOP	40	12k	OTHR Contayner
14189,0	1747	08	06	RUS		FMOP	40	12k	OTHR Contayner
14190,0	1125	09	06	RUS		FMOP	40	12k	OTHR Contayner
14191,0	1559	13	06	RUS		FMOP	40	12k	OTHR Contayner
14192,0	1556	13	06	RUS		FMOP	40	12k	OTHR Contayner
14194,0	0656	05	06	RUS		FMOP	40	12k	OTHR Contayner
14195,0	1421	18	06	RUS		FMOP	40	12k	OTHR Contayner
14196,0	0938	19	06	RUS		FMOP	40	12k	OTHR Contayner
14197,0	1736	07	06	RUS		FMOP	40	12k	OTHR Contayner
14198,0	2016	07	06	CHN		FMCW	66,67	10k	OTHR 3,8s bursts
14200,0	0956	06	06	RUS		FMOP	40	12k	OTHR Contayner
14202,0	1850	01	06	CHN		FMCW	41,67	10k	OTHR 6,1s bursts
14219,0	1428	18	06	CHN		FMCW	66,67	10k	OTHR 3,8s bursts
14226,0	1826	05	06	CHN		FMCW	66,67	10k	OTHR 3,8s bursts
14258,0	0915	06	06	RUS		F1B	50	500	CIS50-500
14260,0	1430	26	06	CHN		FMCW	50	10k	OTHR 5,1s bursts
14283,0	2000	02	06	CHN		FMCW	41,67	10k	OTHR 6,1s bursts
14285,0	1817	03	06	CHN		FMCW	50	10k	OTHR 5,1s bursts
14296,0	1850	01	06	CHN		FMCW	41,67	10k	OTHR 6,1s bursts
14301,0	1537	13	06	RUS		FMOP	40	12k	OTHR Contayner
14302,0	1825	08	06	CHN		FMCW	50	10k	OTHR 5,1s bursts
14310,0	1402	26	06	CHN		FMCW	50	10k	OTHR 5,1s bursts
14312,0	2005	07	06	CHN		FMCW	66,67	10k	OTHR 3,8s bursts
14312,0	1650	24	06	RUS		FMOP	40	12k	OTHR Contayner

DARC; Daniel DL3RTL. Credit to monitors: DF5JL, Tom; F4FPR, Benjamin; DL8LAQ, Norbert; DL4HG, Olaf; DL2SCH, Jürgen; DL9MGE, Jan; DB3TA, Alex

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14327,0	1240	12	06	RUS		FMOP	40	12k	OTHR Contayner
14339,0	1828	05	06	CHN		FMCW	66,67	10k	OTHR 3,8s bursts
14341,0	1816	03	06	CHN		FMCW	50	10k	OTHR 5,1s bursts
18120,0	1025	06	06	CHN		FMCW	50	10k	OTHR 5,1s bursts
18146,0	0705	05	06	CHN		FMCW	50	10k	OTHR 10,2s bursts
21000,0	1845	01	06	CYP		FMCW	50	20k	OTHR Pluto Cyprus
21004,0	1108	19	06	IRQ		PSK		23k	unid, 4 parallel data transmissions, each 4k bw, TDoA Iraq
21060,0	0958	06	06	CHN		FMCW	66,67	10k	OTHR 3,8s bursts
21158,0	0804	19	06	RUS		FMOP	40	12k	OTHR Contayner
21159,0	1002	06	06	RUS		FMOP	40	12k	OTHR Contayner
21176,0	0918	05	06	RUS		FMOP	40	12k	OTHR Contayner
21190,0	0702	26	06	RUS		FMOP	40	12k	OTHR Contayner
21362,0	0918	05	06	RUS		FMOP	40	12k	OTHR Contayner
21372,0	0940	19	06	CHN		FMCW	66,67	10k	OTHR 3,8s bursts
21374,0	0958	06	06	CHN		FMCW	66,67	10k	OTHR 3,8s bursts
21402,0	0919	05	06	CHN		FMCW	41,67	10k	OTHR 2,98s bursts
28000,0	0750	19	06	IRN			307/870	45k	Iranian OTHR 5,81/3,26s bursts
28015,9	0628	13	06	-		A1A	-	-	Lettre ? / Signal too weak
28020,3	0624	13	06	-	MT	A1A	-	-	lettre "MT"
28020,8	0625	13	06	-	EB	A1A	-	-	lettre "EB"
28036,6	0759	13	06	-		A1N/A1A	-	-	Lettre ? / Signal too weak
28046,5	0807	13	06	-		A1N/A1A	-	-	Lettre ? / Signal too weak
28125,7	1611	19	06			FSK			unid slow FSK
28129,0	1657	19	06		H	A1A			Lettre "H" signal weak
28141,4	1650	19	06		EE	A1A	-	-	Lettre "EE"
28161,6	0938	04	06	-	-	A1N	-	-	No lettre
28860,0	vt	vd	06	IRN			150/313	45k	Iranian OTHR 9,97/7,19s bursts

IRTS; Michael, EI3GYB

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3640	2205	28	6	RUS / UKR		LSB			Ukrainian propaganda. Very strong signal. Persistent.
3675	2205	24	6	RUS / UKR		LSB			Ukrainian propaganda. Loud music, shouting of slogans in Russian and Ukrainian. Persistent.
7001	2235	30	6			PSK			Huge signal, persistent.
7039	2230	30	6			RADAR			Radar from 7039 to 7061 kHz. Huge signals, persistent.
7046	2200	38	6			RADAR			Radar from 7046 to 7067 kHz. Strong and persistent.

IRTS; Michael, EI3GYB									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7050	1855	16	6	RUS / UKR		LSB			Ukrainian propaganda "Russenschwein". Huge signals, persistent.
7055	1850	16	6	RUS / UKR		LSB			Ukrainian propaganda "Russki katsapi". Loud and persistent. Main channel for propaganda- daily active all day long.
7060	1905	6	6	RUS / UKR		LSB			Ukrainian propaganda. "Russki pederadska". Very strong and persistent signal.
7095	2025	8	6	RUS / UKR		LSB			Ukrainian propaganda "Putin khyilo". Very strong and persistent.
7100	2225	30	6			RADAR			Radar from 7100 to 7124 kHz. Strong and persistent.
7105	540	23	6	RUS / UKR		LSB			Rebroadcasting of a Russian radio station. Huge signal. Persistent.
14000	1425	13	6	CHN		AM			China Radio International- mixing product. Weak to medium signal. Almost daily until 1600z.
14104	1415	21	6			RADAR			Radar from 14104 to 14118 kHz. Medium signal, persistent.
14130	520	23	6			RADAR			Radar from 14130 to 14170 kHz. Strong and persistent.
14153	1355	9	6			RADAR			Radar from 14153 to 14168 kHz. Strong and persistent.
14165	1520	3	6			RADAR			Radar from 14165 to 14195 kHz. Strong and persistent.
14170	1315	27	6			RADAR			Radar from 14170 to 14200 kHz. Medium signal, persistent.
14170.5	910	13	6			PSK			Very strong signal, on and off.
14180	1420	13	6			RADAR			Radar from 14180 to 14200 kHz. Strong and persistent.
14188	1350	9	6			RADAR			Radar from 14188 to 14205 kHz. Huge and persistent signal.
14204	1125	13	6			RADAR			Radar from 14204 to 14232 kHz. Very strong and persistent.
14220	530	23	6			F1B			Medium signal. Persistent.
14246	1415	13	6			RADAR			Radar from 14246 to 14258 kHz. Medium signal.
14280	1250	24	6			RADAR			Radar from 14280 to 14305 kHz. Strong and persistent.
14308	1355	9	6			RADAR			Radar from 14308 to 14342 kHz. Huge and persistent.
14317	1405	21	6			RADAR			Radar from 14317 to 14342 kHz. Strong and persistent.
18147	1300	7	6	British Cyprus		RADAR			Radar from 18147 to 18182 kHz. Strong and persistent.

IRTS; Michael, EI3GYB

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
18154	630	10	6	British Cyprus		RADAR			Radar from 18154 to 18174 kHz. Huge and persistent.
20980	1325	8	6	British Cyprus		RADAR			Radar from 20980 to 21015 kHz. Very strong and persistent.
21000	1120	13	6	B		USB			Group of Brazilian Cbers. Medium signals.
21054	1330	8	6	British Cyprus		RADAR			Radar from 21054 to 21070 kHz. Very strong and persistent.
21176	1120	5	6	British Cyprus		RADAR			Radar from 21176 to 21202 kHz. Strong and persistent.
21182	1130	9	6	British Cyprus		RADAR			Radar from 21182 to 21205 kHz. Huge signal, persistent.
21208	1340	30	6	British Cyprus		RADAR			Radar from 21208 to 21230 kHz. Strong and persistent.
21345	1335	8	6	British Cyprus		RADAR			Radar from 21345 to 21353 kHz. Very strong and persistent.
21377	1345	9	6	British Cyprus		RADAR			Radar from 21377 to 21402 kHz. Huge and persistent.
21438	1130	5	6	UKR		CW			Russian Navy, Sevastopol. Daily with a medium signal.
28800	1815	12	6	IRN		RADAR			Radar from 28800 to 28900 kHz in AM mode. Medium strength.
29158	1400	8	6			Digital			Digital signals . Sporadic, in and out with weak signals.
29494.5	1345	8	6			F1B			Medium strength.

OeVSV; Christoph, OE1VMC

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14012	1349	28	06			XXX			Stopped 13:53 UTC.
7050	1904	26	06	UKR		J3E-L		3K0E	
21438	1023	25	06	RUS		A1A			
21120	1718	24	06			RADAR		25K0E	QTF 330
14036	0642	19	06			XXX			Parallel and synchronous transmissions on 14022 and 14036 kHz, stopped

OeVSV; Christoph, OE1VMC

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
									06:53 UTC.
14022	0642	19	06			XXX			Parallel and synchronous transmissions on 14022 and 14036 kHz, stopped 06:53 UTC.
14030	1852	18	06			XXX			Duration ca. 60s
14162	1519	18	06	RUS		RADAR		15K0E	
28860	1035	18	06	IRN		RADAR		60K0E	
14200	1015	18	06	RUS		RADAR		18K0E	
14025	0737	16	06			XXX			
14050	1946	15	06			XXX			
28860	1900	09	06	IRN		RADAR		40K0E	
14221	0431	03	06			J3E-L			Pirates QTF 270, Caribbean?

PZK; SP3AMO, SP5GNI

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7000.0	0840	01	06			PSK		2K9	CIS-12 S8
7008.0	0655	12	06			F1B		200H	
7147.0	1533	19	06			PSK	120	2k70E	
14025.0	1035	22	06			RADAR		8K0E	S8
14086.0	1615	21	06			RADAR	40	12K0E	
14098.5	0808	28	06			UI		1K5E	S9 a few digital transm. per second
14103.0	1547	23	06			RADAR	40	12K0E	
14121.0	1545	23	06			RADAR	40	12K0E	
14128.0	1010	02	06			UI		8K0E	S9
14136.0	1548	23	06			RADAR	40	12K0E	
14140.0	1345	08	06			RADAR		20K0E	S9+20dB,
14150.0	0715	08	06			RADAR	40	12K0E	
14146.5	0700	26	06			UI		3K0/6K0	
14163.0	1538	08	06			RADAR	40	12K0E	
14167.5	0705	26	06			UI		6K0E	irregular bursts
14178.0	0805	28	06			RADAR		10K0E	S8 burst
14186.0	0753	16	06			RADAR	40	12K0E	
14190.0	1345	08	06			RADAR		20K0E	S9+20dB,
14191.0	1635	21	06			RADAR	40	12K0E	
14193.0	0750	13	06			RADAR		12K0E	S8 bursts short
14213.0	0750	13	06			RADAR		12K0E	S8 about 1 minute long
14221.0	2042	07	06			F1B		200H	
14221.0	0716	08	06			RADAR	40	12K0E	
14221.0	2101	16	06			F1B		200H	
14221.0	2057	26	06			F1B		200H	
14222.5	2145	03	06			UI		5K0E	S7
14241.0	0754	13	06			RADAR		12K0E	S8 jumping to other freq's
14242.0	1105	24	06			CIS		2K7	S9 pilot 14243.3
14256.0	0754	16	06			RADAR	40	12K0E	
14271.0	2055	26	06			RADAR	40	12K0E	
14326.0	1410	09	06			RADAR		12K0E	S7

PZK; SP3AMO, SP5GNI

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
18088.0	0913	02	06			RADAR		8K0E	S8
18113.0	1542	08	06			RADAR	40	12K0E	
18163.0	1100	24	06			RADAR		10K0E	S9
18165.0	1455	26	06			RADAR		8K0E	S8 burst
21000.0	1335	08	06			RADAR		20K0E	S7
21045.0	0945	22	06			RADAR		20K0E	S5
21065.0	1335	08	06			RADAR		12K0E	S5
21130.0	0600	14	06			RADAR	50	20K0E	
21158.0	1232	07	06			RADAR	40	12K0E	
21160.0	1145	07	06			RADAR		10K0E	S7
21183.0	0645	12	06			RADAR	40	12K0E	
21279.0	0720	07	06			RADAR	40	12K0E	
21285.0	0827	01	06			RADAR		10K0E	S5 bursts
21290.0	vt	vd	06			RADAR		20K0E	S5 continous
21351.0	1338	08	06			RADAR		10K0E	S9
21390.0	1407	09	06			RADAR		20K0E	S5
21415.0	1448	12	06			RADAR		10K0E	S7
21417.0	1105	07	06			RADAR		8K0E	S7 burst
28100.0	0852	02	06			RADAR		20K0E	S7
28150.0	0835	08	06	G		RADAR		20K0E	S9
28215.0	0857	07	96			J3E		5K0E	S5 conversation unknown language
28215.0	1405	09	06			UI		10K0E	S9 digital, a few spectral lines
28300.0	0850	02	06	IRN		RADAR		60K0E	S6 10:20 still present
28860.0	vt	vd	06			RADAR	150/30 0	46K0E	
28935.0	0705	08	06			RADAR	50	20K0E	

REF; Francis, F5MIU

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
21000	1644	1	06			fmcw	50	20kHz	OTH Radar pulsed 20ms, S9, Multiple rates
14033	1648	1	06			Data		9kHz	Pure data Tx S9,
14200	0743	2	06			fmcw	50	20kHz	OTH Radar pulsed 20ms, S9, Multiple rates
21151	1621	6	06			lsb		3kHz	Unindent central Africa ? QSO on NCDXF frequency S4
21280	0723	7	06			fmcw	40	15kHz	OTH Radar pulsed 25ms,
21410	0808	8	06			fmcw	40	15kHz	OTH Radar pulsed 25ms, S7
14190	0743	9	06			fmcw	40	25kHz	OTH Radar pulsed 25ms, S9+10 (Multiple rates)
21420	1648	9	06			fmcw	40	25kHz	OTH Radar pulsed 25ms, S9 (Multiple rates)
21300	0728	10	06			fmcw	50	25kHz	OTH Radar pulsed 20ms, S8(Multiple rates)
14190	0733	10	06			fmcw	40	15kHz	OTH Radar pulsed 25ms, S7(Multiple rates)
14190	0831	11	06			fmcw	40	15kHz	OTH Radar pulsed 25ms, S9+(Multiple

REF; Francis, F5MIU

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
									rates)
14155	0759	14	06			fmcw	40	15kHz	OTH Radar pulsed 25ms, S9+30 (Multiple rates)
14140	1714	14	06			fmcw	40	15kHz	OTH Radar pulsed 25ms, S9+20 (Multiple rates)
21142	0725	16	06			fmcw	40	10kHz	OTH Radar pulsed 25ms, S7
14256	0729	16	06			fmcw	40	20kHz	OTH Radar pulsed 25ms, S9
14195	0942	19	06			fmcw	40	20kHz	OTH Radar pulsed 25ms, S9
14115 14105	1633	21	06			fmcw	40	15kHz	OTH Radar pulsed 25ms, S9 Both synchron's
14105	1521	24	06			fmcw	40	15kHz	OTH Radar pulsed 25ms, S9
14310 14365	1523	24	06			fmcw	40	20kHz	OTH Radar pulsed 25ms, S9+20 Both synchron's
14107	1547	30	06			fmcw	40	15kHz	OTH Radar pulsed 25ms, S9

RSGB; Richard, G4DYA

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3510.0	2032	01	06			J3E		2K70E	USB 'The Air Horn'. Daily. Also heard 302212z
3756.0	2032	01	06			J3E		1K70E	USB 'The Pip'. Daily. Also heard 302213z.
7000.0	2004	29	06			J7D		2K70E	USB 6998.0 / CIS-12. Also heard 302155z.
7010.0	1733	06	06			J7D		2K70E	USB 7008.0 / CIS-12
7019.0	1824	19	06			N0N			Plain carrier
7023.0	2151	30	06			J7D		2K70E	USB 7021.0 / CIS-12
7026.0	2152	30	06			J7D		2K70E	USB 7024.0 / CIS-12
7054.0	2222	29	06	RUS		P0N	40	12K0E	Container pulse radar
7057.0	0806	07	06			J7D		2K70E	USB 7055.0 / CIS-12
7075.0	2037	16	06					18K0E	Unidentified
7110.0	1636	05	06	ETH	R. Ethiopia	A3E			BC. Also heard 151710z
7113.0	2154	30	06	RUS		P0N	40	12K0E	Container pulse radar
7138.0	2027	01	06			F1B		250	FSK. Also heard 020800z, 030800z, 102121z
7140.02	1819	19	06	ERI	VoBM	A3E			BC
7170.0	0756	03	06			F1B		200	FSK. Also heard 102122z
10127.0	2119	10	06	RUS		P0N	40	12K0E	Container pulse radar
14008.0	0829	15	06			F1B		250	FSK. Also heard 220802z
14029.0	0635	01	06					8K00E	Unidentified
14105.0	1531	07	06	RUS		P0N	40	12K0E	Container pulse radar
14116.0	0725	05	06			F1B		250	FSK
14118.0	0801	06	06					540HE	Unidentified
14155.0	1257	29	06	RUS		P0N	40	12K0E	Container pulse radar
14158.0	0807	14	06	RUS		P0N	40	12K0E	Container pulse radar
14162.0	0727	05	06			J7D		2K70E	USB 14160.0 / CIS-12
14169.0	0706	01	06			F1B	50	200	FSK. Also heard 070748z

RSGB; Richard, G4DYA

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14180.0	1116	09	06	RUS		P0N	40	12K0E	Container pulse radar
14186.0	0747	16	06	RUS		P0N	40	12K0E	Container pulse radar
14191.0	0753	06	06	RUS		P0N	40	12K0E	Container pulse radar. Also heard 091116z
14192.0	0756	14	06	RUS		P0N	40	12K0E	Container pulse radar
14200.0	1329	02	06	RUS		P0N	40	12K0E	Container pulse radar
14221.0	0755	14	06	RUS		P0N	40	12K0E	Container pulse radar
14221.0	2024	16	06			F1B	50	200	FSK. Also heard 232244z, 292008z, 302147z
14237.0	2227	28	06	CHN		F3N	66.7	10K0E	FMCW radar bursts
14238.1	0904	09	06			F1B		250	FSK
14254.0	1632	05	06	RUS		P0N	40	12K0E	Container pulse radar
14298.5	0803	10	06			F1D		1K20E	Unidentified FSK bursts. 600 Hz shift. Also heard 220804z, 230818z
14300.0	0744	02	06	RUS		P0N	40	12K0E	Container pulse radar
14305.0	2242	23	06	RUS		P0N	40	12K0E	Container pulse radar
14312.0	1850	24	06	RUS		P0N	40	12K0E	Container pulse radar
14320.0	2240	23	06	RUS		P0N	40	12K0E	Container pulse radar
14326.0	1349	09	06	RUS		P0N	40	12K0E	Container pulse radar
18157.0	1125	02	06	RUS		P0N	40	12K0E	Container pulse radar
18165.0	0901	09	06	G		F3N	50	20K0E	FMCW radar, UK SBA, Cyprus
18169.0	0805	14	06	CHN		F3N	66.7	10K0E	FMCW radar bursts
18170.0	0712	29	06	G		F3N	50	20K0E	FMCW radar, UK SBA, Cyprus
21065.0	1253	08	06	RUS		P0N	40	12K0E	Container pulse radar
21159.0	1005	06	06	RUS		P0N	40	12K0E	Container pulse radar
21160.0	1128	07	06	RUS		P0N	40	12K0E	Container pulse radar
21171.0	1228	06	06	RUS		P0N	40	12K0E	Container pulse radar
21175.0	0825	17	06	RUS		P0N	40	12K0E	Container pulse radar
21182.0	0828	15	06	CHN		F3N	66.7	10K0E	FMCW radar bursts
21250.0	0801	10	06	G		F3N	50	20K0E	FMCW radar, UK SBA, Cyprus
21290.0	0858	09	06	G		F3N	50	20K0E	FMCW radar, UK SBA, Cyprus. Also heard 230730z
21300.0	0735	10	06	G		F3N	50	20K0E	FMCW radar, UK SBA, Cyprus
21300.0	0712	16	06	G		F3N	12.5	40K0E	FMCW radar, UK SBA, Cyprus
21305.0	1059	17	06	G		F3N	25	20K0E	FMCW radar, UK SBA, Cyprus
21317.0	1038	06	06	RUS		P0N	40	12K0E	Container pulse radar
21351.0	1254	08	06	RUS		P0N	40	12K0E	Container pulse radar
21367.0	0826	16	06	RUS		P0N	40	12K0E	Container pulse radar
21390.0	1347	09	06	G		F3N	50	20K0E	FMCW radar, UK SBA, Cyprus
21438.0	0859	09	06	RUS	RCV	A1A			Morse. Also heard 150837z, 190839z
21438.0	0834	14	06			A1N			Faulty, unintelligible Morse
21440.0	0805	07	06	G		F3N	50	20K0E	FMCW radar, UK SBA, Cyprus
24950.0	0747	18	06	G		F3N	25	20K0E	FMCW radar, UK SBA, Cyprus
28000.0	0810	19	06	IRN		P0N		45K0E	Pulse radar, 307.1 / 869.5 pps
29110.0	0754	02	06	G		F3N	50	20K0E	FMCW radar, UK SBA, Cyprus

RSK; Kamweti, 5Z4BV

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7000	0919	27	6			PSK		2K5E	STANAG 4285
7110	vt	dly	6	ETH		A3E		22kE	Radio Ethiopia National Service
7140	vt	vd	6	ERI		A3E		10kE	Radio Eritrea Voice of Broad Masses
7140	vt	vd	6			J3E-U		2K5E	Vernacular/Kiswahili QSO
7150	vt	dly	6	KEN		MFSK	128	2k2	2G ALE Call transmission
10100	vt	vd	6			PSK		2K5E	STANAG 4285
10105	1420	27	6			PSK		2K5E	STANAG 4285
10121	vt	vd	6			J3E-U		2K5E	Vernacular QSO
14075	1228	28	6			FMOP	40 sps	20K0E	Kontayner
14100	1301	28	6			FMOP	40 sps	20K0E	Kontayner
14203	1425	27	6			FMOP	20 sps	20K0E	Kontayner
14314	1423	26	6			J3E-U		2K5E	Unid. voice QSO
21130	1435	26	6			FMOP	?	40K0E	Unid. multi 'channel' OTHR 40 kHz

SRAL; Pekka, OH2BLU

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7 MHz	(2200 - 0200)		6	RUS		RADAR	40sps	13k0E	(WebSDR 25d)
7 MHz	0500- 1715	*	6	RUS		RADAR	10sps	10k0E	*) Days: 3. 5. 15. 22.
7 MHz	0445- 1815	*	6	RUS		XXX		8k0E	*) Days: 1. 5. - 7. 13. 18. 25. 26. 30. mainly 6997 – 7025 kHz
7000.0	0000- 2400	*	6	RUS		J7D	120	2k60E	*) Days: 1. 6. 15. 29. 30.
7006.0	0540- 1115/ 14	09	6			NON			-125 Hz offset
7006.5	0700- 1215	*	6	RUS		F1B		500H	*) Days: 2. 6. 13.
7008.0	1015- 1815	*	6	RUS		F1B		250H	*) Days: 1. 2. 11. 22.
7010.0	0515- 1800	06 21	6	RUS		J7D	120	2k60E	
7016.0	1210- 1805	11 20	6	RUS		F1B		250H	
7019.0	0500- 1800	*	6	RUS		NON			*) Days: 7. 12. 14. 19.
7020.0	1240- 1320/ 22	15	6	RUS		F1B		250H	
7025.0	0500- 1630	*	6	RUS		F1A/B	28 wpm	200H	*) Days: 2. 3. 5. 7. - 10. 21. - 30.
7025.0	0515- 1620	*	6	RUS		J7D	120	2k60E	*) Days: 8. 9. 13. 19. 23.
7031.0	0400- 1730/ 21	*	6	RUS		J3E-u		3k0E	*) Days: 16. - 20. brum, fem vox
7055.0	0700- 1800	21 25	6	RUS		J7D	120	2k60E	
7072.0	1320- 1555/ 01	01	6	RUS		J7D	120	2k60E	

SRAL; Pekka, OH2BLU									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7057.5	0500-0945	*	6	RUS	1X9L etc	A1A	18 wpm	40H	*) Days: 1. - 5. 5BL
7076.0	1300-1515/	11 15	6	RUS		F1B		250H	
7110.0	1130-1315	*	6	RUS		F1B		200H	*) Days: 5. 9. 10.
7110.0	1600-1810/	01 - 30	6	ETH	R. Ethiopia	A3E		9k0	
7110.4	1700-1840/	06	6		RSS	A1A	22 wpm	20H	News in English (Google news)
7124.0	1210	18	6	RUS		J7D	120	2k60E	
7138.0	0445-1830	*	6	RUS		F1B		250H	*) Days: 1. - 4. 10. 11
7140.0	1700-1845/	19	6	ERI	VoBME	A3E		9k0	+20Hz offset
7147.0	0540-1515	*	6	RUS		J7D	120	2k60E	*) Days: 11. 19. 20. 21. 24.
7169.0	1700-1810/	21	6	RUS		J7D	120	2k60E	
7170.0	0000-2400	*	6	RUS		F1B		200H	*) Days: 2. - 4.
7196.0	0630-0745/	27	6	RUS		F1B		250H	
7200.0	1200-1500/	01 - 30	6	TWN		A3E		9k0	National Unity Radio to Korea
10 MHz			6	G		RADAR	50sps	20k0	(WebSDR 0d)
10 MHz	0500-1720	*	6	RUS		RADAR	40sps	13k0E	*) Days: 1. 2. 3. 15. 21. 29. (WebSDR 14d)
14 MHz	0300-2400	*	6	RUS		RADAR	40sps	13k0E	*) Days: 1. - 14. 16. 18. - 21. (WebSDR 28d)
14 MHz	0515-1415	*	6	RUS		RADAR	10sps	10k0E	*) Days: 4. 8. 9. 18. 22.
14 MHz	0500-1730	*	6	RUS		XXX		8k0E	*) Days: 1. 5. 6. 7. 15. 19. 24. 30. mainly 14000 – 14045 kHz
14 MHz	0500-1820	*	6	CHN		RADAR	50/67s ps	10k0E	*) Days: 1. 5. 6. 8. 9. 13. 15. 17. 18. 20. 22. - 29. 'foghorn'
14000.0	1357-1457/	01 - 31	6	CHN	CRI	A3E		9k0	Tx intermodulation, //13710 & 13855 kHz
14002.0	1145	12	6	RUS		F1B		1k0	
14008.0	0445-1445	*	6	RUS		F1B		250H	*) Days: 2. 8. 9. 15. 16. 19. 22.
14026.0	0745	24	6	RUS		J7D	120	2k60E	
14108.0	0600-1040	*	6	RUS	EFVD etc	A1A	20 wpm	40H	*) Days: 2. 3. 4. 5. 9. 14. 15. 23. 25. 28. 5BL
14171.0	0745-0757/	*	6	RUS		J7D	120	2k60E	
14221.0	0330-0600/	01 - 30	6	KAZ		F1B		200H	
14242.0	0500-1110	*	6	RUS		J7D	120	2k60E	*) Days: 5. 7. 24.

SRAL; Pekka, OH2BLU

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14317.0	0805	08	6	RUS	8F9D etc	A1A	15 wpm	40H	5BL (ERP > 400 W)
18 MHz	0600-1800	*	6	G		RADAR	25/50s ps	20k0	*) Days: 3. 9. 11. 20. 21. 22. (WebSDR 8d)
18 MHz	0545-1215	*	6	RUS		RADAR	40sps	13k0E	*) days: 1. 2. 4. 24. 25. 30. (WebSDR 12d)
21 MHz	0500-2000	*	6	G		RADAR	25/50s ps	20k0	*) Days: 1. 3. 7. - 10. 14. 20. 22. 23 25. 30. (WebSDR 15d)
21 MHz	0445-1220	*	6	RUS		RADAR	40sps	13k0E	*) Days: 3. 5. - 8. 11. - 17. 19. 22. (WebSDR 8d)
21 MHz	0700-1545	*	6	CHN		RADAR	50/67s ps	10k0E	*) Days: 2. 3. 5. 6. 14. 18. 22. 'foghorn'
21365.0	0930	11	6			A3E		9k0	MX
21438.0	/0830-1315	01 - 30	6	RUS	RCV	A1A	20 wpm	40H	Key failures
28 MHz	0600-1100	*	6	G		RADAR	25/50s ps	20k0	*) Days: 1. 2. 8. (WebSDR 3d)
28 MHz	0500-1130	*	6	IRN		RADAR	150/313	60k0E	*) Days: 2. 11. 27. 29. alternating fq (WebSDR 2d)
28 MHz	0500-1800	*	6	IRN		RADAR	310/870	120k0E	*) Days: 17. 18. 19. 21. 27. 29. (WebSDR 3d)
28860.0	0400-1900	*	6	IRN		RADAR	150/313	60k0E	*) Days: 2. - 6. 8. - 19. 21. - 26. 29. (WebSDR 25d)
28 MHz	0445-1830	*	6	RUS	Taxi disp.	F3E		3k0E	*) Days: 2. 3. 4. 6. - 9. 11. 12. 13. 17. 22. 14. - 26. 95 reports

URE; Gaspar, EA6AMM

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7001.5	19:49	19	06			XXX		CA3K0E	XXX: burst system.. Also on 7015.5 kHz CF.
7044.0	20:38	20	06			XXX		8K0E	XXX. BW 8K0E
7055.0	20:35	20	06			J3E-L			UKR/RUS radiowar
13995.0	06:43	16	06	RUS		RADAR	40	12K0E	OTHR Contayner. Just QRT
14000.0	12:06	14	06			XXX		CA2K80E	XXX)
14000.8	16:47	19	06			XXX		CA3K0E	XXX. Bursts system.
14013.1	11:00	19	06			XXX		CA3K0E	XXX. Bursts system. Also on 14027.85 kHz CF
14018.8	13:32	15	06	BLR		XXX		CA2K50E	XXX. Burst system
14021.0	13:37	06	06			XXX		8K0E	XXX. With central carrier
14022.0	16:59	19	06			XXX		C3K0E	XXX. Burst system. Also on 14034 kHz CF
14024.3	11:49	16	06	BLR		XXX		CA3K0E	XXX. Burst system
14027.9	11:08	19	06			XXX		CA3K0E	XXX: Bursts system. Also on 14013.14 kHz CF. Long - lasting
14050.0	05:30	09	06			XXX		8K0E	XXX.. With central carrier
14085.0	12:45	21	06	RUS		RADAR	40	12K0E	OTHR Contayner. Also on 14137 kHz CF
14085.0	11:32	22	06	RUS		RADAR	40	12K0E	OTHR Contayner
14090.9	07:38	08	06			W7D		2K80E	OFDM. CIS- 60

URE; Gaspar, EA6AMM

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14091.0	20:06	06	06	RUS		RADAR	40	12K0E	OTHR Contayner
14098.4	12:40	16	06			F1B	600	600H	DPRK-FSK 600 ARQ
14098.5	12:52	06	06			F1B	600	600H	DPRK-FSK 600 ARQ
14100.0	14:48	16	06	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14101.0	11:56	21	06	RUS		RADAR	40	12K0E	OTHR Contayner
14102.0	12:03	14	06	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14102.0	13:17	15	06	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14105.0	15:51	18	06	RUS		RADAR	40	12K0E	OTHR Contayner.
14110.0	15:59	19	06	RUS		RADAR	40	12K0E	OTHR Contayner
14113.0	17:50	18	06	RUS		RADAR	40	12K0E	OTHR Contayner
14116.0	12:03	22	06	RUS		RADAR	40	12K0E	OTHR Contayner. Short TX. Jumped to 14096 kHz CF
14121.0	12:10	21	06	RUS		RADAR	40	12K0E	OTHR Contayner
14125.0	15:00	17	06	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14128.0	12:08	14	06	RUS		RADAR	40	12K0E	OTHR Contayner. Hopping every minute
14128.0	17:59	18	06	RUS		RADAR	40	12K0E	OTHR Contayner
14135.0	20:07 vt*	06 vd*	06	RUS		RADAR	40	12K0E	OTHR Contayner. Also on 18/06. 1547 UTC
14137.0	12:46	21	06	RUS		RADAR	40	12K0E	OTHR Contayner
14140.0	13:31	11	06	RUS		RADAR	40	12K0E	OTHR Contayner
14140.0	16:30	13	06	RUS		RADAR	40	12K0E	OTHR Contayner. Also on 14194 kHz CF
14140.0	11:00	16	06	RUS		RADAR	40	12K0E	OTHR Contayner. Also on 14188 kHz CF
14147.0	11:50	17	06	RUS		RADAR	40	12K0E	OTHR Contayner. Jumping every minute
14147.0	13:59	18	06	RUS		RADAR	40	12K0E	OTHR Contayner. Also on 14170 kHz CF
14150.0	07:36	08	06	RUS		RADAR	40120		OTHR Contayner. Also on 14223 kHz CF
14157.0	07:15	09	06	RUS		RADAR	40	12K0E	OTHR Contayner. Also on 14186 kHz CF
14157.0	12:21	22	06	RUS		RADAR	40	12K0E	OTHR Contayner
14161.0	11:54	17	06	RUS		RADAR	40	12K0E	OTHR Contayner. Jumping every minute within the 20 m band
14162.0	15:32	18	06	RUS		RADAR	40	12K0E	OTHR Contayner
14165.0	18:02	13	06	RUS		RADAR	40	12K0E	OTHR Contayner
14167.0	19:45	13	06	RUS		RADAR	40	12K0E	OTHR Contayner
14169.0	07:25 vt*	07 vd*	06			F1B	50	200H	*Also on 08 and 14/06, vt.
14170.0	14:00	18	06	RUS		RADAR	40	12K0E	OTHR Contayner
14172.0	13:29	11	06	RUS		RADAR	40	12K0E	OTHR Contayner. Also on 14202 kHz CF
14178.0	19:46	13	06	RUS		RADAR	40	12K0E	OTHR Contayner
14178.0	18:12	19	06	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14179.0	20:10	06	06	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14183.0	18:08	19	06	RUS		RADAR	40	12K0E	OTHR Contayner
14185.0	11:59	13	06	RUS		RADAR	40	12K0E	OTHR Contayner
14186.0	07:15	09	06	RUS		RADAR	40	12K0E	OTHR Contayner
14188.0	06:42	16	06	RUS		RADAR	40	12K0E	OTHR Contayner
14188.0	11:08	16	06	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14189.0	07:45	09	06	RUS		RADAR	40	12K0E	OTHR Contayner
14189.0	18:03	13	06	RUS		RADAR	40	12K0E	OTHR Contayner. Short TX

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14189.0	14:44 vt*	16 vd*	06	RUS		RADAR	40	12K0E	OTHR Contayner. Jumping every minute. *Also on 17/06, 1318 UTC
14192.0	06:31	09	06	RUS		RADAR	40	12K0E	OTHR Contayner
14192.0	10:52	20	06	RUS		RADAR	40	12K0E	OTHR Contayner. 2 TX side by side: 14192 kHz CF + 14199 kHz CF
14194.0	16:31	13	06	RUS		RADAR	40	12K0E	OTHR Contayner
14197.0	17:47	07	06	RUS		RADAR	40	12K0E	OTHR Contayner
14198.5	13:02 vt*	21 vd*	06			A3E	1200	1K20E	DPRK-PSK 1200 ARQ. *Often
14198.5	12:41 vt*	17 vd*	06			F1B	600	600H	DPRK-FSK 600 ARQ. *Often
14200.0	13:16	15	06	RUS		RADAR	40	12K0E	OTHR Contayner
14202.0	13:30	11	06	RUS		RADAR	40	20K0E	OTHR Contayner
14203.0	17:56	18	06	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
14218.0	11:12	16	06	RUS		RADAR	40	12K0E	OTHR Contayner
14219.0	14:16	18	06	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14221.0	06:01 vt*	08 vd*	06	KAZ		F1B	50	200H	*Often
14223.0	06:51	08	06	RUS		RADAR	40	12K0E	OTHR Contayner
14228.0	16:51	19	06	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14233.0	11:34	17	06	RUS		RADAR	40	12K0E	OTHR Contayner
14238.1	07:27	09	06			F1B	75	250H	
14244.0	16:23	15	06	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14249.0	13:27	13	06	RUS		RADAR	40	12K0E	OTHR Contayner
14255.0	15:53	18	06	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14289.3	06:34 vt*	21 vd*	06			OTHER	1200	1K20E	DPRK-PSK 1200 ARQ. *Often
14298.5	12:34 vt*	14 vd*	06			F1B	600	600H	DPRK-FSK 600 ARQ. *Often
14299.0	18:22	19	06	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14301.0	16:33	13	06	RUS		RADAR	40	12K0E	OTHR Contayner
14302.0	15:48	18	06	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
14303.0	13:02	16	06	RUS		RADAR	40	12K0E	OTHR Contayner
14303.3	06:37 vt*	21 vd*	06			OTHER	1200	1K20E	DPRK-PSK 1200. Running at the same time that 14298.3 KHz system. *Often
14306.0	12:42	22	06	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14320.0	14:02	18	06	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14321.0	12:38	22	06	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
14343.0	17:58	18	06	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
14343.0	16:01	19	06	CHN		RADAR	62.1	10K0E	Short bursts. "Foghorn"
14347.0	07:37	07	06			J3E-U			Music
18075.0	20:31 vt*	20 vd*	06	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus. *Also on 20/06, 0613 UTC
18078.5	11:45	14	06			XXX		CA11K0E	XXX. BW ca 11 kHz. (jammer?)
18080.0	07:22 vt*	07 vd*	06			A3E			BC. "Sound of Hope". *Often
18085.0	05:43	09	06	CHN		RADAR	50	10K0E	Short 50 sps bursts. "Foghorn"
18119.0	06:04	08	06	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
18119.0	06:40	16	06	RUS		RADAR	40	12K0E	OTHR Contayner
18168.0	12:39	19	06	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
18175.0	17:57	09	06	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
18175.0	11:56	14	06	G		RADAR	25	20K0E	OTHR Pluto. UK SBA, Cyprus
21000.0	13:57	08	06	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
21003.5	14:21 vt*	15 vd*	06	IRN		XXX		CA3K0E	XXX. Continuous signal. Long – lasting. TDoA = IRN. *Often
21020.0	10:59	20	06	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
21065.0	13:58	08	06	RUS		RADAR	40	12K0E	OTHR Contayner
21119.0	11:14	19	06	CHN		RADAR	41.7	10K0E	Short bursts. "Foghorn"
21122.5	06:10 *vt	13 vd*	06	IRN		XXX		CA33K0E	XXX. Continuous signal. Long – lasting. TDoA = IRN. *Often
21130.0	05:27	14	06	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
21134.0	06:06	08	06	RUS		RADAR	40	12K0E	OTHR Contayner. Also on 21166 kHz CF
21137.0	11:19	19	06	CHN		RADAR	66.7	10K0E	Short bursts. "Foghorn"
21149.5	06:23	08	06			XXX		CA6K50E	21149.5 kHz USB: XXX DIGI. With SSB unreadable bursts.
21160.0	11:30	07	06	RUS		RADAR	40	12K0E	OTHR Contayner
21166.0	06:06	08	06	RUS		RADAR	40	12K0E	OTHR Contayner
21171.0	12:31	06	06	RUS		RADAR	40	12K0E	OTHR Contayner
21187.0	10:56	16	06	RUS		RADAR	40	12K0E	OTHR Contayner
21279.0	07:21	07	06	RUS		RADAR	40	12K0E	OTHR Contayner
21330.0	05:17	14	06	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
21339.0	12:49	16	06	RUS		RADAR	40	12K0E	OTHR Contayner
21345.0	12:11	20	06	G		RADAR	50	20K0E	OTHR Pluto. UK SBA, Cyprus
21352.0	13:59	08	06	RUS		RADAR	40	12K0E	OTHR Contayner. Also on 21065 kHz CF
21370.0	14:40	16	06	G		RADAR	25	20K0E	OTHR Pluto. UK SBA, Cyprus
21410.0	07:57	08	06	RUS		RADAR	40	12K0E	OTHR Contayner. Also on 21166 kHz CF
21410.0	06:04	16	06	G		RADAR	12.5	40K0E	OTHR Pluto. UK SBA, Cyprus
21413.4	05:59	21	06			F1B	600	600H	DPRK-FSK-600 ARQ
21420.0	06:12	08	06	CHN		RADAR	50	10K0E	Short bursts. "Foghorn"
21424.0	06:29	18	06	RUS		RADAR	40	12K0E	OTHR Contayner
21425.0	05:44	14	06	RUS		RADAR	40	12K0E	OTHR Contayner
21438.0	06:10 vt*	08 vd*	06	RUS	RCV	A1A			"RCV" QTC. RUS navy. *Daily
28000.0	12:45 vt*	17 vd*	06	IRN		RADAR	307/ 870	45K0W	OTHR IRN. Alternating 307 and 870 sps bursts. *Also on 18/06, 1105 UTC
28020.0	17:42	14	06			F1B		300H	Fishing buoy. Vt, vd
28020.4	18:43	13	06		MTE	A1A			Fishing buoy. Vt, vd
28020.7	11:27	06	06		EB	A1A			Fishing buoy. Vt, vd
28020.8	16:40	13	06		EB	A1A			Fishing buoy. Vt, vd
28021.1	16:41	13	06		CP	A1A			Fishing buoy. Vt, vd
28036.6	16:48	13	06		BQ	A1A			Fishing buoy. Vt, vd
28041.5	18:06	13	06	RUS		RADAR	40	12K0E	OTHR Contayner (Harmonic??)
28046.8	18:07	14	06		VV	A1A			Fishing buoy. Vt, vd
28051.5	19:34	13	06			F1B			Fishing buoy. Vt, vd
28056.3	19:43	13	06		BH	A1A			Fishing buoy. Vt, vd

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
28061.5	19:36	16	06		BK	A1A			Fishing buoy. Vt, vd
28062.1	18:04	14	06			F1B		300H	Fishing buoy. Vt, vd
28065.9	19:08	13	06		BQ	A1A			Fishing buoy. Vt, vd
28071.4	16:43	13	06		CC or CY	A1A			Fishing buoy. Vt, vd
28085.2	16:45	13	06			F1B		300H	Fishing buoy. Vt, vd
28091.0	18:05	13	06	RUS		RADAR	40	12K0E	OTHR Contayner (Harmonic??)
28099.4	16:29	19	06		AY	A1A			Fishing buoy. Vt, vd
28100.0	18:18	20	06	I		F3E			Italian CBers
28100.2	19:17	13	06			F1B		300H	Fishing buoy. Vt, vd
28102.0	19:18	13	06			F1B			Fishing buoy. Vt, vd
28104.4	16:53	13	06		EE	A1A			Fishing buoy. Vt, vd
28109.8	18:47	13	06		RS	A1A			Fishing buoy. Vt, vd
28110.5	18:49	13	06		CY	A1A			Fishing buoy. Vt, vd
28110.6	16:51	13	06		QQ	A1A			Fishing buoy. Vt, vd
28119.8	19:06	16	06		EB	A1A			Fishing buoy. Vt, vd
28128.9	16:26	19	06		PT	A1A			Fishing buoy. Vt, vd
28131.3	16:35	19	06		AL	A1A			Fishing buoy. Vt, vd
28134.9	19:14	16	06		DK	A1A			Fishing buoy. Vt, vd
28136.4	17:15	18	06		AL	A1A			Fishing buoy. Vt, vd
28139.7	19:22	13	06		AC	A1A			Fishing buoy. Vt, vd
28140.0	18:35	15	06		JYT	A1A			Fishing buoy. Vt, vd
28141.4	18:16	14	06		DO	A1A			Fishing buoy. Vt, vd
28150.0	08:17	08	06	G		RADAR	50	20K0E	OTHR Pluto. UK SBA; Cyprus.
28150.0	12:04	21	06	IRN		RADAR	307	45K0E	OTHR IRN. BW ca 45K0E. Alternating 307 and 870 sps bursts
28161.6	17:24	14	06		A	A1A			Fishing buoy. Vt, vd
28163.7	16:38	13	06		PU	A1A			Fishing buoy. Vt, vd
28164.7	16:35	13	06		AC	A1A			Fishing buoy. Vt, vd
28164.8	16:54	13	06		AR	A1A			Fishing buoy. Vt, vd
28181.7	16:57	13	06		LU	A1A			Fishing buoy. Vt, vd
28189.8	17:00	13	06		B	A1A			Fishing buoy. Vt, vd
28200.0	19:19	16	06			F1B			Fishing buoy. Vt, vd
28209.0	17:01	13	06		DP	A1A			Fishing buoy. Vt, vd
28212.0	17:46	14	06			F1B		300H	Fishing buoy. Vt, vd
28219.7	16:39	13	06		EB	A1A			Fishing buoy. Vt, vd
28229.6	16:42	19	06		IB	A1A			Fishing buoy. Vt, vd
28231.4	18:52	13	06			A1A			Fishing buoy. Vt, vd
28246.3	17:03	13	06		AE	A1A			Fishing buoy. Vt, vd
28255.0	19:45	16	06	I		F3E			Fishing buoy. Vt, vd
28255.9	18:54	13	06		BQ	A1A			Fishing buoy. Vt, vd
28260.4	19:23	16	06		AF	A1A			Fishing buoy. Vt, vd
28269.7	18:32	18	06		RI	A1A			Fishing buoy. Vt, vd
28275.1	05:51	21	06			F1B		300H	Fishing buoy. Vt, vd
28284.3	11:38	06	06		CA	A1A			Fishing buoy. Vt, vd
28284.8	17:06	13	06		CA	A1A			Fishing buoy. Vt, vd
28284.9	19:21	16	06		EE	A1A			Fishing buoy. Vt, vd
28286.1	18:58	13	06		CF	A1A			Fishing buoy. Vt, vd

URE; Gaspar, EA6AMM

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
28289.6	17:12	13	06		AY	A1A			Fishing buoy. Vt, vd
28289.7	17:10	13	06		AB	A1A			Fishing buoy. Vt, vd
28299.3	18:26	14	06		AS?	A1A			Fishing buoy. Vt, vd
28336.4	19:01	13	06		BQ	A1A			Fishing buoy. Vt, vd
28359.7	18:40	18	06		RI	A1A			Fishing buoy. Vt, vd
28374.7	19:29	13	06		DZ	A1A			Fishing buoy. Vt, vd
28376.3	17:14	13	06		BQ	A1A			Fishing buoy. Vt, vd
28379.7	17:16	13	06		EH	A1A			Fishing buoy. Vt, vd
28399.8	17:13	13	06		EB	A1A			Fishing buoy. Vt, vd
28416.6	17:20	13	06		BQ	A1A			Fishing buoy. Vt, vd
28419.8	18:59	17	06		EB	A1A			Fishing buoy. Vt, vd
28421.3	17:22	13	06		CL	A1A			Fishing buoy. Vt, vd
28440.0	17:24	13	06		EH	A1A			Fishing buoy. Vt, vd
28441.2	17:26	13	06		CL	A1A			Fishing buoy. Vt, vd
28441.4	18:43	18	06		BK	A1A			Fishing buoy. Vt, vd
28446.1	18:45	18	06		BH	A1A			Fishing buoy. Vt, vd
28560.0	05:32	21	06	IRN		RADAR	313	45K0E	OTHR IRN. Jumping fast across the whole 10 m band. Only 313 sps bursts
28860.0	06:49 vt*	07 vd*	06	IRN		RADAR	150	45K0E	OTHR IRN Alternating 150 and 313 sps bursts. *Almost daily
28935.0	07:09	08	06	G		RADAR	50	20K0E	OTHR Pluto UK SBA, Cyprus
29000.0	12:42	19	06	IRN		RADAR	307	45K0E	OTHR IRN. Alternating 307 and 870 sps bursts
29120.0	17:21	20	06	IRN		RADAR	313	45K0E	29120 kHz CF jumping fast across the whole 10 m band. Only 313 sps bursts. OTHR IRN. Seldom, very few 870 sps bursts sent

USKA; Peter, HB9CET

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7000.0	1240 0528	15 30	06			J7D	12x120 Bd	2k70E	CIS12: partially in 40m band often
7001.8	1701 2245	27 28	06			G1D FSK/PSK 8		2k80E	Bursts, short FSK intro; maybe MIL 188-xxx modified (seriell/parallel)
7014.8	1230	15	06			G1D PSK-8	2400	2k40E	1800Hz single tone modem. Most likely MIL188-110A
7015.0	1231	15	06			XXX		ca 5k0E	most likely Jammer (over the PSK-8)
7018.0	1028	27	06			J7D	12x120 Bd	2k70E	CIS12
7020.0	1209	15	06			F1B	75 Bd	250H	FSK; long lasting
7023.0	2212	30	06			J7D	12x120 Bd	2k70E	CIS12
7025.0	2241	09	06			J7D	12x120 Bd	2k70E	CIS12
7025.0	1549 0542	03 30	06	RUS	RDL	F1B	50 Bd	200H	FSK often
7025.0	0545	30	06	RUS	RDL	F1A		200H	CW-FSK encrypted

USKA; Peter, HB9CET									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7026.0	2215	30	06			J7D	12x120 Bd	2k70E	CIS12
7031.0	1410	03	06			XXX		ca 8k0E	unknown signal; most likely Jammer
7047.0	2224	30	06			FMOP	40 sps	12k0E	OTHR; Contayner
7049.0	2132	15	06			FMOP	40 sps	12k0E	OTHR; Contayner
7053.5	2146	21	06			XXX		ca 4k0E	unknown signal; most likely Jammer
7054.0	1333	09	06			F1B	50 Bd	200H	FSK
7055.0 LSB	1549 0633	03 30	06			J3E-L		ca 3k0E	RUS-UKR Radio War almost daily
7057.0	0725 0834	21 28	06			J7D	12x120 Bd	2k70E	CIS12 often
7065.0	2225	20	06			FMOP	40 sps	12k0E	OTHR; Contayner
7076.0	1715	24	06			XXX		ca 18k	Jammer
7089.8	1701 0848	02 04	06			G1D		ca 3k0E	LINK 11 SLEW often
7106.0	0734	01	06			OTHR		ca 50k	OTHR
7108.0 LSB	0834	12	06			PSK-4	30x60B d	2k50E	CHN30 (PRC30); Burst system; Pre- amble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz
7110.0	1713	07	06	ETH		A3E		ca 9k0E	BC: Radio Ethiopia daily
7113.0	2230	30	06			FMOP	40 sps	12k0E	OTHR; Contayner
7119.0	1323	09	06			J7D	12x120 Bd	2k70E	CIS12: weak, strong fading
7138.0	0741	01	06		RDL	F1B	50 Bd	250H	FSK; long lasting; often ID in F1A
7147.0	2044 0615	09 20	06			J7D	12x120 Bd	2k70E	CIS12
7154.0 LSB	2057	15	06			PSK-4	30x60B d	2k50E	CHN30 (PRC30); Burst system; Pre- amble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz
7155.0	1536	03	06			J7D	12x120 Bd	2k70E	CIS12: weak, strong fading
7170.0	0828 1420	03	06			F1B	75 Bd	200H	FSK; long lasting
7198.5	0849	12	06			XXX		2k0E	unknown
14000.0	1422	01	06		CRI	A3E			China Radio International. intermodu- lation from 13855 + 13710 kHz often
14002.0	0609	30	06			FMOP	40 sps	12k0E	OTHR; Contayner
14003.8	2213	03	06			XXX		ca 3k3	unknown signal
14008.0	0849 0907	15 22	06			F1B	50 Bd	250H	FSK almost daily
14019.0	1352	15	06			XXX		ca2k50E	unknown burst signal
14020.0	0537	25	06			XXX		ca 8k0E	unknown signal; most likely Jammer
14025.0	0843	18	06			XXX		ca2k50E	unknown burst signal
14026.0	1516	03	06			J7D	12x120 Bd	2k70E	CIS12
14042.0	1647	24	06			XXX		ca 8k0E	unknown signal; most likely Jammer
14043.0	1112	18	06			XXX		ca 3k0	unknown burst signal
14051.0	0803	02	06			XXX		ca 8k0E	unknown signal; most likely Jammer

USKA; Peter, HB9CET									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14056.0	1713	01				OTHR	50	10k0E	
14086.0	1034	27	06			FMOP	40 sps	12k0E	OTHR; Contayner
14090.9	0837	08	06			W7D OFDM 60		2k80E	OFDM 60, tone spacing 44.4Hz
14098.5	0824	02	06			ARQ FSK/PSK 2	600/ 1200	600H 1200H	DPRK ARQ system (FSK or PSK)often
14101.0	1204	21	06			FMOP	40 sps	12k0E	OTHR; Contayner
14110.0	1600	19	06			FMOP	40 sps	12k0E	OTHR; Contayner
14111.0	0614	30	06			FMOP	40 sps	12k0E	OTHR; Contayner
14117.0	1709	24	06			OTHR	66.66 sps	10k0E	OTHR, bursts
14119.0	1316	14	06			FMOP	40 sps	12k0E	OTHR; Contayner
14121.0	1215	21	06			FMOP	40 sps	12k0E	OTHR; Contayner
14125.0	1335	28	06			FMOP	40 sps	12k0E	OTHR; Contayner
14127.0	1724	07	06			FMOP	40 sps	12k0E	OTHR; Contayner
14129.0	2216	28	06			FMOP	40 sps	12k0E	OTHR; Contayner
14132.0	0717 1343	21 28	06			FMOP	40 sps	12k0E	OTHR; Contayner
14133.0	1324	14	06			FMOP	40 sps	12k0E	OTHR; Contayner
14138.0	1037	24	06			J7D	12x120 Bd	2k70E	CIS12
14139.0	2206	28	06			FMOP	40 sps	12k0E	OTHR; Contayner
14140.0	1256	02	06			FMOP	40 sps	12k0E	OTHR; Contayner
14160.0	0855	24	06			F1B		250H	FSK
14171.4	0920	13	06			XXX		ca 2.7k	unknown signal
14181.0	1529	03	06			FMOP	40 sps	12k0E	OTHR; Contayner
14184.0	0728	01	06			FMOP	40 sps	12k0E	OTHR; Contayner
14188.0	1337	12	06			FMOP	40 sps	12k0E	OTHR; Contayner
14189.0	0750	09	06			FMOP	40 sps	12k0E	OTHR; Contayner
14191.0	1230	02	06			FMOP	40 sps	12k0E	OTHR; Contayner
14192.0	1718	07	06			FMOP	40 sps	12k0E	OTHR; Contayner
14193.0	0818	10	06			FMOP	40 sps	12k0E	OTHR; Contayner
14198.5	1231	02	06			ARQ PSK2	1200	1200	DPRK ARQ system often
14198.5	0820	28	06			ARQ F1B	600 Bd	600H	FSK: DPRK ARQ system often
14221.0	2046 2052	09 15	06			F1B	50 Bd	200H	FSK often
14238.1	0757	09	06			F1B	75 Bd	250H	FSK
14242.0	1026	24	06			J7D	12x120 Bd	2k70E	CIS12
14253.0	1524	25	06			FMCW	66.66 sps	10k0E	OTHR; Bursts
14298.5	1237	02	06			ARQ PSK2	1200	1200H	DPRK PSK ARQ system often
14298.5	0646 0809	03 09	06			ARQ FSK	600	600H	DPRK FSK ARQ system often

USKA; Peter, HB9CET

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14312.0	1631	24	06			FMOP	40 sps	12k0E	OTHR; Contayner
14327.0	1330	12	06			FMOP	40 sps	12k0E	OTHR; Contayner
14334.0	1002	12	06			FMOP	40 sps	12k0E	OTHR; Contayner; long lasting
14341.0	1357	28	06			OTHR	42 sps	10k0E	OTHR; short bursts only
14343.0	1604	19	06			FMCW	66.66 sps	10k0E	OTHR; Bursts
18080.0	0612	20	06			A3E			BC: Sound of Hope, Taiwan daily
18090.0	0902	22	06			FMOP	40 sps	12k0E	OTHR; Contayner
18173.0	0640	03	06			FMOP	40 sps	12k0E	OTHR; Contayner; partially in 17m band
21000.0	1425	01	06	G		FMCW	50 sps	20k0E	OTHR; UK base Cyprus; partially in 15m band
21002.0	1231	15	06			XXX		ca 18k0E	unknown signal; maybe OTHR
21020.0	1142	20	06	G		FMCW	50 sps	20k0E	OTHR; UK base Cyprus
21003.5	1522	15	06			XXX		ca12K	unknown signal; maybe OTHR
21045.0	0847	22	06	G		FMCW	50 sps	20k0E	OTHR; UK base Cyprus
21122.9	2131	21				XXX		ca 18k0	unknown signal, strong fading; long lasting often
21171.0	0901	13	06			FMOP	40 sps	12k0E	OTHR; Contayner
21175.0	0828	17	06			FMOP	40 sps	12k0E	OTHR; Contayner
21290.0	0934	01	06	G		FMCW	50 sps	20k0E	OTHR; UK base Cyprus
21350.0	1215	20	06	G		FMCW	50 sps	20k0E	OTHR; UK base Cyprus
21371.0	0851	15	06	G		OTHR	50 sps	10k0E	OTHR
21438.0	0857	04	06	RUS	RCV	A1A		10H	Area of Sevastopol daily
28000.0	0744	17	06	IRN		?	307 + 870 sps	ca 45k	OTHR; Bursts; long lasting sweep rate alternating
28047.6	1200	15	06			F1B	51 Bd	300H	GPS fishing buoy "ENAGAL"
28149.0	1152	21	06	IRN		OTHR	307 + 870 sps	ca 45k	OTHR; Bursts; long lasting sweep rate alternating
28153.0	1213	21	06	IRN		OTHR	307 + 870 sps	ca 45k	OTHR; Bursts; long lasting sweep rate alternating
28181.58	1347	24	06		LU	A1A		ca 15H	CW fishing buoy
28860.0	0658 0857	03 15	06	IRN		OTHR	150 + 313 sps	ca 50k	OTHR; Bursts; long lasting sweep rate alternating often
29110.0	0813	02	06	G		FMCW	50 sps	20k0E	OTHR; UK base Cyprus
29130.0	1158	20	06			F3E		ca 4k	unknown language (maybe Russian Taxi?)

VERON; Ruud, PG1R

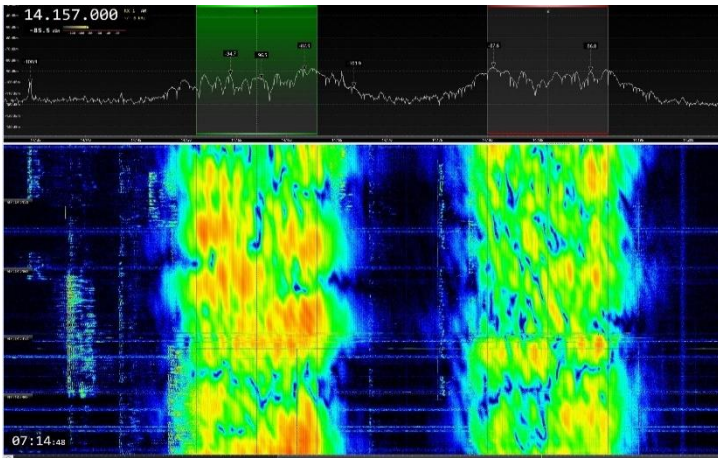
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7011.8	1910	11	06			XXX		4K0E	CF; Unknown digital signal; jammer?
7050.0	1907	11	06	UKR /RU S		J3E-L			RUS-UKR radio war; 2TX dueling
7055.0	1906	11	06	UKR /RU S		J3E-L			Comments; UKR-RUS radio war
7055.0	1645	29	06	UKR		J3E-L			Endless tape: male voice "Russian

VERON; Ruud, PG1R									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
				/RU S					Schwein".
7060.0	1725	11	06	UKR /RU S		J3E-L			Slogans; UKR-RUS radio war
7070.0	1959	11	06			XXX		8K0E	CF; unknown signal; jammer?
7081.0	1957	11	06			XXX		8K0E	CF; unknown signal; jammer?
7100.0	2031	11	06	UKR /RU S		J3E-L			Music/songs
7100.0	1925	21	06			J3E-L			Music / speech (loop)
14004.0	1655	18	06			XXX		2K50E	Unknown digital signal; reported by PF5X
14032.0	1655	18	06			XXX		2K50E	Unknown digital signal; synchronized with signal on 14004kHz
14136.0	1343	11	06	RUS		RADAR	40	12K0E	CF; OTHR Contayner
14140.0	1250	03	06			F1B		200H	UiPtr
14160.0	0856	14	06	RUS		RADAR		12K0E	TdoA: Russia
14162.0	0726	05	06	RUS		J7D		2K70E	CF; CIS-12
14168.0	1525	14	06			F1B		200H	UiPtr
14169.0	1018	04	06	RUS		RADAR		12K0E	TDoA: Russia
14180.0	1235	11	06	RUS		RADAR	40	12K0E	CF; OTHR Contayner
14194.0	0753	06	06			RADAR		20K0E	Also 10/06, 0701UTC
14201.0	1338	11	06	RUS		RADAR	40	12K0E	CF; OTHR Contayner
14221.0	2022	11	06	RUS		F1B		200H	Printer; idling; S5 with QSB
14259.7	1244	11	06			XXX		4K0E	CF; unknown mode; jammer?
14330.0	1018	24	06	RUS		RADAR		12K0E	TdoA: 54E in Russia
14332.0	1429	21	06			RADAR		20K0E	
14350.0	1939	21	06	I		J3E-U			Italian male voices; hams outside band?
18170.0	0714	29	06	G		RADAR	50	20K0E	CF; OTHR UK base Cyprus; partly in 17m band
21000.0	1355	08	06	G		RADAR	50	20K0E	CF; OTHR Pluto Cyprus
21318.0	1040	06	06	RUS		RADAR	40	12K0E	CF; OTHR Contayner
28016.0	0813	19	06			A1A			UiCW; one dash every 5 seconds

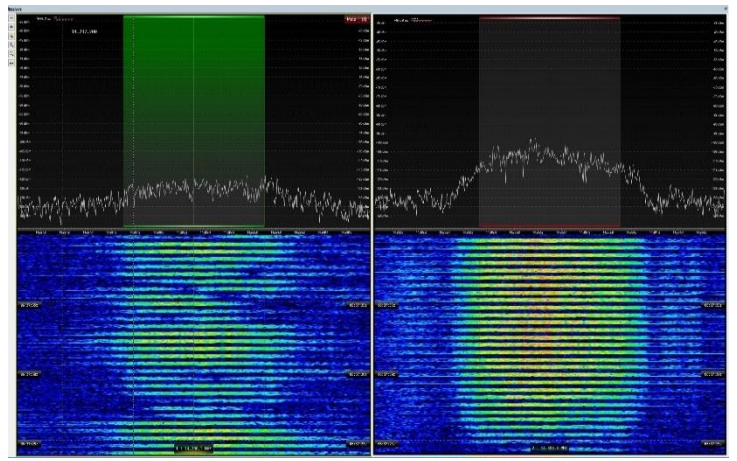
Contact: Gaspar Miró, EA6AMM, ea6amm@iaru-r1.org

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

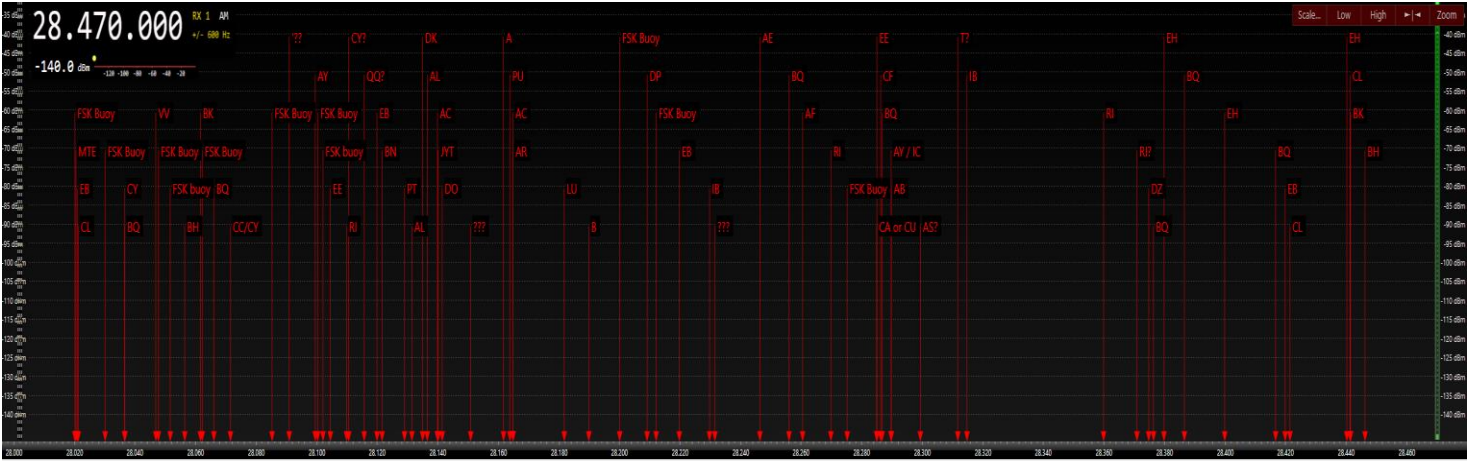
Visit our website: <https://www.iaru-r1.org/about-us/committees-and-working-groups/iarums/>



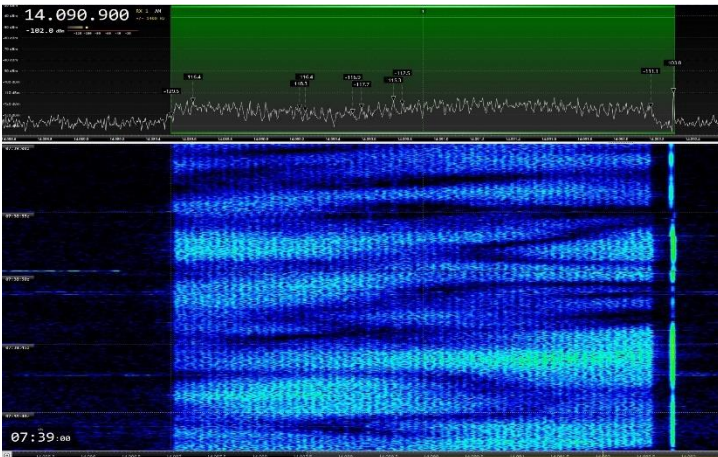
OTHR Contayner. (RUS. BW = 20K0E. 40 sps). 2 simultaneous TX on 20 m



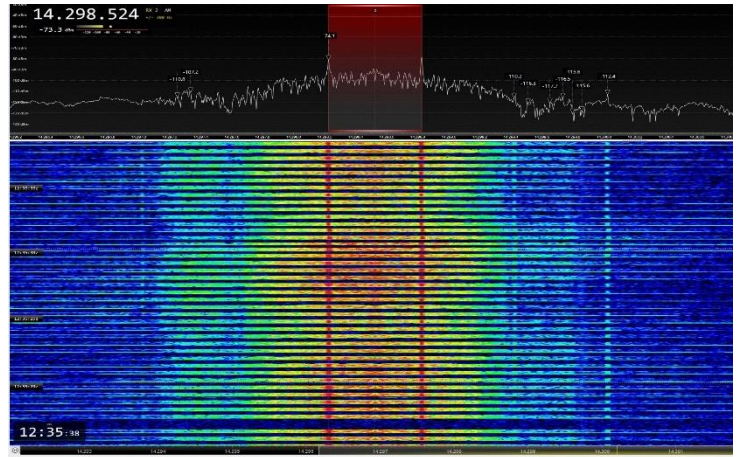
DPRK-PSK 1200 ARQ (BW = 1K20E. 1200 Bd). 2 simultaneous TX on 20 m



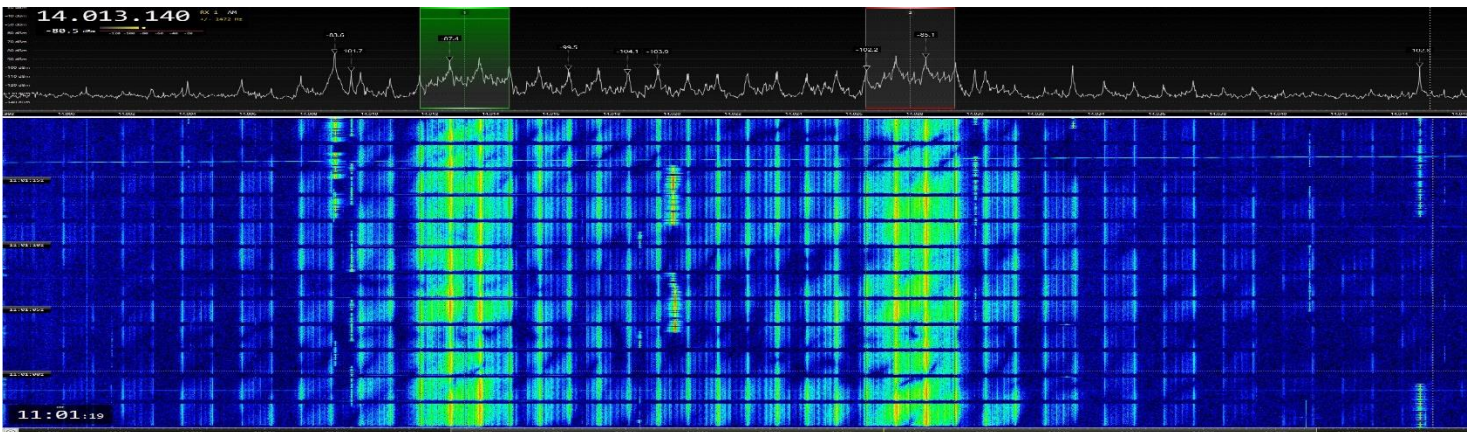
Fishing buoys (A1A; CW and F1B; FSK) on the 10 m band, June 2022 (from 28000 kHz to 28450 kHz)



CIS-60. OFDM (a.k.a Russian High Data Rate modem) RUS. BW = 2K80E.



DPRK-FSK 600 ARQ. F1B. SH = 600 Hz. 600 Bd



XXX. 2 X unknown burst system on 20 m. Wideband view, with splatter