

IARU Monitoring System Region 1



Monthly Newsletter - September 2023

New IARUMS R1 National Coordinators

Since September the 18th, Thierry, ON4LTW, is the new IARUMS National Coordinator for Belgium (UBA), succeeding Marc, ON9TT.

Since October the 9th, Vaughan, M0VRR is the new IARUMS National Coordinator for the United Kingdom (RSGB), succeeding Richard, G4DYA.

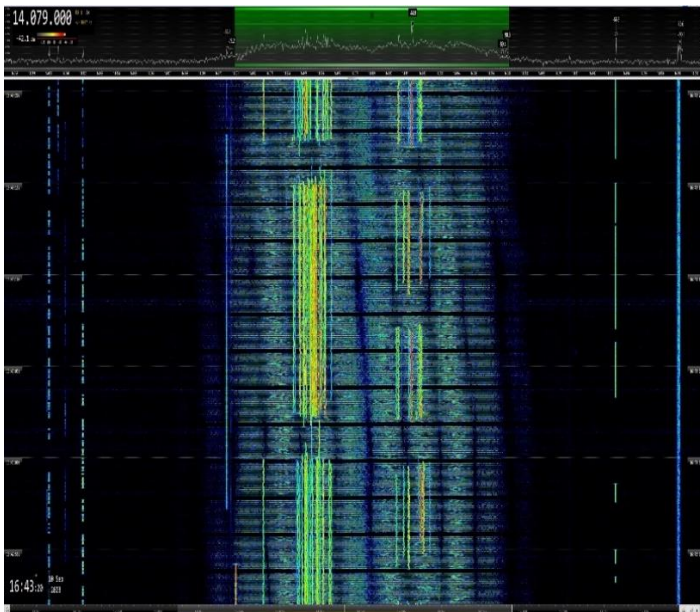
We warmly thank Richard G4DYA and Marc ON9TT for their work, help and commitment, and wish Thierry, ON4LTW and Vaughan, M0VRR, good luck in their new roles.

We encourage the IARU R1 Member Societies to appoint IARUMS National Coordinators to help the IARU Monitoring System Region 1.

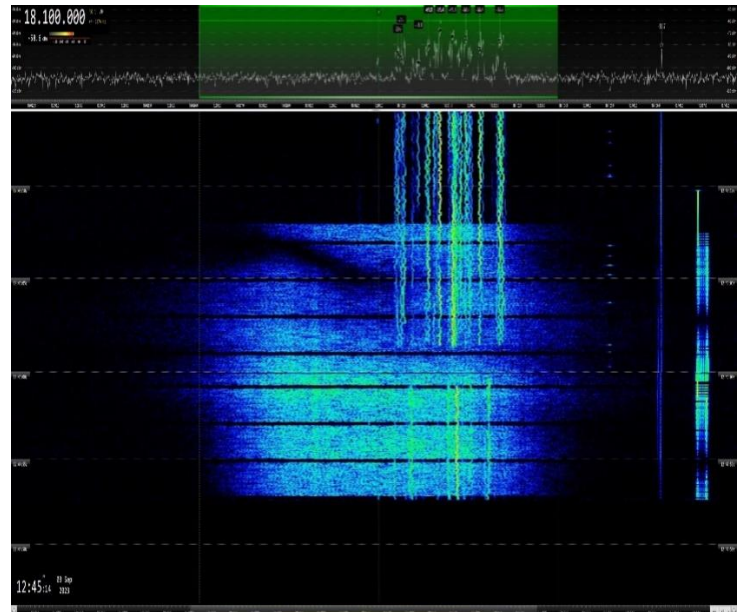
News and info

Let's start with more information about the interferences received on various bands, in the FT-8 and FT-4 dedicated segments that we received during the past month, caused by jammers, using different unknow modes – continuous or bursts - and bandwidths: throughout the first half of September, they could also be observed and the TDoA radiolocations continued to point to the Sevastopol area. Sometimes, this jamming was executed simultaneously on the 20, 17, 1,5 12 and 10 m bands.

Fortunately, these transmissions disappeared in the second half of the month.



14079 kHz CF: XXX. Jammer. Bursts. BW ca 16K0E

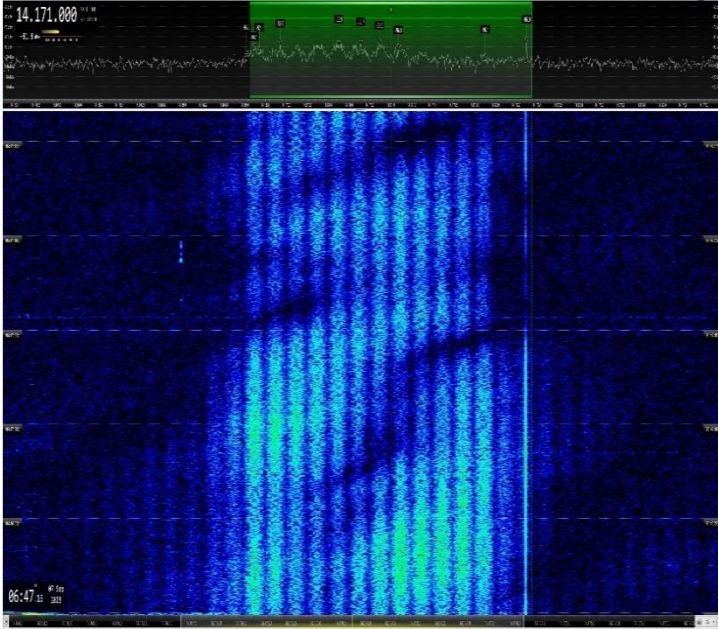


18100 kHz CF: XXX. Jammer. Bursts. BW ca 7K0E.

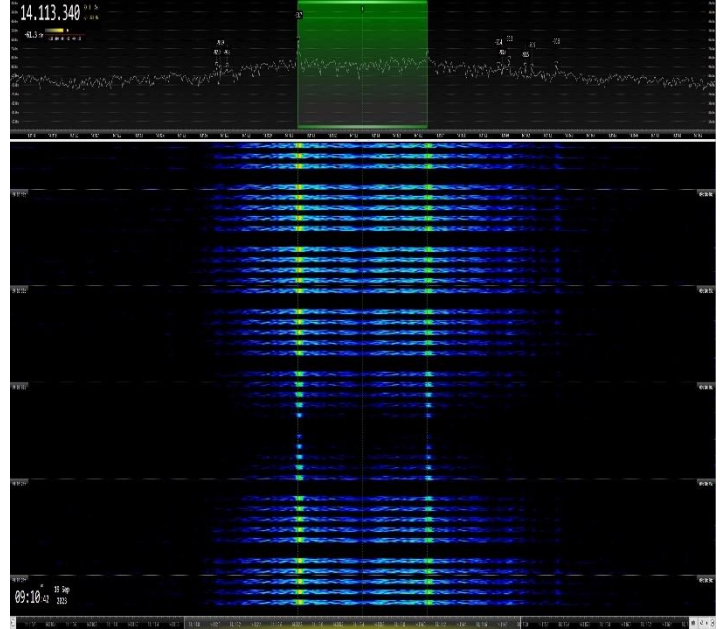
A long-lasting jammer was often received on the 40 meters band, on 7041 kHz CF. BW = 10 kHz.

In this band too, where long-lasting CIS-12 transmissions were also observed very often (7000 kHz CF and 7060 kHz CF. RUS. J7D. BW = 2K70E. 12 x 120 Bd + pilot tone), multiple F1B transmissions on various CIS-## modes (FSK / F1B shift 200 Hz or 250 Hz systems) were received, some of them very active during the first half of the month, like on 7016 kHz CF (RUS; Shift = Bd) or on 7137 kHz CF (RUS. , and some of them active daily like the one on 7080 kHz CF (RUS. SH = 200 Hz. 50 Bd).

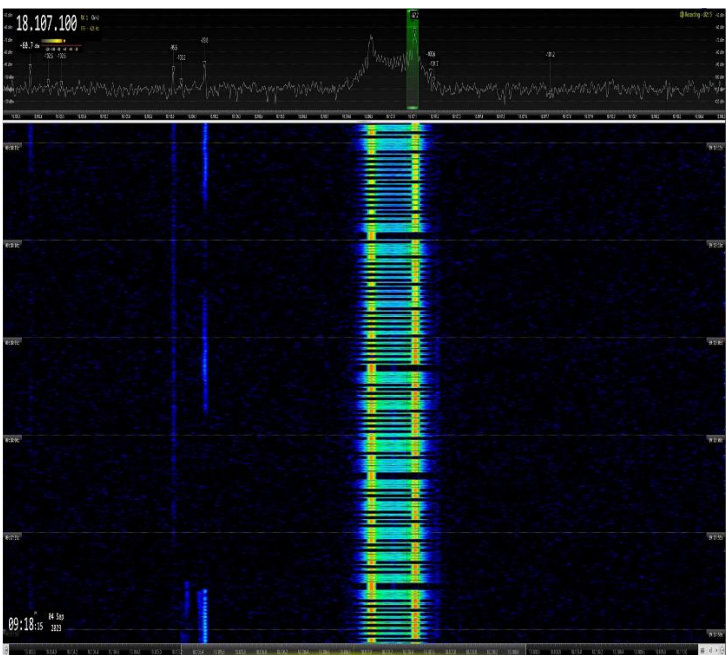
Transmissions of such systems were also observed on the 20 meters band (e.g., 14008 kHz CF. F1B. RUS. SH = 500 H. 50 Bd, almost daily) as well as on other frequencies, and also on the 17 meters band (18107 kHz CF. RUS. CIS-36 50. F1B and F1A – FSK telegraphy. ID = RDL). On the 20 m band, the well-known DPRK FSK and PSK ARQ systems were reported almost daily.



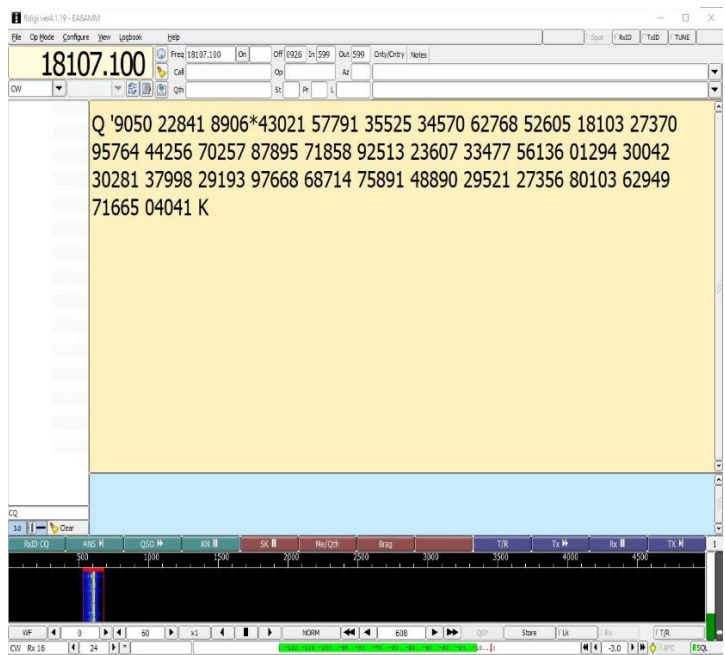
14171 kHz CF. CIS-12. J7D. BW = 2K70E. 12 x 120 Bd



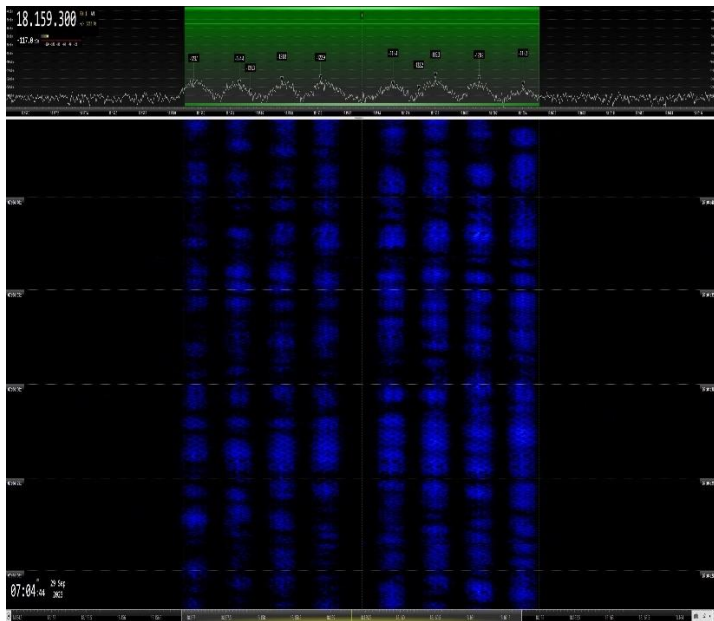
14113.34 kHz CF: DPRK-FSK 600 ARQ. F1D. Shift = 600. 600 Bd



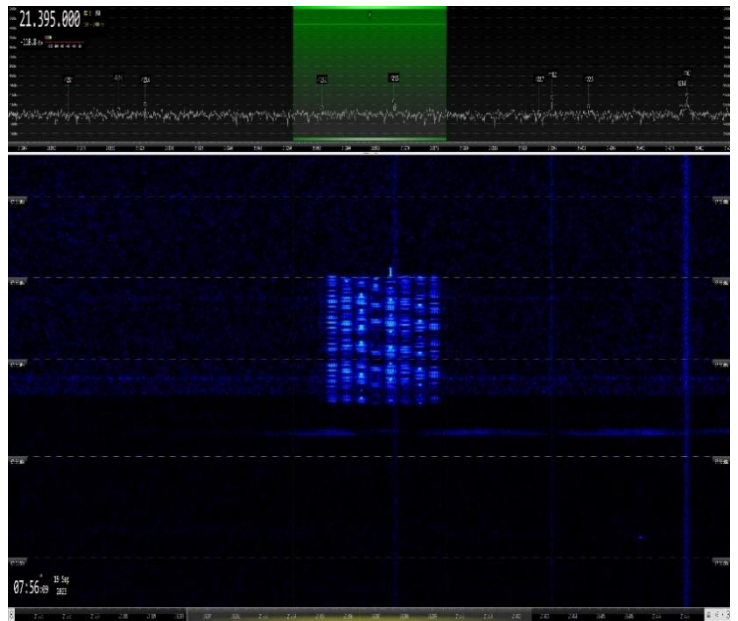
18107 kHz CF: CIS-36 50. F1B and F1A. RUS. ID = RDL. Shift = 200H.
Left: F1A part. Right: FSK telegraphy (F1A), encrypted: groups of 5 numbers



Several CHN MIL transmissions were observed on the 40, 20, 17 and 15 m bands, like CHN-30 (G7D. BW ca 2K50E. 30 x 60 Bd), CHN 4+4 (G7D. BW = 2K40E- 8 x 75 Bd), MIL-188-141A ALE 2G (J7D. BW =1K75E. 8 x 125 Bd) and OFDM 39 (OFDM. BW = 2K40E. 39 x 44.44 Bd + pilot tone).

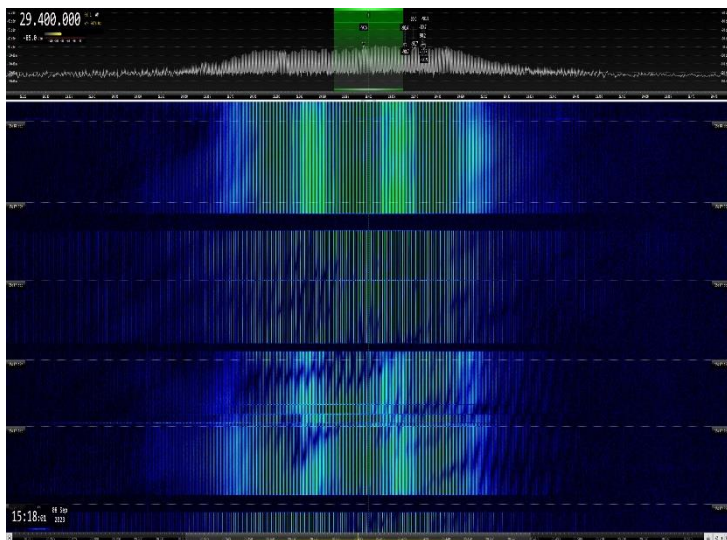


18159.3 kHz CF: CHN 4+4. G7D. BW = 2K40E. 8 x 75Bd

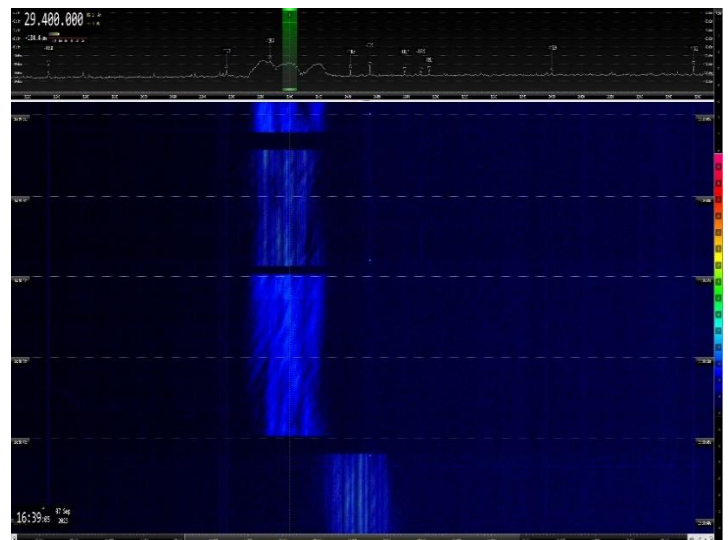


21395 kHz VFO: MIL-188-141A ALE 2G. J7D. 8 x 125 Bd.

As for the Over the Horizon radar (OTHR) transmissions, contrary to what happens usually, we were lucky to receive the British OTHR (located at the UK Sovereign Base Area on Cyprus) really seldom. (FMCW. BW = 20K0E. 50 or 25 sps) The Iranian OTHR, well-known, transmitting for years almost daily on 28860 kHz CF (AMOP. BW = 45K0E. Alternating 150 sps and 313 sps bursts), changed to 28960 kHz CF since September the 10th. Besides these transmissions, other sent by this OTHR were received on other 10 meters band QRG, like on 29450 kHz, where it was sometimes observed to be jumping among 29400 kHz CF and 29 500 kHz CF, and also received on 28500 kHz CF, using the same bandwidth but alternating 307 sps and 870 sps bursts. We could sometimes find up to 3 simultaneous transmissions of this radar on the 10 meters band.

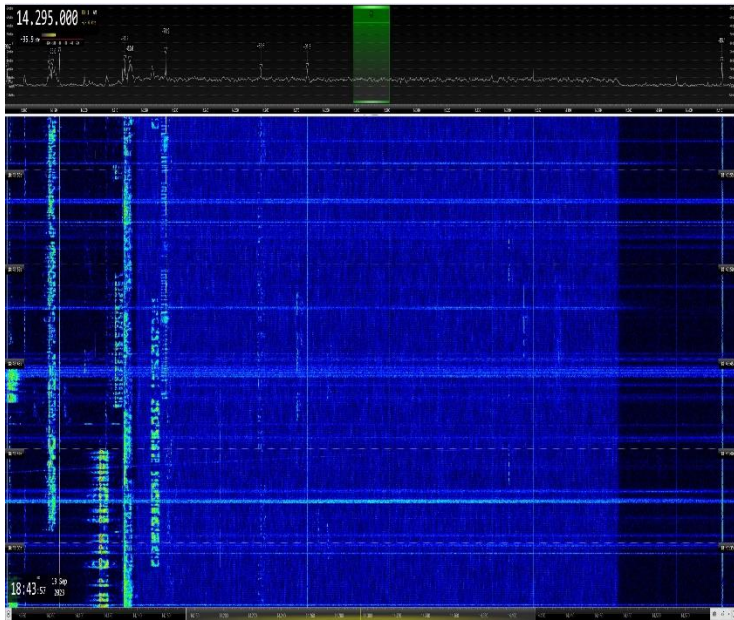


Left: 29400 kHz CF. OTHR IRN.. BW = 45K0E. Alternating 150 sps and 313 sps bursts.
Right, the OTHR IRN jumping from 29450 kHz CF to 29400 kHz CF

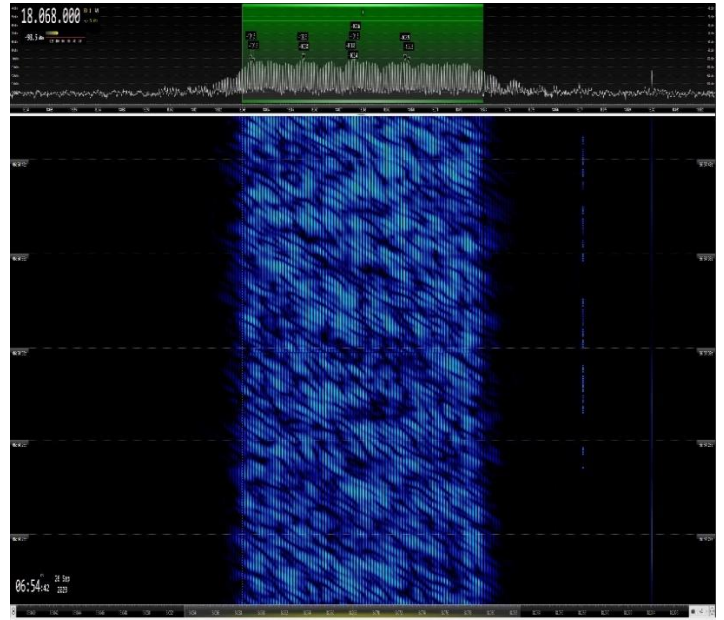


Besides the OTHR transmissions, on the 10 meters band we could also receive very often a plethora of unidentified stations in different QRG between 28100 kHz Cf and 28400 kHz Cf transmitting on F3E (FM), most usually heard with female voices in a Slavic language, sending short traffic. Some fishing buoys transmitting on A1A (CW) or F1B (shift ca 300 Hz; encrypted) were also heard in this band, as well as CBers from different countries.

Besides the sadly usual CHN OTHR bursts (BW = 10KOE. Most usually 66,7 sps or 50 sps, but also 41.7 sps and 83.3 sps) that can be received every month on 40, 20, 17, 15 and 12 m, in September we also received the CHN wideband OTHR (BW = 160 kHz. 10 sps on 20 and 15 meters, as well as a long-lasting CHN radar (BW = 10KOE. 50 sps) on 18068 kHz CF (17 meters)

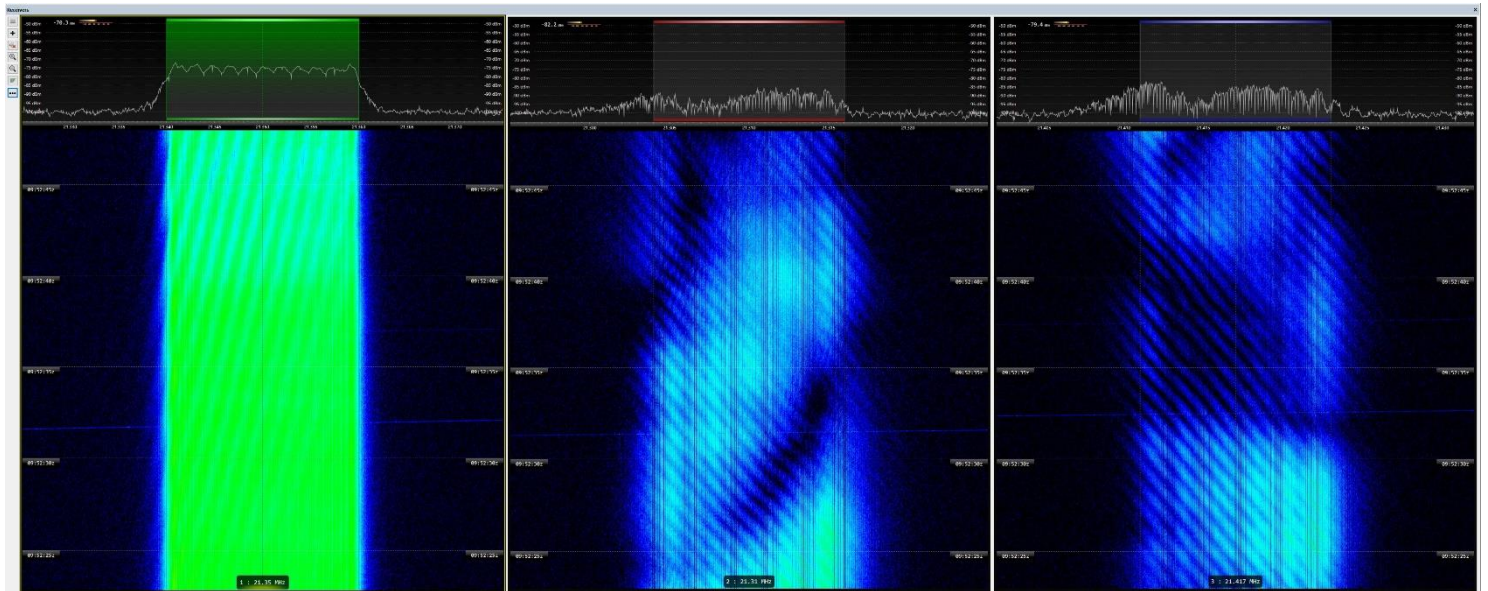


14295 kHz CF: CHN wideband OTHR. BW = 160 kHz. 10 sps



18068 kHz CF: CHN OTHR. BW = 10KOE. 50 sps

The RUS OTHR Contayner (FMOP. BW = 12KOE. 40 sps) was active on the 40, 20, 17 and 15 m band. In these bands it was sometime observed to perform up to 3 simultaneous transmissions.



3 X OTHR on 15 m. 21350 kHz CF: OTHR G. UK SBA, Cyprus. 20KOE. 50 sps. 21310 kHz CF 21417 kHz CF: OTHR Contayner. RUS. 12KOE. 40 sps

Just like during August, in September we also received the broadcasting station “National Unity Radio” transmitting form Taiwan daily on 7200 kHz A3A (AM), jammed by China and, every Tuesday on 21455 kHz CF, “Radio Free Asia”, transmitting from Tinian Island and jammed by China too.

Find other screenshots about the intrusions received during September at the end 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: DL8LAQ, Norbert; DL2SCH, Jürgen; DL4MCA, Rainer; DB1TH, Tobias; DJ4WT, Christian; DF5JL, Tom; DL5EAQ, Heinz-Dieter; DO1LR, Christian; DG3KBQ, Torsten; F4FPR, Benjamin; DG9OAY, Jens; DC2AM, Arne; DL5JP, John; DL5RBW, Roger; DB3TA, Alex

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3740,0	2132	22	09			J3E-L			RF pirat, music & russ. speech
7000,0	vt	vd	09	RUS		PSK		2k7	CIS-12
7008,0	2102	28	09	RUS		FMOP	40	12k	OTHR Contayner
7041,0	2155	05	09					10k	Jammer
7041,9	2010	26	09					9k	unid
7041,9	1804	27	09					9k	unid
7044,0	1640	11	09			F1B	50	250	FSK unid
7051,0	2023	13	09	RUS		FMOP	40	12k	OTHR Contayner
7052,0	2120	05	09	RUS		F1B	50	250	FSK unid
7053,3	1536	29	09			G1D		2k75	STANAG 4285
7060,0	vt	vd	09	RUS		PSK		2k7	CIS-12
7060,0	2102	28	09	RUS		FMOP	40	12k	OTHR Contayner
7064,0	2008	26	09	RUS		FMOP	40	12k	OTHR Contayner
7067,0	2115	05	09	RUS		FMOP	40	12k	OTHR Contayner
7080,0	vt	vd	09	RUS		F1B	50	200	CIS-36-50
7088,0	1947	25	09	RUS		FMOP	40	12k	OTHR Contayner
7089,7	1803	27	09			PSK		2k4	LINK11 SLEW
7090,0	1949	20	09			PSK	2400	3k	LINK11 SLEW
7094,0	2115	27	09	RUS		FMOP	40	12k	OTHR Contayner
7095,0	2128	22	09	RUS		FMOP	40	12k	OTHR Contayner
7100,0	2100	14	09	RUS		J3E-L		3k	RUS/UKR radio war
7103,0	2050	05	09	RUS		FMOP	40	12k	OTHR Contayner
7107,0	2100	14	09	RUS		FMOP	40	12k	OTHR Contayner
7114,0	2122	05	09	RUS		F1B	50	200	FSK unid
7137,0	1858	04	09	RUS		F1B	50	200	unid FSK
7137,0	1730	18	09			F1B	50	200	unid FSK
7183,0	2102	28	09	RUS		FMOP	40	12k	OTHR Contayner
7184,0	2023	26	09	RUS		FMOP	40	12k	OTHR Contayner
7185,0	2055	18	09	RUS		FMOP	40	12k	OTHR Contayner
7185,0	2025	27	09	RUS		FMOP	40	12k	OTHR Contayner
7190,0	2128	22	09	RUS		FMOP	40	12k	OTHR Contayner
7192,0	2134	05	09	RUS		FMOP	40	12k	OTHR Contayner
7200,0	1345	30	09			A3E			Myanmar Radio
14008,0	1245	04	09	RUS		F1B	50	500	CIS-50-50

DARC; Daniel, DL3RTL. Credit to monitors: DL8LAQ, Norbert; DL2SCH, Jürgen; DL4MCA, Rainer; DB1TH, Tobias; DJ4WT, Christian; DF5JL, Tom; DL5EAQ, Heinz-Dieter; DO1LR, Christian; DG3KBQ, Torsten; F4FPR, Benjamin; DG9OAY, Jens; DC2AM, Arne; DL5JP, John; DL5RBW, Roger; DB3TA, Alex

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14008,0	1155	25	09	RUS		F1B	50	500	CIS-36-50
14048,0	1850	25	09	RUS		FMOP	40	12k	OTHR Contayner
14075,0	1535	06	09	RUS				6k	unid
14076,0	1548	05	09					10k	unid
14089,0	0705	13	09	RUS		FMOP	40	12k	OTHR Contayner
14089,0	1122	13	09	RUS		FMOP	40	12k	OTHR Contayner
14107,0	1728	19	09	CHN		FMCW	41,67	10k	OTHR 6,1s bursts
14114,0	0732	17	09	RUS		FMOP	40	12k	OTHR Contayner
14140,0	1912	11	09	RUS		FMOP	40	12k	OTHR Contayner
14148,0	0644	23	09	RUS		FMOP	40	12k	OTHR Contayner
14165,0	2202	10	09	RUS		FMOP	40	12k	OTHR Contayner
14182,0	1930	11	09	RUS		FMOP	40	12k	OTHR Contayner
14185,0	1820	23	09	RUS		FMOP	40	12k	OTHR Contayner
14187,0	1908	03	09	RUS		FMOP	40	12k	OTHR Contayner
14208,0	1640	16	09	CHN		FMCW	50	10k	OTHR 5,1s bursts
14216,0	1246	10	09	RUS		FMOP	40	12k	OTHR Contayner
14221,0	0906	24	09	RUS		FMOP	40	12k	OTHR Contayner
14229,0	1502	17	09	RUS		FMOP	40	12k	OTHR Contayner
14229,0	1505	25	09	RUS		FMOP	40	12k	OTHR Contayner
14262,0	1134	21	09	RUS		FMOP	40	12k	OTHR Contayner
14267,0	1710	18	09	CHN		FMCW	41,67	10k	OTHR 6,1s bursts
14270,0	1125	17	09	RUS		FMOP	40	12k	OTHR Contayner
14297,0	1710	18	09	CHN		FMCW	41,67	10k	OTHR 6,1s bursts
14299,0	1110	17	09	RUS		FMOP	40	12k	OTHR Contayner
14301,0	1514	25	09	RUS		FMOP	40	12k	OTHR Contayner
14336,0	0440	26	09	RUS		FSK	50	250	CIS-50-50
14340,0	0649	23	09	RUS		FMOP	40	12k	OTHR Contayner
18092,0	1553	05	09	RUS		FMOP	40	12k	OTHR Contayner
18100,0	0757	03	09					75	unid with massive splatter
18100,0	0947	03	09					2k4	unid
18107,0	vt	dly	09	RUS		F1B	50	200	CIS-36-50
18165,0	0838	01	09	RUS		FMOP	40	12k	OTHR Contayner
18165,0	0558	10	09	RUS		FMOP	40	12k	OTHR Contayner
18168,0	1858	06	09	RUS		FMOP	40	12k	OTHR Contayner
21088,0	1952	11	09	RUS		FMOP	40	12k	OTHR Contayner
21095,0	1340	03	09					6k8	unid
21121,2	1527	25	09			J3E-U		2k7	pirates, suspect fisher or trucker language: moroccan arabic
21125,0	0603	17	09	G		FMCW	50	20k	OTHR Pluto Cyprus
21158,0	1848	11	09	RUS		FMOP	40	12k	OTHR Contayner
21161,0	0808	09	09	RUS		FMOP	40	12k	OTHR Contayner
21162,0	1403	12	09	RUS		FMOP	40	12k	OTHR Contayner
21165,0	1940	11	09	RUS		FMOP	40	12k	OTHR Contayner
21180,0	1411	01	09	G		FMCW	25	20k	OTHR Pluto Cyprus
21180,0	0635	23	09	CHN		FMCW	66,67	10k	OTHR 3,8s bursts
21270,5	1002	10	09				83	18k	OTHR

DARC; Daniel, DL3RTL. Credit to monitors: DL8LAQ, Norbert; DL2SCH, Jürgen; DL4MCA, Rainer; DB1TH, Tobias; DJ4WT, Christian; DF5JL, Tom; DL5EAQ, Heinz-Dieter; DO1LR, Christian; DG3KBQ, Torsten; F4FPR, Benjamin; DG9OAY, Jens; DC2AM, Arne; DL5JP, John; DL5RBW, Roger; DB3TA, Alex

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
21319,0	0945	16	09	CHN		FMCW	41,67	10k	OTHR 6,1s bursts
21340,0	0823	10	09	CHN			10	160k	OTHR wideband, 51s bursts
21348,0	1200	09	09	RUS		FMOP	40	12k	OTHR Contayner
21369,0	0809	09	09	CHN		FMCW	50	10k	OTHR 5,1s bursts
21370,0	0940	02	09	G		FMCW	25	20k	OTHR Pluto Cyprus
21406,0	1512	26	09	RUS		FMOP	40	12k	OTHR Contayner
21407,0	1406	01	09	RUS		FMOP	40	12k	OTHR Contayner
21407,0	1848	11	09	RUS		FMOP	40	12k	OTHR Contayner
21410,0	1537	24	09	G		FMCW	50	20k	OTHR Pluto Cyprus
21416,0	0635	23	09	CHN		FMCW	50	10k	OTHR 5,1s bursts
21422,0	1914	11	09	RUS		FMOP	40	12k	OTHR Contayner
21425,0	1148	16	09	RUS		FMOP	40	12k	OTHR Contayner
21425,0	1558	26	09	RUS		FMOP	40	12k	OTHR Contayner
21438,0	1140	02	09	RUS		A1A			RUS NVY Sevastopol
21450,0	1345	17	09	G		FMCW	50	20k	OTHR Pluto Cyprus
21450,0	0638	23	09	CHN		FMCW	50	10k	OTHR 5,1s bursts
21455,0	1041	12	09	CHN		A3E		12k	Chinese Radio jamming Radio Free Asia on 21455 kHz
28275,0	1304	18	09	IRN			307/870	45k	Iranian OTHR
28300,0	1257	18	09	IRN			150/313	45k	Iranian OTHR
28500,0	1015	27	09	IRN				45k	Iranian OTHR
28860,0	0715	03	09	IRN			150/313	45k	Iranian OTHR 9,98/7,19s bursts
28960,0	vt	vd	09	IRN			150/313	45k	Iranian OTHR 9,98/7,19s bursts
29500,0	0755	16	09	IRN			150/313	45k	Iranian OTHR 9,98/7,19s bursts
29500,0	1645	22	09	IRN			307/870	45k	Iranian OTHR

IRTS; Michael, EI3GYB

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7032	2145	13	9			USB			Strong persistent carrier. Heard often with "patriotic" music.
7050	1620	1	9	RUS/ UKR		LSB			Russian-Ukrainian radio war. Daily all day. Strong.
7055	1725	4	9	RUS/ UKR		LSB			Russain-Ukrainian radio war. Very strong.
7060	600	13	9			PSK			Very strong and persistent. Medium signal. Persistent. Still on at 2145z.
7100	1730	28	9	RUS/ UKR		LSB			Propaganda. "Russki swinja". Strong and persistent.
7103	1950	29	9	RUS/ UKR		LSB			Shouting of propaganda slogans.
7113	1025	19	9			PSK			Huge signal. Persistent.
7116.5	540	13	9			PSK			Link-11 Clew. Strong and persistent.
7138.5	2148	13	9			PSK			Link-11 Clew. Very strong and persistent. Also heard on 4th at 1720z on the same frequency.
7200	1415	19	9	TWN		AM			National Unity Radio, Taiwan. Very weak. Ended 1459z.
14000	1415	4	9	CHN		AM			China Radio International. Harmonic

IRTS; Michael, EI3GYB

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
									mixture. Very low signal. Persistent.
14180	745	14	9			RADAR			Radar from 14180 to 14192 kHz. Medium and persistent signal.
14243	920	25	9			RADAR			Radar from 14243 to 14262 kHz. Medium but persistent.
14294	740	14	9			PSK			Medium signal, persistent.
14298	735	14	9			PSK			North Korean style embassy traffic. Strong and persistent.
14310	1420	5	9	CHN		RADAR			Foghorn. 14310 to 14320 kHz. Medium signal, on and off.
18080	750	14	9	TWN		AM			Voice of Hope, Taipeh. Weak. Nearly daily audible.
18106	900	8	9	G		RADAR			Radar from 18106 to 18136 kHz. Strong and persistent. UK SBA, Cyprus.
18153	1601	1	9	G		RADAR			Radar from 18153 to 18173 kHz. Huge and persistent. UK SBA, Cyprus.
21000	1015	8	9	E or MM		USB			Spanish fishermen chatting. Medium signals.
21088	1330	11	9	IRN		RADAR			Radar from 21088 to 21098. Medium signal.
21170	1445	20	9	G		RADAR			Radar from 21170 to 21184 kHz. Medium signal. Persistent. UK SBA, Cyprus.
21205	1000	22	9	CHN		RADAR			Chinese foghorn from 21205 to 21215 kHz. Huge signals. Persistent.
21315	910	29	9	CHN		RADAR			Chinese foghorn form 21315 to 21325 kHz. Medium strength, persistent.
21438	1440	20	9	UKR		CW			Russian navy, Sevastopol. Weak to medium signal. Heard daily. Also heard after the recent Ukrainian attack on the HQ of Russian navy.
25000	1200	10	9			FM			Male voices in a SE Asian language. Very strong.
28060	1320	11	9	RUS		FM			Russian taxi service. Strong.
28265	1350	11	9	RUS		FM			Russian taxi service.Strong.
28290	1328	11	9	RUS		FM			Russian taxi service, strong.
28355	1300	22	9			AM			Male voices in a SE Asian language. Medium signals.
28415	1315	22	9			AM			Male voices in a SE Asian language. Medium signals.Probably fishermen.
28470	1155	18	9	IRN		RADAR			Radar from 28470 to 28530 kHz. Medium signals, very strong.
28477	1246	1	9	G		RADAR			Radar from 28477 to 28501 kHz. Huge and persistent. UK SBA, Cyprus.
28500	1235	22	9			FM			Group of men chatting in a SE Asian language. Strong. Most likely fishermen.
28535	1310	22	9			AM			Male voices- probably SE Asian fishermen.Medium signals.
28565	1250	22	9			FM			Group of male voices. Fishermen? SE Asian language.Medium signals.
28650	1305	22	9			FM			Group of males, probably fishermen.Medium signals.
28735	1110	27	9	RUS		FM			Russian taxi service, strong.Also heard 11th at 1325z.
28820	1115	22	9	IRN		RADAR			Radar from 28820 to 28920 kHz. Very strong and persistent.

IRTS; Michael, EI3GYB

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
28885	1325	22	9			FM			Male voices. Weak. Probably SE Asian fishermen
28950	1315	11	9	IRN		RADAR			Radar from 28950 to 28990 kHz. Medium signals, persistent.
29315	1510	30	9	RUS		FM			Russian taxi service. Huge signals.
29440	1225	20	9	IRN		RADAR			Radar from 29440 to 29540 kHz . Medium but persistent signals.

PZK; SP3AMO, SP5GNI

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7000.0	vt	vd	09			PSK	120	2K70E	
7011.0	0917	13	09			UI		3K0E	long burst, strong signal
7032.0	1034	19	09			J2E-U		3K0E	S7 songs military in Russian
7034.0	0720	29	09			UI		5K0E	
7050.0	2220	20	09			RADAR		16K0E	S9
7060.0	vt	vd	09			CIS-12	120	2K7	S7
7072.0	0722	29	09			PSK	120	2K50E	
7112.0	1030	19	09			UI		3K3	S9+ Stanag?
7124.0	1030	19	09			UI		3K0E	S7 Stanag?
7137.0	1625	05	09			F1B		200H	
7141.0	2220	20	09			RADAR		16K0E	S9+20dB
14008.0	0724	29	09			F1B		250H	
14026.0	1050	21	09			CIS-12		2K7	S7
14075.0	0745	09	09			RADAR		10K0E	6 sec bursts
14102.0	0855	26	09			CIS		2K7	S8
14147.0	1048	19	09			RADAR		14K0E	S7
14156.0	0852	27	09			RADAR		10K0E	5 sec burst
14156.0	0337	07	09			RADAR	40	12K0E	
14160.0	1050	19	09			UI		5K0E	S9+ Stanag?
14162.0	0912	13	09			RADAR		10K0E	short 3 sec. Bursts also 14237.0
14165.0	0837	21	09			RADAR		10K0E	5 sec burst
14184.0	1124	12	09			RADAR		10K0E	5 sec burst
14220.0	1015	04	09	G		RADAR		20K0E	S9
14231.0	1015	04	09	G		RADAR		20K0E	S9
14251.8	0850	27	09			UI		2K0	S7 20 spectral lines
14262.0	0958	01	09			RADAR		16K0E	S8
14262.0	1053	21	09			RADAR		14K0E	S9+
14297.0	1935	13	09			RADAR		160K0E	S6, long bursts, half time at 14343.0
14333.0	0840	27	09			RADAR		10K0E	short 3 sec. Bursts
18072.0	0738	30	09			RADAR	40	12K0E	S9++
18073.0	0735	30	09			RADAR		10K0E	S9+23dB
18080.0	vt	vd	09	CHN		A3E		9K0E	Radio
18107.0	0645	07	09		RDL	F1B/A2A		200H	20wpm
18107.0	vt	vd	09			F1B		200H	
18159.0	1250	04	09			RADAR		10K0E	S5
18168.0	1820	06	09			RADAR		12K0E	S5
21345.0	0730	29	09			RADAR	66	10K0E	Bursts

PZK; SP3AMO, SP5GNI

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
21350.0	0950	01	09	G		RADAR		20K0E	S9+
21351.0	1000	20	09			RADAR		10K0E	short 3 sec. bursts
21403.0	0729	29	09			RADAR	66	10K0E	Bursts
21407.0	0955	01	09			RADAR		10K0E	3 sec. bursts also at 21420.0
21417.0	0954	01	09			RADAR		10K0E	Continuous S5 also at 21310.0
24967.0	1115	12	09			RADAR		10K0E	short 3 sec. bursts
28480.0	1150	18	09	IRN		RADAR		100K0E	S9
28500.0	1546	27	09			RADAR	300/500	46K0E	
28860.0	0652	07	09			RADAR	150/300	46K0E	
28960.0	1548	27	09			RADAR	150/300	46K0E	
29500.0	0900	26	09	IRN		RADAR		60K0E	S8 also 28960.0
50360.0	0705	30	09			RADAR		20K0E	

RSGB; Richard, G4DYA

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3756.0	1820	19	09			J3E		2K20E	USB 'The Pip'. Daily.
7000.0	1727	05	09			J7D		2K70E	USB 6998.0
7008.0	2100	28	09	RUS		P0N	40	14K0E	Container pulse radar
7016.0	0641	14	09			F1B		250	FSK
7023.0	2054	21	09	RUS		P0N	40	14K0E	Container pulse radar
7060.0	1729	05	09			J7D		2K70E	USB 7058.0 / CIS-12. Also heard 140646z, 152042z, 181710z, 191815z, 202023z, 210627z, 221516z
7060.0	2101	28	09	RUS		P0N	40	14K0E	Container pulse radar
7065.9	1549	28	09			N0N			Plain carrier. Also heard 291714z
7080.0	1731	05	09			F1B		200	FSK. Also heard 181711z, 191816z, 202023z, 291714z
7089.8	2021	20	09			G1D		2K40E	Link 11 SLEW
7096.0	2055	21	09	RUS		P0N	40	14K0E	Container pulse radar
7112.0	1051	19	09			J7D		2K70E	USB 7110.0 / CIS-12
7114.0	2044	15	09			F1B		200	FSK
7137.0	1734	05	09			F1B		200	FSK. Also heard 181717z, 191817z, 202024z
7183.0	2057	28	09	RUS		P0N	40	14K0E	Container pulse radar
7196.0	2046	15	09			F1B		200	FSK
10147.0	2052	21	09			F3N	7.0	10K0E	FMCW radar bursts
14008.0	0728	29	09			F1B		500	FSK
14123.0	2048	21	09	CHN		F3N	50	10K0E	FMCW radar bursts
14147.0	1049	19	09	RUS		P0N	40	14K0E	Container pulse radar
14156.0	0554	23	09	RUS		P0N	40	14K0E	Container pulse radar
14242.0	1454	20	09			J7D		2K70E	USB 14240.0 / CIS-12
14294.0	1545	28	09	CHN		F3N	50	10K0E	FMCW radar bursts
18107.0	0924	15	09			F1B		200	FSK. Also heard 181238z, 201452z, 210624z, 220926z, 241003z, 281542z, 290727z
21110.0	0920	22	09	CHN		F3N	50	10K0E	FMCW radar bursts
21153.0	0951	15	09	CHN		F3N	66.7	10K0E	FMCW radar bursts

RSGB; Richard, G4DYA

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
21174.0	1511	22	09	RUS		P0N	40	14K0E	Container pulse radar
21178.0	1450	20	09	RUS		P0N	40	14K0E	Container pulse radar
21273.0	0908	15	09	CHN		F3N	66.7	10K0E	FMCW radar bursts
21292.0	1000	24	09	CHN		F3N	50	10K0E	FMCW radar bursts
21324.0	0921	22	09	CHN		F3N	66.7	10K0E	FMCW radar bursts
21348.0	0922	22	09	CHN		F3N	66.7	10K0E	FMCW radar bursts
21364.0	0904	15	09	CHN		F3N	66.7	10K0E	FMCW radar bursts
21374.0	0924	22	09	CHN		F3N	50	10K0E	FMCW radar bursts
21415.0	0909	15	09	CHN		F3N	41.7	10K0E	FMCW radar bursts

SRAL; Pekka, OH2BLU

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7 MHz	0930-1000	*	9	RUS		RADAR	40 sps	13k0E	*) Days: 5. 16. 22. 28. (WebSDR 25d, 2040-0530)
7000.0	0000-2400	*	9	RUS		J7D	120	2k60E	*) Days: 5. - 15. 26. 27.
7000.0	0700-1830	*	9			A3E			*) Days: 1. 3. 4. 8. 11. 14. 24. 29. 30. BC?, weak modulation
7008.5	0915-1345	*	9	RUS		J7D	120	2k60E	*) Days: 20. 22. 28. 29.
7016.0	0430-1830	*	9	RUS		F1B/ N0N		250H	*) Days: 7. 8. 9. 12. 13. 14. 23.
7018.0	1200-1430	04	9	RUS		J7D	120	2k60E	
7019.0	0830-1300	03	9	RUS		F1B/ N0N		200H	
7020.0	0810-0900	22	9	RUS		F1B		250H	
7032.0	1400-1700	14	9	RUS		F1B		500H	
7032.0	0455-1830	01 - 30	9	RUS		J3E-u		3k50	Non-stop Russian anthem / mx, spur to 7000.0 & 7064.5 & 7101.7
7032.0	0420-1830	01 - 30	9	RUS		J3E-u		2k50	Brum, when not music
7038.1	1350-1550	28 - 29	9	RUS	N61N	A1A	14wpm	40H	5BL
7042.0	1600-1800	26 - 30	9	RUS		XXX		7k5E	Jammer?
7044.0	1300-1700	*	9	RUS		F1B		250H	*) Days: 4. 7. 10. 11. 13. 14. 25. 27. 28. 29.
7052.0	1430-1530/	15	9	RUS		F1B		250H	
7054.0	1120-1815	*	9	RUS		F1B		200H	*) Days: 8. 26. - 30.
7060.0	0400-1830	01 - 22	9	RUS		J7D	120	2k60E	
7066.0	0500-1815	28 - 30	9	RUS		F1B		200H	
7080.0	1700-1830	*	9	RUS	RDL	F1A/B		200H	*) Days: 7. 9. 10. 11. 13. 17. - 25. 28. - 30.
7110.0	1600-1805/	01 - 30	9	ETH	R. Ethiopia	A3E		9k0	Days 24. - 30. weak or no modulation

SRAL; Pekka, OH2BLU

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7112.0	1000-1430	08 13	9	RUS		J7D	120	2k60E	
7114.0	0430-0640/	*	9	RUS		F1A/B/NON		200H	
7116.0	1235-1315	14	9	RUS	RIT	A1A	13wpm	40H	5F
7118.0	1000-1400	08	9	RUS		J7D	120	2k60E	N0 on 7116.0 kHz
7122.0	1300-1400	01	9	RUS		F1B/ NON		250H	
7137.0	1600-1830	*	9	RUS		F1B/ NON		200H	*) Days: 4. 6. - 11. 13. - 20.
7162.0	0915-1400	*	9	RUS		F1B		250H	*) Days: 11. 18. 19.
7166.0	0520	19	9	RUS		J7D		2k60E	
7179.0	0500-1800	*	9	RUS		F1B		200H	*) Days: 18. 19. 20.
7194.9	0500-1730	24 - 30	9	RUS	U	A1A		100H	Id every 7 sec. Dash after id. Unstable fq
7196.0	0600-1230	*	9	RUS	D3MI	A1A		40H	*) Days: 5. 7. 2. 28. 5F
7196.0	0600-1630	*	9	RUS		A1/NON		100H	*) Days: 3. 10. 11. 18. 21. 24. 28. 50 Hz dotter
7200.0	1200-1500/	01 - 30	9	TWN	NUR	A3E		9k0	National unity radio to KRE. Frequency offset – 7 Hz
10 MHz			9	G		RADAR	50sps	20k0	(WebSDR 3d)
10 MHz	1530-1600	03 04	9	RUS		RADAR	40sps	13k0E	(WebSDR 5d)
10124A	1500-1600	01 - 30	9	TWN	KTWR	xxx		5k0E	// 9900 kHz, spurious
10134A	1200-1230	*	9	TWN	KTWR	xxx		5k0E	*) Days: 17. 23. 25.// 9910 kHz, spurious, also DRM
14 MHz	0450-1830	*	9	RUS		RADAR	40sps	13k0E	*) Days: 1. 4. 5. 6. 13. 15. 16. 17. 21. 23. - 28. (WebSDR 30d)
14 MHz	0800-1800	*	9	CHN		RADAR	50/67sps	10k0E	*) Days: 4. - 7. 10. - 20. 22. 25. - 29. 'foghorn'
14000.0	1357-1500/	01 - 30	9	CHN	RCI	A3E		9k0	TX intermod. // 13710 & 13855 kHz
14008.0	0500-1415	*	9	RUS		F1B		500H	*) Days: 3. 8. 10. 11. 13. 14. 16. 18. 21. - 30.
14064 A	0935-0950	05 22	9	RUS		J3E-u		5k0E	2f
14290.0	1305-1317/	23	9	CHN		RADAR	10 sps	160k	
14310.4	0555-0820	*	9	RUS	ICAK	A1A	13wpm	40H	*) Days: 7. 11. 14. 5BL
14336.0	0500-0550	26 - 30	9	RUS		F1B		250H	
18 MHz	0530-1730	*	9	G		RADAR	50 sps	20k0	*) Days: 1. 7. 24. 26. (WebSDR 4d)
18 MHz	0500-1800	*	9	RUS		RADAR	40 sps	13k0E	*) Days: 1. 7. 8. 11. 14. 27. (WebSDR 15d)
21 MHz	0630-1430	01 02	9	G		RADAR	25/50sps	20k0	(WebSDR 2d)
21 MHz	0715-	*	9	RUS		RADAR	40 sps	13k0E	*) Days: 1. 5. 6. 9. 11. 12. 14. 27. (WebSDR

SRAL; Pekka, OH2BLU

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
	1700								14d)
21 MHz	0500-1730	*	9	CHN		RADAR	50/67sp s	10k0E	*) Days: 1. 4. - 8. 11. - 16. 20. - 30. 'foghorn'
21 MHz	0600-1000	10 12	9	CHN		RADAR	10 sps	40k	(WebSDR 2d)
21095A	1300-1400/	*	9			XXX		6k5E	*) Days: 1. 5. 6. 7. 9. 10. 11. 13. 15. 27.
21320.0	1300-1312/	21	9	CHN		RADAR	10 sps	160k	
21438.0	/0830-1215	01 - 30	9	RUS	RCV	A1A	24 wpm	40H	
28 MHz	0540-1400	01 02	9	G		RADAR	25/50sp s	20k0	(WebSDR 2d)
28 MHz	0630-1330	*	9	IRN		RADAR	150/ 313	60k0E	*) Days: 16. 17. 23. 26. 27. (WebSDR 0d)
28 MHz	0500-1730	*	9	IRN		RADAR	310/ 870	120k0E	*) Days: 7. 18. 20. 23. 24. (WebSDR 2d)
28860.0	0500-1630	*	9	IRN		RADAR	150/ 313	60k0E	*) Days: 1. 2. 6. 7. 15. (WebSDR 5d)
28960.0	0500-1630	*	9	IRN		RADAR	150/ 313	60k0E	*) Days: 9. - 14. 16. - 30. (WebSDR 14d)
28 MHz	0500-1230	*	9	RUS	Taxi disp.	F3E		3k0E	*) Days: 11. 12. 27. 30. 21 reports

UBA; Thierry, ON4LTW

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14150	1120	13	09	RUS		FMOP	40	12K0E	OTHR Contayner
14090	0922	13	09	RUS		FMOP	40	12K0E	OTHR Contayner
21390	0944	26	09	RUS		FMOP	50	12K0E	OTHR Contayner
14225	1200	27	09			FMCW	50	20k	OTHR
14260	0843	28	09	RUS		FMOP	40	12K0E	OTHR Contayner

URE; Gaspar, EA6AMM

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
6992.0	19:59	25	09	RUS		RADAR	40	12K0E	OTHR Contayner.
7000.0	21:31 vt*	04 vd*	09	RUS		J7D	120	2K70E	CIS-12. Long-lasting *Often. 15 reports
7006.0	20:50	30	09	RUS		RADAR	40	12K0E	OTHR Contayner. *Also on 7066 kHz CF. 2 simultaneous TX on 40m
7006.5	16:30	13	09			XXX		CA3K0E	XXX. Unid digital bursts. BW ca 3K0E
7010.0*	21:04	13	09	RUS		RADAR	40	12K0E	OTHR Contayner.*Also on 7051 kHz CF. 2 simultaneous TX on 40m
7016.0	16:49 vt*	07 vd*	09	RUS		F1B	50	200H	*Also on 09, 12 13 and 14/09; vt
7017.0*	09:01	22	09			XXX	VBW**	CA3K0E	XXX. Unknown digital bursts. *QRG: Jumping from 7000 to 7040 kHz CF **BW = various. from 3K0E to 20K0E
7023.0*	20:47	21	09	RUS		RADAR	40	12K0E	OTHR Contayner. *Also on 7096 kHz CF. 2 simultaneous TX on 40m
7042.0	18:40 vt*	07 vd*	09			XXX		CA8K0E	XXX. BW ca 8K0E. Jammer *Often. 9 reports

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7049.0	09:44	20	09			F1B	75	200H	
7051.0	20:42	13	09	RUS		RADAR	40	12K0E	OTHR Contayner
7054.0	18:43 vt	07 vd*	09	RUS		F1B	50	200H	*Also on 09, 28 and 29/09; vt
7060.0	16:09 vt*	01 vd*	09	RUS		J7D	120	2K70E	CIS-12 *Very often. 18 reports
7065.9	18:58	29	09			NON			
7066.0	20:51	30	09	RUS		RADAR	40	12K0E	OTHR Contayner
7072.0	06:57	29	09			J7D	120	2K70E	CIS-12
7080.0	18:01 vt*	04 vd*	09	RUS		F1B	50	200H	*Almost daily. 20 reports
7088.0	19:58	25	09	RUS		RADAR	40	12K0E	OTHR Contayner
7089.8	20:49 vt*	20 vd*	09			G1D	2400	2K40E	LINK-11 SLEW *Also on 28/09, 1743 UTC
7091.0	22:53 vt*	12 vd*	09	RUS		RADAR	40	12K0E	OTHR Contayner *Also on 24/09, 2139 UTC
7095.0	18:48	29	09			J3E-L		2K60E	Audio loops. Propaganda. male voice. Slavic language (UK/RUS radiowar style)
7096.0	20:48	21	09	RUS		RADAR	40	12K0E	OTHR Contayner
7105.0	18:53	29	09			J3E-L			J3E-L. Music + unknow signal (BW ca 3K0E) possibly used as jamming
7114.0	21:27 vt*	04 vd*	09			F1B	50	200H	*Also on 06 and 07/09; vt
7134.0	17:59	11	09	RUS		F1B	50	200H	
7134.0	16:53	19	09	RUS		F1B	50	200H	
7136.9	16:13	01	09	RUS		NON			Carrier (F1B 7137 kHz CF system)
7137.0	16:11 vt*	01 vd*	09	RUS		F1B	50	200H	*Often. 12 reports
7146.5	06:41	28	09			XXX		CA2K80E	
7162.0	09:17	19	09	RUS		F1B	75	250H	
7179.0	09:32	19	09			F1B	75	200H	
7183.0	21:34	04	09	RUS		RADAR	40	12K0E	OTHR Contayner
7194.0	20:55	20	09			F1B	50	200H	
14000.0	21:01	20	09			J3E-U		2K40E	J3E-U. Unid sts. Male voices. Unid language (seems Asian language)
14000.0 USB	17:51	24	09			J7D	125	1K75E	MIL-188-141A ALE
14003.0 USB	13:56	06	09			J7D	125	1K75E	CHN MIL-188-141A-ALE 2G
14008.0	08:23 vt*	03 vd*	09	RUS		F1B	50	500H	*Often. 13 reports
14019.0	19:23	09	09	CHN		RADAR	50	10K0E	OTHR short bursts
14026.0	08:09 vt*	01 vd*	09			J7D		2K70E	CIS-12 *Also on 21/09, 1046 UTC
14026.0	15:59	01	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
14034.0	17:23	07	09			J3E-U		2K40E	USB. Male voice. Asian language.
14035.1	06:30	28	09			XXX		CA3K0E	XXX. Unidentified bursts. Jammer
14035.6	17:14	07	09			W7D	2400	2K40E	CHN OFDM 39. 39 tones. 44.44 Bd each; with pilot tone on 400 Hz
14048.0	18:49	25	09	RUS		RADAR	40	12K0E	OTHR Contayner
14049.0	16:43	20	09	CHN		RADAR	41.7	10K0E	OTHR short bursts

URE; Gaspar, EA6AMM

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14052.0	13:03	03	09			J7D		2K70E	CIS-12
14053.0	16:12	06	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14056.0	16:34	06	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14060.0	14:06	30	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14063.0	16:13	05	09	CHN		RADAR	50	10K0E	OTHR short bursts
14074.0	10:18	01	09			F1D	300	600H	FSK3
14075.0*	12:39	03	09			XXX		CA7K0E	XXX. Unid bursts. Jammer. *Simultaneous TX on 18100 kHz CF, 21141 kHz CF and 24916 kHz CF.
14075.0	15:42	05	09			XXX		CA10K0E	XXX: Unid bursts. Jammer
14075.0	09:21	06	09			XXX		CA7K0E	XXX. Unid bursts. Jammer
14075.0	13:52	09	09			XXX		CA8K0E	XXX. Unid bursts. Jammer
14075.0*	07:01	10	09			XXX		CA6K0E	XXX. Unid bursts. Jammer. Long-lasting. *Also on 14082 kHz CF
14078.0	07:02	04	09			XXX		CA14K0E	XXX. Unid bursts. Jammer. Intermittent TX
14079.0	07:42	08	09			XXX		CA14K0E	XXX. Unid bursts. BW ca 14K0E. Jammer
14081.0	17:59	02	09			XXX		600H	
14082.0*	07:01	10	09			XXX		CA6K0E	XXX. Unid bursts. Jammer. Long-lasting. *Also on 14075 kHz CF
14089.0	10:42	14	09			J3E-U		2K80E	USB. Non amateur comms between the 14091 kHz CF OFDM CIS-60 TX. Unid sts. Female and male voices. Slavic language
14091.0	09:32	14	09			W7D	60x30	2K80E	CIS-60. 60 X 30 Bd + pilot tone
14091.0	10:00	22	09			J7D	30	2K70E	CIS-12
14094.0	15:58	25	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14098.5	08:50 vt*	01 vd*	09			F1D	600	600H	DPRK-FSK 600 ARQ *Often. 13 reports
14102.0	08:11	26	09			W7D	30	2K80E	CIS-60. 60 x 30 Bd + pilot tone
14107.0	17:02	19	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14108.0	16:01	01	09	CHN		RADAR	50	10K0E	OTHR short bursts
14111.0	15:57	25	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14113.5	06:51 vt*	10 vd*	09			F1B	600	600H	DPRK-FSK 600 ARQ *Also on 14, 19, 23 and 27/09; vt
14114.0	12:23	14	09	RUS		RADAR	40	12K0E	OTHR Contayner
14115.0	16:23 vt*	05 vd*	09	CHN		RADAR	41.7	10K0E	OTHR short bursts *Also on 30/09, 1410 UTC
14118.5	11:10	25	09			F1B	600	600H	DPRK-FSK 600 ARQ
14119.0	18:14	19	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14123.0	20:50	21	09	CHN		RADAR	50	10K0E	OTHR short bursts
14124.0	13:57	24	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14127.0	18:38	13	09	RUS		RADAR	40	12K0E	OTHR Contayner
14140.0	19:06 vt*	11 vd*	09	RUS		RADAR	40	12K0E	OTHR Contayner *Also on 20/09, 1719 UTC
14148.0	06:46	23	09	RUS		RADAR	40	12K0E	OTHR Contayner
14150.0	07:46	04	09			XXX		CA1K30E	XXX. Continuous signal with center carrier
14150.0	09:16	13	09	RUS		RADAR	40	12K0E	OTHR Contayner
14154.0	14:38	30	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14155.0	07:39	27	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
14156.0	21:59	06	09	RUS		RADAR	40	12K0E	OTHR Contayner
14158.0*	11:20	25	09	RUS		RADAR	40	12K0E	OTHR Contayner. *Also on 14191 kHz CF. 2

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kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
									<i>simultaneous TX on 20m</i>
14158.0	14:39	30	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14160.0 USB	17:08 vt*	05 vd*	09			J3E-U		2K80E	Audio loops. Male voice. Slavic language. UKR / RUS radiowar style. *Also on 20/09, 1204 UTC
14160.0	12:04	20	09			J3E-U		2K80E	J3E-U. Audio loops, propaganda, music. Male voice. (UKR/RUS radiowar)
14160.0	12:59 vt*	20 vd*	09			F1B	75	250H	Jammed by unid signal *Also on 21/09, 0605 UTC
14160.0	13:00 vt*	20 vd*	09			XXX		CA3K0E	XXX. Jammer. Interfering the 14160 kHz CF F1B system. *Also on 21/09, 1021 UTC
14160.0	11:13	22	09			J3E-U		2K80E	J3E-U. Audio loops. Propaganda. Male voice. Slavic language (UKR/RUS radiowar)
14161.0	14:40	30	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14162.0	13:35	03	09			J7D		2K70E	CIS-12
14164.0	19:37	05	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14170.0	06:07	21	09			F1B		250H	F1B. Shift = 250 Hz
14171.0	08:17 vt*	02 vd*	09			J7D	120	2K70E	CIS-12. *Also on 07/09, 0645 UTC and 21/09, 0706 UTC
14180.0	06:50	26	09	RUS		RADAR	40	12K0E	OTHR Contayner
14182.0	19:20	11	09	RUS		RADAR	40	12K0E	OTHR Contayner. *Also on 14140 kHz CF. 2 <i>simultaneous TX on 20m</i>
14182.0	13:42	20	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
14184.0	18:40	27	09	CHN		RADAR	50	10K0E	OTHR short bursts
14185.0	16:41	23	09	RUS		RADAR	40	12K0E	OTHR Contayner
14186.0	13:32	29	09	CHN		RADAR	50	10K0E	OTHR short bursts
14188.0	07:42	14	09	RUS		RADAR	40	12K0E	OTHR Contayner
14190.0	13:32	29	09	CHN		RADAR	50	10K0E	OTHR short bursts
14191.0	11:20	25	09	RUS		RADAR	40	12K0E	OTHR Contayner
14191.9	05:35	07	09			NON			Carrier. Long-lasting
14192.0	09:09	01	09	RUS		F1B	50	400H	*Also on 02, 03 and 04 and 13/09, vt*
14192.0	11:57	13	09	RUS		RADAR	40	12K0E	OTHR Contayner
14195.0	16:00	01	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
14198.5	08:44 vt*	01 vd*	09			G1D		1K20E	DPRK-PSK 1200 ARQ *Also on 02/09, 1205 UTC
14198.5	12:06 vt*	04 vd*	09			F1D	600	600H	DPRK-FSK 600 ARQ *Often. 12 reports
14200.0	16:12	26	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
14201.0	16:10	26	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
14206.0	17:50	07	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14216.0	12:48	06	09			XXX		CA4K0E	XXX. Unid continuous multitone signal
14216.0	16:13	26	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
14217.0	12:43	27	09	RUS		RADAR	40	12K0E	OTHR Contayner
14219.0	07:11	28	09	RUS		RADAR	40	12K0E	OTHR Contayner
14220.0	10:22 vt*	04 vd*	09	RUS		RADAR	40	12K0E	OTHR Contayner *Also on 11/09, 0946 UTC
14221.0	09:59	22	09	RUS		RADAR	40	12K0E	OTHR Contayner
14221.0	11:37	24	09			XXX		CA6K0E	XXX. unid multitone signal. Slightly drifting
14225.0 USB	17:54	07	09			J7D	125	1K75E	MIL-188-141A-ALE

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kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14227.0	09:50	21	09	RUS		RADAR	40	12K0E	OTHR Contayner
14227.0	19:38	26	09			XXX		CA10K0E	XXX. Intermittent TX
14229.0	13:43	25	09	RUS		RADAR	40	12K0E	OTHR Contayner
14230.0	08:54	05	09	RUS		RADAR	40	12K0E	OTHR Contayner
14231.0	12:06	04	09	RUS		RADAR	40	12K0E	OTHR Contayner
14242.0	12:01	20	09			J7D	120	2K70E	CIS-12
14250.0	11:35	29	09	RUS		RADAR	40	12K0E	OTHR Contayner
14253.0	16:03 vt*	19 vd*	09	CHN		RADAR	41.7	10K0E	OTHR short bursts *Also on 30/09, 1429 UTC
14255.0	15:59	13	09	CHN		RADAR	10	160K0E	OTHR wideband
14256.0	08:11	25	09	RUS		RADAR	40	12K0E	OTHR Contayner
14256.0	17:54	28	09	CHN		RADAR	50	10K0E	OTHR short bursts
14260.0	08:07	28	09	RUS		RADAR	40	12K0E	OTHR Contayner
14262.0	10:12 vt*	01 vd*	09	RUS		RADAR	40	12K0E	OTHR Contayner. *Also on 21/09, 1049 UTC and 27/09, 1049 UTC
14264.0	17:12	07	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14265.0	08:23	11	09	RUS		RADAR	40	12K0E	OTHR Contayner
14278.0	06:52	04	09			F1B	75	250H	
14278.0	14:57	04	09	CHN		RADAR	50	10K0E	OTHR short bursts
14284.0	08:11	06	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
14284.0	13:43	29	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14287.0	16:46	20	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14295.0	18:41	13	09	CHN		RADAR	10	160K0E	Wideband OTHR. CHN 160K0E. 10 sps
14296.0	19:25	09	09	CHN		RADAR	50	10K0E	OTHR short bursts
14297.0	15:27	09	09	CHN		RADAR	30	10K0E	TX duration = 64 sec. Interval between TXs: ca 10 min
14298.0	16:15	05	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14298.5	08:10 vt*	01 vd*	09			G1D		1K20E	DPRK-PSK 1200 ARQ *Also on 02/09, 1205 UTC
14298.5	07:34 vt*	04 vd*	09			F1D	600	600H	DPRK-FSK 600 ARQ *Often. 16 reports
14299.0	07:16	25	09	RUS		RADAR	40	12K0E	OTHR Contayner
14299.0	15:53	26	09	CHN		RADAR	50	10K0E	OTHR short bursts
14301.0	13:16	25	09	CHN		RADAR	50	10K0E	OTHR short bursts
14302.0	17:52 vt*	07 vd*	09	CHN		RADAR	41.7	10K0E	OTHR short bursts *Also on 22/09, 1637 UTC
14304.0	07:45	25	09	RUS		RADAR	40	12K0E	OTHR Contayner
14304.0	13:56	29	09	CHN		RADAR	50	10K0E	OTHR short bursts
14307.0	19:01	29	09	CHN		RADAR	66.7	10K0E	OTHR short bursts; alternating 66.7 sps and 62.5 sps
14308.0	12:45 vt*	06 vd*	09	CHN		RADAR	66.7	10K0E	OTHR short bursts *Also on 07/09, 1359 UTC
14310.0	18:17	19	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14310.4	12:30	27	09			A1A			Unid st. Figures and letters
14313.0	14:21	05	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
14315.0 USB	13:21	13	09			J7D	125	1K75E	MIL-188-141A- ALE
14318.5	07:39 vt*	19 vd*	09			F1B	600	600H	DPRK-FSK 600 ARQ *Also on 25/09, 0711 UTC
14320.0	14:57	19	09	CHN		RADAR	66.7	10K0E	OTHR. Long-lasting

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kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14320.0	18:16	19	09	CHN		RADAR	50	10K0E	OTHR short bursts
14324.0	16:44	07	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
14325.0	18:40	13	09	CHN		RADAR	10	160K0E	Wideband OTHR. CHN. 160K0E. 10 sps
14326.0	18:31	27	09	REU		RADAR	50	10K0E	OTHR short bursts
14328.0	18:15	19	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14330.0	14:23 vt*	05 vd*	09	CHN		RADAR	66.7	10K0E	OTHR short bursts *Also on 22/09, 1315 UTC
14333.0 USB	16:26	22	09			J7D	125	1K75E	CHN MIL-188-141A ALE 2G + robust
14333.0	07:31	27	09	CHN		RADAR	83.3	10K0E	OTHR short bursts
14333.0	08:09	29	09			A1A			Groups of 5 letters
14336.0	15:52	04	09	CHN		RADAR	50	10K0E	OTHR short bursts
14336.0	16:30	06	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14336.0	05:37 vt*	07 vd*	09			F1B	50	200H	*Also on 25/09, 2004 UTC and 30/09, 2103 UTC
14338.0	19:10	21	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14339.0	16:39	22	09	CHN		RADAR	50	10K0E	OTHR short bursts
14340.0	16:32	06	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
14340.0	07:06	23	09	RUS		RADAR	40	12K0E	OTHR Contayner
14343.0	08:34 vt*	06 vd*	09	CHN		RADAR	66.7	10K0E	OTHR short bursts *Also on 26/09, 1615 UTC
14344.0	16:19	01	09	CHN		RADAR	50	10K0E	OTHR short bursts
14344.0	14:19	30	09			J7D	8 x 125	1K75E	CHN MIL-188-141A-ALE 2G + robust
14345.0	16:18	01	09	CHN		RADAR	66.7		OTHR short bursts
14345.0	16:11	13	09	CHN		RADAR	10	160K0E	OTHR wideband CHN. 160K0E, 10 sps
14347.0	13:55	24	09	CHN		RADAR	50	10K0E	OTHR short bursts
14352.0	19:17 vt*	05 vd*	09	CHN		RADAR	41.7	10K0E	OTHR short bursts *Also on 16/09, 1600 UTC
14352.0	15:59	25	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
18068.0	06:55	26	09	CHN		RADAR	50	10K0E	OTHR
18072.0	07:32	30	09	RUS		RADAR	40	12K0E	OTHR Contayner
18079.0	09:24	06	09	RUS		RADAR	40	12K0E	OTHR Contayner
18083.0	17:02	06	09	RUS		RADAR	40	12K0E	OTHR Contayner
18089.0	18:19	12	09			XXX		CA3K0E	18089 USB. XXX. Unid bursts
18095.0*	15:53	05	09	RUS		RADAR	40	12K0E	OTHR Contayner. *Also on 18175 kHz CF (splatter to 18165 kHz). 2 simultaneous TX on 17m
18100.0	08:54	01	09	RUS		F1D	300	600H	FSK-3
18100.0	09:28	03	09			XXX		CA6K0E	XXX. Unid bursts. Jammer
18100.0*	09:51	03	09			XXX		CA3K0E	XXX. Unid continuous signal. *Simultaneous TX on 15, 12 and 10m FT-8 QRGs
18100.0	12:39	03	09			XXX		CA7K0E	XXX. Unid bursts. Jammer. *Simultaneous TX on 14075 kHz CF, 21141 kHz CF and 24916 kHz CF
18100.0	12:43	06	09			XXX		CA6K0E	XXX. Unid bursts. Jammer. Intermittent
18107.0	08:13 vt*	01 vd*	09	RUS	RDL	F1B F1A	50	200	CIS-3650 (F1B and F1A). *Daily
18119.0	11:59	13	09	RUS		RADAR	40	12K0E	OTHR Contayner
18123.0	09:15	08	09	RUS		RADAR	40	12K0E	OTHR Contayner
18128.0	07:54	11	09	CHN		RADAR	66.7	10K0E	OTHR short bursts

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kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
18133.0	11:13	25	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
18140.0	11:53 vt*	20 vd*	09	CHN		RADAR	66.7	10K0E	OTHR short bursts *Also on 23/09, 0650 UTC
18143.0	12:57	06	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
18149.0	05:51	07	09	RUS		RADAR	40	12K0E	OTHR Contayner
18151.0	19:34	05	09	RUS		RADAR	40	12K0E	OTHR Contayner
18159.0	12:43	04	09	RUS		RADAR	40	12K0E	OTHR Contayner
18159.3	07:06	29	09			G7D	8x75	CA2K50E	CHN 4+4
18165.0	16:04	01	09	RUS		RADAR	40	12K0E	OTHR Contayner
18168.0	18:12	06	09	RUS		RADAR	40	12K0E	OTHR Contayner
18169.0	09:16	03	09	RUS		RADAR	40	12K0E	OTHR Contayner
18170.0	17:23	01	09	G		RADAR	50	20K0E	OTHR. UK SBA, Cyprus
18171.0	08:52	01	09	RUS		RADAR	40	12K0E	OTHR Contayner. Spurious to 18130 kHz
18175.0	15:53 vt*	05 vd*	09	RUS		RADAR	40	12K0E	OTHR Contayner. Splatter to 18165 kHz *Also on 08/09, 0733 UTC
18176.0	06:36	10	09	RUS		RADAR	40	12K0E	OTHR Contayner. Splatter to 18165 kHz
21034.0	07:45	19	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21058.5	07:17	27	09			F1D	600	600H	DPRK-FSK 600 ARQ
21095.0	13:24	07	09			XXX		CA8K0E	XXX. Continuous unid signal. Jammer
21105.0	06:49	30	09	CHN		RADAR		10K0E	OTHR short bursts
21110.0	08:40	22	09	CHN		RADAR	50	10K0E	OTHR short bursts
21113.0	08:23	29	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21115.0	07:24	27	09	CHN		RADAR	50	10K0E	OTHR short bursts
21118.5	07:18	27	09			F1D	600	600H	DPRK-FSK 600 ARQ
21121.2 USB	18:18 vt*	27 vd*	09	MRC		J3E-U		2K40E	Moroccan fishers *Also on 28/09, 0728 UTC
21125.0	08:00	01	09	G		RADAR	50	20K0E	OTHR. UK SBA, Cyprus
21141.0	09:18	03	09			XXX		CA6K0E	XXX. Unid bursts. BW ca 6K0E. Jammer
21141.0*	10:00	03	09			XXX		CA3K0E	XXX: Unid continuous signal. Jammer. *Simultaneous TX on 17, 12 and 10 m FT-8 segments
21141.0*	12:39	03	09			XXX		CA7K0E	XXX: Unid bursts. Jammer. *Simultaneous TX on 14075 kHz CF, 18100 kHz CF and 24916 kHz CF
21145.0 USB	07:58 vt*	11 vd*	09	MRC		J7D	125	1K75E	MIL-188-141A-ALE *Also on 26/09, 0754 UTC
21149.3	06:46	25	09			F1D	600	600H	DPRK-FSK 600 ARQ
21156.0	07:46	19	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21158.0	17:49	11	09	RUS		RADAR	40	12K0E	OTHR Contayner
21159.0	07:27	24	09	CHN		RADAR	50	10K0E	OTHR short bursts
21164.0	09:52	22	09	CHN		RADAR	50	10K0E	OTHR short bursts
21165.0	20:03	11	09	RUS		RADAR	40	12K0E	OTHR Contayner
21171.0	10:13	26	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
21172.0	08:23	14	09	RUS		RADAR	40	12K0E	OTHR Contayner
21173.0	09:15	11	09	RUS		RADAR	40	12K0E	OTHR Contayner
21174.0	14:19	22	09	RUS		RADAR	40	12K0E	OTHR Contayner
21176.0	13:45	20	09	RUS		RADAR	40	12K0E	OTHR Contayner
21179.0	08:08	22	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21180.0	08:59	01	09	G		RADAR	50	20K0E	OTHR. UK SBA, Cyprus

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kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
21185.0 USB	06:55	30	09			J7D	125	1K75E	CHN MIL-188-141A ALE 2G
21189.0	07:34	23	09	CHN		RADAR	50	10K0E	OTHR short bursts
21190.0	08:39	22	09	CHN		RADAR		10K0E	OTHR short bursts
21191.0	09:55	22	09	CHN		RADAR	50	10K0E	OTHR short bursts
21201.0	09:25	20	09	CHN		RADAR	50	10K0E	OTHR short bursts
21214.0	09:26	14	09	RUS		RADAR	40	12K0E	OTHR Contayner
21231.0	07:39	26	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21239.0	08:38	06	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21240.0	06:49	25	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21248.0	07:19	27	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21270.0	06:16	07	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21276.0	07:49	05	09	CHN		RADAR	50	10K0E	OTHR short bursts
21276.0	09:26	20	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21277.0	09:27	20	09	CHN		RADAR	50	10K0E	OTHR short bursts
21279.0	06:40	30	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21286.0	07:47	19	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21300.0	07:20	27	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21306.0	07:01	26	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21307.0	08:19	11	09	CHN		RADAR	50	10K0E	OTHR short bursts
21310.0*	09:27	01	09	RUS		RADAR	40	12K0E	OTHR Contayner. *Also on 21471 kHz CF. 2 simultaneous TX on 15m
21320.0	07:19	28	09	CHN		RADAR	62.5	10K0E	OTHR short bursts
21324.0	09:56	22	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21327.0	07:40	26	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21333.0 LSB	07:05	28	09			J3E-L		2K40E	Non amateur comms. Male voices. Unid language
21336.0	07:02	26	09	CHN		RADAR	50	10K0E	OTHR short bursts
21340.0	07:35	10	09	CHN		RADAR	10	160K0E	Wideband OTHR, 160K0E
21340.0	09:46 vt*	21 vd*	09	CHN		RADAR	66.7	10K0E	OTHR short bursts *Also on 25/029, 0652 UTC
21342.0	06:18	28	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21344.0	07:14	29	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21345.0	08:51	14	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21346.8	17:10	19	09			G1D	2400	2K40E	MIL-188-110A
21348.0	08:37	22	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21350.0	09:49	01	09	G		RADAR	50	20K0E	OTHR. UK SBA, Cyprus
21357.0	07:36	23	09	CHN		RADAR	50	10K0E	OTHR short bursts
21360.0	06:51	28	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
21361.0	07:21	27	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21362.0	08:25	29	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21364.0	07:17	26	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21365.0	08:26	01	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
21366.0	07:54	19	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21370.0	09:35	02	09	G		RADAR	25	20K0E	OTHR. UK SBA, Cyprus
21372.0	06:50	25	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
21374.0	09:17	22	09	CHN		RADAR	50	10K0E	OTHR short bursts
21375.0	18:28	12	09			F1B	75	1K0E	

URE; Gaspar, EA6AMM

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
21380.0	08:25	29	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21382.0 USB	14:22	04	09			J7D		1K750E	CHN MIL-188-141A ALE 2G + robust
21389.0	06:59	26	09	RUS		RADAR	40	12K0E	OTHR Contayner. *Also on 21412 kHz CF. 2 simultaneous TX on 20m
21390.0	09:20	03	09	CHN		RADAR	50	10K0E	OTHR short bursts
21395.0 USB	07:50 vt*	19 vd*	09			J7D	8x125	1K75E	CHN MIL-188-141A-ALE 2G *Also on 30/09, 0755 UTC
21398.0	07:57	23	09	CHN		RADAR	50	10K0E	OTHR short bursts
21403.0	06:48	29	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21406.0	15:56	26	09	RUS		RADAR	40	12K0E	OTHR Contayner
21407.0*	19:09	11	09	RUS		RADAR	40	12K0E	OTHR Contayner. *Also on 21422 kHz CF. 2 simultaneous TX on 15m
21407.0	07:22	27	09	CHN		RADAR	50	10K0E	OTHR short bursts
21412.0	07:00	26	09	RUS		RADAR	40	12K0E	OTHR Contayner
21416.0	06:53	23	09	CHN		RADAR	50	10K0E	OTHR short bursts
21417.0	09:28	01	09	RUS		RADAR	40	12K0E	OTHR Contayner
21419.0	08:01	11	09	CHN		RADAR	50	10K0E	OTHR short bursts
21422.0	19:10	11	09	RUS		RADAR	40	12K0E	OTHR Contayner
21423.0	12:07	14	09	RUS		RADAR	40	12K0E	OTHR Contayner
21426.0	05:58	07	09	CHN		RADAR	66.7	10K0E	OTHR short bursts
21438.0	16:05 vt*	01 vd*	09	RUS	RCV	A1A			RUS navy QTC *Often. 15 reports
21440.0	09:57	22	09	CHN		RADAR	50	10K0E	OTHR short bursts
21442.0	08:39	11	09	CHN		RADAR	50	10K0E	OTHR short bursts
21448.4	06:04	25	09			F1B	600	600H	DPRK-FSK 600 ARQ
21455.0	10:08	26	09			A3E		20K0E	Radio Free Asia (Tinian Isl), jammed. Jammer BW = 20K0E
24884.0	10:54	11	09	RUS		RADAR	40	12K0E	OTHR Contayner. Splatter to 24993 kHz
24916.0*	09:55	03	09			XXX		CA3K0E	XXX: Unid continuous signal. Jammer. *Simultaneous TX on 17, 15 and 10m FT-8 segments
24916.0*	12:39	03	09			XXX		CA7K0E	XXX: Unid bursts. Jammer. *Simultaneous TX on 14075 kHz CF, 18100 kHz CF and 21141 kHz CF
24928.0	09:21	22	09			XXX		CA30K0E	XXX. Unid bursts. BW ca 30K0E
24960.0	05:53	24	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
24973.0	09:32	24	09	CHN		RADAR	41.7	10K0E	OTHR short bursts
28075.0*	09:42	03	09			XXX		CA3K0E	XXX: Unid continuous signal. Jammer. *Simultaneous on 17, 15 and 12 m FT-8 segments
28075.0	07:01	14	09			XXX	300	600H	XXX. Unid signal. FSK-3. Jammer
28110.0	09:13	01	09	G		RADAR	25	20K0E	OTHR. UK SBA, Cyprus
28115.0	09:15 vt*	01 vd*	09			F3E			Non amateur short traffic. FM. Female voice. Slavic language. *Often
28135.0	10:10 vt*	11 vd*	09			F3E			Non amateur comms. Female voice. Slavic language. Short traffic. *Often
28145.0	10:28 vt*	11 vd*	09			F3E			Non amateur comms. Female voice. Slavic language. Short traffic. *Often
28155.0	07:39 vt*	30 vd*	09			F3E			Non amateur comms. Female and male voices. Slavic language. Short traffic. *Often

URE; Gaspar, EA6AMM

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
28175.0	07:38	30	09			F3E			Non amateur comms. Female voice. Slavic language. Short traffic. *Often
28195.0	08:56 vt*	02 vd*	09			F3E			Non amateur comms. Female voice. Slavic language. Short traffic. Often
28215.0	07:49 vt*	30 vd*	09			F3E			Non amateur comms. Female voice. Slavic language. Short traffic. *Often
28225.0	08:50 vt*	02 vd*	09			F3E			Non amateur comms. Female voice. Slavic language. Short traffic. *Often
28265.0	10:18 vt*	11 vd*	09			F3E			Non amateur comms. Female voice. Slavic language. Short traffic. *Often
28275.0	08:59 vt*	02 vd*	09			F3E			Non amateur comms. Female voice. Slavic language. Short traffic. *Often
28285.0	08:55 vt*	02 vd*	09			F3E			Non amateur comms. Female voice. Slavic language. Short traffic. *Often
28295.0	09:00 vt*	02 vd*	09			F3E			Non amateur comms. Female voice. Slavic language. Short traffic. *Often
28415.0	05:55	24	09	G		RADAR	50	20K0E	OTHR. UK SBA, Cyprus
28500.0	10:40	27	09	IRN		RADAR	307	45K0E	OTHR. Alternating 307 and 870 sps bursts
28860.0	09:17 vt*	01 vd*	09	IRN		RADAR	150	45K0E	OTHR. Alternating 150 and 313 sps bursts *Daily until 08/09 included
28960.0	10:11 vt*	10 vd*	09	IRN		RADAR	150	45K0E	OTHR. Alternating 150 and 313 sps bursts *Almost daily since 10/09. 15 reports. <i>Change from old QRG (28860 kHz CF) to this one?</i>
29100.0	08:54	11	09			NON			Carrier
29400.0	16:40 vt*	07 vd*	09	IRN		RADAR	150	45K0E	OTHR. Alternating 150 and 313 sps bursts *Also on 09/08, 1518 UTC
29450.0	16:36 vt*	07 vd*	09	IRN		RADAR	150	45K0E	OTHR. Alternating 150 and 313 sps bursts *Also on 20/09, 0932 UTC and 29/09, 1315 UTC
29500.0	18:02 vt*	07 vd*	09	IRN		RADAR	150	45K0E	OTHR. Alternating 150 and 313 sps bursts *Often. 8 reports

USKA; Peter, HB9CET

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7000.0	2157	06	09			J7D	12x 120 Bd	2k70E	CIS12 often
7000.0	2221	07	09			NON			Long lasting carrier
7006.5	1158	12	09			F1B	50 Bd	250H	FSK
7016.0	0911	13	09			F1B	50 Bd	250H	FSK
7016.0	2157 2104	07 08	09			F1B	50 Bd	200H	FSK; maybe CIS 36-50
7022.0	2100	21	09			FMOP	40 sps	12k0E	OTHR; Contayner
7041.0	2150	06	09			X	X	ca 10k0E	unid signal, probably jammer
7042.0	2104	11	09			X	X	ca 10k0E	unid signal, probably jammer
7044.0	1543	13	09			F1B	50 Bd	250H	FSK
7050.0 LSB	1221	25	09			J3E-L		ca 3k0E	RUS-UKR Radio War Voice almost daily
7055.0 LSB	0854	25	09			J3E-L		ca 3k0E	RUS-UKR Radio War; Music almost daily
7057.0	1217	20	09			J7D PSK2-A	12x 120 Bd	2k70E	CIS12

USKA; Peter, HB9CET

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS	
7060.0	1226 1217	05 20	09			J7D	12x 120 Bd	2k70E	CIS12; very long lasting	daily
7072.0	1248	29	09			J7D	12x 120 Bd	2k70E	CIS12; stopped at 1252z	
7080.0	2053 2051	16 20	09			F1B	50 Bd	200H	FSK	
7089.8	2046	20	09			G1D PSK8	2400 Bd	2k70E	LINK11 SLEW often (7088.0 USB)	
7090.00 USB	1654	16	09		111	MFSK-8 J7D	8x 125 Bd	1k750	ALE MIL188-141A; To: 222	often
7091.0	2155	12	09			FMOP	40 sps	12k0E	OTHR; Contayner	
7096.0	2102	21	09			FMOP	40 sps	12k0E	OTHR; Contayner	
7107.0 LSB	2117	16	09			PSK-4	30x 60 Bd	2k50E	CHN30 (aka PRC30); burst system; Pilot tone at 450Hz	
7111.0 LSB	2113	16	09			PSK-4	30x 60 Bd	2k50E	CHN30 (aka PRC30); burst system; Pilot tone at 450Hz	
7112.0	1159	08	09			J7D	12x 120 Bd	2k70E	CIS12; PSK-4B	
7114.0	2134	06	09	RUS	RDL	F1A		200H	CW FSK	
7114.0	2140 2122	06 16	09	RUS	RDL	F1B	50 Bd	200H	FSK	
7117.0	2102	16	09	RUS		F1B	75 Bd	200H	FSK	
7118.0	1132	08	09			J7D	12x 120 Bd	2k70E	CIS12; additional carrier at 7016.0 kHz	
7126.0	2115	21	09			Radar	2.6 sps	30k0E		
7133.0	2125	16	09			FMOP	40 sps	12K0E	OTHR; Contayner	
7137.0	1624 2048	11 20	09			F1B	50 Bd	200H	FSK	often
7160.0	1628	19	09			Radar	2.6 sps	30k0E		
7171.0 LSB	2120	16 2134	09			PSK-4	30x 60 Bd	2k50E	CHN30 (aka PRC30); burst system; Pilot tone at 450Hz	daily
7179.0	0910	20	09			F1B	75 Bd	200H	FSK	often
7200.0	1231	25	09			A3E		ca 9k0E	BC: National Unity Radio	daily
14008.0	0600	20	09			F1B	50 Bd	500H	FSK	
14026.0	0900	20	09			J7D	12x 120 Bd	2k70E	CIS12: idling only	
14091.0	0943	14	09			OFDM	30 Bd	ca 2k80E	OFDM, 30Bd, tone spacing 44.4Hz	
14091.0	1022	22	09			J7D	12x 120 Bd	2k70E	CIS12	
14098.5	1225 1227	20 25	09			ARQ FSK	600 Bd	600H	DPRK FSK ARQ system	often
14118.5	1110	25	09			ARQ FSK	600 Bd	600H	DPRK FSK ARQ system	often
14140.0	1918z	11	09			FMOP	40 sps	12K0E	OTHR; Contayner	
14150.0	0924	13	09			FMOP	40 sps	12K0E	OTHR; Contayner	
14158.0	1123	25	09			FMOP	40 sps	12K0E	OTHR; Contayner	
14160.0	1159	21	09			F1B	75 Bd	200H	FSK	often
14160.0 USB	1207 1117	20 22	09			J3E-L		ca 3k0E	RUS-UKR Radio War; strong	
14180.0	0649	26	09			FMOP	40 sps	12K0E	OTHR; Contayner	
14191.0	1124	25	09			FMOP	40 sps	12K0E	OTHR; Contayner	
14198.5	1208	20	09			ARQ	600 Bd	600H	DPRK FSK ARQ system	often

USKA; Peter, HB9CET

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
						FSK			
14242.0	1204	20	09			J7D PSK-2	12x 120 Bd	2k70E	CIS12
14248.0	0934	13	09			FMCW	X	10k0E	OTHR; Bursts
14256.0	0846	25	09			FMOP	40 sps	12K0E	OTHR; Contayner
14262.0	1150	21	09			FMOP	40 sps	12K0E	OTHR; Contayner
14298.55	1201	21	09			ARQ FSK	600 Bd	600H	DPRK FSK ARQ often
14301.0	1319	25	09			FMCW	50 sps	10k0E	OTHR; bursts
14308.0	1404	07	09			FMCW	66.66 sps	10k0E	OTHR; Bursts
14310.4	0945	25	09			A1A			unid CW, numbers + letters
14313.0	1354	05	09			FMCW	66.66 sps	10k0E	OTHR; Bursts
14330.0	1352	05	09			FMCW	66.66 sps	10k0E	OTHR; Bursts
18080.0	0613	20	09		*	A3E		ca 9k0E	BC: *) "Sound of Hope"
18107.0	1251 0623	05 20	09		RDL	F1B	36+50 Bd	200H	CIS 36-50 ID in F1A almost daily
18110.0	1914	11				A3E			BC: voice and music;; spanish
18123.0	0915	08	09			FMOP	40 sps	12K0E	OTHR; Contayner
18133.0	1118	25	09			FMCW	41 sps	10k0E	OTHR; Bursts
18140.0	1148	20	09			FMCW	66.66 sps	10k0E	OTHR; Bursts
18175.0	0735	08	09			FMOP	40 sps	12K0E	OTHR; Contayner, splattering into 17m band
21153.0	0949	15	09			FMCW	66.66 sps	10k0E	OTHR; Bursts
21161.0	1002	25	09			FMCW	42 sps	10K0E	OTHR; Bursts (BD 6.1s)
21162.0	1413	12	09			FMOP	40 sps	12K0E	OTHR; Contayner
21175.0	1134	25	09			FMOP	40 sps	12K0E	OTHR; Contayner
21214.0	0923	14	09			FMOP	40 sps	12K0E	OTHR; Contayner
21244.0	1112	22	09			FMCW	50 sps	10k0E	OTHR; short bursts
21276.0	0939	20	09			OTHR	62	10k0E	OTHR; short bursts
21318.0	0915	16	09			FMCW	41 sps	10k0E	OTHR; short bursts
21328.0	0943	13	09			OTHR	10 sps	160k0E	OTHR; Wideband Radar
21381.0	1056	07	09			FMCW	42 sps	10k0E	OTHR; short bursts
21390.0	0907	25	09			FMCW	X	10k0E	OTHR; short bursts
21395.0 USB	0754	19	09			MFSK-8 J7D	8x 125 Bd	1k75	ALE MIL188-141A
21407.0	1911	11	09			FMOP	40 sps	12K0E	OTHR; Contayner; weak, fading
21408.0	1709	15	09			FMOP	40 sps	12K0E	OTHR; Contayner
21422.0	1903	11	09			FMOP	40 sps	12K0E	OTHR; Contayner; strong: -55dBm
21438.0	0918	08	09	RUS	RCV	A1A		10H	Area of Sevastopol; since years daily
28082.0	0759	08	09			F1B	51 Bd	300H	GPS Fishery buoy, short bursts
28100.0	0745	08	09			F1B	51 Bd	300H	GPS Fishery buoy, short bursts
28860.0	0831	07	09	IRN		Radar	150 + 313 sps	ca 45k	OTHR; Bursts; long lasting, sweep rate alternating almost daily
28960.0	1118 1321	11 29	09	IRN		Radar	150 + 313 sps	ca 45k	OTHR; Bursts; long lasting, sweep rate alternating often
29450.0	1318	29	09	IRN		Radar	150+	ca 45k0	OTHR; Bursts: often

USKA; Peter, HB9CET

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
							313 sps		sweep rate alternating
29500.0	1154	20	09	IRN		Radar	150+ 313 sps	ca 45k0	OTHR; Bursts: often sweep rate alternating

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

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3675.0	1930	19	09	RUS		F1B			UiPtr (Shared Band)
3708.0	1925	29	09	RUS	RDL	F1B			UUU XXX followed by Revs/Ptr (SB)
3710.0	1910	11	09	RUS		F1B			Revs; UiPtr (SB)
3722.0	1912	19	09	RUS		F1B			UiPtr (SB)
3797.0	1934	20	09	RUS	RDL	A1A			5BL (SB)
7016.0	0912	13	09	RUS		F1B		250H	Printer; S3-5.
7030.0	2045	23	09			A3E			German language; probable harmonic of some BC station
7050.0	1831	03	09	UKR/ RUS		J3E-L		2K70E	UKR-RUS radiowar; 2 TX same freq.; slogans/music
7055.0	1657	02	09	UKR/ RUS		J3E-L		2K70E	UKR-RUS Radiowar; comments/slogans/songs; 2 TX same freq. & jammer
7055.0	1926	03	09	UKR/ RUS		J3E-L		2K80E	UKR-RUS radiowar; slogans in loop; S9+
7058.0	2018	02	09			J3E-L		2K60E	Speech & music; weak signal
7060.0	2014	02	09	RUS		J7D		2K70E	CF; CIS-12; Moscow
7060.0	1806	03	09	RUS		J7D		2K70E	CF; CIS-12; Moscow
7080.0	2012	02	09	RUS		F1B		200H	Ptr; S9; also on 03/9 1803utc and 23/9 1934utc.
7117.0	2055	16	09			F1B		200H	UiPtr
7137.0	2008	02	09	RUS		F1B		200H	Ptr; Kaliningrad; S7
7137.0	1800	03	09	RUS		F1B		200H	Ptr; Unclean signal; Kaliningrad; S7-9
7162.0	1420	19	09	RUS		F1B		250H	Printer; weak S3-4.
14007.8	0953	03	09			NON			Long lasting carrier; S9; most likely RUS F1B system 14008kHz
14008.0	1010	14	09	RUS		F1B		500H	UiPtr; also on 21/9 0906utc, 24/9 0728utc, 27/9 1408utc and 29/9 0826utc.
14159.0	1300	25	09			RADAR		20K0E	
14184.0	1916	03	09	RUS		RADAR	40	12K0E	CF; OTHR Contayner
14250.0	0905	21	09			RADAR			
14255.0	0945	12	09	RUS		RADAR		20K0E	TDoA > Russia; probably two adjacent transmissions
14255.0	0945	18	09	RUS		RADAR			
14305.0	1050	28	09			RADAR			
18098.0	1151	03	09			XXX		1K20E	CF; Unknown 6-channel digital; long lasting; probably jammer; S5-7
18107.0	1410	09	09	RUS		F1B		200H	Printer; S8-9
21100.0	0810	11	09	E		J3E-U			Spanish fishermen
21150.0	1837	17	09	E		J3E-U			Spanish fishermen; 4 different stations/ships
21152.0	1704	02	09			PSK		500H	CF; 4 channel PSK; probably Clover-11?
21180.0	0851	01	09			RADAR			

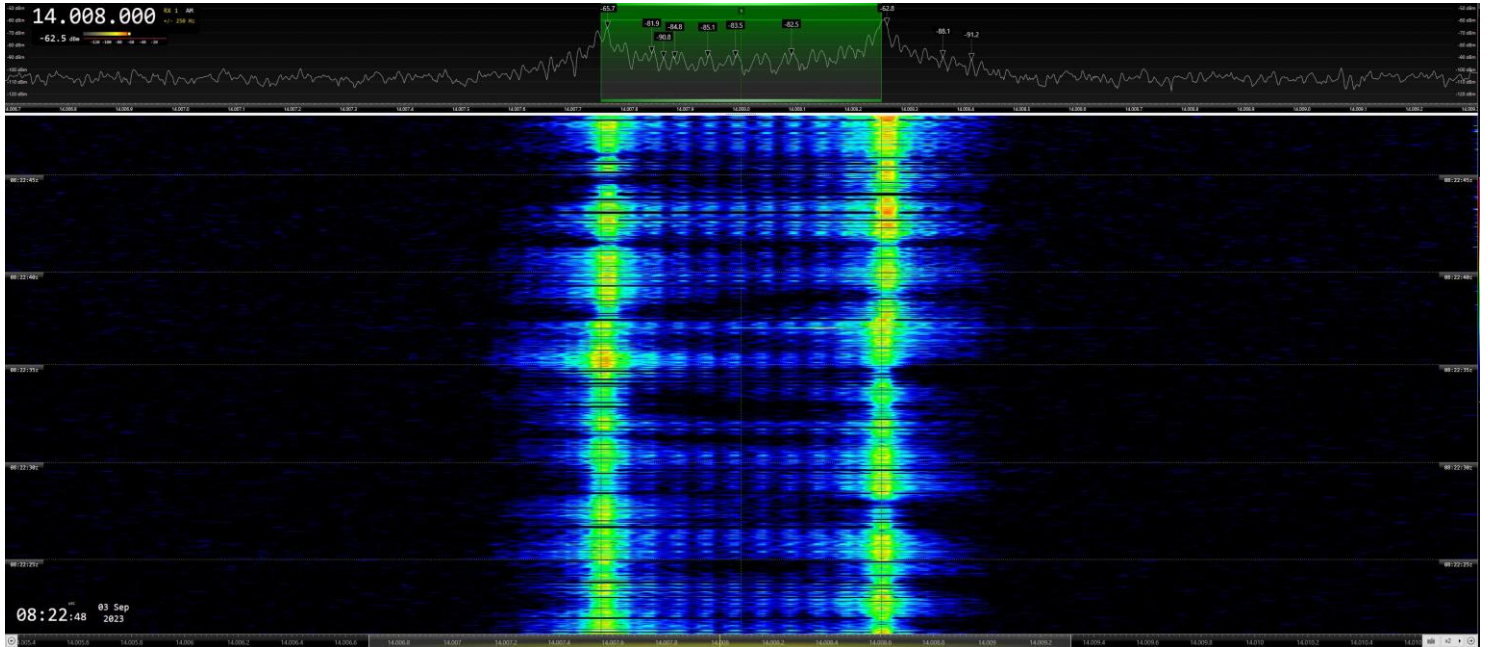
VERON; Ruud, PG1R. Credits to observers Dick PA0GRU, Kees PA2CHM, Arie PA3CNK, Rene PA3EQO

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
21438.0	0936	03	09	RUS	RCV	A1A			RIP90 de RCV QTC 485 46 2 2114 Bawip 32938 Karta2215; also on 12/9 1012utc and 26/9 0940utc.

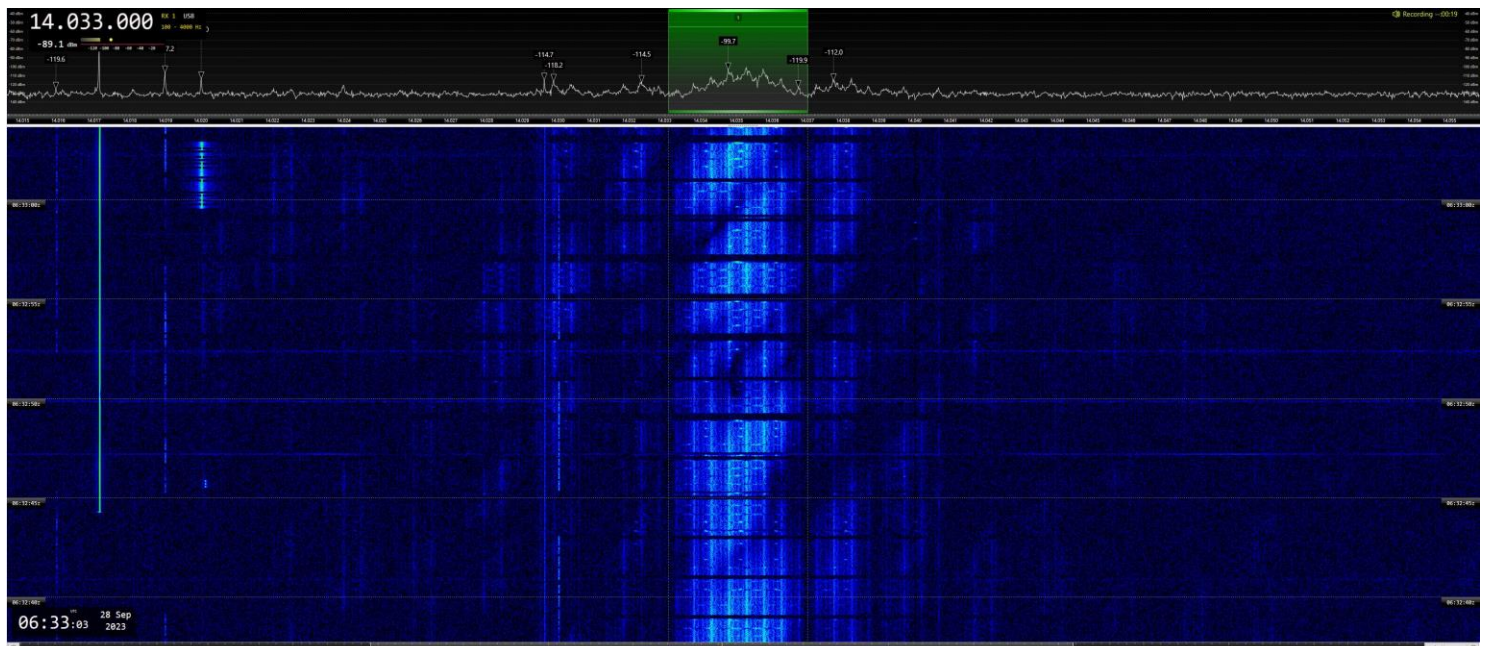
Contact: Gaspar Miró, EA6AMM, ea6amm@iaru-r1.org

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

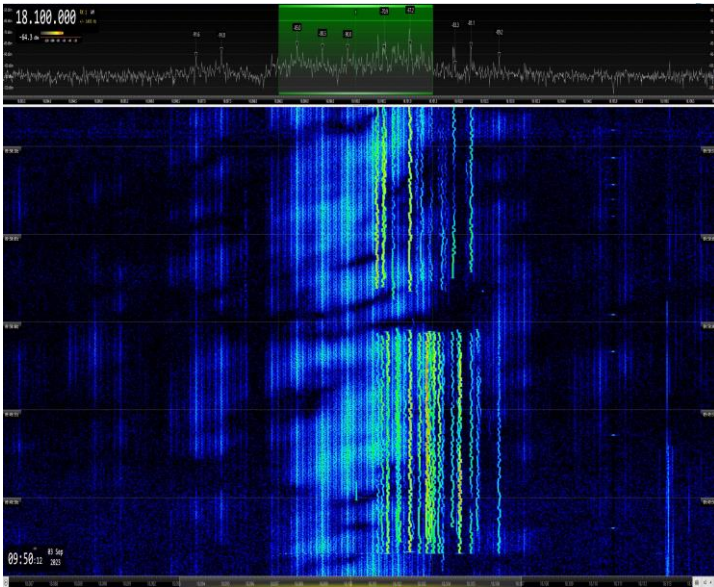
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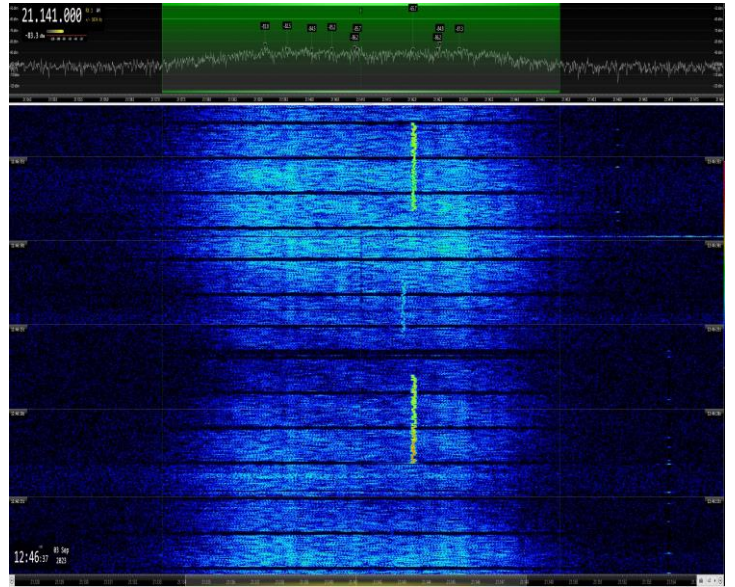
14008 kHz CF: F1B (FSK). RUS. Shift = 500 Hz. 50 Bd



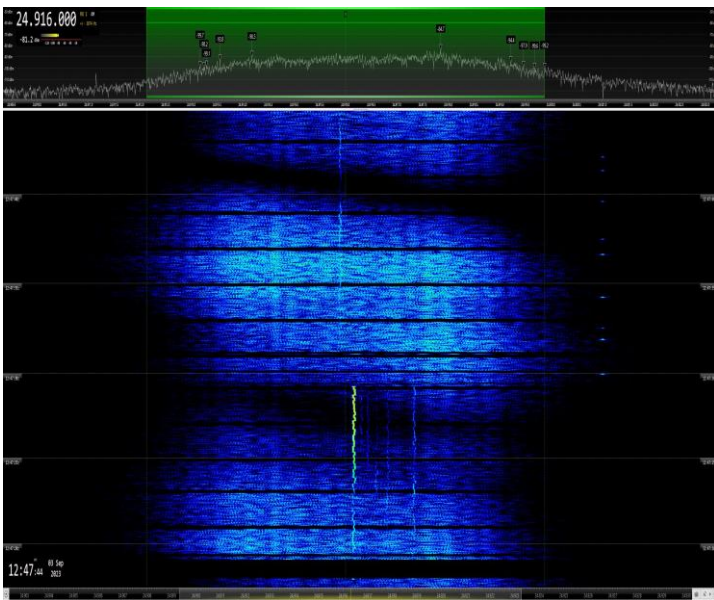
14035 KhZ cf: xxx. Bw CA 3k0e. Most probably, jammer



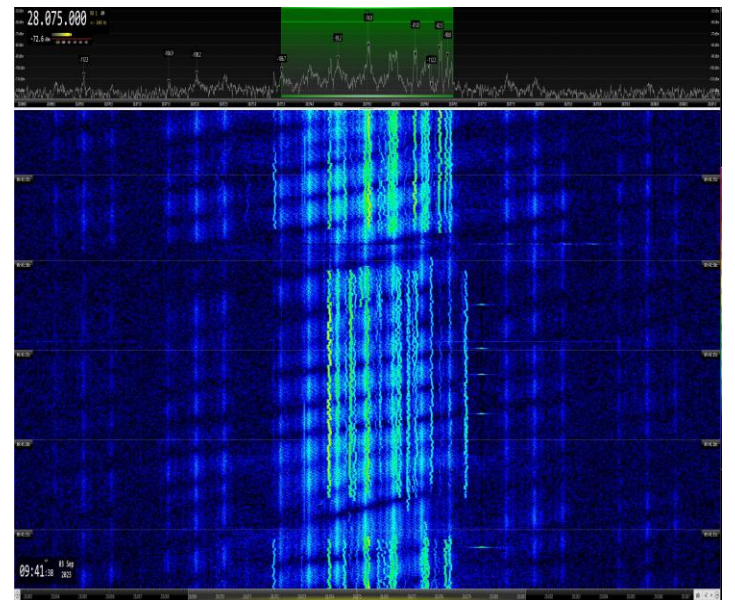
18100 kHz CF: XXX. Jammer. BW ca 3K0E



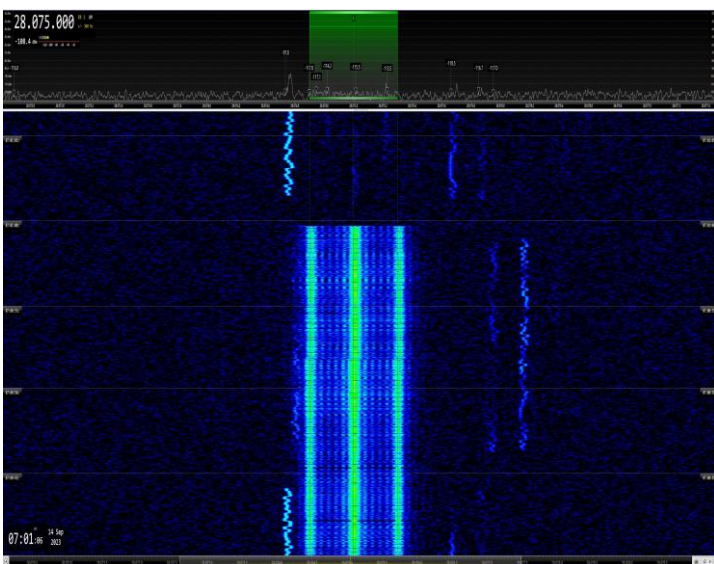
21141 kHz CF: XXX. Unidentified bursts. Jammer. BW ca 8K0E



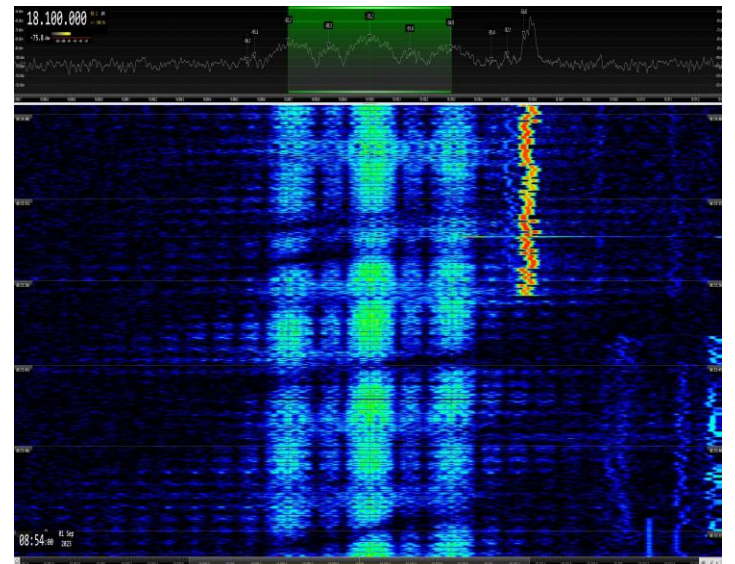
24916 kHz CF: XXX. Unidentified bursts. Jammer. BW ca 8K0E



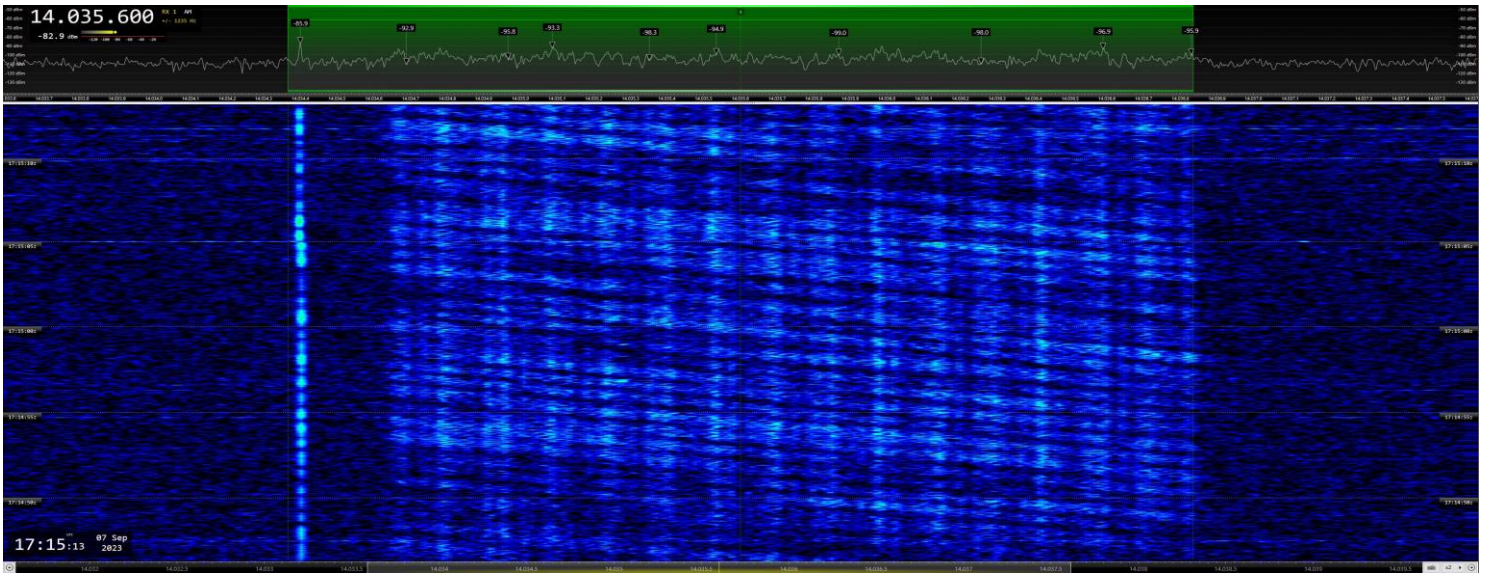
28075 kHz CF: XXX. Jammer. BW ca 3K0E



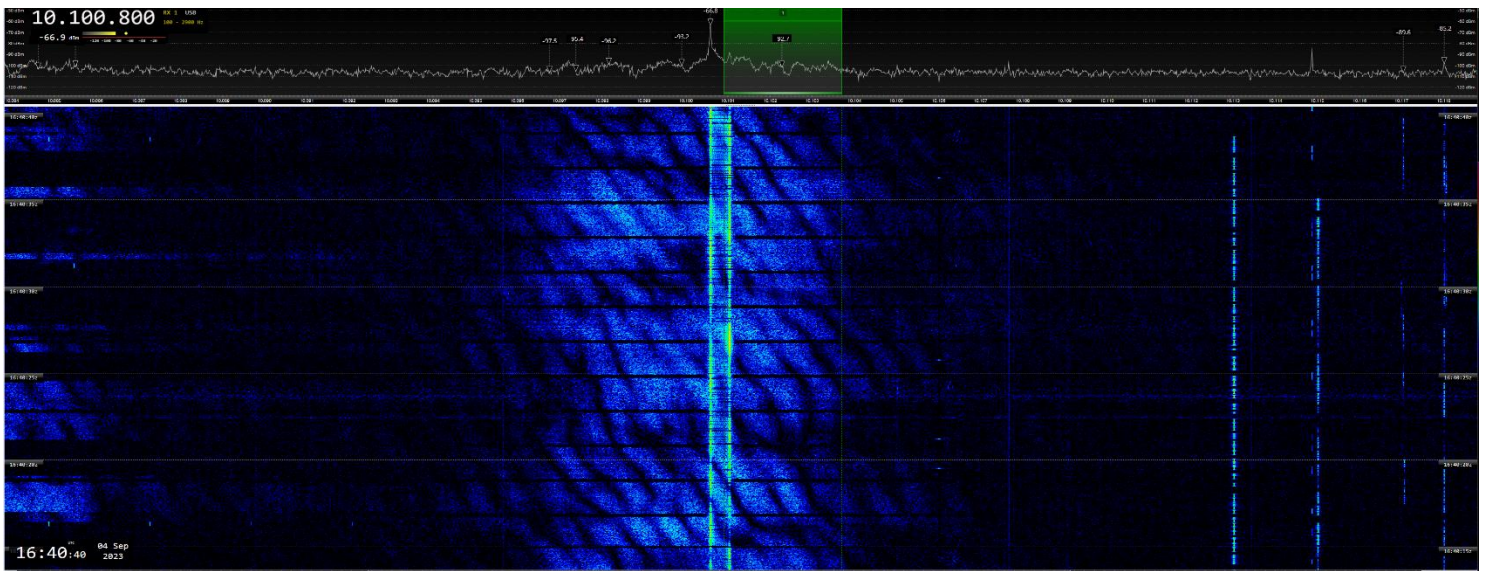
28075 kHz CF: Jammer. FSK-3. Shift = 600Hz. 300 Bd



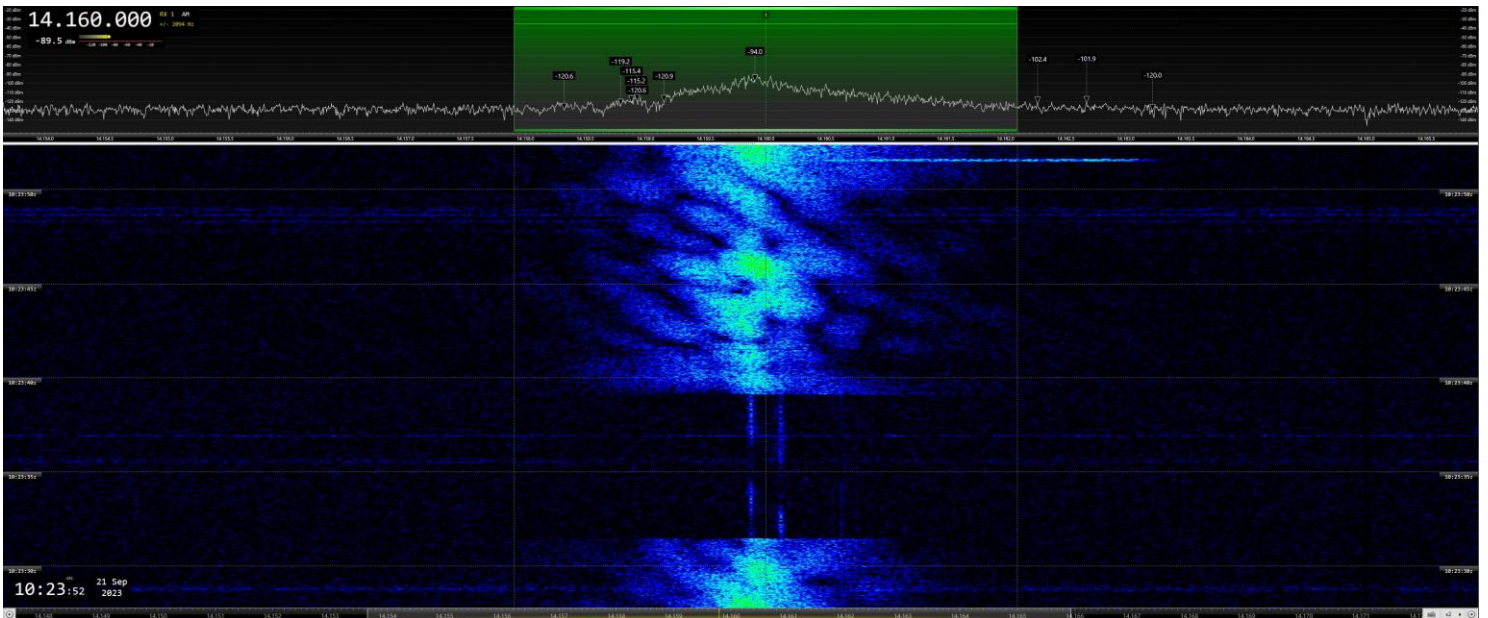
18100 kHz CF: Jammer. FSK-3. Shift = 600 Hz. 300 Bd



14035.6 kHz CF: CHN OFDM 39. BW = 2K40E. 39 x 44.44 Bd + pilot tone



10100 kHz CF. XXX. Unidentified bursts. Jammer. BW ca 8K0E. Interfering the Deutscher Wetterdienst TX (F1B; legal) from Pinnenberg (Germany) (Shared band. Secondary allocation)



14160 kHz CF: F1B. Shift = 250 Hz. 75 Hz. / 14160 kHz CF; XXX. Jammer. BW ca 4K0E, interfering the F1B system