



IARU Monitoring System Region 1 Monthly Newsletter 1 - January 2021

edited by Peter Jost, HB9CET and Gaspar Miró, EA6AMM

News and Info's

More or less the same story as every month, it sounds boring. As in the past, the numerous OTH Radars were a massive nuisance also in January. In addition to the Russian Contayner radar, which can be detected daily on many frequencies, more and more OTHR's from China were found. In addition to the radar known as "Foghorn" (bandwidth 10 kHz, various sweep rates), we often found a wide-band radar with a bandwidth of 160 kHz, mostly 10 sweeps/s, especially in the 40m and 20m band. Both systems are assigned to China and are daily troublemakers.

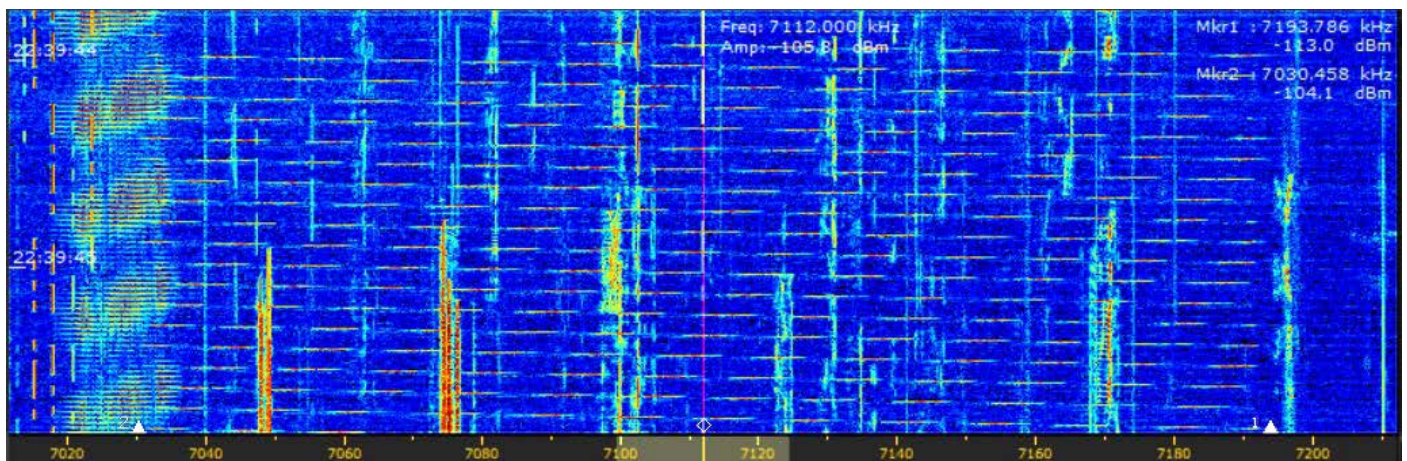
At 7080 kHz we highlight the CW transmissions with the ID "4XZ", supposed to be part of the ISR Navy (TDoA near Haifa), which transmitted during 4 days the sequence "VVV DE 4XZ"

long lasting over hours also sending some QTC. We also observed several times transmissions from a MIL 188-110A mod (Hybrid) modem ; preamble 4 tones, PSK4 75Bd; 450Hz spacing, CF 14001.5 kHz.

Transmissions from a CHN30 modem (burst system; 30x60Bd; tone spacing 75 Hz; Preamble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz) were often detected on 7171 kHz (VFO LSB) and some other frequencies.

As had been the case for a long time, also most of the other well-known intruders could be detected again and again. Be it the broadcast stations on 7140 and 7180 from ERI, or 7200 kHz from TWN, or the CW emission from Sevastopol that is audible every day for years on 21438 kHz.

HB9CET, Peter and EA6AMM, Gaspar



Chinese Wideband OTHR, ca. 160kHz wide, 10 sweeps/s. And at ca. 7028 kHz a Contayner was also activ. So a total of almost 180 kHz were severely affected! Screenshot with Perseus SDR

Detailed reports of national coordinators

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

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

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

DARC; Credits to monitors: Wolf DK2OM, Alex DB3TA, Tom DF5JL, Christian DC5HB, Daniel DL2XP, Wolfgang DF5SX, Christian DG5KCB, Robert DC7RF, Christoph DO1RTH, Gerhard DL1KGT, Horst DH1HR, Daniel DL3RTL

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH /BW	DETAILS
3510.0	1700	dly	01	RUS		chirps		3k	mysterious chirps -60 km east of Bryansk
3527.0	2100	02	01	RUS		F1B	50	200	Severomorsk -daily -shared band
3581.8	ady	dly	01	TUR		PSK8A	2400	2400	Stanag-4285 -600 bps long -Ankara
3756.8	1800	dly	01	RUS		USB			RUS MIL -channel marker -4 tones - Tuapse -East Black Sea (nw of Sochi) - night QRG
7008.0	1737	26	01	CHN		FMOP	66	10k	Chinese OTH radar -7008 and 7010 kHz - 7.7 sec bursts
7009.0	1855	06	01	CHN		FMCW	66.67	10k	OTHR 66.67sps, 3,8s bursts
7010.0	1714	06	01	CHN		FMOP	65	10k	Chinese OTH radar -7005 -7015 kHz - 3.8 sec bursts
7010.0	2215	22	01	CHN		FMOP	10	160k	Chinese wideband OTHR -6930-7090 kHz
7017.0	1602	06	01	RUS		FMOP	40	12k	OTHR Contayner
7020.0	1635	14	01	RUS		FMOP	40	12k	OTHR Contayner
7021.0	2108	14	01	CHN		FMCW	41.67	10k	OTHR 41,67sps, 6,12s bursts
7023.0	1952	19	01	CHN		FMCW	50	10k	OTHR 50sps, 5,1s bursts
7028.0	2222	18	01	RUS		FMOP	40	12k	OTHR
7028.0	1924	29	01	CHN		FMOP	64	10k	Chinese OTH radar -7023 -7033 kHz - 3.8 sec bursts
7029.0	1845	05	01	CHN		FMOP	40	10k	Chinese OTH radar -7024 -7034 kHz - 6.1 sec bursts
7032.0	1712	08	01	RUS		PSK2A	120	2600	CIS-12 - Moscow
7032.0	1645	14	01	RUS		FMOP	40	12k	OTHR Contayner
7034.0	2015	20	01	CHN		FMCW	50	10k	OTHR 50sps, 5,1s bursts
7035.0	1626	12	01	CHN		FMOP	10	160k	Chinese wideband OTHR -6955 -7115 kHz
7041.0	2136	14	01	CHN		FMCW	41.67	10k	OTHR 41,67sps, 6,12s bursts
7043.0	2040	11	01	CHN		FMCW	66.67	10k	OTHR 66,67sps, 3,8s bursts
7039.0	1648	04	01	CHN		FMOP	43	10k	Chinese OTH radar -7034 -7044 kHz - 6.1 sec bursts
7050.0	2029	21	01	CHN		FMOP	10	160k	Chinese wideband OTHR -6970 -7130 kHz
7051.0	1958	29	01	CHN		FMCW	66.67	10k	OTHR 66,67sps, 3,8s bursts
7053.0	2154	09	01	CHN		FMOP	49	10k	Chinese OTH radar -7048 -7058 kHz - 5.1 sec bursts
7054.0	1745	27	01	RUS		F1B	50	180	Vladivostok - often
7055.0	vt	dly	01	UKR		LSB			music and Russian voices
7057.0	1910	17	01	RUS		FMOP	40	12k	OTHR
7058.0	2022	20	01	RUS		FMOP	40	12k	OTHR
7060.0	1855	06	01	RUS		FMOP	40	12k	OTHR
7061.0	2142	20	01	RUS		FMOP	40	12k	OTHR
7062.0	2040	14	01	CHN		FMCW	41.67	10k	OTHR 41,67sps, 6,12s bursts
7063.0	1706	21	01	RUS		FMOP	40	12k	OTH radar Contayner - nw of Saransk - 7057 -7069 kHz
7065.0	1910	11	01	RUS		FMOP	40	12k	OTHR
7067.0	1938	11	01	RUS		FMOP	40	12k	OTH radar Contayner - nw of Saransk - 7061 -7073 kHz
7070.0	1927	18	01	CHN		FMOP	10	160k	Chinese wideband OTHR -6990 -7150 kHz also 24.01.2020 at 1935 utc
7080.0	1940	20	01	ISR	4XZ	A1A			"vuv de 4XZ" - ISR navy -later with QTCs
7086.0	1545	01	01	RUS		FMOP	40	12k	OTHR
7087.0	1718	04	01	CHN		FMOP	49	10k	Chinese OTH radar -7082 -7092 kHz - 5.1 sec bursts
7095.0	1936	10	01	CHN		FMOP	40	10k	Chinese OTH radar -7090 -7100 kHz - 6.1 sec bursts
7095.0	1943	18	01	CHN		FMOP	10	160k	Chinese wideband OTHR -7015 -7175 kHz
7095.0	2026	20	01	CHN		FMCW	50	10k	OTHR 50sps, 10,2s bursts

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kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH /BW	DETAILS
7098.0	1434	03	01	CHN		FMOP	49	10k	Chinese OTH radar -7093 -7103 kHz - 5.1 sec bursts
7099.0	1958	29	01	CHN		FMCW	66.67	10k	OTHR 66,67sps, 3,8s bursts
7100.0	1555	23	01	CHN		FMOP	10	160k	Chinese wideband OTHR -7020 -7180 kHz
7103.0	1531	22	01	CHN		FMOP	10	160k	Chinese wideband OTHR -7023 -7183 kHz
7104.0	1550	06	01	RUS		FMOP	40	12k	OTHR
7105.0	1645	04	01	CHN		FMOP	50	10k	Chinese OTH radar -7100 -7110 kHz - 5.2 sec bursts
7105.0	1605	06	01	RUS		FMOP	40	10k	OTH radar Contayner - nw of Saransk - 7099 -7111 kHz
7106.0	2120	20	01	RUS		FMOP	40	12k	OTHR
7107.0	1520	10	01	CHN			?	10k	OTHR 5.1s bursts, very weak
7107.0	2119	11	01	RUS		FMOP	40	12k	OTHR
7108.0	2133	11	01	RUS		FMOP	40	12k	OTH radar Contayner - nw of Saransk - 7102 -7114 kHz
7110.0	1754	01	01	CHN		FMOP	51	10k	Chinese OTH radar -7105 -7115 kHz - 10.2 sec bursts
7110.0	1545 1545	01 10	01	RUS		FMOP	40	12k	OTHR
7112.0	2229	18	01	CHN		FMOP	10	160k	Chinese wideband OTHR -7032 -7192 kHz
7115.0	1727	08	01	RUS		FMOP	40	12k	OTHR
7115.0	1657	25	01	CHN		FMOP	66.66	10k	Chinese OTH radar -7110 -7120 kHz - 3.8 sec bursts
7121.0	1654	17	01	CHN		FMOP	49	10k	Chinese OTH radar -7121 and 7116 kHz - 10.2 sec bursts
7122.0	1707	21	01	RUS		FMOP	40	12k	OTH radar Contayner - nw of Saransk - 7116 -7128 kHz
7126.0	2012	14	01	CHN		FMCW	66.67	10k	OTHR 66,67sps, 3,8s bursts
7127.0	1938	29	01	CHN		FMCW	50	10k	OTHR 50sps, 5,1s bursts
7128.0	2215	20	01	CHN		FMCW	41.67	10k	OTHR 41,67sps, 6,12s bursts
7131.0	1954	19	01	CHN		FMCW	41.67	10k	OTHR 41,67sps, 6,12s bursts
7132.0	2215	20	01	CHN		FMCW	41.67	10k	OTHR 41,67sps, 6,12s bursts
7132.0	2232	20	01	CHN		FMOP	49	10k	Chinese OTH radar -7127 -7137 kHz - 5.1 sec bursts
7134.0	1621	07	01	CHN		FMOP	41	10k	Chinese OTH radar -7129 -7139 kHz - 6.2 sec bursts
7137.0	2118	28	01	CHN		FMCW	50	10k	OTHR 50sps, 5,1s bursts
7140.0	1705	dly	01	ERI	VOBM	A3E/BC		9k	7140.021 kHz -voice of the broad masse
7140.0	vt	vd	01	CHN		MFSK8	125	1750	MIL-188-141A -(ALE) - "112" - CHN AF
7140.0	1954	20	01	CHN		FMOP	49	10k	Chinese OTH radar -7140 and 7133 kHz - 5.1 sec bursts
7140.0	1842	23	01	RUS		FMOP	40	12k	OTH radar Contayner - nw of Saransk - 7134 -7146 kHz -long lasting
7140.0	1804	25	01	CHN		FMCW	66.67	10k	OTHR 66,67sps, 3,8s bursts
7141.0	1721	19	01	CHN		FMOP	65	10k	Chinese OTH radar -7136 -7146 kHz - 6.5 sec bursts
7142.0	1448	24	01	CHN		FMOP	67	10k	Chinese OTH radar -7137 -7147 kHz - 3.8 sec bursts
7144.0	vt	vd	01	CHN		MFSK8	125	1750	ALE, "985" -CHN AF
7145.0	0908	28	01	CHN		FMOP	41	10k	Chinese OTH radar -7140 -7150 kHz - 6.1 sec bursts
7146.0	1727	19	01	CHN		FMOP	65	10k	Chinese OTH radar -7141 -7151 kHz - 3.8 sec bursts
7147.0	2026	14	01	CHN		FMCW	41.67	10k	OTHR 41,67sps, 6,12s bursts
7149.0	1653	08	01	CHN		FMOP	42	10k	Chinese OTH radar -7144 -7154 kHz - 6.2 sec bursts

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kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH /BW	DETAILS
7151.0	1720	16	01	CHN		FMOP	50	10k	Chinese OTH radar -7146 -7156 kHz - 5.0 sec bursts
7152.0	2220	20	01	CHN		FMCW	50	10k	OTHR 50sps, 5,1s bursts
7154.0	1525	06	01	RUS		FMOP	40	12k	OTHR
7158.0	1707	06	01	RUS		FMOP	40	10k	OTH radar Contayner - nw of Saransk - 7152 -7164 kHz
7160.0	1852	03	01	CHN		FMOP	47	10k	Chinese OTH radar -7155 -7165 kHz - 5.3 sec bursts
7160.0	2240	18	01	CHN			10	160k	OTHR 10sps, 52 sec
7164.0	2221	18	01	CHN		FMCW	50	10k	OTHR 50sps, 5,1s bursts
7165.0	1520	10	01	CHN			?	10k	OTHR 5,1s bursts, very weak
7167.0	1959	22	01	CHN		FMOP	51	10k	Chinese OTH radar -7162 -7172 kHz - 5.1 sec bursts
7169.0	1450	03	01	RUS		FMOP	40	12k	OTHR
7169.0	1630	13	01	CHN		FMOP	50	10k	Chinese OTH radar -7164 -7174 kHz - 5.1 sec bursts
7174.0	2222	18	01	CHN		FMCW	41.67	10k	OTHR 41,67sps, 6,12s bursts
7174.0	1509	21	01	CHN		FMOP	68	10k	Chinese OTH radar -7169 -7179 kHz - 3.8 sec bursts
7175.0	2233	28	01	CHN		FMOP	48	10k	Chinese OTH radar -7170 -7180 kHz - 3.8 sec bursts
7176.0	2218	11	01	CHN		FMCW	50	10k	OTHR 50sps, 2,55s bursts < new!
7178.0	1715	13	01	RUS		FMOP	40	12k	OTHR
7178.0	1845	20	01	CHN		FMCW	66.67	10k	OTHR 66,67sps, 3,8s bursts
7180.0	1409	dly	01	ERI	VOBM	A3E		9k	7180.021 kHz - Radio Eritrea
7180.0	2125	13	01	RUS		FMOP	40	12k	OTHR
7180.0	1824	25	01	CHN		FMCW	66.67	10k	OTHR 66,67sps, 3,8s bursts
7181.0	vt	vd	01	CHN		MFSK8	125	1750	ALE, "689" "947" -CHN AF
7181.0	1659	04	01	CHN		FMOP	51	10k	Chinese OTH radar -7176 -7186 kHz - 5.1 sec bursts
7182.0	1530	13	01	CHN		FMOP	41	10k	Chinese OTH radar -7177 -7187 kHz - 6.1 sec bursts
7184.0	2244	18	01	CHN		FMCW	41.67	10k	OTHR 41,67sps, 6,12s bursts
7187.0	1932	27	01	CHN		FMOP	66	10k	Chinese OTH radar -7182 -7192 kHz - 3.8 sec bursts
7188.0	1818	02	01	RUS		FMOP	40	12k	OTH radar Contayner - nw of Saransk - 7182 -7194 kHz
7190.0	1830	15	01	CHN	CRI	A3E		40k	China Radio International on 7210 kHz - with splatters on 7190 kHz -7230 kHz - daily 1800 -1900 utc
7193.0	0937	03	01	RUS	RDL	F1B	50	200	Kaliningrad -RUS navy - often
7193.0	1650	19	01	RUS		FMOP	49	10k	Chinese OTH radar -7146 -7198 kHz - 5.1 sec bursts
7194.0	1627	10	01	RUS		FMOP	40	12k	OTH radar Contayner - nw of Saransk - 7188 -7200 kHz
7195.0	2320	06	01	RUS		FMOP	40	12k	OTHR
7200.0	1150	01	01	TWN	NUR	A3E		9k	7195.5 -7204.5 kHz - BC transmission from Taiwan -carrier: 7199.997
10100.0	ady	dly	01	FEa		USB			10100.0 -10150.0 - Far East - crowded of pirates
10105.0	1101	27	01	CYP		FMOP	50	20k	UK OTH radar Cyprus -10095 -10115 kHz
10131.6	1820	16	01			USB			unid pirates
14000.0	1400	11 daily	01	CHN		A3E		9k	China Radio International -intermodulation from 13855 and 13710 kHz -13855 x 2 -13710 = 14000 kHz
14116.0	0929	10	01	RUS		F1B	50	250	Moscow

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kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH /BW	DETAILS
14117.0	0918	25	01	CHN		FMOP	64	10k	Chinese OTH radar -14112 -14122 kHz - 4.1 sec bursts
14158.0	1245	02	01	RUS		FMOP	40	12k	OTHR
14183.0	0942	28	01	CHN		FMOP	66	10k	Chinese OTH radar -14178 -14188 kHz - 3.8 sec bursts
14187.0	1319	17	01	RUS		FMOP	40	12k	OTHR
14190.0	0931	29	01	CHN		FMOP	10	160k	Chinese wideband OTHR - 14110 -14270 kHz
14221.0	2030	dly	01	KAZ		F1B	50	200	Kazakhstan -west of Almaty - mostly idling - every evening
14265.0	0841	17	01	CHN		FMOP	3.3 10	160k	Chinese wideband OTHR - 14185 - 14345 kHz
14280.0	1014	13	01	UKR		A3E			female voice with encrypted msgs -figures -"SZRU" = Foreign Intelligence Service of Ukraine in Rivne
14308.0	0930	15	01	RUS		F1B	50	500	Moscow
14325.0	0903	25	01	CHN		FMOP	68	10k	Chinese OTH radar -14320 -14330 kHz - 3.8 sec bursts
14340.0	0908	25	01	CHN		FMOP	50	10k	Chinese OTH radar -14335 -14345 kHz - 5.1 sec bursts
14340.0	1021	30	01	RUS		FMOP	40	12k	OTH radar Contayner - nw of Saransk - 14334 -14346 kHz -long lasting
18080.0	0750	dly	01	TWN		A3E/BC			Sound of Hope -Taiwan and Chinese BC jammer -daily at 06 utc and later
18166.0	1332	29	01	CYP		FMOP	25	20k	UK OTH radar Cyprus -18156 -18176 kHz
18174.0	1056	25	01	RUS		FMOP	40	12k	OTH radar Contayner - nw of Saransk - 18168 -18180 kHz
21000.0	1000	27	01	E		USB			Spanish fishery -like telephone -daily, various times -Canary Islands
21002.0	1043	04	01	MRC		USB			Moroccan fishery
21438.0	0920	03	01	RUS	RCV	A1A			RCV - RUS Navy Sevastopol with QTCs RIP90 de RCV - daily active
28000.0	1845	27	01	I		F3E			Italian pirates
28005.0	vt	vd	01	RUS		F3E			RUS taxi -base station -female voice -St. Peterburg -daily -every day

IRTS; Michael, EI3GYB

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3785	1735	27	01	DL		LSB			Somebody rebroadcasting "Antenne Bayern" to do DQRM to a special event station from Greece.
7000	1500	25	01	INS		LSB			Indonesian fishermen chatting. Nearly daily with strong signals.
7052	1815	18	01			RADAR			7052 to 7064 kHz. Strong and persistent.
7054	2240	06	01			RADAR			7054 to 7066 kHz. Strong, persistent.
7054	2045	20	01			RADAR			7054 to 7068 kHz. Strong and persistent.
7055	1300	Daily	01	RUS/UKR		LSB			Russian-Ukrainian radio war. Loads of shouting. Agitprop. Loop in English "International terrorist state Russian Federation." Ruski swini". Loud, persistent, daily from early morning until late night.
7058	1645	21	01			RADAR			7058 to 7072 kHz. Huge signal, persistent.
7060	0925	13	01	RUS/UKR		LSB			Rebroadcasting of a BC station in the Russian language. Heard often.
7080	1955	20	01	ISR	4XZ	CW			"4XZ" Israeli Navy, Haifa. Very strong.

IRTS; Michael, EI3GYB

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7098	1525	18	01			RADAR			7098 to 7126 kHz. Huge and persistent.
7108	1645	21	01			RADAR			7108 to 7132 kHz. Huge and persistent.
7123.5	1250	18	01			F1B			Strong and persistent.
7124	1900	06	01			RADAR			7124 to 7136 kHz. Weak signal.
7128	2100	06	01			RADAR			7128 to 7140 kHz. Huge, persistent. Wipes the band clean. Still on at 2330z.
7140	1655	21	01	ERI		AM			Radio Eritrea. Medium strength signal. Daily.
7160	1750	07	01			RADAR			7160 to 7174 kHz. Strong, persistent.
7164	1530	18	01			RADAR			7164 to 7178 kHz. Huge and persistent.
7180	1540	07	01	ERI		AM			Radio Eritrea. Medium signal. Daily.
7182	1640	21	01			RADAR			7182 to 7194 kHz. Medium strength, intermittent.
7193.5	1255	19	01			F1B			Medium strength. Persistent. Also heard on 4 th at 1410z.
7200	1100 to 1259	Daily	01	TJK		AM			Relay "Unity Radio" from Dushanbe. Always very strong.
14182	1255	19	01			RADAR			14182 to 14194 kHz. On and off. Very strong.
14242.5	1300	19	01			F1B			Weak signal.
18157	1235	14	01			RADAR			18157 to 18178 kHz. Huge and persistent.
18160	1030	25	01			RADAR			18160 to 18184 kHz. Huge, persistent.
21256	1220	20	01			RADAR			21256 to 21280 kHz. Huge, persistent.
21299	1435	19	01	B		LSB			Brazilian CBers. Male voices. Bad audio. Medium strength.

MRASZ; Laci, HA7PL

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3510.0	1808	22	01			A1A			slow chirp
3532.0	1734	22	01			A1A			"de 7WZU K"
3544.0	1816	18	01			LSB			italian language
3554.0	1732	20	01			F1B		250	
3559.0	1518	05	01			PSK2A			AT3004D
3563.5	1716	31	01			F1B		250	
3566.0	1506	05	01			F1B		250	
3581.8	1737	07	01			PSK8A			Stanag 4285
3581.8	1820	18	01			PSK8A			Stanag 4285
3600.0	1734	20	01			A3B			unidentified
3612.0	1815	22	01			RADAR			3608 – 3616 kHz
3615.0	2220	10	01			?			CIS 12?
3633.0	2242	10	01			PSK8A			Stanag 4285
3650.0	1819	22	01			F1B		200	
3746.0	1509	05	01			F1B		200	
3781.0	1509	05	01			F1B		200	
7005.0	1805	22	01			RADAR			
7006.0	1349	23	01			F1B		250	
7018.0	1327	08	01			F1B		500	
7028.0	1344	23	01			F1B		250	
7051.0	0845	18	01			F1B	50	500	5 letters
7053.5	1415	24	01			?			unidentifid signal, chaos
7055.0	0856	18	01			LSB			chaos as usually + music
7055.0	0903	31	01			LSB			music + chaos

MRASZ; Laci, HA7PL

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7080.0	1351	23	01			A1A			"VVV de 4XZ= ="
7090.0	1528	05	01			RADAR			7078 – 7102 kHz
10104.0	1511	31	01			RADAR			10104 – 10108 kHz
14037.0	0937	26	01			RADAR			14025 - 14050 kHz
14162.0	0857	29	01			RADAR			14158 – 14166 kHz
14181.0	1022	28	01			RADAR			14176 – 14190 kHz
14213.0	0857	29	01			RADAR			14206 – 14220 kHz
14253.0	0858	29	01			RADAR			14240 – 14226 kHz
14306.0	0859	29	01			F1B		500	
14337.0	0949	30	01			RADAR			14326 – 14348 kHz
18174.0	0906	29	01			RADAR			18152 – 18196 kHz

PZK; Marek, SP3AMO + Miro, SP5GNI

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3709	1150	11	01	RUS		PSK		2K9	CIS-12 pilot 3710,3 S9
3731	2208	12	01			J3E-L		3K0	Music and lectures in Russian S9
3731	2010	18	01			J3E-L		3K0	Conversations in Russian without callsigns, jamming music, S9 +25dB
3750	1940	31	01	RUS		PSK		2K9	CIS-12 pilot 3751,3 S9+30dB!
7002.0	vt	vd	01		UI	PSK		1K4	S 7
7003.0	1515	28	01			RADAR		10K0E	S 7, sps 40 Hz [15.30 UTC QRT]
7004.4	0945	27	01		UI	PSK		1K8	S 7
7009.4	0905	28	01		UI	PSK		1K8	S 8/9
7012.1	1323	20	01			F1B		250	
7021	1529	8	01			F1B		500	
7028	2017	18	01			RADAR		10K0E	S7-9 long lasting
7029	952	13	01	RUS		PSK		2K9	CIS-12 pilot 7030,3 S9
7038	1421	22	01			RADAR		12K0E	S8 continuous
7052.0	1520	19	01			RADAR		20K0E	OTHR sps 40 Hz [7052,0 - 7072,0 kHz] - 1532 UTC QRT
7054.0	1745	21	01			RADAR		14K0E	OTHR S 3 sps 40 Hz [7054,0 - 7068,0 kHz]
7056.5	0735	25	01		UI	PSK		1K5	S 9 sps 100 Hz
7056.5	1010	26	01		UI	FSK/PSK			[like Digi SSTV]
7060	0955	04	01	UKR		J3E-L		2K7	Anti-Russian lecture S9+20dB
7065	0935	20	01	UKR		J3E-L		2K7	Anti-Russian lecture in synthetic voice S9+10dB
7066.0	1734	17	01			RADAR			OTHR sps 40 Hz - 1734 UTC QRT
7080.0	1858	20	01		4XZ	A1A			S7 - xx QTC - 20 wpm mixed text
7089	vt	vd	01	RUS		PSK		2k9	CIS-12 pilot 7090,3 S9
7089.4	0737	29	01		UI	PSK		1K8	S 7/8
7121.5	vt	vd	01		RDL	F1B/A2A	50	200	S 3-8 changable modes of work [A2A 20 wpm]
7122	1003	15	01			F1B		200	S9
7150.5	0745	25	01		UI	PSK			S 5 0745 UTC QRT
7159	1004	15	01			F1B		200	
7168	1101	19	01			RADAR		10K0E	In short burst
7170	1325	20	01			RADAR		10K0E	In short burst
7173	1918	19	01			RADAR		20K0E	
7176	1005	28	01			F1B		200	S9 +10dB
7185	1225	13	01			RADAR		10K0E	In short burst
7185	1240	16	01			RADAR		10K0E	In short burst

PZK; Marek, SP3AMO + Miro, SP5GNI

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7187.5	1100	19	01	RUS		PSK		2K9	CIS-12 pilot 7188,8 S8
7189	1407	16	01			RADAR		15K0E	S9 +20
7190	2148	16	01			RADAR		10K0E	In short burst
7192	1137	08	01			RADAR		10K0E	In short burst
7196	1005	28	01			F1B		200	S8
7200	vt	vd	01			AM		6K0E	Radio S9 (probably far east language)
14010	0932	20	01			RADAR		10K0E	Short bursts
14096.8	0840	25	01		UI	NON			S 4
14105.25	1324	25	01			F1B		1000	2 lines/6 lines
14140	1103	04	01	CHN		RADAR		10K0E	In short burst
14156	1110	06	01	CHN		RADAR		10K0E	In short burst very strong
14160	1143	08	01	CHN		RADAR		10K0E	In short burst
14174	1210	08	01			RADAR		10K0E	In short burst very strong
14176	1057	06	01	CHN		RADAR		10K0E	In short burst weak
14176	954	13	01	CHN		RADAR		10K0E	Burst
14180	1154	08	01			RADAR		10K0E	In short burst very strong
14181	1042	14	01			RADAR		14K0E	S7-9
14184	0700	17	01			RADAR		10K0E	In short burst very strong
14184	1012	28	01			RADAR		12K0E	S6, long lasting
14199.5	1000	18	01			UI		400	5 lines
14244	0930	20	01			RADAR		40K0E	Weak S6, long lasting
14285	0855	09	01			RADAR		10K0E	Short bursts
14302	0744	31	01			RADAR		12K0E	
14304	0957	18	01			RADAR		10K0E	In short bursts
14315	0840	17	01			UI		60K0E	abt. 30 sec pattern
14324	0730	17	01			RADAR		10K0E	In short burst very strong
14340	1044	30	01			RADAR		10K0E	S9+ 40SPS
18090	0908	22	01			RADAR		20K0E	S9
18164	1015	28	01			RADAR		12K0E	S4, ended 1018
21176	1120	26	01			RADAR		12K0E	S5
21190	0940	03	01			RADAR		20K0E	1024 disapeared
21385	1105	26	01			RADAR		12K0E	S5-8
29680.3	vt	vd	01			NON			Carrier S9

RSGB; Richard, G4DYA

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3510.0	vt	vd	01			J3E		2K70E	USB 'The Air Horn'
3540.0	2155	21	01			F1A		200	Mostly idle on 3539.9
3548.0	1522	15	01			F1B	50	200	Fixed/Mobile - shared band
3756.0	1831	06	01			J3E		1K70E	USB 'The Pip'
7001.7	vt	03-05	01					3K00E	Unrecognised signal
7010.0	0849	28	01			J7D		2K70E	USB 7008.0 / CIS-12
7012.1	1329	20	01			F1B		250	
7019.0	1505	27	01			F1A		200	
7036.0	1553	24	01			RADAR	66.7	10K0E	FMCW bursts
7057.0	2211	24	01	RUS		RADAR	40	14K0E	Container
7059.0	1809	26	01	RUS		RADAR	40	14K0E	Container
7062.0	1718	21	01	RUS		RADAR	40	14K0E	Container
7063.0	1551	15	01	RUS		RADAR	40	14K0E	Container
7074.39	1143	16	01			A1N			Continuous groups of dashes

RSGB; Richard, G4DYA									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7074.79	vt	vd	01			A1N			Continuous dashes or groups of dashes
7074.99	vt	vd	01			A1N			Continuous dashes or groups of dashes
7075.034	0908	22	01			A1N			Continuous groups of dashes
7080.0	vt	20-24	01	ISR	4XZ	A1A	~20		
7089.0	1232	28	01			J7D		2K70E	USB 7087.0 / CIS-12
7091.0	1718	21	01	RUS		RADAR	40	14KOE	Container
7106.0	1435	12	01	RUS		RADAR	40	14KOE	Container. Ceased at 1437z
7106.0	1817	26	01			RADAR	50	10KOE	FMCW bursts
7120.0	1718	21	01	RUS		RADAR	40	14KOE	Container
7122.0	vt	vd	01	RUS	RDL	F1B	50	200	Ident in F1A
7130.0	1441	24	01			RADAR	66.7	10KOE	FMCW bursts
7131.0	1556	15	01	RUS		RADAR	40	14KOE	Container
7140.020	1400-1835	dly	01	ERI	VoBM1	A3E			BC. Approx times -varies daily
7141.0	1440	24	01			RADAR	66.7	10KOE	FMCW bursts
7154.0	1505	06	01	RUS		RADAR	40	14KOE	Container
7180.020	1400-1835	dly	01	ERI	VoBM2	A3E			BC. Approx times -varies daily
7182.0	1011	27	01			F1A		200	
7187.0	1813	05	01	RUS		RADAR	40	14KOE	Container
7191.0	1446	01	01	RUS		RADAR	40	14KOE	Container
7193.0	vt	vd	01			F1B		200	
7197.0	1622	16	01	RUS		RADAR	40	14KOE	Container
7199.995	1058-1258	dly	01			A3E		9K00E	BC
10105.0	1046	27	01			RADAR	50	20KOE	
10155.0	1412	04	01			RADAR	50	20KOE	Ceased at 1415z
14010.0	0945	20	01			RADAR	66.7	10KOE	FMCW bursts
14055.0	0852	25	01			RADAR	66.7	10KOE	FMCW bursts
14113.0	0900	22	01			RADAR	50	10KOE	FMCW bursts
14138.0	0927	28	01			RADAR	66.7	10KOE	FMCW bursts
14170.0	0854	27	01			RADAR	66.7	10KOE	FMCW bursts
14183.0	0859	28	01			RADAR	66.7	10KOE	FMCW bursts
14188.0	0817	27	01	RUS		RADAR	40	14KOE	Container
14194.0	0843	28	01	RUS		RADAR	40	14KOE	Container
14221.0	0909	20	01			RADAR	50	10KOE	FMCW bursts
14223.0	0914	19	01			RADAR	50	10KOE	FMCW bursts
14243.0	0848	25	01			RADAR	50	10KOE	FMCW bursts
14244.0	0940	20	01			RADAR	10	40KOE	FMCW
14250.0	0916	19	01			RADAR	50	10KOE	FMCW bursts
14280.0	1007	06, 20, 27	01			H3E		3K50E	USB numbers station, Russian language, same time every Wednesday for several minutes. Audio starts 1010 UTC. RR 5.152?
14292.0	0845	28	01			F1B		500	RR 5.152 ?
14325.0	0844	25	01			RADAR	66.7	10KOE	FMCW bursts
14333.0	0857	28	01			RADAR	50	10KOE	FMCW bursts
14338.0	0940	28	01			RADAR	50	10KOE	FMCW bursts
14342.0	0941	28	01			RADAR	50	10KOE	FMCW bursts
18074.0	0840	28	01	RUS		RADAR	40	14KOE	Container

RSGB; Richard, G4DYA

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
21316.0	1034	27	01	RUS		RADAR	40	14K0E	Container
21438.0	vt	vd	01	RUS	RCV	A1A	~20		

SRAL; Pekka, OH2BLU

kHz		DD	MM	ITU	IDENT	MODE	BD	SH/BW	DETAILS
7 MHz	1400-0545	dly	1	RUS		RADAR	40sps	13k0E	(WebSDR 31d) Kontainer
7 MHz	0515-1600	*	1	RUS		RADAR	10sps	10k0E	*) Days: 3. 4. 5. 7. 9. 13. 15. 16. 26. 27. 28. 29.
7 MHz	1025-1915	*	1	CHN		RADAR	50/67sps	10k0E	*) Days: 6. 7. 8. 10. 26. "Foghorn"
10 MHz	1050-1140	27	1	CYP		RADAR	50sps	20k0	(WebSDR 1d)
10 MHz	0630	5	1	RUS		RADAR	40sps	13k0E	(WebSDR 5d) Kontainer
14 MHz	0600-1300	*	1	RUS		RADAR	40sps	13k0E	*) Days: 12. 13. 14. 22. 26. 27. 28. 30. 31. (WebSDR 13d) Kontainer
14 MHz	0615-0945	*	1	RUS		RADAR	10sps	10k0E	*) Days: 4. 5. 8. 11. 30.
14 MHz	0545-0930	*	1	CHN		RADAR	50/67sps	10k0E	*) Days: 4. 13. 14. 15. 18. 20. 21. 22. 24. 25. 29. 31. "Foghorn"
14 MHz	0830-0915	29	1	CHN		RADAR	10sps	160k0	
18 MHz	0630-1240	*	1	CYP		RADAR	50sps	20k0	*) Days: 2. 6. 11. 14. 16. 20. 21. 22. 23. (WebSDR 7d)
18 MHz	0845-1220	28 29	1	RUS		RADAR	40sps	13k0E	(WebSDR 1d) Kontainer
21 MHz	0630-1030	*	1	CYP		RADAR	50sps	20k0	*) Days: 3. 13. 19. 26. 27. 29. 30. (WebSDR 10d)
21 MHz	1230-1245	1	1	RUS		RADAR	40sps	13k0E	(WebSDR 3d) Kontainer
7010.0	1130-1310/	7 28	1	RUS		J7D	120	2k60E	
7029.0	0945-1030	13	1	RUS		J7D	120	2k60E	
7039.2	0715-1305	*	1	RUS	F	A1A		20H	Beacon, *) days: 1. - 3. 5. 6. 8. 9. 12. - 14. 16. 17. 22. 28.
7039.3	1250-1310	22	1	RUS	K	A1A		20H	Beacon
7039.4	0645-1330	*	1	RUS	M	A1A		20H	Beacon, *) days: 8. 16. 17. 28.
7080.0	h24	*	1	ISR	4XZ	A1A	20	50H	*) Days: 20. - 26.
7089.0	0600-1400	28 29	1	RUS		J7D	120	2k60E	
7090.0	1315-1330	7	1	RUS		F1B		700H	
7111.0	0650-0800/	25	1	RUS		F1B		200H	
7122.0	0800-1505/	*	1	RUS	RDL	F1B/A NON		200H	*) Days: 4. 5. 12. - 15. 19. 20. 22. 23. 28.
7140.0	0450-0700/	dly	1	ERI	VoBM	A3E		9k0	
7140.0	1345-1840/	dly	1	ERI	VoBM	A3E		9k0	

SRAL; Pekka, OH2BLU									
kHz		DD	MM	ITU	IDENT	MODE	BD	SH/BW	DETAILS
7141.0	0420-0545	14	1	RUS		A1A		20H	5F
7142.0	0845-1100	20 29	1	RUS		F1B		150H/ 250H	
7159.0	1000-1100	15	1			F1B		200H	
7170.0	1010	14	1			A1A		20H	5F
7176.0	0900-1025/	28	1	RUS		F1B		250H	
7180.0	0450-0700/	*	1	ERI		A3E		9k0	*) Days: 1. - 13. 15. - 25. 27. - 31.
7180.0	1345-1840/	*	1	ERI		A3E		9k0	*) Days: 1. - 13. 15. - 25. 27. - 31.
7182.0	0515-1145/	27	1	RUS		F1B		200H	
7188.0	0645-1100	*	1	RUS		F1A/B/ NON		250H	*) Days: 7. 10. 18.
7193.0	0845-1445	*	1	RUS		F1A/B/ NON		200H	*) Days: 3. - 6. 9. 14. 18. 19.
7196.0	1015-1105/	28	1	RUS		F1B		200H	
7200.0	1058-1300/	dly	1	TWN	National Unity R.	A3E		9k0	Korean px
14221.0	0500-0630	*	1	KAZ		F1B		200H	*) Days: 11. 13. 14. 15. 21. 27. 29.
14308.0	1040-1400	29	1	RUS		F1B		500H	
21438.0	/0830-1130	*	1	RUS	RCV	A1A	20 wpm	20H	*) Days: 2. - 8. 11. 12. 14. 24. - 29. 31.

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
6994	1529	17	01			RADAR	40	12K0E	OTHR Contayner. Splatter to 7004 kHz
6996	1459	18	01			RADAR	40	12K0E	OTHR Contayner. Splatter to 7006 kHz
6999	1834	19	01			RADAR	41.6	10K0E	Short bursts. "Foghorn"
7001.7	0757	05	01			XXX		ca 3K0E	Unknown digital signal
7009	1748	06	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
7022	1944	10	01			RADAR	40	12K0E	OTHR Contayner
7027	1851	18	01			RADAR	40	12K0E	OTHR Contayner. 2 simultaneous TX on 40m: 7027 + 7059 kHz
7028	1841	05	01			RADAR	40	10K0E	Short bursts. "Foghorn"
7028	1642	20	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
7029	1625	20	01			RADAR	50	10K0E	Short bursts. "Foghorn"
7032	1709	08	01			J7D	120	2K60E	CIS-12
7032	1655	12	01			RADAR	40	12K0E	OTHR Contayner
7034	1537	19	01			RADAR	40	12K0E	OTHR Contayner. 2 simultaneous TX on 40m: 7034 + 7106 kHz
7036	1829	11	01			RADAR	40	12K0E	OTHR Contayner. 2 simultaneous TX on 40m: 7036 + 7107 kHz
7036	1615	31	01			RADAR	50	10K0E	Short bursts. "Foghorn"
7050	0859	13	01			J3E-U			Speech, insults, propoganda, UKR/RUS "radiowar"
7050	1540	18	01			RADAR	40	12K0E	OTHR Contayner

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7050	1535	19	01			RADAR	41.6	10K0E	Short bursts. "Foghorn"
7055	0748	04	01			J3E-L			Speech, music, loops, propaganda, UKR/RUS "radiowar". Often
7058	1151	09	01			J3E-L			Music loops, insults, propaganda,, UKR/RUS "radiowar"
7058	1734	31	01			RADAR	40	12K0E	Othr contayner
7059	1851	18	01			RADAR	40	12K0E	OTHR Contayner. 2 simultaneous TX on 40m: 7027
+	7059	13	01			J3E-L			Music, speech, UKR/RUS "radiowar"
7064	1527	17	01			RADAR	40	12K0E	OTHR Contayner. 2 simultaneous TX on 40m: 7064 + 7193 kHz
7065	1849	20	01			RADAR	40	12K0E	OTHR Contayner
7066	1632	31	01			RADAR	40	12K0E	OTHR Contayner
7057	1722 vt*	01 vd*	01			RADAR	40	12K0E	OTHR Contayner. *Also on 09/11, 1613 UTC. 31/01, 1532 UTC
7058	1451	19	01			RADAR	40	12K0E	OTHR Contayner
7058	1635	20	01			RADAR	41.6	10K0E	Short bursts. "Foghorn"
7059	2142 vt*	09 vd*	01			RADAR	40	12K0E	OTHR Contayner. *Also on 18/12, 1827 UTC
7060	1847	06	01			RADAR	40	12K0E	OTHR Contayner
7062	2001	07	01			RADAR	50	10K0E	Short bursts. "Foghorn"
7062	0819 vt*	13 vd*	01			J3E-U			Numbers station "S06s / Russian lady". RUS lang, female voice. USB + carrier. *Every Wednesday
7062	1652 vt*	vd*	01			RADAR	40	12K0E	OTHR Contayner. *Also on 21/01, 1623 UTC
7063	1517	19	01			RADAR	40	12K0E	OTHR Contayner
7064	1620	17	01			RADAR	40	12K0E	OTHR Contayner. 3 simultaneous TX on 40m: 7064 + 7086 + 7118 kHz
7074.4	0707 vt	18 vd	01			A1N			CW. Series of 16 dashes
7074.8	0751	04	01			A1N			CW. Series of 16 dashes. Often
7075	0841 vt	02 vd	01			A1N			CW. Series of 16 dashes or continuous dashes. Almost daily
7080	1612 vt*	20 vd*	01			A1A	20		"VVV DE 4XZ" ISR navy. Also encrypted QTCs. All day long.*Also on 21, 22
7084	1609	17	01			RADAR	40	12K0E	OTHR Contayner
7086	1620	17	01			RADAR	40	12K0E	OTHR Contayner. 3 simultaneous TX on 40m: 7086 + 7064 + 7118 kHz
7088	0758	31	01			J3E-L			Music
7089	1525 vt*	05 vd*	01			RADAR	40	12K0E	OTHR Contayner. *Also on 19/01, 1708 UTC. 29/11, 0751 UTC
7089	0611	28	01			J7D	120	2K60E	CIS-12. With carrier on 7087.6 kHz
7091	1847	11	01			RADAR	50	10K0E	Short bursts. "Foghorn"
7091	1710	21	01			RADAR	40	12K0E	OTHR contayner. 3 simultaneous TX on 40m: 7091 + 7061 + 7121 kHz
7092	1832	05	01			RADAR	50	20K0E	Short bursts. "Foghorn"
7095	1828	05	01			RADAR	40	10K0E	Short bursts. "Foghorn"
7095	1942	10	01			RADAR	41.6	10K0E	Short bursts. "Foghorn"
7100	2000	07	01			RADAR	50	10K0E	Short bursts. "Foghorn"
7102	1720	29	01			RADAR	50	10K0E	Short bursts. "Foghorn"
7106	1715 vt*	01 vd*	01			RADAR	40	12K0E	OTHR Contayner. *Also on 19/01, 1537 UTC

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7107	1735 vt*	06 vd*	01			RADAR	40	12K0E	OTHR Contayner. *Also on 11/01, 1819 UTC
7111	1537	09	01			RADAR	40	12K0E	OTHR Contayner
7112	1526	18	01			RADAR	40	12K0E	OTHR Contayner. 2 simultaneous TX on 40m: 7112 + 7170 kHz
7114	1710	12	01			RADAR	40	12K0E	OTHR Contayner
7115	1550 vt*	02 vd*	01			RADAR	40	12K0E	OTHR Contayner. *Also on 08/01, 1728 UTC
7116	1548	05	01			RADAR	40	12K0E	OTHR Contayner
7117	1816	27	01			RADAR	40	12K0E	OTHR Contayner
7118	1620	17	01			RADAR	40	12K0E	OTHR Contayner. 3 simultaneous TX on 40m: 7118 + 7086 + 7064 kHz.
7118	1928	20	01			RADAR	40	12K0E	OTHR Contayner
7120	1759 vt*	01 vd*	01			RADAR	40	12K0E	OTHR Contayner. *Also on 07/01, 1955 UTC
7120	1900	10	01			RADAR	50	10K0E	Short bursts. "Foghorn"
7121	1631	21	01			RADAR	40	12K0E	OTHR Contayner. 2 simultaneous TX on 40m: 7121 + 7063 kHz
7122	0926	08	01		RDL	F1B / F1A	50	200H	Often
7122	1511	18	01			RADAR	40	12K0E	OTHR Contayner
7123	1856	18	01			RADAR	40	12K0E	OTHR Contayner. 3 simultaneous TX on 40m: 7123 + 7027 + 7059 kHz
7127	1849	03	01			RADAR	41.6	10K0E	Short bursts. "Foghorn"
7127	1532 vt*	04 vd*	01			RADAR	40	12K0E	OTHR Contayner. *Also on 05/01, 1557 UTC
7130	1704	11	01			RADAR	40	12K0E	OTHR Contayner
7130	1856	20	01			RADAR	50	10K0E	Short bursts. "Foghorn"
7131	1836	17	01			RADAR	40	12K0E	OTHR Contayner
7132	1849	06	01			RADAR	40	12K0E	OTHR Contayner. 2 simultaneous TX on 40m: 7132 + 7060 kHz
7139.3	1712	13	01			G7D		ca 2K50E	CHN-30
7140	1713	19	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
7140	1855	20	01			RADAR	50	10K0E	Short bursts. "Foghorn"
7140.02	1523 vt	09 vd	01			A3E			BC "VoBM 1". Often
7143	1614	17	01			RADAR	50	10K0E	Short bursts. "Foghorn"
7145	1721	19	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
7148	1427	18	01			RADAR	40	12K0E	OTHR Contayner
7160	1845	03	01			RADAR	50	10K0E	Short bursts. "Foghorn"
7163	1932	01	01			RADAR	40	12K0E	OTHR Contayner
7164	1858	03	01			RADAR	40	12K0E	OTHR Contayner
7167	1511	29	01			RADAR	40	12K0E	OTHR Contayner
7169.3	1813	05	01			G7D		ca 2K50E	CHN 30
7170	1526	18	01			RADAR	40	12K0E	OTHR Contayner. 2 simultaneous TX on 40m: 7170 + 7112 kHz
7174	1825	13	01			RADAR	40	12K0E	OTHR Contayner
7180	1709	29	01			RADAR	40	12K0E	OTHR Contayner
7180.02	1524	08	01			A3E			BC. "VoBM 2". Often
7185	1915	04	01			RADAR	50	10K0E	Short bursts. "Foghorn"
7187	1811	05	01			RADAR	40	12K0E	OTHR Contayner
7187	1851	20	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
7187.5	0846	19	01			J7D		3K0E	CIS-12. Idling

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
7188	1818	02	01			RADAR	40	12K0E	OTHR Contayner
7193	0813	04	01			F1B	50	200H	Often
7193	1521	17	01			RADAR	40	12K0E	OTHR Contayner
7194	1520	19	01			RADAR	40	12K0E	OTHR Contayner. 2 simultaneous TX on 40m: 7063 + 7194 kHz
7194.6	1825	27	01			XXX		500H	Broken system
14001.5	0911 vt*	21 vd*	01			XXX	2400	2K40E	ISR hybrid modem. *Also on 27/01, 0736 UTC
14005.8	0936	21	01			J7D		3K0E	CIS-12. Idling
14008.5	0927	20	01			XXX		1K20E	DPRK-1200
14010	0932	20	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14018	0814	06	01			RADAR	50	10K0E	OTHR
14022	0814	20	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14023	0749	18	01			RADAR	20	10K0E	OTHR bursts. BD 30 sec to 1 min.
14030	0931	13	01			XXX	40	50K0E	Radar?
14041	0823	06	01			RADAR	41.6	10K0E	Short bursts. "Foghorn"
14041	0758	21	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14045	0803 vt	07 vd	01			XXX		ca 2K0E	Unknown digital signal. Drifting. Often around 14045 kHz. Broken system? Often
14050	0736	22	01			RADAR	40	12K0E	OTHR Contayner
14050	0908	22	01			RADAR	10	16K0E	Wide band OTHR
14055	0733	18	01			RADAR	50	10K0E	Short bursts. "Foghorn"
14056	0808	21	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14060	0852	19	01			RADAR	50	10K0E	Short bursts. "Foghorn"
14088	0729	31	01			F1B	75	1K0E	
14091	0843	20	01			RADAR	50	10K0E	Short bursts. "Foghorn"
14096	0737	20	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14097	0846	30	01			RADAR	50	10K0E	Short bursts. "Foghorn"
14102	0701	06	01			RADAR	50	10K0E	OTHR
14103	0750 vt*	22 vd*	01			RADAR	66.66	10K0E	Short bursts. "Foghorn". *Also on 30/01, 0848 UTC
14104	0851	13	01			RADAR	50	10K0E	Short bursts. "Foghorn"
14105	0852	20	01			RADAR	10	16K0E	Wide band OTHR
14111	0846	20	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14112	0643	28	01			RADAR	40	12K0E	OTHR Contayner
14105	0834	19	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14112	0857	22	01			RADAR	50	10K0E	Short bursts. "Foghorn"
14113	0934	27	01			RADAR	50	10K0E	Short bursts. "Foghorn"
14115	0854	18	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14116	0912	10	01			F1B	50	250H	
14117	0904	21	01			RADAR	41.6	10K0E	Short bursts. "Foghorn"
14119	0911	27	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14124	1343	07	01			RADAR	40	12K0E	OTHR Contayner
14128	0740	05	01			RADAR	50	10K0E	Short bursts. "Foghorn"
14133	0932	27	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14140	0812	29	01			RADAR	66.66	10K0EE	Short bursts. "Foghorn"
14142	0853	01	01			RADAR	41.6	10K0E	Short bursts. "Foghorn"
14149	0832	30	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14158	1230	02	01			RADAR	40	12K0E	OTHR Contayner

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14162	0852	29	01			RADAR	50	ca 12KOE; max: 26 KOE	OTHR, short TX (abt 30 sec - 2 min) and fast QSY to 14192, 14267, 14179, 14214 kHz and more. QRT: 0911 UTC
14165	0847	18	01			RADAR	41.6	10KOE	Short bursts. "Foghorn"
14165	0904	30	01			RADAR	66.66	10KOE	Short bursts. "Foghorn"
14174	0741	31	01			RADAR	66.66	10KOE	Short bursts. "Foghorn"
14175	0822	22	01			RADAR	66.66	10KOE	Short bursts. "Foghorn"
14170	0846	27	01			RADAR	66.66	10KOE	Short bursts. "Foghorn"
14177	0732	05	01			RADAR	50	10KOE	OTHR
14181	0722	07	01			RADAR	50	10KOE	OTHR
14185	0849	18	01			RADAR	66.66	10KOE	Short bursts. "Foghorn"
14186	0715	18	01			F1B		500H	
14188	1420 vt*	02 vd*	01			RADAR	40	12KOE	OTHR Contayner. Also on 27/01, 0824 UTC
14190	0839	29	01			RADAR	10	160KOE	Wide band OTHR
14194	0736	28	01			RADAR	40	12KOE	OTHR Contayner. 2 systems side by side: 14194 + 14208 kHz
14197	0807	22	01			RADAR	40	12KOE	OTHR Contayner
14198	0906	19	01			RADAR	40	12KOE	OTHR Contayner
14203	0713	12	01			RADAR	66.66	10KOE	Short bursts. "Foghorn"
14205	0746	31	01			RADAR	66.66	10KOE	Short bursts. "Foghorn"
14208	0736	28	01			RADAR	40	12KOE	OTHR Contayner. 2 systems side by side: 14208 + 14194 kHz
14210	0755	21	01			RADAR	41.6	10KOE	Short bursts. "Foghorn"
14211	0914	18	01			RADAR	66.66	10KOE	Short bursts. "Foghorn"
14216	0763	30	01			RADAR	66.66	10KOE	Short bursts. "Foghorn"
14218	0820	28	01			RADAR	66.66	10KOE	Short bursts. "Foghorn"
14221	0814	20	01			RADAR	50	10KOE	Short bursts. "Foghorn"
14223	0808	19	01			RADAR	66.66	10KOE	Short bursts. "Foghorn"
14230	0858	09	01			RADAR	10	160KOE	OTHR
14239	0758	29	01			RADAR	66.66	10KOE	Short bursts. "Foghorn"
14241	0930	08	01			RADAR	50	10KOE	OTHR
14243	0821	12	01			RADAR	66.66	10KOE	Short bursts. "Foghorn"
14245	0650	06	01			RADAR	50	10KOE	Short bursts. "Foghorn"
14245	0939	20	01			RADAR	10	40KOE	OTHR
14247	0901	01	01			RADAR	40	10KOE	Short bursts. "Foghorn"
14248.5	0909	13	01			F1B	600	600H	DPRK-FSK 600 ARQ
14250	0750	27	01			RADAR	50	10KOE	Short bursts. "Foghorn"
14253	0756 vt*	20 vd*	01			50	10KOE		OTHR. *Also on 22/01, 0807 UTC
14257	0723	18	01			RADAR	10	40KOE	OTHR
14258	0753	18	01			RADAR	66.66	10KOE	Short bursts. "Foghorn"
14259	0837	04	01			RADAR	50	10KOE	OTHR
14260	0743	03	01			RADAR	50	10KOE	OTHR
14260	0831	05	01			RADAR	50	20KOE	Short bursts. "Foghorn"
14262	0818	29	01			RADAR	66.66	10KOE	Short bursts. "Foghorn"
14276	0835	05	01			RADAR	50	10KOE	Short bursts. "Foghorn"
14279	0753	19	01			RADAR	50	10KOE	Short bursts. "Foghorn"
14280	1006 vt*	13 vd*	01			J3E-U/L		CA7K50E	Numbers station "S06s / Russian lady". RUS lang. Female voice. DSB + carrier. *Every Wednesday

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
14281.5	1009	27	01			XXX		600H	Unknown digital signal transmitted during 14280 kHz "S06s" TX, and ended at the same time, 1016 UTC. Related?
14286	0840	20	01			RADAR	20	10K0E	OTHR
14292	0940	01	01			RADAR	50	10K0E	Short bursts. "Foghorn"
14292	0854	28	01			F1B	75	500H	
14301	1006	11	01			RADAR	40	12K0E	OTHR Contayner
14302	0721	31	01			RADAR	40	12K0E	OTHR Contayner
14303	0755	18	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14304	0736	18	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14305	0826	29	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14307	0713	22	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14308	0801	21	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14308	0654 vt*	28 vd*	28	01		F1B	75	500H	*Also on 29/01, 0755 UTC
14311	0904	04	01			RADAR	41.6	10K0E	Short bursts. "Foghorn"
14311	0841	11	01			RADAR	50	10K0E	Short bursts. "Foghorn"
14312	0927	27	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14313	0727	27	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14317	0742 vt*	20 vd*	01			RADAR	66.66	10K0E	Short bursts. "Foghorn". *Also on 21/01, 0901 UTC. 22/01, 0804 UTC
14318.5	0805 vt*	13 vd*	01			F1B	600	600H	DPRK-FSK 600 ARQ. *Also on 19/01, 0805 UTC. 31/01, 0718 UTC
14321	0729	05	01			RADAR	50	10K0E	Short bursts. "Foghorn"
14321	0818	30	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14321	0741	19	01			RADAR	41.6	10K0E	Short bursts. "Foghorn"
14327	0838	20	01			RADAR	41.6	10K0E	Short bursts. "Foghorn"
14330	0813	05	01			RADAR	50	10K0E	Short bursts. "Foghorn"
14330	0810 vt*	13 vd*	01			RADAR	66.66	10K0E	Short bursts. "Foghorn". *Also on 29/01, 0814 UTC
14332	0719 vt*	18 vd*	01			RADAR	66.66	10K0E	Short bursts. "Foghorn". *Also on 29/01, 0800 UTC
14333	0701	28	01			RADAR	50	10K0E	Short bursts. "Foghorn"
14334	0812	13	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14336	0805	22	01			radar	66.66	10k0e	Short bursts. "Foghorn"
14337	0823	04	01			RADAR	41.6	10K0E	Short bursts. "Foghorn"
14339	0851	04	01			RADAR	41.6	10K0E	Short bursts. "Foghorn"
14340	0854	13	01			RADAR	41.6	10K0E	Short bursts. "Foghorn"
14340	0845	30	01			RADAR	40	12K0E	OTHR Contayner
14340	0732	27	01			J7D	120	2K60E	CIS-12. Idling. Then traffic from 0810 UTC on.
14341	0731	05	01			RADAR	50	10K0E	Short bursts. "Foghorn"
14344	0813	31	01			RADAR	66.66	10K0E	Short bursts. "Foghorn"
14345	0914	13	01			RADAR	41.6	10K0E	Short bursts. "Foghorn"
18165	1316	29	01			RADAR	25	20K0E	OTHR Pluto
18068	0704	28	01			RADAR	50	10K0E	Short bursts. "Foghorn"
18167	0755	19	01			RADAR	40	12K0E	OTHR Contayner
18170	1040 vt*	11 vd*	01			RADAR	50	20K0E	OTHR Pluto. *Also on 28/10, 0827 UTC
18170	0707	22	01			RADAR	25	20K0E	OTHR Pluto
21085	0933	06	01			RADAR	40	12K0E	OTHR Contayner
21110	0803	29	01			RADAR	25	20K0E	OTHR Pluto

URE; Gaspar, EA6AMM									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
21135	0905	03	01			RADAR	25	20K0E	OTHR Pluto
21151.9	0859	07	01			XXX		ca 4K0E	Unknown digital signal. Long lasting.
21190	0939	03	01			RADAR	25	20K0E	OTHR Pluto
21310	0914	30	01			RADAR	25	20K0E	OTHR Pluto
21350	0914	20	01			RADAR	25	20K0E	OTHR Pluto
21355	0916	30	01			RADAR	25	20K0E	OTHR Pluto
21390	0832 vt*	03 vd*	01			RADAR	25	20K0E	OTHR Pluto. *Also on 30/01, 0852 UTC
21430	0849 vt*	02 vd*	01			RADAR	25	20K0E	OTHR Pluto. *Also on 30/01, 0821 UTC
21438	0908 vt	01 vd	01		RCV	A1A	19		RCV QTCs. Daily

USKA; Peter, HB9CET									
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
80m band informational only! - Amateur co-primary, shared with other also primary allocated services !									
3510.0 USB	1648	26	01			?		ca 3k0E	unid Chirp sound, long lasting, daily
3527.0	2240	28	01			F1B		200H	often
3532.0	2339	18	01			B7D	75 Bd	ca 6k0E	LINK11 CLEW DSB or ISB Mode Legal, shared band
3680.0	1649	26	01			F1B		250H	
6980.0	1542	22	01	CHN		Radar	10 sps	160k0E	OTHR; partially in 40m band
6999.8	1601	10	01					ca 2k7	probably PSK8 2400 MIL188-xxx: partially in 40m band
7000.0	1131	03	01			xxx		ca 3k0E	
7000.0	2127	03	01			J3E-U		2k10E	unid language; sounds asian
7004.0	1816	22	01			FMOP	40 sps	12k0E	OTHR; Contayner
7010.0	0904	28	01			J7D	12x120	2k70E	CIS12; BPSK or QPSK
7012.08	1321	20	01			F1B		250H	
7025.0	2217	28	01			Radar	50 sps	10k0E	OTHR
7027.0	1815	20	01			F1B	50	250H	
7028.0	2145	18	01			FMOP	40 sps	12k0E	OTHR; Contayner
7034.0	2208	20	01			Radar	50 sps	10k0E	OTHR
7038.0	1434	22	01			FMOP	40 sps	12k0E	OTHR; Contayner
7050.0	0836	27	01			J3E-L		2k70E	Russian-Ukraininen Radio war daily
7051.0	1612	27	01	CHN		Radar	10 sps	160k0E	OTHR; partially in 40m band
7054.0	1751	27	01			F1B	50	200H	often
7055.0	1644	26	01			J3E-L		2k70E	Russian-Ukraininen Radio war daily
7057.0	2213	24	01			FMOP	40 sps	12k0E	OTHR; Contayner
7058.0	2003	20	01			FMOP	40 sps	12k0E	OTHR; Contayner
7061.0	1756	22	01			FMOP	40 sps	12k0E	OTHR; Contayner
7062.0	1933	21	01			FMOP	40 sps	12k0E	OTHR; Contayner
7070.0	2007	24	01	CHN		Radar	10 sps	160k0E	OTHR
7074.4	1817	27	01			A1N		10H	dashes only;
7080.0	2205 1746	20 21	01	ISR	4XZ	A1A		10H	OTC's. TDoA: ISR, area of Haifa vvv vvv vvv de 4XZ 4XZ 4XZ
7083.0	1637	28	01			Radar	50 sps	10k0E	OTHR
7089.0	0902	28	01			J7D	12x120	2k70E	CIS12; BPSK or QPSK
7091.0	1936	21	01			FMOP	40 sps	12k0E	OTHR; Contayner
7095.0	1955	24	01			G1D PSK-8	2400	ca 2k70E	1800Hz single tone Modem

USKA; Peter, HB9CET

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS
7097.0	1440	22	01	CHN		Radar	10 sps	160k0E	OTHR
7098.0	1608	23	01	CHN		Radar	10 sps	160k0E	OTHR
7100.0	1612	23	01	CHN		Radar	10 sps	160k0E	OTHR
7103.0	1534	22	01	CHN		Radar	10 sps	160k0E	OTHR
7106.0	2150	18	01	CHN		Radar	10 sps	160k0E	OTHR
7106.0	1554	19	01			Radar	40 sps	12k0E	OTHR; Contayner
7108.0 LSB	1746	02	01	CHN		PSK-4	30x60Bd	ca 2k50E	CHN30 (PRC30); Burst system; tone spacing 75 Hz; Preamble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz
7110.0	2021	20	01			FMOP	66.66 sps	10k0E	OTHR, Foghorn
7112.0	2237	18	01			Radar	10 sps	160k0E	OTHR
7117.0	1759	27	01			Radar	40 sps	12k0E	OTHR; Contayner
7121.0	1544	20	01			Radar	40 sps	12k0E	OTHR; Contayner
7122.0	1808	22	01	RUS		F1B	50	200H	sometimes F1A FSK-CW;
7122.0	1810	22	01	RUS	RDL	F1A	50	200H	almost daily
7130.0	2246	24	01			FMOP	66.66 sps	10k0E	OTHR; Foghorn
7136.0	2225	28	01			Radar	50 sps	10k0E	OTHR
7139.0	1604	23	01			FMOP	40 sps	12k0E	OTHR; Contayner
7140.0	1547	19	01	ERI	VOBM	A3E		ca 9k0E	BC: Voice of the broad Masses 1 daily
7144.0	1627	26	01			Radar	50 sps	10k0E	OTHR
7152.0	2225	20	01			Radar	50 sps	10k0E	OTHR
7153.0	1511	30	01			Radar	10 sps	160k0E	OTHR
7164.0	1543	26	01			FMOP	40 sps	12k0E	OTHR; Contayner
7169.0	1514	22	01			FMOP	40 sps	12k0E	OTHR; Contayner
7171.0 LSB	1611 1731 1807	19 21 27	01	CHN		PSK-4	30x60Bd	ca 2k50E	CHN30 (PRC30); Burst system; tone spacing 75 Hz; Preamble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz often
7180.0	1547	19	01	ERI	VOBM2	A3E		ca. 9k0E	BC: Voice of the broad Masses2, often
7180.0	2213	28	01			Radar	50 sps	10k0E	OTHR
7182.0	0943	27	01			F1A		200H	short CW-FSK, then carrier at 7186.9
7187.0	1100	19	01			J7D	12x120Bd	2k70E	CIS12
7187.0	2018	20	01			FMOP	66.66 sps	10k0E	OTHR, Foghorn
7191.0	1633	26	01			FMOP	40 sps	12k0E	OTHR; Contayner
7192.9	0931	03	01			A1N		ca 10H	Jammer; dots only, stupid and illegal
7193.0	0931 1054	03 19	01		RDL	F1B	50	200H	often
7193.1	1049	19	01			A1N		ca 10H	Jammer; dots only, stupid and illegal
7196.0	2010	20	01			MFSK8	125 Bd	1750	ALE, MIL 188-141A
7196.0	1515	22	01			FMOP	40 sps	12k0E	OTHR; Contayner
7200.0 (7199.97)	1210	18	01		National Unity Radio	A3E		ca. 9k0E	BC, Asian language (Korean); (daily 1100 - 1300 utc)
7205.0	1751	02	01		CRI ?	A3E		ca 20k0E	BC: splatter down to 7195 kHz! China Radio International ?
14001.5	0952	21	01	ISR		G1D PSK8	2400	ca 2k60E	MIL 188-110A mod (Hybrid); pre- amble 4 tones, PSK4 75Bd; 450Hz spacing
14051.0	0859	27	01			FMOP	66.66 sps	10k0E	OTHR, Foghorn
14089.0	1005	27	01			Radar	10 sps	160k0E	OTHR, short sequences only
14133.0	0936	27	01			FMOP	66.66 sps	10k0E	OTHR, Foghorn
14135.0	0945	21	01			FMOP	66.66 sps	10k0E	OTHR; Foghorn
14138.0	0941	28	01			FMOP	66.66 sps	10k0E	OTHR, Foghorn

USKA; Peter, HB9CET

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS
14183.0	0956	28	01			Radar		12k0E	OTHR
14185.0	1018	28	01			Radar	40 sps	12k0E	OTHR;
14188.0	0827	27	01			FMOP	40 sps	12k0E	OTHR; Contayner
14194.0	0921	28	01			FMOP	40 sps	12k0E	OTHR; Contayner
14280.0	1014	27	01			H3E		ca 9k0	Number station; female voice; russian
14292.0	0910	28	01			F1B	75	500H	strong (-70dBm)
14308.0	0916 1108	28 29	01			F1B	75	500H	
14332.0	0944	28	01			FMCW	50 sps	ca 10k0E	OTHR
14340.0	0824	27	01			J7D	12x120	2k70E	CIS12 (idling); BPSK or QPSK,
18158.0	1219	29	01			FMOP	40 sps	12k0E	OTHR; Contayner
21160.0	0954	29	01			FMCW	50 sps	20k0E	OTHR; UK base Cyprus
21316.0	1034	27	01			FMOP	40 sps	12k0E	OTHR; Contayner
21438.0	0925 0928	03 26	01		RCV	A1A		10H	TDoA: Area of Sevastopol daily
28860.0	0930	26	01	IRN		?	150 + 313 sps	ca 45k	OTHR, Bursts; long lasting, sweep rate alternating almost daily

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

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD /sps	SH / BW	DETAILS
3527.0	2007	20	01	CIS		F1B			Revs
3527.0	2004	27	01	CIS		F1B			Revs/Ptr
3548.0	1614	17	01			F1B			Ptr
3548.0	1956	27	01			F1B			Ptr
3557.0	2020	12	01	CIS	4EII	A1A			KCZF de 4EII QTC 587 49 12 2304 587 = 083 = ATHBU 5BL
3557.0	2009	20	01			F1B			Ptr
3602.0	1608	17	01	CIS		F1B			Ptr
3792.0	2010	20	01	CIS		F1B			Revs/Ptr
3796.0	2021	20	01	CIS		A1A			5BL ending 349 K
3797.0	2014	12	01	CIS	ARG6	A1A			5BL ending 083 K
7050.0	1021	17	01	UKR		J3E-L			Loop; political slogans; TDoA: west-UKR
7055.0	0933	17	01	UKR		J3E-L			Loop; political slogans
7055.0	1501	20	01	UKR		J3E-L			Political comments
7080.0	1848	20	01	ISR	4XZ	A1A			Endless tape call 4XZ
7080.0	1913	20	01	ISR	4XZ	A1A			5 letter groups TDoA Israel
7186.0	1458	20	01			RADAR		20K0E	CF; weak
7196.0	1027	28	01			F1B			Ptr
14292.0	1031	28	01			F1B			Ptr
21438.0	1037	26	01	RUS	RCV	A1A			RIP90 de RCV QTC 468 45 5 0044 468 = Nawarea 032 3 Karty 32205
21438.0	1043	26	01	RUS	RCV	A1A			RIP90 de RCV QTC 382 31 30 1256 382 = Nawip 033 1736 Karta 32225

Many thanks to all our valued helpers.

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