Monitoring Report Dezember 2020

Intruder im Dezember

Auch der letzte Monat im 2020 bestätige, was wir tagtäglich schon in den Vormonaten beobachtet hatten, nämlich die zahllosen lästigen Überhorizontradare (OTHR) auf vielen Bändern, vorwiegend auf 20m und 40m, zunehmend aber auch auf 17m und 15m. Vor allem das Russische OTHR "Contayner" wie auch OTHR's aus China beeinträchtigten den Amateurfunk mehr und mehr teils ganz massiv, zeitweise waren gleich 3-4 Stationen im selben Band anzutreffen. Mein Spanischer Kollege (EA6AMM) meldet, dass rund 66% all seiner Beobachtungen OTHR waren.

Weiterhin markant weniger anzutreffen waren die einst zahlreichen CIS FSK Emissionen wie auch die charakteristischen CIS12 Signale. (CIS = Commonwealth of Independent States).

Seit einiger Zeit ist von 1100-1258 UTC auf 7200 kHz täglich ein Rundfunksender aktiv der mit seinem unteren Seitenband ca 5 kHz des 40m Bandes massiv beeinträchtigt. Mehrere TDoA Messungen deuten auf Taiwan hin.

Ebenfalls täglich ist auf 7140 kHz der Rundfunksender "Voice of Broad Masses (VOBM1)" aus Eritrea zu hören, vermehrt gleichzeitig auch auf 7180 kHz (VOBM2).

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS
6995.0	1649	01	12			FMOP	40 sps	12k0E	OTHR; Contayner; partially in 40m band
7004.0	1809	17	12			FMOP	40 sps	12k0E	OTHR; Contayner
7012.0	1554	20	12			FMOP	40 sps	12k0E	OTHR; Contayner
7021.0	1534	20	12			FMOP	41 sps	10k0E	OTHR; Burstsystem
7032.0	1503 2301	01 10	12			FMOP	40 sps	12k0E	OTHR; Contayner often
7038.0	2318	17	12			FMOP	40 sps	12k0E	OTHR; Contayner
7039.2	1732	16	12		F	A1A		10H	Cluster Beacon "F": Vladivostok daily weak in HB; strong via SDR rx in JA
7039.827	1041	02	12	F	FDE2	A1A			Endless loop, "vvv de fde2 ar"
7042.0	1734	16	12			FMOP	50 sps	10k0E	OTHR
7047.0	1027	06	12			J7D	12x120 Bd	2k70E	CIS12; BPSK or QPSK
7049.0	1552	11	12			FMOP	40 sps	12k0E	OTHR; Contayner
7050.0	1241	16	12			J3E-L		2k70E	Russian-Ukraininen Radio war
7054.0	1648	25	12			F1B		200H	
7055.0	1530 1257 0912	03 16 30	12			J3E-L		2k70E	Russian-Ukraininen Radio war daily
7058.0	1758 1821	01 17	12			FMOP	40 sps	12k0E	OTHR; Contayner
7059.0	2152	28	12			FMOP	40 sps	12k0E	OTHR; Contayner; strong -60dBm
7062.0	0831	30	12			J3E-U		ca. 2k1	Russian; Number station often
7063.0	1605	22	12			FMOP	40 sps	12k0E	OTHR; Contayner
7072.0	0918	17	12			J7D	12x120 Bd	2k70E	CIS12; BPSK or QPSK
7097.0	1507	07	12			FMOP	40 sps	12k0E	OTHR; Contayner
7100.0	2139	29	12			FMOP	40 sps	12k0E	OTHR; Contayner
7105.0	1610	10	12			FMOP	40 sps	12k0E	OTHR; Contayner
7106.0	1611	27	12			FMOP	40 sps	12k0E	OTHR; Contayner
7108.0	2320	18	12			FMOP	40 sps	12k0E	OTHR; Contayner
7110.0 **LSB**	1656	25	12			PSK-4	30x60Bd	ca 2k50E	CHN30 (PRC30); Burst system; tone spacing 75 Hz; Preamble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz
7112.0	1633	27	12			FMOP	40 sps	12k0E	OTHR; Contayner
7119.0	1700	25	12			J7D	12x120 Bd	2k70E	CIS12; BPSK or QPSK

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS
7122.0	0807 1536 0828	02 20 28	12			F1B	50	200H	almost daily
7122.0	2336	04	12			FMOP	40 sps	12k0E	OTHR; Contayner
7123.0	1559	22	12			FMOP	40 sps	12k0E	OTHR; Contayner
7124.0	2239 1524	06 15	12			FMOP	40 sps	12k0E	OTHR; Contayner
7128.0	2311	06	12			FMOP	40 sps	12k0E	OTHR; Contayner
7129.0	1534 1550	07 16	12			FMxx	50 sps	10k0E	OTHR
7130.0	1816	01	12			FMOP	66.66 sps	10k0E	OTHR
7138.0	1508	07	12			FMOP	40 sps	12k0E	OTHR; Contayner
7140.0	1634	12	12	ERI	VOBM 1	A3E		ca 9k0E	BC: Voice of the broad Masses 1 daily
7151.0	2313	06	12			FMOP	40 sps	12k0E	OTHR; Contayner
7157.0	1602	10	12			FMOP	40 sps	12k0E	OTHR; Contayner
7159.0	1607	19	12			FMOP	40 sps	12k0E	OTHR; Contayner
7162.0	1311	12	12			x		2k60E	idling, only 12 tones + pilot at 3300Hz
7166.0		29	12			J7D	12x120 Bd	2k70E	CIS12; BPSK or QPSK
7167.0	1805	17	12			FMOP	40 sps	12k0E	OTHR; Contayner
7168.0	1517	04	12			FMOP	40 sps	12k0E	OTHR; Contayner
7171.0 **LSB**	1727 1636	10 25	12			PSK-4	30x60Bd	ca 2k50E	CHN30 (PRC30); Burst system; tone spacing 75 Hz; Preamble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz
7171.0	1643	18	12			FMCW	48 sps	10k0E	OTHR
7175.0	2234	30	12			FMxx	50 sps	10k0E	OTHR; Bursts; modulation not analyzed
7179.0	0839	29	12			F1B		200H	often
7180.0	0633	28	12			N0N		10H	long lasting carrier
7180.021	1413 1641	28 30	12	ERI	VOBM 2	A3E		ca 9k0E	BC: Voice of the broad Masses; weak
7188.0	0645	28				F1B		250H	
7191.0	1643	01	12			FMOP	40 sps	12k0E	OTHR; Contayner
7191.0	1643 2253	01 28	12			FMOP	40 sps	12k0E	OTHR; Contayner often
7193.0	1431 0801	01 14	12		RDL	F1A		200H	FSK-CW; numbers often
7193.0	0929 1113	08 14	12		RDL	F1B	50	200H	daily
7196.0	1635	18	12			FMOP	40 sps	12k0E	OTHR; Contayner
7197.0	vt 0631	vd 28	12	TUR	various	MFSK8	125 Bd	1750	ALE, MIL 188-141A; daily TUR Emergency Network **legal?**
7198.0	1554	12	12			J7D	12x120Bd	2k70E	CIS12; BPSK
7199.996	1243 1214	03 30	12			A3E		ca. 9k0E	BC: "National Unity Radio"; daily
14011.0	1131	12	12			F1B		250H	
14026.0	1305	18	12			J7D	12x120Bd	2k70E	CIS12; BPSK or QPSK
14028.0	0815	14				FMxx	50	10k0E	OTHR
14091.0	0903	14	12			J7D	12x120 Bd	2k70E	CIS12; BPSK or QPSK
14101.0	1120	06	12			FMOP	40 sps	12k0E	OTHR; Contayner
14110.0	1434	03	12			FMOP	40 sps	12k0E	OTHR; Contayner
14155.0	1431	12	12			FMOP	40 sps	12k0E	OTHR; Contayner
14223.0	0907	17	12			FMxx		10k0E	OTHR
14234.0	0855	14	12			FMxx	48	10k0E	OTHR
14245.0	0824	09	12			FMxx	47 sps	20k0E	OTHR

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS
14251.0	0827	14				FMxx	41 sps	10k0E	OTHR
14280.0	1011	09	12			A3E		ca 9k0	Number station; female voice; Russian
14308.0	0834	14	12			FMOP	66.66 sps	ca 10k0E	OTHR
14316.0	0851	07	12			FMOP	66.66 sps	ca 10k0E	OTHR
14317.0	0839	14	12			FMOP	66.66 sps	ca 10k0E	OTHR
14321.0	0853	07	12			FMCW	50 sps	ca 10k0E	OTHR
14328.0	0843	28	12			FMCW	50 sps	ca 10k0E	OTHR
14331.0	0828	28	12			FMCW	48 sps	ca 10k0E	OTHR
14340.0	0834	09	12			FMxx	66.66 sps	ca 10k0E	OTHR
14341.0	0813	02	12			FMOP	42 sps	ca 10k0E	OTHR
18081.0	0831	02	12			FMCW	50	ca 20k0E	OTHR
18108.560	0757	09				F1B	600 Bd	600H	FSK ARQ
18164.0	0943	21	12			FMOP	40 sps	12k0E	OTHR; Contayner
18165.0	1321	30	12			FMCW	25 sps	20k0	OTHR
21120.0	0912	17	12			FMCW	50 sps	20k0E	OTHR
21160.0	0908	14	12			FMOP	40	40k0E	OTHR; Contayner
21335.0	0836	30	12			FMxx		30k0E	OTHR
21421.0	1034	06	12			FMCW	25 sps	20k0E	OTHR; most probably UK base Cyprus
21438.0	0846	29	12		RCV	A1A		10H	TDoA: Area of Sevastopol daily
28860.0	0827	02	12	IRN		x	150 + 313 sps	ca 45k	OTHR, Bursts; long lasting, sweep rate alternating almost daily

Errors and omissions excepted

Digital transmissions: Frequency mostly center frequency (CF); otherwise indicated (LSB or USB).

Abbreviations:

aka = also known as **| BC** = Broadcast | **BD** = Baud, or also Burst duration | **BRI** = Burst repetition interval | **BW** = Bandwidth**| ca** = approximate | **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 | **PRC** = **CHN** People´s Republic of China | **RF** = Radio frequency = VFO | **SH** = Shift (Hz) |**sps** = sweeps per second | **TDoA** Time difference of arrival | **ui** = unid = unidentified | **vd** = various dates | **vt** = various times | **x** or **xxx** is used for unknown/not classified.

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