Monitoring Bericht September 2023

Den September kann man weitgehend als "copy/ paste" vom August bezeichnen, waren doch so wie bis anhin vorwiegend dieselben Stationen festzustellen. Es ist müssig, detailliert darauf näher einzugehen. Nebst den alltäglichen massiven Beeinträchtigungen durch das russische "Contayner" Überhorizont Radar, waren die China zugeschriebenen OTHR's ebenfalls fast täglich anzutreffen. Ebenso Dauergast im 10m Band war das Iranische OTHR. Auf Grund der aktuellen Ausbreitungsbedingungen war im 10m Band ab und zu auch Taxifunk in FM festzustellen.

Hinweis: Würde man alle mehrfach, oft täglich gehörten Intruder jedes einzelne Mal auflisten, liessen sich locker ≥ 10 Seiten oder mehr füllen. Beispielsweise täglich CW auf 21438.0 kHz + FSK auf 18107.0, ergäben beide zusammen allein schon 60 Einträge! Ich begnüge mich daher mit den Hinweisen: "daily", "almost daily" oder "often".
Auch wäre der zeitliche Aufwand unverhältnissmässig hoch um täglich stets möglichst alle Intruder zu erfassen.

HB9CET ϟ

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** Peole´s Republic of China | **RF** = Radio frequency = VFO | **SH** = Shift (Hz) |**sps** = sweeps per second | **TDoA** Time difference of arrival | **ui** = unid = unidentified | **x** or **xxx** is used for unknown/not classified.

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

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS	
7000.0	2157	06	09			J7D	12x120 Bd	2k70E	CIS12	often
7000.0	2221	07	09			N0N			Long lasting carrier	often
7006.5	1158	12	09			F1B	50 Bd	250H	FSK	
7016.0	2157 2104	07 08	09			F1B	50 Bd	200H	FSK; maybe CIS 36-50	
7016.0	0911	13	09			F1B	50 Bd	250H	FSK	
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 and Music	almost daily
7055.0 **LSB**	0854	25	09			J3E-L		ca 3k0E	RUS-UKR Radio War; Voice and Music	almost daily
7057.0	1217	20	09			J7D PSK2-A	12x120 Bd	2k70E	CIS12	
7060.0	1226 2139	05 21	09			J7D	12x120 Bd	2k70E	CIS12; long lasting, over weaks,	daily
7072.0	1248	29	09			J7D	12x120 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 (7088.0 USB)	often
7090.00 **USB**	1654	16	09		111	MFSK-8 J7D	8x 125 Bd	1k750	ALE MIL188-141A; To: 222	often
7090.0	2128	21	09			FMOP	40 sps	12k0E	OTHR; Contayner	
7091.0	2155	12	09			FMOP	40 sps	12k0E	OTHR; Contayner	
7096.0	2102	21	09			FMOP	40 sps	12k0E	OTHR; Contayner	

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS
7107.0 LSB	2117	16	09			PSK-4	30x 60 Bd	2k50E	CHN30 (PRC30); Burst system; Preamble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz; weak, fading
7111.0 LSB	2113	16	09			PSK-4	30x 60 Bd	2k50E	CHN30 (PRC30); Burst system; Preamble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz
7112.0	1159	08	09			J7D	12x120 Bd	2k70E	CIS12
7114.0	2134 2215	06 07	09	RUS	RDL	F1A		200H	CW FSK
7114.0	2140 2224 2122	06 07 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	12x120 Bd	2k70E	CIS12; with additional carrier at 7016.0 kHz
7126.0	2115	21	09			Radar	ca 2.6 sps	30k	Coastal radar; BW 30kHz
7133.0	2125	16	09			FMOP	40 sps	12K0E	OTHR; Contayner
7137.0	1624 2048	11 20	09			F1B	50	200H	FSK often
7160.0	1628	19	09			Radar	ca 2.6 sps	30k	Coastal radar; BW 30kHz
7171.0 LSB	2120	16	09			PSK-4	30x 60 Bd	2k50E	CHN30 (PRC30); Burst system; Preamble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz daily
7179.0	0910	20	09			F1B	75 Bd	200H	FSK often
7200.0	1231 1328	25 29	09			A3E		ca 9k0E	BC: National Unity Radio daily
14008.0	0600	20	09			F1B	50 Bd	500H	FSK; often
14026.0	0900	20	09			J7D	12x120 Bd	2k70E	CIS12: idling only
14091.0	0943	14	09			OFDM	30 Bd	ca 2k80E	OFDM, tone spacing 44.4Hz
14091.0	1022	22	09			J7D	12x120 Bd	2k70E	CIS12
14098.5	1225 1227	20 25	09			ARQ FSK	600 Bd	600H	DPRK ARQ FSK system often
14118.5	1110	25	09			ARQ FSK	600 Bd	600H	DPRK ARQ FSK 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	250H	FSK
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 / FSK	600 Bd	600H	DPRK ARQ FSK system often
14242.0	1204	20	09			J7D PSK-2	12x120 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
14298.5	1201	21	09			ARQ / FSK	600 Bd	600H	DPRK ARQ FSK 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

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS
14330.0	1352	05	09			FMCW	66.66 sps	10k0E	OTHR; Bursts
18080.0	0613	20	09			A3E		ca 9k0E	BC: "Sound of Hope" often
18107.0	1256	05	09		RDL	F1A		200H	CW FSK often
18107.0	1251	05 20	09		RDL	F1B	36+50Bd	200H	CIS36-50 almost daily
18110.0	1914	11	09			A3E			BC: voice and music;: spanish, weak, fading
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
21438.0	0918 0851	08 25	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			150 + 313 sps	ca 45k	OTHR; Bursts; long lasting, sweep rate alternating almost daily
28960.0	1118	11	09	IRN			150 + 313 sps	ca 45k	OTHR; Bursts; long lasting, sweep rate alternating often
29450.0	1318	29	09	IRN		OTHR	150+ 313 sps	ca 45k0	OTHR; Bursts: sweep rate alternating often
29500.0	1154	20	09	IRN		OTHR	150+ 313 sps	ca 45k0	OTHR; Bursts: sweep rate alternating often

Errors and omissions excepted

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USKA Monitoring System (Intruder watch)
https://www.uska.ch
Member of IARU Monitoring System R1
https://www.iaru-r1.org/spectrum/monitoring-system/

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[07:54:07] [FRQ 21395.00] [To: BN3 ] [His BER: 11]
[07:55:08] [FRQ 21395.00] [Call] [From: AN1 ] [To: BN3] [His BER: 21]
[07:58:08] [FRQ 21395.00] [Sounding THIS IS] [From: AN1 ] [His BER: 21]
[07:59:06] [FRQ 21395.00] [To: BN3 ] [His BER: 12]
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Bild 1: 19.9.2023: ALE MIL 188-141A (Analyse mit KIWI SDR)

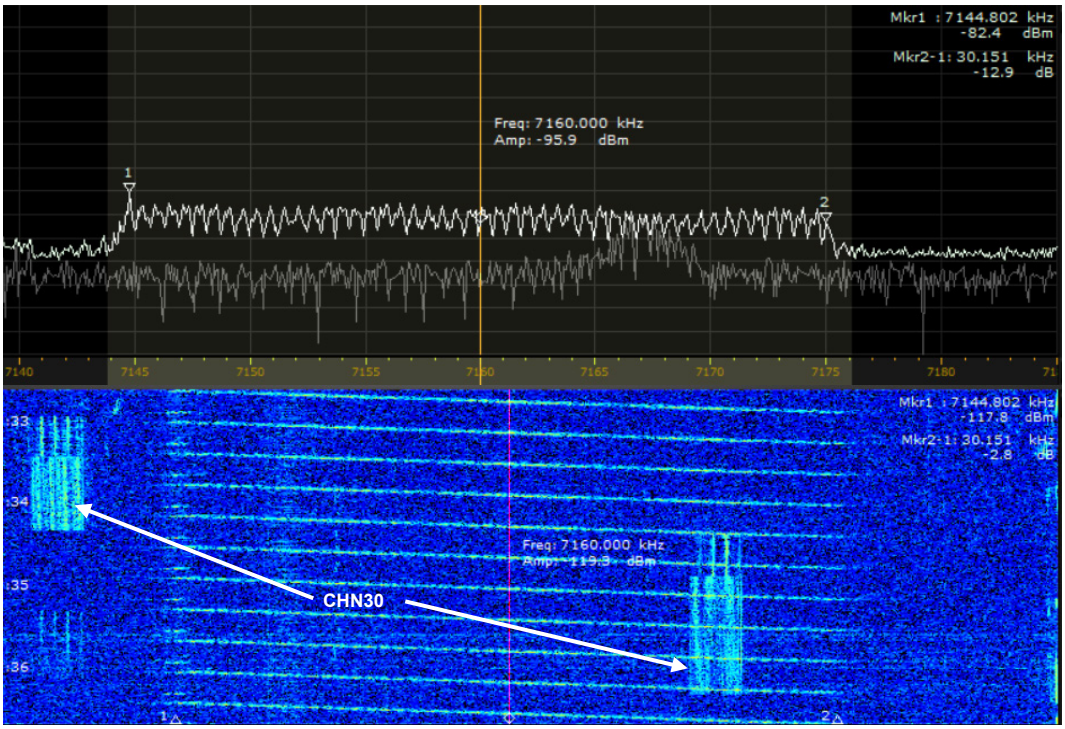

Bild 2 + 3: 19.9.2023: Coastal Radar 2.6 sps, BW 30kHz;
Im Sonagram sieht man zudem zwei CHN 30 (aka PRC 30) Signale.

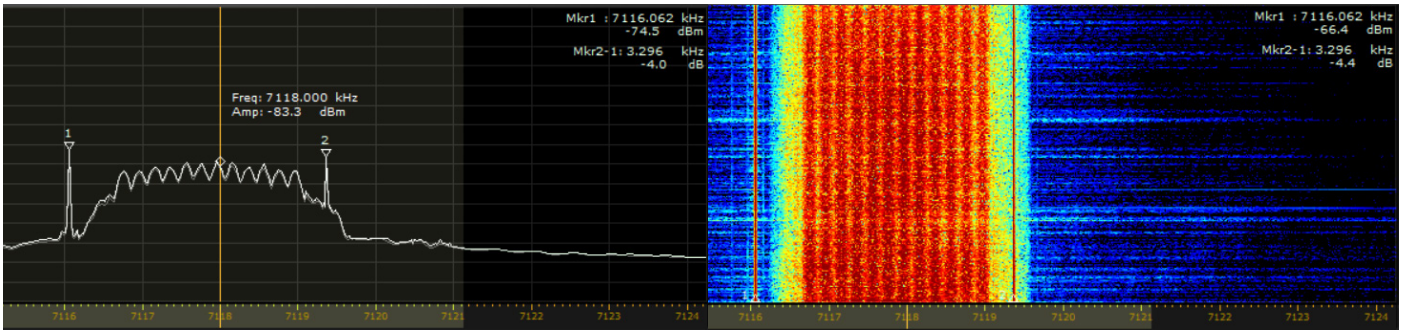

Bild 4 + 5: 8.9.2023: CIS12 mit einem zusätzlichem Träger bei 7116.0 kHz (Marker 1)

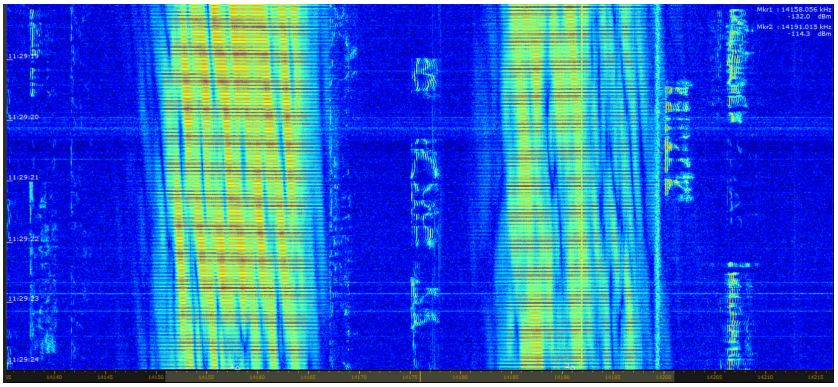

Bild 6: 25.9.2023: 2x OTHR Contayner : 14158.0 und 14191.0 kHz (CF)