

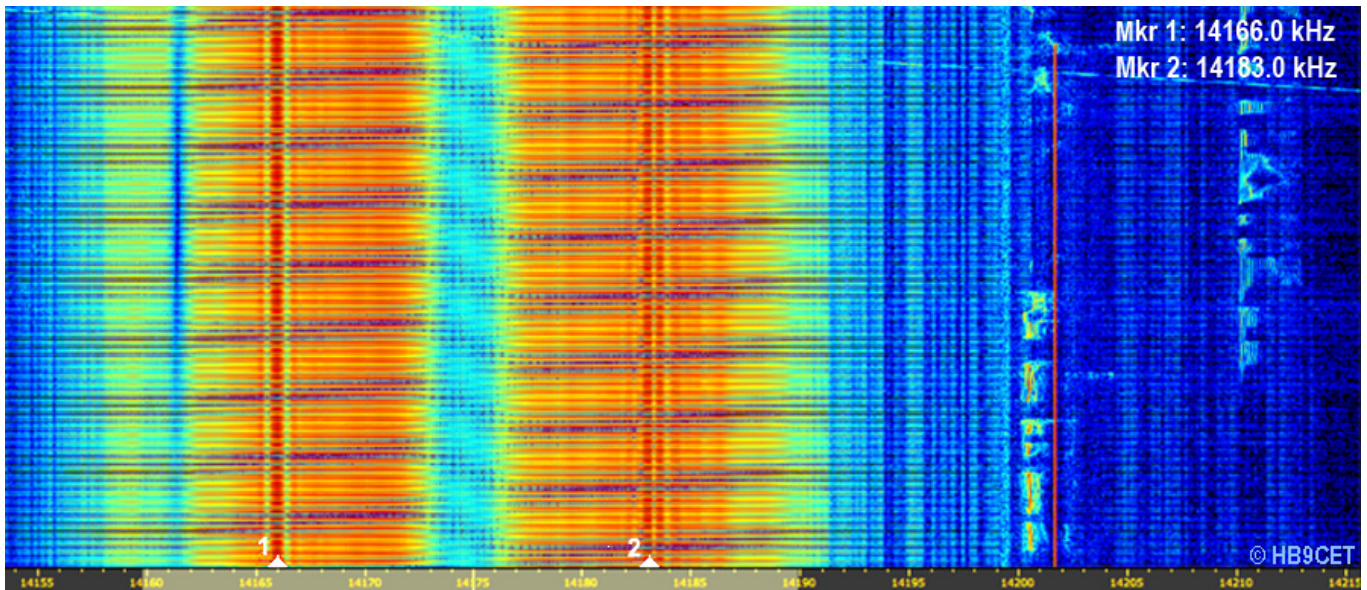


Monitoring Bericht Juni 2023

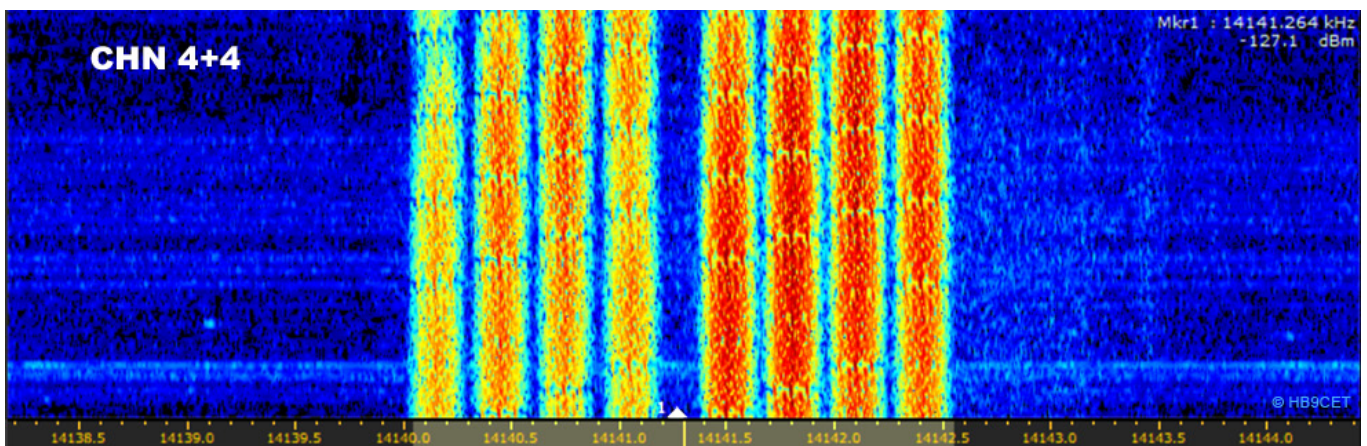
Der Juni widerspiegelte die Beobachtungen des Vormonats, wen wundert's? Die vorwiegend militärischen Intruder (= Bandeindringlinge) waren täglich anzutreffen.

Wiederholt fiel das russische Contayner OTHR gleich im Doppelpack auf, d.h. zwei Stationen fast nebeneinander. siehe Bild:

Nebst dem Contayner OTHR war auch das britische Radar auf Zypern fast täglich zu beobachten. Erstaunlich oft fiel auf verschiedenen Frequenzen im 40m Band, vor allem in den Abend- und Nachtstunden, auch das CHN30 (aka PRC 30) Data Link System auf. Mit starkem Signal war am 8. Juni ebenfalls ein CHN 4+4 Modem zu beobachten.



2x OTH Radar "Contayner" auf 14166 und 14183 kHz (CF)



CHN 4+4 Modem: 2 Gruppen mit je 4 Tönen, 300Hz Abstand, QPSK moduliert 75Bd; Abstand in der Mitte: 450Hz

HB9CET ↗

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** = unidentified | **x** or **xxx** is used for unknown/not classified.

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



USKA - Bandwacht

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kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS
7004.8	2112	28	06			G1D PSK8	2400 Bd	ca 2k5	short bursts; 1800 Hz single tone modem MIL 188-xxx often
7010.0	1439	07	06			J7D	12x120 Bd	2k70E	CIS12; idling
7023.0	2138	19	06			FMOP	40 sps	12k0E	OTHR; Contayner
7050.0 LSB	1639	16	06			J3E-L		ca 3k0E	RUS-UKR Radio War almost daily
7051.7	2134 0810	01 30	06			X	X	1k20E	unid; maybe TDL -Tactical data link ?
7054.0	1434	07	06			F1B	50 Bd	200H	FSK, daily since very long time
7055.0 LSB	1649	06	06			J3E-L		ca 3k0E	RUS-UKR Radio War; Music daily
7065.0	2140	16	06			FMOP	40 sps	12k0E	OTHR; Contayner
7137.0	2034	21	06			F1B	50	200H	FSK often
7141.0 LSB	2137 2148	19	06			PSK-4	30x 60 Bd	2k50E	CHN30 (PRC30); Burst system; Pre- amble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz
7147.0 LSB	2143	19	06			PSK-4	30x 60 Bd	2k50E	CHN30 (PRC30); Burst system; Pre- amble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz
7155.0 LSB	2139	15	06			PSK-4	30x 60 Bd	2k50E	CHN30 (PRC30); Burst system; Pre- amble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz
7171.0 LSB	2056 2128	12 15	06			PSK-4	30x 60 Bd	2k50E	CHN30 (PRC30); Burst system; Pre- amble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz
7198.0 LSB	2143	15	06			PSK-4	30x 60 Bd	2k50E	CHN30 (PRC30); Burst system; Pre- amble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz
14000.0	1448	06	06		CRI	A3E			China Radio International. intermo- dulation from 13855 + 13710 kHz daily
14001.8	0929 0740	01 06	06			PSK-8	2400Bd	2k40E	STANAG 4285; long lasting often
14008.0	0903 0822	01 08	06			F1B	50 Bd	250H	FSK almost daily
14067.92	0752	19	06			F1B	75 Bd	333H	FSK, strange shift!
14089.0	0826	20	06			FMOP	40 sps	12K0E	OTHR; Contayner
14098.5	0731	06	06			ARQ PSK	600 Bd	600H	DPRK PSK ARQ system often
14140.0	1246	19	06			FMOP	40 sps	12K0E	OTHR; Contayner
14141.3	1819z	08	06			QPSK	75 Bd	ca 2k4	CHN 4+4; 8 tones PSK-4 modulated, spacing 300 Hz, except the 4th and 5th tone with 450 Hz spacing (Bild)
14152.0	1155	21	06			FMOP	40 sps	12K0E	OTHR; Contayner
14166.0	1605	25	06			FMOP	40 sps	12k0E	OTHR: Contayner (Bild)
14179.0	1605	19	06			FMOP	40 sps	12K0E	OTHR; Contayner
14182.0	0755	08	06			FMOP	40 sps	12K0E	OTHR; Contayner
14183.0	1609	25	06			FMOP	40 sps	12k0E	OTHR; Contayner (Bild)
14184.0	0829	08	06			FMOP	40 sps	12K0E	OTHR; Contayner
14192.0	0900 0654	01 29	06			F1B	50 Bd	200H	FSK; TDoA area of Moscow often
14198.5	0626	02	06			ARQ PSK	1200	1k20E	DPRK PSK ARQ system often
14199.0	0812	20	06			FMOP	40 sps	12K0E	OTHR; Contayner



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kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS
14201.7	1307	19	06			16x PSK-2	16x 75 Bd	ca 2k50E	CHN-16 (aka PRC 16), weak strong via JA rx
14219.0	0947	08	06			FMOP	40 sps	12K0E	OTHR; Contayner
14221.0	2207	01	06			F1B	50 Bd	200H	FSK;
14222.0	1251	19	06			FMOP	40 sps	12K0E	OTHR; Contayner
14241.0	0941	08	06			FMOP	40 sps	12K0E	OTHR; Contayner
14259.0	0810	08	06			FMOP	40 sps	12K0E	OTHR; Contayner
14262.0	0728	06	06			FMOP	40 sps	12K0E	OTHR; Contayner
14295.0	1042	30	06			FMOP	40 sps	12K0E	OTHR; Contayner
14298.5	0736 1216	06 09	06			ARQ PSK	600 + 1200 Bd	600H 1k20H	DPRK PSK ARQ system often
14299.0	0736	15	06			FMOP	40 sps	12K0E	OTHR; Contayner
14324.0	1651	04	06			FMCW	66.66 sps	10k0E	OTHR; Bursts
14333.00 USB	1703	14	06		BC2	MFSK-8 J7D	8x 125 Bd	1k750	ALE MIL188-141A; To: DB5
18060.0	0953	30	06	G		FMCW	50 sps	20k0E	OTHR; UK base Cyprus; partially in 17m band often
18117.0	1543	06	06			FMOP	40 sps	12K0E	OTHR; Contayner
18118.0	0749	18	06			FMOP	40 sps	12K0E	OTHR; Contayner
18165.0	1104	09	06	G		FMCW	50 sps	20k0E	OTHR; UK base Cyprus
21110.0	1533	06	06	G		FMCW	25 sps	20k0E	OTHR; UK base Cyprus often
21200.0	1642	16	06			A1A			fast dots only, long lasting
21265.0	0919	08	06	G		FMCW	50 sps	20k0E	OTHR; UK base Cyprus
21270.0	0854	01	06	G		FMCW	50 sps	20k0E	OTHR; UK base Cyprus
21300.0	0939	21	06	G		FMCW	50 sps	20k0E	OTHR; UK base Cyprus
21364.0	0814	18	06	G		FMCW	50 sps	10k0E	OTHR; continuos, long lasting
21395.0	0921	04	06	G		FMCW	25 sps	20k0E	OTHR; UK base Cyprus
21397.0	1500	07	06			FMCW	50 sps	10k0E	OTHR; bursts
21423.0	0941	30	06			FMOP	40 sps	12k0E	OTHR; Contayner; long lasting
21438.0	0924	04	06	RUS	RCV	A1A		10H	Area of Sevastopol; since years daily
28082.0	1238	18	06			F1B	51 Bd	300H	GPS Fishery buoy, short bursts
28085.0	1602	17	06			F1B	51 Bd	300H	GPS Fishery buoy, short bursts
28100.0	1639	17	06			F1B	51 Bd	300H	GPS Fishery buoy, short bursts
28161.54	0701	01	06		A	A1A			Fishery Buoy
28610.0	1236	06	06	G		FMCW	25 sps	20k0E	OTHR; UK base Cyprus
28860.0	0926 1255	04 07	06	IRN			150 + 313 sps	ca 50k	OTHR; Bursts; long lasting, sweep rate alternating almost daily
29445.0	0808	06	06	IRN		OTHR	150+ 313 sps	ca 45k0	OTHR; Bursts: sweep rate alternating
29500.0	0946	06	06	IRN		OTHR	150+ 313 sps	ca 45k0	OTHR; Bursts: sweep rate alternating often
29525.0	0910	01	06			F1B	81.9 Bd	ca 140Hz	FSK, oceanographic data buoy

Errors and omissions excepted

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USKA Monitoring System (Intruder watch)
<https://www.uska.ch>

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<https://www.iaru-r1.org/spectrum/monitoring-system/>