

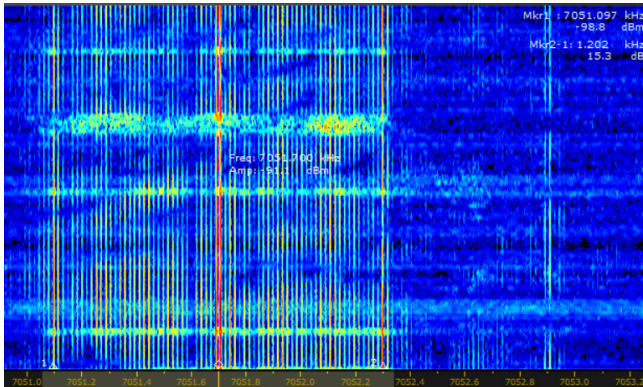


## Monitoring Bericht Mai 2023

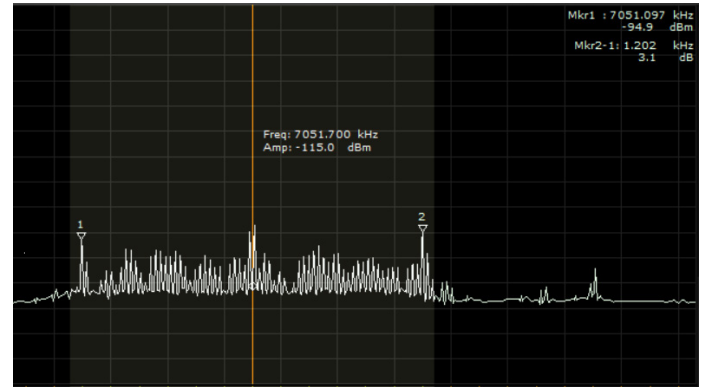
Der Mai widerspiegelte vorwiegend die Beobachtungen der Vormonate. Die wie immer meist militärischen Intruder (= Bandeindringlinge) waren stets irgendwo anzutreffen. Seit dem Monatswechsel zum Juni findet man im 40m Band fast täglich eine unbekannte digitale Emission.

Erste Analysen ergaben ein PSK/FSK moduliertes Signal mit 1200Bd und 1200Hz Bandbreite. Um was für ein System es sich handelt sowie dessen Herkunft versuchen wir derzeit aufzuklären.

HB9CET ↵



Sonagramm mit Perseus SDR



Spektrum mit Perseus SDR

### 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 | **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	2145	18	05			J7D	12x120 Bd	2k70E	CIS12; idling
7051.7	2134	01	06			X	1200 Bd	1k20E	unid signal; long lasting, almost daily
7054.0	1655	02	05			F1B	50 Bd	200H	FSK, daily since very long time
7055.0 LSB	1651	02	05			J3E-L		ca 3k0E	RUS-UKR Radio War; Music daily
7060.0	1246 1415	08	05			J7D	12x120 Bd	2k70E	CIS12 often
7080.0	1702	02	05			F1B	50 Bd	200H	FSK; almost daily
7085.0 USB	2221	31	05			G1D PSK	X	ca 3k0E	RF USB; unid signal; long lasting, fading
7147.0	1701	02	05			J7D	12x120 Bd	2k70E	CIS12
7159.0 DSB	2148	18	05			B7D DQPSK	75 Bd	ca 6k0E	LINK11 CLEW DSB/ISB mode often
7182.0	2151	18	05			J7D	12x120 Bd	2k70E	CIS12; idling
7199.0	0903	23	05			J7D	12x120 Bd	2k70E	CIS12; idling
14008.0	0835 1007	04 11	05			F1B	50 Bd	250H	FSK
14182.0	0817	11	05			FMOP	40 sps	12K0E	OTHR; Contayner
14192.0	0907	23	05			F1B	50 Bd	200H	FSK; often
14193.0	1006	11	05			FMOP	40 sps	12K0E	OTHR; Contayner



# USKA - Bandwacht

Member of IARU Monitoring System R1

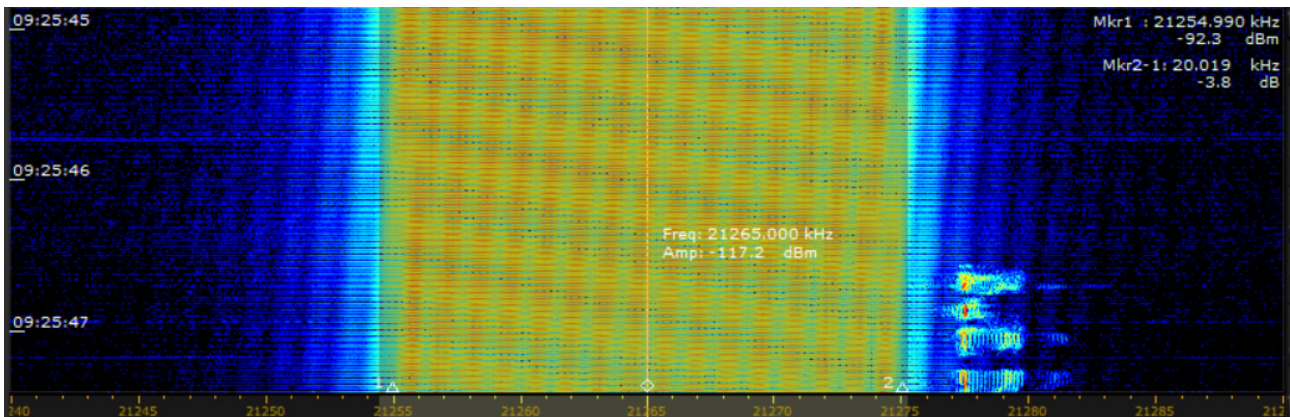
kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS
14221.0	2231	31	05			F1B	50 Bd	200H	FSK;
14298.63	0737	12	05			ARQ PSK	600 Bd	600H	DPRK PSK ARQ system often
14355.0	1450	30	05			FMOP	40 sps	12K0E	OTHR; Contayner
18060.0	0721	02	05	G		FMCW	50 sps	20k0E	OTHR; UK base Cyprus; partially in 17m band
18107.0	1006	02	05			F1B	36+50Bd	200H	CIS36-50 almost daily
21000.0	1033	18	05			J3E-U		ca 2k70E	Spanish, Fishermen almost daily
21099.0	0752	12	05			FMCW	50 sps	10k0E	OTHR; bursts
21110.0	0719	10	05	G		FMCW	25 sps	20k0E	OTHR; UK base Cyprus
21132.0	0726	05	05			FMCW	62sps	10k0E	OTHR; bursts
21156.0	0758	12	05			FMCW	66.66 sps	10k0E	OTHR; bursts
21169.0	1010	02	05			FMCW	62sps	10k0E	OTHR; bursts
21285.0	0824	14	05	G		FMCW	25 sps	20k0E	OTHR; UK base Cyprus
21343.0	0756	12	05			FMCW	50 sps	10k0E	OTHR; bursts
21370.0	0749	18	05	G		FMCW	50 sps	20k0E	OTHR; UK base Cyprus
21386.0	0800	12	05			FMCW	66.66 sps	10k0E	OTHR; bursts
21422.0	1003	11	05			FMOP	40 sps	12k0E	OTHR; continuos: Contayner
21424.0	1635	02	05			F1B	50 Bd	400H	FSK, weak; 2 <sup>nd</sup> of 10712.0 kHz
21425.0	1249	05	05			FMOP	40 sps	12k0E	OTHR; continuos: Contayner
21438.0	1420	31	05	RUS	RCV	A1A		10H	Area of Sevastopol; since years daily
28500.0	0828	11	05	IRN			307 + 870 sps	ca 45k	OTHR; Bursts; long lasting sweeprate alternating
28960.0	0730	05	05	IRN			150 + 313 sps	ca 50k	OTHR; Bursts; long lasting, sweep rate alternating almost daily
29000.0	1239	01	05	IRN			307 + 870 sps	ca 45k	OTHR; Bursts; long lasting, sweep rate alternating often
29350.0	0748	18	05	IRN		OTHR	150+ 313 sps	ca 45k0	OTHR; Bursts: sweep rate alternating

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/>



OTHR, FMCW: 50 sps, BW 20 kHz; UK base Cyprus