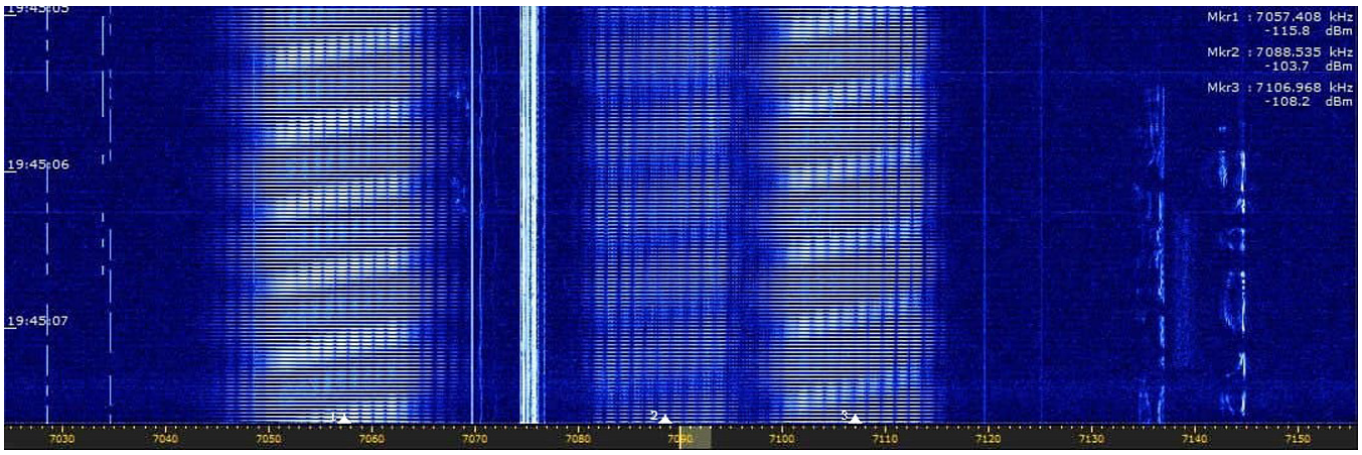
Monitoring Report November 2020

Im November hatten wir ab und zu bessere Ausbreitungsbedingungen, teilweise mit Bandöffnungen bis in's 10 m Band. So hörte man auf 10 m vereinzelt Signale von Fischereibojen oder das iranische OTH Radar. Die unsäglich lästigen Überhorizont Radare (OTHR) waren täglich anzutreffen und belegten regelmässig auch das 40m Band, teilweise gleich zu Dritt. Auch das Chinesische OTH Radar (Nickname "Foghorn") war ebenfalls ein täglicher Störenfried. Im November signifikant abgenommen hatten hingegen sowohl die einst zahlreichen (CIS) FSK Emissionen wie auch die charakteristischen CIS12 Signale. Das bereits im Oktober auf 7159 kHz aufgetauchte LINK 11 CLEW Signal war auch im November wiederholt zu beobachten, teils im SSB Modus (G7D), teils im DSB oder ISB Modus (B7D).



Erneut 3 x OTH Radar bei 7057, 7088 und 7107 kHz, je 12 kHz breit - Quelle + Bild ©DK2OM

Intruder im November

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS
3525.0	1757	30	11			B7D	75 Bd	ca 6k0E	LINK 11 CLEW, DSB/ISB mode often **Legal, co-allocated band**
6999.0	2315	12	11			FMOP	40 sps	12k0E	OTHR; Contayner; partially in 40m band
7000.0	1729	16	11			J3E-U		2k10E	unid language
7000.0 **USB**	1657	17	11			ev. G1D		ca 2k30E	unident digital signal, bursts
7000.0	1618	18	11			FMOP	40 sps	12k0E	OTHR; Contayner; partially in 40m band
7001.5	1735	16	11			F1B		600H	sounds like Pactor calling
7008.0	0709	20	11			F1B		250H	
7009.0	1821	19	11			FMOP	50 sps	10k0E	OTHR
7030.0	2227	12	11			J7D	120 Bd	2k70E	CIS12; BPSK or QPSK
7030.0	1630	17	11			FMOP	40 sps	12k0E	OTHR; Contayner often
7039.2	2314	19	11	RUS	F	A1A		10H	Cluster Beacon "F": Vladivostok daily weak in CH; strong via SDR rx in JA
7039.4	2314	19	11	RUS	M	A1A		10H	Cluster Beacon "M": Magadan daily weak in CH; strong via SDR rx in JA
7050.0	1631	18	11			FMOP	40 sps	12k0E	OTHR; Contayner
7059.0	1713	20	11			FMOP	40 sps	12k0E	OTHR; Contayner
7060.0	2220	12	11			FMOP	40 sps	12k0E	OTHR; Contayner
7062.0	1440	24	11			FMOP	40 sps	12k0E	OTHR; Contayner
7064.0	1824	19	11			FMOP	40 sps	12k0E	OTHR; Contayner

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS
7065.0	1700	30	11			FMOP	40 sps	12k0E	OTHR; Contayner
7074.995	1049	19	11			A1A			CW; only dashes (as a 0) almost daily
7085.0	1622	25	11			FMOP	40 sps	12k0E	OTHR; Contayner
7088.0	2334	30	11			FMOP	40 sps	12k0E	OTHR; Contayner
7093.0	1728	30	11			FMOP	40 sps	12k0E	OTHR; Contayner
7095.0	1531	23	11			FMOP	40 sps	12k0E	OTHR; Contayner
7100.0	1609	16	11			FMOP	40 sps	12k0E	OTHR; Contayner
7104.0	1658	20	11			FMOP	47 sps	ca 10k0E	OTHR
7104.0	1543	25	11			FMOP	40 sps	12k0E	OTHR; Contayner
7113.0	1628	20	11			FMOP	40 sps	12k0E	OTHR; Contayner
7118.0	1602	16	11			J7D	12x120 Bd	2k70E	CIS12; BPSK or QPSK
7121.0	1651	30	11			FMOP	40 sps	12k0E	OTHR; Contayner
7122.0	1627	18	11			F1B	50	250H	somtimes F1A FSK-CW; often
7131.0	1807	03	11			FMOP	40 sps	12k0E	OTHR; Contayner
7134.0	1535	23	11			FMXX	50 sps	10k0E	OTHR
7141.0 **LSB**	1632 1652	17 18	11			PSK-4	30x60Bd	ca 2k50E	CHN30 (PRC30); Burst system; tone spacing 75 Hz; Preamble 4x PSK4 60Bd, spacing 600Hz; Pilot tone at 450Hz
7143.0	2301 2333	19 23	11			FMOP	40 sps	12k0E	OTHR; Contayner
7158.0	2340	12	11			FMOP	40 sps	12k0E	OTHR; Contayner
7159.0 **USB**	2349	17	11			G7D	75 Bd	ca 2k50E	LINK11 CLEW SSB Mode
7159.0	1731	30	11			B7D	75 Bd	ca 6k0E	LINK11 CLEW DSB or ISB Mode
7161.0	1816	19	11			FMOP	50 sps	10k0E	OTHR
7164.0	2229	19	11			FMOP	66.66 sps	10k0E	OTHR; Foghorn
7170.0	1604	16	11			FMOP	40 sps	12k0E	OTHR; Contayner
7175.0	1627	25	11			FMOP	40 sps	12k0E	OTHR; Contayner
7181.0	1658	30	11			FMOP	40 sps	12k0E	OTHR; Contayner
7187.0	0013	18	11			FMOP	40 sps	12k0E	OTHR; Contayner
7188.0	2251	01	11			FMOP	40 sps	12k0E	OTHR; Contayner
7189.0	1504	24	11			FMOP	40 sps	12k0E	OTHR; Contayner, 1505 QRT
7191.0	1537	25	11			FMOP	40 sps	12k0E	OTHR; Contayner
7193.0	0854	19	11			F1B	50	200H	jammed
7193.100	0854	19	11			A1N		10H	fast dots: Jammer: stupid and illegal
7196.0	1602	16	11			FMOP	40 sps	12k0E	OTHR; Contayner
7197.0	2301	30	11	TUR	various	MFSK8	125 Bd	1750	ALE, MIL 188-141A; daily TUR Emergency Network **legal?**
7198.0	1544	18	11			J7D	12x120 Bd	2k70E	CIS12; BPSK
7200.0	1239	11	11			A3E		ca. 8k0E	BC, Asian language daily
14026.0	1116	03	11			J7D	12x120 Bd	2k70E	CIS12 BPSK or QPSK
14098.5	1311	30	11			F1B/ARQ	600 Bd	600H	ARQ system
14110.0	0832	23	11			FMxx	50 sps	20k0E	OTHR; bursts BD ca 10s
14246.0	0806	20	11			FMxx	50 sps	10k0E	OTHR
14297.0	0753	20	11			FMOP	66.66 sps	ca 10k0E	OTHR; type "Foghorn"
14308.0	0914	23	11			F1B		500H	
14325.0	0938	16	11			FMOP	42 sps	10k0E	OTHR, maybe Foghorn type
14331.0	0751	20	11			FMOP	66.66 sps	ca 10k0E	OTHR; type "Foghorn"
18061.0	0944	28	11			FMCW	50	ca 20k0E	OTHR; partially in 17m band
18068.0	1445	26	11			FMxx	xx	ca 20k0E	OTHR (observed by HB9FSV)
18165.0	1119	30	11			FMOP	40 sps	12k0E	OTHR; Contayner
21130.0	0813	20	11			FMOP	12.5 sps	40k0E	

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS	
21438.0	0944	03	11		RCV	A1A		10H	Area of Sevastopol	daily
28860.0	0939		11			OTHR	alternating	ca 40k0E	OTHR, alternating 150 and 313sps	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.

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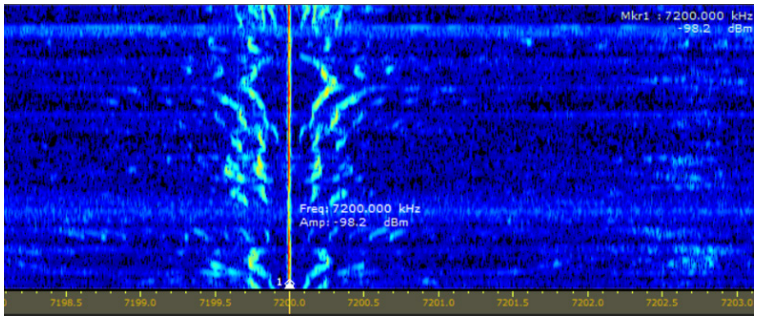
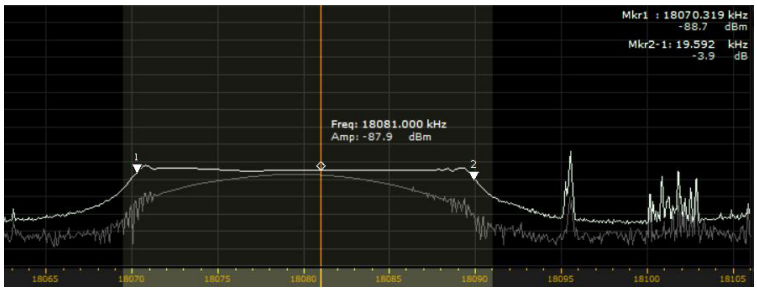
Screenshots from Perseus SDR



7200 KHz

Broadcast AM A3E
Daily emission: 1100 - 1258 UTC

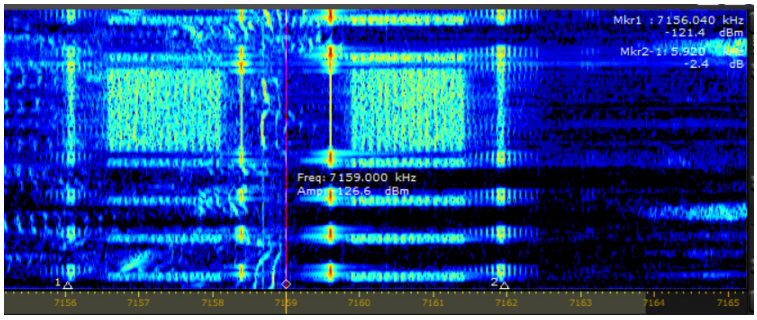
Assumed to be from Taiwan



18081.0 kHz

OTH Radar
FMCW BW 20 kHz
often on various frequencies

Assumed to be from UK base Cyprus



7159.0 kHz (CF)

LINK11 CLEW in DSB or ISB Mode
DQPSK modulated, 75Bd

Sometimes also in SSB Mode (USB)

Also known as TADIL A, MIL STD 188-203-1A