Monitoring Bericht Dezember 2022

Dominante Störer waren auch im Dezember die breitbandigen Überhorizont Radare (OTHR) verschiedener Herkunft, vorwiegend aus Russland, China, Iran und Zypern. Das britische OTHR aus Zypern war oft mit verschiedenen Sweeprates aktiv (50, 25, vereinzelt 12.5 sps).

Kollegen ist ab und zu auch das australische OTHR "JORN (Jindalee Operational Radar Network) aufgefallen.

Sowohl das LINK11 SLEW auf 7089.8 kHz (CF) wie das LINK11 CLEW auf 7159.0 kHz sind nach langer Aktivität Anfang Dezember zum Glück wieder verschwunden.

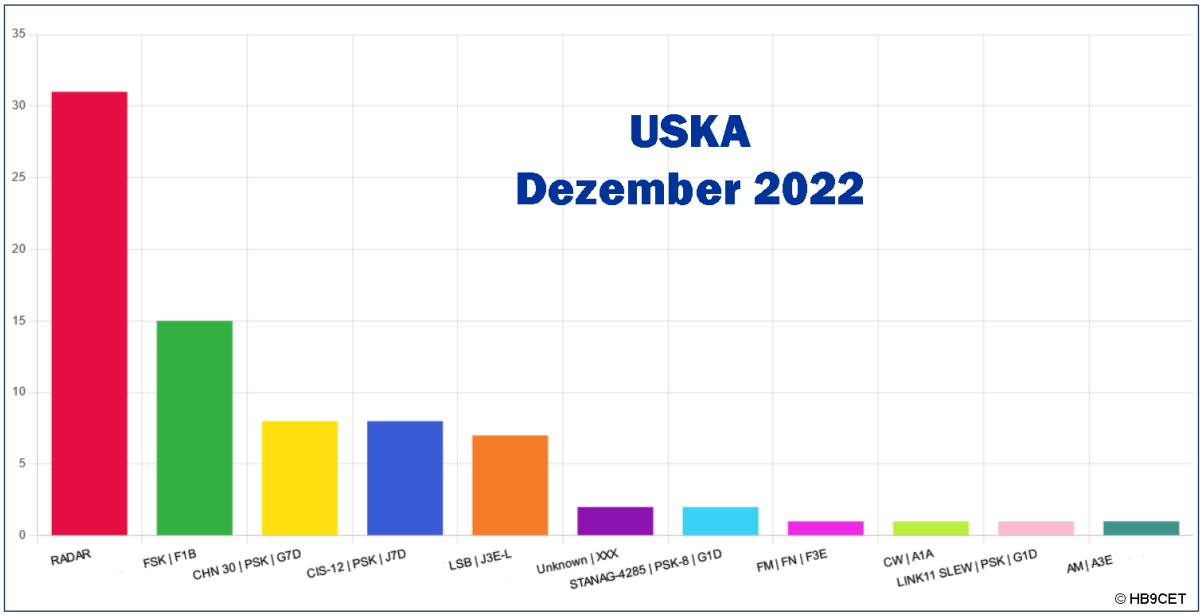
Vereinzelt wurden STANAG 4285 Emissionen (PSK-8 1800Hz single tone Modem) beobachtet. STANAG 4285 ist ein NATO-Standard. Viele verschiedene, vorwiegend wohl militärische Emissionen in FSK, MFSK, PSK uam, waren auf vielen Bändern täglich anzutreffen. Einige Signale konnten leider nicht näher bestimmt werden.

Im 10m Band hörte man zeitweise Taxifunk in FM.
Da und dort waren auch Fischer in SSB aktiv, oft an den Bandanfängen (z.B. 21000 oder 28000 kHz).

Vor allem in den frühen Nachtstunden bemerkte man im 40m Band auch häufig Sprechfunk in LSB (7010, 7015, 7020, 7030 kHz etc), mutmasslich "Village Radio" aus Indonesien.

Besten Dank allen Lesern meiner Berichte für ihr Interesse sowie allen Kollegen die mich ab und zu in irgend einer Form unterstützen. Ihnen allen wünsche ich ein glückliches und erfolgreiches neues Jahr.

Peter Jost, HB9CET



Monats Statistik Dezember 2022

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 USB	1433	22	12			X	X	ca 3kHz	Burst signal; Hybrid serial/parallel mit FSK Intro 40Bd
7008.0	2246	20	12			FMOP	40 sps	12k0E	OTHR; Contayner
7010.0	1542 1549	29 30	12			J3E-L			LSB; unid language, maybe village radio from Indonesia; weak
7015.0	1533	24	12			J3E-L			LSB; unid language, maybe village radio from Indonesia; weak
7020.0	1528	24	12			J3E-L			LSB; unid language, maybe village radio from Indonesia; weak
7025.0	1553	30	12			J3E-L			LSB; unid language, maybe village radio from Indonesia; weak
7026.0	1541	13	12			OTHR	X	10k0E	OTHR; Bursts
7026.7	2254	03				X	X	ca 2k4	unid signal
7030.0	1949 1532	21 24	12			J3E-L			LSB; unid language, maybe village radio from Indonesia; weak
7039.0	2234	03	12			FMOP	40 sps	12k0E	OTHR; Contayner
7039.4	1619	30	12	RUS	M	A1A			Channel Marker; Magadan (weak)
7042.0	1353	28	12			J7D	12x120 Bd	2k60E	CIS12
7050.0 LSB	1409	31	12			J3E-L		ca 3k0E	RUS-UKR Radio War almost daily
7054.0	1457 1404	22 31	12			F1B	50 Bd	200H	FSK almost daily
7055.0 LSB	1411	31	12			J3E-L		ca 3k0E	RUS-UKR Radio War; almost daily
7062.0	1820	23	12			FMOP	40 sps	12k0E	OTHR; Contayner
7071.8	1501 1016	13 14	12			G1D PSK8	2400 Bd	2k70E	STANAG 4285
7082.0 LSB	2230	20	12			PSK-4	30x60 Bd	2k50E	CHN30 (PRC30); Burst system Preamble, Pilot tone at 450Hz often
7083.0	2323	02	12			J7D	12x120 Bd	2k60E	CIS12
7086.0	1801	23	12			FMOP	40 sps	12k0E	OTHR; Contayner
7089.0	1347	28	12			J7D	12x120 Bd	2k60E	CIS12
7089.8	2242	03	12			G1D PSK8	2400 Bd	2k40E	LINK11 SLEW, very long lasting often
7095.0	1539	27	12			FMOP	40 sps	12k0E	OTHR; Contayner
7109.0	2217	21	12			OTHR	66.66 sps	10k0E	Bursts
7110.0	1557	22	12	ETH		A3E		ca 9k0E	BC: Radio Ethiopia often
7111.0 LSB	1545	22	12			PSK-4	30x60 Bd	2k50E	CHN30 (PRC30); Burst system Preamble, Pilot tone at 450Hz often
7114.0 LSB	2217	20	12			PSK-4	30x60 Bd	2k50E	CHN30 (PRC30); Burst system Preamble, Pilot tone at 450Hz often
7118.0	1538	22	12			J7D	12x120 Bd	2k60E	CIS12
7119.0	1412 1554	28 30	12			J7D	12x120 Bd	2k60E	CIS12
7123.0 LSB	1548	29	12			PSK-4	30x60 Bd	2k50E	CHN30 (PRC30); Burst system Preamble, Pilot tone at 450Hz often
7134.0	2233 1403	20 28	12	RUS		F1B	X	250H	FSK, weak, fading often
7155.0 LSB	2553 1555	27 30	12			PSK-4	30x60 Bd	2k50E	CHN30 (PRC30); Burst system Preamble, Pilot tone at 450Hz often
7159.0 USB	2334	02	12			G7D DQPSK	75 Bd	ca 2k40E	LINK11 CLEW SSB; 16 tones, spacing 110Hz often
7164.0	1454	22	12			F1B	75 Bd	500H	FSK

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD / sps	SH / BW	DETAILS
7178.0	1605	29	12			OTHR	62	10k0E	Bursts
7184.0	1516	24	12			OTHR	50	10K0E	Bursts
7188.0	1255	02				F1B	X	200H	FSK
7193.0	0900	05	12	RUS		F1B	50 Bd	250H	FSK often
7196.0	1226	09	12			J7D	12x120 Bd	2k70E	CIS12
7198.0 LSB	1944 1506	21 24	12			PSK-4	30x60 Bd	2k50E	CHN30 (PRC30); Burst system often Preamble, Pilot tone at 450Hz
7198.5	1054	04	12			X	X	2k0E	Bursts; unid digital signal
14004.0	0844	05	12			FMOP	40 sps	12k0E	OTHR; Contayner
14110.0	1334	28	12			FMOP	40 sps	12k0E	OTHR; Contayner
14161.0	1453	24	12			FMOP	40 sps	12k0E	OTHR; Contayner
14189.0	1418	31	12			FMOP	40 sps	12k0E	OTHR; Contayner
14194.0	0946	26	12			OTHR	66.66 sps	10k0E	Bursts
14211.0	0950	15	12			OTHR	10 sps	160K0E	Wideband Radar
14308.0	1024	23	12			F1B	X	500H	FSK
14323.0	1009	26	12			OTHR	66.66 sps	10k0E	Bursts
18170.0	1243	02	12			FMCW	50 sps	20k0E	OTHR; partially in 17m band UK base Cyprus
21000.0	1005	15	12			FMCW	50 sps	20k0E	OTHR; UK base Cyprus
21130.0	1219	02	12			FMCW	25 sps	20k0E	OTHR; UK base Cyprus
21171.0	1221	09	12			FMOP	40 sps	12k0E	OTHR; Contayner
21176.0	1216	02	12			FMOP	40 sps	12k0E	OTHR; Contayner
21330.0	0849	05	12			FMCW	50 sps	20k0E	OTHR; UK base Cyprus
21370.0	0936	05	12			FMCW	25 sps	20k0E	OTHR; UK base Cyprus
21423.0	1020	23	12			FMOP	40 sps	12k0E	OTHR; Contayner
21438.0	1225	02	12	RUS	RCV	A1A		10H	Area of Sevastopol daily
21441.0	0911	05	12			OTHR	41 sps	10k0E	OTHR; bursts
24996.0	1025	15	12			Radar	X	200k	probably ocean wave radar, partially in 12m band (picture below)
28060.0	1021	27	12			OTHR	307 sps	40k0E	OTHR, bursts, long lasting
28100.0	1038	31	12	IRN		OTHR	307 + 870 sps	ca 45k	OTHR; Bursts; long lasting, sweep rate alternating
28115.0	1309	02	12			F3E		ca 9k0E	short traffic only; Taxi
28600.0	1031	15	12	IRN		OTHR	307 + 870 sps	ca 45k	OTHR; Bursts; long lasting, sweep rate alternating
28860.0	0810	11	12	IRN		OTHR	150 + 313 sps	ca 45k	OTHR; Bursts; long lasting, sweep rate alternating daily
28910.0	1015	27	12			FMCW	50 sps	20k0E	OTHR; UK base Cyprus (picture below)
28980.0	1012	27	12			FMCW	25 sps	20k0E	OTHR; UK base Cyprus (picture below)
29325.0	1030	31	12			F3E			short traffic only; Taxi ?
29450.0	1250	02	12	IRN		OTHR	150+ 313 sps	45k0	OTHR; bursts, sweeprate alternating
29525.0	1229	21	12			FMCW	50 sps	20k0E	OTHR; UK base Cyprus

Errors and omissions excepted

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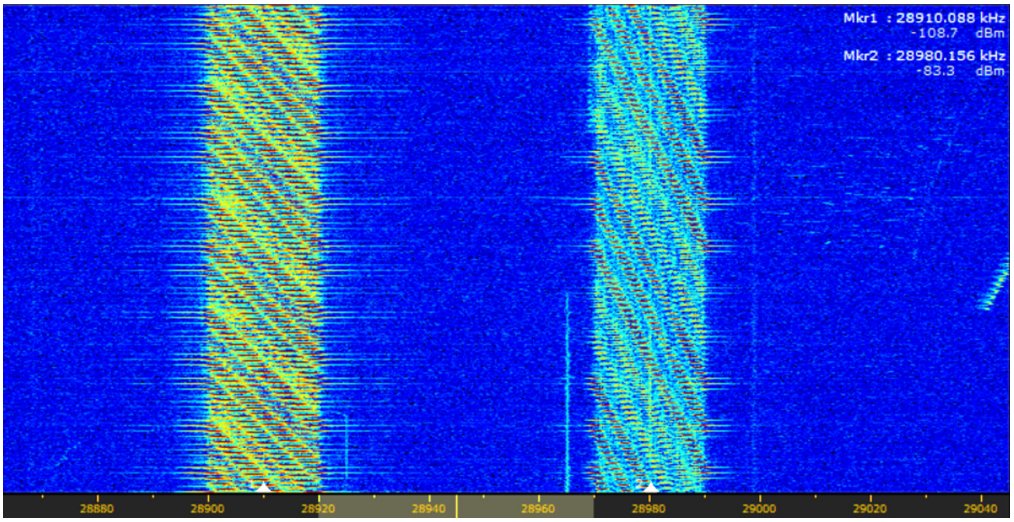
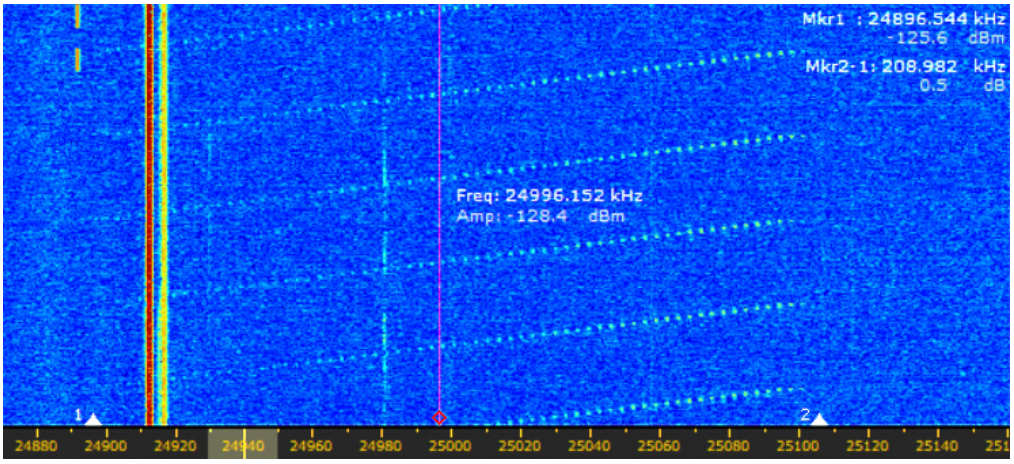
USKA Monitoring System (Intruder watch)
https://www.uska.ch

Member of IARU Monitoring System R1
https://www.iaru-r1.org/spectrum/monitoring-system/

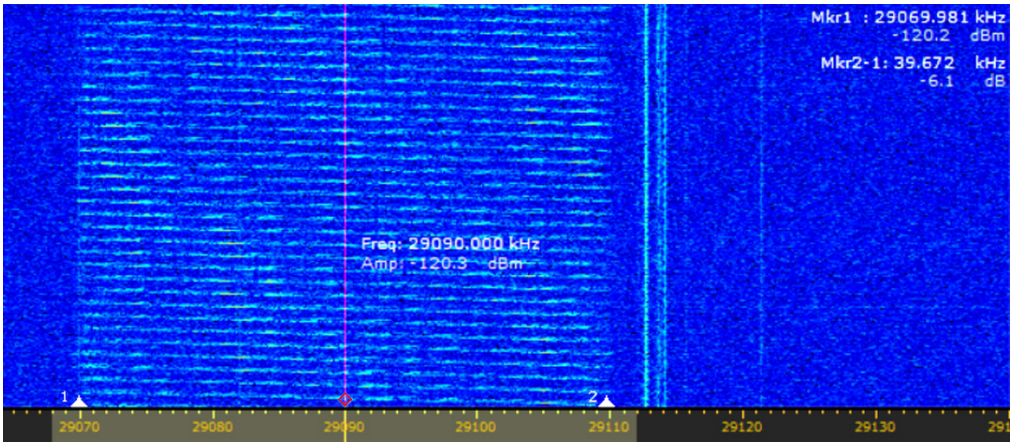
Radars



2x OTHR: FMCW, BW 20kHz each, at 28910 kHz with 50 sps; 28980 kHz with 25 sps



Probably ocean wave radar at 24996 kHz, BW 200kHz ! Partially in 12m Band



Wideband Radar at 29090 kHz, 12.5 sps, BW 40kHz!

Happy New Year - Glückliches Neues Jahr
Felice Anno Nuovo - Bonne année!