Monitoring Report August and September 2018

1) August

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
80m band informational only! - Amateur co-primary, shared with other also primary allocated services!									
3527.0	2144	09	08			F1B	50	200	almost daily
3744.8	2033	08	08			G1D PSK8	2400	2k7	MIL 188-110A mod (Hybrid), preamble 4 tones, PSK4 75Bd 450Hz spacing often
7000.0	0949	14	08			N0N			long lasting carrier
7060.0	0940	14	08			J7D	12x120	2k7	BPSK; CIS12
7084.8	0744	10	08			F1B	50	500	DF TDoA: Agglomeration Moscow
7110.0	2052	09	08			F1B	50	200	
7112.0 VFO LSB	2054	09	08			BPSK	30x60Bd	ca 2k6	Burst system; tone spacing 75 Hz. Preamble 4x PSK4 60Bd, spacing 600Hz; Pilottone at 450Hz
7120.0	1659	07	08	SOM		A3E			BC; Radio Hargaysa almost daily
7120.0	0947	14	08			J7D	12x120	2k7	BPSK; CIS12
7122.0	2221	12	08			F1B	75	250	often
7122.0	0944	14	08	RUS		F1B	75	250	
7130.6	2114	17	08			G1D PSK8P	2400	2k4	STANAG 4285 DF TDoA: Tyrrhenian Sea (Bild)
7140.0	1655	07	08	ERI		A3E		~ 9k	BC often
7159.0 LSB +USB	2147	21	08			B7D DQPSK	14x75	5k9	LINK 11 CLEW DSB Mode
7169.0	0801	13	08			J7D	12x120	2k7	BPSK; CIS12
7186.0	1451	07	08	RUS		J7D	12x120	2k7	BPSK; CIS12; DF TDoA: Presumably Region of Kaliningrad
14113.5	0740	17	08			F1B	600	600	ARQ often
14116.0	0752	10	08			F1B	50	250	
14118.0	0720	12	08			A1A	80 bpm		Groups of five, encrypted
14160.0	1524	19	08			F1B	75	250	DF TDoA: Area of Moscow often
14261.0	0953	14	08			OFDM60	30	~2k7	spacing 44.45Hz; pilottone @ 3300Hz
14297.5	1713	07	08	RUS		unid		4k	unidentified digital signal. DF TDoA: Presumably agglomeration Moscow
18070.0	0950	11	08			FMCW		20k	OTHR
18080.0	0703	15	08	TWN		A3E		~15k	BC; Chinese Sound of Hope almost daily

2) September (from Spain, EA3)

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
7024.0	1331	07	09	RUS		F1B	75	250	
7110.0	1601	02	09			F1B	50	250	
7110.0	1434	07	09			F1B	50	200	
7114.0	1546	02	09			F1B	50	200	CIS 50-50
7137.0	1721	04	09			F1B	36+50	200	CIS 36-50
7175.0	1714	04	09			J7D	12x120	2k7	BPSK; CIS12

kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
14192.0	1305	03	09			F1B	50	200	almost daily
14221.0	1819	04	09			F1B	50	200	often
18107.0	1136	02	09			F1B	50	200	often
18107.0	1702	06	09	RUS	RDL	F1A		200	CW: letters and figures often
21353.5	1648	06	09			F1B	600	600	ARQ

Errors and omissions excepted

Digital transmissions: Frequency mostly center frequency; otherwise indicated.

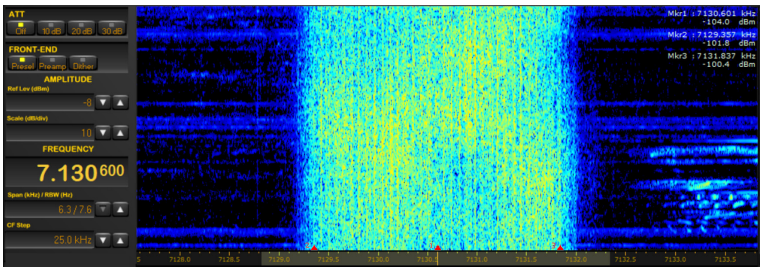
BC = Broadcast // **BD** = Baud, or also Burst duration // **BRI** = Burst repetition interval // **SH** = Shift or Spacing (Hz)
BW = Bandwidth // **OTHR** = over the horizon radar // **FMCW** = frequency modulated continuous wave //
FMOP = frequency modulated on pulse // **sps** = sweeps per second // **vd** = various dates // **vt** = various times
DF = Direction finding // **TDoA** Time difference of arrival

Peter A. Jost / HB9CET
Vice-Coordinator IARU Monitoring System R1
Head of USKA Bandwacht
Friedheimstrasse 34b
CH 8057 Zürich
E-Mail: guard@uska.ch

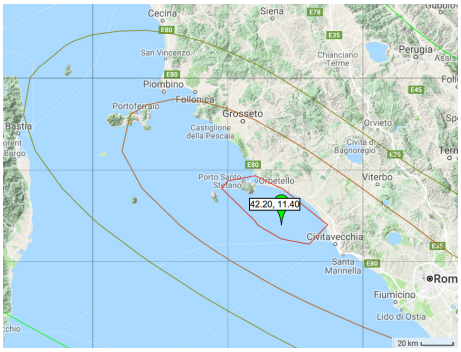
USKA Radio Monitoring
www.uska.ch
Member of IARU Monitoring System
www.iaru.org/monitoring-system/
www.iarums-r1.org/

Stanag 4285 at 7130.6 kHz

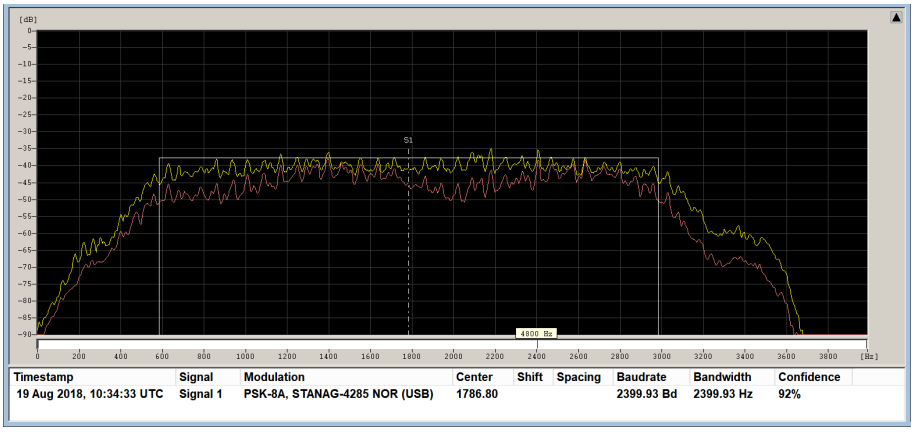
Modulation PSK-8, Symbol rate 2400Bd



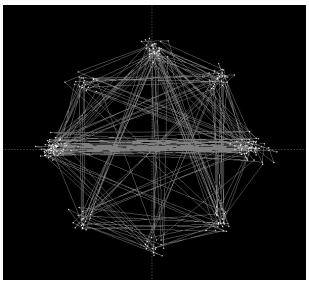
Screenshot: Sonagram with Perseus SDR



DF TDoA: presumed area: Tyrrhenian Sea



Analysis with the W-Code Classifier



Typical Phaseplane