



Monitoring Report July 2019

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!									
3525.0 VFO USB	2218	02	07			G1D PSK-8	2400	2k7	LINK 11 SLEW
3527.0	2212	02	07		RTL	F1B	50	200	
3581.8	2252	03	07			G1D	2400	2k7	Stanag 4285 almost daily
3592.0	2249	03	07			G1D	2400	2k7	Stanag 4285
3715.0	2113	14	07			G1D	2400	2k7	Stanag 4285 often
7008.0	1314	02	07			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D
7018.0	1356	04	07			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D
7022.0	1621	31	07			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D often
7030.0	2051	12	07			J3E-U		2k1	Fishery; spanish
7058.0	1631	31	07			F1B	75	250	CIS
7089.8	1558	18	07			G1D	2400	2k7	LINK 11 SLEW (NATO) often
7090.0	0718	08	07			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D
7098.0	2039	18	18			FMOP	10 sps	160k	OTHR
7111.0	1428	18	07			F1B	75	250	often
7114.0	2112	11	07			FMOP	40 sps	appx 12k	OTHR
7119.0	2024	30	07			FMXX	41 sps	appx 10k	OTHR, long bursts
7120.0	1701	09	07			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D often
7122.0	1431	18	07			F1B	75	250	
7140.0	1539	11	07	ERI	VOBM	A3E		~ 9k	BC
7169.0	1359	04	07			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D
7171.0	0912	22	07			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D
7174.0	2035	30	07			FMXX	41 sps	appx 10k	OTHR, long bursts
7174.5	1107	09	07			F1B	75	200	
7179.0	0931	01	07			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D often
7180.0	1537	11	07	ERI	VOBM	A3E		~ 9k	BC almost daily
7200.0	1207	18	07			J7D	12x120	2k7	PSK-2; CIS12 aka AT3004D partially in 40m band.
10110.0	0948	13	07	CYP		FMCW	50 sps	20k	OTHR UK-base; long lasting
14008.0	0904	11	07			F1B	50	250	often
14086.0	1046	04	07			FMOP	40 sps	appx 12k	
14089.0	1313	11	07			FMOP	40 sps	appx 12k	stopped 1318z
14140.0	1228	23	07			FMOP	10 sps	appx 10k	OTHR
14161.0	1055	04	07			FMOP	40 sps	appx 12k	OTHR
14181.0	1054	04	07			FMOP	40 sps	appx 12k	OTHR
14192.0	2204	02	07			F1B	50	200	daily
14200.0	1057	04	07			FMOP	40 sps	appx 12k	OTHR
14217.0	1052	04	07			FMOP	40 sps	appx 12k	OTHR (long lasting)
14221.0	2144	24	07			F1B	50	200	often
14240.0	1321	11	07			FMOP	10 sps	160k	OTHR
14255.0	1309	11	07			FMOP	10 sps	160k	OTHR
14261.5	1632	23	07			F1B	75	200	(see pictures below) often
14302.0	0908	11	07			OFDM60	30	~ 2.75k	pilottone
14304.0	1124	24	07			FMOP	40 sps	appx 12k	OTHR (long lasting)
14317.0	0857	01	07			FMOP	10 sps	40k	OTHR
21438.0	0832	12	07	RUS	RCV	A1A			letters + figures almost daily



USKA - Bandwacht

Member of IARU Monitoring System R1



kHz	UTC	DD	MM	ITU	IDENT	MODE	BD	SH (BW)	DETAILS
28860.0	0807 1027	01 22	07	IRN		XXX	150 + 313 sps	appx 45k	OTHR, Bursts, various sweep-rates and durations daily

Errors and omissions excepted

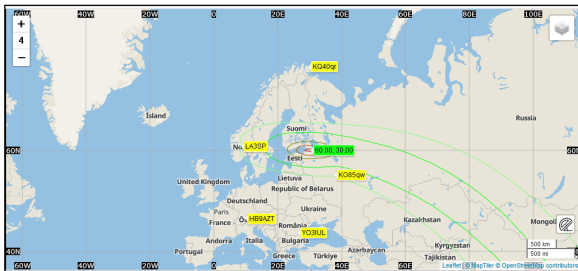
Digital transmissions: Frequency mostly center frequency; otherwise indicated.

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 (radio location) // **TDoA** Time difference of arrival // **aka** = also known as

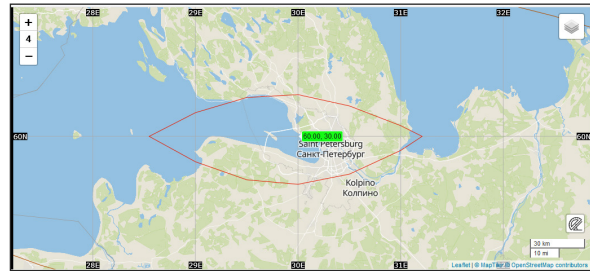
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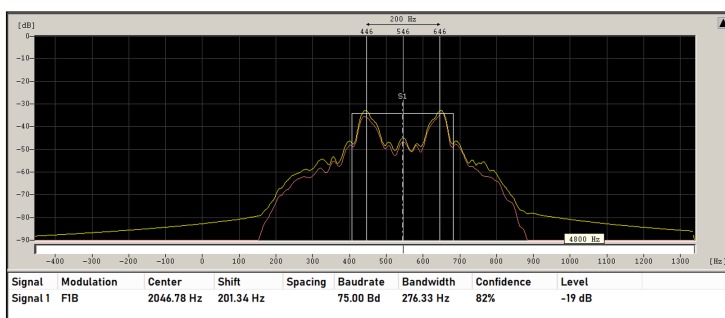
F1B 75Bd 200Hz on 14261.5 kHz: TDoA with Kiwi SDR; Analysis with W-Code 10.0



TDoA location (wide) with 5 Kiwi SDR receivers



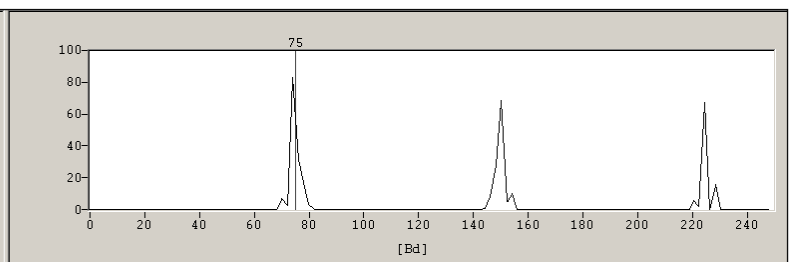
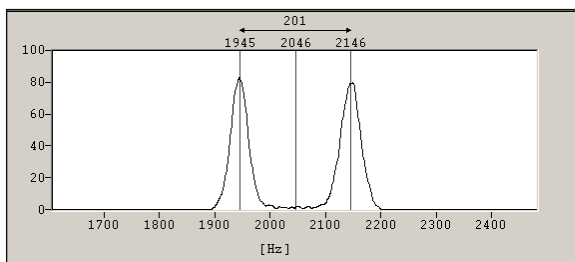
Zoomed: 60.00N 30.00E: Area of St. Petersburg



Signal Analysis with W-Code Classifier

Baudrate: 75 Bd
 Shift: 201 Hz

23.7.2019: 1632 UTC



Analysis with W-Code FSK Analyzer

Many thanks to WAVECOM ELEKTRONIK AG in Bülach for the very valuable support since almost 15 years!