## SPACE RELATED HAM FREQS MAY 2018

	INTERNATIONAL SPACE STATION				
ID and Usage		Downlink	Uplink		
ITU REGION 1 & 2 FM Voic	e	145.800	144.49	0 [-1.31 split]	
Global U/v FM REPEATER		145.800	437.800	)	
Global V/u FM RPTR w/PL		437.800	145.990	) PL 67.0.	
Global L/v FM Voice Repeat	ter	145.800	1269.6	50	
AX.25 1200 Bd AFSK Packe	et	Down/Up 1	45.825		
FM SSTV Global		145.800			
UHF FM SIMPLEX [rare]		Down/Up 4	37.550		

VHF-1 143.625 FM Main Russian comms, especially over Russian Federation.

VHF-2 130.167 AM Downlink from Service Module, Russian suit comms during EVA.

121.750 and 121.125 FM Russian Orlan space suits during EVA's.

## AMSAT FOX-1 SATELLITES, FM

Name/ID	Uplink FM	Downlink FM	<u>Status</u>
AO-85 (Fox-1A)	435.170	145.980	Operational
AO-91 (RadFx Sat) (Fox-1B)	435.250	145.960	Operational
AO-92 (Fox-1D) (*switched as needed)	435.350 1267.359*	145.880	Operational
Fox-1Cliff *switched	435.300 1267.300	145.920	Summer 2018
So-50	145.850 (67.0)	436.795	Operational

SO-50 also has a 10 minute timer, arm by 2 second carrier with 74.4 PL.

**CAS-3H** 144.350 437.200 Operational (LilacSat-2)

More birds coming 2018, check <u>www.amsat.org</u> for launch details.

## LINEAR ANALOG SSB/CW SATELLITES

**AO-7 Mode A** – V/a Non-Inverting Active only in sunlight, preferably >24 hours, so 24 hr timer switches to Mode B. Uplink USB 145.850 ↔ 145.950 Downlink USB 29.400 ↔ 29.500 Beacon on 29.502. **AO-7 Mode B** – U/V Inverting Active only in sunlight. Uplink LSB 432.125 ↔ 432.175 Downlink USB 145.975 ↔ 145.975 Beacon on 145.925. AO-73 (FUNcube-1) – U/v Inverting Transponder active in eclipse or on Uplink LSB 435.150 ↔ 435.130 weekends. Downlink USB 145.950 ↔ 145.970 Beacon on 145.950 telemetry FO-29 (JAS-2) – V/u Inverting Uplink LSB 146.000 ↔ 145.900 Downlink USB 435.800 ↔ 435.900 Beacon on 435.795 XW-2A (CAS-3A) – U/v Inverting Digital telemetry 145.640, GMSK Uplink LSB 435.030 ↔ 435.050 at 9.6/19.2 kbps. Downlink USB 146.685 ↔ 145.665 CW beacon 145.660 XW-2B (CAS-3B) – U/v Inverting Digital telemetry 145.705, GMSK Uplink LSB 435.090 ↔ 435.110 at 9.6/19.2 kbps Downlink USB 145.750 ↔ 145.730 CW beacon 145.725 **XW-2C (CAS-3C)** – U/v Inverting Digital telemetry 145.770, GMSK Uplink LSB 435.150 ↔ 435.170 at 9.6/19.2 kbps Downlink USB 145.815 ↔ 145.795 CW beacon 145.790

This is NOT intended to be an inclusive listing, as old ones flame out and new ones are launched. I did not list most of those active in other areas. There are a number of new birds scheduled for 2018 launches. Some of these are in the FUNcube format, and you can download the FUNcube Dashboard software to receive and display the telemetry.

Enjoy! Don't forget to investigate and select your favorite birds and tracking software, and then there's the automatic antenna tracking.... down another fun wormhole we go! Go to <u>www.amsat.org</u> for the latest.

Roger, KD9EPX May 24, 2018.