



**Moog Manned Data Link Validation
FCC Information Brief
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Transmitter Summary

Item #	Mfg	Model No	Description	Frequency (MHz)		Tuning Resolution / Accuracy	Power (W)	Antenna Gain (dBi)	Beamwidth (Deg)	ERP (dBm)	Mean / Peak	Modulating Signal	Bandwidth
				Lower	Upper								
Airborne Transmitters													
1	BMS (see Note 1)	Helicoder 4, HC4--47-H	Video and Data Transmitter Primary Down link	4,400	5,000	1 MHz +/- 2.5 PPM	10.0	5.5	Omni	45.5	Mean	COFDM	8MHz
2	BMS (see Note 1)	Helicoder 4, HC4--47-H	Video and Data Transmitter Back-up Down link (Same as Primary)	4,400	5,000	1 MHz +/- 2.5 PPM	10.0	5.5	Omni	45.5	Mean	COFDM	8MHz
3	FW	FGBR115RC	B/U Data Transmitter (FHSS)	340	400	1 MHz +/- 1.5 PPM	4.0	5.5	Omni 20 deg EL	33.0	Average	FSK	230 KHz
Ground Transmitters													
1	BMS	BMTII	Command / data Transmitter Primary	4,400	5,000	1 MHz +/- 2.5 PPM	8.0	28.0	6.4 deg (AZ & EL)	65.0	Mean	FSK	140KHz (-3dB)
2	FW	FGBR115RC	Data Transmitter (FHSS) Back-up	340	400	1 MHz +/- 1.5 PPM	4.0	5.5	Omni 20 deg EL	33.0	Average	FSK	230 KHz
Notes:		1. BMS - Broadcast Microwave Services, Poway, CA ; FW - FreeWave Technologies, Boulder, CO 2. Frequencies can be changed remotely during a mission 3. The C-band emitters are tunable in 1 MHz increments within the upper and lower frequencies 4. The FGBR115RC can transmit band is 225 MHz to 400 MHz. The UHF antenna used has an operating range of 340 MHz to 400 MHz. 5. ERP includes allowance for cable losses											





