



**Moog Manned Data Link Validation
FCC Information Brief
Pete Hirneise – phirneise@moog.com
480-862-5695**

21 November 2012



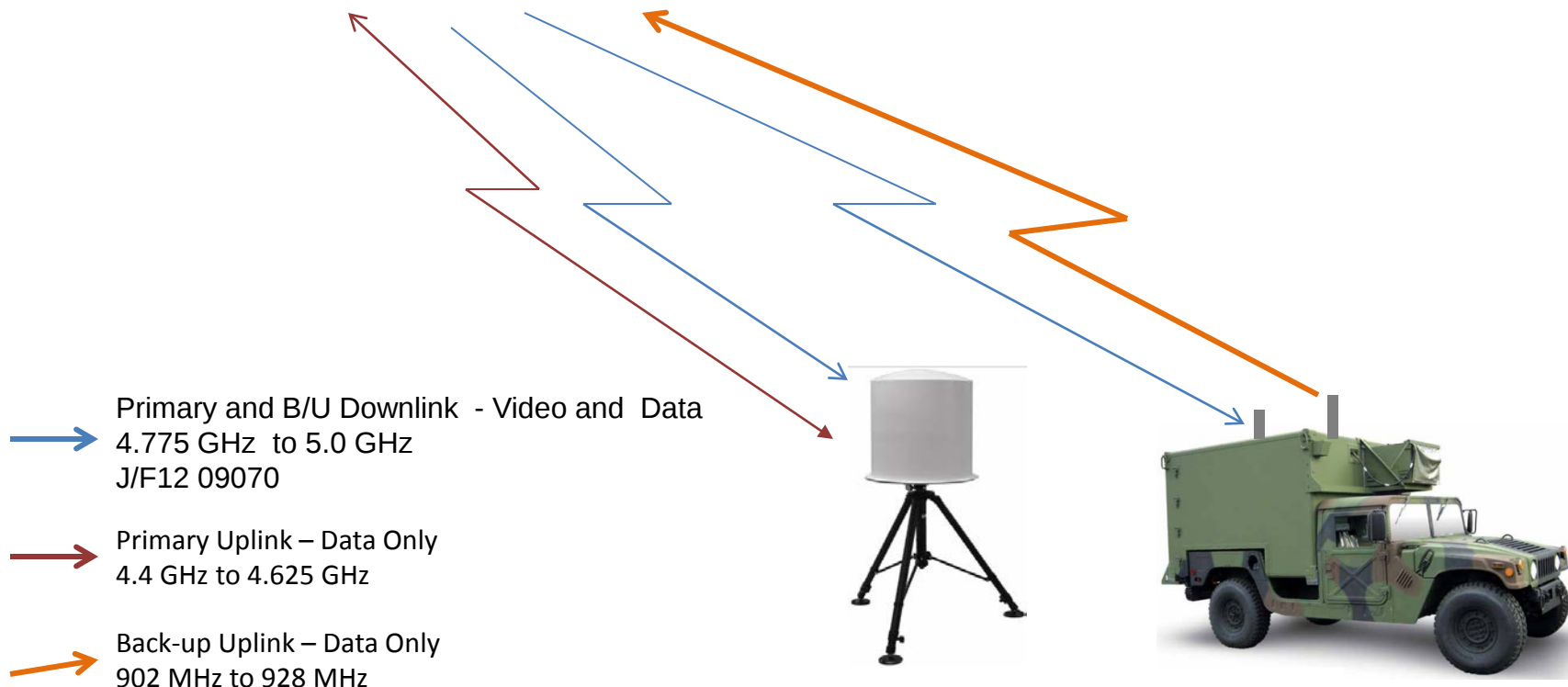
MOOG UAS DATALINK
UNCLASSIFIED

Date 11/21/2012

PAGE 1

Transmitter Summary

Airborne Transmitters			Mobile: Latitude N 42 33 34, Longitude W 78 20 15 , Operational Radius 26 Km										
1	BMS (See Note 1)	Helicoder 4, HC4--47-H	Video and Data Transmitter Primary Down link	360.0	20.0	4,400	5,000	1 MHz +/-0.00025 %	10.0	20	Mean	COFDM (QPSK, 16QAM,64QAM)	8M00D7W
2	BMS	Helicoder 4, HC4--47-H	Video and Data Transmitter Back-up Down link (Same as Primary)	360.0	20.0	4,400	5,000	1 MHz +/-0.00025 %	10.0	20	Mean	COFDM (QPSK, 16QAM,64QAM)	8M00D7W
3	FW	FGR115RC	B/U Data Transmitter (FHSS)	360.0	20.0	902	928	230.4 KHz +/-0.00015 %	1.0	2.0	Mean	GFSK Freq Hopping	230KF1D
Ground Transmitters			Fixed, Strykerville, NY: Latitude N 42 45 55, Longitude W 78 27 36 377 Big Tree Rd. Strykersville, New York Wyoming County										
1	BMS	BMTII-22	Command / data Transmitter Primary	6.4	6.4	4,400	5,000	1 MHz +/-0.00025 %	8.0	1,400	Mean	FSK	330KF9W
2	FW	FGR115RC	Data Transmitter (FHSS) Back-up	360.0	20.0	902	928	230.4 KHz +/-0.00015 %	1.0	2.0	Mean	GFSK Freq Hopping	230KF1D
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. FW radio is a Spread Spectrum transmitter using 7user selectable hopping bands 5. ERP includes allowance for cable losses										



MOOG UAS DATALINK

UNCLASSIFIED

Date 09/17/2012
Rev. a 11/21/2012

PAGE 3

