

Dove 1 - WF9XKA
0898-EX-ST-2012

Pursuant to meetings with NTIA, Cosmogia now seeks to operate on the frequencies specified below. All other technical information previously submitted remains the same.

Table 1 – Dove 1 Frequencies

Frequency Band	Direction
2.4016-2.4776 GHz	space-to-Earth
2.4016-2.4776 GHz	Earth-to-space
8.221-8.229 GHz	space-to-Earth
2.056 GHz	Earth-to-space
401.3 MHz	space-to-Earth
450 MHz	Earth-to-space

Table 2 – Emission Characteristics:

space-to-Earth

Freq (MHz)	Output Power (W)	Tx Antenna Type	ERP (W)	Mean or Peak	Freq Tolerance	Emissions Designator	Modulation
2401.6-2477.6	1	patch	3.2	P	0.003%	280KF1D	CPFSK
8221-8229	3	patch	9.5	P	0.001%	5M50G1D	QPSK
401.3	1	monopole	1.6	P	0.002%	40k0F1D	2-FSK

Earth-to-space

Freq (MHz)	Output Power (W)	Tx Antenna Type	ERP (W)	Mean or Peak	Freq Tolerance	Emissions Designator	Modulation
2401.6-2477.6	1	18 m parabolic	42072	P	0.003%	280KF1D	CPFSK
2056	1	18 m parabolic	31623	P	0.002%	600KF1D	MSK
2056	15	3 m parabolic	18884	P	0.002%	600KF1D	MSK
450	0.25	18 m parabolic	791	P	0.002%	60k0F1D	MSK
450	10	Yagi	126	P	0.002%	60k0F1D	MSK

These emission characteristics are the same as those specified previously in 0898-EX-ST-2012, 0100-EX-PL-2012, 0548-EX-PL-2012, and/or 0551-EX-PL-2012, except for the 450 MHz link which replaces the previously requested 402.4 MHz link.