



Exhibit 1

Supplemental Information Regarding Earth Stations

Applicant: **Space Exploration Technologies Corp.**



In this application, SpaceX seeks experimental authority to allow testing of an antenna with SpaceX's licensed non-geostationary orbit satellite system pursuant to a government contract. The antenna will be tested on the ground and then operated from a moving aircraft. Information on the characteristics of the antenna is set forth below.

	Operational Config.	Min Subarray Config.*
Manufacturer	Ball Aerospace	
TX Antenna	Assembly: 2567567-500	
Diameter (m)*	N/A	
TX Antenna Gain (dBi)	34.1, 34.2	28.1, 28.2
TX Antenna Full Beamwidth (deg)	3.5, 3.4 (HPBW)	7.0, 6.8 (HPBW)
TX Power (W)	3.2	0.8
TX ERP (kW)	5.1	0.3
TX EIRP (dBW)	39.1	27.1
RX Antenna	Assembly: 2567566-500	
Diameter (m)*	N/A	
RX Antenna Gain (dBi)	36.1, 36.7	28.3, 28.9
RX Antenna Full Beamwidth (deg)	3.5, 3.3 (HPBW)	7.0, 6.6 (HPBW)
RX Figure of Merit (dB/K)	11.1	3.3

* SpaceX will test the full range of configurations, from one transmit and one receive subarray up to the nominal operational configuration of four transmit and six receive subarrays to characterize the link performance at each stage.

Representative Ku-band transmit antenna patterns for the operational configuration of this antenna are set forth below.



