Response to section 18 of FCC Experimental Station License

Item A. Width of beam at the half power point (3dB)

Frequency (GHz)	Aperture Diameter (meters)	Half Power Beam Width (deg) (degrees)
5.85	2.4 (Prodelin)	1.5
6.73	2.4 (Prodelin)	1.3
5.85	3.7 (Andrew)	0.97
6.73	3.7 (Andrew)	0.85
5.85	4.5 (Viasat)	0.8
6.73	4.5 (Viasat)	0.7
5.85	4.6 (Andrew)	0.78
6.73	4.6 (Andrew)	0.68
7.9	2.4 (Prodelin)	1.1
8.4	2.4 (Prodelin)	1.05
7.9	3.7 (Andrew)	0.72
8.4	3.7 (Andrew)	0.68
7.9	4.5 (Viasat)	0.59
8.4	4.5 (Viasat)	0.55
7.9	4.6 (Andrew)	0.58
8.5	4.6 (Andrew)	0.54
13.8	2.4 (Prodelin)	0.64
14.5	2.4 (Prodelin)	0.6
13.8	3.7 (Andrew)	0.41
14.5	3.7 (Andrew)	0.39
13.8	4.5 (Viasat)	0.34
14.5	4.5 (Viasat)	0.32
13.8	4.6 (Andrew)	0.33
14.5	4.6 (Andrew)	0.32

Items B/C. Orientation in horizontal/vertical plane

Currently STTR is leasing transponder bandwidth on Pan Am Sat Galaxy 3R. Based on the Colorado Springs, Colorado operating location the true azimuth (horizontal) is 135 degrees and the elevation (vertical) is 35.9 degrees.

Item A. Overall height above ground to tip of antenna in meters:

Based on the current use of trailer mounted 3.7 meter Andrew antennas, the overall height is, worst case, 4.7 meters. This is based on a fully upright vertical dish of 3.7 meters and a 1 meter height due to the trailer.

Item B. Elevation of ground at antenna site is 1902 meters above mean sea level.

Item C. Distance to nearest aircraft landing site in kilometers is approximately 0.5 kM. We have performed frequency deconfliction with the Peterson AFB frequency manager and have been grated approval to transmit.

Item D. There are no natural formations that would tend to shield the antenna from aircraft.