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To: Leann Nguyen
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Subject: FCC File 0183-EX-RR-2015

Message:

Antennas are used in testing and developing ViaSat's ArcLight based mobility products.

Minimum antenna size is a 12" reflector type with 31.9 dBi transmit gain and 30.8 dBi receive gain typically, but larger more directive antennas are also used.

The antennas transmit and receive using linear polarization. Both horizontal and vertical polarizations are used depending upon the spacecraft we are communicating with.

Orientation is toward the geostationary satellite arc. Specific azimuth and elevation angles depend upon location earth station and satellite being used.

Antenna height ranges from ground mounted on a test cart at roughly 1 m above ground level to tail mounted on business jet at roughly 7.62 m.

When aircraft are flying, operating altitude may exceed 12,000 m