To: Kristi Key E-Mail: kristina.key@spacex.com From: Doug Young Date: April 29, 2021

Subject: Request for Info - File # 0562-EX-ST-2021

## Message:

Prior to GRANT being issue, the FCC's International Bureau/Satellite Division will need the following information:

() Please provide the antenna's pattern performance. Please provide the co-polarized gain (dbi), plus and minus from 0 to 10 degrees, 0 to 45 degrees, and 0 to 180 degrees with FCC 25.209 envelop, in the azimuth and elevation planes, at the center frequency bands of 14-14.5 GHz for 0.48m SpaceX UTA-201 antenna and "12.2 X 12.2" square antenna.

() Please provide the manufacture specification and certification of the Ku-band 0.48m SpaceX UTA-201 antenna and 12.2" X 12.2" square antenna.

() For operations on 0.48m VMES mobile ground-based user terminal within 300 km of Redmond, Washington, the incumbent GSO MES (Mobile earth station) operate within the range of EIRP from 20 to 35.7 dBW. The BES (Blanket earth station) of Omnitracs, LLC operate at 20 dBW EIRP. The VMES (Vehicle Mounted Earth Station) operate within the range of EIRP from 21.6 to 36.81 dBW. Please provide interference analysis to address how the proposed maximum power level (EIRP of 38.2 dBW; which exceeded 18.2 dBW EIRP of incumbent Ku-band GSO earth station licenses), would not cause harmful interference to and can be shared with GSO and NGSO satellite systems operating in the 14-14.5 GHz band.

() For operations on a "12.2" X 12.2" square" VMES mobile ground-based user terminal within 300 km of Redmond, Washington, the incumbent GSO VSAT network and TFE (Temporary Fixed earth station) at Washington operate within the range of EIRP from 37.78 to 40 dBW The MES (Mobile earth station) operate within the range of EIRP from 20 to 35.7 dBW. The BES (Blanket earth station) of Omnitracs, LLC operate at 20 dBW EIRP. The VMES (Vehicle Mounted Earth Station) operate within the range of EIRP from 21.6 to 36.81 dBW. Please provide interference analysis to address how the proposed maximum power level (EIRP of 39.2 dBW; which exceeded 19.2 dBW EIRP of incumbent Ku-band GSO earth station licenses), would not cause harmful interference to and can be shared with GSO and NGSO satellite systems operating in the 14-14.5 GHz band.

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of April 29, 2021 may result in application dismissal pursuant to Section 5.67 and forfeiture of the filing fee pursuant to Section 1.1108.

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Responses to this correspondence must contain the Reference number: 61641