From: Steven Hemple

To: Leann Nguyen Date: June 12, 2019

Subject: Request for Info - File # 0383-EX-CN-2019

## Message:

Date: 06/12/2019

From: Steven Hemple, Viasat, Inc. steven.hemple@viasat.com

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To: Leann Nguyen, FCC OET Leann.Nguyen@fcc.gov

Re: STA Request File # 0383-EX-CN-2019

FCC Correspondence Reference # 48513

Answers to FCC Inquiry from Leann Nguyen on 5/30/2019

Ms. Nguyen:

Viasat is providing the following information in response to your above referenced correspondence.

#1 Transmitter Antenna (Space station):

- Location: Polarization and Orientation

- Dimension: Gain (dbi), Beamwidth (degree)

Viasat Response 1:

The polarization is right hand circular polarized (RHCP).

Location/Orientation: HRR: Nadir only, MRR: Nadir and Zenith, Nadir tracks ground station during passes The Peak Gain is 3 dBi and the half power beamwidth is 116 degrees.

#2 Receiver Antenna (Earth station):

- Polarization - Orientation

- Dimension: Gain (dbi), Beamwidth (degree), Azimuth (degree clockwise from True North),

Elevation (in meter above MSL), Height (in meter above MSL).

Viasat Response #2:

The polarization is RHCP. The minimum elevation angle is 10 degrees and the azimuth can range from 0 -359.9 degrees.

The gain is 39.1 at 2270 MHz. The half power beamwidth is 1.2 degrees.

#3 ODAR

Viasat Response #3 See Attached Document STPSat-4 SDAR EOLP\_Final.pdf

#4 Orbital characteristics: Period (in hour) Viasat Response #4: 1.543 hours for the orbital period

#5 Point of contact if interference occurs: Name and telephone numbers. Viasat Response #5: JUSTIN M. BRUH, Capt, USAF DoD Human Spaceflight Payloads justin.m.bruh@nasa.gov
(d) 281-244-1928
(c) 561-568-8195