

From: Franklin Williams

To: Behnam Ghaffari

Date: May 05, 2021

Subject: FCC File No. 0466-EX-ST-2021

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Message:

1) Please clarify and amend the coordinates. There are two different set of coordinates: 1. Omaha, DOUGLAS, NE- NL 41-14-35; WL 96-59-00 2. The Terminal will be fixed at 41 deg 14' 15.05" North 96 deg 0' 59.44" West in Omaha, Nebraska.

The precise location is 41 degrees 14 minutes 35.05 seconds North and 96 degrees 0 minutes and 59.44 seconds west.

2) Please provide the name of contracted, commercial entity that will conduct tests for the Terminal #1 (Hawkey III terminal). This commercial entity should file the STA to conduct tests for Terminal #1 and reference this STA File No. 0466-EX-ST-2021.

Initial tests and operations for validation of functionality will be performed by L3Harris, the current applicant for this STA. We expect the follow on company that will be doing operations long term will fill for a full FCC authorization (aka license) for continuous operations beyond the STA authorized period.

3) Please provide the size (meter), antenna gain (dBi), maximum total input power at antenna flange (Watts), and EIRP (dBW) associated with emission for the proposed antennas: L3Harris Technologies, Inc. WPM-1000 5 ThinKom Falcon Ka2517 1

Antenna Size: 0.4318 m

Antenna Gain: 37.3 dB

Maximum Input Power: 13.2 dBW (20.89 W)

EIRP: 50.5 dBW

4) Please provide the name and call sign for the point of communication (satellites) operating in the 5.85-6.425 GHz band.

The C-band (5.85-6.425 GHz band) satellites to be utilized for this test have not been negotiated or under contract therefore no definitive satellites can be named at this point. If necessary, this STA may be authorized without C-band authorization. Initial operations will be done accordingly. One option is the Galaxy 28 satellite

Call Sign: S2160, COSPAR: 2005-022A)

5) Please provide the name and call sign for the point of communication (satellites) operating in the 13.75-14.5 GHz band. In addition, operation in the 13.75-14 GHz band is subject to the Footnote US 356 of Section 2.106 of the Commission's rules.

Galaxy 28 (Call Sign: S2160, COSPAR: 2005-022A)

AMC-15 (Call Sign: S2180, COSPAR: 2004-041A)

6) Please note that the 2.4m Hawkey III terminal does not meet the minimum antenna size specified in Footnote US 356 of Section 2.106 of the Commission's rules. Therefore, please amend the frequency band from 13.75-14.5 GHz to 14.0 -14.5 GHz band for 2.4m Hawkey III terminal.

L3Harris (applicant) accepts the restriction to 14.0 - 14.5 GHz for the 2.4 m Hawkey III terminal.