Exhibit A

Description of the Application

Astranis Projects USA LLC ("Astranis") seeks authority to deploy up to ten fixed earth stations in the state of Alaska. The earth stations will communicate with Astranis's Geostationary Orbit ("GSO") satellite Arcturus ("Arcturus"). These earth stations will initially support time-sensitive in-orbit testing for Arcturus and will subsequently be used for long-term carrier monitoring operations. Arcturus is expected to deploy at the end of 2022 and Astranis seeks authority to operate these earth stations by **January 6, 2023**. These earth stations will only communicate over portions of the Ka-band that have been requested for use by Arcturus in Astranis's pending space station license application.[1]

Grant of this application is in the public interest as it will enable the provision of dedicated satellite connectivity services to U.S. individuals, corporations, and government-users in Alaska and the surrounding region.

A. Point of Communication: Arcturus

The earth stations will communicate with Arcturus, which will operate at 163° W.L., by transmitting in the 28.35-28.6 GHz and 29.3-29.75 GHz bands and receiving[2] in the 18.3-18.8 GHz and 19.7-20.2 GHz bands.[3] Astranis has applied for access to these bands in its Arcturus space station license application that is pending before the Commission.[4]

B. Description of Earth Station Operations

Astranis seeks to operate one type of fixed earth station pursuant to this blanket license application. Specifically, Astranis seeks to use a 1.8-meter earth station with an antenna and reflector manufactured by Global Skyware ("1.8m terminal").

Protection of Adjacent Band GSO Networks. Measured transmit and receive antenna patterns for the 1.8m terminal meet the limits articulated by Section 25.209(a) and (b) of the Commission's rules. Exhibit B of this application is a certification pursuant to Section 25.132(a)(1) confirming the conformance of this antenna with Sections 25.209(a) and (b). The input power spectral density into the antenna will not exceed 3.5 dBW/MHz, consistent with Section 25.212(e) of the Commission's rules. Therefore, this earth station is fully compliant with two-degree separation in each of the requested bands of operation.

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[1] *See* Call Sign: S3155; IBFS File No. SAT-LOA-20221019-00145.

[2] Astranis is coordinating the use of the 18.2-20.2 GHz band with the U.S. government in accordance with footnote US334 of the U.S. Table of Frequency Allocations. Astranis expects to complete coordination prior to the requested grant date in this application.

[3] These bands are identified as blanket-license bands for earth stations communicating with GSO satellites in the Federal Communication Commission's (the "Commission") rules. *See* 47 C.F.R. 25.124(a)(5).

[4] *See* Call Sign: S3155; IBFS File No. SAT-LOA-20221019-00145.

Good Faith Coordination with Non-geostationary Orbit ("NGSO") Mobile Satellite Service Feeder Link ("MSS FL") Operators in the 29.3-29.5 GHz Band. Astranis will comply with Section 25.258 of the Commission's rules and coordinate its earth station deployments with NGSO MSS FL operators in the 29.25-29.5 GHz band.

Astranis has completed coordination with Iridium in the 29.3-29.5 GHz frequency range and Iridium is the only NGSO MSS FL operator with earth stations currently deployed in Alaska.[5] Astranis will continue to engage with good faith coordination efforts with other NGSO MSS FL operators.

[5] Confirmed by an IBFS search conducted on November 2, 2022 of earth stations in Alaska operating in the 29.3-29.5 GHz band. *See* Call Signs E060300 and E052282.

Exhibit B

Declaration

I hereby declare that:

1. I am the technically qualified person responsible for the preparation of the engineering information contained in this application, and that I am familiar with Section 25.209 of the Commission's rules.

2. In accordance with Section 25.132(a)(1) of the Commission's rules, I have reviewed the results of a series of radiation pattern tests performed by the antenna manufacturer on representative equipment in representative configurations. The test results demonstrate that the Global Skyware AT1154 1.8 meter antenna meets the relevant off-axis gain standards set forth by Section 25.209.

The declaration above is true and correct to the best of my knowledge, information, and belief.

Ryan McLinko

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