EXHIBIT 1

REQUEST FOR SPECIAL TEMPORARY AUTHORIZATION
(Response to Question 12, FCC Form)

Pursuant to Section 25.120(b)(4) of the Commission's rules,[1] HNS License Sub, LLC (together with its affiliates, "Hughes") requests to renew its special temporary authorization ("STA"),[2] for an additional 30 days until Mar. 27, 2023, to continue testing and demonstration of four earth station aboard aircraft ("ESAA") terminals within the contiguous United States ("CONUS") for communications with the EchoStar XIX satellite ("EchoStar XIX" or "Jupiter 2") on the following Ka-band frequencies: 29.25-30.0 GHz (uplink) and 19.7-20.2 GHz (downlink).[3] Expeditious grant of the requested STA renewal will serve the public interest by allowing immediate testing and demonstration of the latest technology in ESAA terminals for potential commercial deployment of new broadband applications to U.S. airline passengers and crew.[4]

The technical parameters of the ESAA terminals are specified in Attachment A and remain unchanged.[5] The ESAA terminals have been authorized under the Commission's Part 2 equipment authorization procedures for compliance with applicable Part 25 technical requirements,[6] and are nearly the same as those already authorized for other ESAA terminals

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[1] *See* 47 C.F.R. § 25.120(b)(4).

[2] *See* Hughes, *Stamp* Grant, IBFS File No. SES-STA-20230119-00066 (Jan. 23, 2023).

[3] Hughes is licensed to operate EchoStar XIX at 97.1ºW in the fixed satellite service ("FSS"), as well as numerous associated earth station terminals, on the same Ka-band frequencies proposed herein. *See* Hughes, *Stamp Grant*, Call Sign S2834, IBFS File No. SAT-MOD-20171204-00163 (Jan. 18, 2018); Hughes, *Radio Station Authorization*, Call Sign E060445, IBFS File No. SES-RWL-20220128-00103 (Mar. 9, 2022).

[4] Following successful completion of its STA operations, Hughes may seek authorization to operate the proposed ESAA terminals on a long-term basis.

[5] Attachment A specifies relevant technical parameters as well as U.S. point of contact information, consistent with 47 C.F.R. § 25.228(g)(1).

[6] Additionally, the spectrum use for earth stations in motion ("ESIMs"), including ESAAs, is consistent

communicating with EchoStar XIX.[7] Hughes will continue to operate the ESAA terminals in compliance with Section 25.218's off-axis EIRP density envelope for operation with geostationary Ka-band FSS satellites and Section 25.228's requirements for ESAA operations.[8] Hughes will also continue to operate the ESAA terminals in accordance with all applicable coordination agreements, and will operate in the 29.25-29.3 GHz band only after additional coordination with Iridium has been completed.[9] Accordingly, the proposed STA renewal operations raise no interference concerns.

with the U.S. table of frequency allocations. *See* 47 C.F.R. § 2.106, n.NG527A (in the 19.7-20.2 GHz and 29.25-30.0 GHz bands, ESIMs may be authorized to communicate with geostationary satellites on a primary basis).

[7] *See* Thales Avionics, *Radio Station Authorization*, IBFS File No. SES-MOD-20200818-00888 (Oct. 1, 2020) (licensing operation of ThinKom KA2517 ESAA terminals for communications with EchoStar XIX and other satellites).

[8] *See* 47 C.F.R. §§ 25.218, 25.228.

[9] *See* Hughes, *Supplemental Letter*, IBFS File No. SES-STA-20230119-00066 (filed Jan. 24, 2023).

ATTACHMENT A

TECHNICAL PARAMETERS AND POINT OF CONTACT FOR PROPOSED STA OPERATIONS OF ESAA TERMINALS

Technical Parameters:

Manufacturer	ThinKom	ThinKom
Model	Ka2517	Ka1717
Quantity	2	2
Frequency Bands (GHz)	29.25 – 30.0 (uplink) 19.7 – 20.2 (downlink)	29.25 – 30.0 (uplink) 19.7 – 20.2 (downlink)
Transmitting Antenna Size/Diameter (inches)	17	17
Area of Operation	CONUS	CONUS
Antenna Polarization	Left and Right Circular	Left and Right Circular
Emission Designator	17M8FDXT	17M8FDXT
Transmitting Antenna Gain (dBi at GHz)	38 dBi at 29.5 GHz	38 dBi at 29.5 GHz
Receiving Antenna Gain (dBi at GHz)	39 dBi at 19.7 GHz	36 dBi at 19.7 GHz
Total Input Power at Antenna Flange (watts)	15.8	15.8
Total EIRP for All Carriers (dBW)	50	50
Maximum EIRP per Carrier (dBW)	51.5	51.5
Maximum EIRP Density per Carrier (dBW/4 kHz)	17.5	17.5
Modulation and Services	OQPSK	OQPSK
Maximum EIRP Density toward Horizon (dBW/4 kHz)	-28	-28

U.S. Point of Contact:

The following U.S. point of contact will be available 24 hours a day, seven days a week, with authority and ability to cease all ESAA emissions, if required:

Contact: Hughes Network Operations Center
Phone Number: (301) 601-4205
Email Address: gtnnmc@hughes.com
Address: 11717 Exploration Lane Germantown, MD 20876