Approved by OMB
3060–0678

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATIONEnter a description of this application to identify it on the main menu:
60–day STA for 90 cm Ka–band Remote Earth Terminals (E060445)

1. Applicant

Name:	HNS License Sub, LLC	**Phone Number:**	301–428–5893
DBA Name:		**Fax Number:**	301–428–2818
Street:	11717 Exploration Lane	**E–Mail:**	jennifer.manner@echostar.com
City:	Germantown	**State:**	MD
Country:	USA	**Zipcode:**	20876 –
Attention:	Jennifer Manner		

GRANTED
International Bureau

File # SES-STA-20170721-00792
E060445
Call Sign _____ Grant Date 7-31-17
(or other identifier)
Term Dates
From: 7-31-17 To: 9-29-17
Approved: Paul E Blaw

Applicant: HNS License Sub, LLC
Call Sign: E060445
File No.: SES-STA-20170721-00792
Special Temporary Authority (STA)

HNS License Sub, LLC is granted a special temporary authority for 60 days, commencing July 31, 2017, to operate up to 100,000 ka-band FSS remote earth terminals (90 cm in diameter) to provide high-speed broadband services to consumers throughout the United States with AMC-15 105° W.L., AMC-16 @ 85° W.L. EchoStar-9 (S2179) @ 121 W.L. EchoStar XVII @ 107.1° W.L. and JUPITER 2 (a.k.a. EchoStar XIX, or JUPITER 97W) @ 97.1° W.L. orbital location in the 28.350 – 28.600 GHz & ~~29.3-30.0 GHz~~ 29.25-30.0 GHz (Earth-to-space) and 19.7-20.2 GHz & 18.3-19.3 GHz (space-to-Earth) frequency bands under the following conditions:

1. Operations will not exceed the operational power levels and parameters requested and coordinated.

2. Operations, shall not cause harmful interference to, and shall not claim protection from interference caused to it by any other lawfully operating station and it shall cease transmission(s) immediately upon notice of such interference and notify the FCC in writing.

3. Transmitter(s) must be turned off during antenna maintenance to ensure compliance with the FCC-specified safety guidelines for human exposure to radiofrequency radiation in the region between the antenna feed and the reflector. Appropriate measure must also be taken to restrict access to other regions in which the earth station's power flux density levels exceed the specified guidelines.

4. Operations shall be consistent with applicable coordination agreements and satellite authorized bands.

5. Any action taken or expense incurred as a result of operations pursuant to this STA is solely at HNS License Sub, LLC's risk.

6. Operations in the 29.25-29.30 are limited to operations with Echostar XVII and Echostar XIX subject to the limits agreed upon in the satellite operators coordination agreement.

This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release.

GRANTED
International Bureau

File # SES-STA-20170721-00792
Call Sign E060445 Grant Date 7-31-17
(or other identifier)
Term Dates
From: 7-31-17 To: 9-29-17
Approved:

2. Contact

Name:	Jennifer A. Manner	**Phone Number:**	301–428–5893
Company:	HNS License Sub, LLC	**Fax Number:**	301–428–2818
Street:	11717 Exploration Lane	E–Mail:	jennifer.manner@echostar.com
City:	Germantown	**State:**	MD
Country:	USA	**Zipcode:**	20876 –
Attention:		**Relationship:**	Same

(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.)
3. Reference File Number or Submission ID

4a. Is a fee submitted with this application?
◉ If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).
○ Governmental Entity ○ Noncommercial educational licensee
○ Other(please explain):

4b. Fee Classification CGX – Fixed Satellite Transmit/Receive Earth Station

5. Type Request

◉ Use Prior to Grant ○ Change Station Location ○ Other

6. Requested Use Prior Date 07/28/2017	
7. City	8. Latitude (dd mm ss.s h) 0 0 0.0

9. State	10. Longitude (dd mm ss.s h) 0 0 0.0

11. Please supply any need attachments.

Attachment 1: Exhibit 1 Attachment 2: Attachment 3:

12. Description. (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Seeking 60-day special temporary authority to operate up to 100,000 Ka-band FSS remote earth terminals (90 cm. in diameter) to provide high-speed broadband services to consumers throughout the United States. See Exhibit 1.

13. By checking Yes, the undersigned certifies that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti–Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application" for these purposes. ◉ Yes ○ No

14. Name of Person Signing Jennifer A. Manner	15. Title of Person Signing Senior Vice President, Regulatory Affairs

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

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EXHIBIT 1

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

Pursuant to Section 25.120(b)(3) of the Commission's rules,[1] HNS License Sub, LLC (together with its affiliates, "Hughes") requests special temporary authorization ("STA") for 60 days to operate up to 100,000 remote earth terminals (90 cm. in diameter) in the fixed satellite service ("FSS") on the following Ka-band frequencies: 28.35-28.6 GHz (uplink), 29.25-30.0 GHz (uplink), 18.3-19.3 GHz (downlink), 19.7-20.2 GHz (downlink).[2] These earth terminals will operate with certain Ka-band FSS satellites to provide high-speed broadband services to consumers throughout the United States utilizing the latest technologies.

I. BACKGROUND

Hughes holds a blanket license (Call Sign E060445) ("Ka-band Blanket License") to operate a network of transmit/receive Ka-band FSS earth terminals used to provide high-speed broadband services to U.S. consumers. These licensed earth terminals include antennas of various sizes, ranging from 69 cm. to 3.5 m. in diameter, and are authorized to communicate with a number of Ka-band satellites,[3] including the following:

1) AMC-15 at 105° W.L. (U.S.-licensed);
2) AMC-16 at 85° W.L. (U.S.-licensed);
3) EchoStar-9 at 121° W.L. (U.S.-licensed);
4) EchoStar XVII at 107.1° W.L. (U.S.-licensed); and
5) JUPITER 2 (a/k/a EchoStar XIX or JUPITER 97W) (U.S.-licensed).[4]

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[1] *See* 47 C.F.R. § 25.120(b)(3).

[2] Hughes shortly will file a modification application for long-term authority to operate these same Ka-band FSS earth terminals.

[3] *See* Hughes, FCC Radio Station Authorization, Call Sign E060445, IBFS File No. SES-MOD-20151102-00791 (granted May 23, 2016).

[4] On September 15, 2016, the FCC authorized Hughes to operate Jupiter 2 (a/k/a EchoStar XIX or Jupiter 97W), a Ka-band FSS satellite, at 97.1° W.L. *See* Hughes, Application, IBFS File No. SAT-LOA-20160624-00061 (granted Sept. 15, 2016).

II. DESCRIPTION OF PROPOSED STA OPERATIONS

Hughes requests a 60-day STA to operate up to 100,000 Ka-band FSS earth terminals (90 cm. in diameter) manufactured by Skyware Global. Like other earth terminals authorized under the Ka-band Blanket License, the proposed 90 cm. earth terminals will operate with the same Ka-band satellites listed in Section I above, including JUPITER 2, to provide high-speed broadband services to consumers throughout the United States.

The proposed earth terminals are fully consistent with the FCC's technical requirements,[5] including power density limits under 47 C.F.R. § 25.138 and cross-polarization requirements under 47 C.F.R. § 25.209(b). Additionally, Hughes will operate these earth terminals in accordance with all applicable coordination agreements.[6] Accordingly, there are no interference concerns with the proposed STA operations.

III. GRANT OF THE REQUESTED STA WILL SERVE THE PUBLIC INTEREST

Grant of the requested STA will serve the public interest by allowing Hughes to quickly deploy the latest technology in user terminals that will be used to provide high-speed broadband services to consumers throughout the United States. Specifically, these user terminals will be deployed to meet the broadband needs of business, government and residential users in the United States, delivering such high-demand services as access to the Internet, digital video streaming, voice over IP, digital music, interactive television, video conferencing, and high capacity two-way communications.

Hughes has deployed more than one million broadband user terminals throughout the United States and Canada, and demand continues to increase significantly with the successful

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[5] *See* Attachment A (Technical Specifications).

[6] Specifically, Hughes has previously concluded a coordination agreement with Iridium, the only NGSO licensee in the 29.25-29.50 GHz frequency band. The proposed operations will comply with the coordination agreement, hence protecting Iridium's operations in the band.

launch of EchoStar XIX.[7] This increasing demand for high-speed broadband service demonstrates that there is an ample market for the types of broadband services that Hughes provides.[8] Additionally, areas of the United States that are currently underserved or unserved by terrestrial broadband technologies will benefit from the availability of these new user terminals. Deployment of these new user terminals will provide high-speed broadband service to rural and underserved areas, promote regional commerce, facilitate development of applications and content for consumers, and create new opportunities for economic development in the United States.

[7] *See* Hughes, Press Release, *Hughes Launches World's Largest and Fastest Broadband Satellite Network* (Mar. 7, 2017).

[8] *See* Hughes, Press Release, *Hughes to Highlight Growth in High Throughput Satellite Technology at CSAT 2014 Conference* (Sept. 8, 2014).

ATTACHMENT A
TECHNICAL SPECIFICATIONS

ANTENNA ID:	TR90CM	90 cm.	Skyware Global	
28350.0000 - 28600.0000 MHz		650KG7W	5.15 dBW, 29.4 dBW / 4 kHz	512 KSPS, PSK, DIGITAL CARRIER
29250.0000 - 30000.0000 MHz		650KG7W	51.5 dBW, 29.4 dBW / 4 kHz	512 KSPS, PSK, DIGITAL CARRIER
18300.0000 - 19300.0000 MHz		100KG7W		100 KHZ, PSK, DIGITAL CARRIER
18300.0000 - 19300.0000 MHz		500MG7W		500 MHZ, PSK, DIGITAL CARRIER
19700.0000 - 20200.0000 MHz		100KG7W		100 KHZ, PSK, DIGITAL CARRIER
19700.0000 - 20200.0000 MHz		500MG7W		500 MHZ, PSK, DIGITAL CARRIER