



**INTELSAT.**

*Envision. Connect. Transform.*

January 29, 2020

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

Re: Request for Further Extension of Special Temporary Authority  
7.3m S-band Antenna, Paumalu, Hawaii

Dear Ms. Dortch:

Intelsat License LLC (“IntelSat”) herein requests an additional 30 days of Special Temporary Authority (“STA”)<sup>1</sup> previously granted to IntelSat<sup>2</sup> to utilize a 7.3m S-band antenna located at its Paumalu, Hawaii teleport to provide telemetry, tracking, and command (“TT&C”) for the STPSat-4 satellite during launch and early orbit phase (“LEOP”), in-orbit testing (“IOT”), drift, and in its final orbit. The spacecraft is expected to launch/deploy from the International Space Station on or about January 29, 2020. The services are expected to last approximately one year, and IntelSat has filed a 180-day STA request to support these services.<sup>3</sup>

STPSat-4 is a Department of Defense Space Test Program satellite that hosts a number of experimental payloads including the Air Force Research Laboratory Modular RF Tile L-band Experiment.<sup>4</sup> STPSat-4 is a non-geosynchronous satellite with an apogee of 400 km and inclination angle of 51.6 degrees. The STPSat-4 operation will be performed using the following frequencies:

---

<sup>1</sup> IntelSat has filed its STA request, an FCC Form 159, a \$210.00 filing fee, and this supporting letter electronically via the International Bureau’s Filing System.

<sup>2</sup> See *Satellite Communications Services Information; Actions Taken*, Report No. SES-02230, File No. SES-STA-20191212-01765 (Jan. 8, 2020) (Public Notice).

<sup>3</sup> See *Satellite Communications Services; Satellite Radio Applications Accepted for Filing*, Report No. SES-02189, File No. SES-STA-20190711-00912 (Aug. 7, 2019) (Public Notice).

<sup>4</sup> For more information, see [www.nasa.gov/mission\\_pages/station/research/experiments/explorer/Investigation.html?#id=7347](http://www.nasa.gov/mission_pages/station/research/experiments/explorer/Investigation.html?#id=7347).

2109.75 MHz (RHCP; emission designator: 17K2G1D) in the uplink and 2277.90 MHz (RHCP; emission designators: 437KG1D and 875KG1D) in the downlink.  
The 24x7 contact information for STPSat-4 mission is as follows:

Ph.: (703) 559-7701 – East Coast Operations Center (primary)  
(310) 525-5591 – West Coast Operations Center (back-up)

Request to speak with Harry Burnham or Kevin Bell.

In further support of this request, Intelsat incorporates by reference Exhibits A and B of its original request,<sup>5</sup> which contain technical information that demonstrates that the operation of the earth station will be compatible with its electromagnetic environment and will not cause harmful interference into any lawfully operating commercial terrestrial facility and a document supporting STPSat-4 operations.

To the extent necessary, Intelsat seeks waiver of the U.S. Table of Frequency Allocations, which allocates the commercial use 2025-2110 MHz to the fixed and mobile services, and the use of 2200-2290 MHz solely to Federal services.

The Commission may grant a waiver for good cause shown. The Commission typically grants a waiver where the particular facts make strict compliance inconsistent with the public interest. In granting a waiver, the Commission may take into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis. Waiver is therefore appropriate if special circumstances warrant a deviation from the general rule, and such a deviation will serve the public interest. As shown below, good cause exists here to grant a waiver allowing Intelsat's 7.3m S-band antenna to operate in order to support STPSat-4's launch, IOT, and operations.

Good cause exists to waive the Table of Allocations for 2025-2110 MHz and 2200-2290 MHz frequency bands. While the commercial allocation in both bands does not include any satellite services, the Federal allocation includes space operation in both bands. Therefore, Intelsat's operations pursuant to grant of this STA will be consistent with the Federal allocations while supporting the Federal operator of STPSat-4 and will not increase the risk on interference.

Finally, Intelsat clarifies that during the STPSat-4 mission, the U.S. Air Force will control the spacecraft. Intelsat will remain in control of the baseband unit, RF equipment, and antenna.

---

<sup>5</sup> See *Satellite Communications Services Information; Actions Taken*, Report No. SES-02188, File No. SES-STA-20190711-00911 (Aug. 7, 2019) (Public Notice).

Ms. Marlene H. Dortch

January 29, 2020

Page 2

Grant of this further STA extension request will allow Intelsat to assist in safely launching, testing, and operating the STPSat-4 satellite, and thereby promotes the public interest.

Respectfully submitted,

*/s/ Cynthia J. Grady*

Cynthia J. Grady  
Senior Counsel  
Intelsat US LLC

cc: Paul Blais