



INTELSAT.

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July 11, 2019

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

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

Dear Ms. Dortch:

Intelsat License LLC (“Intelsat”) herein requests a grant of Special Temporary Authority (“STA”)¹ for 180 days, commencing November 16, 2019, 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 services are expected to last approximately one year, and Intelsat will be filing a 30-day STA request to support these services.

STPSat-4 is a Department of Defense Space Test Program satellite that will host a number of experimental payloads including the Air Force Research Laboratory (“AFRL”) Modular RF Tile L-band Experiment.² 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: 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.

¹ 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 (“IBFS”).

² For more information, *see*

www.nasa.gov/mission_pages/station/research/experiments/explorer/Investigation.html?#id=7347.

Ms. Marlene H. Dortch

July 11, 2019

Page 2

In further support of this request, Intelsat attaches Exhibits A and B, which contains 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.

Grant of this STA 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