



October 8, 2018

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")<sup>1</sup> for 30 days, commencing October 15, 2018, to utilize a 7.3m S-band antenna located at its Paumalu, Hawaii teleport for initial verification of the S-band ground station equipment using the Carbonite-1 ("CBNT-1") satellite.<sup>2</sup> Intelsat expects the ground station verification period to last approximately 30 days.

This testing is being performed in preparation for use of the S-band antenna to provide telemetry, tracking, and command ("TT&C") services to the General Atomics Orbital Test Bed ("OTB") satellite during its launch and early orbit phase ("LEOP") and in-orbit testing ("IOT").<sup>3</sup> Both CBNT-1 and OTB are a low-Earth orbit ("LEO") non-geostationary orbit satellites ("NGSO"). OTB will launch as part of the U.S. Air Force's Space Technology Program (STP-2) and will carry the National Aeronautics and Space Administration's ("NASA") Deep Space Atomic Clock, the U.S. Air Force's Modular Solar Array, and other payloads.<sup>4</sup> OTB is currently scheduled to launch November 30, 2018.

Intelsat US LLC

<sup>&</sup>lt;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 ("IBFS").

<sup>&</sup>lt;sup>2</sup> CBNT-1 is licensed by the United Kingdom and shares many common design features with the OTB satellite such that advance testing with the CBNT-1 satellite will help assure success of OTB's LEOP.

<sup>&</sup>lt;sup>3</sup> Intelsat will be separately filing a request for STA to support the OTB mission.

<sup>&</sup>lt;sup>4</sup> See <u>http://www.ga.com/websites/ga/images/products/defense/space-</u> systems/OTB Satellite DS 0818E.pdf for more information.

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The CBNT-1 operations will be performed in the following frequencies: 2059.0 MHz and 2062.0 MHz in the uplink (RHCP); and 2240.0 MHz in the downlink (LHCP). The proposed operations will be coordinated with all operators of satellites that use the same frequency bands and are in the flight paths of CBNT-1.<sup>5</sup> All operators of potentially affected satellites will be provided with an emergency phone number where the licensee can be reached in the event that harmful interference occurs.

The 24x7 contact information for the 7.3m S-band antenna operations 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 herewith attaches Exhibits A-C, 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 waiver requests.

Grant of this STA request will allow Intelsat to ensure its 7.3m S-band antenna can provide support to U.S. Government missions aboard the OTB satellite and thereby promotes the public interest.

Please direct any questions regarding this STA request to the undersigned at (703) 559-6949.

Respectfully submitted,

/s/ Cynthia J. Grady

Cynthia J. Grady Senior Counsel Intelsat US LLC

cc: Paul Blais

<sup>&</sup>lt;sup>5</sup> ViaSat, Intelsat's customer, will handle the coordination.