



**INTELSAT.**

*Envision. Connect. Transform.*

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 November 30, 2018, to utilize a 7.3m S-band antenna located at its Paumalu, Hawaii teleport for telemetry, tracking, and command (“TT&C”) services during launch and early orbit phase (“LEOP”) and in-orbit testing (“IOT”) of the General Atomics Orbital Test Bed (“OTB”) satellite.<sup>2</sup> The launch of OTB is currently scheduled for November 30, 2018. Intelsat expects the OTB LEOP and IOT period to last approximately 75 days.

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>3</sup> Because OTB is a low-Earth orbit (“LEO”) non-geostationary orbit satellites (“NGSO”), TT&C services from the S-band antenna to the satellite will occur 1-4 times per day, ranging from 8-10 minutes in duration.<sup>4</sup>

The OTB operations will be performed in the following frequencies: 2061.0 MHz, 2062.0 MHz, and 2063.0 MHz (RHCP) in the uplink, and 2272.5 MHz in the downlink (RHCP). The proposed operations will be coordinated with all operators of satellites that use the same frequency bands and

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<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>2</sup> Intelsat understands that while the OTB satellite is not yet licensed, it will be licensed by the United States and that General Atomics has discussed the proposed satellite operations with Commission staff and other interested agencies.

<sup>3</sup> See [http://www.ga.com/websites/ga/images/products/defense/space-systems/OTB\\_Satellite\\_DS\\_0818E.pdf](http://www.ga.com/websites/ga/images/products/defense/space-systems/OTB_Satellite_DS_0818E.pdf) for more information.

<sup>4</sup> The planned orbit for the OTB satellite is 720 km with an inclination of 24°.

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are in the flight paths or are potentially affected by IOT operations.<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 and B, 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 waiver request.

Finally, Intelsat clarifies that during the OTB launch, ViaSat 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 provide support U.S. Government missions aboard the OTB satellite and thereby promotes the public interest.

Grant of this STA request will allow Intelsat to safely place OTB in non-geostationary orbit; TT&C the spacecraft during IOT; and provide support 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

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