

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
Hawaii Pacific Teleport, L.P.) File No. _____
)
Application to Modify Kapolei Earth)
Station License to Add Telstar 18 VANTAGE)
as a Point of Communication)

**APPLICATION FOR AUTHORITY TO COMMUNICATE WITH A NON-US
LICENSED SPACE STATION**

I. INTRODUCTION AND SUMMARY

Pursuant to Section 25.117 of the Commission’s rules, Hawaii Pacific Teleport, L.P. (“HPT”) seeks approval of a modification of its license to operate an earth station in Kapolei, Hawaii, Call Sign E010016, to add the Telstar 18 VANTAGE (“T18V”) satellite as a point of communication using C-band and extended C-band frequencies.

T18V is a new state-of-the-art geostationary satellite orbit, Fixed-Satellite Service (“FSS”) space station owned and operated by Telesat International Limited (“Telesat”) that will replace and expand the coverage of Telesat’s Telstar 18 (“T18”) satellite currently operating at 138° EL (222° WL). T18V was launched on September 10, 2018, and is expected to be placed into service in October 2018. ¹

¹ T18 will be collocated with T18V at 138°EL for a short period of time, pending transition of customer traffic and determination of a new location for T18.

HPT uses E010016 to provide non-common carrier services in standard C-band (3700-4200 MHz and 5925-6425 MHz) and extended C-band (5850-5925 MHz). Among other things, E010016 provides telemetry, tracking and control (“TT&C”) for T18 and supports C-band customer services on T18.²

HPT seeks to modify E010016 to include T18V as an authorized point of communication for the following standard and extended C-band frequencies that are currently covered by the license: 3623 MHz; 3625 MHz; 3700-4200 MHz; 5850-5925 MHz; 5925-6425 MHz. HPT also seeks to add to its license the following extended C-band frequencies to support TT&C for T18V: 6647 MHz and 6649 MHz.³ These changes will enable HPT to use E010016 to provide TT&C for T18V and support non-common carrier customer services via T18V between Hawaii, on the one hand, and Australia, New Zealand and Asia, on the other hand.

This application includes the technical, legal and other information that is required to add a non-U.S. licensed satellite that is not on the Commission’s Permitted Space Station List as an authorized point of communication for a U.S. earth station. It also addresses coordination and other frequency requirements.⁴

As discussed more fully below, grant of the application is in the public interest and satisfies applicable Commission requirements.

² As noted above, for a limited period of time, T18 and T18V will both be located at 138°EL. Because both satellites are controlled by Telesat, it is possible to operate them in the same stationkeeping box.

³ A separate application is being filed concurrently to modify HPT’s license for E030115, also located in Kapolei, to add T18V as a point of communications to support service links on certain Ku-band frequencies. The Ku-band payload on T18V includes regional and HTS spot beams that replace and expand on the Ku-band capacity and coverage of T18 (which does not include Hawaii).

⁴ A radiation hazard exhibit is included with this filing to demonstrate compliance with the Commission’s limits on RF radiation exposure.

II. TELSTAR 18 VANTAGE SATISFIES THE REQUIREMENTS OF SECTION 25.137.

Earth station applicants filing under Section 25.137 must demonstrate that the non-U.S. licensed space station proposed as a point of communication satisfies the Commission's legal and technical requirements as set forth in Section 25.114 of the rules, including Schedule S. This narrative and the associated Technical Exhibit and Schedule S show compliance with these requirements.

A. Technical Qualifications

T18V will replace existing C-band capacity and provide significant additional capacity in the Ku-band.

The C-band payload supports coverage of Asia, Australia and the Pacific in conventional and extended C-band frequencies. In terms of the U.S., the C-band regional beam provides coverage of Hawaii, parts of Alaska, and Guam. This beam will support VSAT services and point-to-point communications links between Hawaii, on the one hand, and Asia, Australia, New Zealand and other points in the North Pacific, on the other hand.

The attached technical exhibit and the Schedule S that are filed with this application establish that operation of T18V will be consistent with the Commission's technical requirements, including its requirements for two-degree satellite spacing compatibility.

B. Legal Qualifications

HPT highlights the following Part 25 rules that warrant special mention:

Sections 25.137(d)(1) & 25.164(b) – Satellite Construction Milestones

Section 25.137(d)(1) of the Commission’s rules⁵ requires earth station applicants requesting U.S. market access to demonstrate compliance with satellite launch and operation milestones. The milestones for GSO systems like T18V are set forth in Section 25.164(a) of the Commission’s rules.⁶ It is anticipated T18V will be operational, and that milestone requirements therefore will have been satisfied, prior to Commission action on this application. HPT acknowledges, however, that the provision of service to the U.S. market via T18V will be subject to the Commission’s milestone requirements in the event the satellite is not in service at the time of a grant.

Sections 25.137(d)(4) & 25.165 – Posting of Bond

Section 25.137(d)(4) of the Commission’s rules requires a bond to be posted in connection with filings involving non-U.S. licensed satellites that are not in orbit and operating.⁷ As stated above, it is anticipated T18V will be in orbit and operating prior to Commission action on this application. HPT acknowledges, however, that the provision of service to the U.S. market via T18V will be subject to the bond requirement in the event the satellite is not in service at the time of a grant.

C. Other Public Interest Factors

1. Effect on competition in the United States

Pursuant to Section 25.137 of the Commission’s rules, an earth station applicant requesting authority to communicate with a non-U.S.-licensed space station

⁵ 47 C.F.R. § 25.137(d)(1).

⁶ 47 C.F.R. § 25.164(a).

⁷ 47 C.F.R. § 25.137(d)(4).

must demonstrate either that: (1) U.S.-licensed satellites have effective competitive opportunities to provide analogous services in the country in which the space station is licensed and all countries in which communications with the U.S. earth station will originate or terminate, or (2) the licensing jurisdiction is a World Trade Organization (“WTO”) member country.⁸ HPT satisfies this requirement. T18V will be operated in the United States under authority from the Kingdom of Tonga (ITU designations TONGASAT C/KU-3 and TONGASAT-2/138E)⁹, which is a WTO member.¹⁰

2. Spectrum availability

The Commission considers under the “other public interest factors” element of *DISCO II* whether access to the U.S. market would have an impact on spectrum availability.¹¹ In so doing, the Commission evaluates whether grant of access would create the potential for harmful interference with U.S.-licensed satellite and terrestrial systems.

T18V satisfies this aspect of *DISCO II*. T18V will operate at 138° E.L. and is compatible with other geostationary satellite orbit (“GSO”) space stations from a spectrum availability perspective. The compatibility of T18V with satellites as close as two degrees away is demonstrated in the attached Technical Exhibit.

⁸ This rule implements the portion of the *DISCO II Order* establishing a presumption that granting applications to provide service in the United States via satellites licensed by WTO members will enhance competition and therefore is in the public interest. See *Amendment of the Commission’s Regulatory Policy to Allow Non-U.S. Licensed Space Stations to Provide Domestic and International Service in the United States*, 12 FCC Rcd 24094, ¶ 29 (1997) (“*DISCO II Order*”).

⁹ Both the TONGASAT C/KU-3 and TONGASAT-2/138E filings are associated with the C-band frequencies on T18V; for some reason, IBFS is not permitting entry of the full reference for both filings.

¹⁰ Tonga was not a WTO member at the time U.S. market access was granted for T18, and the Commission made a finding that the effective competitive opportunities test was satisfied. (SES-MOD-20040115-00131)

¹¹ See *DISCO II Order*, ¶¶ 146-182.

3. National security, law enforcement, foreign policy, and trade issues

The Commission also considers under the “other public interest factors” element of *DISCO II* whether grant of an application would implicate national security, law enforcement, foreign policy, or trade concerns.¹² The Commission has found in similar circumstances involving Telesat International or its affiliates that using non-U.S. licensed satellites to serve the United States raises no national security, law enforcement, foreign policy, or trade concerns. The Commission made this finding, for example, in authorizing the Telstar 19 VANTAGE satellite.¹³ These findings apply with equal force to HPT’s request to add T18V as a point of communication.

III. SPECTRUM ISSUES

In the table below, HPT addresses certain spectrum issues, including coordination requirements, that are specific to the frequencies that are the subject of this modification application.

¹² See *DISCO II Order*, ¶¶ 146-182.

¹³ *Telesat International Limited Petition for Declaratory Ruling to Add Telstar 19 VANTAGE, a Ku-band and Ka-band Satellite, to the Permitted Station List*, FCC File No. SAT-PPL-20160225-00020 (granted Aug. 31, 2016). See also *Telesat Canada Petition for Declaratory Ruling for Inclusion of ANIK F3 on the Permitted Space Station List*, FCC File No. SAT-PPL-20060516-00061 (granted Jan. 18, 2007); *Loral Orion Services, Inc., Order*, 15 FCC Rcd. 12419 (IB 2000); *Orion Satellite Corp., Order and Authorization*, 10 FCC Rcd. 12307 (IB 1995).

Frequency	Use	Coordination	Comments
3623 and 3625 MHz	space-to-Earth: telemetry	Non-federal coordination not required	HPT acknowledges these frequencies are authorized on a secondary basis (condition 5890) and acknowledges the limitations to use by international, intercontinental systems (Table of Allocations, footnote US245; Section 2.108 of the rules)
3700-4200 MHz	space-to-Earth: service links (full band) and telemetry at 4199 MHz	Comsearch report provided for coordination for 138°EL using 9.3M antenna (frequencies previously had been coordinated for the 11M antenna on E010016)	Frequencies are already licensed and coordinated for T18 at 138°EL. T18V is a replacement satellite for T18 at 138°EL. Accordingly, the Commission's temporary freeze on earth station modifications in this band is not applicable. ¹⁴

¹⁴ *Expanding Flexible Use of the 3.7-4.2 GHz Band*, Order and Notice of Proposed Rulemaking, FCC 18-91 (July 12, 2018), para. 46. In the event the freeze is determined to apply, however, there is good cause for a waiver because after T18 is replaced and relocated, terrestrial stations only would need to protect the same earth station location as before, and the earth station at that location would be communicating with a space station in the same orbital position as before.

Frequency	Use	Coordination	Comments
5850-5925 MHz	Earth-to-space: service links	Already coordinated for 138°EL	HPT is aware of the co-primary Federal Government radiocommunication allocation in this band in the U.S. and Possessions; of the potential electromagnetic compatibility issues in the frequency band (see e.g., NTAI Report on Federal Radar Spectrum Requirements, NTIA Report 83-115, Spectrum Resource Assessment in the 5650-5925 MHz Band, and FCC Fifth Notice of Inquiry in Preparation for a General World Radio Conference in 1979 (Docket No. 20271; FCC 77-349)); and agrees to accept this potential unacceptable interference that may be caused to its communication links by radiolocation systems, including high-powered land-based transportable and shipborne radar transmitters operating in the frequency band in accordance with footnote G2, to the receiving space station with which the earth station proposes to communicate. HPT acknowledges the limitations to use by international, intercontinental systems (Table of Allocations, footnote US245; Section 2.108 of the rules)
5925-6425 MHz	Earth-to-space: service links (full band) and command at 6423 and 6425 MHz	Comsearch report provided for coordination for 138°EL using 9.3M antenna (frequencies previously had been coordinated for the 11M antenna on E010016)	
6647 and 6649 MHz	Earth-to-space: command	Comsearch report provided for coordination	

IV. CONCLUSION

T18V will preserve the benefits of competition currently afforded by T18 in the provision of direct connectivity between the United States and Asia/Oceania in C-band at the 138°EL orbital position. In addition, the expanded coverage into the United States of the Ku-band capacity on the satellite will enhance competition and enhance the options available to customers in this country.

Accordingly, and in view of the foregoing, grant of this application to modify the license for E010016 is in the public interest, and it is respectfully requested that the Commission grant the application expeditiously.