

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of

Application of Hawaii Pacific Teleport L.P.)	Call Sign E150010
for 60-Day Special Temporary Authorization)	
("STA") to Communicate with the)	File No. _____
EUTELSAT 172B Satellite)	

APPLICATION FOR SPECIAL TEMPORARY AUTHORIZATION

Hawaii Pacific Teleport L.P. ("HPT") pursuant to Section 25.120 of the Commission's rules, 47 C.F.R. § 25.120, respectfully requests 60-day special temporary authorization ("STA") to operate a General Dynamics Satcom Technologies 9.2m fixed earth station (the "ST-9.2m gateway") at its facility in Kapolei, Hawaii. The ST-9.2m gateway will operate in the 18.4-19.2 GHz (space-to-Earth) and 27.5-29.1 GHz (Earth-to-space) bands to communicate with the EUTELSAT 172B satellite, a replacement for the EUTELSAT 172A satellite, which is the subject of a pending application and separate STA request to operate at the 172° E.L. orbital location.

HPT has filed an application, which remains pending before the Commission, to modify an existing station license¹ to operate the ST-9.2m gateway in Ka-band frequencies at 18.4-19.2 GHz (space-to-Earth) and 27.5-29.15 GHz (Earth-to-space) to support EUTELSAT 172B service link operations. The *HPT Modification Application* has not yet been placed on Public Notice and, given the 30-day public notice requirement and the impending commencement of EUTELSAT

¹ See Hawaii Pacific Teleport L.P., File Nos. SES-MFS-20170721-00787 and SES-AFS-20171007-01112, Call Sign E150010 (the "*HPT Modification Application*").

172B services, HPT would be unable to provide critical gateway support for EUTELSAT 172B service links when the satellite commences commercial operations.²

HPT seeks this STA commencing on November 15, 2017, or as soon as practicable thereafter, to ensure uninterrupted provision of service following the hand-off of customer traffic from EUTELSAT 172A to EUTELSAT 172B in mid-November. This STA will serve the public interest by enabling commencement of service of EUTELSAT 172B, including new high-throughput satellite (“HTS”) spot beams supporting mobility applications, thus enhancing capacity and the efficiency of services provided to U.S. customers in the Asia-Pacific region.

I. DISCUSSION

ES 172 LLC, an indirect, wholly owned subsidiary of Eutelsat S.A. (collectively “Eutelsat”), has a pending application with the Commission to operate certain C-band and Ku-band communications payloads of EUTELSAT 172B to replace the EUTELSAT 172A satellite,³ and is also filing an STA request to operate EUTELSAT 172B at 172° E.L. commencing November 15, 2017, pending the outcome of its underlying satellite application.⁴ In addition, both Panasonic Avionics and The Boeing Company have filed an STA request to communicate with

² HPT acknowledges that grant of the requested STA is without prejudice to any determination that the Commission may make regarding pending or future applications regarding HPT’s earth station license. Any action taken or expense incurred as a result of operations pursuant to the requested STA is solely at HPT’s risk.

³ See File No. SAT-RPL-20170927-00136, Call Sign S3021 (“*EUTELSAT 172B Application*”). The EUTELSAT 172B will operate in other frequencies, including Ka-band gateway frequencies, pursuant to authority issued by France. Nonetheless, the *EUTELSAT 172B Application* includes information regarding EUTELSAT 172B proposed operations under Commission and French authority.

⁴ See Application of ES 172 LLC for a 60-Day Special Temporary Authorization (“STA”) to Operate the EUTELSAT 172B Satellite from the 172° E.L. Orbital Location, File No. SAT-STA-20171104-00149, Call Sign S3021 (filed Nov. 4, 2017).

EUTELSAT 172B at 172° E.L. commencing November 15, 2017.⁵ Here, HPT seeks to provide critical gateway/backhaul services to support EUTELSAT 172B's Ku-band service links relied on by U.S. service providers and network operators.

The multiple applications and STA requests associated with EUTELSAT 172B include substantial technical and legal showings regarding the satellite's proposed operations, including Ka-band gateway operations that HPT seeks to support with the ST-9.2m gateway earth station. In addition, they demonstrate the strong public interest considerations associated with near-term access to this next-generation satellite.

HPT demonstrated in the *HPT Modification Application* that the EUTELSAT 172B satellite and ST-9.2m gateway comply with applicable Commission requirements for operating in the subject Ka-band frequencies, or requested appropriate waivers of such requirements.⁶ Moreover, in the *EUTELSAT 172B Application*, Eutelsat provides the information required by Section 25.114 of the Commission's rules, 47 C.F.R. § 25.114, including substantial technical showings and Schedule S data. HPT hereby incorporates by reference the satellite and earth station operational parameters and other relevant information set forth in the *EUTELSAT 172B Application* and *HPT Modification Application*.

⁵ See Panasonic Avionics Corporation, File No. SES-STA-20171003-01104, Call Sign E100089; The Boeing Company, SES-STA-20171006-01107, Call Sign E140097.

⁶ See 47 C.F.R. § 25.137(d); *HPT Modification Application* Section I.D. To the extent necessary, HPT incorporates by reference the following waiver requests: (i) a waiver of Section 2.106 and the Commission's Ka-band plan to permit non-conforming operation of the ST-9.2m gateway in the 18.8-19.2 GHz band; (ii) a partial waiver of the data submission requirements of revised Section 25.132 of the Commission's rules to allow for post-grant submission of certain measured data for the proposed antenna type; (iii) waiver of Section 25.210(j) to operate EUTELSAT 172B with a stationkeeping tolerance of ± 10 degree; and (iv) waiver of Section 25.210(f) regarding full frequency re-use on EUTELSAT 172B.

A. Ka-band Spectrum Access Issues

The U.S. Table of Allocations and the Commission's Ka-band Plan identify various spectrum allocations in the subject frequency bands.⁷ The ST-9.2m gateway seeks to communicate with the EUTELSAT 172B satellite in the following bands, with allocations indicated:

Table 1. Gateway Frequencies

Frequency Band (GHz)	Function	U.S. Allocation
27.5-28.35	Gateway Uplink	UMFUS fss (secondary)
28.35-28.6	Gateway Uplink	GSO FSS Primary ngso fss (secondary)
28.6-29.1	Gateway Uplink	NGSO FSS Primary gso fss (secondary)
18.4-18.8	Gateway Downlink	GSO FSS Primary
18.8-19.2	Gateway Downlink	NGSO FSS Primary

A summary of spectrum access considerations in each relevant band segment follows.

The Commission's Table of Allocations and Ka-band Plan provide that LMDS systems operate on a primary basis and FSS systems on a secondary basis in the 27.5-28.35 GHz (Earth-to-space) bands.⁸ The Commission also recently adopted rules that make FSS secondary to the

⁷ See United States Table of Frequency Allocations, 47 C.F.R. §2.106; *In the Matter of Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, 11 FCC Rcd. 19005, ¶¶ 57-58 and 78 (1996) (“*Ka-band Plan R&O*”). *In the Matter of Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use*, 15 FCC Rcd 13430, ¶ 28 and 34 (2000) (“*Redesignation of Ka-band Plan R&O*”); See also 47 C.F.R. § 25.136.

⁸ See *Ka-band Plan R&O* ¶¶ 59-62; see also *Redesignation of Ka-band R&O* ¶ 28.

newly created Upper Microwave Flexible Use Service (“UMFUS”) in the 27.5-28.35 GHz band.⁹ The UMFUS framework allows for the expansion of mobile operations and extended UMFUS rights and protections to existing LMDS licensees.¹⁰ The Comsearch coordination report included with the *HPT Modification Application* demonstrates that HPT has completed coordination in the 27.5-28.35 GHz band with existing terrestrial licenses in the area and no objections were received from incumbent licensees.¹¹ Moreover, HPT demonstrated that operation of the ST-9.2m gateway also satisfies Section 25.136 of the Commission’s rules to facilitate future UMFUS operations.¹²

The Table of Allocations and Ka-band Plan provide that the 28.35-28.6 GHz (Earth-to-space) and 18.4-18.8 GHz (space-to-Earth) bands may be used by GSO FSS systems on a primary basis. HPT will operate the ST-9.2m gateway consistent with this allocation. HPT notes that Section 25.115 of the Commission’s rules provides that earth stations proposing to receive in the 18.4-18.8 GHz band can communicate only with satellites for which coordination has been completed pursuant to Footnote US334. HPT understands that coordination of the EUTELSAT 172B satellite under Footnote US334 will be completed shortly. HPT further understands that interim coordination arrangements may have been concluded to permit in-orbit testing operations for EUTELSAT 172B. HPT certifies that it will operate consistent with any interim or final

⁹ *Establishing a More Flexible Framework to Facilitate Satellite Operations in the 27.5-28.35 GHz and 37.5-40 GHz Bands, et al.*, Report and Order and Further Notice of Proposed Rulemaking, FCC 16-89, ¶ 50 (2016) (“*Spectrum Frontiers Order*”). HPT notes that its proposed operations in the 27.5-28.35 GHz band are consistent with the Commission’s view on the “gateway-type” FSS operations that would not cause harmful interference to primary LMDS stations in the band.

¹⁰ *Id.* ¶ 41.

¹¹ See *HPT Modification Application*, Frequency Coordination Report.

¹² *Id.* at Attachment C.

coordination agreement and otherwise will not cause interference to or claim protection from U.S. government operations in the 18.4-18.8 GHz band.

The 28.6-29.1 GHz band is allocated to NGSO FSS on a primary basis and to the GSO FSS on a secondary basis. The 18.8-19.2 GHz band is allocated to NGSO FSS on a primary basis but there is no GSO FSS allocation, so HPT requests a waiver in the *HPT Modification Application* to operate in this band. For both bands, the ST-9.2m GSO FSS gateway earth station must not cause interference to or claim protection from NGSO FSS operations. The Commission has granted O3b Limited (“O3b”), a Ka-band NGSO system, U.S. market access and authorized operation of a gateway earth station in Hawaii. As demonstrated in the *HPT Modification Application* Technical Appendix, operation of the ST-9.2m gateway is fully compatible with and will not cause interference to O3b’s operations.¹³

B. Other Public Interest Considerations

HPT respectfully requests this 60-day STA pursuant to Section 25.120 of the Commission’s rules, 47 C.F.R. § 25.120. Section 25.120(a) provides that STA requests should be filed at least three working days prior to the date of commencement of the proposed operations. Here, HPT is proposing to commence Ka-band operations on or about November 15, 2017, to support Ku-band service links following the transition of traffic from EUTELSAT 172A to EUTELSAT 172B. Additionally, the Commission may grant a 60-day STA without placing it on public notice if the applicant plans to file a request for regular authority for the operations. As discussed, HPT currently has a pending application to enable the long-term commercial operations of the ST-9.2m gateway with EUTELSAT 172B at the 172° E.L. orbital location.

¹³ *Id.* at Attachment B, Section 14.

Grant of this STA request is in the public interest because it will directly facilitate the ability of Eutelsat to provide reliable services in transitioning traffic from the aging EUTELSAT 172A satellite to the EUTELSAT 172B satellite in mid-November. The EUTELSAT 172B satellite includes vital HTS beams that will support growing traffic requirements in the Asia-Pacific region. The Ka-band backhaul support provided by HPT's ST-9.2m gateway is required to fully utilize the commercial capabilities on EUTELSAT 172B and enable uninterrupted services from the 172° E.L. orbital location. Grant of this request would further serve the public interest by extending U.S. leadership in satellite-based broadband mobility services.

II. CONCLUSION

In view of the foregoing, the public interest would be served by a grant of a 60-day STA to allow HPT to provide Ka-band gateway services for EUTELSAT 172B satellite operations commencing on November 15, 2017, or as soon as practicable thereafter.