

March 21, 2019

**BY ELECTRONIC FILING**

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, DC 20554

Re: *Space Exploration Holdings, LLC, IBFS File No. SAT-MOD-20181108-00083*

Dear Ms. Dortch:

This is to inform you that, on March 19, 2019, Patricia Cooper, David Goldman, and undersigned counsel representing Space Exploration Holdings, LLC (“SpaceX”) met with Tom Sullivan, Troy Tanner, and Jennifer Gilsenan of the Commission’s International Bureau to discuss the above referenced application to modify SpaceX’s existing authorization to deploy and operate a non-geostationary orbit (“NGSO”) satellite system. During the meeting, SpaceX discussed its response to the Bureau’s request for further technical information with respect to that application,<sup>1</sup> noting the initial version of its satellite design will meet or exceed all Commission requirements for orbital debris mitigation and collision avoidance. Moreover, SpaceX has unlocked a totally demisable spacecraft design for its subsequent iteration of satellites, which will then reduce casualty risk to zero. Even including the initial iteration, SpaceX has improved the safety of its constellation by more than 90% since its initial application, which was already compliant with all Commission debris mitigation and collision avoidance rules.

SpaceX also discussed the safety value in permitting communications with its spacecraft after deployment through orbit raise, authority that the Commission envisioned for all geostationary orbit (“GSO”) satellites but has not yet implemented for NGSO satellites.<sup>2</sup> Specifically, allowing NGSO operators to transmit on their authorized frequencies (including those used for telemetry, tracking, and command (“TT&C”)) during orbit-raising maneuvers would ensure that only fully healthy satellites are raised from injection to their operational orbit by permitting persistent tracking and allowing testing of the TT&C and communications payloads during this period.

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<sup>1</sup> See Letter from William M. Wiltshire to Jose P. Albuquerque, IBFS File No. SAT-MOD-20181108-00083 (Mar. 13, 2019).

<sup>2</sup> See 47 C.F.R. § 25.282 (authorizing GSO satellites to use authorized TT&C frequencies during orbit raising maneuvers). The Commission has recognized this issue and recently proposed to expand the provisions of Section 25.282 to include NGSO systems. See *Mitigation of Orbital Debris in the New Space Age*, FCC 18-159, ¶ 70 (rel. Nov. 19, 2018).

**HARRIS, WILTSHIRE & GRANNIS LLP**

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Sincerely,

A handwritten signature in blue ink that reads "William M. Wiltshire". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

William M. Wiltshire  
*Counsel to SpaceX*

cc: Tom Sullivan  
Troy Tanner  
Jennifer Gilsenan