

## Federal Communications Commission Washington, D.C. 20554

September 3, 2020

Jonathan L. Wiener Goldberg, Godles, Wiener & Wright LLP 1025 Connecticut Ave., NW Washington, DC 20036

JWiener@g2w2.com

Re: Spaceflight, Inc.

IBFS File No: SAT-STA-20200728-00089

Dear Mr. Wiener:

On July 28, 2020 Spaceflight, Inc. (Spaceflight) filed the above-captioned application for special temporary authority (STA) associated with operations of the Sherpa FX-1 non-geostationary orbit (NGSO) spacecraft. To aid the Commission's evaluation of the application, please provide the following additional information:

- 1. Spaceflight seeks waiver of section 25.113(g), which requires approval for orbital deployment and a station license before a space station may be deployed and operated in orbit. We ask that Spaceflight provide information responsive to the questions contained in Form 312 Main Form, Application for Satellite Space Station Authorizations, Questions 29-34 and 36-40, which would typically be completed by an applicant for deployment and operating authority.
- 2. Please specify any control arrangements with respect to the four payloads that will remain onboard the Sherpa FX-1, in particular, the payloads with radio frequency operations. How will these payloads be activated, and what is the extent of the interaction between the Sherpa FX-1 operations and the operations of these payloads?
- 3. Please specify which of the deployed customer spacecraft will have propulsion, and whether the propulsion will be sufficient to perform collision avoidance, as appears to be assumed in the re-contact analysis.
- 4. Please provide more detail regarding the assumption that sub-3U spacecraft are considered a single, aggregate 3U spacecraft for purposes of the re-contact analysis, including why this assumption is made.
- 5. The re-contact analysis appears to include assessment of probability of collision with resident space objects under section 2.1, but characterizes this as "probability of recontact with resident space objects." Is this intended to be "probability of collision" rather than "probability of recontact" or was something different meant here?
- 6. Please provide additional details regarding the input data for the casualty risk assessments in the ODAR attachment. First, please clarify what is modeled in the DAS logs as "F", which is shown as surviving reentry and appears identical to subsequent entries of "Sherpa-FX1",

none of which are shown as surviving reentry. Second, please clarify whether non-deployed mass dummies were included in the casualty risk analysis, and if so, which component includes those mass dummies. Third, please explain or clarify the results of what we assume to be the sub-optimal deployment scenarios modeled on pages 28 and 32 of the ODAR, especially as they compare to the initial run on page 24. Specifically, can you briefly explain why these sub-optimal deployment scenarios appear to result in more favorable results for the casualty risk assessment?

To facilitate the Commission's timely evaluation of Spaceflight's application, we ask that you provide the requested information no later than **October 5, 2020**.

Sincerely,

Karl A. Kensinger

Acting Chief, Satellite Division International Bureau

Cc: Ms. Kristina Hloptsidis Spaceflight, Inc.

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