

Federal Communications Commission Washington, D.C. 20554

November 20, 2018

Lynne Montgomery Wilkinson Barker Knauer, LLP 1800 M Street, NW Suite 800N Washington, D.C. 20036

Re: Hiber Inc.

IBFS File No. SAT-PDR-20180910-000691

Call Sign: S3038

Dear Ms. Montgomery:

On September 10, 2018, Hiber Inc. (Hiber) filed the above-captioned Petition for Declaratory Ruling requesting U.S. market access for a non-voice, non-geostationary (NVNG) mobile-satellite service (MSS) system in the 399.9-400.05 MHz and 400.15-401 MHz frequency bands. To assist in the Satellite Division's review of Hiber's petition, please provide the information requested below.²

- 1. The Orbital Debris Assessment Report does not appear to be fully executed in the signature block.³ The version of the Debris Assessment Software utilized is not a current version. Please update.
- 2. In its Orbital Debris Assessment Report, Hiber identifies two failure modes that may be inversely related.⁴ The first "lithium plating on the anode" is caused by operation below recommended temperatures, while the second "gas generation" is caused by use above recommended temperatures. Please provide recommended temperature range and any steps to avoid operations above or below this range.
- 3. In its Orbital Debris Assessment Report, no calculations or data are included to support Hiber's conclusions regarding the probability of collision with space objects.⁵ Please provide additional information on these calculations.

¹ Section 25.137 of the Commission's rules specifies that a petition for declaratory ruling is the means to request U.S. market access through any type of non-U.S. licensed space station in any frequency band. Accordingly, we have changed Hiber, Inc.'s IBFS file number from a Letter of Intent (LOI) to a Petition for Declaratory Ruling (PDR).

² 47 CFR § 25.111(a).

³ Hiber Inc. Petition for Declaratory Ruling, IBFS File No. SAT-PDR-20180910-00069 (Petition), Orbital Debris Assessment Report at 1.

⁴ Petition, Orbital Debris Assessment Report, Section 3.4, Assessment of Spacecraft Intentional Breakups and Potential for Explosions.

⁵ Petition, Orbital Debris Assessment Report, Section 3.5, Assessment of Spacecraft Potential for On-Orbit Collisions.

- 4. In its Orbital Debris Assessment Report, Hiber provides the probability of collision for a proposed satellite system of two satellites.⁶ Please provide orbital debris mitigation information for Hiber's proposed twenty-four space station constellation.
- 5. The Schedule S lists the estimated lifetime of the satellites as three years from date of launch.⁷ There is no further documentation regarding the length of time these satellites will be in orbit through natural decay. Please provide additional information supporting Hiber's conclusion regarding the lifetime of the satellites. This information should be provided showing altitude and time data and may be submitted in a graph format.
- 6. Section 3.7 of the Orbital Debris Assessment Report includes an incomplete table of spacecraft components.⁸ Please provide a complete list of spacecraft components.
- 7. Hiber notes that regarding its proposed use of the 400.15-401 MHz band, Orbcomm, Inc. is authorized to use certain portions of this band on a primary basis. Hiber states that it "believes" it will be able to successfully coordinate with Orbcomm. Please state what steps Hiber has taken to complete this coordination. In addition, Hiber states it is capable of coordinating with Federal satellite operations in the 400.15-401 MHz band. Please submit detailed information supporting this statement, including any steps taken to commence coordination.

The requested information must be submitted no later than December 20, 2018. Failure to do so may result in the dismissal of Hiber's Petition pursuant to Section 25.112(c) of the Commission's rules, 47 CFR § 25.112(c).

Sincerely,

Vose P. Albuquerque Chief, Satellite Division International Bureau

⁶ Id.

⁷ Petition, Schedule S, at 2.

⁸ Petition, Orbital Debris Assessment Report, Section 3.7, Assessment of Spacecraft Reentry Hazards.

⁹ Petition, Attachment A, at 8.

¹⁰ Id. at 9.