

July 9, 2015



Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Informal Objection Under Section 5.95 to Application of Space Exploration Technologies Corp. ("SpaceX"), Application for Experimental License for the MicroSat-1a/b Test and Demonstration Mission, File No. 0356-EX-PL-2015

Dear Ms. Dortch:

Intelsat License LLC ("Intelsat") respectfully objects to grant of SpaceX's above-captioned application (the "SpaceX MicroSat-1a/b Application")¹ until such time as SpaceX includes sufficient information in the public record to allow Intelsat to analyze how SpaceX intends to protect co-frequency geostationary operations, as well as avoid collision with geostationary satellites transiting low earth orbit.

Intelsat is the world's leading provider of global satellite services, delivering high performance connectivity solutions for media, fixed and mobile broadband infrastructure, enterprise, and government and military applications. It operates one of the world's largest fleets of geostationary satellites and holds numerous FCC satellite licenses.

Intelsat's objection stems from the fact that the confidential treatment requests (the "SpaceX Confidential Treatment Requests")² filed in connection

¹ *Application of Space Exploration Technologies Corp. to Request an Experimental License for the MicroSat-1a/b Test and Demonstration Mission*, File No. 0356-EX-PL-2015 (filed May. 29, 2015) ("SpaceX Application").

² Letter to Nnake Nweke, Ph. D., Branch Chief, Experimental Licensing Branch, Office of Engineering and Technology, FCC, from David J. Den Herder, Sr. Counsel, SpaceX (May 29, 2015) ("SpaceX Confidential Treatment Request, Exhibits 1-5"); Letter to Nnake Nweke, Ph.

with the SpaceX MicroSat-1a/b Application sweep too broadly. Intelsat and, potentially, other interested operators of geostationary orbit ("GSO") systems, simply do not have the necessary information (including technical information) about SpaceX's experimental plans, to determine whether and how the proposed MicroSat-1a and MicroSat-1b satellites (the "MicroSat Satellites"), which would operate in the Ku-band and X-band, could operate on a non-interference basis or meet the requirement to avoid collision with other satellites. For this reason, Intelsat simultaneously has filed a Freedom of Information Act request seeking full copies of SpaceX's filings.³

I. SpaceX has failed to meet its burden of showing how it could operate on a non-interference basis to Ku- or X-band satellites in the geostationary arc.

A) SpaceX has failed to show that it would not interfere with licensed geostationary satellites.

Section 5.84 of the rules makes clear that experimental licenses must operate solely on a secondary basis to licensed services.⁴ SpaceX, therefore, has the obligation to operate without causing interference to licensed or authorized services, such as the Ku-band services operated by Intelsat and others.⁵ SpaceX boldly claims "interference with other systems is very unlikely."⁶ Yet its confidentiality request masks so much material that it is impossible for any satellite operator to judge whether its operations can be protected, as required by Section 5.84.

The SpaceX Confidential Treatment Requests ask that the following exhibits of the SpaceX MicroSat-1a/b Application be withheld from public disclosure: (i) Exhibit 1 – Information Regarding Satellite System; (ii) Exhibit 2 – Information Regarding Power Flux Density; (iii) Exhibit 3 – Information

D., Branch Chief, Experimental Licensing Branch, Office of Engineering and Technology, FCC, from David J. Den Herder, Sr. Counsel, SpaceX (June 9, 2015) ("SpaceX Confidential Treatment Request, Exhibit 6").

³ That filing is attached as Exhibit 1.

⁴ 47 C.F.R. § 5.84.

⁵ See "Guidance on Obtaining Small Licenses for Satellites," *Public Notice*, FCC, DA 13-445, released March 15, 2013, at 5 ("All experimental licenses are granted on a non-interference basis, *i.e.*, the licensed operations can neither cause interference nor claim protection from interference.").

⁶ SpaceX Question 7: Purpose of Experiment, at 1.

Regarding Ground Stations; (iv) Exhibit 4 – X Band Antenna Patterns [spreadsheet]; (v) Exhibit 5 – Ku Band Antenna Patterns [spreadsheet] (the "Non-Disclosed Exhibits"); and (vi) Exhibit 6 – Additional Information.⁷

The information that SpaceX is seeking to withhold is the kind of basic information that is routinely, and publicly, filed by other satellite operators (both GSO and NGSO) in applications seeking FCC authorizations.⁸ The information withheld is critical to any analysis of potential interference.⁹

As a minimum, before Intelsat can assess the interference potential of the SpaceX MicroSats, it will need to know several additional, but withheld parameters. For example, it will need to understand the satellites' beam width, orientation, off-axis gain, number of antennas, beam pointing and switching mechanism, whether the beams remain on even outside the range of the receiving station, and earth station azimuth and elevation angles when communicating with the satellites. Additionally, Intelsat will need to understand the satellite orbital parameters.

The beam parameters are needed so that an analysis of interference potential can be carried out without assuming worst case parameters. One example of a worst case assumption would be that the SpaceX downlink beam peak gain could be directed at an Intelsat earth station from a direction at or near the peak receive gain of the earth station antenna, potentially overestimating the interference to the Intelsat transmissions.

The orbital parameters are needed so that if interference is detected by an Intelsat earth station, Intelsat either can identify or eliminate a SpaceX transmission as the cause. Without the orbital parameters, such a determination would be quite difficult or impossible, which, assuming that the SpaceX transmission were the cause, would make it more difficult for Intelsat to request

⁷ SpaceX Confidential Treatment Request, Exhibits 1-5 at 1; SpaceX Confidential Treatment Request, Exhibit 6 at 1.

⁸ The Commission previously communicated with SpaceX to state the International Bureau's concern regarding SpaceX's request for confidential treatment of its orbital debris mitigation assessment, which the Commission noted is "routinely provided by other applicants" and is not "competitively sensitive." Email from Doug Young, FCC, to Steven Davis, SpaceX (June 24, 2015) ("Email from the FCC to SpaceX"). The Commission requested that SpaceX provide a substantial justification for confidentiality or provide the orbital debris mitigation assessment. *See* Email from the FCC to SpaceX. In response, SpaceX filed an additional exhibit, Exhibit 7 – Information Regarding Orbital Debris Assessment, and allowed this information to be made publically available as requested by the International Bureau. *See* Email from Steven Davis, SpaceX, to Doug Young, FCC (June 25, 2015). It is possible that other "routine" and not "competitively sensitive" information has been withheld by SpaceX in the SpaceX Confidential Treatment Requests.

⁹ 47 C.F.R. § 5.84.

the FCC to force Space X to cease causing interference. In other words, the fact that Space X is required to operate on a non-protection, non-harmful interference basis is of little comfort to GSO operators if the source of interference cannot be determined.

B) SpaceX has not shown how it could meet its collision avoidance and coordination responsibilities.

Section 5.64(b)(3) of the rules requires experimental satellites "launched into a low-Earth orbit that is identical, or very similar, to an orbit used by other space stations [to] include an analysis of the potential risk of collision and a description of what measures the space station operator plans to avoid in-orbit collisions."¹⁰ If filed at all, that information is not in the public record – and it must be.

Intelsat provides Launch and Early Operation Phase (LEOP) services for its own satellites, as well as for satellites owned by other operators. During LEOP, Intelsat will boost satellites up to the 36,000 km geostationary orbit, necessarily passing through the orbit of the SpaceX MicroSats. LEOP commences after a satellite separates from the launch vehicle – in some cases in orbits of a few hundreds of kilometers. This is *below* the proposed 625 km orbit proposed by SpaceX. Yet, so far as the public portion of the application reveals, SpaceX has not put in place a mechanism for coordination with potentially affected providers of LEOP services.

II. SpaceX should be required to disclose relevant confidential materials.

Because relevant information is not in the public record, but under a request for confidentiality, Intelsat simultaneously is filing a Freedom of Information Act request under Section 0.461 of the Rules requesting SpaceX's confidential information.

Section 0.457 of the Commission's rules describes materials that the Commission automatically treats with confidentiality.¹¹ For materials not specifically listed in Section 0.457, Section 0.459 provides a mechanism by which any party submitting information to the Commission may request that the

¹⁰ 47 C.F.R. § 5.64(b)(3).

¹¹ 47 C.F.R. § 0.457. SpaceX has not identified whether the Non-disclosed Exhibits fall within any of the categories specifically highlighted by the Commission as automatically afforded confidential treatment. Thus, Intelsat does not address Section 0.457 in its analysis.

information be treated as confidential and withheld from public disclosure.¹² A party seeking confidential treatment under this rule is required to submit a statement of the reasons for non-disclosure of the materials and of the facts upon which those reasons are based.¹³ Mere conclusory or generalized allegations are not sufficient to substantiate a request for nondisclosure.¹⁴ Rather, Section 0.459(d) of the Commission's rules provides that a request for confidentiality will be granted if it presents by a preponderance of the evidence a case for nondisclosure consistent with the provisions of the Freedom of Information Act ("FOIA").¹⁵

A request for confidentiality must specify the reasons the information should be withheld and address nine specific issues.¹⁶ Three of these issues are most relevant in this case: (i) the degree to which the information is financial or commercial or is privileged; (ii) the degree to which the information concerns a service that is subject to competition; and (iii) how disclosure of the information would result in substantial competitive harm. SpaceX asserts that the Non-Disclosed Exhibits "contain . . . sensitive proprietary technical and commercial information,"¹⁷ but the assertion is not substantiated by any specific explanation. Such a general assertion is insufficient for the purposes of Section 0.459(b)(3) of the Commission's rules. Moreover, the unexplained claim of "proprietary information" cannot justify withholding critical technical information from interested parties that need to determine if the MicroSat Satellites will interfere with their satellite transmissions or put a satellite's safety at risk.

¹² *Id.* § 0.459.

¹³ *Id.* § 0.459(b).

¹⁴ *National Exchange Carrier Ass'n, Inc., Memorandum Opinion and Order*, 5 F.C.C. Rcd 7184, 7184 ¶ 3 (1990) (quoting *Nat'l Parks & Conservation Ass'n v. Kleppe*, 547 F.2d, 547 F.2d 673, 680 (D.C. Cir. 1976)).

¹⁵ 5 U.S.C. § 552. *See also* 47 C.F.R. § 0.459(d)(2).

¹⁶ 47 C.F.R. § 0.459(b). *See also Examination of Current Policy Concerning the Treatment of Confidential Information Submitted to the Commission*, GEN Docket No. 96-55, Report and Order, 13 F.C.C. Rcd 24816, 24819 (1998) ("*Confidential Treatment Policy*").

¹⁷ SpaceX Confidential Treatment Request, Exhibits 1-5 at 1; SpaceX Confidential Treatment Request, Exhibit 6 at 1.

July 9, 2015

Page 6

As the Commission's rules provide,¹⁸ the customary practice is to refrain from adjudicating a dispute concerning the scope of a request for confidential treatment until a FOIA is filed, "based on considerations of administration efficiencies . . . [and] the salutary effect of conserving administrative resources."¹⁹ As a result, Intelsat's counsel simultaneously is submitting a FOIA request for these documents; it is attached for your convenience.

* * *

In light of the foregoing, Intelsat respectfully requests that the Commission deny the SpaceX MicroSat-1a/b Application until such time as SpaceX includes sufficient information in the public record to allow Intelsat to analyze how SpaceX intends to protect co-frequency geostationary operations, as well as avoid collision with geostationary satellites transiting low earth orbit.

Very truly yours,

/s/

Susan H. Crandall
Associate General Counsel
Intelsat Corporation

Cc: David Den Herder, Sr. Counsel, Space Exploration Technologies Corp.
Nnake Nweke, Office of Engineering and Technology, FCC
Jose Albuquerque, International Bureau, FCC
Jon Wilkins, Office of the Managing Director, FCC
Julius Knapp, Office of Engineering and Technology, FCC

Attachment

¹⁸ 47 C.F.R. § 0.459(d)(3).

¹⁹ See *Confidential Treatment Policy* at 24854.



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BY ELECTRONIC MAIL/SURFACE MAIL

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Re: Freedom Of Information Act Request

Dear Sir or Madam:

Pursuant to the Freedom of Information Act and Section 0.461 of the Commission's Rules, 47 CFR § 0.461, and on behalf of my client Intelsat Corporation, I am writing to request:

- A complete copy of the Part 5 Experimental Radio Service application filed by Space Exploration Technologies, File No.: 0356-EX-PL-2015, including all attachments, whether or not subject to a pending request for confidential treatment under Section 0.459, 47 CFR § 0.459 (the "Application").
- Copies of any correspondence involving this Application, whether pre-dating or post-dating the submission of the Application, and whether or not subject to a pending request for confidential treatment under Section 0.459.
- Copies of any additional filings made by Space Exploration Technologies or any third party involving the Application, whether or not subject to a pending request for confidential treatment under Section 0.459.

In accord with subsection 0.461(c), for the reasons set forth in the attached, the documents listed above are not properly subject to confidentiality. SpaceX's assertion that disclosure of the Non-Disclosed Exhibits is "likely to cause competitive injury and substantial irreparable harm" is insufficient to shield from disclosure the exhibits that others must review in order to analyze the SpaceX Application. It is longstanding FOIA precedent that such "conclusory and



FCC FOIA Request

July 9, 2015

Page 2

generalized allegations of substantial competitive harm . . . are unacceptable and cannot support an agency's decision to withhold requested [information]."¹

I am willing to pay the reasonable fees associated with the processing of this request, up to \$1000.00. Should the anticipated fee for preparing a response to this request exceed \$1000.00, please contact me.

All responsive documents should be sent to me at 1776 K Street, NW, Washington, DC 20006, or emailed to me if electronic documents are available. If you have any questions about this request, please feel free to contact me at 202-719-7269 or cfrank@wileyrein.com. I appreciate your prompt attention to this request.

Sincerely,

A handwritten signature in black ink, appearing to read "Carl R. Frank", written over a horizontal line.

Carl R. Frank

Attachment

¹*Pub. Citizen Health Research Grp. v. Food & Drug Admin.*, 704 F.2d 1280, 1291 (D.C. Cir. 1983). See also *National Exchange Carrier Ass'n, Inc., Memorandum Opinion and Order*, 5 FCC Rcd 7184, 7184 ¶ 3 (1990) (quoting *Nat'l Parks & Conservation Ass'n v. Kleppe*, 547 F.2d, 547 F.2d 673, 680 (D.C. Cir. 1976)).