

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Viasat, Inc.)	IBFS File Nos. SES-LIC-20170401-00357
)	SES-LIC-20190411-00503
Operation of Earth Stations Aboard Aircraft)	SES-MOD-20191216-01737
in the 18.8-19.3 GHz and 28.6-29.1 GHz)	
Bands)	

REPLY OF VIASAT, INC.

John P. Janka
Amy R. Mehlman
Jarrett S. Taubman
Viasat, Inc.
901 K Street NW, Suite 400
Washington, DC 20001

October 26, 2020

SUMMARY

SpaceX’s “Consolidated Reply”—which serves as an opposition to Viasat’s motion to strike SpaceX’s earlier request for an order to show cause—fails to answer the serious charges made against SpaceX. Indeed, SpaceX could not take those charges *less* seriously, explaining *in a footnote* that it “feels no need to respond” to those matters (although SpaceX does address a number of matters raised in the motion). Particularly damning is SpaceX’s failure to offer *any* response to allegations that SpaceX filed its Request for improper and retaliatory purposes, presented information it knew to be false, and otherwise lacked candor—a trifecta of misconduct targeted by Commission rules and policies prohibiting frivolous filings.

Instead, SpaceX succeeds in adding to and compounding its earlier misconduct:

- *First*, SpaceX provides new discussion of the license conditions at issue that knowingly misrepresents their substance in obvious ways—*e.g.*, SpaceX suggests that the license conditions are all the same when they are not, and ignores language making clear that Viasat’s obligations *have not* been “triggered” with respect to the SpaceX system.
- *Second*, SpaceX for the first time claims that SpaceX has experienced “occasional interruptions” that “likely can be attributed to Viasat,” but fails to provide *any* substantiation for this claim. SpaceX also fails to disclose that its system is not yet capable of supporting a viable service, and is going through iterative changes—one very plausible cause of any “interruptions” that *may* have occurred.
- *Third*, SpaceX continues to falsely assert that Viasat has not demonstrated its ability to protect SpaceX in certain shared bands—deliberately ignoring record evidence showing that Viasat has made precisely that demonstration on multiple occasions, which are specifically identified in Viasat’s motion.
- *Fourth*, SpaceX continues to ignore record evidence demonstrating that in 2019 the parties identified a set of operating parameters that they both agreed would protect SpaceX’s operations. SpaceX’s attempts to distract the Commission by focusing on the absence of an executed coordination agreement are themselves improper, as: (i) the dispositive fact is that the parties coordinated and reached mutually acceptable terms to “ensure mutual compatibility between the SpaceX non-geostationary satellite system and Viasat GSO satellite networks;” and (ii) SpaceX refused to execute a written coordination agreement reflecting that “meeting of the minds” not for good-faith, coordination-related reasons, but rather because SpaceX was concerned about how doing so could impact SpaceX interests in unrelated regulatory proceedings.

In short, SpaceX's request and its opposition both represent stark violations of Section 1.52 and the Commission's policies prohibiting "the filing of frivolous pleadings or pleadings filed for the purpose of delay in proceedings before the Commission or its staff." Viasat respectfully asks the Commission to "fully utilize its authority" to strike SpaceX's request and opposition and impose other appropriate relief to "discourage and deter the filing of such proceedings" in the future.

TABLE OF CONTENTS

SUMMARY	i
I. SpaceX’s Silence Is Damning in the Face of Showings that It Filed Its Request in Bad Faith and in Retaliation	3
II. SpaceX Compounds the Frivolous Nature of Its Request by Mischaracterizing the License Conditions.....	4
A. SpaceX Fails to Disclose that Viasat’s Obligations Arise Only under Specific Circumstances, Which Have Not Been Met in the Case of the SpaceX System	6
1. Condition 90447 to the License for E170088	6
2. Condition 90257 to the Licenses for E180006 and E190201	8
B. SpaceX Ignores that the License Conditions Would Allow Viasat to Resume Operations Based on Appropriate Demonstrations—Which Viasat Has Made Several Times Over	9
III. SpaceX’s Bad Faith Is Evidenced by Its Untimely, Unsubstantiated, and Irresponsible Suggestion that Occasional Interruptions to SpaceX Likely Can Be Attributed to Viasat.....	10
IV. SpaceX’s Opposition Compounds the Bases for Viasat’s Motion to Strike.....	11
A. SpaceX Deliberately Ignores Record Evidence Demonstrating that Viasat Will Protect the SpaceX System	12
B. SpaceX Deliberately Ignores Record Evidence Showing that Viasat Has Coordinated with SpaceX and Identified Mutually Acceptable Operating Parameters to Protect the SpaceX System	13
CONCLUSION.....	17
EXHIBITS	

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Viasat, Inc.)	IBFS File Nos. SES-LIC-20170401-00357
)	SES-LIC-20190411-00503
Operation of Earth Stations Aboard Aircraft)	SES-MOD-20191216-01737
in the 18.8-19.3 GHz and 28.6-29.1 GHz)	
Bands)	

REPLY OF VIASAT, INC.

Viasat, Inc. submits this response to the “Consolidated Reply” filed by Space Exploration Holdings, LLC (“SpaceX”) on October 14, 2020 in the above-referenced proceedings.¹ In that pleading, SpaceX addresses matters raised in the Motion to Strike filed by Viasat on October 1, 2020.² Accordingly, that pleading is a *de facto* opposition to Viasat’s Motion—albeit a contrived and ineffectual one. Viasat refers to that pleading as SpaceX’s Opposition and takes this opportunity to reply.

In its Motion, Viasat asked the Commission to strike the Request for Order to Show Cause filed by SpaceX on September 18, 2020.³ More specifically, Viasat demonstrated that:

- (i) SpaceX’s Request was premised upon claims that SpaceX knew to be false;
- (ii) SpaceX failed to disclose key facts to the Commission, demonstrating a stunning lack of candor; and

¹ See Consolidated Reply of Space Exploration Holdings, LLC, IBFS File Nos. SES-LIC-20170401-00357, SES-LIC-20190411-00503, and SES-MOD-20191216-01737 (filed Oct. 14, 2020) (“SpaceX Opposition”).

² See Viasat, Inc., Motion to Strike and Request for Any Other Relief the Commission Deems Appropriate, IBFS File Nos. SES-LIC-20170401-00357, SES-LIC-20190411-00503, and SES-MOD-20191216-01737 (filed Oct. 1, 2020) (“Viasat Motion”).

³ See Space Exploration Holdings, LLC, Request for Order to Show Cause, IBFS File Nos. SES-LIC-20170401-00357, SES-LIC-20190411-00503, and SES-MOD-20191216-01737 (filed Sep. 18, 2020) (“SpaceX Request”).

- (iii) SpaceX submitted its Request in bad faith to cause delay and exact retribution for Viasat's advocacy in unrelated Commission proceedings.

Viasat also established that, in light of these demonstrations, it would be consistent with the Commission's rules and policies to strike SpaceX's Request and its Consolidated Reply/Opposition as frivolous and take other appropriate remedial actions.

Notwithstanding the gravity of Viasat's demonstrations about SpaceX's conduct as set forth in Viasat's Motion, SpaceX has explained that it "feels no need to respond" to those matters.⁴ SpaceX's failure to respond to the charges against it is as telling as it is unsettling. Particularly conspicuous is SpaceX's failure to offer *any* response to Viasat's demonstrations that: (i) SpaceX filed its Request in bad faith, to cause unnecessary delay and retaliate against Viasat; and (ii) SpaceX presented information it knew to be false and otherwise lacked candor.

As the same time, SpaceX compounds the frivolous nature of its Request by filing an Opposition that: (i) deliberately misstates and mischaracterizes the "elements" of relevant conditions to the Viasat earth station licenses; and (ii) irresponsibly asserts, for the first time, and without any evidence whatsoever, that Viasat's operations under Call Signs E170088, E180006, and E190201 somehow are interfering with SpaceX.

Accordingly, the Commission should avail itself of its authority to strike both SpaceX's Request and its Consolidated Reply/Opposition, and take any other remedial actions the Commission may deem appropriate.

⁴ See SpaceX Opposition at 5 n.6 (asserting that SpaceX "feels no need to respond" to Viasat's allegations about SpaceX's conduct given its views of the alleged "strength of the case against Viasat"). Viasat disagrees with this characterization of SpaceX's case, to put it mildly. In any event, Viasat wishes to clarify that its decision to respond to the Opposition—as anticipated by the Commission's rules and in a manner consistent with generally accepted practice before the Commission—should not be interpreted as an indication that Viasat views SpaceX's underlying Request as anything but entirely frivolous.

I. SPACEX’S SILENCE IS DAMNING IN THE FACE OF SHOWINGS THAT IT FILED ITS REQUEST IN BAD FAITH AND IN RETALIATION

In its Motion, Viasat explained that SpaceX had improperly “interposed its request: (i) to seek the delay of matters currently pending before the Commission regarding these earth stations, and (ii) as retribution for Viasat’s advocacy with respect to space safety and the preclusive effect of large NGSO constellations on equitable access to shared orbits and the shared spectrum resource.”⁵ SpaceX offers *no* response to these allegations. That silence is damning. Simply stated, SpaceX offers no valid explanation for its behavior because it has none.

In case any lingering doubt exists as to what motivated SpaceX’s Request, Viasat is submitting as Exhibits A and B hereto two e-mails sent by a senior SpaceX executive (the “Executive”) to Viasat. Critically, the first of these e-mails was sent *days* before SpaceX filed its Request and the second was sent the *same day*. The e-mails provide valuable insight into what motivated the filing of that Request.

In the first e-mail, dated September 15, 2020, the Executive responds to material provided to SpaceX at its request showing how Viasat would protect the SpaceX system in the 18.8-19.3 GHz and 28.6-29.1 GHz band segments (the “Shared Bands”). After asserting that the Executive does not believe those materials to be sufficient, the Executive proceeds to complain about Viasat’s advocacy in unrelated proceedings—specifically:

- (i) Viasat’s filings in the ongoing orbital debris rulemaking;
- (ii) Viasat’s pending application to modify its own NGSO system;
- (iii) Viasat’s responses to SpaceX’s unsubstantiated claims about the speeds and latency levels that are being achieved on SpaceX’s NGSO system;
- (iv) Viasat’s proposals with respect to spectrum sharing among NGSO systems; and

⁵ Viasat Motion at i.

(v) Viasat's opposition to SpaceX's recent NGSO system modification application.

{{BEGIN CONFIDENTIAL}}

{{END CONFIDENTIAL}}

In the second e-mail, dated September 18, 2020—the same day SpaceX's Request was filed—the Executive responds to further materials provided to SpaceX showing how Viasat would protect the SpaceX system in the Shared Bands, and again references unrelated proceedings and complains about Viasat's advocacy in those proceedings. Specifically, the Executive complains about Viasat's response to SpaceX's petition to deny Viasat's NGSO system modification application **{{BEGIN CONFIDENTIAL}}**

{{END

CONFIDENTIAL}} This statement—particularly given the context of the rest of the September 15 and 18 e-mails—lays bare the improper motivation for the Request: to retaliate against Viasat for its unrelated advocacy before the Commission.

Given this clear documentation of SpaceX's improper intent, and SpaceX's refusal to *even attempt to* address its bad-faith motivations when given the opportunity to do so, the Commission should proceed to strike both SpaceX's Request and its Consolidated Reply/Opposition.

II. SPACEX COMPOUNDS THE FRIVOLOUS NATURE OF ITS REQUEST BY MISCHARACTERIZING THE LICENSE CONDITIONS

SpaceX's Request essentially alleges that Viasat has failed to satisfy specific conditions to three of its licenses: (i) Condition 90447 to the license for E170088; and (ii) Condition 90257 to the Licenses for E180006 and E190201 (the "License Conditions"). Given the nature of SpaceX's allegations, a proper characterization of these conditions and the obligations imposed

thereunder is critical. And it bears emphasis that SpaceX has consistently mischaracterized what those licenses say—despite Viasat’s having corrected SpaceX’s errors on the record.⁶

Indeed, SpaceX compounds its previous errors in describing—incorrectly—the alleged “elements” of the License Conditions. Specifically, SpaceX wrongly asserts that the License Conditions require Viasat to: “(1) cease operations in the spectrum where NGSO systems are primary . . . before an NGSO system launches unless it (2) reaches a coordination agreement with the NGSO operator for use of this spectrum, or (3) demonstrates to the Commission that the operation of these earth stations would protect NGSO systems against harmful interference.”⁷

As an initial matter, SpaceX once again treats the three licenses in question as if they are all subject to the same condition. As is obvious from even a cursory review, they are not. Indeed, Viasat’s *fixed* earth station license (E170088) is subject to a different condition than its *ESIM* licenses (E180006 and E190201). The differences are more than cosmetic—they are substantive.

Furthermore, SpaceX both ignores and fails to disclose that: (i) Viasat’s obligations under the License Conditions arise *only* after specific circumstances are met with respect to any given NGSO system—and that these circumstances have not been met in the case of the SpaceX system; and (ii) if Viasat ever were required to cease operations, the explicit language of the License Conditions would permit it to operate again once it had made an appropriate demonstration of how it would protect the relevant NGSO system—a demonstration that Viasat has made several times over in the case of the SpaceX system.

⁶ For example, Viasat’s Motion notes that SpaceX has known for almost three years that license E170088 covers fixed earth stations—yet its Request rests heavily on the false claim that the license concerns the operation of earth stations aboard aircraft (“ESAAs,” or “ESIMs”). *See* Viasat Motion at 1, 5-6.

⁷ SpaceX Opposition at 2.

A. SpaceX Fails to Disclose that Viasat’s Obligations Arise Only under Specific Circumstances, Which Have Not Been Met in the Case of the SpaceX System

SpaceX asserts that, under the License Conditions, Viasat is required to “cease operations” in the Shared Bands. But SpaceX ignores that this obligation arises only under specific circumstances that are not met in the case of SpaceX’s system.

1. Condition 90447 to the License for E170088

Under Condition 90447, Viasat’s obligations are triggered by the “scheduled initial launch of each NGSO FSS satellite system” authorized to serve the U.S. in the Shared Bands. The concept of an initial NGSO system launch is not explained by the condition, but all indications are that SpaceX has not yet met this milestone.

As an initial matter, in its November 15, 2016 NGSO system application, SpaceX describes the “Initial Deployment” of its then-4,425 satellite Ku/Ka-band NGSO FSS system as consisting of 1,600 satellites.⁸ SpaceX has not deployed nearly that number of satellites. Even if the condition were read as being triggered by the initial launch of commercial service, Viasat understands that SpaceX is not yet providing such service. To the contrary, SpaceX has represented publicly that its network is still in the private “beta” testing phase, and reports are that “SpaceX hopes to roll out coverage to the U.S. and Canada by the end of the year, but that depends on how well the beta-testing phase goes.”⁹ This is consistent with SpaceX’s explanation to the Commission that “[w]ith deployment of its first 800 satellites”—of a system consisting of

⁸ See Space Exploration Holdings, LLC, IBFS File No. SAT-LOA-20161115-00118, Technical Attachment at 1 (filed Nov. 15, 2016) (“SpaceX Initial NGSO Application”).

⁹ See, e.g., Amy Thompson, *SpaceX just launched 60 new Starlink internet satellites and nailed rocket landing at sea*, at <https://www.space.com/spacex-starlink-satellites-launch-rocket-landing-oct-18-2020> (Oct. 18, 2020) (noting that SpaceX’s system “is currently going through a private beta-testing program” with company employees as testers).

approximately 12,000 satellites¹⁰—“SpaceX will be able to provide widespread U.S. and international coverage for broadband services.”¹¹ SpaceX has not yet deployed 800 NGSO satellites that are ready for service.¹²

Also notable is the fact that SpaceX has not yet obtained Commission approval of the finalized SpaceX system design. Rather, SpaceX has a pending application to modify that system yet again. Furthermore, there are outstanding conditions to SpaceX’s existing system authorizations that have not yet been satisfied, and which SpaceX would need to satisfy before it could offer service under the authorization. Accordingly, there is simply no basis for asserting that a system launch has occurred, or that Viasat’s obligations under Condition 90447 have been triggered with respect to SpaceX.

Nevertheless, SpaceX suggests that its system “launched” in November 2019 when certain SpaceX satellites were placed into orbit. SpaceX fails to articulate any rationale for treating a launch of a mere 60 *satellites* that are part of a much larger system as coextensive with a *system* launch. And SpaceX’s conduct indicates that it does not actually believe its own

¹⁰ See Space Exploration Holdings, LLC, IBFS File No. SAT-LOA-20170301-00027, Technical Attachment at 1-2 (describing a SpaceX system consisting of a total of approximately 12,000 satellites in LEO and VLEO orbits) and Waiver Requests at 16 (noting that SpaceX “will begin providing commercial broadband services in the U.S. and globally once it has deployed the first 800 satellites” of that system) (filed Mar. 3, 2017).

¹¹ See SpaceX Initial NGSO Application, Legal Narrative at 2.

¹² On October 24, 2020, SpaceX launched 60 additional satellites, which may have taken the number of Starlink satellites in orbit to over 800. See <https://www.spacex.com/launches/index.html> (visited Oct. 25, 2020). These satellites will need to be tested, plane drifted, orbit raised, and spaced in plane before they can be placed into operation. Based on the experience of earlier launches, it may take SpaceX several months to get a minimum of 800 satellites properly positioned in operational orbits. Some of the satellites from Starlink v1.0 Launch 10 (11th launch on August 18, 2020), and all satellites from the subsequent launches, are still orbit raising. See <https://planet4589.org/space/stats/megacon/starlink.html> (last visited Oct. 26, 2020).

suggestion in any event; SpaceX's first 60 satellites were launched into orbit in May 2019,¹³ but SpaceX does not claim to have "launched" its system at that time.¹⁴

SpaceX also ignores its implicit obligation to notify Viasat of SpaceX's plans to launch its system to allow Viasat to satisfy Condition 90447 60 days *before* SpaceX's intended system launch. Absent such communication, there would be no reasonable basis for Viasat to know of SpaceX's plans or its interpretation of the system launch concept. But SpaceX never provided Viasat with any such notice.

2. Condition 90257 to the Licenses for E180006 and E190201

Condition 90257 is structured very differently from Condition 90447. The first sentence of Condition 90257 requires Viasat to ensure that its ESAA operations comply with the terms of any coordination agreements with operators of NGSO FSS space stations operating in the Shared Bands, should such agreements exist.¹⁵

The second sentence establishes the circumstances under which Viasat's other obligations under Condition 90257 are triggered. Specifically, those obligations apply only when "*another*

¹³ See Space Exploration Holdings, LLC, IBFS File No. SAT-LOA-20161115-00118, Annual Report (filed July 1, 2019) ("On May 24, 2019, SpaceX launched the first sixty satellites in its Starlink constellation.")

¹⁴ Of the 60 satellites launched in May 2019, 46 have been deorbited and 8 are not maneuvering. See <https://planet4589.org/space/stats/megacon/starbad.html> (last visited Oct. 26, 2020). But the inability of SpaceX's satellites to operate reliably and for more than about 17 months of their 60-month design lives does not change the fact that SpaceX began to launch such satellites much earlier than November 2019.

¹⁵ Condition 90257 provides: "ESAAs authorized herein must be in compliance with the terms of coordination agreements with operators of non-geostationary orbit Fixed Satellite Service space stations operating in the 18.8-19.3 and 28.6-29.1 GHz frequency band. In the event another NGSO FSS system commences operation in the 18.8-19.3 and 28.6-29.1 GHz frequency bands, ESAAs operating pursuant to this authorization must cease operation unless and until such operation has been coordinated with the new NGSO system operator or the ESAA licensee demonstrates that such operation will not cause harmful interference to the new NGSO system."

NGSO FSS system commences operations” in the Shared Bands. The final sentence of the condition makes clear that the reference to “another” system pertains to a “new NGSO system.” Notably, such “new” systems would not have been evaluated by the Commission prior to the grant of Viasat’s licenses that contain Condition 90257; some further coordination or technical demonstration would therefore be in order. But this is simply unnecessary for systems that were known as of the grant of Viasat’s licenses. Notably, Viasat’s underlying applications for the licenses that contain Condition 90257 included a technical analysis demonstrating compatibility with various NGSO systems—including the *SpaceX* system.

B. SpaceX Ignores that the License Conditions Would Allow Viasat to Resume Operations Based on Appropriate Demonstrations—Which Viasat Has Made Several Times Over

SpaceX also ignores provisions in the License Conditions that clearly establish that if Viasat were ever required to cease operations, it would be permitted to operate again once it had made appropriate demonstrations to the Commission.

Specifically, Condition 90447 provides that if Viasat is required to cease earth station operations in the Shared Bands it must do so only “until such time as compliance is demonstrated”—*i.e.*, until Viasat demonstrates that it can protect relevant NGSO systems. Similarly, Condition 90257 provides that if Viasat is required to cease ESAA operations in the Shared Bands it must do so only “unless and until . . . [Viasat] demonstrates that such operation will not cause harmful interference to the new NGSO system.”

As Viasat has explained previously, it has demonstrated its ability to protect SpaceX’s NGSO operations on multiple occasions.¹⁶

¹⁶ See Response of Viasat, Inc. to Show Cause Request, IBFS File Nos. SES-LIC-20170401-00357, SES-LIC-20190411-00503, and SES-MOD-20191216-01737, at 2, 4-6 (filed Oct. 1,

III. SPACEX'S BAD FAITH IS EVIDENCED BY ITS UNTIMELY, UNSUBSTANTIATED, AND IRRESPONSIBLE SUGGESTION THAT OCCASIONAL INTERRUPTIONS TO SPACEX LIKELY CAN BE ATTRIBUTED TO VIASAT

SpaceX's Opposition alleges, for the first time, that "SpaceX has experienced occasional interruptions to its [NGSO] satellite system for the past year, which can likely be attributed to Viasat."¹⁷ Although SpaceX has not yet launched commercial service, it asserts that "[w]ithout immediate action from the Commission, Viasat will certainly cause interference and disrupt needed service to SpaceX's customers in rural and remote areas."¹⁸

SpaceX fails to provide any: (i) details or documentation of these supposed interruptions; (ii) basis for its claim that they likely are attributable to Viasat; (iii) declaration or certification in support of its claim; or (iv) explanation of why these allegations were not raised in its Request.¹⁹ Nor does SpaceX provide a shred of technical analysis to rebut the Viasat technical demonstrations that long have been on the record about why interference would not be expected.²⁰

Viasat submits that the more likely cause of the alleged interruptions—if they have in fact occurred—is SpaceX itself. SpaceX has launched only a fraction of the satellites in its system, and is still engaged in an iterative process including "optimization," "testing," and rolling out

2020) ("Viasat Response"); *see also* Section IV.A, *infra*. SpaceX's contention that "Viasat has refused to make adequate showings," *see* SpaceX Opposition at 1, is simply untrue.

¹⁷ SpaceX Opposition at 1.

¹⁸ *Id.* at 2.

¹⁹ Historically, GSO satellite operators have closely communicated with each other with respect to adjacent-satellite interference events to ensure that they are able to quickly and effectively resolve issues if they occur.

²⁰ *See supra* note 16.

new software,²¹ which in and of itself may explain “occasional interruptions.” SpaceX also is engaging in *beta* testing of the system, indicating that it is not yet ready for reliable commercial deployment. Moreover, as Viasat has explained in recent submissions, Starlink satellites have shown an alarmingly high failure rate to date. When many dozens of Starlink satellites are failing or being abandoned after less than about 17 months of their 60-month design lives, it is more than reasonable to ask what other aspects of the SpaceX system may not be working properly that could give rise to “occasional interruptions.” Under these circumstances, any “occasional interruptions” are not unforeseeable, and without more facts they are not reasonably attributed to anyone *but* SpaceX itself.

IV. SPACEX’S OPPOSITION COMPOUNDS THE BASES FOR VIASAT’S MOTION TO STRIKE

SpaceX’s Request irresponsibly suggests that Viasat has: (i) failed to demonstrate how it would protect SpaceX’s NGSO operations in the Shared Bands; and (ii) failed to agree to coordination terms with SpaceX.²² Viasat’s Motion and related Response present clear evidence establishing that Viasat *has* made such demonstrations, and *has* coordinated with SpaceX and identified a mutually acceptable set of operating parameters to protect SpaceX’s system with which Viasat is willing to comply. Nevertheless, SpaceX compounds the frivolous nature of its Request by ignoring the record and doubling down on its false claims.²³

²¹ See Letter from SpaceX to FCC, IBFS File No. SAT-MOD-20200417-00037, at 2 (filed Sep. 29, 2020) (“SpaceX’s beta testing uses conditions designed to support on-going optimization and testing of the network that make network performance measurements *worse, not better*. . . . Moreover, these results are based on beta-test software frame grouping settings that do not yet reflect performance using the software designed to optimize performance for commercial use.”).

²² See SpaceX Request at 8-9.

²³ See, e.g., SpaceX Opposition at 1-2 (asserting that Viasat “has provided no indication that it intends to comply with the conditions on its licenses”).

A. SpaceX Deliberately Ignores Record Evidence Demonstrating that Viasat Will Protect the SpaceX System

SpaceX baselessly asserts that the License Conditions require Viasat to demonstrate that it will protect SpaceX's system, and that Viasat has failed to do so.²⁴ SpaceX ignores that Viasat *has* demonstrated as much to the Commission, on multiple occasions. SpaceX persists in this claim even though Viasat provided specific evidence in its Response detailing the prior demonstrations it has made and establishing that SpaceX had specific knowledge of those demonstrations.²⁵

Not even SpaceX disputes that Viasat has made these demonstrations on the record and in good faith. It is therefore indisputable that Viasat has taken reasonable measures to comply with the License Conditions.²⁶ And while SpaceX apparently takes issue with the adequacy of these demonstrations, the Commission should recognize the improper, bad-faith motivations underlying SpaceX's objections. Viasat's Motion demonstrates that SpaceX had submitted its Request in bad faith to cause delay and exact retribution for Viasat's advocacy in unrelated Commission proceedings. The same bad-faith motivations explain why SpaceX is summarily dismissing Viasat's showings. This behavior is inconsistent with the Commission's rules and

²⁴ See SpaceX Opposition at 6 ("According to IBFS, Viasat has not submitted any demonstration with respect to interference to NGSO operators . . .").

²⁵ See Viasat Response, Chronology at ¶¶ 2-3, 15-19. Notably, Viasat submitted supplemental technical analysis in connection with its pending petition for partial reconsideration of the E170088 license grant, which has not been addressed or refuted by SpaceX. See Viasat, Inc. Petition for Partial Reconsideration, IBFS File No. SES-LIC-20170401-00357 (filed Dec. 11, 2017) and Viasat, Inc., Reply at Att.1 (Technical Response to SpaceX Opposition), IBFS File No. SES-LIC-20170401-00357 (filed Jan. 8, 2018).

²⁶ The modification application filed by Viasat on September 18, 2020 provides additional evidence of Viasat's good faith and diligence. That application was filed out of an abundance of caution, including to ensure that the Commission was aware that its earlier petition for reconsideration remained outstanding. See IBFS File No., SES-MOD-20200923-01031, Narrative (filed Sep. 18, 2020).

policies—including but not limited to the imposition on NGSO operators of the “burden . . . to examine the GSO showing in good faith to determine its acceptability.”²⁷ SpaceX has utterly failed to meet this burden.

In any event, it is the *Commission* that ultimately must determine whether Viasat has made sufficient demonstrations under the License Conditions. Viasat has acted in good faith to provide multiple such demonstrations to the Commission to allow it to make this finding.

B. SpaceX Deliberately Ignores Record Evidence Showing that Viasat Has Coordinated with SpaceX and Identified Mutually Acceptable Operating Parameters to Protect the SpaceX System

SpaceX asserts that Viasat has somehow violated the License Conditions because it has not submitted evidence of an executed coordination agreement with SpaceX.²⁸ As an initial matter, nothing in either License Condition would require the existence of an executed agreement (if the obligations under the SpaceX system had been triggered with respect to SpaceX’s system). Condition 90447 requires only that the parties have agreed on terms that would protect SpaceX operations in the Shared Bands—and nothing prevents this from occurring without the execution of a formal coordination document. Similarly, Condition 90257 requires only that operations between the parties be “coordinated”—with no requirement that any formal agreement be executed.

In any event, Viasat has established that in June 2019 the parties *did* identify a set of terms that would “ensure mutual compatibility between the SpaceX non-geostationary satellite

²⁷ *Facilitating the Communications of Earth Stations in Motion with Non-Geostationary Orbit Space Stations*, 35 FCC Rcd 5137, at ¶ 19 (2020).

²⁸ *See, e.g.*, SpaceX Opposition at 8 (alleging that Viasat has selectively quoted various e-mails to try to find a “binding coordination agreement” between the parties).

system and Viasat GSO satellite networks.”²⁹ This was the culmination of a process that began in 2017—and not 2019 as incorrectly claimed by SpaceX.³⁰ SpaceX itself has characterized its acceptance of these terms as an “agreement”—including in *SpaceX’s own* language cited in the Opposition referring to “our agreement to your UK networks.”³¹ SpaceX attempts to obfuscate this simple fact by pointing to instances in which it subsequently refused to execute a formal agreement, or to make certain items explicit within that agreement for reasons having nothing to do with how Viasat’s operations would protect SpaceX’s system.

For example, SpaceX references an exchange that occurred later in June 2019 in which
{{BEGIN CONFIDENTIAL}}

{{END CONFIDENTIAL}} But the relevant e-mails show that
 SpaceX’s was concerned not with whether or how **{{BEGIN CONFIDENTIAL}}**

{{END CONFIDENTIAL}}, but rather with
 how such a provision might be used against SpaceX in unrelated rulemaking proceedings.
 Nothing in this exchange, **{{BEGIN CONFIDENTIAL}}**

{{END CONFIDENTIAL}}, alters the fact that coordination *did* occur and *did* identify a set of
 mutually acceptable operating parameters that would ensure the protection of SpaceX’s system,
 consistent with the License Conditions: **{{BEGIN CONFIDENTIAL}}**

²⁹ Viasat Response at 4, 6; *see id.*, Chronology at ¶¶ 4-11, Exhibit B. Viasat referenced this evidence in its Motion and Response not because this is “a recent development,” *see* SpaceX Opposition at 8, but rather because the false claims made in SpaceX’s irresponsible and unsubstantiated Request demand a response grounded in the factual record.

³⁰ *See* SpaceX Opposition at 6 (incorrectly asserting that “[i]n 2019, SpaceX and Viasat initiated coordination discussions”); *see also* Letter from SpaceX to Viasat, at 3 (June 9, 2017), attached as Exhibit D hereto (addressing coordination matters).

³¹ SpaceX Opposition at 9.

{{END CONFIDENTIAL}}³³

SpaceX also questions³⁴ Viasat's characterization of a September 18, 2020 SpaceX e-mail as one in which **{{BEGIN CONFIDENTIAL}}**

³⁵ **{{END**

CONFIDENTIAL}} SpaceX confuses the referenced e-mail with one sent later that day; the e-mail Viasat actually referenced is attached hereto as Exhibit C. In that e-mail, **{{BEGIN CONFIDENTIAL}}**

,³⁶

³² See Viasat Motion, Exhibit B, Coordination Agreement, §§ 3 & 4.

³³ SpaceX cites a subsequent e-mail in the June 2019 exchange in which Viasat noted that it had a coordination agreement with O3b Limited that covers ESIMs. There is no basis for SpaceX's baseless and false assertion that this is a "false claim." See SpaceX Opposition at 10. Viasat has such an agreement, and any system not within the ambit of that agreement would be addressed by Condition 90531 to Viasat's ESIM licenses.

³⁴ See *id.* at 12.

³⁵ Viasat Motion at 10.

³⁶ **{{BEGIN CONFIDENTIAL}}**

³⁷ {{END CONFIDENTIAL}}

In any event, SpaceX does itself no favors by instead referencing a different e-mail in which {{BEGIN CONFIDENTIAL}}

³⁸ {{END CONFIDENTIAL}} Critically, that e-mail is the same September 18, 2020 e-mail discussed above as evidence of SpaceX’s improper motivations (and attached as Exhibit B hereto). SpaceX fails to mention the rest of the e-mail, which provides critical context demonstrating *why* SpaceX changed its position—namely, because it was

{{END CONFIDENTIAL}}

³⁷ SpaceX claims that Viasat “conceded in its May 2020 submission to the Commission that it still had {{BEGIN CONFIDENTIAL}} {{END CONFIDENTIAL}} SpaceX Opposition at 2; *see also id.* at 6-7. Viasat’s May 2020 submission explained {{BEGIN CONFIDENTIAL}}

{{END CONFIDENTIAL}} See Exhibit D. Contrary to SpaceX’s assertion, *see* SpaceX Opposition at 3-4, the document enclosed with the May 2020 letter provided the salient technical demonstration of how compatibility is ensured: {{BEGIN CONFIDENTIAL}}

{{END CONFIDENTIAL}}

³⁸ See SpaceX Opposition at 12. Importantly, Viasat provided technical analysis in good faith and in response to a request from the SpaceX Executive, without knowledge of how the Executive viewed that analysis. Furthermore, Viasat did not “only send information that had previously been rejected because it was inadequate.” *See id.*

incensed with Viasat’s advocacy in other proceedings and wished to retaliate against Viasat (see Section I above for a more fulsome discussion).³⁹

More broadly, the Commission can and should take notice of the primary reason why a formal, written agreement has not been executed to date—SpaceX’s bad faith. Viasat’s Motion demonstrates that SpaceX has submitted its Request in bad faith to cause delay and exact retribution for Viasat’s advocacy in unrelated Commission proceedings. The same improper motivations explain SpaceX’s refusal to execute a written coordination agreement with Viasat. The Commission should not permit that bad-faith refusal to justify SpaceX’s bad-faith filing of the Request, which is flatly inconsistent with the Commission’s rules and policies.

CONCLUSION

SpaceX fails to offer *any* response to serious charges that it filed its Request for improper and retaliatory purposes, presented information it knew to be false, and otherwise lacked candor before the Commission. At the same time, SpaceX compounds that misconduct by knowingly misrepresenting the substance of relevant license conditions, making irresponsible and unsubstantiated claims that “occasional interruptions” to SpaceX can “likely be attributed to Viasat” (while ignoring the continuing iterations of the SpaceX system as the plausible cause), and deliberately ignoring record evidence with respect to prior technical demonstrations by Viasat and coordination by and between the parties.

SpaceX agreed over two years ago that the way Viasat is operating today would not interfere with SpaceX, and has admitted that SpaceX would not execute a coordination

³⁹ SpaceX’s suggestion that the e-mail exchanges from September 2020 “have little bearing on whether [Viasat] violated the terms of its authorization,” *id.* at 11 (which Viasat denies), misses the salient point that these exchanges speak *directly* to SpaceX’s improper motivations for filing its Request.

agreement containing those terms because SpaceX thought that doing so might affect its position in unrelated regulatory proceedings.

SpaceX's Request and Consolidated Reply/Opposition are therefore prime examples of the sort of frivolous pleadings that Section 1.52 and related Commission policies are designed to deter. Viasat respectfully asks the Commission to "fully utilize its authority" to strike those pleadings, and grant such other relief as the Commission finds appropriate.

Respectfully submitted,

/s/
 John P. Janka
 Amy R. Mehlman
 Jarrett S. Taubman
 Viasat, Inc.
 901 K Street NW, Suite 400
 Washington, DC 20001

October 26, 2020

CERTIFICATE OF SERVICE

I, Kayla Ernst, hereby certify that on this 26th day of October, 2020, I caused to be served a true copy of the foregoing Reply of Viasat, Inc. via first-class mail upon the following:

David Goldman
Space Exploration Technologies Corp.
1155 F Street, NW
Suite 475
Washington, DC 20004

William M. Wiltshire
Paul Caritj
Harris, Wiltshire & Grannis LLP
1919 M Street, NW
Suite 800
Washington, DC 20036
Counsel for SpaceX

/s/
Kayla Ernst