

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Ligado Networks Subsidiary LLC,)	SAT-MOD-20251206-00374
Debtor-in-Possession: Application)	S2358
to Modify L-Band Space Station Authority)	
)	

**COMMENTS OF THE AEROSPACE AND FLIGHT TEST
RADIO COORDINATING COUNCIL, INC.**

Aerospace and Flight Test Radio Coordinating Council, Inc. (“AFTRCC”), hereby submits its Comments pursuant to Section 25.154(a) of the Rules on the Application of Ligado Networks Subsidiary LLC, Debtor-in-Possession (“Ligado”) referenced above (the “Application”).¹ Ligado, in collaboration with the satellite operator AST & Science, LLC, and its affiliates (“AST Space Mobile”), seeks authority to offer mobile satellite service (“MSS”) on AST Space Mobile’s 96-satellite non-geostationary orbit (“non-GSO”) constellation, specifically to provide direct-to-device services to terrestrial end user handsets. The operation of “SkyTerra Next” on AST’s large constellation of low earth orbit (“LEO”) non-GSO satellites would create a fundamentally different radiofrequency environment in which incumbent services are operated in the same bands and in adjacent bands than the service operated today on Ligado’s SkyTerra-1 geostationary orbit satellite (“GSO”). While AFTRCC supports the introduction of innovative new satellite services, such as Supplemental Coverage from Space services (“SCS”) and other MSS, new services should be introduced without causing interference to existing co-channel or adjacent-channel primary incumbent uses, such as aeronautical mobile telemetry (“AMT”). The

¹ See Application for Modification of Space Station License of Ligado Networks Subsidiary LLC, ICFS File No. SAT-MOD-20251206-00374, Call Sign S2358 (filed Dec. 8, 2025) (the “Application”). The Space Bureau accepted the Application for filing on January 30, 2026. See Report No. SAT-01970 at 1 (rel. Jan. 30, 2026).

Application gives surprising little attention to the potential for interference from SkyTerra Next to other L-Band operations, merely asserting that SkyTerra Next will not create any new threats of interference and that existing coordination agreements will ensure protection of other spectrum users. AFTRCC submits this assessment, based on the materials in the Application, and even more importantly what is not there – namely, any interference analysis concerning potential impacts on adjacent band AMT operations below 1525 MHz – would make a grant of the Application premature at this time.²

AFTRCC asks the Commission to seek from Ligado and AST Space Mobile, before acting on the Application, meaningful interference analysis to demonstrate in the record their basis for concluding that there is no interference threat to AMT, or articulate measures by which it would protect AMT which may require conditions on any grant. The public should then have the opportunity to evaluate and comment in the record on the analysis before Commission action.

I. AFTRCC AND THE IMPORTANCE OF FLIGHT-TESTING USING AMT

AFTRCC, a member organization, was founded in 1954 to serve as an advocate for the aerospace industry on matters affecting spectrum policy, in particular ensuring flight testing of both military and commercial aircraft enjoys reliable, interference-free spectrum access.³

AFTRCC's Members, and other aerospace companies licensed under Part 87 of the

² AFTRCC's Members may have other concerns regarding impacts that the proposed SkyTerra Next would have on other L-Band services, including the Global Positioning System ("GPS") and satellite communications. AFTRCC and its Members understand that other stakeholders will be addressing these matters and reserve their right, in light of the record that is developed in response to the Application and additional materials that Ligado or AST Space Mobile may submit in support of their Application, to comment further on these and other matters which are important to safe and effective aviation.

³ AFTRCC's Members include many of the nation's principal aerospace manufacturers. *See* Attachment A. More information regarding AFTRCC may be found at <https://afrcc.org>.

Commission’s Rules, utilize the primary non-Federal/Federal shared allocation for AMT in 1435-1525 MHz to capture telemetry during flight testing of crewed aircraft, uncrewed aircraft “UA”), and missiles.⁴ There are hundreds of non-Federal AMT receive sites in thirty States, and there are even more Federal AMT sites with a similar and even greater distribution around the country. The 1435-1525 MHz Band is heavily and increasingly used as flight test operators engage in testing from the beginning of the aircraft programs during the design and development phases, throughout delivery, and during the sustainment of the aircraft (upgrades and modifications). Program life cycles can and often do span decades.⁵

During flight tests, it is essential for both safety-of-life reasons and also productivity to relay real-time essential telemetry data from test aircraft to typically distant ground stations – up to approximately 200 miles away – to allow for management of the flight test. AMT operations use sensitive, high-gain receive antennas to both obtain the data and track the test vehicles on the same signal.⁶ Flight tests push aeronautical vehicles to their design limits, often at extremely high velocities, thus significantly increasing safety of flight considerations. Whether during flight tests or subsequent regular operations, all flight activity depends on the reliability of information received on a real-time basis during the multiple phases of flight testing, without

⁴ In addition to the 1435-1525 MHz Band, there is a second primary AMT allocation used by non-Federal flight test operators on a shared basis with Federal operators, the 2360-2395 MHz Band. While some flight testing occurs in a few other bands today, it is on a secondary or Part 5 experimental basis, underscoring the importance of 1435-1525 MHz Band as well as 2360-2395 MHz for safe and successful flight-testing.

⁵ Routine flight testing is essential for introduction, maintenance, and upgrading of new conventional aircraft that are safe and operationally efficient, and equally so for the next generation of aircraft using green, sustainable fuels or powered by electricity, as well as increasingly sophisticated fixed wing, rotorcraft, and UAs, from smaller drones to, eventually, passenger-carrying uncrewed aircraft.

⁶ Flight test operators also use VHF and HF spectrum for voice communications between pilots and the ground during testing.

disruption from harmful interference, even for an extremely short period that may last only a few seconds.⁷ Successful real-time receipt and analysis of key telemetry data is essential, especially in cases where a test may promptly need to be aborted or modified to protect life and property.

In short, without interference-free access to adequate spectrum for these purposes, important flight tests involving high risk might not be possible, and the potential adverse consequences for both military aviation and commercial passenger and transport aviation, not to mention private aviation and the use of UAs, would be substantial. Protecting and preserving the A&D industry's access to non-Federal flight test spectrum is a central mission of AFTRCC. In serving that role, AFTRCC acts as the Commission-designated spectrum coordinating committee, working in close collaboration with Federal Area Frequency Coordinators, to coordinate flight-testing and other uses in and adjacent to the 1435-1525 MHz Band and the 2360-2395 MHz Band. This includes AFTRCC having entered into a Coordination Agreement with Ligado to coordinate Ligado terrestrial base stations that may operate above 1525 MHz under Ligado's Ancillary Terrestrial Component ("ATC") authority.

⁷ If signal lock is lost, even for a matter of seconds, it may be several multiples of that period before lock can be successfully reestablished, during which time telemetry is not being received and a decision may be made to abort a flight test operation to ensure safety of the flight test pilots (and any crew). If the interfering signal is strong enough to capture the receive antenna tracking, re-acquiring the tracking of the test article and obtaining data "lock" can take much longer.

II. THE COMMISSION HAS RECOGNIZED INTERFERENCE CONCERNS IN SIMILAR CIRCUMSTANCES, WHICH WARRANTS CAUTION

In the Commission’s 2024 Supplemental Coverage from Space (“SCS”) Order,⁸ the Commission declined to identify spectrum adjacent to AMT bands as suitable locations for SCS, direct-to-device services – extremely similar to the proposed SkyTerra Next – due to interference concerns. The Application contends that “direct-to-device MSS systems [such as SkyTerra Next] can offer SCS-like capabilities in bands not designated for SCS, further increasing the range of options in the market.”⁹ The Application declines to mention that, in the *SCS Order*, the Commission rejected several spectrum bands adjacent to AMT allocations as initial bands for SCS due to interference concerns: 1432-1435 MHz next to the AMT frequency band at 1435-1525 MHz, and 2345-2360 MHz adjacent to the AMT frequency band 2360-2395 MHz.¹⁰ In both cases, AFTRCC filed comments identifying the need to ensure MSS direct-to-device operations, such as SCS and including SCS-like services, do not cause adjacent channel interference and protect AMT operations consistent with the protection criteria found in Rec. ITU-R M.1459.¹¹ The Commission concluded that interference concerns prevented the identification of these bands as initial SCS bands without foreclosing future consideration of them. In the matter of the 1432-1435 MHz Band, the Commission expressed its intent to adopt

⁸ *In the Matter of Single Network Future: Supplemental Coverage from Space*, Report and Order and Further Notice of Proposed Rulemaking, FCC 24-28, GN Docket No. 23-65 (rel. Mar. 15, 2024) (“SCS Order”).

⁹ Application, Narrative Statement, at 15-16.

¹⁰ See *SCS Order* ¶¶ 32-34 (2345-2360 MHz) and ¶¶ 43-44 (1432-1435 MHz).

¹¹ Regarding the 2360-2395 MHz Band, see *id.* at ¶ 33 citing Aerospace and Flight Test Radio Coordinating Council, Inc. Comments, GN Docket No. 23-65, at 5-10 (rec. May 12, 2023); Lockheed Martin Corporation Comments, GN Docket No. 23-65, at 6 (rec. May 12, 2023). The Commission explained that, “given the serious concern that permitting SCS in [2345-2360 MHz] band could potentially interfere with important adjacent band operations, and our interest in authorizing SCS in the near-term where feasible, we will not include the WCS band as available for SCS at this time.” *SCS Order* ¶ 34.

“an SCS framework that will minimize the risks of harmful interference,” specifically in bands that “enabl[e] SCS operations that present less technically complex interference protection scenarios, which is not the case in the 1.4 GHz band.”¹²

III. THE APPLICATION IS DEVOID OF ANY INTERFERENCE ANALYSIS

The *SCS Order* underscores the reality that consideration of proposals for SCS services or SCS-like services – such as the proposed SkyTerra Next – must take into account serious interference concerns raised by all users of adjacent channel services. In the current circumstances, the potential for adjacent-channel interference to AMT which operates on a primary basis immediately adjacent to the lower-band spectrum Ligado and AST Space Mobile intend to use, specifically 1525-1549 MHz, must be addressed. However, the Application makes no meaningful effort to discuss interference concerns with any L-Band users in the same or adjacent spectrum, including AMT.

Rather, the Application makes only broad claims about interference, none of them touching upon any prospective threat to any spectrum users or group of users, with the exception of GPS. The Application merely asserts that “[t]he proposed SkyTerra Next MSS system . . . will not result in any new interference risks or coordination challenges”¹³ adding its claim that “[t]he proposal . . . will not cause harmful interference to the Global Position System or other

¹² *Id.* ¶ 44. Because the Commission did not include the 1.4 GHz band as an SCS Band at the time of the *SCS Order*, it refrained from addressing AFTRCC’s request that MidWave Wireless (“MidWave”), the proponent of SCS in the 1432-1435 MHz band, to demonstrate “that adjacent band safety-of-flight Federal and non-Federal aeronautical mobile telemetry operations will be protected from harmful interference” before MidWave would be allowed to deploy SCS in that band. *See* Letter from Edward A. Yorkgitis, Jr., Counsel to Aerospace and Flight Test Radio Coordinating Council, Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket No. 23-65 et al., at 3 (filed Mar. 7, 2024).

¹³ Application, Narrative at i.

adjacent band services.”¹⁴ But even in the case of GPS, no detail is provided in the Technical Supplement of the Application.¹⁵ No mention of AMT is made.

The Application also asserts that the “use of licensed MSS spectrum in the United States over SkyTerra Next is consistent . . . with Ligado’s existing L-band coordination agreements.”¹⁶ Here, the Application cannot be referring to non-Federal AMT operators. While AFTRCC has a coordination agreement with Ligado, it is solely for the coordination of Ligado ATC base stations to avoid interference to AMT receive sites, a wholly different matter than coordinating with a large, dynamic non-GSO LEO system providing direct-to-device mobile services to user equipment that can be collocated with the AMT receive sites.

The fact that AMT operations have co-existed on an adjacent channel basis with Ligado’s GSO satellite SkyTerra-1 does not obviate the need for an assessment of the interference potential of the SkyTerra Next proposal. SkyTerra-1, as a GSO satellite, is stationary in the sky from any point on the ground. By contrast, the AST Space Mobile constellation of 96 non-GSO satellites occupies 96 different orbital planes.¹⁷ Consequently, the satellites will appear at virtually all locations in the sky in any given period serving user equipment that may be located without constraint, meaning that the boresite and near-boresite downlink satellite transmissions will blanket the United States from all elevation angles and azimuths. Because AMT receive antennas during a flight test will track test articles dynamically over a large range of elevations

¹⁴ *Id.*

¹⁵ The Application’s Technical Supplement does state that SkyTerra Next will support “dynamic beam shaping, variable power control, and rapid reconfiguration to avoid or mitigate interference,” Application, Technical Supplement, at 1, but does not offer any insights how Ligado and AST Space Mobile might use these features, if at all, to protect any particular class of other spectrum users or limit their use to manage intra-system interference.

¹⁶ Application, Narrative at 11.

¹⁷ *Id.* at 5-6.

and azimuths, encounters with non-GSO satellites in the boresite or sidelobes of the AMT receive antennas can be expected to be frequent. This necessitates the need for the proponents of SkyTerra Next to provide analyses in the record based on their proposed operation of the impacts on adjacent channel AMT operations, including the possible effects of aggregation.¹⁸

IV. CONCLUSION

For the foregoing reasons, before the Commission can act on the Application, it should direct Ligado and AST Space Mobile to submit, as a complement to the Application, compatibility analyses with other L-Band users, including AMT, so that, in that case, AFTRCC and its Members, as well as Federal flight test operators and coordinators, can analyze Ligado and AST Space Mobile claims that no new interference threats will be created. AFTRCC looks forward to reviewing such analysis and working with Ligado and AST Space Mobile to explore solutions to address any interference concerns identified by robust analyses. In the interim, as AFTRCC awaits technical information and analysis complementing the Application, AFTRCC has commenced an undertaking to analyze the proposed SkyTerra Next operations and the

¹⁸ Recently, at AFTRCC's request, Ligado and AST Space Mobile met with AFTRCC representatives and members to share the conclusions of what appeared to be a rudimentary analysis claiming to conclude a minimal chance of harmful interference to adjacent-channel AMT operations. While AFTRCC acknowledges this initial effort, it notes that none of the AMT-compatibility-information in the presentation has been provided in the record and insufficient technical material was provided in the presentation to confirm the methodology used and to materially assist AFTRCC to verify the results.

prospective impacts on adjacent-channel AMT. When the analysis is complete, AFTRCC intends to provide the results to the Commission as well as Ligado and AST Space Mobile.

Respectfully submitted,



Kara R. Curtis

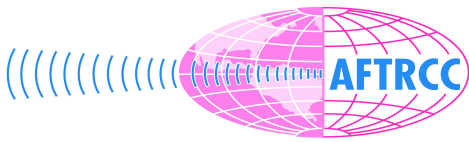
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CERTIFICATE OF SERVICE

I, Jennifer Wainwright, hereby certify that on March 2, 2026, a copy of the foregoing Comments was sent to the following recipients via electronic mail (pursuant to pre-arrangement with outside counsel for Applicant that service via electronic mail will be accepted in lieu of mailed or couriered paper copies):

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