AEROSPACE & FLIGHT TEST RADIO COORDINATING COUNCIL, INC.®

PO Box 780481
Wichita KS 67278
316-821-9516
www.aftrcc.org

Confidential, Proprietary Communications

To: AFTRCC Members

From: Kara R. Curtis, President

Date: March 31, 2026

Subject: Annual Report for the Year 2025

Dear Member,

I am pleased to share AFTRCC's 2025 Annual Report. Founded in 1954 by leaders of the flight test community, AFTRCC continues to advance its mission of advocating for the aerospace industry's spectrum needs and coordinating flight test spectrum usage. We remain committed to supporting both traditional flight test operations and emerging users, including commercial space launch operators, while ensuring that aeronautical mobile telemetry (AMT) systems are protected. The Board of Directors remains dedicated to serving our Members with integrity and diligence.

Throughout 2025, AFTRCC engaged with the Test Resource Management Center (TRMC); the Department of Defense Military Service Spectrum Management Offices; the Air Force Materiel Command spectrum office; the National Telecommunications and Information Administration (NTIA); and the Federal Communications Commission (FCC). We held meetings in Washington, D.C., Nashville, and virtually. I appreciate the companies that supported travel for their representatives to attend our in-person sessions.

A key milestone this year is the expansion of AFTRCC's coordination area in the latest NTIA Manual. Chapter 8.3.17.1 now requires AFTRCC coordination for assignments in the 1435–1525 MHz, 2360–2395 MHz, and 5091–5150 MHz bands throughout the United States, the District of Columbia, and all U.S. territories and possessions—an important refinement to previous editions.

AFTRCC Members also honored the memory of Rex Miller, AFTRCC's longest serving President, through a donation to Texas A&M University–Commerce supporting the university's Electronic Warfare course. This program continues to provide a pipeline of engineering talent to AFTRCC Member companies in the Dallas–Fort Worth region.

AEROSPACE & FLIGHT TEST RADIO COORDINATING COUNCIL, INC.®

PO Box 780481
Wichita KS 67278
316-821-9516
www.aftrcc.org

Confidential, Proprietary Communications

AFTRCC's Top Six Priorities

Member representatives have identified the following priorities for inclusion in the report:

- Commercial Space Launch Coordination
- L Band Wireless Microphone Manufacturers
- C Band Non-Federal AMT Allocation
- National Spectrum Strategy
- ITU Agenda Items 1.11 and 1.13
- MidWave Wireless (formerly TerreStar)

Commercial Space Launch Coordination Efforts

Developing efficient processes for new requirements inevitably takes time, and space launch coordination is no exception. Throughout 2025, the AFTRCC coordination team held numerous meetings, phone calls, email exchanges, and FCC filings. Most stakeholders have now reached agreement on the essential file formats, methods, and procedural steps needed to support effective coordination.

AFTRCC began the year with a comprehensive review of both federal and non-federal telemetry databases. Companies wishing to review their telemetry site information are encouraged to contact AFTRCC's Telemetry (TM) coordinators. Ensuring our TM coordinators had up to date points of contact for each company was another important milestone. Rapid communication with the appropriate individuals is critical, and AFTRCC seeks to maintain a direct line to company representatives responsible for space launch information. AFTRCC Member representatives will continue to be notified as well.

A significant portion of our discussions this year involved assisting NTIA in gaining a clearer understanding of flight test scheduling practices. Several AFTRCC Members contributed valuable insights to help illustrate operational challenges. I would like to acknowledge the following Members for their exceptional support: Jonathan Westerling, Lauren Haertlein, and Craig Milliard (Joby/X Wing); Danny Hankins and Mike Jenkinson (Textron); Chris Confer, Paul

PO Box 780481
Wichita KS 67278
316-821-9516
www.aftrcc.org

Thill, and Benjamin Povall (Bombardier); James Nikirk, Kristopher Smith, Darwin Breland, and Ryan Terry (Lockheed Martin); and Daniel McNeil, John Garcia, and Nathan Miller (The Boeing Company).

As a result of these efforts, development of the space launch notification portal—created by our TM coordination team—advanced significantly. After completing its trial phase, the portal entered active use in early 2026. It incorporates automation tools that enable AFTRCC to quickly notify flight test operators whose sites may experience harmful interference during a coordinated space launch in the 2360–2395 MHz band. AMT operations remain the primary user of this band; thus, companies may still object to proposed launch windows when AMT activities are scheduled. Commercial space launch operations use these frequencies under a secondary allocation in Part 26 and must not cause harmful interference to primary Part 87 licensed flight test operations.

The AFTRCC space launch coordination policy continues to evolve as new challenges emerge. A revised version will be circulated to the Membership for review and approval, and once adopted, the approved version will be posted on the AFTRCC website.

Wireless Microphones – Secondary Licensing in the L Band

In 2025, AFTRCC continued productive discussions with Sennheiser and Shure regarding the development of wireless microphone equipment intended for secondary allocation in the L Band AMT spectrum under FCC Part 74. The rules require L Band wireless microphones to coordinate with AFTRCC for specific times, locations, and frequencies (up to 30 megahertz per user and per location, absent an STA). Part 74 wireless microphone use is limited to “power users”—large systems with over 100 portables, although the FCC is considering lowering this threshold—operating at fixed indoor or outdoor venues.

AFTRCC has held regular virtual meetings with Sennheiser (at least monthly). The portal connecting AFTRCC’s SpectrumCenter and Sennheiser’s SPECTERA Wireless Multi-Channel Audio System (WMAS) is nearly complete. Sennheiser is developing a user portal through which customers can submit coordination requests. Those requests will then be forwarded to AFTRCC automatically. Discussions will continue as remaining issues are refined, including site verification, handling subsequent modified coordinations, and equipment authorization procedures.

PO Box 780481
Wichita KS 67278
316-821-9516
www.aftrcc.org

AFTRCC also held several virtual meetings with Shure in 2025. Similar topics have been discussed, and Shure has expressed interest in convening wireless microphone manufacturers to develop a unified coordination framework. AFTRCC believes the Sennheiser–SpectrumCenter approach could serve as a foundation, with each manufacturer maintaining its own customer interface while submitting standardized data to AFTRCC.

Supporting licensed wireless microphone usage in the L Band aligns with AFTRCC's long term interests, given continued attention to the band for flexible use.

C Band Non-Federal AMT Allocation

The potential allocation of the 4400–4940 MHz band remains complex due to concurrent activity in adjacent ranges. In February, the FCC issued a Notice of Inquiry regarding the 3.98–4.2 GHz band as part of broader efforts to identify 600 megahertz of mid band spectrum for commercial reallocation. For AMT purposes, the 4800–4940 MHz range appears to be the most viable near-term opportunity, which may subsequently support access to the adjacent 4400–4800 MHz range. AFTRCC continues discussions with radar altimeter subject matter experts regarding outstanding compatibility concerns.

As background, the FCC has already auctioned the 3700–3980 MHz band. The Commission has indicated strong interest in making additional spectrum available to commercial carriers and is proceeding with a Notice of Proposed Rulemaking on auctioning 3980–4200 MHz.

On October 30, 2025, at the 14th Spectrum Americas Conference, NTIA announced that it will evaluate the 4400–4900 MHz band—particularly the top portion—for potential reallocation, consistent with international identification for IMT. At least fifteen Federal agencies use this band, and the U.S. mobile industry has expressed significant interest. Positively, both TRMC and the DoD CIO have communicated support for a non-Federal AMT allocation in the 4.4 GHz band.

AFTRCC has consistently advocated that the 4400–4940 MHz band is well suited to support additional non-Federal AMT allocations. Some Federal customers already require 4 GHz telemetry, and in some cases have directed aerospace companies to pursue FCC authorization in the 4 GHz band instead of using L Band or Upper S Band resources. Today, non-Federal AMT operations in the 4 GHz band are limited to Part 5 experimental licenses.

PO Box 780481
Wichita KS 67278
316-821-9516
www.aftrcc.org

Establishing Part 87 licensed access would enhance support to military customers and provide Members with essential supplemental spectrum when L Band and S Band resources are congested. AFTRCC continues to monitor parallel commercial interest in the band.

National Spectrum Strategy

The National Spectrum Strategy paused during the 2025 government shutdown but resumed once federal operations restarted. The strategy also underwent a revision last fall, including adjustments to the bands identified for further study. Notably, the 3100–3450 MHz band was removed from consideration and is no longer being evaluated for future auctions.

The Strategy proposes reallocation of portions of the 7125–7400 MHz band for commercial wireless operations, increasing permitted CBRS power levels in the 3550–3650 MHz band, and acquiring additional microwave spectrum including the 42 GHz band. The 3980–4200 MHz band may also be added to a future usage study, with a possible auction as early as 2028.

Administration officials have expressed impatience with lengthy spectrum studies, historically requiring a year or more before bands can be considered for reallocation. The Administration has referred to its accelerated plan as a "10-week sprint," interrupted by the shutdown. Several spectrum activities across multiple bands of interest will be revisited later.

International Telecommunication Union Agenda Items 1.11 and 1.13

Agenda Item 1.11 addresses technical, operational, and regulatory considerations for space-to-space links between NGSO and GSO satellites in several bands, including 1518–1544 MHz, which overlaps the L Band AMT spectrum.

Domestically, AFTRCC continues to monitor the FCC's Single Network Future: Supplemental Coverage from Space (SCS) Report and Order adopted March 15, 2024. The Order establishes SCS as a secondary service within certain terrestrial flexible use bands. AT&T and AST SpaceMobile sought inclusion of the 2305–2320 MHz and 2345–2360 MHz bands, but the Commission declined pending resolution of interference concerns. AFTRCC has coordinated AT&T terrestrial deployments in the 2345–2360 MHz band since 2015 and is engaged in discussions under NDA regarding potential SCS like operations adjacent to the Upper S Band AMT spectrum. AFTRCC has emphasized that protection criteria must comply with ITU R Recommendation M.1459.

PO Box 780481
Wichita KS 67278
316-821-9516
www.aftrcc.org

Agenda Item 1.13 focuses on possible new Mobile Satellite Service (MSS) allocations to support direct to device (D2D) connectivity. A central challenge is criticism that AMT protection criteria in ITU R M.1459 were not developed specifically for NGSO MSS constellations. Maintaining the relevance of M.1459 remains a priority.

Aerospace Corporation developed simulations evaluating AMT protection using M.1459 power flux density limits. Results suggest D2D MSS/IMT systems require filters or other mitigation to avoid harmful interference. However, the study did not achieve U.S. delegation consensus and was not submitted during the April Working Party 4C meetings. Instead, the U.S. delegation issued a liaison statement requesting guidance from Working Party 5B, which responded that relevant portions of M.1459 may be used "where applicable." TRMC awaits proposals from AT&T and AST SpaceMobile regarding application of M.1459.

AFTRCC continues to monitor and participate in preparations for additional WRC 27 topics relevant to AMT spectrum protection. We acknowledge Scott Kotler (Lockheed Martin) and Mark Lofquist (Aerospace Corporation) for their significant contributions.

MidWave Wireless (formerly TerreStar)

MidWave Wireless holds nationwide licenses in the 1432–1435 MHz band adjacent to the L Band AMT spectrum. The company has expressed interest in deploying non-WMTS systems, including private networks and possible future SCS applications. Although MidWave Wireless holds FCC licenses, it is not required to enter a formal coordination agreement. Preliminary discussions indicated that coexistence appears feasible with appropriate collaboration and mitigation measures. AFTRCC intends to resume discussions and will file an ex-parte letter with the FCC addressing coordination considerations.

Telemetry, HF/VHF, Space Launch Coordination

Danny Hankins and Sneyder Jimenez (HF & VHF coordinators) processed 98 HF/VHF requests in 2025, including Part 87 flight test requests, experimental licenses, and DoW support. They also manage WCS coordination with AT&T, processing 28 markets in 2025.

Telemetry coordinator Wayne Morris supported 40 test events, 158 DoW telemetry site authorizations, and 730 STAs from broadcasters. AFTRCC processed 24 space launch coordination requests in 2025, an increase from 2024.

AEROSPACE & FLIGHT TEST RADIO COORDINATING COUNCIL, INC.®

PO Box 780481
Wichita KS 67278
316-821-9516
www.aftrcc.org

Confidential, Proprietary Communications

AFTRCC Officers and Directors

We have experienced several personnel changes over the past few years, and I would like to introduce our newest AFTRCC Officer and Director:

Vice President: Jonathon Westerling, Joby Aviation
Director: Chris Confer, Bombardier

Despite the challenges of 2025, AFTRCC had a highly productive year, and we anticipate that 2026 will continue advancing our Members' AMT interests. We remain committed to diligent advocacy in flight test spectrum policy and coordination matters. Thank you for your continued support.

If you have any questions, please do not hesitate to contact me.

Kara R. Curtis

President
AEROSPACE & FLIGHT TEST RADIO COORDINATING COUNCIL
t +1 903 457 3544
AFTRCC.ORG / Kara.R.Curtis@L3Harris.com
P.O. Box 780481 / Wichita, KS 67278 / USA