Airport Remote Tower

Scott Coffman, Airport Director

Airport Commission March 8, 2023



Remote Tower Chronology

- 2013 Increasing air traffic conflicts and airspace security violations
- 2013 Sequestration FCT applications suspended
- 2014 Virginia SATS Lab approached Leesburg as test site for a new Remote Tower System
- 2015 System installed
- 2016 FAA began evaluations
- June 2018 Continuous daily ATC operations began
- 2019 FAA committed funds to build Remote Tower Center (RTC)
- 2019 Town leased space from County for new RTC
- 2020 JYO accepted into FCT Program





Remote Tower Chronology

- May 2021 New RTC opened at Miller Drive
- Jul 2021- Draft operational, visual, and and technical requirements issued
- Sep 2021 Operational Viability Decision issued
- 2022 STARS Radar display installed
- 2022 System Design Approval submittals moving forward
- Feb 7, 2023 Saab notified FAA it will no longer pursue System Design Approval at JYO
- **Feb 21, 2023** FAA notified Leesburg it will end the program effective June 14, 2023



Remote Tower Center Building



Program Funding

- \$30 million in public funding provided through FAA
- FAA:
 - ATC Services through Robinson Aviation
 - Equipment and maintenance through Saab
- Leesburg:
 - Utilities
 - Facility maintenance
 - Communications
- Loudoun County:
 - Building space at no cost (lease to Town)
- VSATSLab:
 - Infrastructure investments (fiber connectivity)





Operational Viability Decision

- In September 2021, the FAA issued an Operational Viability Decision (OVD) memo on the Leesburg Remote Tower (RT) System.
- According to the memo, the FAA conducted extensive air traffic operational evaluations of the system and convened "more than a dozen Safety Risk Management (SRM) assessments".
- The OVD also documented that "all safety performance targets have been met through all periods of operational use of the Saab Inc. RT System for the provision of ATC services at JYO" and led the FAA to determine that the Saab system installed at JYO was "operationally viable ... for the provision of ATC services".



Saab's Decision

- In 2022, FAA required new remote tower systems be Operationally Evaluated at the FAA Technical Center in NJ.
- FAA's Operational Viability Decision restricted Saab's system to single runway airports with 5,500' runway or less.
- FAA released draft Technical Requirements and System Design Approval process in July 2021.
- Saab's system significantly predates the new FAA technical requirements.
- Saab states it is pausing System Design Approval and may resume with a new system at a future date to be determined.



FAA Decision

- Approval of Remote Tower Systems is under the FAA Non-federal Program
 - Remote Towers could display hazardously misleading information to controllers
 - Accidents related to malfunctions could lead to legal liabilities on all parties
- Non-federal Program sets policy for non-FAA systems operating in the National Airspace System (NAS) to ensure safe operations through FAA oversight
 - Airports may only install FAA-Approved or Type-Certified equipment
 - Requirements for formal commissioning, inspections, and certification of non-FAA technicians
 - These requirements cannot be met until System Design Approval by the FAA
 - Saab's decision to cease work towards SDA results in no path forward to commissioning of the Saab system in the NAS



Loss of ATC Services

- While loss of a tower will hurt the airport's economic capacity to bring corporate air travel into Loudoun County, our paramount concern is safety.
- While open only 10-hours each day, Leesburg's tower records over 75,000 takeoffs and landings each year, nearly as the same as Norfolk International and more than the Roanoke and Williamsburg-Newport News airports.
- Leesburg lies within the Washington Special Flight Rules Area (SFRA). Eliminating the tower will eliminate a vital communication link to resolve security issues with the National Capital Region Coordination Center.
- The FAA's statement that many general aviation airports operate without a tower does not account for the traffic volume and airspace restrictions at Leesburg.
- The potential for aircraft accidents will increase without ATC services.



Action Plan

- 1. Request that the end date for ATC services via the Remote Tower at JYO be extended to December 31, 2023, at a minimum, to allow all parties involved to determine the best path forward.
- 2. If #1 is not possible, request that the FAA place a temporary tower at the airport and continue to provide ATC services until such time as a RT system is certified or a physical tower is constructed and operational.
- 3. If the RT program is canceled, pursue funding and an accelerated development schedule for a physical tower.



Efforts Underway

- Coordinated outreach/education:
 - Saab
 - Senator Warner's office
 - Senator Kaine's office
 - Congresswoman Wexton's office
 - Loudoun County Board of Supervisors
 - JYOTenants & Customers
- Provided talking points, program timeline, annual operations counts, and draft letters to send to FAA and federal legislators
- Loudoun County has made their federal lobbyists available to the Town at no cost
- The Town has hired federal lobbyist and former FAA assistant administrator Jenny Rosenberg with JTR Strategies



Next Steps

- JTR Strategies is working to set up meetings with FAA and NBAA
- Continued coordination with federal legislators

