City of Denton



City Hall 215 E. McKinney Street Denton, Texas www.cityofdenton.com

AGENDA INFORMATION SHEET

DEPARTMENT: POLICE

CM/DCM/ACM: Sarah Hensley, City Manager

DATE: November 18, 2025

SUBJECT

Consider approval of a resolution of the City of Denton approving the City's participation in the AAMTEX, LLC, North Texas Shared Airspace Implementation, an evaluation, technology development, and rulemaking process for improving the coordination and intervisibility of commercial and public safety uncrewed aerial systems (UAS) "drones" in the National Airspace System (NAS); and providing an effective date.

BACKGROUND

The City of Denton operates a Public Safety UAS Team consisting of trained and FAA certified pilots from the city's Police and Fire Departments, who jointly respond to many types of calls, including but not limited to missing persons, collision and crime scene investigations, tactical incidents, and fire suppression operations.

NASA completed the development and testing phase of the introduction of Unmanned Traffic Management (UTM) between 2015 and 2019. The concept is to provide a federated, web-based deconfliction and airspace management system for unmanned aircraft below 400ft Above Ground Level (AGL). The next phase for the standardization and fielding of UTM across the U.S. is the FAA-backed UTM Key Site Operational Evaluation, also known as 'Key Site' running since 2024 in the North Dallas/Fort Worth area.

Lessons learned in Key Site are informing standards, concepts of operation (CONOPs), and regulations for widescale commercial and public safety use of small UAS at beyond visual line-of-sight (BVLOS) ranges with competing air traffic. There are currently nine Key Site participants, each acting as a UAS Service Supplier (USS) to assure interoperability with other operators. Each USS must themselves operate, partner with an active drone operator such as the Denton Public Safety UAS Team to provide a real-world operational evaluation of the USS concept and guide the deployment of UTM nationwide. Key Site has a special taskforce to support the needs and requirements of public safety, with its prioritization and security concerns, and Denton's engagement and insights will greatly benefit this effort.

FireFlyTM USS provides commercial and public safety drone operators the ability to securely publish Operational Volumes (OVs) and provide deconfliction and air domain awareness of low level manned and unmanned aircraft operations in the area of interest. It monitors conformance of flights within the reserved areas, and notifies other operators should aircraft stray outside of their indicated airspace. As part of Key

Site, AAMTEX systems are actively pooled with two other companies (Wing, Zipline) as the access providers for the accepted airspace reservation system in the US. Adhering to accepted industry standards for quality assurance, cybersecurity, and privacy, it provides a secure record of interactions between entities and a history for post-flight analysis and auditing purposes.

AAMTEX is looking to partner with the Public Safety UAS Team drone operators to further the following operational concepts as part of the Key Site program:

- 1. UTM intervisibility of Public Safety and commercial drone operations
- 2. UTM prioritization of Public Safety missions
- 3. UTM integration with Drone as a First Responder (DFR) procedures
- 4. DroneSense interoperability with UTM
- 5. Live weather feed input to live flight mission planning and monitoring
- 6. Manned-Unmanned Teaming (MUMT) operational improvements
- 7. Common Operating Picture (COP) and coordination improvements
- 8. Data Retention and analysis process improvements

The goal of this no-cost operational partnership will allow the City of Denton Public Safety UAS Team drone operators to have significant input into the federal roll-out of the UTM-based management of the lower airspace structures, and to be among the first public safety entities actively participating in the nationwide UTM system with other live commercial operators.

RECOMMENDATION

Staff recommends Council approve this resolution.

FISCAL INFORMATION

No cost to the City of Denton.

EXHIBITS

Exhibit 1 - Agenda Information Sheet Exhibit 2 - Resolution and MOU

Respectfully submitted: Jessica Robledo Chief of Police

Prepared by: Bryan Cose Deputy Chief of Police Public Safety UAS Program Manager