

Topic of the Month: Drones

Over the past decade, uncrewed aircraft systems (UAS) – what most of us call drones – have evolved from niche novelties into essential technological assets powering modern commercial logistics, emergency services and regional infrastructure planning.

For November's Topic of the Month, we swoop into the world of the airspace advances brought on by drones and how North Texas is finding itself at the center of this air mobility evolution.

A Versatile Tool Across Industries

Across the region, uncrewed aircraft are actively serving three primary sectors:

- **Commercial operations:** You've no doubt seen them buzzing above retail stores in North Texas, setting off on a delivery or coming back from one. More will eventually fill the skies as retailers, logistics firms and medical providers continue to rely on automated drones to streamline deliveries. By bypassing highway congestion, UAS delivery drastically reduces turnaround times, cuts carbon emissions and ensures rapid transport of essential goods and medical supplies directly to consumers.
- **Public Safety:** Local police and fire departments, and emergency management teams, often deploy drones during critical operations to enhance their presence. Drones give first responders a clear eye in the sky during search-and-rescue missions, active disaster responses and roadway crashes, significantly improving situational awareness while keeping people out of the way.
- **Planning and infrastructure:** Urban planners, civil engineers and public works agencies use UAS technology for aerial mapping, traffic pattern monitoring and structural inspections of bridges, roads and transit systems. These aerial surveys allow transportation agencies to collect accurate data faster and more efficiently and are often safer than traditional manual field inspections.

DFW: A Hub of Aviation Innovation

Dallas-Fort Worth has earned a global reputation as a premier proving ground for next-generation transportation solutions. Driven by regional partnerships and forward-thinking public infrastructure, DFW is home to major pilot projects and high visibility showcases that are setting national standards for aerial innovation.

- **North Texas Drone Demonstration Day:** In September, the Henry B. Tippie National Aviation Education Center at Dallas Executive Airport hosted North Texas Drone Demonstration Day. Organized by the Regional Transportation Council, the showcase brought together more than 30 leading industry, academic and public

safety organizations to highlight the rapid evolution of uncrewed aircraft technology. Attendees experienced live drone demonstrations and an electric vertical takeoff and landing (eVTOL) flight simulation. They also had front seats to public safety operations and first-person view (FPV) drone races. Many of the attendees were students from local schools – the next generation of drone users.

- **Alliance Airport & Project Nexus Pilot Program:** As one of the world's premier industrial and logistics hubs, Perot Field Fort Worth Alliance Airport serves as a cornerstone for advanced aviation research. In September, Alliance Airport officially launched Phase 1 testing for **Project Nexus**, a pilot program spearheaded by the Texas Department of Transportation (TxDOT) in partnership with the Federal Aviation Administration (FAA). The initiative tests autonomous cargo planes, electric air taxis and automated airspace management systems operating within busy commercial airspace. Industry leaders such as Joby Aviation and Merlin Labs conducted public test flights as part of the FAA's eVTOL Integration Pilot Program, which demonstrates how electric aircraft can operate within a major commercial airport. For more information on the program, visit <https://www.faa.gov/newsroom/eIPP-Announcement-Fact-Sheet.pdf>
- **Arlington Multimodal Delivery Pilot Project:** Led by the City of Arlington in collaboration with University of Texas at Arlington researchers, Tarrant Area Food Bank, autonomous vehicle operators and the NCTCOG Transportation Department, this innovative project tested a zero-emission supply chain that paired low-altitude delivery drones with automated ground robots to deliver more than 300 grocery boxes to underserved residents. By bridging transit gaps and reducing greenhouse gas emissions, Arlington's multimodal model illustrates how uncrewed technology can enhance community health, disaster relief response and urban logistics simultaneously.
- **Securing the Skies: Counter-UAS and Airspace Awareness:** To prepare for FIFA World Cup 2026™ matches at AT&T Stadium in Arlington, the Federal Emergency Management Agency (FEMA) awarded more than \$30 million to Texas through its Counter-UAS Grant Program. The funding paid for drone detection and mitigation equipment and specialized training for state and local personnel, so public safety agencies could protect large crowds and critical infrastructure from unauthorized drones. That investment didn't end with the tournament. The infrastructure and trained personnel put in place for the World Cup now serve as the framework for

NCTCOG's Airspace Awareness Initiative. The region is building on that foundation to expand shared drone detection and airspace data across North Texas.

How the RTC is Helping Lead the Way

To ensure our region remains a competitive and safe environment for uncrewed aviation, the Regional Transportation Council is actively building the policy, workforce and public resource framework required to support sustainable growth.

Key regional initiatives include:

1. **Advanced Air Mobility (AAM) Call for Projects:** The Regional Transportation Council recently awarded a competitive \$500,000 AAM Call for Projects. This program provides 100% funding to public-use airports across the region to acquire electric charging infrastructure, preparing airfields to support future eVTOL operations, vertiports and regional air corridors. For more information, visit the [North Texas Advanced Air Mobility Readiness Call for Projects](#).
2. **North Texas Aviation Careers:** To meet the growing demand for skilled aviation professionals across our region, the NCTCOG Transportation Department actively works to promote regional aviation through targeted education, specialized training and legislative support. Initiatives like the North Texas Aviation Program create innovative career pathways for students and job seekers looking to enter the industry. With Dallas Fort Worth International Airport operating as the third busiest airport in the world and Denton Enterprise Airport ranking fifth for the busiest air traffic control tower in Texas, these workforce efforts ensure North Texas continues to build the talent pipeline required for future aviation and uncrewed aircraft systems (UAS) growth. Learn more at <https://www.nctaviationcareers.com>.
3. **North Texas UAS Website & Task Force:** In response to the rapid rise of uncrewed aircraft, the Transportation Department launched the UAS Safety and Integration Initiative - a multi-pronged effort dedicated to fostering safe drone operations across North Central Texas. Through regular workshops, working group meetings and regional planning activities, the initiative brings key stakeholders together while offering a central online resource hub to guide municipalities, operators and the public. Central to this work is the North Texas UAS Safety and Integration Task Force, which convenes public safety officials, municipal leaders and industry experts to address low-altitude airspace coordination. By facilitating open communication and sharing best practices, the task force helps local communities develop consistent

policies that prioritize both safety and technological progress. To learn more, visit <https://www.northtexasuas.com>.

Looking to the Future

The sky is no longer a limit; it is our newest transportation corridor. As low-altitude airspace management continues to evolve and eVTOL passenger aircraft progress toward commercial deployment, drones could become as integrated into our daily lives as ground transportation. Through planning, community engagement and regional collaboration, the RTC is ensuring North Texas stays well-positioned to lead this exciting new era of aviation safely and efficiently.