Building an Advanced Air Mobility Ecosystem

Arlington, TX

SCENARIO

The North Central Texas Council of Governments (NCTCOG) wanted to create a regional Unmanned Aircraft Systems (UAS) ecosystem, but first they needed to better understand their local UAS infrastructure and the safety of aircraft, objects, and airspace within their community.

SOLUTION

NCTCOG launched the Advanced Air Mobility Pilot Program, bringing together representatives from municipal governments, academia, research, public safety operations, and service providers representing supporting technologies: airspace monitoring and management, communications, micro-weather solutions, and more.

To demonstrate low-altitude airspace monitoring, NCTCOG worked with Hidden Level and its Airspace Monitoring Service (AMS), a network of custom-built IoT sensors offering real-time location data of low altitude airspace activity. Using 4G LTE cellular and fiber backhauls, sensors deployed on area rooftops, water towers, and cell towers deliver data on airspace activity to UAS service suppliers, video management systems, situational awareness displays, and security operations centers.

RESULT

Hidden Level's AMS uses airspace data to:

+ Correlate public drone complaints to existing drone flight operations, streamlining police response

+ Send out automatic notifications about drone flights over flight-restricted public events like football and baseball games

+ Support R&D efforts for urban air mobility (UAM), drone delivery and inspection, and public safety

+ Characterize the density of low-altitude operations, airspace utilization, and adherence to FAA regulations