

AiRXOS - Scaling the Urban Air Mobility economy

September, 2019



AiRXOS
Part of GE Aviation

Accelerating Advanced UAS Operations

- Wholly-owned subsidiary of GE Aviation; Headquartered in Boston; Global reach
- Key partner in developing UTM/UAM for multiple FAA, NASA, and White House Programs
- Collaboration with the State of Ohio to build first Operational UTM corridor in the US
- Participating in the UK “Open Access UTM” framework
- FAA approved USS provider of LAANC Authorizations
- Precedent-setting BVLOS with Radar for Permian Basin, TX
- World’s first organ delivery via UAS for transplant

UTM the “Digitization” of Air Traffic Management

LEGACY AIR TRAFFIC MANAGEMENT (ATM)


-  Runway Infrastructure
-  Radar Surveillance
-  Communications
-  Air Traffic System
-  Network Operations Center (NOC)
-  Tactical Operations Center (TOC)
-  System Wide Info. Mgmt. (SWIM)



AiRXOS Air Mobility Platform (AMP)



FUTURE TRAFFIC MGMT. FEDERATED - UTM/UAM

-  USS – Airspace Mngt.
-  Ground-based Radar
-  C2 Network
-  Authoritative Data Registries
-  Weather, Terrain, Obstacles
-  Certification & Waivers
-  Intelligent Avionics Detect & Avoid tech
-  Integrated w/ATM

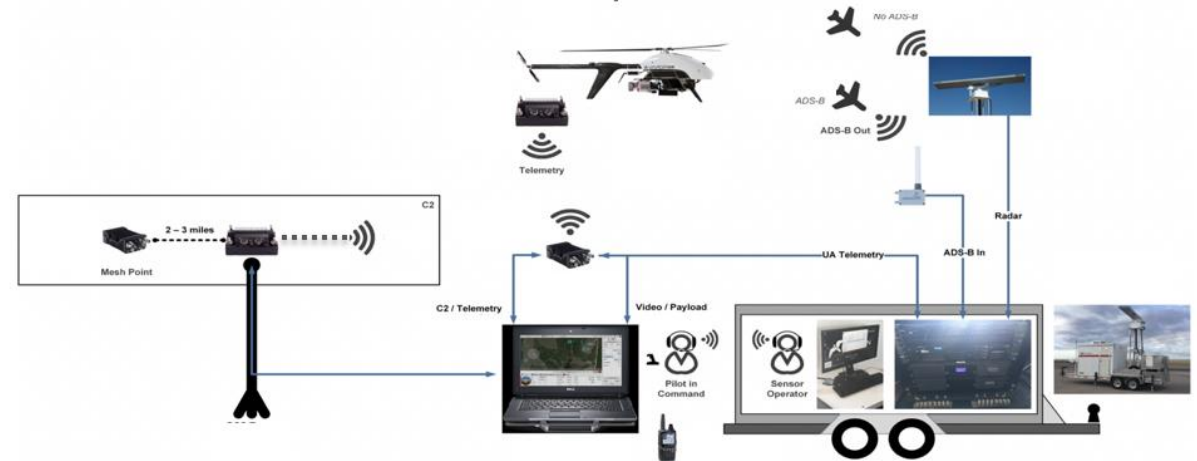
Scalable, Repeatable & Economically viable Operations

Achieving proper Economics requires a holistic approach



- Precedent-setting 2210/333 Exemption
- > 55 lb. + UAV
- BVLOS inspections
- Over critical infrastructure, over limited people

- >50 Flight Operations
- 40% savings realized
- Improved safety of personnel
- Scaled number of wells by 5X
- Reduced number of field personnel required by 2x
- More accurate data
- Reduced time between inspections



UAM - Path to Cost and Affordability

CHALLENGES AND CONSTRAINTS

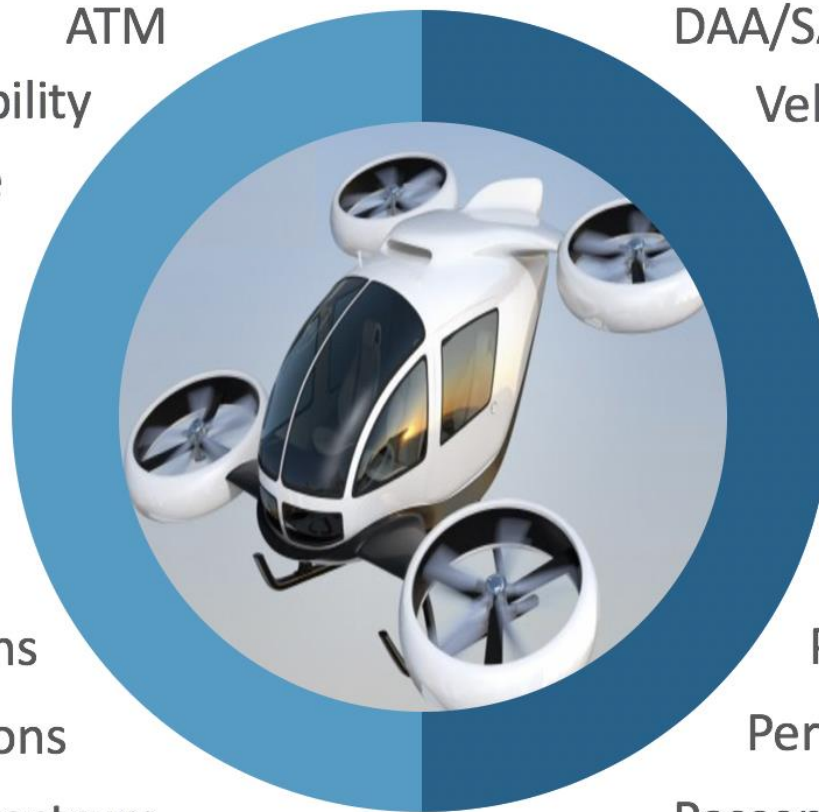
Infrastructure

Intermodal-connected mobility
Sensors & Surveillance
Communications
Vertiports

Legal & Regulatory

The Certification Process
Aircraft Noise & Emissions
Laws and Regulations
Spectrum

ATM



DAA/SAA

Aircraft Technology

Vehicle Performance and Reliability
Battery Technology
Cybersecurity
Electric propulsion

Societal Adoption

Cost vs. Alternative Modes
Public Perception & Trust
Personal Safety
Passenger Safety

