# Unlocking the Potential of the UAS Industry

August 7, 2019

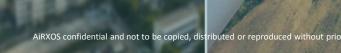




## FREEDOM TO ACCELERATE

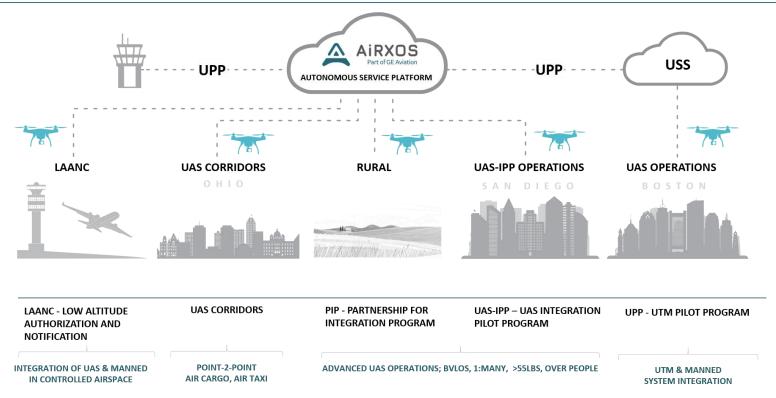
- Wholly-owned subsidiary of GE Aviation; Headquartered in Boston
- Awarded multiple FAA, NASA, and White House Programs (12)
- Collaboration with the State of Ohio to build first Operational UTM corridor in the US
- FAA approved USS provider of LAANC Authorizations
- Multi-state technology trial for First Responder Application
- Precedent-setting BVLOS with Radar for Permian Basin, TX
- World's first organ delivery via UAV for transplant







#### Shaping UAS industry policies and procedures





#### Hurdles to overcome to unlock commercial UAS market

- Waivers/Exemptions process
- Performance measurements & standards
- Traffic management
- Privacy

- Infrastructure investment
- Public-Private partnerships
- Revenue sources/allocation across value chain participants
- Responsibility/liability of UAM solution providers



- Advanced unmanned operations
- Traffic management
- Vehicle performance
- · Surveillance infrastructure

- · Safety standards & compliance
- Flight Ops performance/risk assessments
- Airspace surveillance
- Community engagement



#### Pioneering new technologies: ACAS - sXU

#### ACAS-sXU Detect and Avoid (DAA) algorithm in the AiRXOS ASP (UTM)

- Realtime ingestion of radar track feeds
- Realtime processing to detect possible "intruders"
- Situation awareness through visualization of telemetry and radar tracks
- Applications:
  - Dynamic v. static airspace management
  - Airspace safety/security



















#### Advanced operations for scale / value - the 2210 exemption

AiRXOS partnered with Avitas Systems to enable a Tier 1 Oil and Gas customer to improve and scale their oil pad and wellhead inspections in the Permian Basin, TX.

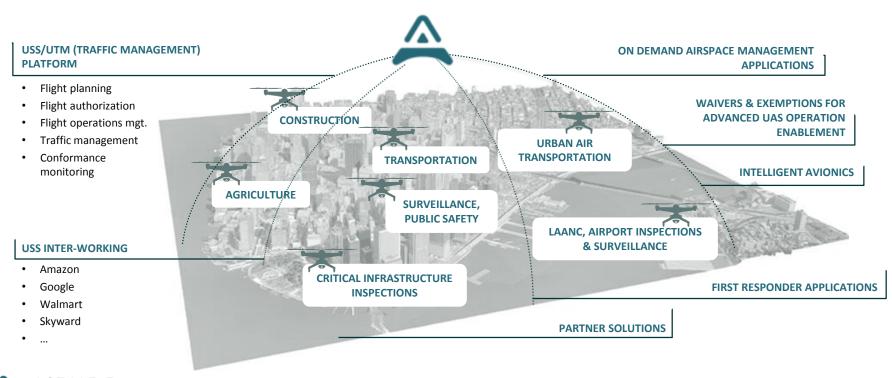
#### **RESULTS**

- Precedent-setting 2210 Exemption
  - Over 55 lb. drone
  - True BVLOS inspections (no visual observers)
  - Over critical infrastructure
  - Over limited people
- Business value
  - 40% savings target (estimated, over time)
  - Improved safety of personnel
  - Scaled number of wells by 5X
  - Reduced number of people to perform inspections





### AiRXOS: A comprehensive ecosystem





Thank You



