

CERTAIN Smart Center

AN URBAN UAS TEST ENVIRONMENT ON LaRC'S AIRSPACE-ENABLED SMART CENTER



UAS Operations Office

"A Staff of Trained Professional Engineers, Aircrew, Technicians and Range Safety Officers available to support your research"

- Concepts of operations development
- Airworthiness certification
- Pilots, observers, range safety
- Identification of system and operational risk
- Verification of FAA, NASA & LAFB compliance
- Cost Estimates

Range Safety

- Hazard Analysis
- Mission Planning
- Operational Readiness Reviews
- Flight Readiness Reviews

What we offer for UAS testing

- Access to 800 acres of Urban and Rural airspace for testing UAS technology in VLOS and BVLOS operations
- Research Payload integration on in-house UAS
- Opportunities to collaborate with world class researchers at NASA Langley



Airspace Surveillance
for BVLOS



Vertiport
Infrastructure



UAS Command and
Control Rooms

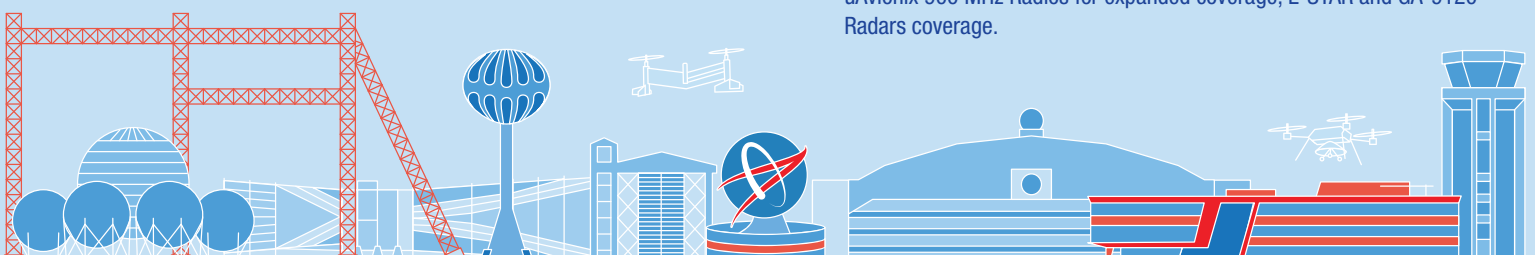


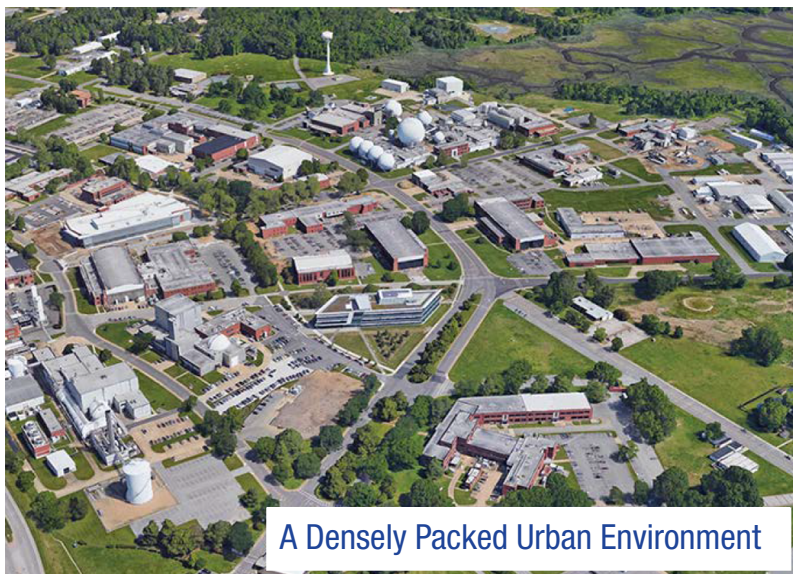
Drone Cages



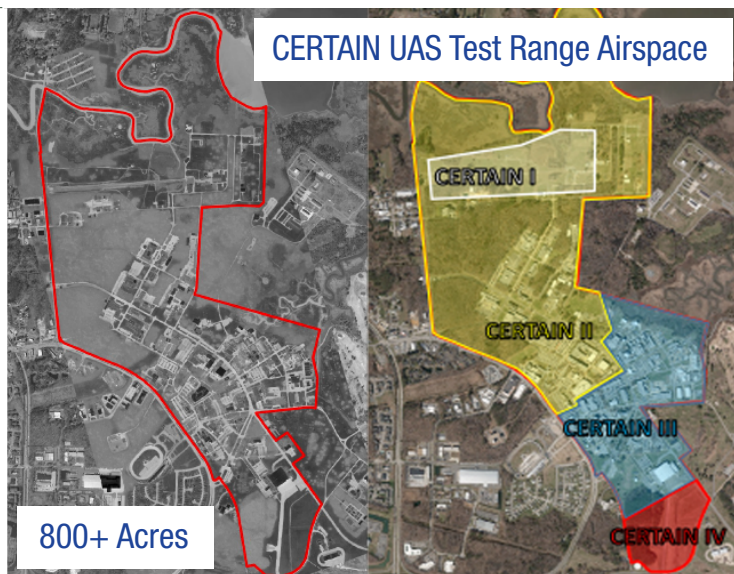
Local Positioning
System

ALSO INCLUDING: In-house Ground Based LiDARS and In-Situ Sensors, Wind-Tunnels, Anechoic Chambers, Link Analysis Toolkit, ADS-B, S-Band/C-Band Data Links, Telemetry and Range Communications, Safeguard Range Containment Technology, 3-D High Fidelity CERTAIN Simulator, Vertical Takeoff and Landing Pads, 5' x 1000' paved surface, Real-time Environmental Information (Micro-weather, Radio frequency spectrum and GPS status), UAS Mission Assessment Tool (UMAT), uAvionix 900 MHz Radios for expanded coverage, L-STAR and GA-9120 Radars coverage.





A Densely Packed Urban Environment



800+ Acres

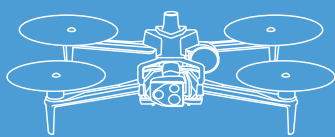


3D Models of the Center



Mission Operations & Autonomous Integration Center

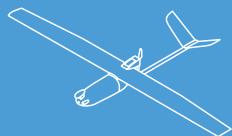
UAS OPERATIONS OFFICE FLIGHT ASSETS



Skydio X10
4K Camera, 3D scan, 23 min flight time,
lightweight video platform



Skydio Dock
Remotely operated UAS for
inspections, surveillance, and monitoring.



Black Swift S2
Field swappable 5 lb payload system,
90 min flight time, catapult launch



Supervolo
5 lb payload, 8 hour flight time,
Pixhawk Autopilot



Alta 8
20 lb payload, 20 min flight time
Pixhawk autopilot, flexible payload



Alta X
35 lb payload, 50 min flight time,
Pixhawk autopilot, flexible autopilot

How to Get Scheduled:

Contact UAS Operations Office Branch Head to schedule a kickoff meeting.

Fill out LF435 (provided at kickoff meeting) to receive cost estimate.

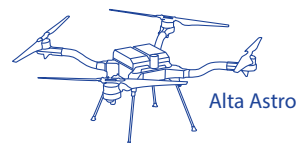
Enter into reimbursable or non-reimbursable Space Act Agreement with NASA Langley.

Conduct flight review and begin flight test.

Contact Information:

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Alta Astro

