

Unmanned Aircraft Systems in the Homeland Security Environment:

Integration and Preparedness Planning Considerations



(U) FAA Modernization and Reform Act of 2012

(U) Intent is to integrate Unmanned Aircraft Systems In a manner that ensures safety and addresses security consideration

(U) The most significant change to US airspace since 1958

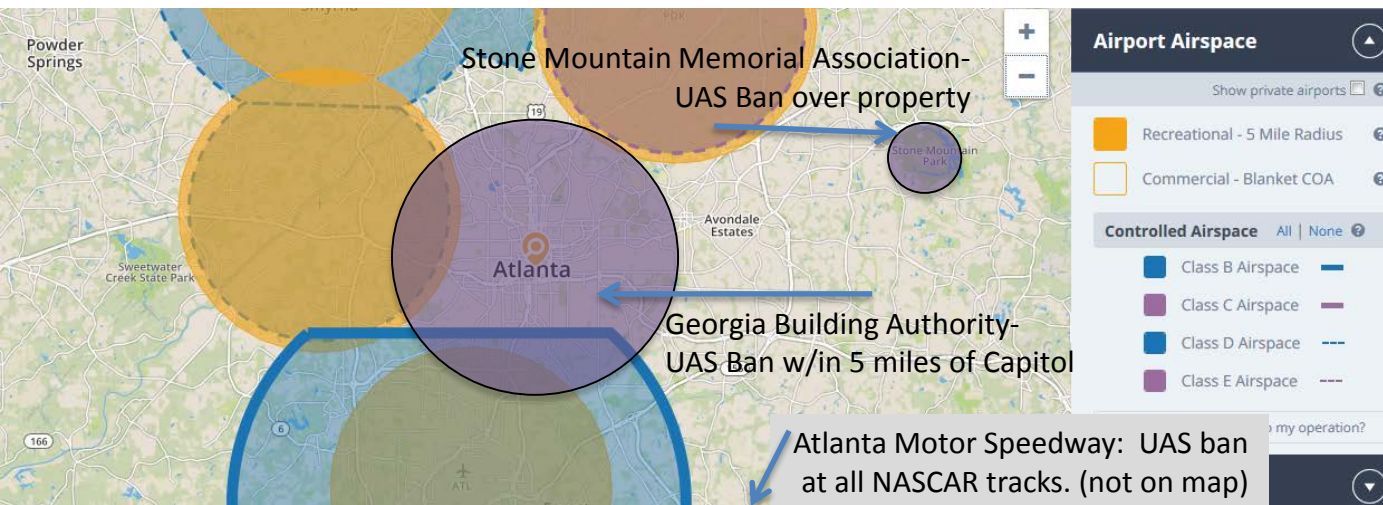
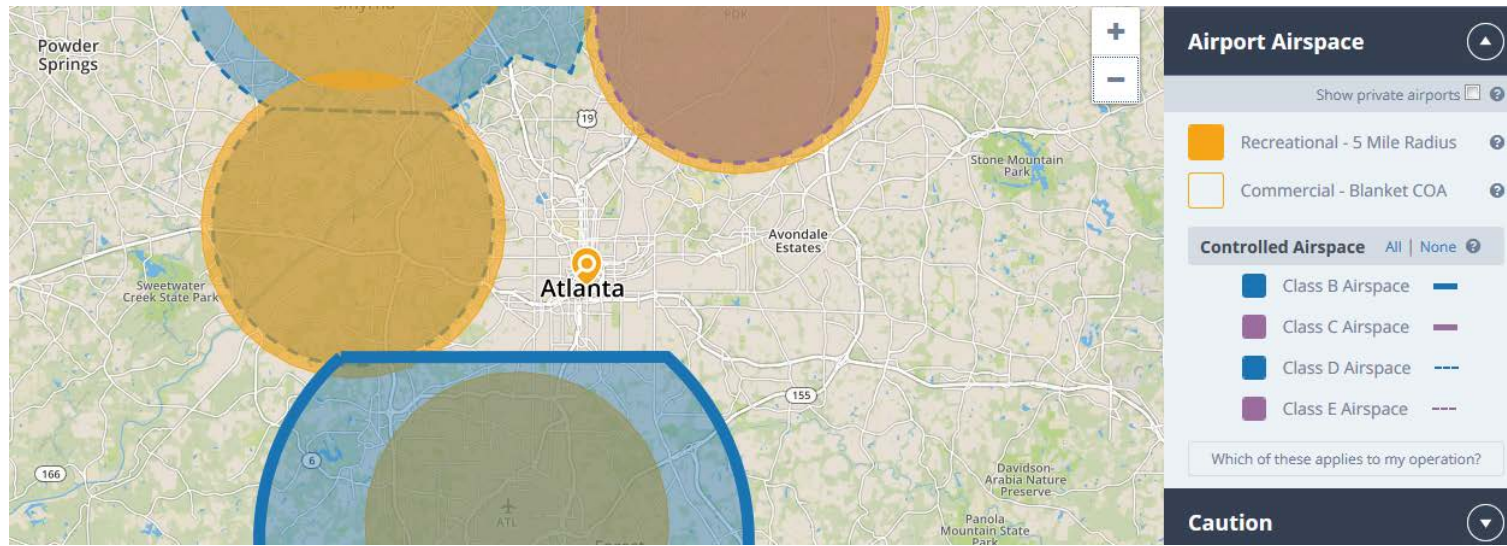
(U) Integration and development in a historical context

- Federal Aviation Act of 1958
- Air Commerce Act of 1926

(U) Integration is a process that takes years

(U) Federal v. State/Local UAS Restrictions

(U) Federal:
Class A-E
airspace,
airports,
national parks,
marine
sanctuaries



(U) State, Local,
Private: State
property, activity
based restrictions,
area based
restrictions

(U) Low Altitude Domain Awareness

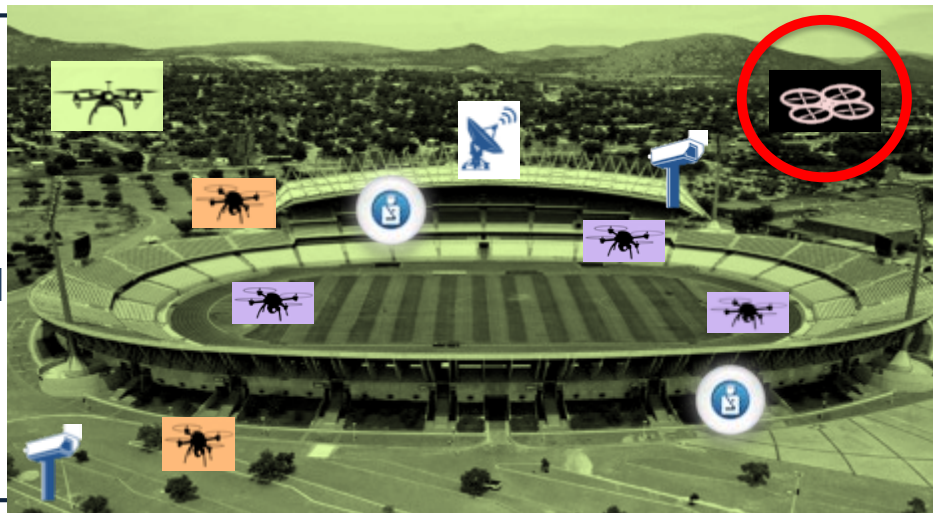
(U) Near-Term:





- Reporting Requirements: Communication process, description of system; photo/video, analysis of recovered UAS
- Assessment of vulnerable systems/structure
- Training/planning focus on persistent awareness for fixed sites & support requirements for special events
- Leverage current air domain planning

(U) Up to 1200 feet AGL

(U) Layered detection

- Personnel training
- Planning and communications
- Persistent and specialized requirements
- Countermeasure employment

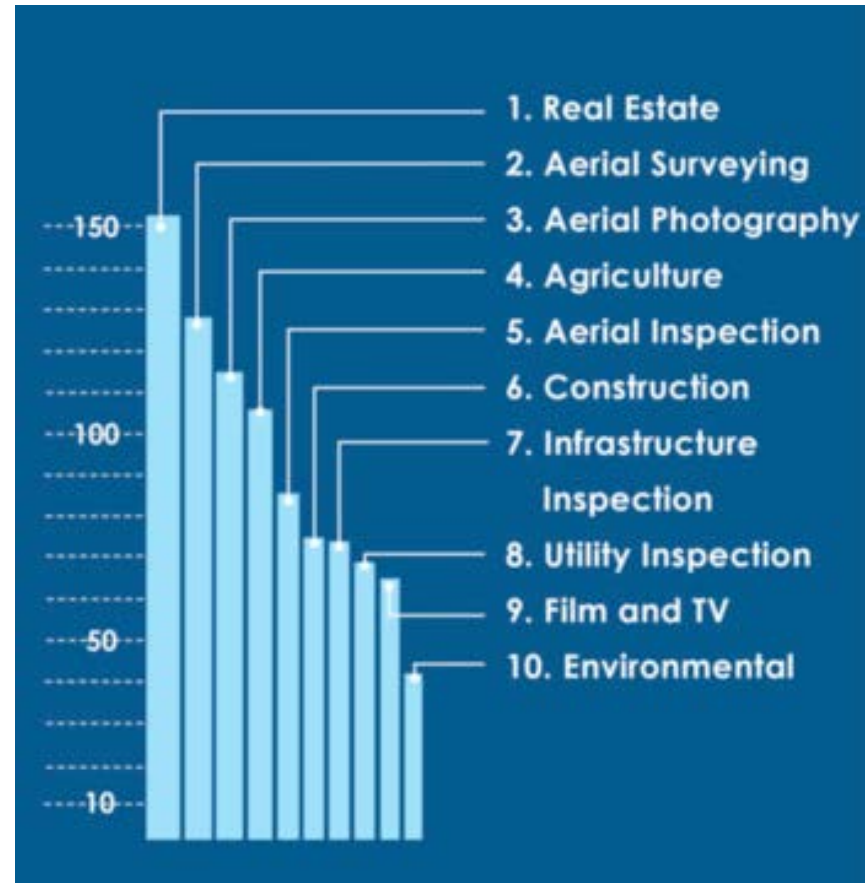


	Civil/ Security & Maintenance
	Civil/ Media Systems
	Public/ LE Systems
	Unknown Possible Threat System

(U) What's Next...

(U) Commercial growth within the UAS sector over the next 24-48 months will drive capabilities such as greater range, payload, secure frequencies, beyond the line of sight operations, all weather flight, and will require less direct human interaction.

- (U) Business using or exploring UAS for package delivery, media, agriculture, industrial use are already asking for these things.
- (U) Potential for cross-over technology for manned aviation systems.



(U) FAA Approvals for Commercial UAS Use, 31 July 2015, source: AVUSI