Unmanned Aircraft Systems (UAS) integration at airports

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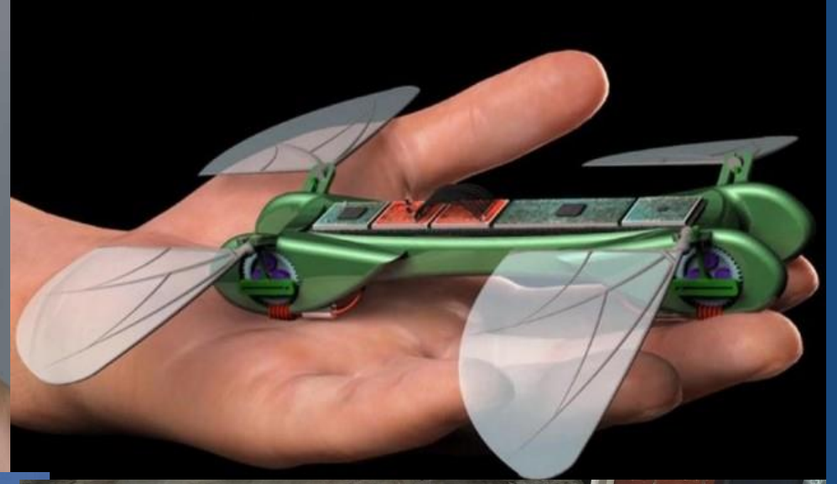
01

Unmanned Aircraft Systems (UAS) - Basics



- According to the FAA: “A UAS is the unmanned aircraft (UA) and all of the associated support equipment, control station, data links, telemetry, communications and navigation equipment, etc. necessary to operate the unmanned aircraft.”
- Micro UAS – less than 250g (0.5 lbs)
  - Do not have to register
  - Less than 250g (0.5 lbs)
  - Limited Threat to Aviation
- Small UAS
  - Register with FAA
  - Less than 55 lbs
  - Hobbyist and Commercial use
  - Higher potential for risk to aircraft
- Large UAS
  - Register with FAA
  - Over 55 lbs
  - Usually flown by professional
  - Higher potential for risk to aircraft

Types of Operators

Recreational – for those that fly drones solely for recreation

Commercial – for those who fly drones for commercial, government or other non-hobby purposes

Governmental – for those that fly for a governmental entity (public university, law enforcement, fire department, of federal or state government agency

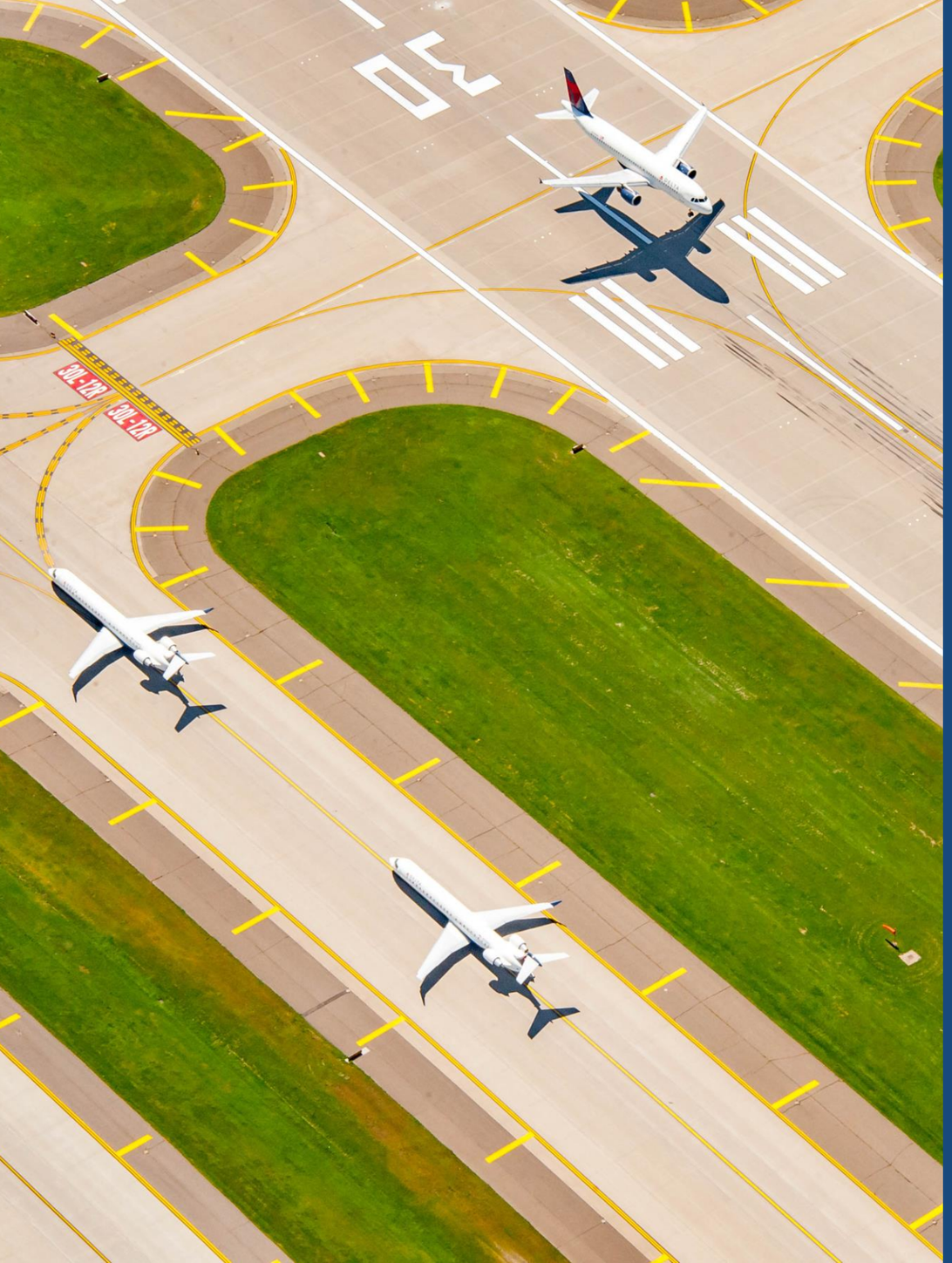
Educational – fly by students for accredited educational institutions

02

Blue Ribbon Task Force

on UAS mitigation at airports

Final Report – October 2019



- Recommendation – UAS Detection:

  A Shared Responsibility

What does this mean for Airports?

FAA air traffic control is responsible for managing the safety and efficiency of controlled airspace and aircraft

Under the 2012 FAA Modernization and Reform Act, the FAA clarified their position on UAS as aircraft, stating that “Aircraft are any device that is used or intended to be used for flight in the air.”

Airports should not be burdened with undertaking this operation alone

Air Traffic Organization (ATO)

Law Enforcement Assistance Program (LEAP)

UAS Integration Office

Shared between airports and federal governments

Transportation Security Administration (TSA)

Federal Communications Commission (FCC)

Department of Justice (DOJ)

Department of Defense (DOD)

- Recommendation – UAS Mitigation:

  A Role for State and Local Law Enforcement

What does this mean for Airports?

State, provincial, and local law enforcement are first responders (APD LEOs)

Federal authorities will not deploy resources to an airport until local law enforcement resources are exhausted

"When the full weight of local resources are unable to resolve a credible risk from errant or malicious UAS operations, assistance from federal authorities and supporting resources **<u>may</u>** be available upon request"

- Recommendation – UAS Mitigation:

  A Role for State and Local Law Enforcement

How do you know if a UAS operation is authorized?

Only FAA ATC will know

Under what authority do local law enforcement agencies have to mitigate UAS?

NONE!

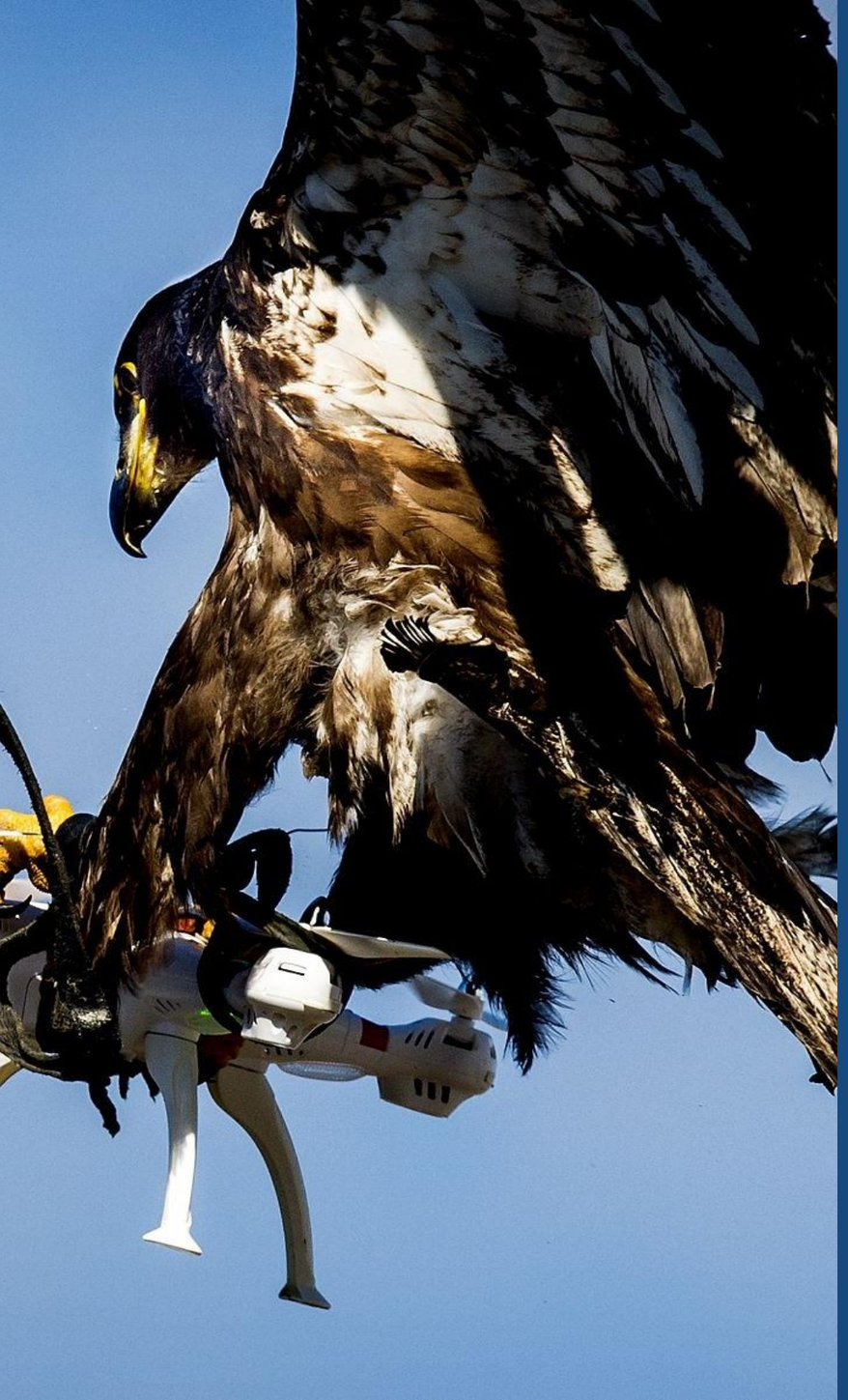
Who is authorized to mitigate an unauthorized UAS?

TSA – Lead federal agency for counter-UAS response at airport

FBI – Responsible for investigation of terrorist acts or violent crimes against aircraft

DOD

DOJ



Note – the FAA does not support the use of C-UAS by entities other than the federal agencies.

Significant legal obstacles restrict most public and private entities from testing, evaluating or using countermeasures against UAS such as:

- United States Criminal Code
- Title 18 – prohibits acts that:
  - damage or destroy aircraft
  - willful or malicious interference with US government communications
  - intentional or malicious interference with satellite communications
  - Computer Fraud and Abuse Act
  - wiretap Laws
  - Aircraft Sabotage Act
  - Pen Register Act – protection of electronic communications
- 1934 Communications Act
- Title 49 prohibits seizing or exercising control of an aircraft…by force, violence, threat of force, intimidation and with wrongful intent
- FAA Regulation 107 – anyone controlling a UAS to be the designated PIC

- Recommendation – UAS Mitigation:

  A Role for State and Local Law Enforcement

What can local authorities do?

1) Detect UAS
2) Report incidents to Federal entities
3) Observe the UAS in flight
4) Identify the type of device, UAS size, shape, color, payload
5) Locate the operator
6) Execute appropriate police action
   - Obtain evidence
   - Identify witnesses
   - Conduct Interviews
   - If possible – locate the operator and ask them to land the UAS

To date, most UAS incursions have been halted when the UAS operator is identified and told to land the errant UAS

TSA's Draft Tactical Response Plan (TRP)

Released in July 2019, provides a framework for a local response to an errant or malicious UAS at the airport

The BRTF states the "TRP exacerbates the fundamental problem of assigning responsibilities to airport operators that they have no authority (and insufficient resources) to carry out."

- BRTF recommends the TRP be modified to:

1. Reframe the current roles and responsibilities of airports and the FAA
2. Exclude reference to the Airport's ASP to address UAS threats until such time that roles and responsibilities are clearly defined and codified
3. Federal agencies publish a document clearly defining the roles, responsibilities and authorities of local law enforcement agencies.

Airports Next Steps

- Work with TSA, FAA and other agencies to develop a local understanding of responsibilities
- Participate in table-top exercise to refine a response to unauthorized UAS operations
- Review the BRTF Final report
- Support industry advocacy to advance FAA as the lead agency for airspace management of ALL aircraft – UAS Traffic Management (UTM)
- Promote the industry adoption of remote identification of the UAS and operator
- Recommend to Congress the extension of authority to engage in UAS detection, interdiction and mitigation to trained state and local law enforcement agencies with the same legal protections as federal agencies

Thank you

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