NATIONAL SAFE SKIES ALLIANCE
Program for Applied Research in Airport Security
PARAS 0041 Project Summary

Project Title:	Security Considerations for Urban Air Mobility (UAM) Operations at Airports
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BACKGROUND

Urban Air Mobility (UAM) is a rapidly growing operational concept of moving people and small cargo in an urban transportation system. The FAA states that UAM "will be composed of an ecosystem that considers the evolution and safety of the aircraft, the framework for operation, access to airspace, infrastructure development, and community engagement."[1]

As this new form of aviation takes shape, the framework for airport operations must consider how these emerging transport systems will impact operational security, and the associated regulatory considerations. Airport security considerations are an important part of planning, and must be proactively assessed as the direction of the technology and its uses becomes clearer.

OBJECTIVE

The objective of this research is to assist the aviation community in better understanding and planning for the potential security impacts of UAM operations at airports. The resulting document should include:

- Realistic models for operations, including:
  - Purpose (i.e., cargo only or passenger service)
  - Origin/Destination points (heliport to airport, heliport to heliport, etc.)
  - Common infrastructure considerations (e.g., airside/landside access points and service needs)
  - General aviation vs. commercial service airport considerations
- Security implications for each model, including:
  - Passenger, baggage, and cargo screening needs and associated considerations
  - Passenger, baggage, and cargo transfers between commercial or other UAM flights
  - Operator needs, including access to regulated areas
- Review of current regulatory applicability and outstanding questions
- Potential impacts of varying levels of autonomy (piloted vs. remotely piloted) on airport security, including cybersecurity
- Relevant examples and lessons learned, including international and non-aviation
- Recommendations for future research

[1] https://www.faa.gov/uas/advanced_operations/urban_air_mobility/