AAM
FLORIDA ADVANCED AIR MOBILITY

FDOT | IMPROVING FLORIDA'S AIR TRANSPORTATION SYSTEM THROUGH THE ADVANCEMENT OF INNOVATION IN AVIATION

ADVANCED AIR MOBILITY (AAM)

TAIL ROTOR   MAIN ROTOR

TRADITIONAL HELICOPTER

AAM EXAMPLES

MAIN PROPELLERS

MULTICOPTER   LIFT & CRUISE   VECTORED THRUST

WHAT: A new air transportation system that moves people and cargo between places underserved by traditional aviation. AAM incorporates Urban Air Mobility, which utilizes a new type of aircraft known as eVTOL (electric vertical-takeoff-and-landing).

WHY: eVTOL differ from traditional helicopters and offer lower maintenance, lower noise, reduced environmental impact, and better safety prospects.

WHERE: Florida airports, heliports, and vertiports.

WHEN: As early as 2024 but scaled commercial operations likely coming in later years.

WHO: For air taxi, air cargo, air medical, firefighting, public safety, and disaster at existing airports and new vertiports in urban and suburban areas.

AAM CONNECTIONS TO FLORIDA

AAM connections to Florida are numerous. Several AAM manufacturers and operators are planning for commercial operations in Florida and a few are already negotiating with targeted cities and airports within the state. These include the following:

wisk   LILIUM   supernal   VOLOCOPTER   BETA   REGENT   EVE MOBILITY REIMAGINED   ARCHER   VERTICAL   KITTYHAWK   BLADE   Joby

ESSENTIAL FACTORS FOR VERTIPORT SUCCESS

Several factors are essential for the success of fully scaled AAM, including highly safe and efficient aircraft, economic feasibility, advanced air traffic control, low noise, scaled manufacturing and maintenance, and physical infrastructure. FDOT policy to facilitate these factors is specifically related to infrastructure the airports and vertiports these aircraft will use. For AAM to be successful, Florida's new vertiports must be compatible with the surrounding land uses, provide for interconnectivity, and be safe and secure.
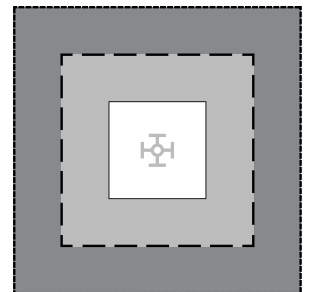
FEDERAL POLICY & GROUND INFRASTRUCTURE

COMMONLY NAVIGATED AIRSPACE

ADVANCED AIR MOBILITY AIRSPACE

FLORIDA
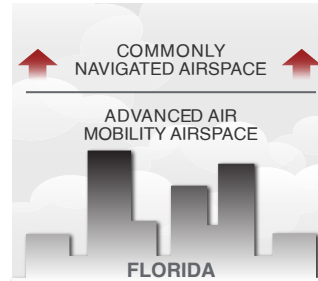
The FAA has the exclusive authority to regulate navigable airspace, and AAM is changing what that airspace looks like. AAM has the potential to occur in areas that have not traditionally experienced a lot of aircraft activity: urban locations at low altitudes.

VERTIPORT LANDING DESIGN

The FAA standards for vertiports can be found in Engineering Brief 105, Vertiport Design. The FAA approval process for AAM support infrastructure includes the use of the FAA form 7460 for a federally obligated airport and 7480-1 for off-airport and non-federally obligated airports.
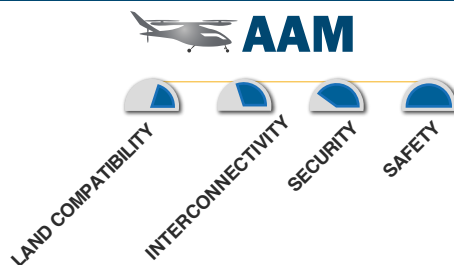
They have also provided a process for developing new vertiports on existing facilities or as stand-alone projects.

SAFETY AREA   FATO   TLOF

FATO: Final Approach and Take-Off
TLOF: Touchdown and Lift-Off

AAM-RELATED GUIDANCE DOCUMENTS

- 14 CFR Part 157 Notice of Construction, Alteration, Activation, and Deactivation
- 14 CFR Part 77 Safe, Efficient Use and Preservation of Navigable Airspace
- NFPA Section 418 Standards for Heliports

- Florida Building Code, Building, Current Edition
- Florida Statute 330.30, Regulation of Aircraft, Pilots, and Airports
- Florida Administrative Code (FAC) Chapter 14-60.005, Airport Site Approval

AAM RELATIONSHIP TO THE FLORIDA AVIATION SYSTEM PLAN (FASP)

FDOT AAM policy is meant to support the existing and future updates of the FASP by providing policy recommendations for the emerging AAM industry as it develops in Florida. Appropriate early planning for AAM and UAM by FDOT will increase the success of this emerging industry.

AAM

LAND COMPATIBILITY   INTERCONNECTIVITY   SECURITY   SAFETY

FASP
FLORIDA AVIATION SYSTEM PLAN 2035
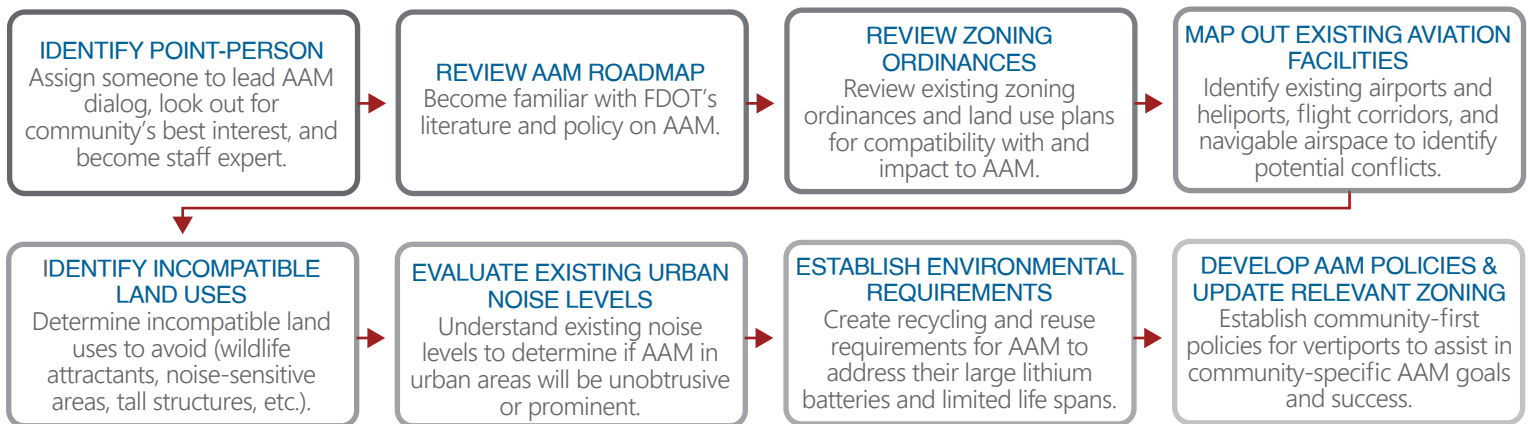
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BEST PRACTICES FOR LOCAL GOVERNMENTS

The likelihood of AAM success in Florida increases if consistent processes, proactive policies, and mindful public engagement are implemented early because potential issues can be addressed before they occur. These policies and engagements comprise what are known as best practices, which can be used by Florida municipalities seeking to implement AAM in their communities.

PRE-FACILITY ASSESSMENT PLANNING

High-level, fundamental first steps a municipality can take to encourage AAM's success.

IDENTIFY POINT-PERSON
Assign someone to lead AAM dialog, look out for community's best interest, and become staff expert.

REVIEW AAM ROADMAP
Become familiar with FDOT's literature and policy on AAM.

REVIEW ZONING ORDINANCES
Review existing zoning ordinances and land use plans for compatibility with and impact to AAM.

MAP OUT EXISTING AVIATION FACILITIES
Identify existing airports and heliports, flight corridors, and navigable airspace to identify potential conflicts.

IDENTIFY INCOMPATIBLE LAND USES
Determine incompatible land uses to avoid (wildlife attractants, noise-sensitive areas, tall structures, etc.).

EVALUATE EXISTING URBAN NOISE LEVELS
Understand existing noise levels to determine if AAM in urban areas will be unobtrusive or prominent.

ESTABLISH ENVIRONMENTAL REQUIREMENTS
Create recycling and reuse requirements for AAM to address their large lithium batteries and limited life spans.

DEVELOP AAM POLICIES & UPDATE RELEVANT ZONING
Establish community-first policies for vertiports to assist in community-specific AAM goals and success.

VERTIPORT APPLICATION AND PROPOSAL ASSESSMENT

VERTIPORT APPLICATION

Municipalities should prepare for vertiport development with an application and approval process that allows the proper evaluation of vertiport proposals. The application should be comprehensive, inclusive of all applicable stakeholders and call for the proponent to provide all the information needed to evaluate the facility for safety and compatibility.

APPLICATION COMPONENTS

- Plans and specifications
- Security plans
- Wind analysis
- Noise analysis
- Commercial operations proposed
- Forecasted activity
- Design Aircraft
- FAA and State Approvals Received

APPROVAL PROCESS

Vertiport application assessment requirements should be developed and include the items that the vertiport will be measured against. This includes the AAM policy, the needs of the community, safety, land use compatibility, environmental impacts, as well as any additional points that may be relevant locally. It should also include community engagement.

1 STAKEHOLDERS
Identify interested parties
- Community
- Existing Airports
- Government
- Utility Providers
- Special Interest Groups

2 COMMUNITY ENGAGEMENT
Follow established procedures for public input with stakeholders.

3 INCOMPATIBLE LAND USES AND ZONING
Assess application against incompatible land uses and zoning regulations.

4 INDUSTRY STANDARDS
Review proposal for alignment to industry standards.

5 FAA AIRSPACE DETERMINATION
Verify proposal has received a non-objectionable airspace determination from the FAA.

6 FDOT APPROVAL
Ensure the proposal has appropriate FDOT site approval and license.

This document establishes a baseline set of best practices for communities to reference as AAM continues to grow. It should not be considered all-inclusive, as each municipality will have unique government structures and community challenges that will require a tailored fit.