

Vertiport's Importance to the UAM ECO-System

Unmanned Aircraft Systems Traffic Management (UTM) Response to the Request for Information

Topic 2: Critical elements of AAM requiring global interoperability and harmonization.

ICAO DRONE ENABLE Symposium

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The Boeing Company



<https://www.aus.edu>



<https://www.falconaviation.ae>



[Helijet.com](https://www.helijet.com)



<https://en.skydrive2020.com>



VERS UNE SOCIÉTÉ INTELLIGENTE, NUMÉRIQUE ET DURABLE

<https://www.etsmtl.ca>; <http://www.concordia.ca>; <https://www.ulaval.ca/en>; <https://www.mcgill.ca>;
<http://polymtl.ca>; <https://www.usherbrooke.ca>; <https://uqam.ca>; <https://www.uqtr.ca>

ATKINS

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<https://www.atkinsglobal.com>



<https://www.innovitech.com>



<https://www.honeywell.com>



<https://www.sharjah.ac.ae/en>



<https://www.boeing.com>



<https://nuair.org>



<https://seairidgetech.com>



<https://wisk.aero>



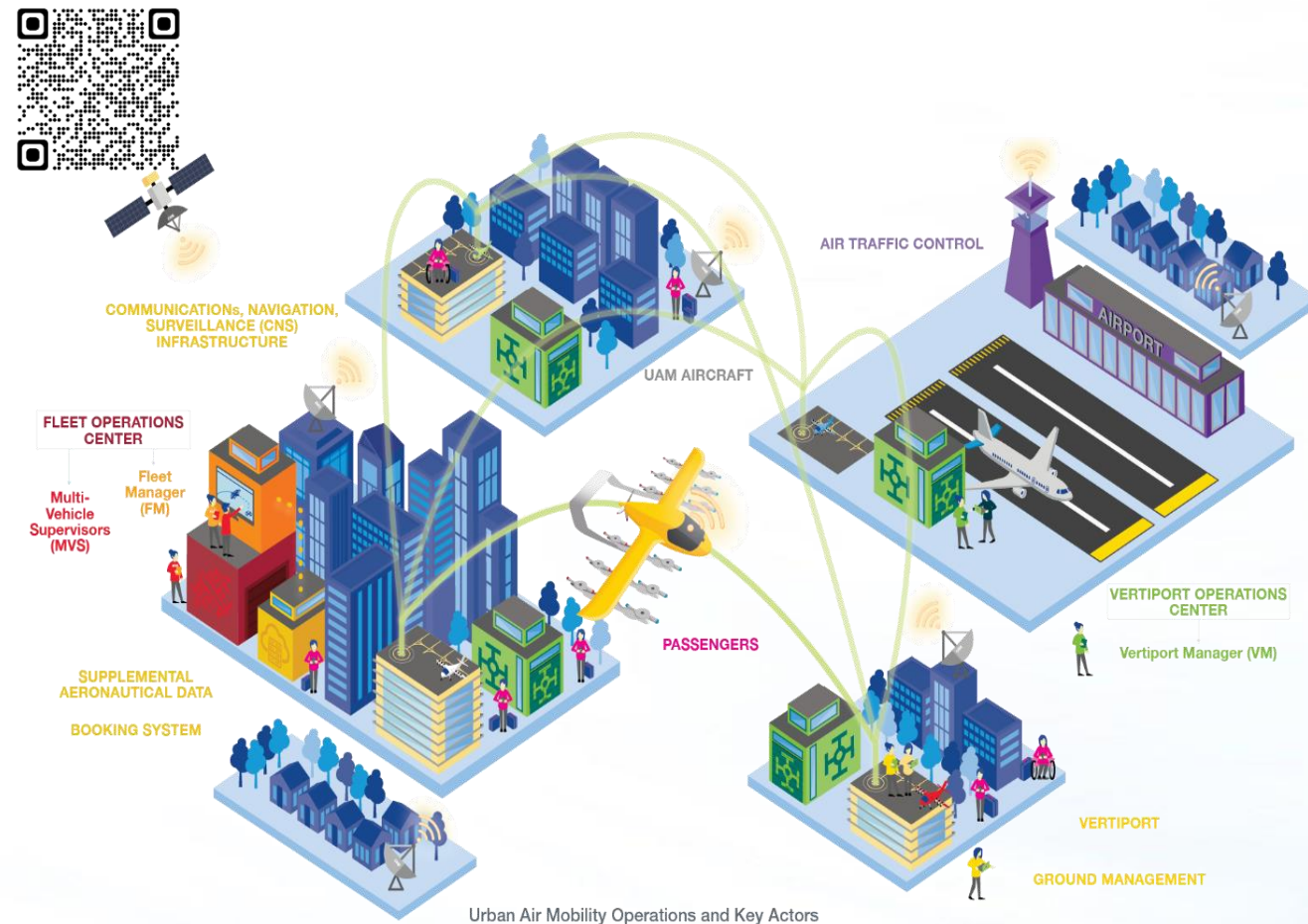
An Integrated System of Systems View



VERTIPORT'S IMPORTANCE TO UNLOCK AAM

Key Enabler Considerations

- **Development of Global Standards to support National Regulatory Oversight**
 - **Integrate Air, Ground & Land Operations**
 - **Implement Aircraft and Vertiport Contingency Management Plans**
 - **Advance Environmental Compliance**
 - **Enable a Safety Management System View**



C2 LINKS



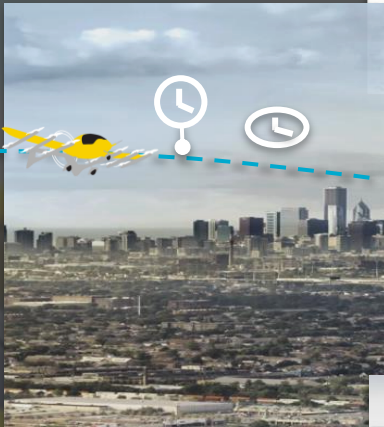
DIGITAL SERVICES



CAPACITY BALANCING & REAL TIME SCHEDULING



IFR NETWORK



4D TRAJECTORIES

AUTONOMOUS FLIGHT RULES



Importance of Operational Test

Certification Projects



Insitu ScanEagle3



Wisk Gen 6

Generation 6

Our 6th Generation aircraft represents more than a decade of development, testing, and training. With improvements in configuration, a lot of our industry best practices, and advanced systems, we have a new level of safety, efficiency, and performance.

Designed for Advanced Air Mobility

Missions: Passenger air taxi
Power: All electric
Configuration: LIR - MR/CRJ
Operations: Autonomous (with flight with human oversight)
Cruising Altitude: 2500 - 4000 feet above ground level
Dimensions: ~50 foot wingspan
Range: 300 miles (with payload) / 344 kilometers
Cruising Speed: 110-120 knots
Change Time: 10 minutes
Seats: 4 - 11 seats for carry-on luggage items

Enabling Infrastructure



UNLOCKING THE AIRSPACE.
SKYGRID



R&D / Regulatory Efforts



NextGEN



ATLAS
Collaborative program to advance solutions to global regulatory challenges



LONE STAR UAS
CENTER OF EXCELLENCE & INNOVATION



Australian Government
Civil Aviation Safety Authority



SESAR
JOINT UNDERTAKING



NASA NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
Intelligent Systems Division



XUNTA DE GALICIA



Texas Department of Transportation
Texas A&M Transportation Institute



Assured Autonomy



DARPA

Regulatory Engagement

Platform		Supporting Environment		
Aircraft: Gen 6 	Airmen	Airspace/Aerodrome		
	Ground Systems and Automation	Air Traffic Management	Vertiports/UAM Aerodromes 	UAM Routes VFR vs. IFR 
	Comm. Protocols	CNS Infrastructure		
Certification				

Regulatory Engagement

OUR RECOMMENDATIONS

- **Advance Globally Harmonized Vertiport Standards & Recommended Practice (SARPS) and Procedures for Air Navigation Services (PANS) to Ensure Safety and Global Interoperability**
- **Consider Vertiport Airside and Landside Operations Integration Implementation & Best Practice to Align Stakeholders**
- **Promote Vertiport Operational Test & Learn Programs to demonstrate and validate ConOps to enable scale**

