The Dawn of Advanced Air Mobility

Presented by

AMIN VAFADAR

Sharif University of Technology

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United Nations Sustainable Development Goals

UN SDGs

What Now?

68%

Urban by 2050

UN projection for global urbanization

$1.5 T

Annual Cost

Economic impact of road congestion

20%

Global CO_2

Transport's contribution to emissions

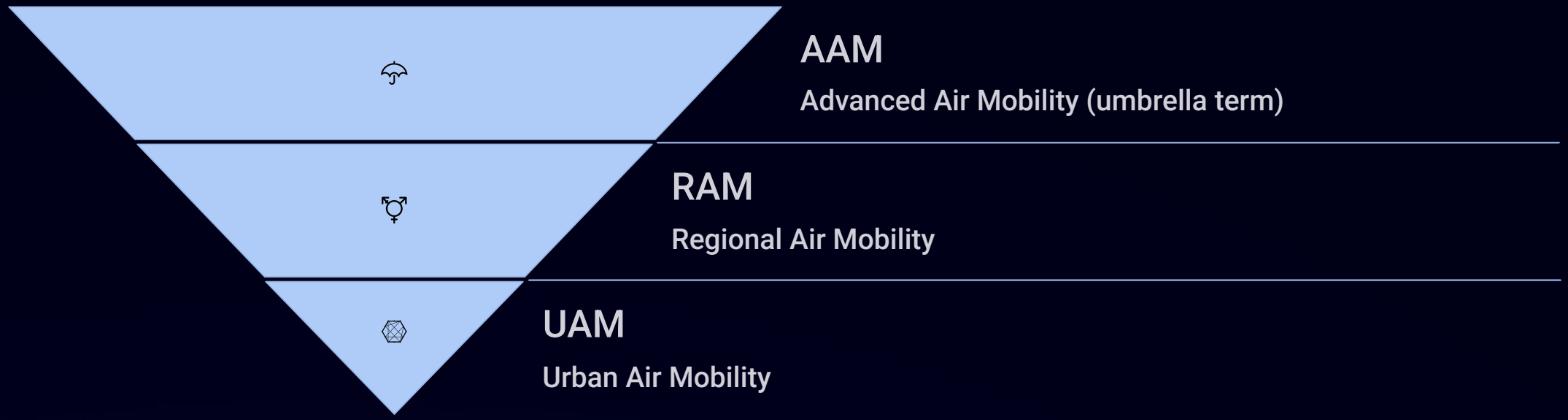
1 B

People

Lack road access – equity gap

Advanced Air Mobility (AAM) Definition

Advanced Air Mobility is a refinement in aviation, where current technologies are optimized through emerging configurations. AAM Focuses on developing sustainable, scalable, and inclusive solutions that improve connectivity and accessibility across urban and regional landscapes. AAM Includes a broad range of aeronautical systems, integrating sustainable power sources (e.g., electric, hydrogen, hybrid) and various launch capabilities (e.g., vertical, conventional, short take-off and landing). It embraces both crewed and uncrewed solutions (e.g., piloted, remote, autonomous operations) that integrate with existing and evolving air traffic frameworks (e.g., ATM, UTM), and smart infrastructure.



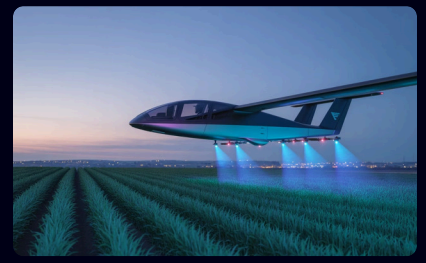
Use-Case Panorama

Emergency Response

Rapid deployment for disaster management and critical situations

Aero Medical

Swift transportation of patients, organs, and medical supplies

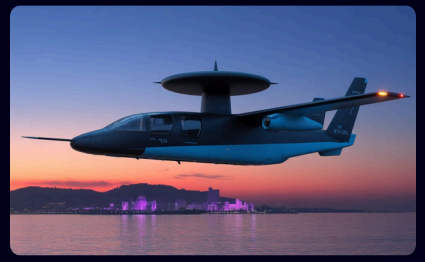


Agriculture

Precision farming with aerial monitoring and crop management

Cargo and Logistics

Efficient delivery systems for urban and remote locations



Military and Defense

Strategic operations and surveillance for national security

Infrastructure Inspection

Safe assessment of hard-to-reach structures and facilities

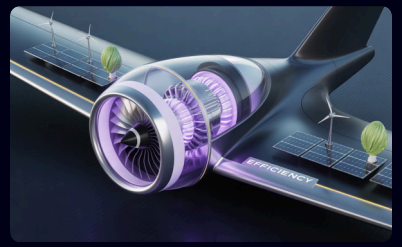
Tourism & Sight Seeing

Unique perspectives of landmarks and natural wonders

Air Taxi Services

On-demand urban transportation above congested streets

Core Principles



Propulsion System

Advanced electric, hydrogen, and hybrid propulsion systems reducing aviation's carbon footprint

Energy Production

Renewable energy sources integrated with aviation infrastructure and operations

Architecture & Materials

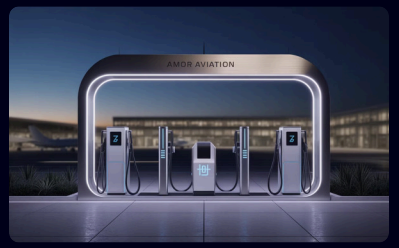
Lightweight composites and innovative airframe designs optimizing efficiency and performance

Autonomous Operation

AI-powered systems enabling safe autonomous and remotely piloted flight operations

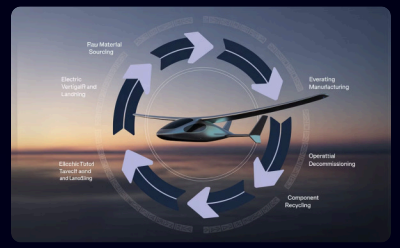
Traffic Management

Integrated systems managing complex flight paths in increasingly crowded airspace



Energy Infrastructure

Charging and refueling networks supporting sustainable aviation operations



Lifecycle Management

Sustainable practices from manufacturing through decommissioning and recycling

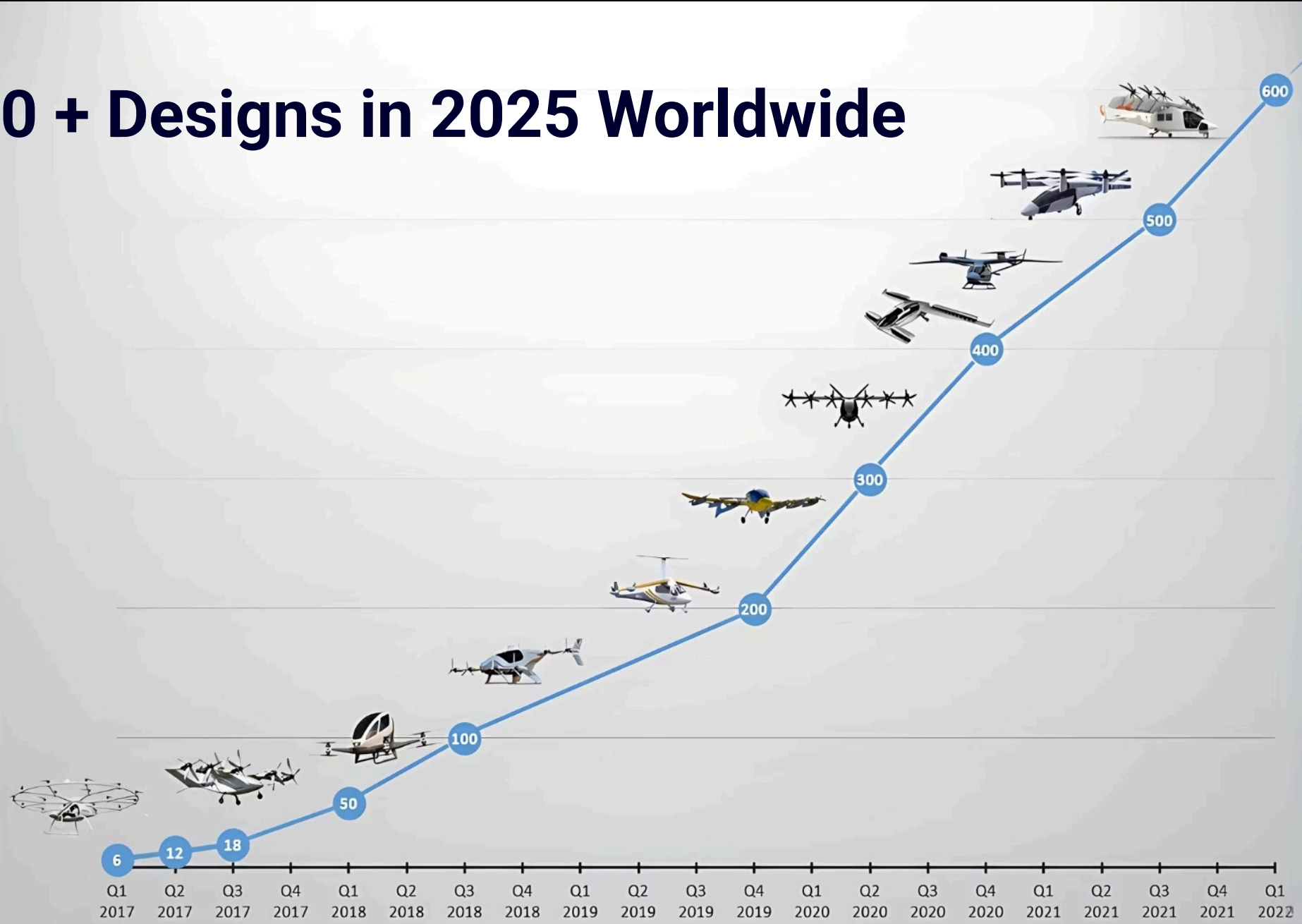
Smart Infrastructure

Connected facilities optimizing ground operations, passenger experience, and aircraft management

Ecosystem Stakeholders

1. OEM: Manufacturers
2. Vertiport Developers
3. Infrastructure Managers
4. Energy & Utility Providers
5. Airspace & Traffic-Management Providers
6. Operators & Service Providers
7. Aviation Authorities and Regulators
8. Regional and City Councils
9. Finance & Insurance Community
10. Workforce & Training Institutions
11. Communities & End-Users
12. Advocacy & Industry Associations

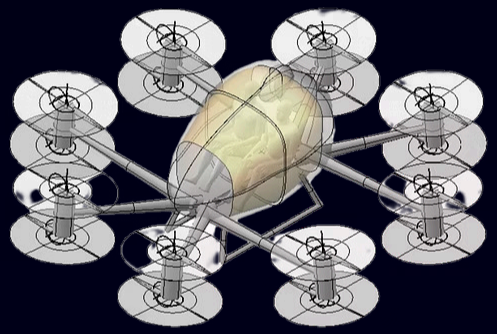
1100 + Designs in 2025 Worldwide

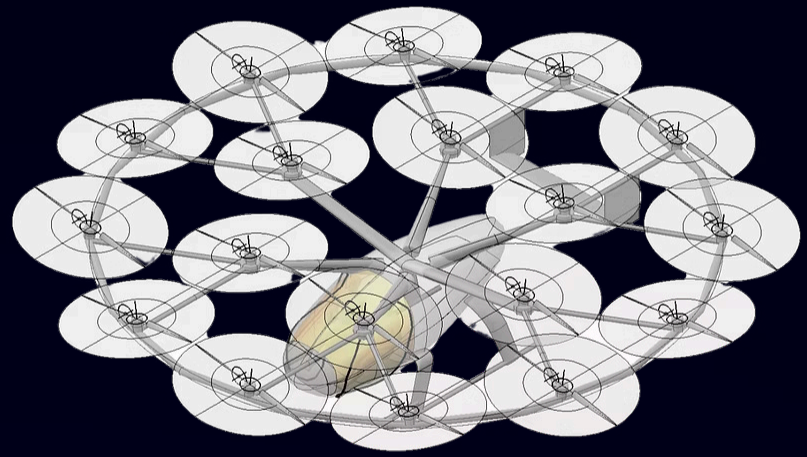


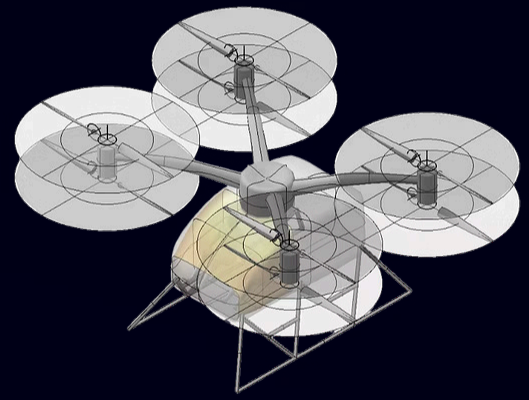
Vehicle Typology

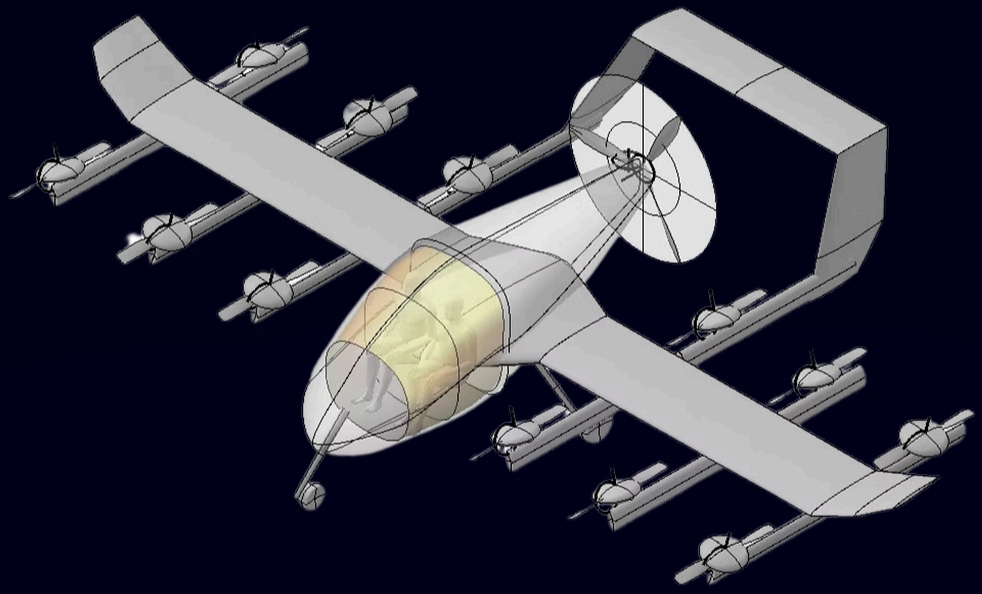
Propulsion Configuration	Take-off and Landing Class	Powertrain
Multicopter	**VTOL**: Vertical Take-off and Landing	**Battery-Electric**
Lift + Cruise	**STOL**: Short Take-off and Landing	**Hydrogen-Electric** (fuel-cell/H2)
Vectored Trust	**CTOL**: Conventional Take-off and Landing	**Hybrid-Electric** (SAF/Jet-A)
Augmented Lift		
Conventional		

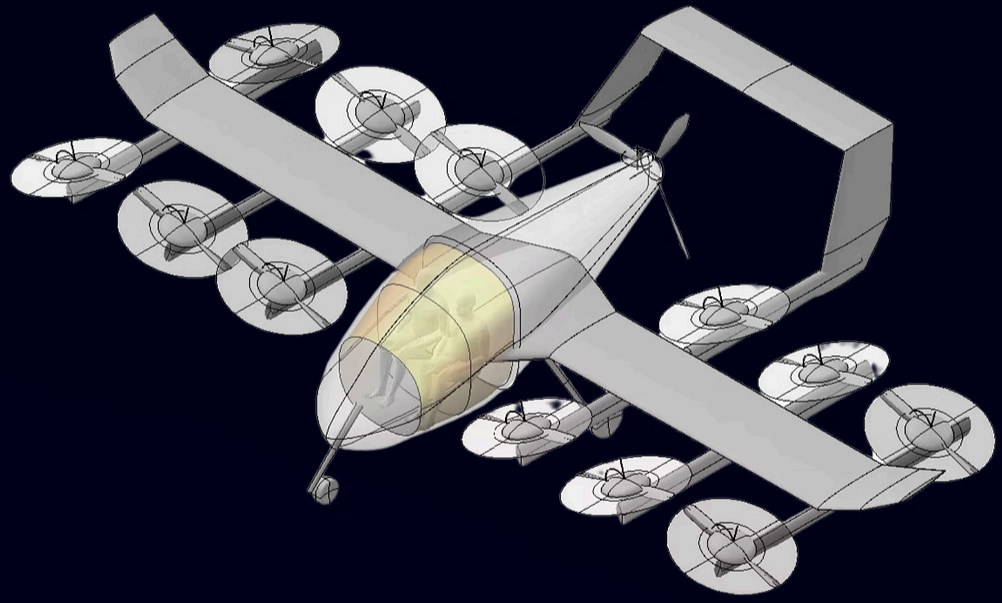
Main Typology Based on Propulsion System

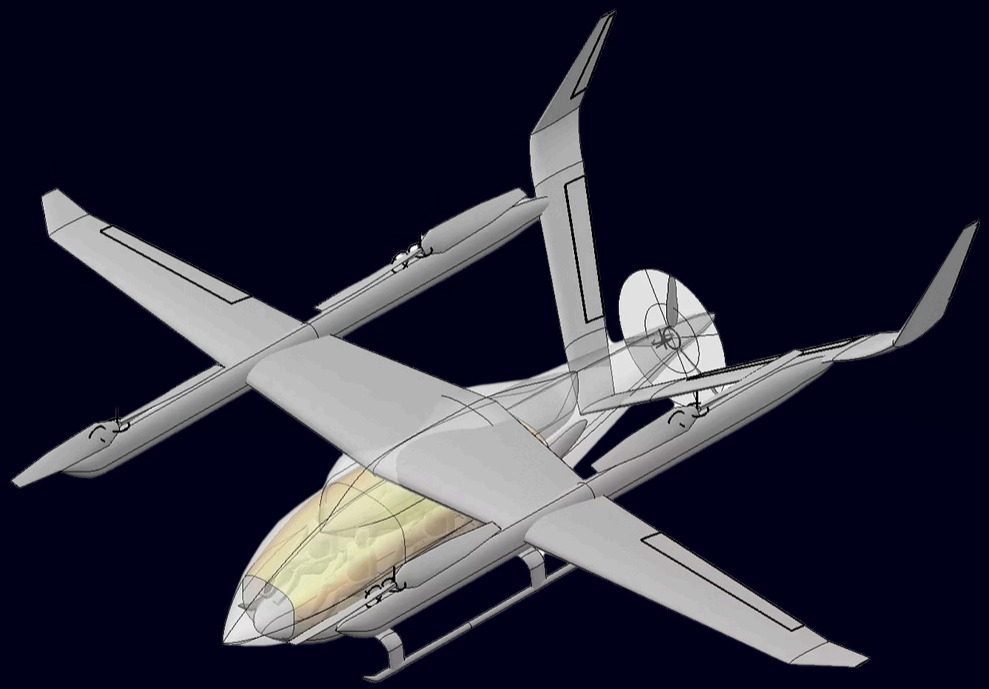


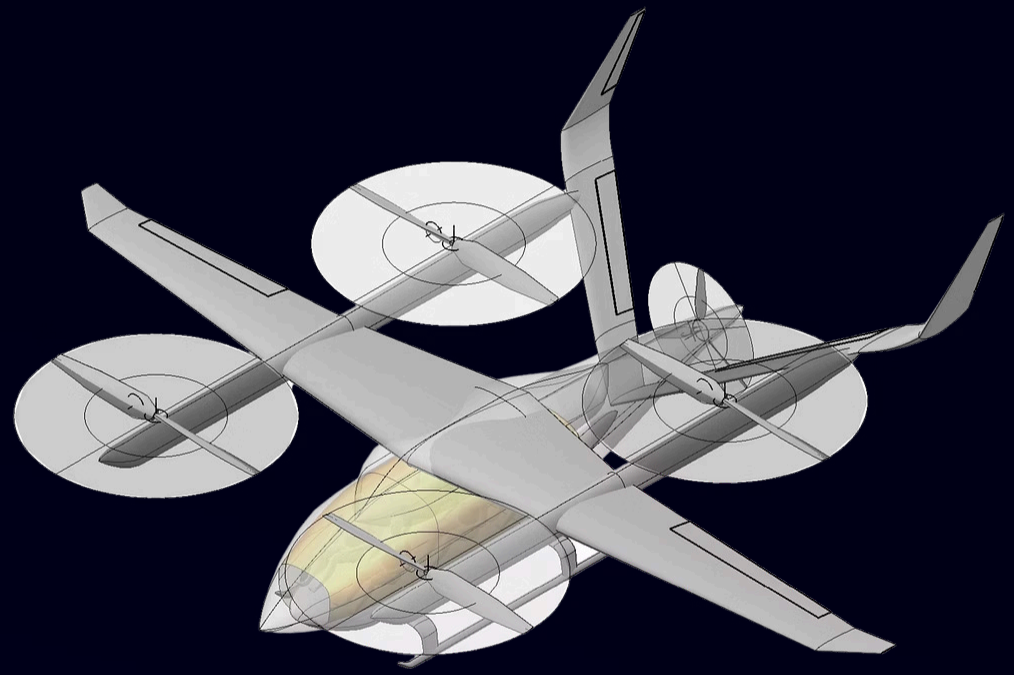


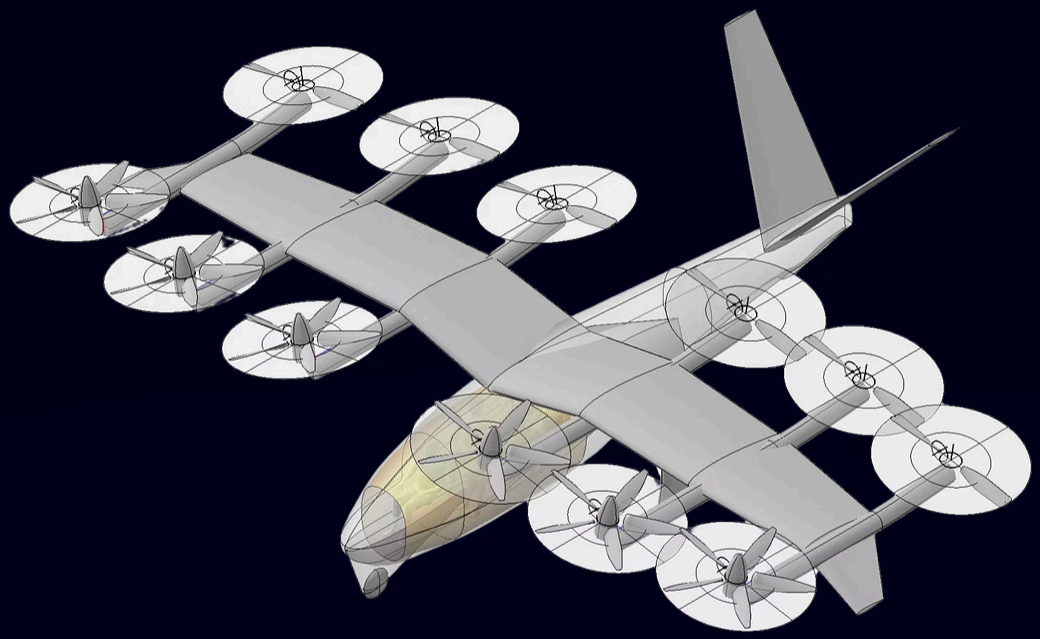


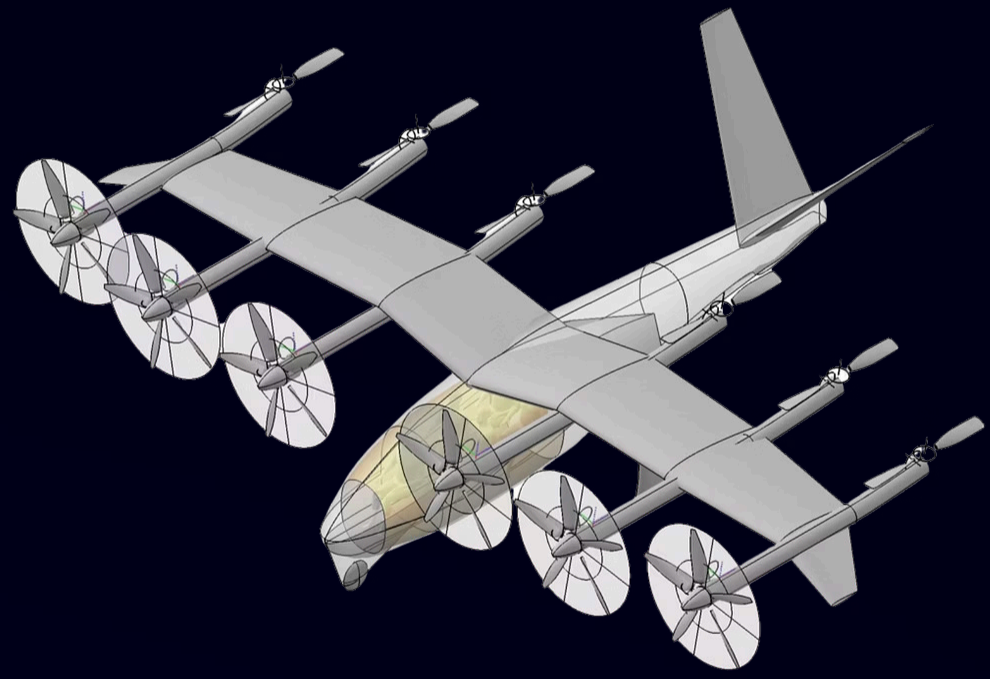


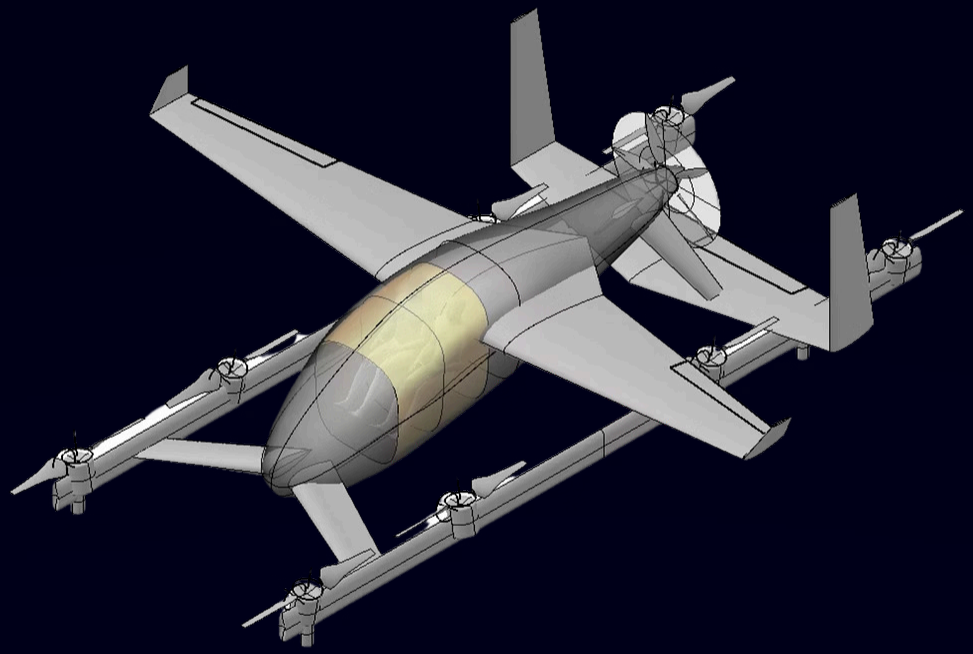


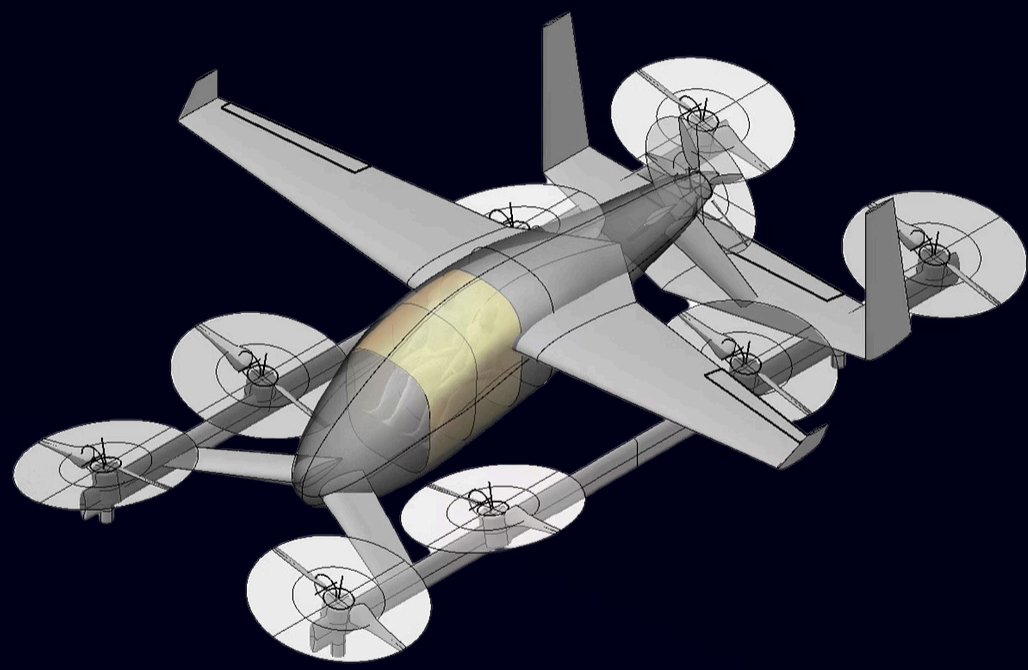


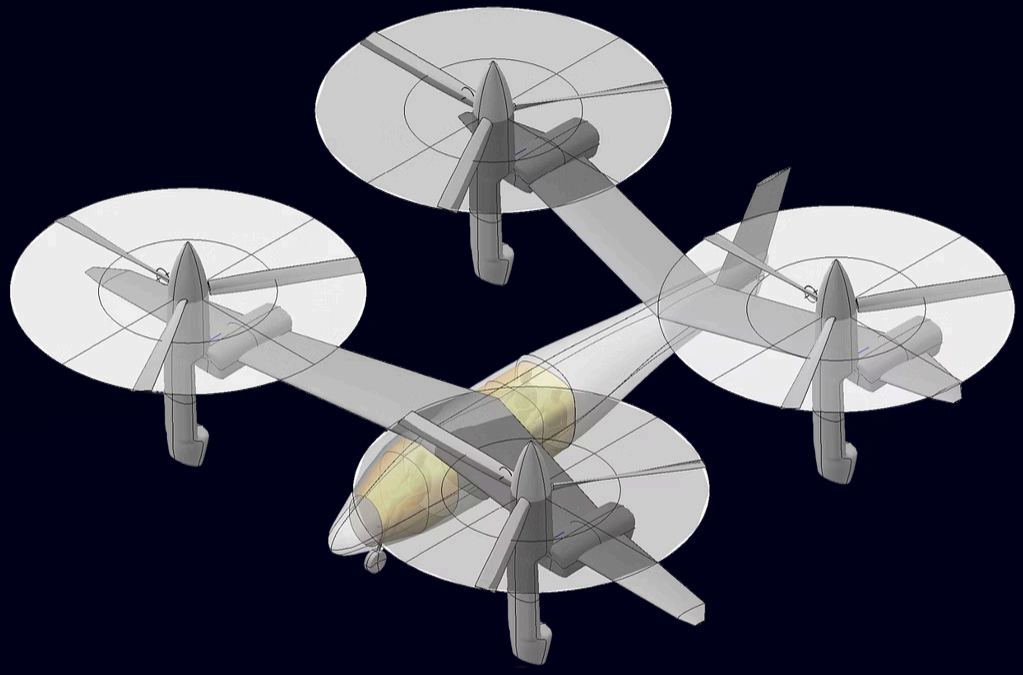


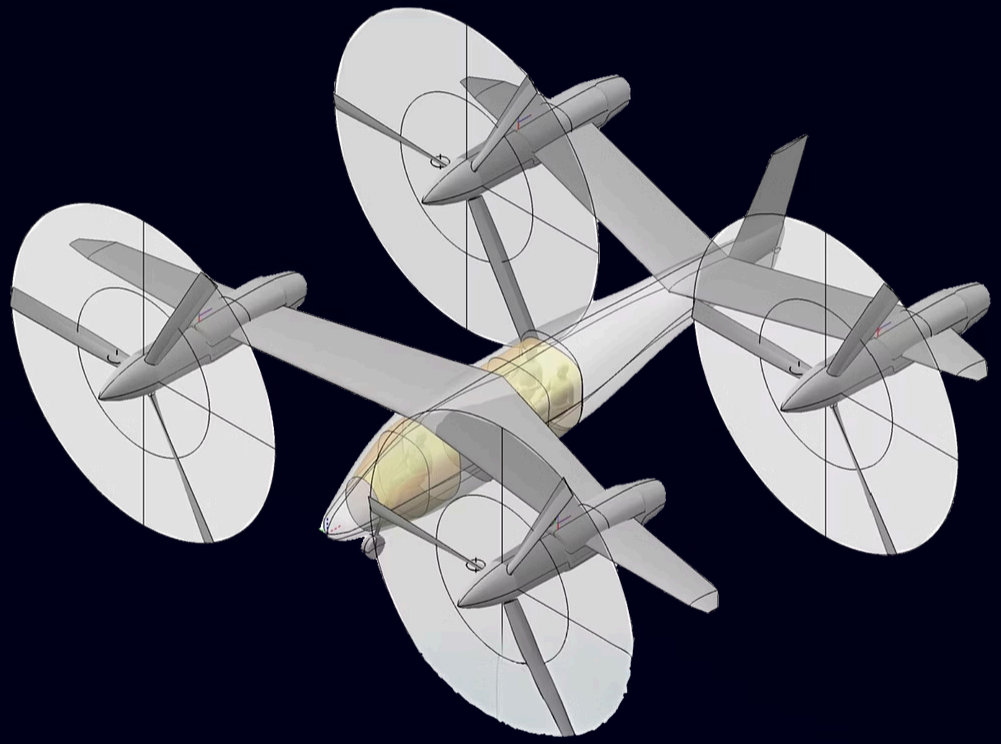


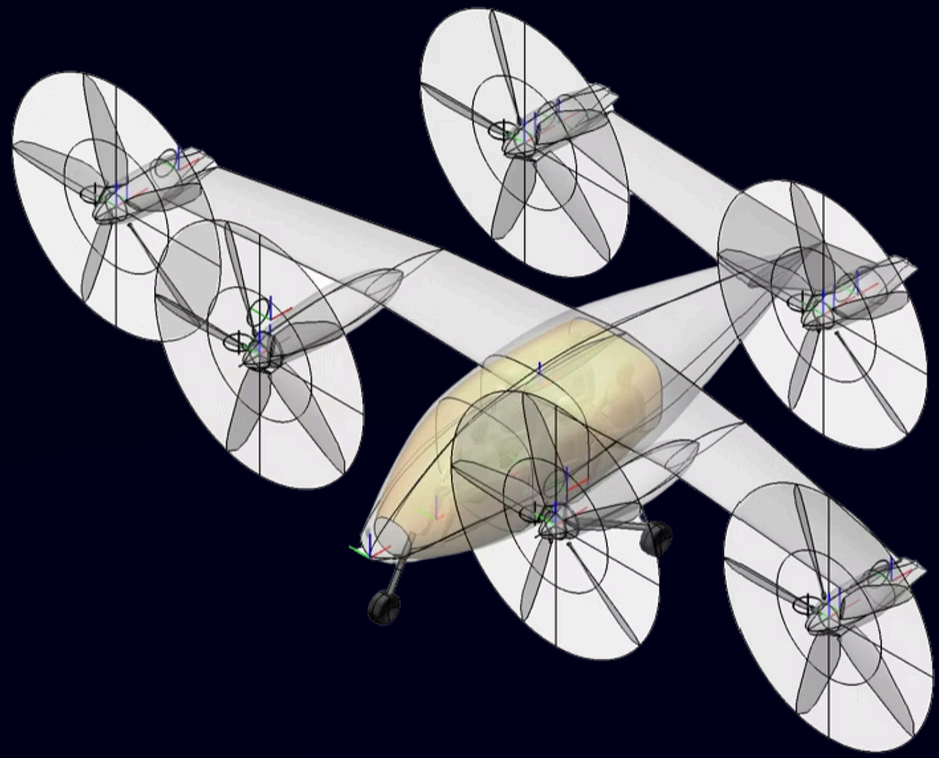


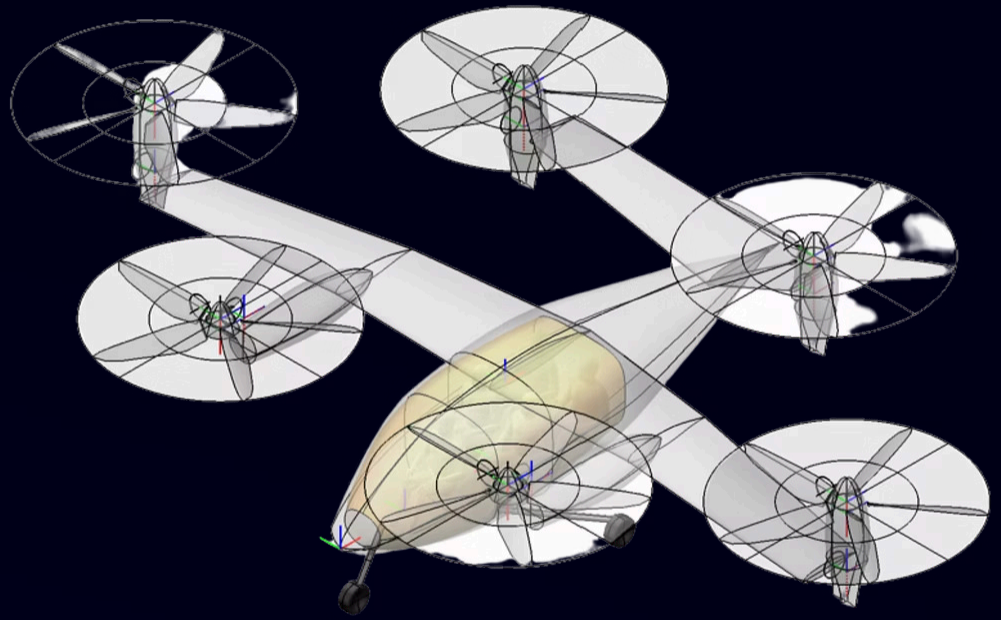


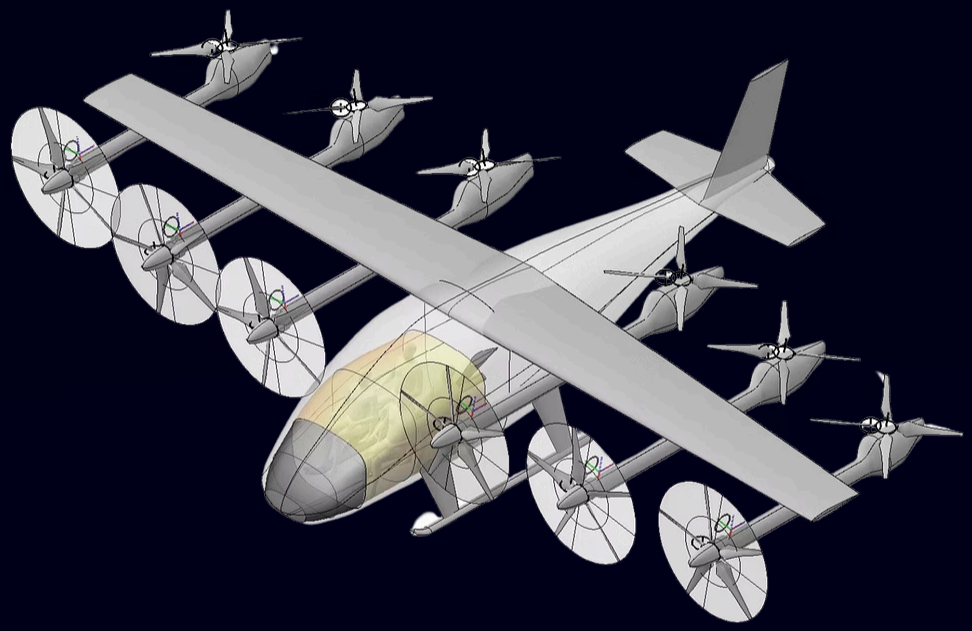


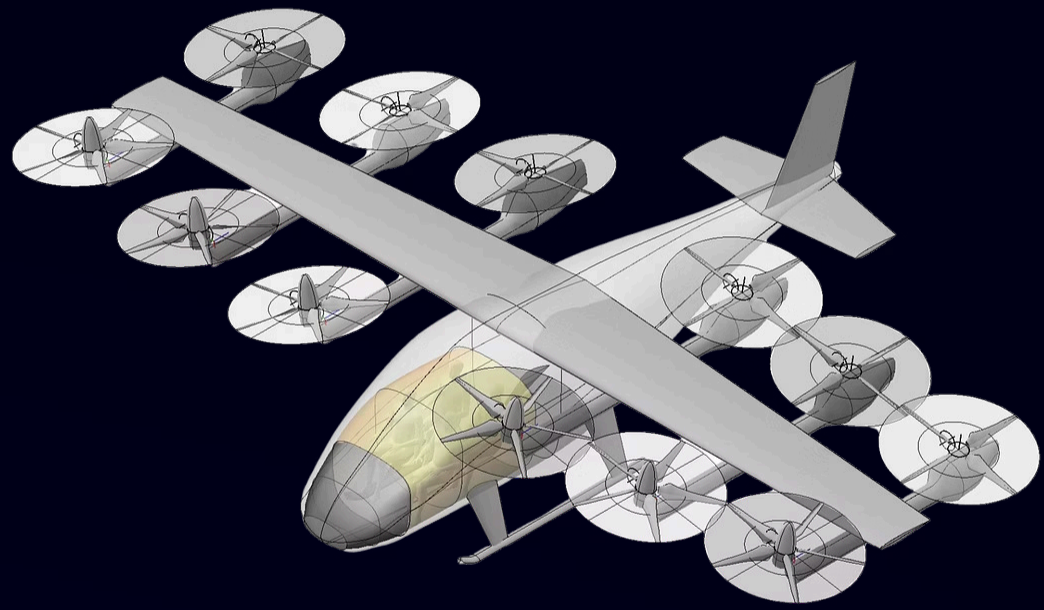


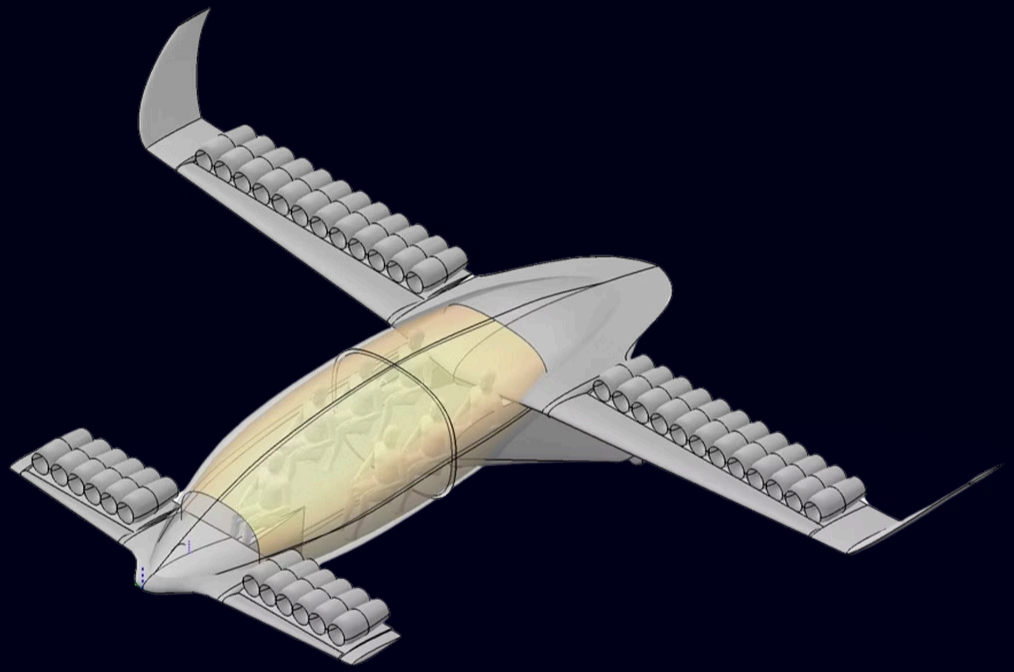


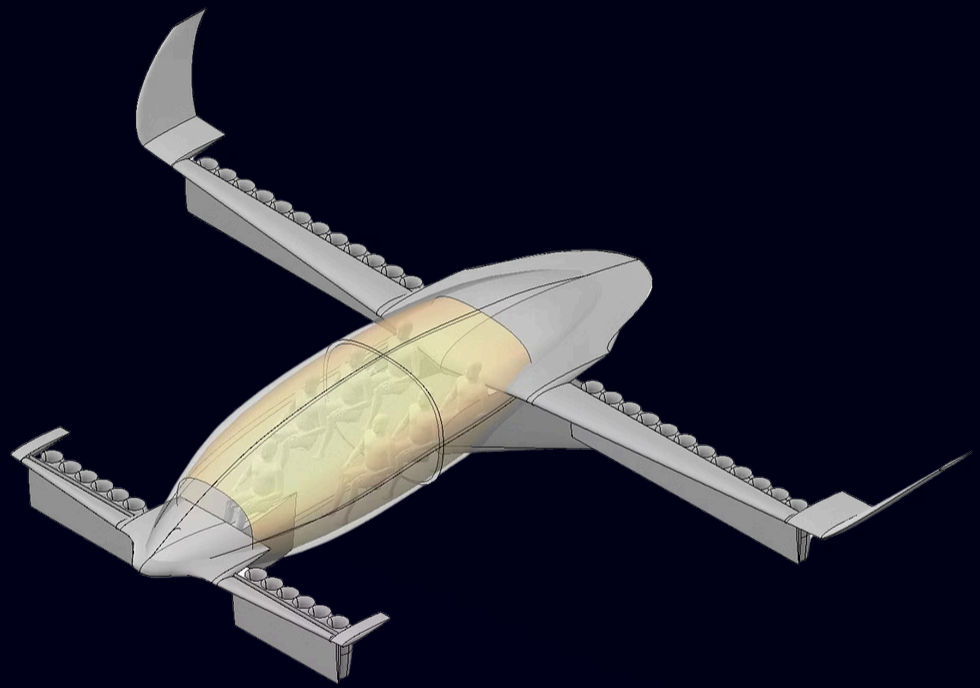












SkyDrive - Japan

Eve Air Mobility - Brazil

Wisk - USA

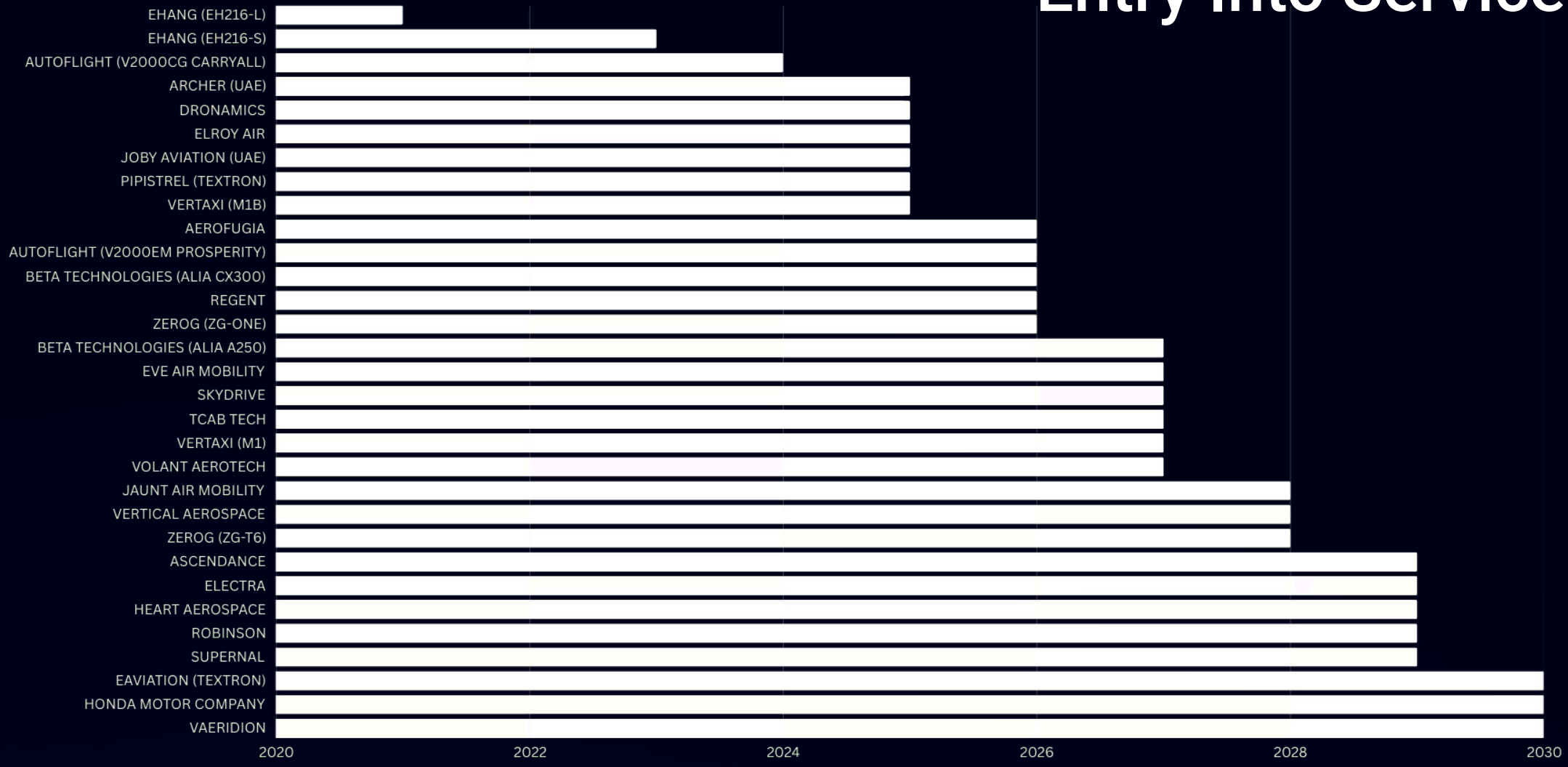
Regent - USA

Heart Aerospace - Sweden

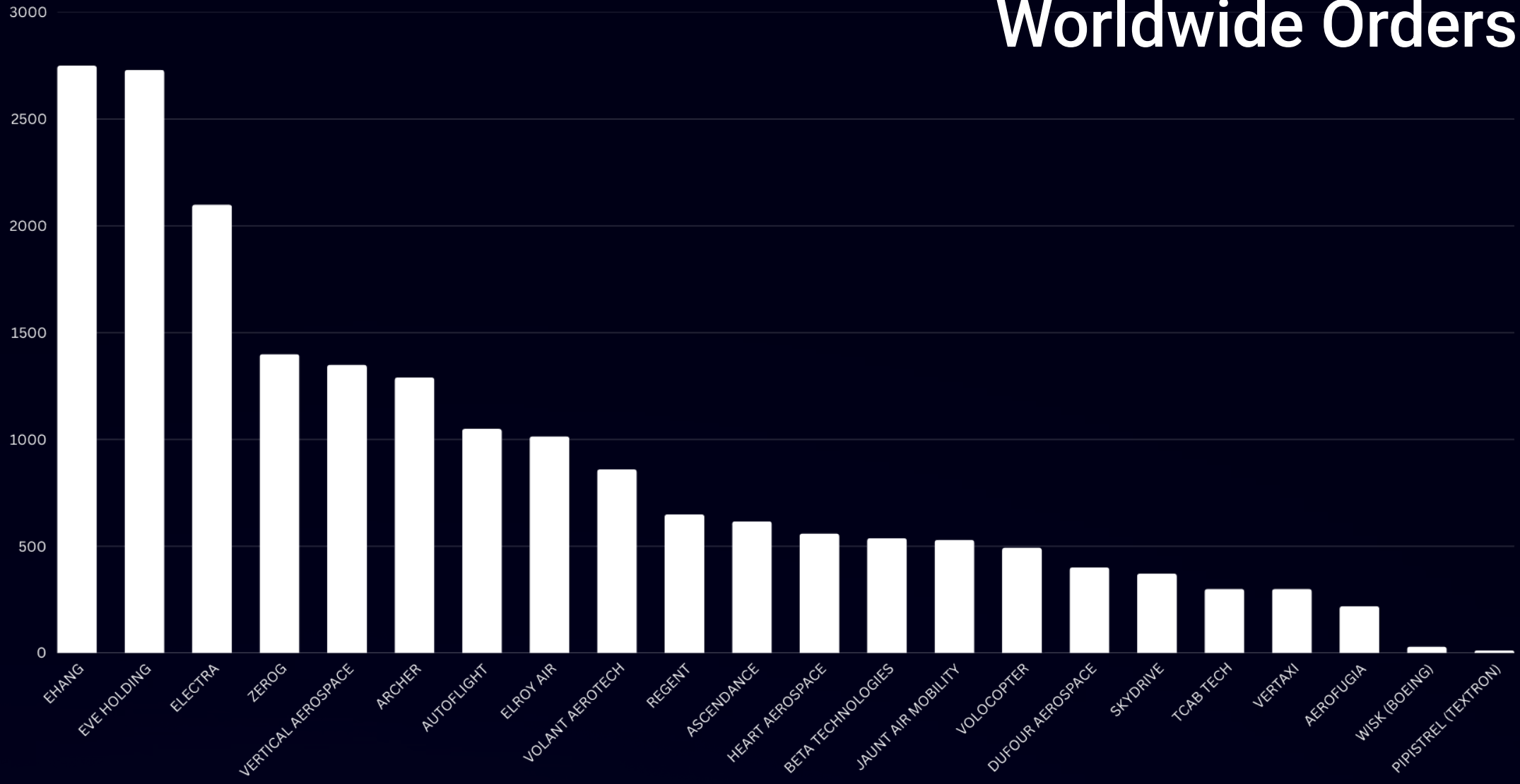
Zero Gravity - China

Beta Technologies - USA

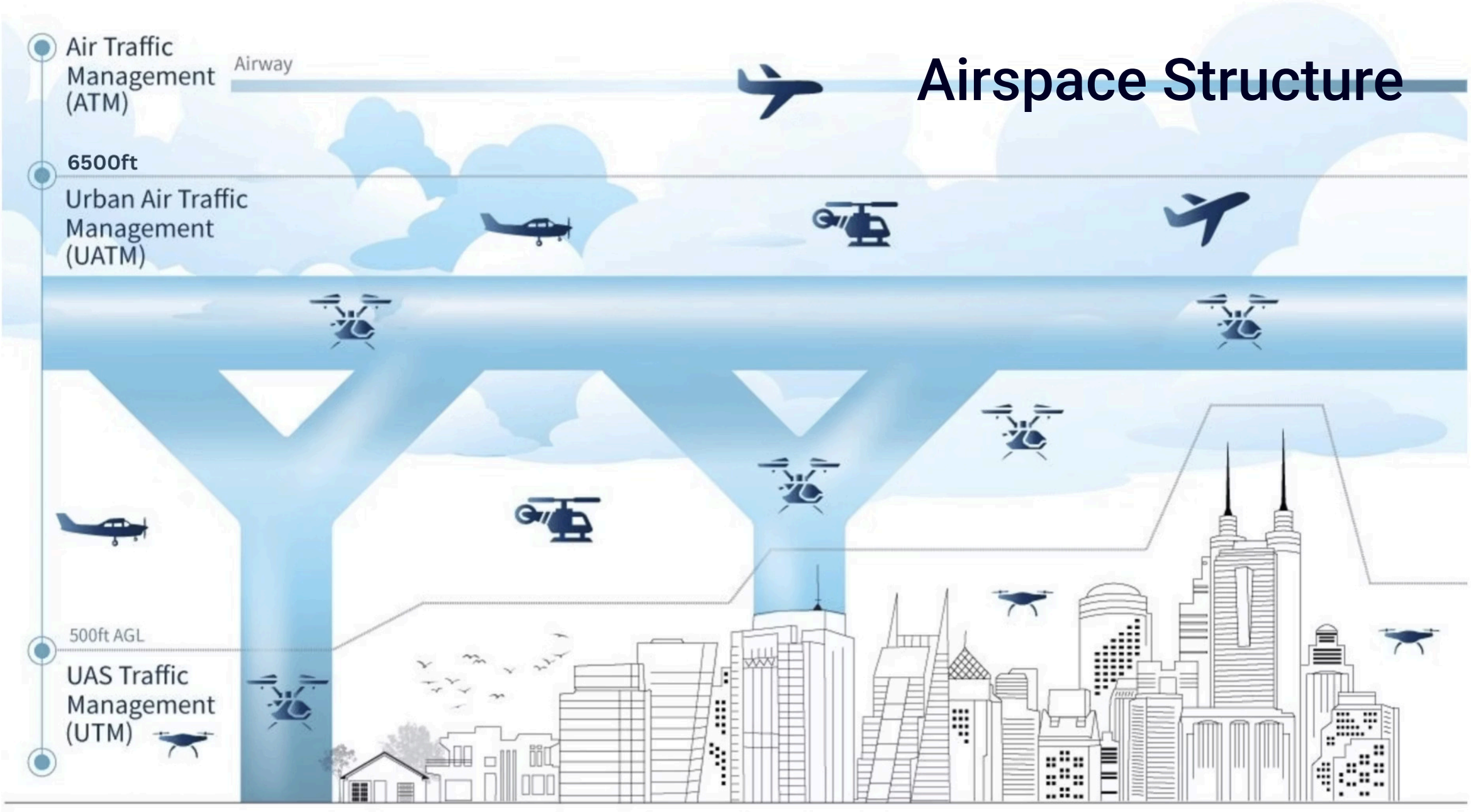
Entry Into Service



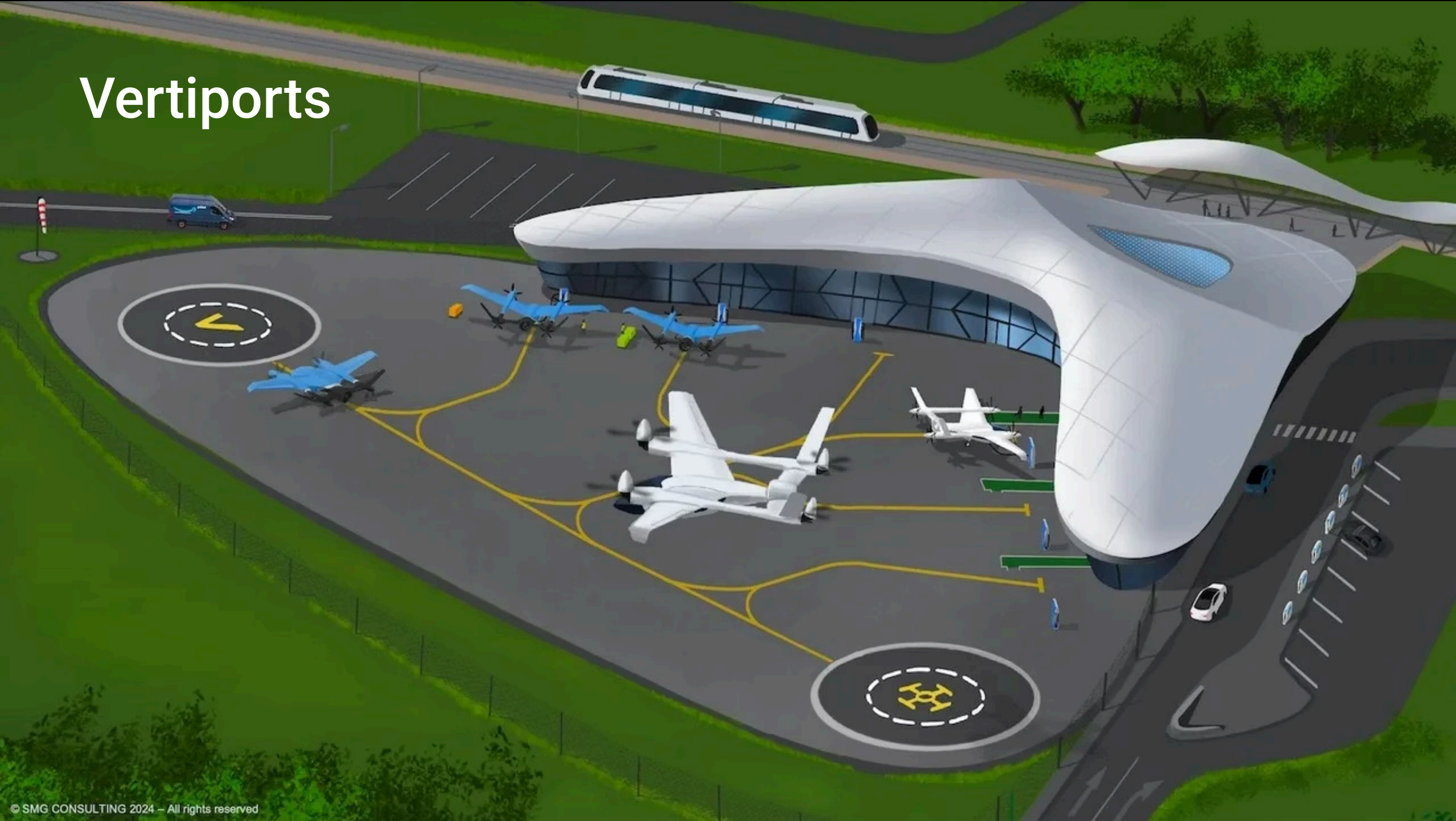
Worldwide Orders



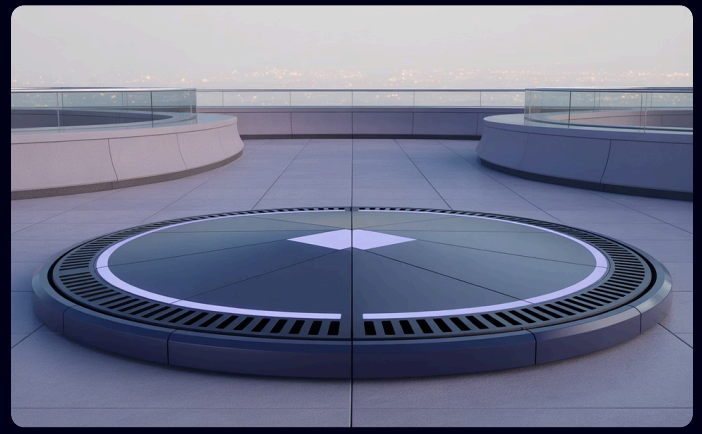
Airspace Structure



Vertiports

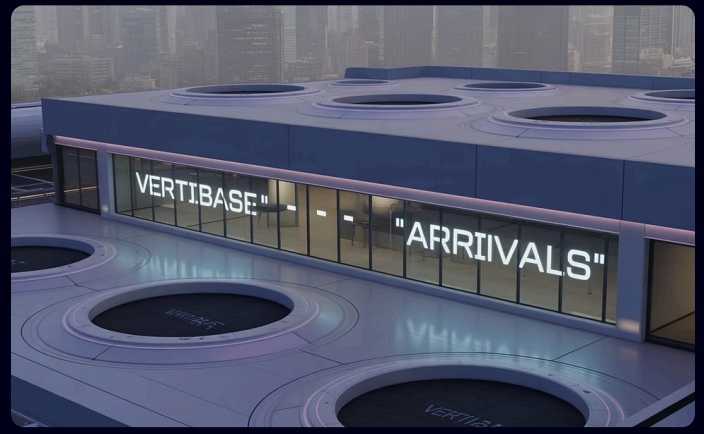


Types of Vertiports



Vertipad

The simplest vertiport configuration with a single landing pad, typically installed on rooftops or small urban spaces.



Vertibase

Mid-sized vertiport with multiple landing areas and basic passenger facilities, serving as connection points across cities.

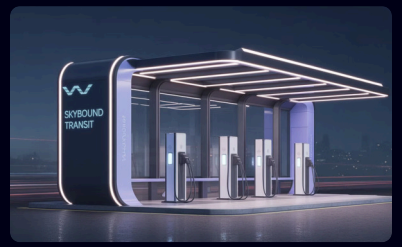
Vertihub

Comprehensive vertiport facility with multiple landing areas, passenger terminals, and maintenance capabilities for high-volume operations.

Scalable Types of Vertiports

Vertistop

Single landing pad designed for quick passenger pickup/dropoff with minimal infrastructure

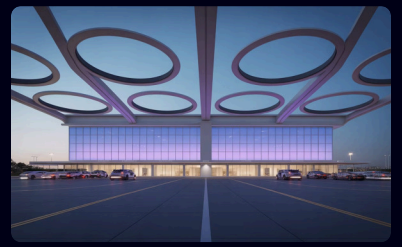


Vertispot+

Enhanced landing pad with basic charging capabilities and weather protection

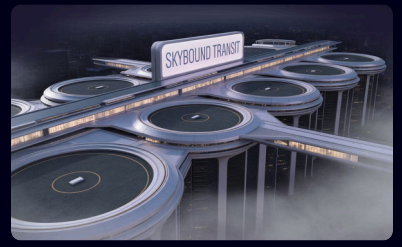
Small Vertiport

Multiple landing pads with basic passenger facilities serving limited routes



Medium Vertiport

Integrated facility with multiple landing pads and comprehensive passenger services

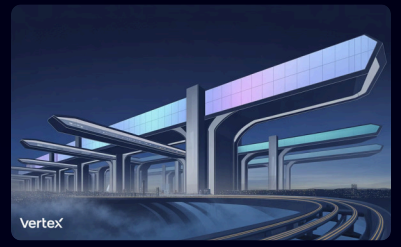


Large Vertiport

Urban air mobility hub with high-capacity handling and extensive amenities

Fleet Service Vertiport

Specialized facility with maintenance capabilities and operational support



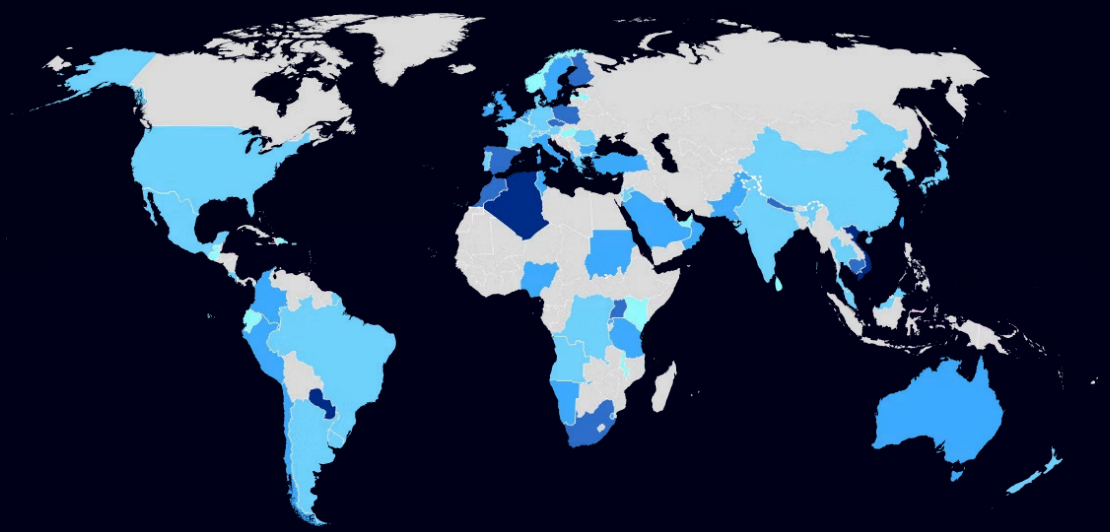
Vertihub

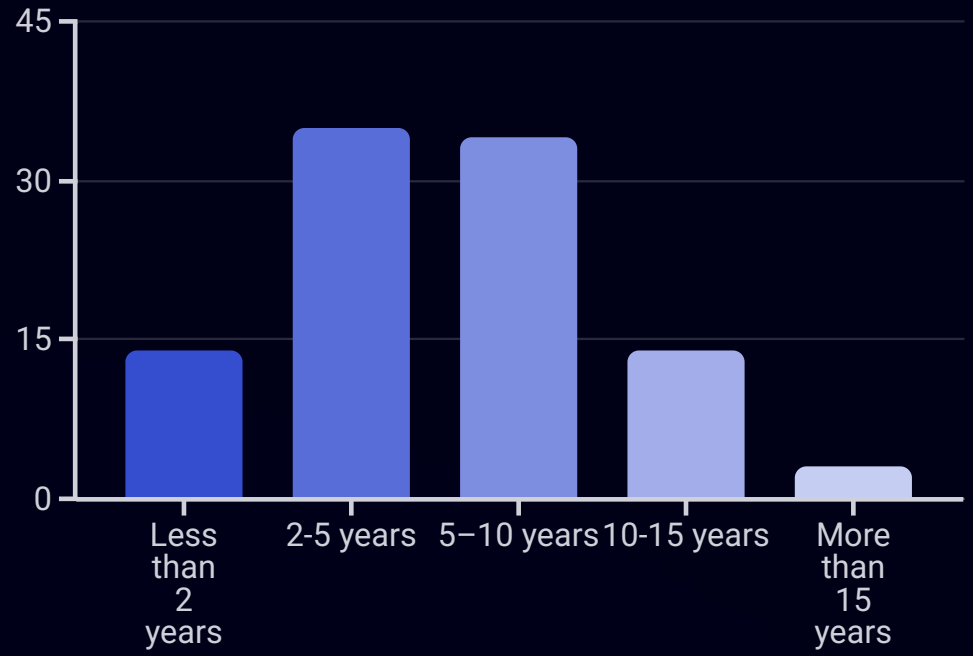
Major transportation nexus connecting multiple routes and transportation modes

Progress Drivers for AAM Deployment

AAM Launch Locations

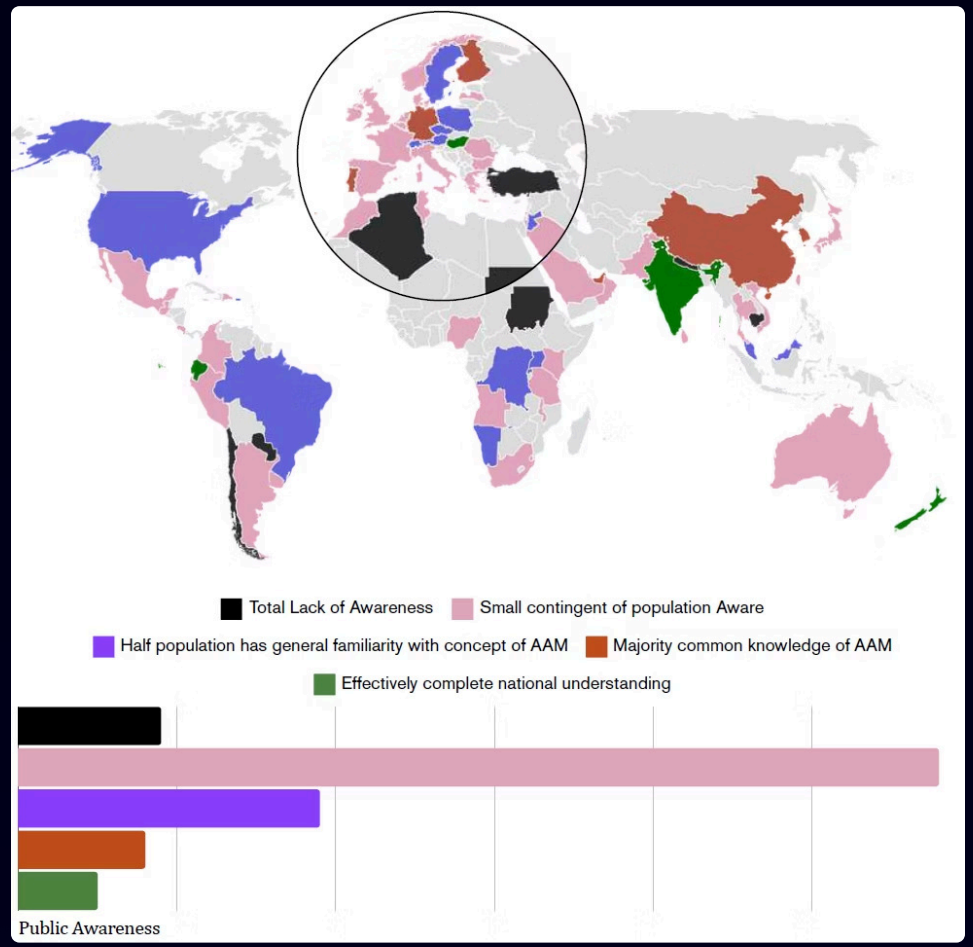
Viability Projection



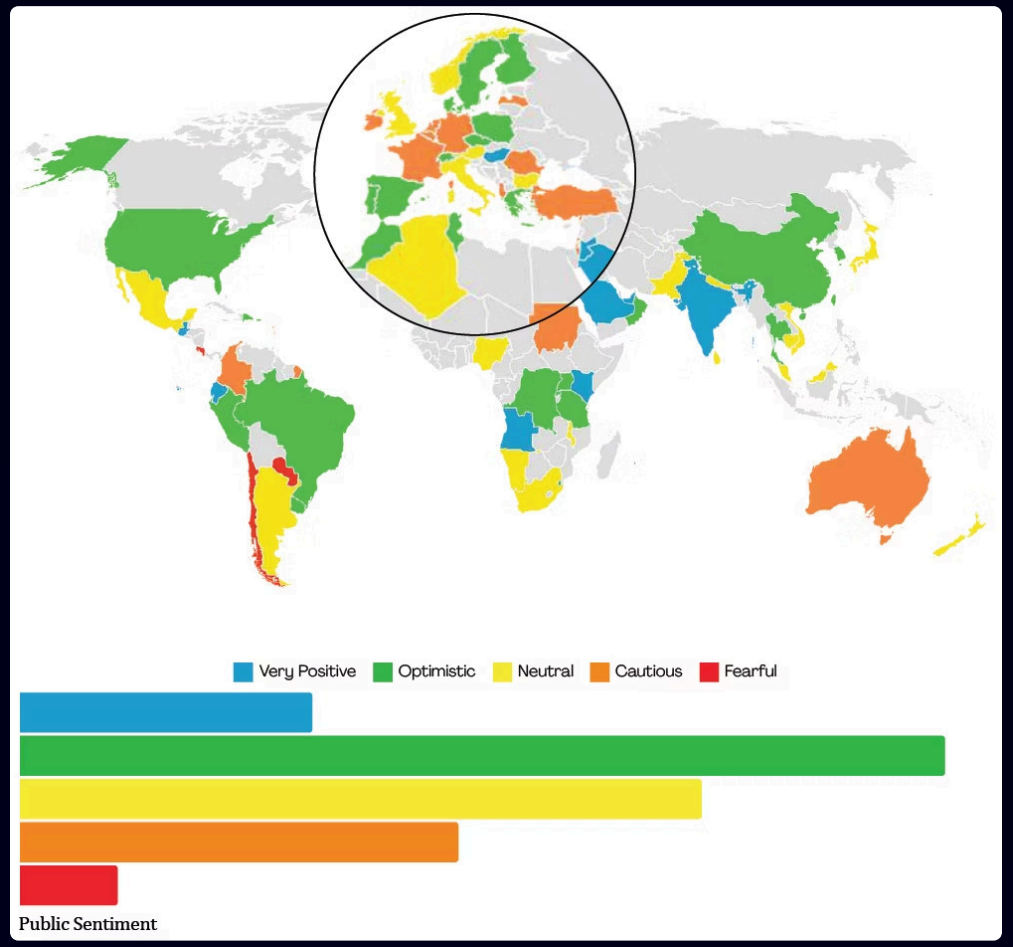


SWOT Analysis

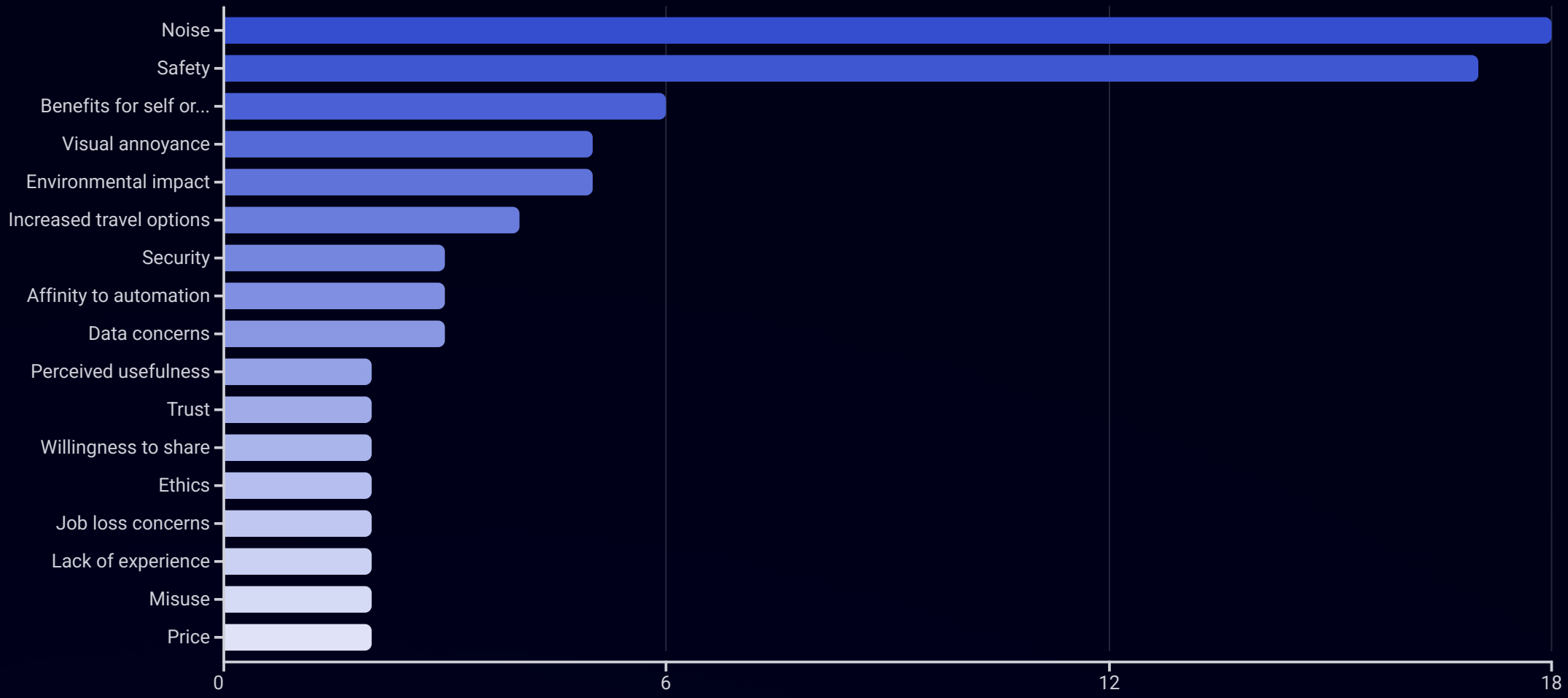
Public Awareness



Public Acceptance



Social Acceptance Factors



A Public-Good Mindset

Critical Infrastructure

Treat AAM as critical infrastructure, not luxury

Priority Use Cases

Prioritise med-evac, disaster relief, transit-desert links

Integrated Transport

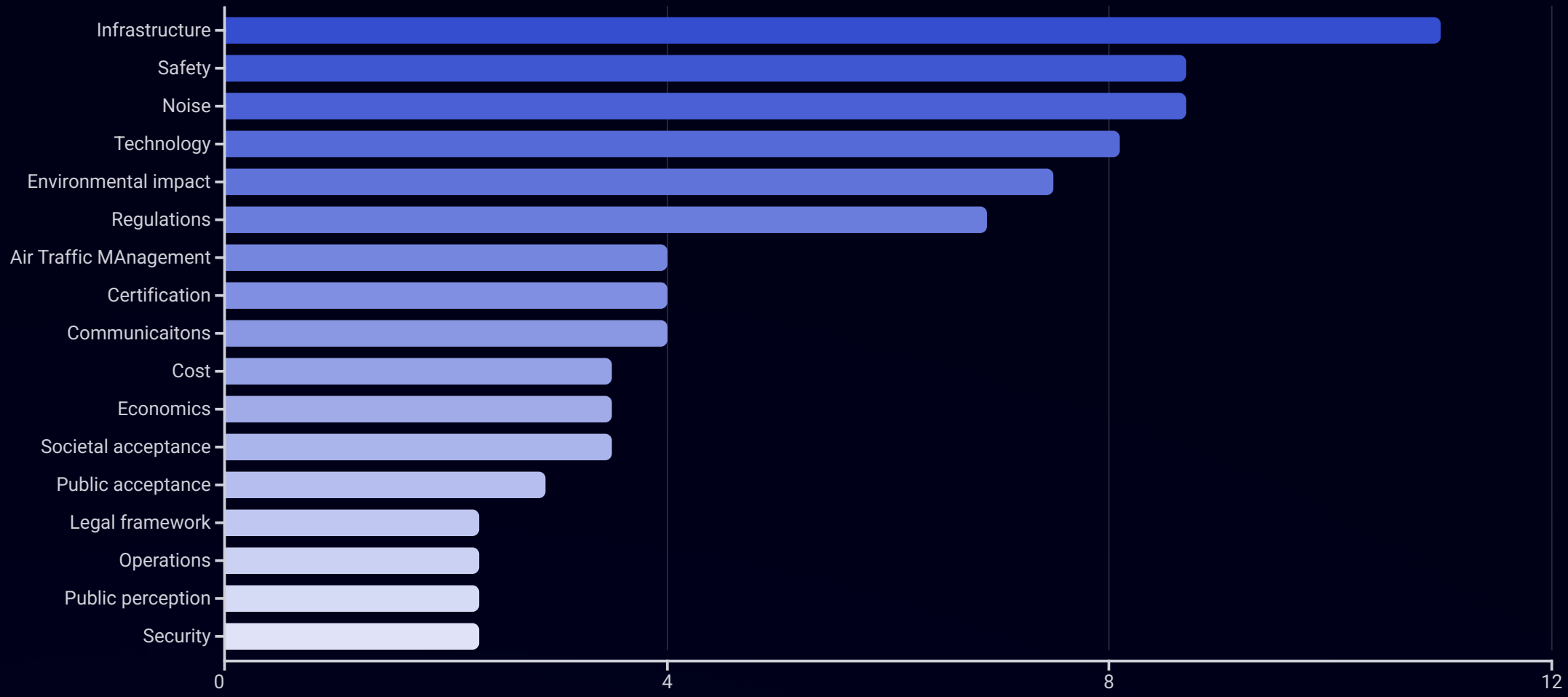
Integrate with metro, rail; mandate equitable access

Community Standards

Align noise & carbon targets to community standards

Connecting Care, Delivering Hope

Challenges for AAM/UAM



Your Opportunity

Pathway	What You Can Do
Engineering and R&D	Design lighter airframes, safer batteries, quieter rotors, AI flight stacks
Autonomy & Software	Build UTM algorithms, digital-twin health monitoring, cyber-security
Infrastructure & Energy	Plan vertiports, MW-class charging, H_2 supply chains, smart-grid links
Policy & Regulation	Shape safety rules, noise limits, community equity schemes
Finance & Business	Structure ESG funds, model route economics, launch start-ups
Operations & Training	Become eVTOL pilot/remote-operator, maintenance tech, dispatcher
Sustainability Steward	Lead public-engagement, noise mapping, SDG impact auditing

“True fellowship among men must be based upon a concern that is universal, it is not the private interest of the individual that creates a lasting fellowship among men, but instead the goals of humanity”

I Ching (Book of Changes, circa 1000 B.C.)

Thank you for your interest in shaping future of aviation and a global movement in mobility for next generations to come!

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Amin Vafadar

vafadar.aviation@gmail.com

www.linkedin.com/in/aminvafadar