

Capability Statement

Aviation Infrastructure

Aero Voltaics (AV) is an advanced aviation infrastructure and systems integration company focused on accelerating the deployment and scaling of electrified aviation infrastructure. AV integrates advanced renewable energy systems with simulation, modeling, and training environments that enable safe, resilient, and sustainable aviation operations.

AV supports the transition of aviation technologies from research and development into operational deployment by combining infrastructure planning, airspace integration, energy systems, simulation environments, certification support, and commercialization strategy into one coordinated platform.

Core Capabilities

Advanced Air Mobility (AAM) Systems Integration

- Vertiport architecture and infrastructure design
- Airspace integration and operational CONOPS development
- FAA certification support, including Part 135 adjacency planning
- Remote tower and distributed aviation operations systems
- End-to-end AAM ecosystem modeling and integration

Simulation, Digital Twin, and AI Systems

- Pilot-in-the-loop simulation environments
- Aviation digital twin development for operational systems
- AI-enabled mission planning and optimization tools
- Custom simulation software for aviation operations
- Human-in-the-loop system validation and training environments

Aviation Infrastructure and Energy Systems

- Hydrogen and hybrid aviation energy integration
- Vertiport microgrid and distributed energy systems
- Sustainable aviation infrastructure planning
- Ground support energy architecture for AAM networks

Training and Operational Enablement

- Flight simulation-based training systems
- AAM operational readiness programs
- Scenario-based certification and evaluation environments
- System-of-systems training integration

Program Management and Commercialization

- FAA, DoW, and commercial aviation program execution
- Systems engineering and lifecycle integration management
- SBIR/STTR transition support from R&D to operational deployment
- Public-private aviation infrastructure development strategies

Past Performance

- FAA WHJ – NEIC – Airbus 320 Flight Training Device Simulator
- PC-24 Pilot & MX Training Program (Part 142 Part 60)
- Jetspeed Ventures – sUAS Remote Pilot Operations
- C40 – US Navy Wet Training Program

AAM Integration

Simulation Systems

Hydrogen Aviation

Differentiators

- End-to-end AAM ecosystem integration capability rather than a point solution offering
- Strong linkage between R&D programs and operational deployment pathways
- Deep expertise in aviation simulation, certification, and systems engineering
- Ability to bridge government innovation programs to commercial aviation operations
- Integrated approach combining aviation, energy, software, and infrastructure systems

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541330	541511	N2ZUXKFKWLR7
541715	611512	1ZZS8
541690	488190	
541611	541990	
541512	541620	

Certifications
FAA Remote Pilot License, sUAS rating, (Commercial License)
FAA Commercial Pilot License, multiengine instrument rating CFI, CFII
HYSKY Society Certificate Hydrogen Aircraft
HYSKY Society Certificate Hydrogen Safety for Aviation
Project Management Professional (PMP)

Past Performance [Federal – State – Commercial]

