

## eVTOL Aircraft Pilot Training, Certification, and Integration in the NAS

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# Introduction to VTOLs in Aviation



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## VTOLs in Aviation

- Unprecedented aviation challenges: VTOL integration
- Promises safe and affordable travel for the public
- Timely intercity transportation in large metropolitan areas
- Vertical takeoff and landings altering air traffic norms

## Navigating the Challenges

- Urban air mobility: clean, efficient, versatile
- Challenges ahead: safety, operational complexities
- Challenges of electric propulsion and rapid charging vertiports
- Shared airspace complexities: drones, commercial flights, autonomous vehicles
- ALPA's role: ensuring safety and airspace integrity

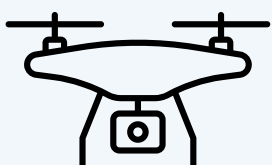
## Training Revolution

- Pilot training evolution for VTOLs
- Proficiency beyond manual operations: understanding automation
- Specialized training for unique VTOL flight characteristics
- Harmonizing human skills with electronic systems
- New training paradigms for revolutionary aircraft

## eVTOL Battery Technology Training Needs

- Battery limitations: endurance and payload capacity
- Training for operational limitations and weight management
- Real-time adjustments in system usage for optimal performance
- Emphasizing planning and resource allocations in training syllabus
- Preparing pilots for technical difficulties and system malfunctions
- Continuous updates to training modules with cutting edge research

**The regulatory structure that will be built around VTOL operations must ensure the highest standards of aircraft certification, pilot training, and operation integration with existing parts of the National Airspace System**



Introducing VTOLs may change the very nature of a pilot's career. ALPA is proactive in ensuring that this evolution respects the dignity of the professionalism.

Affirming ALPA's commitment to industry guidance and safety. ALPA is cautiously optimistic regarding the advancement of VTOLs

"The world-altering powers that technology has delivered into our hands now require a degree of consideration and foresight that has never been asked of us." –Carl Sagan