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5 NOVEMBER 2026 | CALIFORNIA

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THE LEADING TECHNICAL-CONFERENCE & EXPO FOCUSED ON ADVANCED TECHNOLOGY FOR ·NEXT-GEN ADVANCED AIR MOBILITY

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TECHNICAL AGENDA | FREE·TO·ATTEND EXPO | 250+ EXHIBIT SHOWCASES | 2000+ ATTENDEES

WELCOME TO THE EVTOL SHOW USA 2026

THE USA's PREMIER TECHNICAL GATHERING OF eVTOL INDUSTRY LEADERS, INNOVATORS AND ENGINEERS

JOIN 700+ eVTOL PROFESSIONALS

The eVTOL SHOW USA equips manufacturers and their suppliers with the cutting-edge tools, technologies, and connections needed to accelerate commercial roll-out. Explore advanced materials, innovative systems, and state-of-the-art processes that provide powerful manufacturing advantages and operational insights. Gain a competitive edge and ensure your operations thrive in an evolving, digitally intelligent landscape. Join us to discover the future of eVTOL manufacturing and drive the industry forward.

1-DAY, TECHNICAL AGENDA

The global eVTOL manufacturing landscape is undergoing rapid transformation, and the industry needs ingenuity, collaboration and innovation to scale-up and roll-out. With an interactive technology showcase, thought-provoking presentations, and strategic networking sessions, the eVTOL SHOW USA empowers manufacturing leaders and their suppliers to navigate this evolution and address shared challenges to drive long-term growth.

60+ INDUSTRY EXPERT SPEAKERS

Do you have ground-breaking insights and innovative solutions in the eVTOL industry? We invite you to join our line-up of 60+ expert speakers at this year's eVTOL Smart Manufacturing USA Summit. Submit your presentation and become a part of our thought leadership community, where you can share your knowledge, engage with industry leaders, and drive the future of aerospace manufacturing.

Don't miss this opportunity to showcase your expertise and contribute to the conversation on the latest advancements and trends in eVTOL technology. Submit your presentation today and help shape the future of the industry!

100+ EXHIBITOR SHOWCASE

Seize the opportunity to sponsor and exhibit at the eVTOL SHOW USA 2026 and position your company at the forefront of the aerospace industry. Our Technology Showcase offers unparalleled visibility and access to key decision-makers, industry leaders, and potential clients.

By sponsoring or exhibiting, you can demonstrate your innovative solutions, connect with top-tier professionals, and drive your business forward. Highlight your cutting-edge technologies and establish your brand as a leader in the rapidly evolving eVTOL sector.

SHAPING THE FUTURE OF THE EVTOL LANDSCAPE

Where eVTOL Gets Designed, Certified, and Built

Join North America's premier assembly of eVTOL designers, engineers, and senior executives as we concentrate on scaling up eVTOL production at the continent's largest technical conference and exhibition for eVTOL professionals. This distinguished event will feature a series of in-depth case study presentations, interactive panel discussions, and exclusive networking opportunities, providing a unique platform for industry experts to collaborate and innovate.

CONFERENCE TOPICS

eVTOL Market And Value Chain

The eVTOL industry is rapidly developing, and understanding its value chain and key use cases is crucial for stakeholders. This topic explores the entire value chain of eVTOLs, from design and manufacturing to deployment and operation. It includes an in-depth analysis of market trends, key developments, and the challenges of building and running the necessary ground infrastructure, including overcoming the "Not In My Backyard" syndrome.

Automation And Digital Manufacturing

Automation and digital processes are transforming eVTOL manufacturing. This topic focuses on the need for advanced, automated, and digital manufacturing processes, managing the extensive use of automation, and adopting the latest tools and processes in production. It also examines the influence of automotive industry practices and biomimicry in cabin design.

Environmental And Operational Sustainability

Achieving environmental sustainability is a key goal for the eVTOL sector. This topic explores how to design eVTOLs to meet environmental sustainability requirements, noise and vibration mitigation strategies, and learning from experiences in the EV and grid storage spaces. It also addresses managing lifecycle challenges in battery technology and ensuring sustainable operations.

Airspace And Traffic Management

Effective airspace management is essential for the successful integration of eVTOLs into urban environments. This topic addresses how eVTOLs will be handled in the airspace, including the creation of a new low altitude air traffic management system.
It also explores the incorporation of multiprotocol label switching for faster connections and the potential necessity of IFR for short flights, along with the challenges of establishing rooftop vertiports.

Advanced Propulsion Systems

Innovation in propulsion systems is critical for the performance and efficiency of eVTOLs. This topic delves into the latest advancements in electric propulsion technologies, hybrid systems, and new materials that enhance propulsion efficiency. It also examines the challenges of thermal management and noise reduction in propulsion systems

Certification And Safety

Navigating the certification process and ensuring safety is paramount in the Evtol industry. This topic covers the certification process and handling of safety concerns, including coordination with the FAA and EASA, the use of performance-based requirements, and overcoming differences in certification standards. It also examines compliance with RTCA DO-311, SAE AIR6897, and FAA AC 20-184, as well as approaches to managing thermal runaway risks in lithium-based chemistries.

Infrastructure Development And Urban Integration

The successful deployment of eVTOLs requires extensive infrastructure planning and development. This topic explores the challenges and solutions related to urban integration, including the development of vertiports, ground infrastructure, and charging stations. It also covers regulatory and zoning issues, and strategies for ensuring community acceptance.

Pilot Training And Simulation

Training pilots for eVTOL operations is essential for safety and efficiency. This topic covers simulation for eVTOL pilot training, including the use of full-motion flight simulators and mixed-reality simulators. It emphasizes the importance of advanced training tools and techniques to prepare pilots for the unique challenges of operating eVTOL aircraft.

Autonomous Flight And Control Systems

Autonomous flight technology is a game-changer for the eVTOL industry. This topic covers the development and implementation of autonomous flight and control systems, including AI and machine learning applications, sensor technologies, and redundancy systems to ensure safety. It also discusses the regulatory and ethical considerations of autonomous flight.

Design And Production Systems

Designing and finalizing prototypes while building robust production systems is a critical phase for eVTOL manufacturers. This topic delves into finalizing and freezing designs to build conforming prototypes and focuses on building out efficient production systems. It also covers advanced modeling and simulation, overcoming manufacturing and supply chain challenges, and ensuring structural integrity with composites and thermoplastic resin systems.

Data Management And Cybersecurity

Managing data and ensuring cybersecurity are major concerns for the eVTOL industry. This topic covers data management strategies, cybersecurity protocols, and the importance of protecting sensitive information. It also explores the role of blockchain and other advanced technologies in enhancing data security.

Interior Design, Materials, And Haptics In eVTOLs

The interior design of eVTOLs plays a crucial role in passenger comfort, safety, and overall experience. As the industry evolves, there is a growing focus on utilizing advanced materials and haptic technologies to create a sophisticated and immersive environment within the cabin. This topic explores the latest trends and innovations in eVTOL interior design, the use of cutting-edge materials, and the integration of haptic feedback systems to enhance the passenger experience.

Regulatory Landscape And Policy Development

Navigating the regulatory landscape is a significant challenge for the eVTOL industry. This topic covers the current state of regulations, the role of international aviation authorities, and the development of policies that facilitate the safe and efficient operation of eVTOLs. It also explores the impact of emerging regulations on the industry and strategies for compliance.

Battery Technology And Energy Management

Battery technology is a cornerstone of eVTOL performance and efficiency. This topic addresses managing battery recharging times, increasing range, and shortening turnaround times. It explores the challenges of using off-the-shelf EV batteries, developing batteries tailored to eVTOL needs, and overcoming issues related to cycle life, energy density, and feasibility. Additionally, it includes discussions on solid-state batteries, sodium-ion batteries, hydrogen fuel cells, and managing temperature parameters.

AGENDA 2025

08:40 | Welcome address

A Defining Year for Advanced Air Mobility

Nicolas Zart, *Founder,* ***Electric Air Mobility/ Vertiport Infrastructure***

Commercial pilots-to-service, sharper **FAA/EASA** guidance, better batteries & thermal strategies, and tighter links with airports/vertiports are reshaping AAM. Cut through the noise to what actually moved in 2025—and what it means for NA programs in 2026.

- 2025 milestones that change certification, ops, and investment.
- Current technical/regulatory blockers and near-term remedies.
- Where OEMs, Tier-1s, and airports are placing 2026 bets.
- High-value collaboration lanes (OEM–airport–city–utility).
- Concrete actions to de-risk manufacturing and route launch.

09:00 Joby

From Vision to Vertiports: Accelerating Commercial Readiness at Scale

Andy Krebs, *Head of Infrastructure,* ***Joby Aviation***

With certification pathways firming up and public-private coalitions forming, the question is speed: how quickly can safe, reliable eVTOL services be woven into airspace, cities, and daily life? This session distills what it takes to move from flight tests to scalable operations.

- **Close out certification:** Coordinate final findings with multi-region regulators.
- **Sync with infrastructure:** Align aircraft needs to **vertiport, ATC/UTM, and grid** timelines.
- **Evolve the model:** Government/defense/commercial partnerships that unlock routes.
- **Build at rate:** Localized supply chains, factory automation, and QA at scale.
- **Win public trust:** Live demos, transparent noise/ENV data, and community playbooks.
- **Operationalize:** Airline-style simulations > schedule reliability & turnaround SOPs.
- **Measure what matters:** KPIs for safety, on-time performance, cost, and customer experience.

09:30 AIR

Powered Lift Light Sport Aircraft as Proving Ground for Advanced Air Mobility

Chen Rosen, *CTO,* ***AIR***

The FAA's MOSAIC rule, finalized in July, opens a practical pathway for certifying powered lift light sport aircraft (LSA). The AIR ONE illustrates how these aircraft provide a lower-risk proving ground for electric propulsion and vertical operations, offering real-world experience in less congested airspace and private aviation. This approach reduces certification challenges while preparing the industry for broader Advanced Air Mobility adoption.

- Understand how the MOSAIC rule accelerates certification for powered lift LSAs.
- Identify the advantages of testing eVTOL technologies in less congested, lower-intensity environments, and see how simpler designs such as the AIR ONE support this process.
- Recognize how powered lift LSAs build real-world experience with electric and vertical operations.
- Evaluate their role in reducing risk and enabling broader AAM readiness.

09:50 VOLTAIQ

Agile, Data-Driven eVTOL Pack Design in a Dynamic Battery Market

Eli Leland, *CTO & Co-Founder,* ***VOLTAIQ***

Battery packs in the eVTOL space demand extreme power density, rigorous safety, and uncompromising reliability—while cell technologies, chemistries, and supply chains evolve rapidly. This session provides best practices for meeting these challenges and staying competitive.

- Why legacy approaches fall short: Traditional stage-gate processes weren't designed for continuous pack development across multiple suppliers, evolving chemistries, and shifting trade environments.
- The qualification data challenge: Rate testing, cycle life, HPPC, and safety protocols generate massive data volumes across disparate sources—from cell to pack to system—creating development bottlenecks.
- From data chaos to AI-ready infrastructure: Automated data integration, cleaning, and feature extraction accelerate insight while building the foundation for AI-powered pack development.
- Proven production workflows: Real-world examples demonstrate 20-20,000x workflow acceleration, enabling teams to identify issues faster, pinpoint root causes, and make data-driven decisions..

10:10 Henkel

Next Generation Structural Paste Adhesives: Designed for Rapid eVTOL Assembly

Kaspar Schaerer, *PhD Manager of Product Development,* ***Henkel***

Overcoming the natural limitations of traditional structural pastes and adhesives is a key step in the assembly of eVTOLs and supports the rapid transition from certificationto large- scale commercialization. Technological breakthrough approaches to address bonding of uneven parts, extended open time combined with short cure time and film like superior mechanical properties will be presented.

- Bonding parts: Uneven surfaces: Pastes versus films adhesives.
- Surface treatment: Metal, thermosets and thermoplastic composite materials.
- Mechanical properties: Increased toughness after high temperature cure.
- Mechanical Limitations: Temperature and strength requirements.
- Raw Materials: Unique combinations of resin and toughening agents.
- Application: Paste versus films, temperature, open time and cure time.
- Automation: Status and future designs.
- Sustainability: TSCA&REACH, waste and energy reduction.

10:30 EHANG 亿航

From First to Future: The EHang Blueprint for Pilotless eVTOL Certification and Commercialization

Conor Yang, *CFO,* ***EHang***

The certification of EHang's EH216-S in China marked a historic milestone for the eVTOL industry, transitioning from prototype development to authorized commercial operations. This achievement provides critical insights for stakeholders across the globe as they navigate the complex path from type certification to large-scale commercialization.

- **How they certified:** TC + airworthiness under CAAC—evidence, test flow, and audit rhythm.
- **Mind the gaps:** CAAC vs FAA vs EASA—where rules align, where they diverge, what to bridge.
- **Ops readiness:** Safety cases, vertiport integration, SOPs for day-one reliability.
- **Scale smart:** What China's deployment teaches about public acceptance and U-space/ATM integration.
- **Global roadmap:** Reusing artifacts for international validation and faster market entry.

10:50 TPC THE PARTNER COMPANIES

Mission-Critical by Design: Building eVTOL-Ready Components that Don't Fail

Danielle Wilkerson, *Vice President of Business Development,* ***The Partner Companies***

This session unpacks TPC's approach to engineering and manufacturing mission-critical components and assemblies for next-gen aircraft, with an emphasis on requirements flow-down, design-for-reliability, qualification, and production discipline suited to eVTOL and uncrewed platforms.

11:00

Engineering Espresso Break

Hosted By TPC THE PARTNER COMPANIES

11:40 DASSAULT SYSTEMES

Model-Based Systems Engineering Approach for Design and Development of Drones and eVTOLs

Dr. Behnam Afsharpoya, *Senior Solution Consultant,* ***Dassault Systèmes***

To allow drones and eVTOLs to fly and meet regulatory requirements, a series of validation and verification processes is necessary to demonstrate safety compliance. Traceability between regulations, requirements, and design solutions must be enforced from the early stages of engineering. A single source of truth enables digital continuity of data and maintains clarity of design intent for certification authorities. This presentation explains how a model-based systems engineering approach can integrate and evolve collections of models from one development phase to the next throughout

the life span of an air vehicle. This method is applicable to developing various complex systems involving multi-discipline and multi-physics aspects in a virtual environment.

- Grasp how MBSE establishes end-to-end traceability from regulations and requirements to design solutions, supporting certification.
- Learn to implement a single source of truth for digital continuity, preserving design intent and auditability across teams and phases.
- Apply MBSE to integrate multi-discipline/multi-physics models and streamline V&V, enabling faster iteration and risk reduction in a virtual environment.

12:00 AdvanTech International

Fiber Laser Welded Battery Plates: Enabling High-Integrity Thermal and Electrical Performance for eVTOL Applications

Adrian Serna, *Business Development Specialist,* ***AdvanTech International***

Fiber laser welding is emerging as the joining technology of choice for battery interconnects and cooling plates. This session examines how ultra-precise, low-distortion fiber laser welding enables reliable, thermally stable, and electrically efficient joints at the module and pack level—while reducing process variability, weight, and total cost.

- Comparing fiber laser vs. ultrasonic and resistance welding for thin-plate joining—beam quality, penetration depth, and minimal heat-affected zones.
- Cell tab interconnects, current collectors, and liquid-cooled cold plate seals.
- Achieving high-conductivity joints that maintain pressure integrity under cyclic load and vibration.
- Real-time seam tracking, closed-loop power control, and quality assurance for aerospace-grade reliability.
- Optimizing joint geometry, material pairing (Al/Cu/Ni), and laser parameters for scalable, automated production.
- Non-destructive evaluation techniques for weld validation and defect detection.
- Integrating laser welding systems into automated battery production lines for high throughput and minimal rework.

12:20 BLOOMY

Advancing HIL & SIL Validation for eVTOL: From Tip to Battery to Tail

Peter Blume, *President,* ***Bloomy***

SIL/HIL turn design intent into cert-grade evidence—before flight. This session shows how modular, scalable benches validate propulsion, BMS, flight controls, and avionics under real-time scenarios, faults, and environmental edge cases to cut risk, cost, and schedule.

- **Why now:** Use **SIL/HIL** to de-risk certification and compress test cycles.
- **Architect the rigs:** Modular benches that model **full-aircraft behavior** (FCC, BMS, drives, avionics).
- **Fault with purpose:** Structured **fault injection** (shorts, sensor drift, timing, OEI) with coverage metrics.
- **Autonomy & energy:** Validate **autonomous logic** and **energy management** under realistic missions.
- **Automate evidence:** Trace **requirements** > **tests** > **reports**; configuration control for repeatability.
- **Integrate & scale:** Tie benches into **MBSE/PLM**, reuse for regression, end-of-line, and in-service incident replay.
- **Cert alignment:** Build test artefacts regulators accept—**DO-178C/254, SC-VTOL** safety cases.

12:40 theion

Beyond Lithium-Ion: Unlocking eVTOL Range with Lithium-Sulfur Crystal Batteries

Dr. Ulrich Ehmes, *CEO,* ***Theion***

Theion's crystal-structured lithium-sulfur (Li-S) concept targets step-change Wh/kg (claimed up to ~3× vs conventional Li-ion) with cobalt/nickel-free cathodes—promising lighter packs, lower cost, and new mission envelopes for eVTOL.

- **Electrochem basics:** How crystal Li-S cathodes and solid-state design drive energy density.
- **Thermal & safety:** Heat generation, TR risk profile, and high-power behavior for VTOL phases.
- **Performance over life:** Degradation modes, recharge efficiency, cycle/ calendar life for aviation duty.
- **eVTOL fit:** Pack-level implications—weight savings, C-rate, redundancy, and turnaround.
- **Sustainability edge:** No Co/Ni bill of materials; carbon footprint considerations.
- **Certification hooks:** Evidence needs vs DO-311A/DO-160, abuse tests, containment & venting.
- **Path to market:** Pilot programs, manufacturing scale-up, and operator trial frameworks.
- **What to watch:** Readiness indicators—cell specs, pack demos, and independent validation.

13:00 | NETWORKING LUNCH

14:00 VALCON LABS

Ceramic Solid-State Batteries for eVTOL: Safer, Higher-Performance Energy Systems

Jacob Matly, *Founder & CEO,* ***Valcon Labs***

Ceramic solid-state batteries (SSB) using oxide electrolytes such as LLZAO offer a step-change for aviation: non-flammable all-ceramic cells with higher specific energy and high C-rate charge/discharge that can eliminate complex liquid cooling—directly enabling longer range/reserve, tighter safety cases, and lower operational risk for eVTOL. Inherent thermal-runaway resistance and non-propagating failure modes simplify compliance with DO-311A/ED-287 at the pack level, while ceramic stacks support >800 V architectures with improved power delivery and thermal stability in lighter, less complex enclosures. Realizing these gains at aviation scale hinges on two bottlenecks: (1) mechanical stability of large-format, multilayer stacks under high-cycle, high-vibration flight, and (2) scalable fabrication of thin, defect-free solid-electrolyte separators, which drive energy density, cost, and throughput.
This session examines how next-gen ceramic SSB chemistries, interfaces, and manufacturing methods translate into certifiable, maintainable, high-performance eVTOL packs—what's feasible today, the residual risks, and a pragmatic migration path from high-rate Li-ion to ceramic solid-state.

- Energy, power, and safety impacts of ceramic SSB chemistries on eVTOL mission profiles.
- Thermal runaway and propagation behavior, and how to design for compliance with DO-311A/ED-287.
- Manufacturing constraints—including sintering, stack pressure, moisture sensitivity, separator thickness control, and mechanical stability—and their implications for yield, cost, and certification.
- A realistic migration roadmap from today's Li-ion systems to flight-ready ceramic SSB packs for next-generation eVTOL aircraft.

14:20 MTorres

High-Angle AFP for eVTOL: OLI-Enabled Head for Complex, Small-Scale Aerostructures

Manu Motilva, *Chief Growth Officer, Machines,* ***MTorres***

eVTOL programs push composite manufacturing toward smaller, highly contoured parts with tight radii and aggressive layup angles—beyond the comfort zone of legacy AFP/ATL heads. MTorres presents its high-angle eVTOL AFP head (≥ 40–45° clearance) with eight tows, a servo-driven rotary cutter (minimum cut length 100 mm), and integrated Online Inspection (OLI). Deployed on gantry or robot, the system targets 75–85% OEE with layup rates up to 7 kg/h—5–6× faster than hand layup—while safeguarding quality on small, complex geometries typical of eVTOL primary and secondary structures.
eVTOL airframes feature many small, complex composite details (doors, frames, ribs, fairings, winglets, boom/empennage sub-elements) where access and angle limit deposition quality and speed.
High-angle head geometry + OLI closes the gap between automotive-style takt expectations and aerospace quality, supporting repeatable, certifiable production.

- Select head geometry for small/complex parts: when and why ≥40–45° clearance is decisive.
- Program deposition strategies (steering, staggering, drops/adds) for eight-tow heads on tight contours with 100 mm cut constraints.
- Use OLI data to drive closed-loop quality (porosity/bridging, FOD, gaps/overlaps) and boost OEE to 75–85%
- Compare cells: robot vs. gantry for eVTOL parts—footprint, reach, stiffness, cycle time, and re-teaching trade-offs.
- Quantify ROI vs. hand layup: process capability indices, rework rates, and 7 kg/h throughput modeling.

14:40 MAGLEV AERO

MagLev-Electric Propulsion: A New Architecture for Quiet, Efficient Vertical Flight

Ian Randall, *Founder & CEO,* ***Maglev Aero***

As eVTOL propulsion systems evolve beyond ducted fans and distributed electric drives, magnetically-levitated (maglev) rim-driven systems are emerging as a disruptive alternative, offering ultra-smooth, low-vibration operation, that delivers more thrust for less power and noise in sustained vertical and cruise phases of flight. This session examines how maglev-based propulsion redefines performance, acoustics, reliability and operational impact for eVTOL and hybrid-electric aircraft.

- Unified Drive Architecture: Integration of motor, inverter, bearing, and fan merges the best of aerodynamic and electromagnetic design, delivering step-change improvements in efficiency and acoustic performance.
- AI-Enhanced Design Optimization: Advanced multiphysics modeling and AI-driven optimization tools accelerate design cycles, refine magnetic and aerodynamic geometries, and enable scalable product development across thrust classes.
- Applications and Scalability: From kilowatt to megawatt, flexible maglev-propulsion architectures support modular lift and cruise configurations for distributed electric and hybrid aircraft.

- Operational Impact: Reduced power draw, increased useful load, lower maintenance cycles, quieter operation, and smoother transitions between hover and forward flight..

15:00 SimuTech Group

High-Fidelity CFD Methods for Quadcopter Propulsion–Fuselage Interaction

Jeff Collins, *Staff Engineer,* ***SimuTech Group***

Capturing rotor–airframe coupling is key to performance, control authority, and cert evidence. This session shows how to push Ansys Fluent with 6-DOF motion, Virtual Blade Model (VBM), overset meshes, and UDFs to model take-off and acceleration accurately.

- **6-DOF dynamics:** Set up true take-off/acceleration simulations.
- **Prop–body coupling:** Use VBM + overset meshing to resolve fan–fuselage interactions.
- **Extend Fluent:** Apply UDFs for custom motion, controls, and force models.
- **Validate & tune:** Correlate with test data; sensitivity to grid/time-step settings.
- **Speed vs fidelity:** When to use VBM vs resolved blades; cost/performance trade-offs.
- **Actionable workflow:** A ready-to-adopt setup template for eVTOL/drone studies.

15:20 SES

Selecting the Optimal Battery Partner: Engineering the Power Core of Next-Generation eVTOLs

Dr. Qichao Hu, *Founder, Chairman & CEO,* ***SES AI***

This session explores how SES AI's advanced lithium-ion and hybrid-solid-state cell platforms, engineered with AI-accelerated material discovery and predictive modeling, are redefining energy and safety performance for aerospace applications. Attendees will gain insight into how data-driven cell development, electrochemical simulation, and vertical integration can de-risk flight-critical battery programs from prototype through qualification.

- Design trade-offs for eVTOL energy systems: Specific energy vs. power output, cycle life, and safety envelope optimization.
- AI-driven materials engineering: Leveraging machine learning for electrolyte stability, SEI formation control, and accelerated aging prediction.
- Thermal & safety validation: Integrating in-situ sensing, abuse testing data, and digital twins to inform certification evidence.
- System integration: Electrical, thermal, and mechanical interfaces between cell, module, and aircraft architecture.
- Partnership model: Why early, concurrent engineering between OEM and cell supplier shortens certification and improves manufacturability.

15:40 AIRO

Metal Replacement for Next-Generation Battery Enclosures: Composite and Modular Solutions for eVTOL Platforms

Arash Jahangir, *SVP Business Development,* ***AirGo***

Lightweighting and safety compliance are critical to certifying and scaling eVTOL platforms. This session highlights two breakthrough approaches that replace traditional metal enclosures with advanced composite and modular designs:

- AI-Accelerated Fiber-Reinforced Thermoplastics (FRTC): Leveraging AirGo's ATLAS-AI CAE software to cut simulation cycles from weeks to hours, improve accuracy by 90%, and reduce computing loads by 70%.
- Lightweighting Case Studies: Results from leading aerospace and automotive programs demonstrating >70% weight savings and >90% CO⊠ reductions compared to metal solutions.
- Modular Battery Enclosures: A novel cell-holder architecture 90% lighter than conventional designs, with ultrathin 0.5 mm walls for maximum packaging efficiency.
- Thermal Runaway Containment: Proven ability to contain 100% SOC thermal events, limiting neighboring cells to <100 °C under trigger conditions at 460 °C.
- High-Voltage Safety & Scalability: Full insulation up to 3000 V DC and rapid, high-volume assembly validated through OEM-level vibration, drop, and thermal safety testing.
- Lightweight Drone Structures: AirGo has also developed and qualified FRTC-based structural components for next-generation lightweight drones, achieving up to 45% weight reduction compared to aluminum assemblies while maintaining stiffness, impact resistance, and manufacturability. These drone programs have validated AirGo's composite process scalability and its ability to deliver aerospace-grade performance in compact, high-frequency operational environments.

16:00 Infineon

Unlocking Efficient and Reliable eVTOL Performance: Using Best-in-Class Semiconductor Solutions

Steven Ohanesian, *Director of Business Development,* ***Infineon Technologies***

eVTOL aircraft require innovative solutions to achieve efficient, reliable, and safe operation. Cutting-edge improvements in semiconductors, electronic solutions, and packaging technology are addressing the unique challenges of eVTOL designs, enabling higher levels of system performance and reliability. This session will highlight some of the major enablers, including:

- High-efficiency power electronics, enabled by Silicon Carbide (SiC) technology, which increase battery life and reduce downtime.
- Advanced semiconductor packaging solutions that impact thermal management, reliability, and overall system performance.
- The benefits of high-voltage operation, including reduced cabling, component size, and weight, which contribute to improved eVTOL efficiency and range.
- The critical role of Battery Management Systems (BMS) and how Infineon's solutions integrate with BMS to enhance overall system efficiency and safety.
- The multiple benefits of Infineon's Aurix controllers, which provide redundancy, meet regulatory requirements, and enable safe design and certification.
- Upcoming technologies bringing additional benefits to eVTOL designs such as increased power density, improved reliability, and reduced maintenance.

16:20

Afternoon Refuel & Connect

Hosted By Glenair

17:00 AIBOT

From Model to Mission — Flight Controls, System ID, and Autonomy

George Jacobellis, *Head of Flight Sciences,* ***AIBOT***

AIBOT walks through the end-to-end pipeline for an autonomous, tilt-wing eVTOL: from modeling and system identification (SID) to flight-control design and mission execution. Using the T500 uncrewed tilt-wing, eight-rotor platform as a case study, the session details how NASA-style SID methods were applied to real flight-test data to refine aero-propulsive models and optimize control laws—accelerating readiness for high-speed, high-reliability operations in public safety, logistics, and industrial missions.

- Design & validate an eVTOL SID campaign (orthogonal/multisine inputs) to produce frequency-domain models for hover–transition flight.
- Specify & tune tilt-wing control allocation and handling-quality targets across hover, transition, and wing-borne regimes.
- Integrate autonomy with flight-control models to meet public-safety, infrastructure, and emergency-response mission needs.
- Evaluate Phase-II flight-test data and plan envelope expansion that translates into production-intent configurations and airworthiness evidence.
- Communicate technical outcomes (performance, transition smoothness) via a focused demo/exhibit briefing that aligns stakeholders on operational value.

17:20 NeoGraf Solutions

Thermal Management in UAV and eVTOL Batteries: Preventing Hot Spots, Extending Life, and Enhancing Safety

Bret Trimmer, *Applications Engineering Manager,* ***NeoGraf Solutions***

Thermal control dictates range, life, and safety. This session turns materials-led and hybrid cooling into cert-ready designs—showing how graphite spreaders, TIMs, and targeted active cooling eliminate hot spots, slow degradation, and contain events.

- **Why thermals matter:** Cell temp spread > power fade, aging, and TR risk.
- **Choose the approach:** Passive vs active vs hybrid—weight, complexity, performance.
- **Materials in action:** SpreaderShield™ graphite, HiTherm™ TIMs, NeoNxGen® for hotspot control & propagation resistance.
- **Case lessons:** Ag UAVs (sustained power), delivery UAVs (lightweight hybrids), and scaling to eVTOL duty cycles.
- **Design details:** Vent paths, sensor placement, and turnaround heat removal for fast charging.
- **Evidence & cert:** Test matrices (cell>module>pack), TR containment demos, DO-160/DO-311A hooks.
- **Maintainability:** Service-friendly interfaces (blind-mate coolant), leak detection, and health monitoring.

17:40 TE

Redefining Connectivity for Next-Generation eVTOL Platforms

Eric Weingartner, *Sr. Manager of Product Management,* ***TE Connectivity***

This session will explore TE's latest innovations, including small, light-weight power switching

solutions utilizing solid state and electro-mechanical technology, anti-fretting connectors, shape-optimized power cables, and "follow-the-wire" methodology for system-level optimization to enable certification-ready eVTOL designs.

- Understand how advanced power switching technology enhances load handling performance at high voltage.
- Explore power and data interconnect solutions optimized for high-voltage aviation requirements.
- Gain insight into SWaP-focused design strategies to maximize performance while minimizing weight and space.
- Learn how "follow-the-wire" methodologies improve safety, reliability, and maintenance efficiency.
- Assess how interconnect innovations are enabling certification and scalable production of eVTOL aircraft.

18:00 Lufthansa Consulting

Airspace Integration for eVTOL Operations: Managing Traffic Complexity and Scaling Solutions

Pedro Macedo, *Aviation Consulting,* ***Lufthansa Consulting***

Safely blending eVTOL with legacy traffic demands new playbooks—geofencing, dedicated corridors, remote vertiport networks, and dynamic, data-driven traffic services. This session turns concepts into operational rules and interfaces that scale.

- **Design the airspace:** Interface eVTOL patterns with major-airport ops without adding controller load.
- **Keep it safe:** Separation strategies, conflict detection/resolution, and resilience to disruptions.
- **Geofence & corridorize:** Use controlled zones and "aerial highways" to simplify flows.
- **Network the pads:** Connect remote vertiports into U-space/UTM frameworks.
- **Go dynamic:** AI + real-time data for adaptive routing, metering, and demand/capacity balancing.
- **Measure & govern:** KPIs, data sharing, and roles/responsibilities across ANSPs, cities, and operators.

18:20 MIGHTY Fly

Scaling Autonomous Cargo eVTOL Operations: FAA Progress, BVLOS Expansion, and Commercial Applications

Manal Habib, *CEO & Aerospace Engineer,* ***MightyFly***

Cargo is the fastest on-ramp for autonomous eVTOL operations—fewer passenger constraints, higher risk tolerance, and clearer logistics ROI. This session maps the practical path from today's flight trials to scalable, revenue-generating networks: current FAA initiatives, BVLOS rulemaking and waivers, DAA/C2 approvals, ground ops standardization, and the commercial routes where autonomy pencils out first.

- Regulatory runway: How near-term FAA pathways (waivers, exemptions, type/production cert building blocks, 135 approvals) unlock autonomous cargo at scale—what's approved vs. what still needs data.
- BVLOS at scale: Architectures for Detect-and-Avoid (onboard + network), C2 link assurance, and CONOPS that meet corridor and contingency requirements.
- Operational economics: Dispatch reliability, pad/turn time, weather minima, battery cycle life, and cost-per-ton-mile—how to hit 85–90% availability.
- Safety case packaging: Data packages, FOQA/FRMS for autonomous ops, and how to convert pilot programs into repeatable approvals.
- Commercial beachheads: Middle-mile logistics, medical/critical spares, offshore/remote resupply, defense dual-use—what routes and partners de-risk first deployments?el shifts, utilization gains, and new service lines (cargo/regional/urban).

18:40 skyportz

Vertipads: Engineering, Safety & ROI for Real-World AAM

Clem Newton-Brown, *CEO & Founder,* ***Skyportz***

Justin Wiley, *Strategy & Development,* ***UC Berkeley ITS***

The technical realities—downwash/outwash, fire safety, noise, and community license—are colliding with hard questions about who funds, builds, and operates the first wave of pads. This session reframes "vertiports as infrastructure" into "vertipads as an investable product."

- Challenges of urban vertiports – Downwash/outwash, fire, noise, and safety considerations.
- Breaking up vortices – Explanation of the patented design and how it mitigates downwash and outwash.
- Noise and community licence – Disrupting windspeeds and the flow on benefits for noise amelioration.
- Fire safety – The "dunk tank" suppression systems to halt thermal runaway.
- The role of the property industry – The need for a minimum viable product to secure a multitude of vertipads.
- Who pays and is there a ROI? -Is there money to be made from building and operating vertiports?
- The cautionary tale – The Segway scooter failure. Awesome tech but a commercial flop
- IP for free – Collaboration opportunities for test beds, OEMS and early adopters. First USA site announced.

19:00 EMBRY-RIDDLE Aeronautical University

Next-Gen Pilots: eVTOL User Acceptance Across Diverse Pilot Demographics

Anna Golendukhina, Embry-Riddle Aeronautical University

As Advanced Air Mobility rapidly advances, pilot readiness and acceptance will influence how seamlessly eVTOL operations scale into the national airspace. This presentation delivers new insights from Embry-Riddle research examining how pilots from varied experience levels perceive autonomy, transfer traditional skills into advanced eVTOL flight profiles, and prepare for operational transition.

- Acceptance and trust in autonomous flight control capabilities
- Skill transferability for advanced eVTOL maneuvers (precision landing, hover-transition, mid-air repositioning)
- Preferred training pathways and willingness to operate eVTOL technology
- Tailored curriculum design for diverse pilot backgrounds
- User-centric training strategies to sustain motivation and ensure smooth workforce integration

Insights from this study support safer certification, informed training investments, and improved pilot onboarding as OEMs and operators build the next generation of urban air mobility operations.

19:20 | Closing Remarks

19:30 | All Attendee Drinks Party

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OEM / eVTOL Manufacturer

- Prices include food & beverages, morning breakfast & coffee
- Networking breaks, coffee and snacks. Hot buffet luncheon
- Afternoon coffee break including soft drinks & snacks
- All attendee evening drinks reception – open bar

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Supplier / Vendor

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- Networking breaks, coffee and snacks. Hot buffet luncheon
- Afternoon coffee break including soft drinks & snacks
- All attendee evening drinks reception – open bar

SUMMIT Rate	OEM/eVTOL Manuf.
$999	

SUMMIT Rate	Supplier/Vendor
$1,500	

All tickets include our All-Attendee Drinks Reception & Party

Inc. Drinks, snacks, canapés & House DJ

It's one of the **highlights of the show:** a relaxed, high-energy evening attended by **400+ guests** across OEMs, Tier-1s, regulators, operators, and investors. Continue the conversations from the day, meet new partners, and celebrate with the community before day two kicks off.

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