













LIGHTWEIGHT MATERIALS

MANUFACTURING

BATTERY THERMAL MANAGEMENT

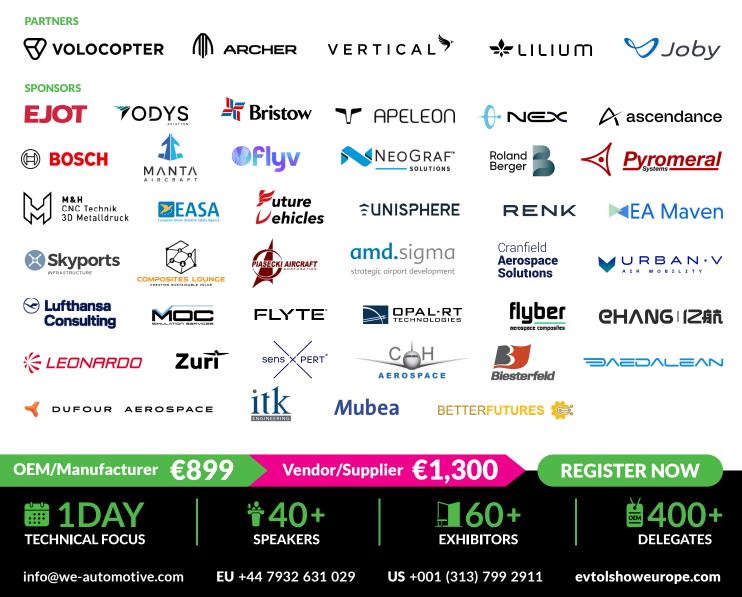
BATTERY SYSTEMS & TECHNOLOGY

CHARGING INFRASTRUCTURE

VERTIPORT

SAFETY CERTIFICATION

EUROPE'S PREMIER EVENT FOR INDUSTRY LEADERS, INNOVATORS, AND TECHNICAL EXPERTS TO EXPLORE THE LATEST BREAKTHROUGHS IN ELECTRIC VERTICAL TAKE-OFF AND LANDING (EVTOL) TECHNOLOGIES





## **CUTTING-EDGE INSIGHT DELIVERED BY EXPERTS** AND **THOUGHT LEADERS**

Our programs are diligently researched and curated in partnership with the eVTOL community, to ensure they address the most pertinent current challenges and key investment areas. This level of detail is part of our pioneering approach to content and ensures that we attract the highest level of attendees.



**Rohit Wariyar** Business Development & Public Affairs Volocopter GmbH



**Darrell Swanson** Co-Founder / Strategic Advisor on Advanced Air Mobility Electric Aviation I EAMaven



Xavier Burgat Sales Director Ascendance



Dr. Holger Kühnei Expert Cyber Security I ITK Engineering



Rowan Carstense Co-Founder & CEO | Flyber Aerospace Composites



Wojcjech Reczek Senior Vertiport Planner Skyports Infrastructure



**Christian Heller** Independent Business Development and Supply-chain Expert | Aerospace & eVTOL



**Marvin Koenig** Senior Manager Government Relations & Public Affairs Europe | Lilium



Lucas Marchesini Co-Founder & CEO Manta Aircraft



Arvind Chandrasekhar Associate Partner | Head of Network & Fleet Management Solution Group I Lufthansa Consulting



Kalin Stoyanov Head of Business Development Daedalean Al



Jose Ignacio (Nacho) Rexach Chief Commercial Officer for Europe and Latin America I EHang



Johannes Hien Head of Design I Cranfield Aerospace Solutions Ltd



**Steffen Kress** Head of Business **Development and Sales** | Mubea Aviation

**Dave Stepanek** Executive Vice President & Market Development Manager Chief Transformation Officer Vertical Aerospace Ltd. **Bristow Group** 



Mauro Berzovini Head of Partnerships & Funding Scouting and Management Leonardo Helicopters



Pedro Macedo Consultant Lufthansa Consulting



**Hicham Benmai** Product Manager / Test Systems Aviation I RENK Test System GmbH



**Bret Trimme** Application Engineering **INFOGRAF** Solutions



**Calogero Giammusso** Head of Operations Urban V



Nicholas Ecke Application Engineer SensXpert



Jonathan Stephens

Head of Airworthiness

**I Odys Aviation** 

Barbara Verdeio

ssociate Consultant

Lufthansa Consulting

Ilkay Özkisaoglu

Co-Founder and Facilitator

| The Composites

Lounge

Certification



Stefan Andres eVTOL Chief of Product -Consultant | Piasecki Aircraft Corp



Jochen Wagner Head of Sales and Business Development M&H CNC Technik GmbH



Olaf C. Bünck Senior Manager - Strategic Airport Development l amd.sigma, Munich Airport Consulting



Head of Product Marketing NEX Aero GmbH



**Timo Zehetmayr Operations Manager** Start Up Team Member I flyybird Gmbh



Go-To-Market Director -Transportation and Power Electronics | OPAL-RT



Founder & CEO APELEON



Luc Tytgat Directeur exécutif I EASA - European Union Aviation Safety Agency



Joerg Mecks Team Leader Charging Systems | Bosch Engineering GmbH



Michal Illich Founder & CEO I Zuri



Johannes Garbino-Anton CTO & Co-Founder NEX Aero GmbH



**Anthony Mc Loughlin** Founder & CEO Better Futures Al



Simon Bendrey Head of Design Dufour Aerospace



Víctor Jiménez **Business Development** Manager Composites



**Emilia Torres Gamboa** 









**Dr. Christoph Selis** Chief Commercial Officer & Co-Founder











TECHNOLOGIES





US +001 (313) 799 2911 | evtolshoweurope.com

info@we-automotive.com | EU +44 7932 631 029



## WELCOME TO THE EVTOL SHOW EUROPE 2025

### EUROPE's PREMIER TECHNICAL GATHERING OF eVTOL INDUSTRY LEADERS, INNOVATORS AND ENGINEERS

### JOIN 400+ eVTOL PROFESSIONALS

The eVTOL SHOW EUROPE 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.

### 40+ 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 40+ expert speakers at this year's eVTOL Smart Manufacturing EUROPE 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!

### 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 EUROPE empowers manufacturing leaders and their suppliers to navigate this evolution and address shared challenges to drive long-term growth.

### 60+ EXHIBITOR SHOWCASE

Seize the opportunity to sponsor and exhibit at the eVTOL SHOW EUROPE 2025 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

Join Europe'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 indepth 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.

### 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 cuttingedge 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.

### 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.

### 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**



#### 07:20 | Morning Registration

#### 08:00 | Chair's Opening Remarks

### Europe's Role In Shaping The Global eVTOL Market

### *Marvin Koenig,* Senior Manager Government Relations and Public Affairs Europe, *Lilium*

Europe plays a pivotal role in shaping the global eVTOL market, driving advancements in innovation, regulation, and sustainability. We will discuss how European manufacturers and developers are setting industry standards while navigating challenges like regulatory barriers, production scalability, and infrastructure readiness. Insights will highlight current trends in manufacturing efficiency and the critical obstacles the industry must overcome for future growth.

#### 08:20

#### Paving The Way For Air Taxi Deployment: Challenges And Opportunities In Urban Air Mobility

#### Luc Tytgat, Executive Director, EASA -European Union Aviation Safety Agency

Deploying air taxi services in urban areas promises to revolutionize transportation but comes with significant challenges. From designing flight corridors that ensure safety and minimize noise to building vertiports and gaining public trust, the road to widespread air taxi adoption is complex. This presentation will examine the technical, regulatory, and societal hurdles faced by eVTOL manufacturers, vendors, and battery suppliers. Attendees will gain insights into Europe's regulatory frameworks and strategies for overcoming barriers to successful deployment.

- Understanding Regulatory Foundations: Explore EASA's comprehensive regulatory framework for VTOL operations, including airworthiness, flight crew licensing, and U-space integration.
- Addressing Technical Challenges: Learn about the design of flight corridors, vertiports, and the integration of safety measures to minimize environmental impact and enhance operational efficiency.
- Building Public Trust and Adoption: Analyze public perceptions of Urban Air Mobility, strategies to address societal concerns, and approaches to foster confidence in air taxi services.

#### 08:40

#### Advancing Advanced Air Mobility In China: Leveraging Low-Altitude Economy Development And Sharing OEM Expertise For Global Urban Air Mobility Deployment

Jose Ignacio (Nacho) Rexach, Chief Commercial Officer for Europe and LatAm, EHang

China is at the forefront of Advanced Air Mobility (AAM) development, driven by favorable policies

and regulations that actively support Urban Air Mobility (UAM) and the Low-Altitude Economy. China's strategic framework fosters collaboration through public-private partnerships, facilitating innovation and growth. The country's immense market demand further accelerates the adoption of AAM solutions, making it a pivotal player in the global landscape.

China's leading industries in electric batteries, electric vehicles, communication and information technology, and drones contribute to an integrated value chain, creating a robust ecosystem for AAM. By leveraging these synergies, EHang is not only advancing local operations but also sharing their expertise globally to ensure the safe and efficient deployment of UAM systems worldwide.

- Understand China's AAM Leadership: Explore how favorable policies, public-private partnerships, and immense market demand position China as a global leader in Advanced Air Mobility (AAM) development.
- Examine Integrated Ecosystems: Learn how China's industries—electric batteries, electric vehicles, communication technology, and drones—create a synergistic value chain driving innovation in AAM.
- Global Impact of EHang: Gain insights into how EHang leverages China's AAM ecosystem to advance local operations and share expertise for the safe, efficient global deployment of Urban Air Mobility (UAM) systems.

#### 09:00

#### Scaling Advanced Air Mobility: Five Critical Theses For A Safe And Scalable Future

### **Dave Stepanek,** Executive Vice President & Chief Transformation Officer, **Bristow Group**

This session will provide key learnings on the foundational elements for successfully launching and scaling Advanced Air Mobility (AAM). Participants will gain insights into the critical areas of technology, regulation, funding, and ecosystem readiness necessary for AAM growth. The presentation will outline five core strategies, including how to leverage existing B2B logistics models, partner with experienced air carriers, and optimize infrastructure for scalability. Attendees will also explore the benefits of collaboration with seasoned operators and the importance of data-sharing to drive global scalability and secure AAM's place in future transportation networks.

- Understand the advantages of a B2B logistics model for early-stage AAM operations within industrial areas.
- Identify the role of licensed air carriers with vertical lift expertise in establishing safe, efficient AAM operations.
- Recognize the importance of collaborating with experienced operators to facilitate public adoption and market readiness for AAM.
- Assess the benefits of using carriers with existing infrastructure and data-sharing capabilities to enable global scalability in AAM.
- Learn best practices for managing health and flight data in AAM operations according to aviation industry standards.

#### 09:20 | OEM Panel

#### Clearing The Path To Market: eVTOL OEM Panel

Mauro Berzovini, Head of Partnerships & Funding - Scouting and Management, Leonardo Helicopters

Xavier Burgat, Sales Director, Ascendance

Janathan Stephens, Head of Airworthiness & Certification, Odys Aviation

Stefan Andres, Chief of Product, Piasecki Aircraft Corporation

Andreas Fuerlinger, Founder & CEO, Apeleon

**Emilia Torres Gamboa,** Head of Product Marketing, **NEX Aero GmbH** 

As the eVTOL industry accelerates toward commercial viability, major OEMs face a suite of critical challenges that shape their development timelines and strategic decisions. The panel assembles leaders from prominent OEMs to share insights on navigating some of the sector's toughest obstacles. From the race for certification and talent recruitment to the impact of global financial instability, these executives will discuss both their strategies and the overarching trends influencing eVTOL's path to market readiness.

#### 09:50

#### Propelling Air Cargo Forward: A Visionary Path To Hydrogen-Powered Innovation

### Johannes Garbino-Anton, CTO & Co-Founder, NEX Aero GmbH

Explore the cutting-edge hydrogen fuel cell technology, highlighting its seamless integration with existing infrastructure and its impact on operational efficiency. Attendees will gain insights into how these drones, designed for vertical takeoff and landing, operate effectively across challenging environments—from offshore platforms to remote industrial sites. The discussion will focus on the technological advances enabling cost-effective, long-range missions for supply delivery, inspection, and repair.

- Analyze the role of hydrogen fuel cells in enhancing range, durability, and adaptability in varied conditions.
- Understand the integration of hydrogen technology into existing infrastructures, including fueling logistics and power management.
- Explore the technical specifications enabling vertical takeoff and landing in diverse environments, optimizing mission flexibility.
- Discover the efficiencies gained through autonomous inspection, repair, and supply missions, with a focus on remote and offshore applications.
- Examine real-world applications and data on cost savings, productivity boosts, and enhanced operational safety in mission-critical industries

### Vendor/Supplier €1,300

#### Cybersecurity Meets eVTOL: Risks For eVTOLs And New Certification Requirements

### Dr. Holger Kühner, Expert Cyber Security, ITK Engineering

This presentation will showcase unique attack vectors of eVTOL aircraft and highlight the new certification requirements based on DO 326/356 and ED 202/203 that have to be satisfied in order to harden eVTOL aircrafts against attacks. We will highlight common challenges when implementing the required methods (e.g., in the SRA) and showcase how existing solutions from other domains can be applied without having to reinvent the wheel.

- Explore potential cybersecurity risks for eVTOL aircrafts
- Understand the new cybersecurity
- certification requirements (DO 326 / ED 202) • Learn how you can leverage cybersecurity solution and expertise from other domains

#### 10:30 | MORNING BREAK

#### 11:00

#### Engineering Hybrid eVTOLs With Sustainable Aviation Fuel (SAF) For Long-Range Flight

#### Michal Illich, Founder & CEO, Zuri

In the pursuit of sustainable, long-range eVTOL solutions, hybrid aircraft powered by Sustainable Aviation Fuel (SAF) present a unique path forward. With pure electric models facing limitations in energy density and range, a hybrid configuration offers a compelling alternative for extended flights, achieving 500-700 km on a single charge. Zuri's founder will unpack the complexities of designing and developing VTOLs with hybrid powertrains, focusing on the specific engineering challenges, regulatory hurdles, and operational pain points in creating a greener aviation solution.

- Balancing battery weight with fuel efficiency and emissions, a key challenge for achieving optimal performance and sustainability.
- Addressing the practical and logistical barriers in accessing and distributing SAF, particularly in emerging markets.
- Navigating global regulations for SAF and hybrid technology integration, and the critical role of consumer trust in adopting hybrid VTOLs for urban air mobility.
- Understand the technical and logistical challenges of integrating SAF and hybrid powertrains into VTOL aircraft designs.
- Discover best practices for managing the infrastructure demands and supply chain issues related to SAF.
- Gain insights into the regulatory and market forces shaping the adoption of hybrid aircraft in sustainable aviation.

#### 11:20

#### Metal Additive Manufacturing: The Ultimate Enabler For High Performance eVTOL

Jochen Wagner, Head of Sales and Business Development, M&H CNC Technik Gmbh, IIz, Austria The eVTOL market is increasing tremendously. Since the first concept emerged more than 15 years ago, more and more OEM have entered into this field.

The competition in regards to range and price level has started.

Metal additive manufacturing is the ultimate enabler for high performance eVTOL by offering solutions for light weight designs in combination with high strength materials. Proven designs for best in class heat exchangers and cooling units as well as 3D printed components for hydrogen applications, e.g. fuel cells, are already in use.

- Light weight design reduced wall thickness + topology optimization
- High strength light materials
- Best in class heat exchangers and cooling units
  Hydrogen applications already produced and approved
- Proven experience in Airworthiness projects

#### 11:40

#### Faster eVTOL Charging, Extending Range, And Propagation Prevention Through Advanced Battery Thermal Management

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

Optimizing thermal management for eVTOL batteries, covering best practices for maintaining performance. Key topics include factors influencing fast charging, strategies to prevent thermal runaway, and the advantages of flexible graphite over aluminum in lightweight applications.

- Understanding why effective thermal management is vital for optimizing the performance of eVTOL batteries
- Reviewing the latest goals and best current methods for drone, ePlane, and eVTOL battery thermal management
- Examining the five factors that allow cells to charge quickly and discussing the single factor that pack designers can control
- Exploring the four primary strategies battery pack manufacturers use to prevent Thermal Runaway and the impact of each on fast charging, cell performance, and cell lifetime
- Understanding the three key advantages that flexible graphite offers for thermal management
- For applications where smaller size and lighter weight is essential, flexible graphite will be discussed as a direct substitute for aluminium

#### 12:00

#### Building Step-By-Step: Assessing The Challenges Surrounding An Incremental Approach To VTOL Execution

### Jonathan Stephens, Head of Airworthiness & Certification, Odys Aviation

Odys Aviation presents an innovative, stepwise approach to VTOL (Vertical Takeoff and Landing) development that balances ambition with practical execution. By leveraging an incremental roadmap and collaborating closely with key suppliers, they're starting with a light UAS (Unmanned Aircraft System) cargo product. This automated cargo delivery platform provides a foundation for testing, training, and proof of concept, all paving the way toward certification and larger, passenger-capable aircraft.

• Understand the incremental roadmap that enables a gradual, sustainable path from UAS

cargo applications to larger VTOL aircraft

- Explore the importance of strategic partnerships with industry-leading suppliers in building a scalable, reliable supply chain for VTOL development
- Gain insights into how early-stage cargo solutions offer a controlled environment for testing automation and safety, building a case for regulatory certification and future aircraft scalability

#### 12:20 | Infrastructure Panel

#### Building The Infrastructure For eVTOL: What's Needed For Widespread Adoption?

#### Sven Kopera, Project Manager -

Industrials | Aerospace & Defence, **Roland Berger** 

#### Olaf C. Bünck, Senior Manager - Strategic Airport Development, amd.sigma + Munich Airport Consulting

*Wojciech Reczek, Senior Vertiport Planner, Skyports Infrastructure* 

**Darrell Swanson**, Co-Founder / Strategic Advisor on Advanced Air Mobility - Electric Aviation, **EAMaven** 

#### **Calogero Giammusso,** Head of Operations, **Urban V**

*Marvin Koenig,* Senior Manager Government Relations and Public Affairs Europe, *Lilium* 

Marjan Schoeke, Market Development Manager, Vertical Aerospace Ltd.

With the rollout of AAM, integrating both existing and new infrastructure becomes a critical challenge. This panel will address the need for a system-of-systems approach, considering multimodal transportation networks, shared resources like electricity and data, and the development of vertiports in strategic locations. Experts will share insights into planning and collaboration processes that keep stakeholders aligned, ensuring smart, interconnected AAM infrastructure for seamless integration into urban landscapes. Experts will explore how airports can adapt to the unique demands of eVTOL vehicles, including the necessary changes in operational protocols, charging infrastructure, and airspace management. The session will also address the challenges of coordinating with existing aviation operations while ensuring safety, efficiency, and sustainability.

- Understand the critical infrastructure components necessary for eVTOL deployment
- Explore the challenges of funding and regulatory compliance in building eVTOL infrastructure
- Learn about the importance of stakeholder collaboration in creating a cohesive eVTOL ecosystem

#### 13:00

### Introducing Engineering Verified Assistants

#### Anthony Mc Loughlin, Founder & CEO, Better Futures AI

- Why are Aerospace Engineers drowning in paperwork and AI is not helping them?
- Why is the GPT breakthrough an inflection point for Engineering but still nobody can use it?
- What are Engineering Verified Assistants?
- How can they radically accelerate certification and increase engineering productivity?

### Vendor/Supplier €1,300

#### evtolshoweurope.com

#### 14:00

#### Atea: Redefining Regional Air Mobility With Hybrid-Electric eVTOL Innovation

#### Xavier Burgat, Sales Director, Ascendance

This session introduces Atea, the first eVTOL aircraft powered by the Sterna system. Attendees will learn about Atea's innovative low-noise, low-carbon footprint design, which reduces  $CO_2$  emissions by up to 80% and extends operational range to 400 km. Key technical features will be covered, such as Atea's versatile performance, which allows it to serve decentralized regional transport needs efficiently, providing a viable solution where other modes are impractical.

- Overview of the Sterna powertrain technology and its role in reducing Atea's fuel consumption and CO₂ emissions by up to 80%, setting new standards in sustainable aviation.
- Technical specifications of Atea's range capabilities, including a 400 km operational range with a built-in 30-minute reserve, suitable for extended regional flights; how its efficient turnaround time is five times faster than other eVTOLs, enhancing operational productivity.
- Examination of noise reduction technologies that make Atea a low-noise alternative for urban and suburban areas, fostering greater public acceptance and regulatory compliance.
- Insights into Atea's adaptability for diverse operational scenarios, from replacing existing helicopter fleets to serving unique regional transport needs in passenger, medical, and cargo sectors.
- Analysis of how Atea's design offers significant savings in fuel, operating costs, and maintenance, making it an economically viable choice for operators focused on sustainability and efficiency.
- Discuss Atea's dual charging options ground and in-air—enhancing operational flexibility from unequipped sites and reducing environmental impact.

#### 14:20

#### (Re)-Engineering The European Supply Chain: What Do eVTOL And Investors Demand?

#### **Rowan Carstensen,** Co-Founder & CEO, **Flyber Aerospace Composites**

This presentation will examine the eVTOL supply chain's ecosystem to highlight the structural limits of the current manufacturing offering for production scalability, efficiency and return on investment. Particularly, it will discuss the challenges faced by European suppliers in meeting client's customisation, complex geometries at scale and with process flexibility, along with internal political/regulatory barriers for competitiveness. This session will also address the lack of capital allocation in European manufacturing and how to develop a more supportive environment to compete geopolitically.

- Understand supply chain's constraints in Europe in designing and developing automated solutions for the eVTOL and investor's demand.
- Explore the political and regulatory risks in manufacturing and how it has influenced eVTOL's growth and supply-chain selection

 Learn how collaboration between suppliers, OEMs, governments and investors can overwhelm geopolitical uncertainty and create a competitive landscape for vertical integration in Europe.

14:40

#### Engineering Hybrid-Electric eV/ STOL Aircraft For Multifunctional Aerial Applications: A Deep Dive Into Manta Aircraft's Platform Approach

#### Lucas Marchesini, Co-Founder & CEO, Manta Aircraft SA

This comprehensive technical session will explore the engineering and design strategies behind Manta Aircraft's hybrid-electric Vertical and Short Take-off and Landing (HeV/STOL) models, crafted for diverse applications in regional connectivity, specialized transport, emergency response, and surveillance. Attendees will gain insights into the technical innovations driving Manta's aircraft, from advanced hybrid-electric propulsion systems and carbon-fiber structural design to operational adaptability across various environments.

- Understand Manta's platform approach for modular aircraft design, allowing seamless adaptation to various applications, including medical transport, emergency response, and infrastructure surveillance.
- Explore Manta's hybrid-electric propulsion technology, optimized for eVT/STOL operations, providing a 300-800+ km range and high-speed cruise capability that balances fuel efficiency with battery management.
- Balancing battery weight with fuel efficiency, enhancing range and endurance without compromising safety.
- The use of advanced lightweight materials to ensure structural integrity while maintaining optimal performance metrics.
- Practical requirements for implementing Manta's models in regional settings, from vertiports to charging systems.

#### 15:00

#### Cutting-Edge Noise Reduction For eVTOLs In Urban Airspaces

#### Marjan Schoeke, Market Development Manager, Vertical Aerospace Ltd.

Advanced noise reduction strategies essential for integrating eVTOLs into urban environments. Examine innovative acoustic technologies and design solutions that minimize noise across takeoff, landing, and flight phases. Key topics include the role of rotor design, propulsion advancements, and material acoustics in reducing sound profiles, as well as the regulatory impact of evolving noise standards on eVTOL operations and public acceptance.

- Understand the critical role of noise reduction for urban eVTOL integration and operational feasibility.
- Explore leading-edge technologies and engineering strategies to lower noise emissions in eVTOLs.
- Analyze the regulatory landscape for noise standards and its influence on design and public perception in urban air mobility.

#### 15:20

#### Bridging eVTOL Challenges And Automotive Expertise: Innovating Battery Charging Systems For Urban Air Mobility

### Joerg Mecks, Team Leader Charging Systems, Bosch Engineering GmbH

The electrification of aviation, particularly eVTOLs, brings unique challenges to high performance battery charging systems. As the industry moves towards certification and commercial deployment, understanding and aligning with the evolving regulatory frameworks is crucial.

This session delves into the state of certificationrelevant standards and explores how established automotive standards can enhance the development of robust and efficient charging solutions.

Shifting the focus from global charging standards to the evaluation of the existing charging ecosystem, we will discuss the technologies based on the following key aspects:

- Applications: Leveraging automotive technologies to meet the high power and energy demands associated with operating eVTOL systems.
- Interoperability: Ensuring seamless integration between ground-based charging stations and aerial vehicle systems.
- Safety and Reliability: Fundamental considerations, adoption of proven safety mechanisms from the automotive sector.

#### 15:40

#### Exploring Synergies: Unlocking Opportunities For AirlineeVTOL Collaborations To Elevate Partnerships And Enhance Customer Experience

**Arvind Chandrasekhar,** Associate Partner | Head of Network & Fleet Management Solution Group, **Lufthansa Consulting** 

#### Pedro Macedo, Consultant, Lufthansa Consulting

#### Barbara Verdejo, Associate Consultant, Lufthansa Consulting

As airlines and eVTOL manufacturers explore collaboration opportunities, they face challenges in aligning operational models, integrating technologies, and meeting customer expectations for seamless travel experiences. Establishing effective partnerships requires addressing compatibility in infrastructure, regulatory compliance, and interoperability between traditional aviation and advanced air mobility (AAM) solutions. This presentation will identify key barriers to collaboration and offer actionable insights for fostering partnerships that enhance efficiency and elevate the customer journey.

- Identifying Collaboration Challenges: Understand the operational, regulatory, and technological hurdles in aligning airline and eVTOL operations to create cohesive travel ecosystems.
- Infrastructure and Integration Strategies: Explore solutions for integrating eVTOL infrastructure, such as vertiports and flight corridors, into existing airline networks and urban environments.
- Enhancing Customer Experience: Learn how to design seamless multimodal travel experiences that prioritize convenience, reliability, and sustainability for passengers.

Vendor/Supplier €1,300

#### Redefining Travel: The Future Of On-Demand Air Mobility

#### **Timo Zehetmayr,** Operations Manager - Start Up Team Member, **flyvbird Gmbh**

Participants will learn how flyv leverages underutilized infrastructure, AI-powered scheduling, and next-generation aircraft to unlock seamless journeys for distances between 100 km and 900 km.

The session will showcase practical use cases, compare flyv's innovative solutions to conventional travel methods, and discuss its potential to reshape the future of mobility.

#### 16:20 | NETWORKING BREAK

#### 17:00

#### Validating Electrical Distribution & Control Systems For UAM/eVTOL Through Ground Testing

#### **Hicham Benmar,** Product Manager / Test Systems Aviation, **RENK Test System GmbH**

As urban air mobility (UAM) and eVTOL technologies advance, validating the reliability and safety of electrical distribution and control systems is a critical step in the development process. Ground testing offers a controlled environment to assess system performance under real-world operating conditions. This session will provide a deep dive into the requirements of the UAM/eVTOL industry, the specific demands of test stands.

- Explore the technical and operational challenges in electrical system validation, including the impact of high-power loads, redundancy, and system resilience.
- Discover the critical elements of a test stand, including flexibility, scalability, and precision control, tailored for eVTOL applications.
- Gain insights into a cutting-edge approach to electrical distribution and control system validation, designed to ensure safety and reliability in UAM platforms.
- Learn how advanced automation and control systems streamline testing processes, enabling accurate, repeatable results and efficient fault analysis.
- Understand the role of fault induction, including AC fault simulation, in stress-testing electrical systems to identify vulnerabilities and improve overall system robustness.

#### 17:20

#### eVTOL Mission Simulation For Optimized Energy Management

### **Dr. Christoph Selig**, Chief Commercial Officer & Co-Founder, **Unisphere**

Energy efficiency is critical to the commercial success of eVTOL aircraft as it directly impacts operating costs, performance and scalability. This session will explore how advanced simulation technologies and flight planning strategies are shaping the future of eVTOL technology. Attendees will learn how Unisphere's expertise in simulation, data analysis, and flight planning - developed through its work on the groundbreaking Solar Impulse project - provides practical solutions for eVTOL manufacturers and operators.

This session will demonstrate how simulationbased flight planning using historical weather data provides insight into the impact of wind on flight times and energy consumption. This approach supports optimized battery planning and mission-specific operating profiles. Unisphere will also share findings from a forthcoming white paper that includes real-world case studies from San Francisco and Chicago. Topics will include altitude effects, comparisons of different eVTOL configurations and their impact on flight times, mission planning and energy consumption.

- Understand Weather Impact on different eVTOL Configurations: Discover how wind affects flight time and energy consumption, and how the impact differs for different eVTOL configurations, such as multicopter vs. tiltrotor concepts.
- Optimize Operational Profiles: Explore the influence of route characteristics and altitude profiles on the energy consumption and different operational scenarios to optimize for fastest flight times or lowest energy consumption.
- Gain Actionable Insights for Network Planning: Learn how Unisphere uses historical weather data to provide insights into average flight times and minimum/maximum values for specific routes to support network planning, taking into account seasonal effects.
- Expectation Management: Understand the variation in weather conditions for specific routes/networks, which is key to managing customer expectations and for identifying areas with favorable conditions for early eVTOL operations.
- Integration eVTOL and Vertiports in urban environments: Learn about findings from SESAR research project EUREKA on how operational data analytics can improve eVTOL procedure planning in cities, taking into account wind constraints specific to eVTOL aircraft.

#### 17:40

#### Hydrogen Fuel Cells In eVTOL: Overcoming Technical And Safety Barriers For Sustainable Aviation

Johannes Hien, Head of Design, Cranfield Aerospace Solutions Ltd

- Experiences and lessons of implementing hydrogen fuel cell technology in eVTOL aircraft, particularly Project FRESSON, examining the technical and operational challenges encountered and the solutions developed to overcome them
- Understand the landscape of existing eVTOL aviation projects that are incorporating hydrogen high-temperature fuel cells, highlighting the technological advancements and the companies leading the charge in this innovative sector
- Discover the advantages of using hydrogen fuel cells in eVTOL applications, including increased energy efficiency, longer range, and lower operating costs
- Explore the critical safety protocols and measures necessary for the successful integration of hydrogen high-temperature fuel cells in aviation, addressing concerns related to hydrogen storage, handling, and overall aircraft safety
- The future of hydrogen-powered eVTOLs, anticipated technological advancements, regulatory developments, and the potential for mass adoption in the urban air mobility market

#### 18:00 | Composites Panel

#### The Requirements For Fiber-Reinforced Composites In eVTOLS

Ilkay Özkisaoglu, Co-Founder and Facilitator, The Composites Lounge

**Christian Heller**, Independent Business Development and Supply-chain Expert in Aerospace & eVTOL, **CH Aerospace** 

**Steffen Kress,** Head of Business Development and Sales, **Mubea Aviation** 

Nicholas Ecke, Application Engineer, SensXpert

Víctor Jiménez, Business Development Manager Composites, **Biesterfeld** 

Simon Bendrey, Head of Design, Dufour Aerospace

The panel will explore the critical role of advanced composite materials in the development and certification of electric vertical take-off and landing (eVTOL) aircraft. Industry experts will discuss the unique challenges these materials face, including balancing weight reduction with structural integrity, meeting stringent safety and certification standards, and scaling production to meet market demands. Attendees will gain insights into how fiberreinforced composites can help solve these issues and accelerate the adoption of eVTOL technologies.

- Understand the material performance requirements for fiber-reinforced composites specific to eVTOL applications, including strength, weight, and durability.
- Identify the key certification and safety challenges for composites in eVTOLs and explore strategies to address them.
- Explore scalable manufacturing processes for composites to support cost-efficient production and commercialization of eVTOL aircraft.

18:40

#### Situational Intelligence In The Cockpit: Al's Role In Transforming eVTOL's Flight

### *Kalin Stoyanov,* Head of Business Development, **Daedalean Al**

Artificial Intelligence (AI) is reshaping aviation, enabling unprecedented levels of situational awareness, safety, and operational reliability. The presentation will explore the concept of "Situational Intelligence"—AI's ability to anticipate, interpret, and react to threats in dynamic environments. Attendees will gain a comprehensive understanding of AI's role in the journey toward autonomous flight, from task assistance to full autonomy, while addressing critical regulatory and certification challenges for AI systems in aviation.

- Insights into how AI supports and augments pilot decision-making for safer and more efficient operations.Phased integration of AI from pilot assistance to full autonomy.
- Frameworks for managing responsibilities between pilots and AI across varying levels of autonomy.
- Discussion of unique requirements for Al certification in aviation.
- Steps toward achieving compliance with evolving aviation standards for Urban Air

Vendor/Supplier €1,300

Mobility (UAM) and eVTOL applications.

- Practical use cases, including Helicopter Emergency Medical Services (HEMS), humanitarian missions, cargo delivery, and emerging eVTOL operations for UAM.
- How AI enables safer, more efficient operations in diverse, high-stakes environments.
- The transformative potential of AI in enhancing operational reliability and redefining pilot responsibilities.
- Future trends in Al's role in aviation safety, efficiency, and scalability.

#### 19:00

#### Advancing eVTOL Innovation With Hardware-in-the-Loop: Testing BMS, Motor Drives, And Flight Controllers

#### **Timo Roesch**, Go-To-Market Director -Transportation and Power Electronics, **OPAL-RT TECHNOLOGIES**

This presentation will explore the role of Hardware-in-the-Loop (HIL) testing in advancing eVTOL innovation, focusing on the validation of battery management systems (BMS), motor drives, and flight controllers. It will highlight how HIL simulations provide a robust environment for testing and optimizing critical components, ensuring their reliability and performance in real-world scenarios. The session will also discuss the challenges of integrating HIL testing into the development lifecycle and the importance of iterative testing in enhancing eVTOL safety and efficiency.

- Understand the principles and benefits of Hardware-in-the-Loop testing for eVTOL systems
- Explore how HIL simulations enhance the validation of BMS, motor drives, and flight controllers
- Learn about the challenges of integrating HIL testing into the eVTOL development process and its role in ensuring safety and reliability

**19:20** | Chair's Closing Remarks

19:40

All Attendee Drinks Reception

# **EVIO** SHOW EUROPE

**12 FEB 2025** STUTTGART, DE

# UNLOCK EXCLUSIVE SAVINGS RESERVE YOUR PLACE NOW!

### SUMMIT RATE OEM/MANUFACTURER €899

- 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

### SUMMIT RATE SUPPLIER/VENDOR €1,300

- 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

**ENQUIRE HERE** 

### **EVTOL SHOW USA ATTENDEES BY COMPANY 2023**

Archer Aviation, Joby Aviation, Volocopter, Lilium, Vertical Aerospace, EHang, Bell Nexus, Wisk Aero, Jaunt Air Mobility, Sabrewing Aircraft Company, Lift Aircraft, Manta Aircraft, XTI Aircraft Company, Jump Aero, Transcend Air Corporation, Electra.aero, Skyryse, AIR, Samad Aerospace, Rotor X Aircraft Manufacturing, Urban Aeronautics, AeroMobil, Airbus Urban Mobility, EVE, Karem Aircraft, Pipistrel, Astro Aerospace, Opener, Geely, Boeing, Beta Technologies, SkyDrive, Skyports, Urban-Air Port, VPorts, Volatus Infrastructure, Lilium Network, Vertiport Chicago, Ferrovial Airports, Munich Airport International (MAI), Landing International, InfraTech Aero, Honeywell Aerospace, Garmin, Thales Group, Collins Aerospace, GE Aviation, Safran, Rolls-Royce, Siemens eAircraft, Leonardo, Denso, Eaton, L3Harris Technologies, Raytheon Technologies, Toray Industries, Hexcel Corporation, Solvay, SGL Carbon, Teijin Limited, Cytec Industries, Mitsubishi, Evonik Industries, Arkema, Dupont, Henkel, 3M, BASF, PPG Industries, Aleris, Materion, Amphenol Aerospace, NASA, FAA, EASA, Uber Elevate, Boeing, Airbus, Lockheed Martin, General Motors, Stellantis, Ford Motor Company, Toyota, Hyundai, Honda Aircraft, Bosch, Panasonic, Samsung SDI, LG Chem, Northrop Grumman, KPMG, Deloitte, Skyports Infrastructure, Skybase, Urban-Air Ventures, eVTOL Airport Solutions, Airspace Experience Technologies, Aeroport Mobility, Horizon Urban Air Mobility, SkyGate, Airspace Systems, FlytBase Vertiports, Moog Inc., Parker Aerospace, BAE Systems, MTU Aero Engines, MagniX, Ampaire, Spirit AeroSystems, Meggit, AeroVironment, Kraton Corporation, Kordsa, Owens Corning, Gurit, Plasan Carbon Composites, Park Aerospace, AGY Holding Corp, Chomarat Group, SABIC, Lanxess, Victrex, Aviation Industry Corporation of China (AVIC), Embraer, Bombardier, Dassault Aviation, Textron Aviation, Bell Helicopter, Piaggio Aerospace, Aurora Flight Sciences, Textron Systems, US Air Force, Department of Transportation (DOT), National Renewable Energy Laboratory (NREL), Federal Communications Commission (FCC), International Civil Aviation Organization (ICAO), World Economic Forum (WEF), International Air Transport Association (IATA), Air Line Pilots Association (ALPA), American Institute of Aeronautics and Astronautics (AIAA), The Boeing Company, General Electric (GE), Lockheed Martin, Raytheon Technologies, Northrop Grumman, Bechtel, Fluor Corporation, Accenture, PwC, Ernst & Young (EY), McKinsey & Company, Boston Consulting Group (BCG), NeXt Aero, Jetpack Aviation, Alaka'i Technologies, Yuneec International, Hoversurf, Terrafugia Transition, AVX Aircraft Company. Ascendance . Vertiv. Global Air Mobility Solutions. SkyLanes. Heliports of America. SkyDock, VertiPort Americas. SkyGrid. Urban Port. Elevated Networks. Metro Skyways, CityAir Ports, Curtiss-Wright, Harris Corporation, Viasat, LORD Corporation, Esterline Technologies, Rockwell Collins, Teledyne Technologies, ITT Corporation, Schneider Electric, Hexagon AB, PPG Aerospace, Dymax

### THOUGHT LEADERSHIP

Establish your company as a thought leader by showcasing your latest innovations, insights, and best practices on the eVTOL Show 2025 stage. Deliver a keynote address, participate in a panel discussion, or host a workshop to educate, inspire, and solidify your position as a leader in the industry.

### MAXIMUM VISIBILITY

Elevate your brand's presence by connecting with a targeted audience of **eVTOL designers, engineers, manufacturing experts, and strategists.** Boost your visibility through prominent logo placement as an event sponsor and captivate the delegation with an engaging and interactive exhibition booth.

### NETWORKING OPPORTUNITIES

Forge impactful connections and collaborations with key decision-makers, influential leaders, existing and prospective customers at the largest global gathering of eVTOL manufacturers and operators. Enjoy extensive networking opportunities throughout the day, followed by a drinks reception and exclusive VIP dinners.

### **#SHOWCASE YOUR TECHNOLOGIES AND SOLUTIONS ATTHE EVTOL SHOW 2025**

PRESENT | SPONSOR | EXHIBIT | NETWORK

**CONTACT US** 

### **EVTOL SHOW USA ATTENDEES BY JOB TITLE 2023**

Chief Executive Officer (CEO), Chief Technology Officer (CTO), Chief Operating Officer (COO), Chief Financial Officer (CFO), Chief Innovation Officer (CIO), Chief Commercial Officer (CCO), President, VP of Engineering, VP of Manufacturing, VP of Operations, VP of Research & Development (R&D), VP of Product Development, VP of Business Development, Lead Engineer, Principal Engineer, Senior Engineer, Systems Engineer, Electrical Engineer, Mechanical Engineer, Aerospace Engineer, Software Engineer, Design Engineer, Structural Engineer, Propulsion Engineer, Test Engineer, Materials Engineer, Manufacturing Engineer, Production Engineer, Quality Assurance Engineer, Reliability Engineer, Safety Engineer, Integration Engineer, Simulation Engineer, Firmware Engineer, Controls Engineer, Battery Systems Engineer, Battery Pack Engineer, Power Electronics Engineer, Battery Management Systems (BMS) Engineer, Energy Storage Engineer, Thermal Management Engineer, Director of Research & Development (R&D), R&D Manager, Innovation Manager, Development Engineer, Product Development Manager, Experimental Test Pilot, Aerodynamics Specialist, Battery R&D Scientist, Battery Chemist, Materials Scientist, Supply Chain Manager, Logistics Manager, Procurement Manager, Materials Manager, Inventory Manager, Operations Manager, Warehouse Manager, Supply Chain Analyst, Distribution Manager, Director of Business Development, Strategy Manager, Market Development Manager, Partnerships Manager, Strategic Alliances Manager, Client Relations Manager, Industry Analyst, Director of Regulatory Affairs, Compliance Manager, Certification Manager, Quality Manager, Regulatory Affairs Specialist, Environmental Compliance Manager, Safety Compliance Officer, Director of Operations, Operations Manager, Production Manager, Plant Manager, Operations Analyst, Production Planner, Lean Manufacturing Specialist, Six Sigma Black Belt, IT Manager, IT Infrastructure Manager, Cloud Solutions Architect, Cybersecurity Specialist, Network Engineer, Systems Administrator, Director of Marketing, Communications Manager, Brand Manager, Technical Support Engineer, Director of Finance, Financial Analyst, Controller, Legal Counsel, Battery Systems Engineer, Battery Pack Engineer, Battery Management Systems (BMS) Engineer. Battery Design Engineer, Power Electronics Engineer, Battery Research Scientist, Battery Chemist, Energy Storage Engineer, Battery Thermal Management Engineer, Battery Testing and Validation Engineer, Materials Engineer, Composite Materials Engineer, Advanced Materials Scientist, Polymer Scientist, Metallurgist, Nanomaterials Engineer, Materials Testing Engineer, Structural Materials Engineer, Surface Coatings Engineer, Manufacturing Engineer, Production Engineer, Industrial Engineer, Process Engineer, Automation Engineer, Additive Manufacturing Specialist, CNC Programmer, Lean Manufacturing Specialist, Quality Control Inspector, Assembly Line Supervisor