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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

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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.



Business Development & Public Affairs I Volocopter GmbH



Sebastian Mores CTO | Volocopter GmbH



Senior Manager Government Relations & Public Affairs Europe | Lilium



Michael Cervenka Chief Technology Officer | Vertical Aerospace Ltd.



Marjan Schoeke Market Development Manager Vertical Aerospace Ltd.



eVTOL Chief of Product -Consultant | Piasecki Aircraft Corp



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



Lucas Marchesini Co-Founder & CEO | Manta Aircraft



César Nava Gaxiola Innovation Project Manager I Aena



Jonathan Stephens Head of Airworthiness Certification **Odys Aviation**



Dave Stepanek Executive Vice President & Chief Transformation Officer | Bristow Group



Joerg Mecks Team Leader Charging Systems I Bosch **Engineering GmbH**



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Sven Kopera Project Manager - Industrials Aerospace & Defence | Roland Berger



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



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Emilia Torres Gamboa Head of Product Marketing I NEX Aero GmbH



Johannes Garbino-Anton CTO & Co-Founder



Rowan Carstensen Co-Founder & CEO | Flyber Aerospace Composites



Catherine Roy Foresight & Design Leader, Design Center Quebec I Thales



Bret Trimmer Application Engineering Manager
I NEOGRAF Solutions



Adam Forsyth Head of Longspur Capital Markets & Head of Research | Longspur Capital Limited



Tomislay Lang Founder I flyvbird Gmbh



Chief Executive Officer | FlyNow Aviation GmbH



Woiciech Reczek Senior Vertiport Planner | Skyports Infrastructure



Head of Design | Cranfield Aerospace Solutions Ltd



Calogero Giammusso Head of Operations I Urban V



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 $\ensuremath{\mathsf{EV}}$ 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 To eVTOL Commercialization

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

As Volocopter navigates the urban air mobility market, its commercial strategy and market readiness are crucial. Volocopter will address the key commercial challenges in launching eVTOL solutions. Drawing on their experience, the session will outline the essential components of a go-to-market strategy, including regulatory navigation, market demand forecasting, and business model development shedding light on overcoming challenges in certification, consumer adoption, and infrastructure planning. The presentation will also outline actionable milestones, projected growth indicators, and the strategic shifts necessary for market success by

- Volocopter's approach to aligning product development with regulatory frameworks and the implications for market entry timelines.
- Evaluation of infrastructure needs, including vertiports and charging stations, to support Volocopter's scalable eVTOL operations and foster consumer adoption.
- Strategies for differentiating Volocopter in the urban air mobility space by leveraging niche opportunities and operational efficiencies.

08:40

Building Public Trust For eVTOL Success Through Strategic Communication

Catherine Roy, Foresight & Design Leader, Design Center Quebec, **Thales**

The success of eVTOLs hinges not only on tech innovation but also on gaining public trust. This session explores the vital role of social acceptance and outlines a robust communication strategy to address public concerns, manage expectations, and build trust throughout eVTOL development.

- Understanding the role of social acceptability in the success of eVTOLs and its impact on market growth
- Identifying the critical phases in eVTOL development where communication plays a pivotal role
- Learning strategies for fostering public trust through transparent, proactive communication
- Exploring best practices for managing communications during contingencies or operational challenges
- Gain insights on creating a sustainable future value proposition for eVTOLs by aligning technical progress with community engagement and acceptance

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

Panelists: **Rohit Wariyar**, Business Development & Public Affairs, **Volocopter**

Thibault Baldiva, Co-Founder & COO, **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.

10:00

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

10:20 | 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

Advanced Composites In eVTOL: Driving Efficiency And Lightweight Design For Next-Gen Aircraft

Explore the critical role of advanced composite materials-such as thermosets, thermoplastics, and fiber-reinforced composites-in eVTOL design, from structural to propulsion and interior components. Key areas include composite battery enclosures for thermal safety, lightweight materials in propulsion for efficiency, and fiberreinforced structures that improve performance and range. Additionally, attendees will learn about surface protection methods like lightning strike and galvanic barriers, ensuring durability and operational resilience across demanding environments.

- Examine how thermosets, thermoplastics, and fiber-reinforced composites contribute to structural integrity, propulsion efficiency, and lightweight design across eVTOL components.
- Explore the use of composite materials in battery enclosures to optimize thermal management, reduce fire risk, and enhance overall safety.
- Identify how advanced composite materials in propulsion systems reduce weight and improve fuel efficiency, thereby extending the operational range of eVTOLs.
- Learn how fiber-reinforced composites increase the strength-to-weight ratio, enhancing the structural performance and range of eVTOLs.
- Understand surface protection methods, including lightning strike protection and galvanic barriers, to ensure durability and reliability under diverse operating conditions.
- Analyze how advanced composites withstand wear, corrosion, and environmental stress. reducing maintenance costs and extending the lifespan of eVTOL components.

11:40

Building Tomorrow's Airspace: Mobility In Times Of Dwindling Resources

Jürgen Greil, Chief Executive Officer, FlyNow **Aviation GmbH**

Although the world population will grow to 10.5 billion by about 2080, the construction of ground-based transport infrastructure must be

questioned due to the declining birth rates. The demand for resources and energy per person-kilometre for production and operation on the vehicle- and infrastructure side has an enormous influence on national economies, since mobility is a cornerstone of economic growth. In order to establish 3D mobility as an alternative to ground-based transport systems, it must be superior in all areas such as safety, punctuality, comfort, noise, emissions, costs in production and operation.

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?

Moderator: Sven Kopera, Project Manager -Industrials | Aerospace & Defence, Roland

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

César Nava Gaxiola, Innovation Project Manager, Aena

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

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

13:20 | LUNCH BREAK

14:00

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

Thibault Baldivia, Co-Founder & COO, 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 CO₂ 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.

Key themes include:

- 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

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

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

16:00

Redefining Travel: The Future Of On-Demand Air Mobility

Tomislav Lang, Founder, 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

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

17:20

eVTOL Mission Simulation For Optimized Energy Management

Energy efficiency is a key factor in the commercial success of eVTOL aircraft. Manufacturers need to understand how mission-specific energy management can improve performance, lower operational costs, and ensure the viability of eVTOL technology across diverse routes. Attendees will explore the critical role of mission simulation in optimizing energy management for eVTOL aircraft. The session demonstrates how advanced simulation technologies can predict energy consumption across various operational scenarios, using multi-physics models to assess the entire propulsion system. By simulating specific missions, this approach not only forecasts energy usage but also identifies strategies for maximizing efficiency and validating hardware performance.

- Understand the importance of energy consumption analysis for eVTOL aircraft in various operational use cases.
- Explore how simulation and testing technologies can predict and optimize energy usage for eVTOL missions.
- Learn how multi-physics models provide comprehensive insights into the propulsion system's performance during mission analysis.
- Identify strategies for maximizing energy efficiency across different eVTOL mission scenarios.
- Discover how simulation technologies can validate hardware performance and optimize eVTOL energy management for real-world applications.

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

Optimizing Size Weight And Power (SWaP) For eVTOL Aircraft

TE Connectivity

This session delves into advanced design strategies for creating lightweight, efficient eVTOL components without sacrificing functionality. Key areas include optimizing size, weight, and power (SWaP) for propulsion systems, ensuring redundancy and durability under environmental stresses, and achieving scalable manufacturing processes. Attendees will also explore lifecycle management to reduce maintenance, innovative materials, and system designs that enhance power management and connect seamlessly with battery technology.

- Techniques for designing smaller and lighter weight components without compromising functionality
- Designing components to enable efficient propulsion systems and advanced power management
- Ensuring system redundancy and reliable electronics
- Designing systems to operate efficiently in varied weather conditions
- Ensuring long-term durability and resistance to environmental stresses
- Developing scalable and cost-effective manufacturing processes from functional prototype to serial product
- Minimizing maintenance and focusing on lifecycle management
- Understand the critical size, weight, and power challenges in eVTOL development
- Explore innovative materials and design techniques to optimize SWaP
- Learn about advancements in connecting to battery technology and power management
- Looking at the complete architecture with electrical propulsion system design

18:20

Advancements In Avionics & Control Systems For eVTOL Aircraft: Enhancing Autonomy, Safety, And Urban Integration

As eVTOL (Electric Vertical Take-Off and Landing) aircraft evolve from concept to reality, advancements in avionics and control systems are crucial for their safe and efficient integration into urban air mobility networks. This technical session will delve into the latest innovations, challenges, and solutions in avionics and control technologies that enable the autonomous,

reliable, and scalable operation of eVTOL platforms.

- Advancing Al-driven control systems for precise, reliable flight in urban environments. Enhancing redundancy and emergency response mechanisms to meet safety standards.
- Implementing communication protocols for seamless data exchange and collision avoidance. Ensuring cybersecurity and compliance for safe urban operations.
- Utilizing LIDAR, radar, GPS, and AI-enhanced guidance for accurate navigation and obstacle detection in dynamic airspaces.
- Designing intuitive control interfaces and augmented reality displays for improved pilot awareness and semi-autonomous operations.

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 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

The Future of eVTOL MRO

The future of Maintenance, Repair, and Overhaul (MRO) for eVTOLs, highlighting how it diverges from traditional aircraft MRO. Key areas include the use of advanced analytics, digital twins, and predictive maintenance for electric propulsion and battery systems; also unique material challenges, collaboration opportunities among MRO providers and manufacturers, and the evolving regulatory landscape shaping eVTOL MRO practices.

- Explore how the maintenance requirements for electric propulsion systems and highvoltage batteries differ from those of traditional aircraft.
- Examine the implications of new material compositions, such as lightweight composites, on repair and overhaul processes.
- Learn how data-driven insights and Alpowered predictive maintenance can reduce downtime and optimize eVTOL fleet performance.
- Discover how digital twins enable real-time monitoring and simulation for more efficient maintenance planning.
- Gain insights into the emerging standards and certification requirements for eVTOL maintenance operations.
- Understand how global regulatory frameworks are shaping the future of eVTOL MRO practices.
- Discuss how partnerships between MRO providers, OEMs, and technology developers can streamline maintenance solutions for eVTOL fleets.
- Identify upcoming innovations, such as autonomous inspection systems and AI-

assisted troubleshooting tools, that will redefine MRO practices.

19:20

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.

19:40 | Chair's Closing Remarks

19:45

All Attendee Drinks Reception



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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.

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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, Industry Analyst, Director of Regulatory Affairs, Compliance Manager, Certification Manager, Industry Analyst, Director of Regulatory Affairs, Compliance Manager, Certification Manager, Industry Analyst, Director of Regulatory Affairs, Compliance Manager, Certification Manager, Industry Analyst, Director of Regulatory Affairs, Compliance Manager, Certification Manager, Industry Analyst, Director of Regulatory Affairs, Compliance Manager, Certification Manager, Industry Analyst, Director of Regulatory Affairs, Compliance Manager, Certification Manager, Industry Analyst, Director of Regulatory Affairs, Compliance Manager, Certification Manager, Industry Analyst, Director of Regulatory Affairs, Compliance Manager, Industry Affairs, Compliance Manager, C 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