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DRONES WORLD

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Dhirubhai Ambani University Law | Copernicus Strategic Consulting CSC GmbH | SPAVIATECH LAW

Senior Executive Development Programme on Compliance, Safety & Regulations in Aviation

Onsite: Hamburg, Germany | 12th-15th January 2026

Programme Speakers

Prof. (Dr.) Avinash Dadhich
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Founder and Head, Copernicus Strategic Consulting CSC GmbH
Distnguished Honorary Professor, Dhirubhai Ambani University- School of Law

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Founding Faculty Member and Head of Executive Education at Dhirubhai Ambani University- School of Law

Sivadath Madhu Menon
Head of Aviation Law and Management Vertical at Dhirubhai Ambani University- School of Law

Key Topics

- EASA's Certification System and New Technologies Certification Challenges
- Legal Framework Governing International Civil Aviation: Key Conventions and Organisations
- Liability and Claims in Aviation : Legal and Regulatory Perspectives
- Aviation Security
- Export Control and Economic Sanctions in International Aviation
- Aviation Air Accident Investigations: International Best Practices, Safety Protocols, and Airworthiness Compliance with Case Study Analyses
- Environmental Governance in Civil Aviation: Reconciling Sectoral Expansion, Technological Innovation, and Regulatory Compliance
- Airbus Hamburg Final Assembly Line Visit
- Networking dinner with aerospace CEOs, regulators, and policy experts.

Featured Session: Behind the Dreamliner- Exclusive Insights from the Boeing 787 Whistleblower.

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B. KARTIKEYA

Hello Readers,

The Autonomous Horizon – Reflecting on 2025, Planning for 2026

As we close the final chapter of 2025, the narratives within this issue powerfully illustrate an industry at an operational tipping point. From the interviews that anchor this edition, a clear theme emerges: autonomy is no longer a promise, but a practical reality reshaping every sector.

Our conversations with global leaders capture this transformation. Richard Lowe of Satellite Applications Catapult details how sovereign testing ecosystems like the DTDC are de-risking BVLOS deployment. Mariah Scott of American Autonomy champions data sovereignty and open systems as the bedrock for scalable agricultural drone platforms. Jack Wrangham of Drone Ag demonstrates how AI and 'drone-in-a-box' solutions are overcoming regulatory hurdles to automate broadacre farming. Matt Whitaker of Michigan Central outlines a complete urban blueprint, blending infrastructure, regulation, and community trust to unlock Advanced Aerial Mobility. From the manufacturing frontier, Pavle Jeremic of Aether Biomachines reveals a future where AI-designed proteins could redefine drone materials and supply chains.

This year's major news underscores a parallel strategic shift. We've seen defense priorities pivot towards integrated, AI-powered systems—from Anduril's IBCS-M win and Shield AI's Hivemind partnerships to next-gen counter-UAS capabilities validated from the Netherlands to USNORTHCOM. In Advanced Air Mobility, milestones from EHang in Qatar and Thailand, Archer in the UAE, and Joby's conforming aircraft signal tangible progress toward certification and commercial service.

As we stand on the threshold of 2026, these interconnected stories of innovation, regulation, and integration set the agenda for the year ahead. This dynamic landscape presents a prime opportunity for industry leaders to shape the conversation.

Seize the Moment in 2026

Drones World is your platform to engage this global executive audience. Launch the new year by showcasing your breakthroughs, thought leadership, and solutions in our upcoming issues. Our featured interviews, in-depth advertorials, and tailored editorial packages offer unparalleled visibility to the decision-makers driving this autonomous revolution. Connect with our team to explore how you can be at the forefront of the discussion in 2026.

Kartikey B.

NEWAYS AND NLR TO DEVELOP A DUTCH-ONLY FLIGHT CONTROL SYSTEM FOR DRONES

Neways, a global innovator in mission-critical technology announced a strategic collaboration with Royal NLR (Netherlands Aerospace Centre), the national authority in aerospace research. The partnership focuses on developing a sovereign Dutch Flight Control System specifically designed for professional and industrial drone applications.

The Flight Control System initiative marks an important step towards technological sovereignty within the Dutch aerospace sector for drone applications. As global supply-chain dependencies become increasingly complex, this collaboration ensures that critical flight-control technologies remain fully independent from non-European suppliers while meeting the highest standards of reliability and cybersecurity.

The partnership leverages NLR's leadership in aerospace research alongside Neways' advanced engineering and manufacturing capabilities. Together, the organisations will define the technical framework, validation strategy, and early prototyping approach for next-generation drone control systems serving both defence and civilian markets.The collaboration also includes plans to establish a broader Dutch consortium involving companies, research institutes, and public organisations, creating a comprehensive ecosystem for drone technology development and production.

NLR CEO Tineke van der Veen emphasises the strategic importance of the initiative: "Our collaboration with Neways demonstrates how public-private partnerships can drive meaningful innovation in fundamental technologies. This Dutch Flight Control System project aligns perfectly with our mission to strengthen national aerospace capabilities of our Defence while advancing practical solutions for both defence and civilian applications. These technologies will ensure that the Netherlands maintains control over essential systems that protect our national interests."

Hans Büthker, CEO of Neways comments: "This partnership with NLR represents exactly the kind of strategic collaboration needed to secure the Netherlands' technological future through sovereign technology development. By combining our proven track record in mission-critical electronics with NLR's world-class aerospace research capabilities, we're creating solutions that will serve Dutch interests for decades to come."

The Neways-NLR collaboration brings together complementary expertise across multiple domains. Neways contributes advanced electronic manufacturing capabilities, including specialised components for defence systems, embedded motor drives, and power electronics. NLR provides comprehensive aerospace research capabilities spanning aircraft operations, air-traffic management, defence and security, and platform technology.

Over the coming months, both organisations will focus on defining the technical specifications and validation protocols for the sovereign flight control system. Potential consortium partners will further strengthen the initiative by adding local expertise and manufacturing capabilities, thereby reducing dependency on international suppliers.

REVOLUTIONARY X-PLANE TAKES SHAPE

X-65 is designed to demonstrate active flow control, a technology that could transform the future of aircraft design.

Aurora Flight Sciences, a Boeing company, is building an X-plane, designated the X-65, as part of a Defense Advanced Research Projects Agency (DARPA) program to gather flight test data on active flow control (AFC). AFC replaces traditional control mechanisms, like flaps and rudders, with jets of air to control the aircraft's pitch, roll, and yaw. AFC is expected to improve aerodynamics and to reduce weight and mechanical complexity.

In August 2025, Aurora and DARPA finalized an agreement to co-invest in the completion and first flight of the X-65. The Control of Revolutionary Aircraft with Novel Effectors (CRANE) program is now progressing towards completion of the fuselage in January 2026.

Aurora previously completed preliminary and critical design review phases and has made significant progress in manufacturing the aircraft. The fuselage, wing assemblies, and engine diffuser are being manufactured in Aurora's West Virginia facility. Propulsion and AFC system components are currently in-house and ready for integration.

The X-65 is purpose-designed for testing and demonstrating active flow control with a 30-ft wingspan and 7000 lb. gross weight. The AFC system supplies pressurized air to fourteen AFC effectors embedded across all flying surfaces. The triangular wing design enables testing across multiple wing sweeps and is modular with replaceable outboard wings and swappable AFC effectors to allow for future testing of additional AFC designs.

"We're excited to continue our longstanding partnership with DARPA to complete the build of the X-65 aircraft and demonstrate the capabilities of active flow control in flight," said Larry Wirsing, VP of aircraft development at Aurora Flight Sciences. "The X-65 platform will be an enduring flight test asset, and we're confident that future aircraft designs and research missions will be able to leverage the underlying technologies and flight test data."

ACQUISITION OF NEW INTERCEPTOR CAPABILITY

Electro Optic Systems Holdings Limited announces that it has entered into an agreement to acquire the UK-based interceptor business (the "Interceptor") from MARSS Group ("MARSS") for a total initial investment of €5.5 million (approximately A$10 million).

Key Highlights

Acquisition of complementary counter-drone capability – emerging advanced technology, seen as highly promising in the future counter-drone product mix

Easing integrated into EOS' product portfolio for sale to existing and new customers

Expected 12-24 months of further development before full commercial launch – faster and lower risk than in-house development. Further EOS investment of up to A$10m over next three years, with potential for customer development funding

Further establishes EOS as the leading counter-drone capability company

Background : Interceptor drones are being developed & for use in Ukraine and other conflicts. This emerging advanced technology is seen as a critical future counter-drone tool due to key benefits:

Agility – capable of moving very fast to defeat equally fast moving and agile threats

Range – able to operate at distances up to 5km - beyond the current EOS' Remote Weapon System ("RWS") range

Cost – lower cost compared to traditional rockets and missiles

Effectiveness – more effective than some soft-kill effectors (i.e. jammers less effective)

Collateral – interceptors create low collateral damage (compared to some alternatives)

Smart – Use advanced AI to counteract intelligent targets

The New EOS Interceptor : Following launch, the system pursues the target with onboard imaging, an infrared seeker and market-leading AI-based guidance. They can be operated fully autonomously if required.

The system is compact and mobile, suited to fixed sites and vehicle deployment, and is designed to integrate with common sensors and command and control systems as part of a layered counter drone solution. A version of the system can be side-loaded to EOS' RWS.

Strategic Rationale : The acquisition is consistent with EOS' stated strategic intent of expanding its counter-drone capability and offers several strategic benefits:

Interceptor will broaden EOS' counter drone 'effector' portfolio complementing EOS' RWS and High Energy Laser Weapons, offering another defensive layer.

This important effector has high strategic product potential due to:

AI capability to counter 'smart' drones and high-speed ability (up to 290km/h)

Low production cost compared to alternative effectors (e.g. rockets and missiles)

Ability to be integrated within EOS' RWS

Additional potential in new markets needing 'low collateral' response (incl civil & domestic).

Extends EOS software/AI capability and establishes EOS' in the UK (AUKUS partner) market.

The Transaction: EOS has agreed to acquire all of the Interceptor assets from MARSS and employ the expert team of specialised engineers that created this product to continue its development. The initial investment of ~$10m will be funded from EOS' existing cash reserves. It is expected that there will be no material impact on near-term financial results.

Completion is expected following receipt of required approvals and satisfaction of customary conditions. EOS will provide further updates in line with its continuous disclosure obligations. This announcement has been authorised for release to the ASX by the Board of Directors of the Company.

GA-ASI COMPLETES FSF TEST ON MQ-9B

General Atomics Aeronautical Systems, Inc. (GA-ASI) completed its "third lifetime" of full-scale fatigue (FSF) testing for the MQ-9B Remotely Piloted Aircraft (RPA). Completion of FSF testing for the third and final lifetime includes a total of 120,000 operating hours (40,000+ flight hours per aircraft life) for the RPA and is a key milestone in validating the design of the airframe. The testing verifies the airframe structural integrity in support of certification to the NATO STANAG 4671 standard.

The aim of the testing is to identify any potential structural deficiencies ahead of fleet usage and assist in developing inspection and maintenance schedules for the airframe. Test results will be used as documentation for certification and will form the basis for in-service inspections of structural components.

"The completion of our full-scale fatigue test validates years of GA-ASI design and analysis

efforts," said GA-ASI President David R. Alexander. "The first two lifetimes simulated the operation of the aircraft under normal conditions, and the third intentionally inflicted damage to the airframe's critical components to demonstrate its ability to tolerate operational damage that could occur over the lifetime of the aircraft."

Testing was conducted from December 13, 2022, through October 31, 2025, at Wichita State University's National Institute for Aviation Research in Wichita, Kansas. The airframe tested was a production airframe purpose-built to support the test campaign.

MQ-9B is GA-ASI's most advanced RPA and includes the SkyGuardian® and SeaGuardian® models as well as the new Protector RG Mk1 that is currently being delivered to the United Kingdom's Royal Air Force (RAF). In addition to the RAF, GA-ASI has MQ-9B procurement contracts with Belgium, Canada, Japan, Taiwan, Poland, India, Denmark, and the U.S. Air Force in support of the Special Operations Command. MQ-9B has also been featured in various U.S. Navy exercises, including Northern Edge, Integrated Battle Problem, RIMPAC, and Group Sail.

KRATOS MOVES TO NEW ENGINE MANUFACTURING FACILITY IN AUBURN HILLS, MI TO SUPPORT DEMAND FOR HIGH-RATE PRODUCTION OF SPARTAN ENGINES

Kratos Defense & Security Solutions, Inc. a leading technology company in the defense, national security, and global markets announced the opening of a new Propulsion Manufacturing Facility in Auburn Hills, Michigan to fulfill upcoming demand for Kratos' Spartan engines, a family of high-quality, low-cost, military grade turbojet engines, a key enabler in the affordable mass problem set.

This state-of-the-art 22,500-square-foot facility with office, manufacturing, assembly and test areas allows for concurrent production of all four engines in the Spartan family and quantities of 50,000 plus per year. The Spartan line of engines consists of four propulsion systems ranging in thrust from 30 to over 200 lbf.

Kratos' investment in the new facility demonstrates our commitment to advancing affordable mass inventory levels, producing a large number of military-grade, affordable turbojet engines while expanding crucial infrastructure needed to accelerate propulsion system inventory levels as a part of the US defense industrial base.

To support concurrent production and test of the multiple engine types, Kratos has configured the new facility and optimized inventory systems, production flow, and manufacturing ramp plans to enable isolation of key elements such as inventory while enabling shared use for incoming and outgoing inspection, as well as the multi-station test cell.

With an investment in infrastructure, personnel, and equipment, Kratos' Auburn Hills facility is designed for rapid, affordable manufacturing of low-cost turbojet engines to significantly boost critical inventory levels.

Steve Fendley, President of Kratos Unmanned Systems Division, said, "Achieving affordable mass requires effective planning and management at all levels—from supply chain to military customer delivery aligned and optimized for cost, capacity, and resilience. Our production-first mindset has been key to our success in realizing high-reliability, military-grade engines with key operational features that can be produced affordably and delivered at high rates. This is a result of our focus on producibility and cost right from the start, rather than the traditional performance first, manufacturability and cost second approach."

AMENTUM WINS USAF CONTRACT WORTH UP TO $995M TO MODERNIZE THE MQ-9 UAS

Amentum has been awarded the Remotely Piloted Aircraft (RPA) Maintenance Support IDIQ contract by the Air Force Air Combat Command with a ceiling value of up to $995 million. The MQ-9 Reaper is an essential unmanned aerial system equipped with cutting-edge technologies including sensors, armaments, ground control stations, and a satellite link. Unmanned aerial systems are a strategic element of today's modern warfare and ensure the U.S. maintains its competitive military edge.

"Amentum's unmanned aerial solutions are designed to ensure the MQ-9 Reaper remains a formidable force in complex, dynamic environments," said Mark Walter, president of Amentum's Engineering and Technology business. "Our experience delivering enhanced mission capabilities and MQ-9 unique operational constructs, such as Satellite Launch and Recovery (SLR), offers innovative versatility and efficiency to meet the U.S. Air Force's evolving and dynamic mission needs."

Specifically, Amentum will deploy specialized professionals, weapons loading strategies, and aerospace ground equipment solutions in the U.S. and globally for the MQ-9 Reaper to reinforce combat readiness and training capabilities at designated sites.

"Amentum is uniquely positioned to enhance the operational excellence of the MQ-9 Reaper," said Amentum senior vice president of Modernization and Training, Mark Evans. "Our legacy dates back to early systems like the MQ-1 Predator and the RQ-4 Global Hawk, which provided Amentum with deep technical insights and operational proficiency in MQ-9 systems worldwide."

The Air Force Air Combat Command RPA Maintenance Support IDIQ contract has an ordering period of five years.

Drones World Editor Kartikeya In Conversation with

Mr. Richard Lowe

Chief Technical Officer Satellite Applications Catapult

Q How does CAA designation de-risk investment and accelerate commercial drone deployment timelines?

A Becoming a recognised test site, enables drone companies to expedite (otherwise a lengthy and cost prohibitive) testing processes. Reducing risk in test and evaluation, speeding up their SORA application process and therefore reducing time to market deployment.

Q What specific satellite-dependent capabilities can you test at Drone Test and Development Centre (DTDC) that others can't?

A The Satellite Applications Catapult has various facilities based at Westcott, including the Future Networks Development Centre (FNDC) which enables extended satellite communications. Alongside the Catapult expertise in Ubiquitous Communications (UC) and Position Navigation and Time (PNT), this means companies can gain access to facilities and expertise to integrate space

enabled services on their platforms; key enablers to commercial BVLOS flying.

Q Is the Catapult building a proprietary data repository from all these tests, and who owns this valuable data?

A The Satellite Applications Catapult is here to enable sector growth, therefore all IP and data belongs to our customers – the end users of the Drone Test and Development Centre (DTDC).

Q How will you synchronize operations with partners like WholeShip to create a true national testing network?

A Recognised Test Sites enable drone companies to seek the most appropriate testing environment for their needs. Satellite Applications Catapult and Wholeship, as well as other sites in the UK are looking to align and offer complementary capability, bringing a mutually supportive offer to the UAS industry.

Q Beyond regulation and tech, what's the most underestimated bottleneck to scaling drone operations?

A Lack of neutrally operated repeatable testing environments (alongside the lack of CAA pre-assessed Test Sites) have historically been a primary challenge for the sector, responding to this challenge has led us to create the Drone Test and Development Centre. For companies scaling their operations, the biggest factor alongside cost and time, is the inability to prove safe operations ahead of licencing. We feel our drone centre addresses this barrier.

Q What's the UK's defensible competitive advantage in the global drone race through facilities like DTDC?

A The DTDC speeds up the innovation process, giving UK companies a competitive advantage. We hope to continue working with the CAA and others to develop this further and ensure the UK's UAS industry can thrive.

Q What single metric will define DTDC's success in 5 years?

A Growth: A thriving UK sovereign UAS Industry, using satellite technology, to offer world-beating products and services.

EMBRAER TO EXPAND A-29 SUPER TUCANO CAPABILITIES TO COUNTER UNMANNED AERIAL SYSTEMS

Embraer one of the global leaders in the aerospace industry, announced that the A-29 Super Tucano is expanding its mission portfolio to counter modern unmanned threats effectively and affordably.

Relying on A-29 features in operation and new sensors, including specific datalinks for receiving initial target coordinates and queueing, the Electro-Optical/ Infra-Red (EO/IR) sensor for laser tracking and designation, as well as the laser guided rockets and the wing-mounted .50 machine guns for neutralizing targeted Unmanned Aerial Systems (UAS), the Operational Concept (CONOPS) defined by Embraer will allow current and future A-29 operators to add counter drone missions to their operational profiles whenever needed.

"We continue to expand the A-29's capabilities to address the most recent challenges faced by many nations worldwide," said Bosco da Costa Junior, President and CEO of Embraer Defense & Security. "The continued challenges in modern warfare and the recent conflicts worldwide have shown the urgent need for solutions to fight drones. The A-29 is the ideal tool to counter UAS effectively and at low cost, adding to the aircraft's already extensive mission set that includes close air support, armed reconnaissance, advanced training, and many others."

The A-29 Super Tucano is a versatile and powerful turboprop aircraft known for its rugged and durable design, which allows it to perform operations from unimproved runways and at forward operating bases in austere environments and rugged terrain. It is the global leader in its class with more than 600,000 flight hours.

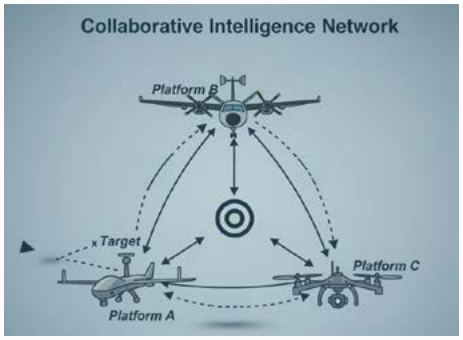
The A-29 Super Tucano fulfills a wide range of missions such as advanced pilot training, Close Air Support (CAS), air patrol, air interdiction, Joint Terminal Attack Controller (JTAC) training, armed Intelligence Surveillance and Reconnaissance (ISR), border surveillance, and air escort. Because of this unmatched combination of capabilities and operational flexibility, combined with its economical life cycle cost, the Super Tucano has been selected by 22 air forces around the world.

The A-29 Super Tucano is the most effective multi-mission aircraft in its category, equipped with state-of-the-art technology for precise target identification, weapons systems, and a comprehensive communications suite. Its capability is further enhanced by advanced Human-Machine Interface (HMI) avionics systems integrated into a robust airframe capable of operating without infrastructure. Furthermore, the aircraft has reduced maintenance requirements and offers a high level of reliability, availability, and structural integrity with low life cycle costs.

PALLADYNE AI SECURES US PATENT FOR ADVANCED SWARMING AND AUTONOMY TECHNOLOGY

Palladyne AI Corp a developer of artificial intelligence software for robotic platforms in the defense and commercial sectors announced that the United States Patent and Trademark Office has issued the Company U.S. Patent No. 12,452,957 B2, titled "Closed Loop Tasking and Control of Heterogeneous Sensor Networks."The patent protects Palladyne AI's core architecture that allows multiple autonomous systems, including drones, robots, and sensors, to work together as an intelligent, coordinated team across domains, resulting in a heterogeneous swarm.

The newly issued patent defines a method where diverse autonomous systems communicate and collaborate efficiently. Utilizing feature-based communication, devices with different sensors, including cameras, radar, and RF nodes, share only



the most critical insights they extract. These insights are fused into a common understanding of the environment, allowing a network to continuously re-task and coordinate itself through a closed-loop feedback system. By exchanging only compact, meaningful information streams, Palladyne AI's architecture delivers resilient, edge-based performance even in environments where network bandwidth is contested or communications are limited.

"U.S. Patent 12,452,957 B2 gives Palladyne AI ownership of the architectural framework that makes true real-world machine collaboration possible," said Ben Wolff, President and CEO, Palladyne AI. "Our technology transforms distributed sensors and drones into a single intelligent system capable of observing, reasoning, and acting collectively in dynamic environments – in essence, this patent protects the brain and nervous system of machine collaboration. It not only helps execute our vision for embodied, biologically inspired AI and collaboration; it provides the legal and strategic foundation for Palladyne AI to be the technological nucleus for swarm autonomy across domains."

GE AEROSPACE AND SHIELD AI TO COLLABORATE ON PROPULSION FOR X-BAT VEHICLE PROGRAM

GE Aerospace and Shield AI have agreed to collaborate on propulsion technologies for Shield AI's new X-BAT vehicle program. Through the Memorandum of Understanding (MOU), the F110-GE-129 engine, featuring the advanced Axisymmetric Vectoring Exhaust Nozzle (AVEN), has been selected to power the X-BAT. GE Aerospace will provide propulsion and testing support for the X-BAT program.

"We're excited to pair GE Aerospace's proven experience in developing and scaling propulsion systems with Shield AI's vehicle development to move faster from concept to capability," said Amy Gowder, president and CEO, Defense & Systems at GE Aerospace. "Together, we're helping redefine how advanced propulsion technologies are integrated into autonomous systems built for the mission. Collaborating with Shield AI underscores GE Aerospace's commitment to advancing propulsion for next-generation autonomous systems."

Unveiled on October 21 in Washington, D.C., X-BAT is an AI-piloted vertical take-off and landing (VTOL) fighter jet by Shield AI engineered for contested and austere environments. Powered by Shield AI's proven Hivemind autonomy software, X-BAT delivers scalable, survivable combat mass in contested environments and can operate independently or as a drone wingman.

"GE Aerospace's F110 engine is one of the most successful and reliable fighter engines in history and has the operability characteristics that X-BAT's VTOL design demands. GE Aerospace has been a great partner, and we are excited by the potential of our combined team," said Armor Harris, senior vice president of aircraft engineering at Shield AI.

By pairing GE Aerospace's expertise in propulsion development, testing, and certification with Shield AI's proven autonomous aircraft technology, the partnership will accelerate development and readiness for future unmanned applications.

The GE Aerospace F110 engine has more than 11 million flight hours under its wing, the most thrust in its class, and recently celebrated a milestone of 40 years of continuous production and improvement. The Axisymmetric Vectoring Exhaust Nozzle (AVEN) for X-BAT provides thrust vectoring capability for vertical flight and enhances maneuverability in horizontal flight.

This announcement builds on GE Aerospace's growing portfolio of partnerships that align with our commitment to advance technologies to support the future of flight and propulsion. As demand grows for affordable, reliable propulsion solutions across both manned and unmanned defense applications, GE Aerospace remains focused on solutions that meet the mission needs of today while shaping the future of flight.

ANDURIL DEMOS CONNECTED DEFENSE ON NATO'S EASTERN FLANK

In response to Russia's aggressive provocations—including drone incursions into Poland and fighter jet violations of Estonian airspace—NATO is prioritizing a faster, smarter, and more interconnected defense for its eastern flank. To meet this challenge, U.S. Army Europe and Africa, in close cooperation with Allies, is developing the Eastern Flank Deterrence Line (EFDL). Rather than a physical barrier, the EFDL is a digital shield: a distributed mission command architecture designed to integrate national sensors, shooters, and command systems into a single, live-data network. This allows, for instance, a radar in Estonia to instantly share detection data with air-defense batteries in Latvia, creating a unified deterrence posture.

The recent Exercise Digital Shield 1.0 in Tallinn, Estonia, was a critical test of this concept. Anduril joined the U.S. Army's 10th Air and Missile Defense Command and the Estonian Defence Forces to demonstrate how digital speed can counter adversarial mass. Within 48 hours, engineers established a resilient network using Menace-T communication kits and Anduril's Lattice nodes, which maintained data flow even in contested electronic environments.

The exercise successfully fused previously isolated systems into a single operating picture, integrating:

Estonian AN/TPQ-50 and Giraffe AMB radars.

Sky Fortress, a Ukrainian acoustic drone detection network.

Dowding, a commercial UAS-tracking feed.

This integration enabled real-time data fusion across radar, acoustic, and commercial networks. Command nodes from the U.S. and Estonia could simultaneously see the same tracks, distinguish drones from birds, and coordinate responses with unprecedented speed. Work that traditionally takes months was completed in days, proving that interoperability can be a decisive advantage.

As Brig. Gen. Curtis W. King of the 10th AAMDC stated, "Innovation is not a one-time effort... Our goal is to ensure every Soldier, system, effector, and sensor contributes to the EFDL."

The lesson from Digital Shield 1.0 is clear: in an era defined by drone swarms and constant pressure, deterrence will depend not just on forward presence, but on shared data, connected systems, and the ability to outpace the threat.

Drones World Editor Kartikeya In Conversation with

Ms. Mariah Scott

CEO at American Autonomy, Inc

Q What specific operational limitation or cost does American Autonomy, Inc. solve for farmers that closed Chinese systems can't?

A When considering buying a drone, farmers should be asking where their data is located, how they can access and use it, and how is it secured. Without data, they are unable to use the data to make better decisions.

Closed Chinese systems have several limitations impacting productivity and efficiency, primarily focused on data sovereignty, portability, transparency, and security.

On many closed Chinese systems, users can't easily (and sometimes not at all) export or import data from other systems (field boundaries, prescription maps, flight logs, coverage maps). This reduces efficiency, imposes compliance risks, requires more time (which equals money) to do tasks. In many cases, those tasks are impossible. For example, these systems cannot produce a coverage map to verify correct application of crop protection or compare to results from a ground sprayer or crop duster. Many cannot export the data needed to create an FAA or state pesticide compliance report.

The American Autonomy operating platform makes these tasks easy to accomplish. Our software is built in the U.S. by U.S. engineers and is hosted on servers in the U.S. Our focus on user control ensures that farmers can access their data. Our commitment to cybersecurity protects farm data.

Q What can a farmer practically do with their data in your open system that's impossible in closed platforms?

A Most farmers flying drones today run into the same problem: the data goes in, but it's tough, or more often impossible, getting it back out in a useful way. If they can get data, it's all manual.

Farmers must re-enter field boundaries every single time, even for repeat jobs. If they're lucky, after each flight, they've got to land, sync logs to the cloud, download them, and then try to make sense of it all.

Maintenance? Pretty much guesswork.

Q Because the software ecosystem is so fragmented, farmers must stitch together bits and pieces just to answer basic questions like: Where did I fly? How well did the drone do? Was the application accurate?

A Our platform changes that. Farmers own their data—and can use it. Everything's in one place: pre-flight planning, post-flight analysis, drone and pilot management, maintenance, and warranty tracking.

Here's what that means in real life:

Farmers can reuse field boundaries for repeat jobs—no more entering them in every time.

Farmers can share data easily—boundaries, flight logs, coverage maps, maintenance records—with anyone who needs them.

See application maps that show exactly where product was applied.

Integrate the data with their farm management system so they've got the full picture for yield analysis.

They can generate reports for compliance, billing, and maintenance without the headache

Bottom line: instead of farmer's data being locked away or buried under manual steps, they can turn it into decisions, insights, and efficiency—all without jumping through hoops.

Q Is your primary customer the farmer, the drone operator, or the manufacturer - and what's your core revenue model?

A Our primary customer is drone manufacturers. Our software integrates as a full stack (ground control station software (GCS), drone data manager software (DDM) and *AcreConnect®* software) or modular components, within an OEM's branded experience.

We sell the operating platform to manufacturers via a per drone fee.

End users will use our software though their drone purchase from our manufacturer partners. The software is designed with farmers in mind as the end user.

We also sell our *AcreConnect®* productivity software as a subscription directly to drone operators. This software is compatible with multiple drones and focused on professional operators who need to manage a fleet and a team.

Q Can your software truly work with any drone hardware, or does it require specific U.S.-made platforms to function?

A We work closely with the manufacturer to integrate our operating platform and data manager with the flight controller onboard the drone.

Our *AcreConnect®* software, sold to end

users, can be used with any spray drone and is integrated with DJI and XAG drones for creating flight logs and application maps.

Q Beyond server location, what specific security measures make your system more secure than current alternatives?

A Modern Authentication & Authorization: We use best-in-class user management tooling with support for multifactor authentication (MFA), single sign-on (SSO), and granular role-based access control (RBAC), ensuring that only authorized users can access sensitive data.

Encryption Everywhere: All data is encrypted in transit using TLS 1.2+ and at rest using industry-standard AES-256 encryption, protecting information both inside and outside our system.

Secure Cloud Architecture: Our system is hosted on AWS with all critical data protected behind strict network controls. Databases and internal services are never exposed to the public internet, significantly reducing potential attack surfaces compared with standard cloud deployments.

Enterprise-Grade Security Practices: Our US-based software engineering team has deep expertise in enterprise security. We regularly perform security audits, vulnerability scanning, and follow secure coding best practices to prevent common threats.
Continuous Monitoring & Incident Response: Our system is instrumented with real-time monitoring, logging, and automated alerting to quickly detect and respond to potential security incidents.

Q What's your most compelling incentive to convince operators to switch from established, convenient systems?

A When looking for a new drone system, operators should look beyond the 'speeds and feeds' to consider how this drone will work for them as a tool on their farm. And that means considering the software that flies the drone and manages its data.

Data control and portability. Most operators will need to share a flight log, an application map, or a record of where they flew and what treatment you applied. Many closed Chinese systems cannot do that. If your drone crashes, is banned or you just decide you want a different manufacturer, losing your data—flights, fields, customers—is a real outcome and a big setback to your productivity. With our drone data manager, your data is secure, in the U.S., and you are in control of how it is used.

Usability. Our software is designed and built in the U.S., for U.S. agricultural users. This means that drones using our operating platform will feel easier to use and more productive than those that use software developed in China and translated. Even simple items, make a big difference in usability – like using acres, feet and gallons instead of hectares, meters, and liters.

U.S. Based Support: When issues arise with Chinese-made software, they're typically routed to overseas engineering teams, leading to long response times, unclear ownership, and little to no feedback for the farmer about whether or when the problem will be resolved. With a U.S.-based engineering team, the feedback loop is much faster. Operators get transparency into issue ownership, clear timelines, and reliable updates on when their concerns will be addressed.

Q What single metric will define success for American Autonomy, Inc. in the next 12 months?

A Adoption of our software—the number of drones and users who are using our software with their agricultural drone.

We already have a foundation for usage with our *AcreConnect®* productivity software, which is the leading platform for spray drone management, with customers active nationwide.

The first drones using our operating platform will launch for the 2026 season from Exedy® Drones.

We look forward to publicly disclosing additional drone manufacturers who will be using our operating platform in the new year.

USAF AWARDS SKYDIO INITIAL CONTRACTS TO BRING ADVANCED AUTONOMY TO MISSION-CRITICAL USAF SPECIALTIES

Skydio, the leading U.S.-based drone manufacturer and world leader in autonomous flight technology, in partnership with ADS, a leading provider of products, technology, and logistics solutions for the U.S. Military announced two initial multi-million dollar contract awards with the U.S. Air Force (USAF) to expand the deployment of Skydio systems across multiple operational units. These efforts extend Skydio's presence across Air Combat Command (ACC) Tactical Air Control Party (TACP) and Explosive Ordnance Disposal (EOD) units, supporting the Air Force's broader initiative to integrate uncrewed systems into every Airman's toolkit.

The Skydio systems will support TACP Airmen in characterizing enemy order of battle, enhancing situational awareness, acting as communications relays, and enabling near-peer engagements through integration with strategic platforms and weaponeering solutions.

In a parallel effort, Skydio has also been selected as the aerial robot of choice for USAF EOD units deploying Skydio systems for both garrison operations and contingency deployments with additional systems planned over the next 18 months. These contracts align with the Air Force's broader effort to reimagine the Airman identity—integrating uncrewed systems to extend capability, situational awareness, and mission efficiency at every level. USAF Security Forces use Skydio systems on a daily basis for Base Defense and Installation Security, demonstrating the critical role of autonomous drone technology in protecting U.S. Air Force assets. Beyond security applications, units are also operating Skydio technology, such as aircraft inspection modernization at Travis Air Force Base, where the 60th Maintenance Group pioneered the Air Force's first drone-based inspection program and reduced C-17 inspection times by more than 90 percent—demonstrating the versatility of Skydio systems across diverse mission requirements.

Skydio X10D delivers operational performance with: A sensor package that is unrivaled in any sUAS this size, including a 48MP telephoto camera A best-in-class Teledyne FLIR Boson+ thermal sensor that can pinpoint temperature differences at each pixel Operational resiliency in environments of contested RF and GPS denial with onboard AI and autonomy

Built-in AI for visual navigation - up to 300m altitude - comes standard

Advanced obstacle avoidance in every direction : A proprietary navigation model for use in zero-GPS environments that utilizes a reference point chosen by the operator, ensuring the X10D can find its way back to the original take off point. Modular, open platform that supports custom third-party attachments and controllers Powerful, full-stack security, starting with the chipset and its firmware

IP55 rating for nearly all-weather operation : X10D, part of the Blue UAS Cleared List, also meets the stringent cybersecurity and capability requirements the Department of War demands.

These Air Force awards add to Skydio's growing partnerships across all branches of the U.S. military, including the U.S. Army's Short Range Reconnaissance (SRR) Tranche 2 program. The breadth of adoption—from special operations to conventional forces—reflects the operational trust earned by systems designed, assembled, and supported in the United States. Skydio also proudly supports 28 allied nations and 3,500+ public safety agencies, utilities, and enterprise customers worldwide. Skydio's manufacturing facility in Hayward, CA, is one of the world's largest drone manufacturing facilities outside of China.

REDWIRE ANNOUNCES PARTNERSHIP BETWEEN EDGE AUTONOMY AND EUROLINK SYSTEMS TO PROVIDE UAS TO THE ITALIAN DEFENSE SECTOR

Redwire Corporation a global leader in aerospace and defense technology solutions announced that its wholly owned subsidiary, Edge Autonomy, has partnered with Eurolink Systems (ELS), a technology organization focused on the aerospace and defense and industrial sectors with expertise in integration, rugged computing, and SWaP-optimized solutions. Together, Edge Autonomy and Eurolink will bring mission proven UAS technology to the Italian market.

Edge Autonomy has decades of successful UAS design, development, and production expertise in the United States and Europe, and the agreement with Eurolink will accelerate Italy's access to next-generation UAS platforms, with local support and integration driven by ELS.

The collaboration includes the promotion and support of Edge Autonomy's Uncrewed Systems portfolio in Italy, featuring the Stalker Block 30 and Block 40 UAS and Penguin C VTOL and Mk2. These systems are designed for long-endurance, long-range missions, rapid deployment, and a modular open systems approach to integration for critical intelligence, surveillance, and reconnaissance requirements.

"We have always been proud to support our allies' missions in Europe, and this is another step forward in promoting the importance of national security," said Steve Adlich, President of Edge Autonomy. "We're excited to work with Eurolink Systems to help ensure that the latest technology is available where it is needed most."

Edge Autonomy solutions also include a comprehensive line of electro-optical gimbal camera payloads and ruggedized energy systems optimized for endurance and performance, supporting government and allied operations worldwide.

"At Eurolink, we have always been committed to making the most innovative international technologies available to our Defense," said Enrico Remiddi, Chief of Strategy for Eurolink Systems. "This is even more effective when framed within partnerships that value the Italian contribution. With Edge Autonomy, we have found full alignment with this vision."

Edge Autonomy has proven and matured platforms that are currently employed by U.S. government entities and allied armed forces. Through the collaboration with Eurolink Systems, these solutions will be more readily available in Italy, with local support for integration, validation, and lifecycle management.

Edge Autonomy, a wholly owned subsidiary of Redwire, specializes in delivering innovative uncrewed systems, advanced optics, and resilient energy solutions that are being used by the DoD, U.S. Federal Civilian Agencies, and allied governments. With nearly three decades of technology heritage and manufacturing expertise, Edge Autonomy's experienced team delivers proven solutions based on real-world mission needs.

ARCHER TO SUPPLY ITS PROPRIETARY ELECTRIC POWERTRAIN TO THIRD PARTIES, STARTING WITH ANDURIL AND EDGE GROUP FOR THEIR RECENTLY ANNOUNCED OMEN AUTONOMOUS AIR VEHICLE

Archer Aviation Inc. announced an agreement to supply Anduril Industries and EDGE Group with Archer's dual use electric powertrain technology to accelerate the development and scaled production of Anduril's recently unveiled Omen Autonomous Air Vehicle system. The UAE has committed to an initial acquisition of 50 Omen systems, creating an established demand signal for the Omen system and Archer's powertrain technology. The agreement marks the first time Archer will make its proprietary, advanced powertrain technology, in use on its Midnight eVTOL aircraft, available for use by a third party, introducing a new revenue stream

Archer has invested heavily in developing a proprietary, best-in-class electric powertrain that is highly optimized for a range of commercial and defense aviation use-cases. This expansion of Archer's business lines to supply electric powertrains for defense applications builds on Archer's accumulated experience in battery and electric engine technologies and opens a new, high upside revenue stream for the company.

"While most see our Midnight eVTOL as an aircraft, we view Midnight as a platform that plays host to a wide range of new and exciting aerospace technologies

that will be leveraged way beyond our own aircraft. Our powertrain deal with Anduril is the first of what we expect to be many examples of this," said Adam Goldstein, founder and CEO of Archer. "For almost a year, we have worked closely with Anduril's team as we advance our hybrid-electric aircraft project. As we've familiarized ourselves with each other's technology, new and interesting opportunities to collaborate beyond the scope of the initial hybrid aircraft project have been uncovered. We could not be more excited to expand the scope of our partnership with Anduril as we open up a new revenue stream for Archer's business as a powertrain supplier for next-generation electric aircraft."

Shane Arnott, Anduril's SVP of Engineering, commented, "We've been working on Omen for more than five years. By combining the Archer team's expertise in powertrain technology with a little bit of Anduril magic, we've been able to mature our propulsion solution to achieve the ranges, speeds, and payload capacity we need to make Omen operationally relevant for a variety of dual-use mission sets. The maturity and reliability of Archer's powertrain platform de-risks our plans to deliver a production variant of Omen to customers at scale."

Archer has recently been active in making other international deals tied to its flagship Midnight eVTOL, announcing an exclusive agreement with Korean Air to commercialize AAM technology across multiple markets and use cases. In Japan, both Osaka and Tokyo have selected Archer and its local partner to lead AAM deployments in those cities.

Archer's Midnight is a piloted aircraft designed to carry four-passengers and perform rapid back-to-back trips with minimal charge time between flights. Midnight has the potential to replace 60–90-minute commutes by car with 10–20-minute electric air taxi flights that are safe, sustainable, low-noise and cost-competitive with ground transportation.

UZBEKISTAN TO OPERATE AIRBUS FLEXROTOR UNCREWED AERIAL SYSTEM

Airbus Helicopters has been awarded a contract by Uztechtrade, the Uzbekistan state unitary enterprise in charge of importing military and dual equipment, for the delivery of an undisclosed number of Flexrotor systems.

"Uzbekistan is a long-standing and valued partner for Airbus Helicopters, and we are proud that Uztechtrade has chosen the cutting-edge Flexrotor to advance its uncrewed capabilities," said Olivier Michalon, Executive Vice President, head of Global Business, Airbus Helicopters. "This contract marks a pivotal moment, as Uzbekistan becomes the first customer for the Flexrotor in Central Asia. This selection underscores Uzbekistan's commitment to adopting innovative technology and strengthens our cooperation across crewed and uncrewed platforms."

The Flexrotor is designed for a broad variety of missions, primarily focused on Intelligence, Surveillance, Target Acquisition, and Reconnaissance (ISTAR). Uzbekistan plans to utilise the Flexrotor in advanced Crewed-Uncrewed Teaming scenarios,

integrating its operations with crewed helicopters to enhance situational awareness and mission effectiveness.

The Flexrotor is Airbus' newest addition to its UAS portfolio. A modern Vertical Takeoff and Landing (VTOL) uncrewed aircraft with a maximum launch weight of 25 kg (55 lbs), it has been designed for ISTAR missions for more than 12-14 hours in a typical operational configuration. It can integrate different types of payloads including an electro-optical system and advanced sensors to suit customers' unique mission needs. With the ability to autonomously launch and recover from either land or sea requiring only a 3.7 by 3.7 m (12 by 12 ft.) area, the Flexrotor is ideal for expeditionary missions requiring minimal footprint.

LM USES 5TH GEN FIGHTER TO COMMAND DRONE IN FLIGHT

Lockheed Martin Skunk Works with industry partners and the U.S. Air Force, controlled an uncrewed aerial system (UAS) from the cockpit of a 5th Gen fighter while in flight.

During the flight out of Nellis Air Force Base, Nevada, an F-22 Raptor pilot successfully used an open interface in the cockpit to send control directions to another airborne UAS.

"This effort represents Skunk Works driving a breakthrough in air combat capability, where single-seat aircraft command and control drones with simple and intuitive interfaces in the cockpit," said OJ Sanchez, vice president and general manager, Lockheed Martin Skunk Works.

The F-22 pilot used a pilot vehicle interface (PVI) to command the drone to execute a specific mission profile. The PVI represents a flexible system to provide integration-ready capabilities for both current and future platforms.

This event demonstrates human-machine teaming capabilities and the future of air combat, today. Lockheed Martin has been focused on the transformative power of autonomous and AI-enabled operations in crewed and uncrewed systems for years, with particular focus on integrating autonomous drones with the F-22 and F-35.

This flight event and other ongoing evaluations are crucial steps in realizing the Air Force's family of systems vision. Human-machine teaming enhances situational awareness, interoperability, survivability and flexibility, unlocking a significant advantage for the U.S. Air Force. By integrating the F-22 with other advanced systems we're bolstering the capabilities of our warfighters, ensuring American airpower dominance.

GA-ASI AND EDGE TO JOINTLY MANUFACTURE ELECTRONIC BRAKE CONTROL SYSTEM

Tawazun Council for Defence Enablement, EPI, an entity of EDGE Group and the cornerstone of precision engineering in the UAE's aerospace, oil and gas, and defence industries, and General Atomics Aeronautical Systems, Inc. (GA-ASI), a leader in advanced aerospace technology for unmanned aircraft systems (UAS), have signed a framework agreement to manufacture Electronic Brake Control Units (eBCU) in the UAE.

The collaboration is enabled by the UAE Tawazun Economic Programme (the Offset), which is overseen by Tawazun Council for Defence Enablement. The programme aims to generate lasting value for the national economy by driving innovation, sustainability, and resilience, while supporting various stakeholders of the sector, and aligning defence priorities with broader industrial and technological development objectives.

Through the framework agreement, EPI and GA-ASI will jointly manufacture and repair eBCUs, a cutting-edge technology designed to replace legacy hydraulic braking systems for both civilian and defence applications.

"Tawazun Council for Defence Enablement continues to drive transformative initiatives that harness capabilities across the full spectrum of advanced manufacturing. By leveraging strategic partnerships, we are contributing to sustainable value creation for the national economy and fostering a robust ecosystem of precision engineering and cutting-edge defence technologies that position the UAE as a regional hub for high-value manufacturing excellence," said Majed Saif Al Shamsi, Executive Director of the Economic Programme at Tawazun.

"We are committed to building the foundations for sustainable industrial growth, knowledge transfer, and technological self-reliance that will define the UAE's pioneer in defence and advanced manufacturing," he added.

Michael Deshaies, CEO of EPI, said: "This collaboration with General Atomics, enabled by the Tawazun Council for Defence Enablement, marks a significant step in advancing the UAE's aerospace industry. It strengthens our drive towards full vertical integration, enhances In-Country Value, and ensures comprehensive aftermarket support for this next-generation intelligent primary braking system."

"Electronic braking represents a transformative advancement in aviation technology," said GA-ASI President David R. Alexander. "Our product will offer a compact design, superior performance, environmental benefits, and reduced maintenance requirements. This breakthrough technology is set to become the standard for modern aircraft, driving innovation and sustainability across the aerospace sector."

This partnership reinforces all parties' commitment to fostering technological growth and economic development in the UAE while contributing to the global evolution of aviation technology.

SHIELD AI AND DESTINUS PARTNER TO INTEGRATE HIVEMIND ACROSS PLATFORMS IN SUPPORT OF UKRAINE AND EUROPEAN DEFENSE

Shield AI and Destinus announced a strategic partnership to integrate Hivemind, Shield AI's mission autonomy software, across Destinus' aerial platforms. Together, the companies are creating the first scalable, cross-platform autonomy architecture jointly developed by next-generation defense leaders in Europe and the United States. By combining Shield AI's battle-proven autonomy with Destinus' industrial-scale European manufacturing, this partnership accelerates the delivery of AI-enabled unmanned systems to Ukraine and strengthens Europe's overall defense resilience.

Through this partnership, Hivemind will be integrated onto Destinus' Ruta and Hornet unmanned aerial systems. Together with Shield AI's V-BAT, these platforms will share information, coordinate behaviors, and adapt in real time with in-flight target updates — creating a tightly integrated and highly effective reconnaissance-strike capability. Joint flight demonstrations are planned for 2026 to showcase operational interoperability across systems from both companies.

"Integrating Hivemind across diverse aircraft architectures like Ruta, Hornet, and V-BAT demonstrates how a unified autonomy framework can enable distributed mission execution," said Nathan Michael, Shield AI Chief Technology Officer and Head of the Hivemind Business Unit. "By allowing platforms to perceive, decide, and act together in real time, Hivemind delivers scalable autonomy that enhances coordination, survivability, and mission success across the battlespace."

"For Europe to achieve true technological sovereignty, we must unite world-class AI autonomy with industrial scale," said Mikhail Kokorich, CEO of Destinus. "This partnership strengthens that effort by pairing Destinus' platforms and AI avionics with Shield AI's combat-proven mission autonomy. With Destinus platforms, we are engineering the backbone of a distributed, intelligent, and resilient autonomous strike architecture for Europe and for Ukraine."

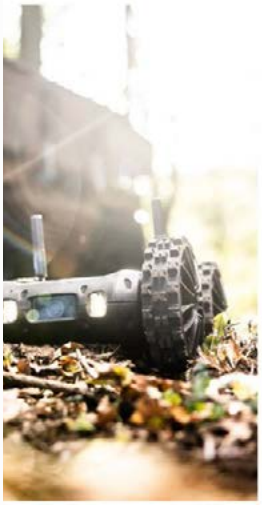
Hivemind is a highly modular, platform-agnostic autonomy software that enables heterogeneous teaming across systems, allowing reconnaissance and strike assets to operate as an intelligent team, thereby closing the reconnaissance-strike loop with speed and precision. Designed to ensure traceability, reliability and governability, Hivemind operates within clear command frameworks and augments human decision-makers, rather than replacing them.

EUROPEAN CONSORTIUM LAUNCHES IMUGS2 TO ADVANCE INTEROPERABLE UNMANNED GROUND SYSTEMS

A European consortium uniting leading defence, research, and technology organisations from across the Union has launched the iMUGS2 project to develop the next generation of interoperable unmanned ground systems, following its successful proposal to the European Commission under its European Defence Fund (EDF) programme. The project is coordinated by Milrem Robotics.

Building on the achievements of the first iMUGS project, iMUGS2 aims to enhance Europe's autonomy and robotics capabilities by developing a scalable, interoperable, and secure system-of-systems architecture for both unmanned and manned platforms. The project reinforces Europe's technological sovereignty in key defence areas, including AI-driven autonomy, systems integration, communications, and command and control.

"With iMUGS2, Europe takes another significant step towards developing truly interoperable and scalable robotic forces that enhance the continent's defence capabilities," said Raul Rikk, Capability Development Director at Milrem Robotics. "The project promotes innovation and cooperation among European nations, ensuring that future



AI-based autonomous systems can operate seamlessly together on the battlefield."

iMUGS2 begins immediately with extensive conceptual, operational, and technical development across multiple domains. Partners will design and refine operational concepts, system architectures, and technological solutions that advance manned–unmanned teaming, autonomous functions, secure communications, and electronic protection.

In parallel, the project focuses on system integration, lifecycle efficiency, and interoperability, laying the groundwork for upcoming demonstrations and capability deployment across Europe's defence landscape. These developments will ensure resilient, cost-effective, and future-ready unmanned systems.

Drones World Editor Kartikeya In Conversation with

Mr.Jack Wrangham

Founder & CEO - Drone Ag Limited

Q What specific requirement in the ENAC SORA process was the most challenging to meet, and does this create a blueprint for other EU authorities?

A The most challenging aspect of this project was providing multiple, layered redundancies and failsafes across the whole system, that met with ENACs requirements. Now that we have learned this, we can apply it across different sites in different nations. And yes, we are applying to other EU authorities as we speak.

Q How does this "drone-in-a-box" service model change your revenue structure and customer relationships compared to selling hardware/software?

A We are a software and operations company,"drone-in-a-box" means we can service many more sites across the EU at scale, without the need for a much larger organisational structure.

Q What is the next, more complex agronomic insight your AI is being trained to deliver from this sub-millimetre imagery?

A In short, being able to quantify very small visual indicators is hugely important and difficult to balance. So this could be things like telltale disease marks on a leaf, like certain fungal spots or rust, or it could be identifying problem species of weeds when they're at very early stages.

This also expands to yield prediction models based on small visual indicators in late-season, as well as identifying types of stress in certain crop types based on colours and shapes within the canopy.

Q How does your system integrate with rather than replace the agronomist's role in crop management?

A We are experiencing a generational shift in Agriculture at the moment, and that extends to Agronomy also. What the industry is noticing is that far more agronomists are retiring than are coming into the profession, resulting in a deficit of skill and knowledge in the workforce. What Skippy will soon allow agronomists to do is apply their skill in a much more effective and timely manner, through remote access to field data collected by either BVLOS base station enabled sites, or by roaming Skippy pilots (including drone-trained junior agronomists).

Senior agronomists can then access this data from a centralised location, and focus their efforts

where they are most needed.

Traditionally an agronomist will visit every site within their portfolio on a rotation, or at the behest of a farmer, but for the sake of argument, in this example, a farm with low growing pressure can be safely de-prioritised in terms of in-person visitation by the agronomist, whereas a farm with much higher pressure can be visited. This way an agronomist can maintain the same standard of care as previous, but can crucially cover more area. This is of course an oversimplification but helps to show how agronomy can cope with the generational shift it is experiencing, through the effective use of new tech.

Q What is the biggest logistical challenge in scaling from research sites to thousands of diverse commercial farms?

A Site analysis and operational planning are relatively straightforward but time-consuming, so automating this is key to unlocking the scalability we're aiming for. Building a resilient system that works in many different scenarios, without the need for a large amount of human oversight, allows scalability. We have the backbone of this, and not requiring a large expansion of our team, is very important.

Q Beyond regulatory first-mover advantage, what part of your technology stack is most defensible against competitors?

A Our automation pipeline from setup, flights, data transfer, processing and delivery, is at the core of our competitive advantage in this space - it allows for robust data provision without the need for human intervention and manual data handling.

Q What single metric will define success for your broadacre expansion in 2026?

A We're looking at BVLOS flights completed as our most important metric to measuring successful expansion with a focus on resilience, it's not quite as simple as this sounds however - more specifically we're looking at the quality of any given flight, for example, looking at whether the full planned data-set was captured, uploaded, processed and sent back to the client, whether there were safety concerns and how they were mitigated against, as well as whether the desired frequency and data quality is being achieved. This way we can monitor both resilience and usefulness, against real-world client satisfaction.

At the end of the day, our whole aim is to make the job of farming easier. For the crop scientist/trial technicians and then the agronomist, the field and the farm business, so they can produce more food for less. Once we have expanded this across R&D trial sites, we will expand across broadacre at large, and farms on small and large scale can benefit. Our aim is to reduce labour applied to crop monitoring, to better inform inputs so they are applied more precisely in terms of both rate and of location.

LEIDOS AUSTRALIA AND KONGSBERG SIGN MOU TO ADVANCE USV STRIKE CAPABILITY

Leidos Australia and Kongsberg Defence Australia have signed a Memorandum of Understanding (MOU) to explore the integration of Kongsberg's Naval Strike Missile (NSM) with Leidos' next-generation uncrewed surface vessels (USVs), Sea Archer and its larger variant, Longbow.

Building on Leidos' proven success in launching missiles from unmanned vessels, the partnership aims to demonstrate how integrating the NSM with advanced USVs could extend the reach, responsiveness and adaptability of maritime strike possibilities.

Kongsberg's ship-based NSM is a sea-skimming, precision-guided cruise missile capable of engaging targets at a range of more than 300 km. Designed for survivability, the NSM features autonomous target recognition and advanced terminal manoeuvres to evade modern defences.

Sea Archer, currently under construction in Australia, is a high-speed, long-range USV designed to support modular payloads for strike, electronic warfare, logistics resupply and intelligence, surveillance, and reconnaissance (ISR). Equipped with Leidos' advanced autonomy software and AI-powered battle management technologies, the vessel reaches speeds up to 40 knots, has a range of 1,500 nautical miles and supports a payload of over 900 kg.

The larger Longbow variant has an increased payload capacity of 3,000 kgs and is powered by four (4) OXE marine diesel engines with 300 horsepower supporting a range in excess of 2,750 nautical miles.

Currently at the proof-of-concept stage, there is potential to explore NSM integration with a variety of Leidos USVs. Further development and integrated payload capabilities are being trialled both in the US and in Australia in 2026.

"This MOU represents a significant step forward in exploring a mission-ready, sovereign maritime strike capability for Australia," said Paul Chase, chief executive of Leidos Australia.

"By combining the proven performance of the NSM with the flexibility and endurance of a Longbow Sea Archer, we are offering Defence a potent, adaptable and locally supported solution for future operational needs."

REDWIRE ANNOUNCES CONTRACT TO DELIVER UAS TO CROATION BORDER PATROL

Redwire Corporation a global leader in space and defense technology solutions announced that its wholly owned subsidiary, Edge Autonomy, has been contracted to deliver its Penguin C VTOL uncrewed aerial systems (UAS) and Octopus gimbal cameral payloads to the Croatian Border Patrol.

Funded under the European Border and Coast Guard Agency (Frontex), which supports countries within the European Union in the management of external borders and the fight against cross-border crime, this contract will supply Croatia with the means to monitor their borders and respond to potential threats or other unlawful activities. Building on successful border patrol deployments around the globe, Edge Autonomy has provided multiple UAS solutions that have proven especially effective in austere environments.

"Redwire understands the importance of national security for our allies, and we are committed to supporting the ISR missions that help keep their borders protected," said Steve Adlich, President of Edge Autonomy. "We have a long-standing history of successful operations with our customers in the European Union, and we are honored to be chosen again by Frontex to provide border patrol technology."

Edge Autonomy has supported previous Frontex contracts in other European Union countries with its UAS solutions and gimbal camera technology and is experienced in flying missions throughout Europe.

Frontex is largely focused on serving the Schengen area in Europe, a zone where internal border controls have been largely abolished to allow for free and unrestricted movement between member countries. With hundreds of millions of travelers entering the Schengen area every year, border authorities are faced with the challenge of quickly and efficiently identifying potential nefarious activity without causing delays for travelers. Autonomous technology from Edge Autonomy will allow for additional airborne surveillance solutions to help differentiate between approved travel and actions that need additional attention from border security personnel.

Edge Autonomy, a wholly owned subsidiary of Redwire, specializes in delivering innovative uncrewed aerial systems, advanced optics, and resilient energy solutions that are being used by the DoD, U.S. Federal Civilian Agencies, and allied governments. With nearly three decades of technology heritage and manufacturing expertise, Edge Autonomy's experienced team delivers proven solutions based on real-world mission needs.

ANDURIL SELECTED FOR US ARMY'S INTEGRATED BATTLE COMMAND SYSTEM MANEUVER PROGRAM

Modern battlefields are defined by speed and saturation. Small unmanned aircraft systems can swarm by the hundreds, overwhelming defenses and striking before human decision loops close. Without effective counter-UAS systems, air defense operators face more targets than they can track or defeat, leaving U.S. forces vulnerable. Current command and control systems weren't built for this fight — they can't process data or execute kill-chain decisions at the speed required to stop autonomous, distributed attacks.

To meet this challenge, the Army has selected Anduril Industries for the Integrated Battle Command System Maneuver (IBCS-M) program, establishing Lattice as the Army's next-generation fire control platform for Counter-UAS missions. IBCS-M provides the command, control, and integration backbone for a vast array of counter-drone systems, enabling a single operator to manage multiple threats simultaneously. It fuses sensor data, automates fire control, and integrates new capabilities, reducing operator load and compressing the time from detection to defeat.

At a recent demonstration at Yuma Proving Grounds, Anduril showcased the power of Lattice — the foundation of IBCS-M. In a seven-day trial, Lattice integrated a previously undisclosed sensor and effector within hours, executed live-fire intercepts that achieved four out of four kills, and demonstrated advanced features like autonomy-enhanced fire control, distributed tracking, and kill-chain optimization.

"We can't think of counter-UAS as static or in the same vein as counter ballistic missile defense. It has to be maneuverable which means it has to be software-centric and adaptable above all else," said Alex Miller, CTO of US Army. "We can't wait a year for a new sensor or effector to be integrated and we can't tell our deployed soldiers that we have to wait for an FSR to solve the problem. It has to support a platoon leader on the move with many small sensors across many vehicles as much as it has to support a forward operating base or garrison commander using a mix of existing and emerging systems."

The IBCS-M effort is part of a broader modernization initiative that is reimagining how the Army commands the fight. Legacy systems were built for an era of predictability — today's world demands an infrastructure that is open, extensible, and capable of evolving at machine speed.

"We're uniquely positioned to deliver on the Army's vision because Anduril helped define the new frontier of air defense technology," said Matt Steckman, President and Chief Business Officer of Anduril Industries. "Our work in autonomous systems and command and control has built the foundation for this moment — it's a natural extension of the lineage that began when we reimagined how modern defense should operate."

Anduril and the Army are building a unified command and control ecosystem — one that turns data into decision advantage and ensures U.S. forces can see, decide, and act faster in the era of autonomy.

BAE AND TURKISH AEROSPACE TO COLLABORATE ON UNCREWED AIR SYSTEMS

BAE Systems and Turkish Aerospace have signed a Memorandum of Understanding (MoU) to establish a strategic alliance to explore opportunities to collaborate on the development of uncrewed air systems (UAS).

The agreement will see experts from Turkish Aerospace, Türkiye's leading aerospace and defence company work together with BAE Systems' combat air experts, to explore common opportunities on uncrewed systems.

"We see this as the start of a deep and meaningful alliance between our two organisations, each bringing complementary skills and capabilities to the table and a strong portfolio of uncrewed assets which we can leverage and combine to create a range of compelling and cost-effective solutions." Said Dave Holmes, Managing Director, BAE Systems FalconWorks division

"The agreement builds on the strong existing relationship between both companies and will allow us to bring our already proven uncrewed systems capabilities to new heights. We want to jointly explore how we can accelerate progress and new market opportunities in this field." Said Turkish Aerospace CEO Dr. Mehmet Demiroglu

TEKEVER AND ARKEUS INTEGRATE THE WARDEN HYPERSPECTRAL SENSOR TO ENHANCE LONG-RANGE DETECTION AND MISSION EFFECTIVENESS

TEKEVER, Europe's leading provider of AI-powered unmanned aerial systems, and ARKEUS, an Australian pioneer in autonomous optical intelligence, have successfully completed a joint integration and flight test campaign, proving the full compatibility and mission-readiness of TEKEVER's AR3 EVO tactical unmanned aerial system and ARKEUS' Warden Hyperspectral Optical Radar (HSOR).

The demonstration confirmed the operational benefits of combining TEKEVER's modular, shipborne-capable AR3 EVO with the cutting-edge Warden HSOR, enabling real-time detection, classification and long-range tracking across maritime, littoral and overland theatres — even in low-visibility or electromagnetically contested environments.

The AR3 EVO, TEKEVER's most advanced tactical UAS, is a flexible multi-mission platform capable of fixed-wing or VTOL configurations, with precision launch and recovery in confined spaces and rapid deployment from land or sea. Its open, modular architecture makes it an ideal platform to seamlessly integrate next-generation payloads and AI-driven sensing systems, delivering enhanced situational awareness for operators across defence and security missions in challenging operational contexts.

This is the first time ARKEUS' Warden HSOR sensor has flown in Europe. Designed for persistent, autonomous ISR in complex scenarios, the Warden provides material-based identification through high-resolution hyperspectral imaging. This enables operators to detect and identify objects that remain hidden, camouflaged or indistinct to traditional EO/IR sensors — significantly expanding ISR capabilities for wide-area surveillance missions, including comms- and GPS-denied operations even within degraded conditions.

"This successful integration reflects TEKEVER's commitment to continuously evolve operational capability through strategic collaboration," said Mark Baxter, Senior Business Development at TEKEVER. "By combining the advanced sensing power of ARKEUS' Warden HSOR with the proven flexibility of AR3 EVO, we are delivering a new level of situational awareness to our customers, enabling them to operate effectively in the most demanding environments."

"The combination of the Warden HSOR operating from the AR3 EVO provides customers with group 4 performance within a group 3 size, weight and power, said Simon Olsen," CEO of Arkeus. "Through successful operational evaluations in both Australia and the US, the Warden has demonstrated unmatched range, unmatched coverage and unparalleled performance in the most challenging degraded visual environments. The Warden detects, locates and identifies contacts, before they become a threat. The speed of this integration demonstrates the critical edge this capability can provide to both civil and Defence customers in the UK and Europe, today."

NEW GA-ASI GAMBIT 6 UCAV ADDS AIR-TO-GROUND OPERATIONS FOR INTERNATIONAL CCA

The latest iteration of the innovative Gambit Series of unmanned combat air vehicles (UCAV) from General Atomics Aeronautical Systems, Inc. (GA-ASI) is Gambit 6, a collaborative combat aircraft (CCA) that adds air-to-ground operations to its already proven air-to-air capability. The multi-role platform is optimized for roles such as electronic warfare, suppression of enemy air defenses (SEAD), and deep precision strike, making it a versatile option for evolving defense needs.

Air forces throughout the world are looking to air-to-ground-capable CCAs to enhance operational capabilities and address emerging threats in a denied environment. Gambit 6 is being developed to meet the corresponding need for adaptability, scalability, and mission-specific performance.

"These are real threats, and they require real solutions," said GA-ASI President David R. Alexander. "The modular architecture and signature-reducing internal weapons bay of Gambit 6 allow for easy integration of advanced autonomy, sensors, and weapons systems, ensuring the aircraft can adapt to a wide range of operational scenarios."

Airframes will be available for international procurement starting in 2027, with European missionized versions deliverable in 2029. GA-ASI is building industry partnerships throughout Europe with the aim of providing sovereign capabilities for all its platforms.

GA-ASI's Gambit Series envisions multiple CCA variants rapidly reconfigured from a common core, enabling substantial commonality for rapid and affordable production at scale.

The Gambit Series is a modular family of unmanned aircraft designed to meet diverse mission requirements, including intelligence, surveillance, and reconnaissance; multi-domain combat; advanced training; and stealth reconnaissance. It's built around a common core platform that accounts for a significant proportion of the aircraft's hardware, including the landing gear, baseline avionics, and chassis. This shared foundation reduces costs, increases interoperability, and accelerates the development of mission-specific variants like Gambit 6.

By leveraging specialized configurations and advanced autonomy, Gambit aircraft offer tailored capabilities that enhance operational efficiency, reduce costs, and improve survivability in contested environments. One Gambit derivative is the U.S. Air Force's YFQ-42A, developed as part of that service's effort to field an AI-enabled uncrewed wingman. Based off the original Gambit 2 concept, the YFQ-42A is designed to complement human-crewed fighters like the F-35 and Next-Generation Air Dominance (NGAD) systems, expanding sensing, weapons capacity, and survivability in contested airspace.

The original concept for Gambit was announced three years ago and was based on four models. Gambit 1 is a nimble sensing platform optimized for long endurance; Gambit 2 adds the provision for air-to-air weapons; Gambit 3 looks much like Gambit 2 but is optimized for a complex adversary air role; Gambit 4 is a combat reconnaissance-focused model with no tail and swept wings. Then in 2024, GA-ASI announced Gambit 5 for ship-based CCA operations.

Drones World Editor Kartikeya In Conversation with

Mr. Matt Whitaker

Director, Mobility Innovation Platform at Michigan Central

Q What specific regulatory, technical, or community hurdles has your ecosystem uniquely solved that others haven't?

A Michigan Central has created a complete, turn-key solution for testing and scaling new drone technologies into market-ready solutions, the Advanced Aerial Innovation Region (AAIR). This platform blends the 28 square mile AAIR testing area with lab space and launchpads, digital safety and mapping infrastructure, regulatory process support, startup engagement, industry facilitation, customer and community feedback loops, and workforce training all under one ecosystem.

Key to the progress here is that the ecosystem brings together partners, startups, Fortune 500 companies, universities, government organizations, artists, investors and nonprofits into one network that helps create opportunities and accelerate innovation. This allows drone startups to enter contracts, pilot new technologies, and deploy beyond visual line of sight (BVLOS) quickly and effectively as AAIR guides the federal authorization processes, state coordination, municipal permitting and private sector technical support.

Q How does Detroit's industrial legacy provide a tangible advantage for modern drone startups over other tech hubs?

A While competing hubs across the globe offer safe airspace, many times this happens in rural, uninhabited land, converted airports, and open fields. AAIR spans a dense urban area of commercial office, industrial, residential, and retail-zoned land. This is the perfect mix of real estate, people, and day-to-day activity for drone operators to demonstrate the value of aerial drone delivery systems in a practical, and real-world environment.

Detroit also has a century plus of experience in automotive manufacturing, material sourcing and logistical knowhow, providing it with the proven knowledge and skillset for mass, complex manufacturing and assembling. More than 1.7 million vehicles come out of Detroit assembly lines each year. We believe that the talent and processes that drives that kind of complex engineering, design and production, when paired with ongoing regulatory supporting, can be adapted to scale a robust aerial ecosystem that is able to meet the demand for millions of new units per year.

Q Beyond airspace access, what is the most valuable non-technical resource your platform provides (e.g., data, insurance, policy support)?

A The three most valuable resources that our platform provides are the physical infrastructure, virtual integration and talent.

From a physical standpoint, AAIR includes drone launch & landing pads (including a rooftop platform integrated into the Newlab at Michigan Central startup ecosystem), an air traffic operations center, and digital systems to support ground based detect-and-avoid through radar, ADS-B, and remoteID. Additionally, drone startups have access to our 18k square feet of advanced prototyping and fabrication facilities for prototype development -- which include everything from woodworking space and CNC machines to 3D printers and circuit board fabrication.

Our virtual platform utilizes Airspace Link low-altitude digital technology that provides drone operators with real-time airspace risk assessment, traffic management, digital mapping, and drone operations management capabilities.

From a talent perspective, Michigan is home to one of the largest concentrations of automotive engineering talent, globally, and leads the nation in

the number of engineers per capita with more than 375 mobility companies based within 50 miles of downtown Detroit.

Michigan Central aims to bolster that talent with robust adult training and youth workforce development programs in partnership with institutions like the University of Michigan Center for Innovation, Wayne State University, and Grand Valley State University. With a focus on robotics, automation and advanced manufacturing, these programs are designed to create seamless classroom-to-career pathways by embedding youth into the startups, researchers and community organizations who are already operating out of our membership platform.

As an example, we have seen 130 graduates of our CODE313 drone technology and coding program, with more than 20 securing FAA part 107 remote pilot certification – including an 18-year old, who was the operator for Aerialoop's 2.3 mile BVLOS drone delivery.

Q Which specific startup operating in your ecosystem best demonstrates the "before and after" impact of your model?

A Lamarr.AI is an automated solutions provider for building diagnostics. By combining its thermal imaging with AAIR capabilities, Lamarr.AI was able to enter into a pilot with the City of Detroit to inspect local municipal buildings. Working with their partner FlyGuys, AAIR enabled a shift from visual line of sight operations to BVLOS, enabling building scans throughout the city.

Over the course of the pilot, they identified more than 460 areas of thermal energy loss – information that is projected to save an estimated 22% in HVAC energy costs. As a result of its ongoing success in Detroit, Lamarr.AI is accelerating deployment of its technology across 8 other States, Canada, UK and the UAE – with a focus on improving energy efficiency across entire real estate portfolios.

Q As the FAA's Part 108 (BVLOS) looms, how is Detroit's progress creating a de-facto national blueprint?

A As most cities play catchup to drone regulation, Detroit is already well-prepared. Our AAIR is the complete package, a turnkey solution that will serve as the blueprint for American cities in 2026 as they look to modernize drone deployments in sync with the FAA's upcoming Part 108 (BVLOS) regulations.

As Part 108 normalizes BVLOS drone operations, AAIR will help startups rapidly adapt to the new ruleset and enable new businesses to operate on a real-world scale. Availability of AAIR within Detroit is leading to rapid adoption of drones through both commercial and public use cases, enabling scaled technology adoption and creating a framework to inform and accelerate drone utilization throughout the country.

Q What is your most effective strategy for building crucial public trust and acceptance for urban drone operations?

A Michigan Central and key partners here like Newlab and Airspalce Link aim to help shape regulatory best practices to deploy drone technologies that blend seamlessly with everyday life. The critical real-world data that our drone operators capture is reciprocally shared with policymakers operating under the Michigan Central partner umbrella.

This information, captured from more than 1,000 BVLOS flights, provides officials with insight related to noise, safety and airspace management. Insight that they use to further modernize and shape regulation based on demonstrable facts, not just speculation, and provide new funding opportunities through the State's Advanced Aerial Mobility Fund.

But community engagement is also paramount to ensure public trust through transparency and participation. We've made community education a core tenet of the process, launching the first of its kind Flight Viewer for Community powered by Airspace Link, which allows residents to learn more about any drone flying in the Advanced Aerial Innovation Region, all while protecting the need for pilot and operator business proprietary information.

The next building block of community engagement is linking drone innovation to local workforce development. Through partnerships with higher education institutions and nonprofits, startups and founders are creating training programs that prepare Detroiters for jobs in this emerging sector.

Since June 2024, more than 2,400 young people and 600 adult learners have been directly impacted by these types of learning and activity programs at Michigan Central.

Q Looking at your portfolio, which application—logistics, public safety, inspection—is maturing fastest and why?

A Within AAIR, we see significant interest and evidence of rapid adoption by public safety organizations. The ability for first responders to gain insights that quickly and safely serve the community through improved response is exceptionally compelling. Public safety organizations throughout the country have clearly identified this opportunity and are poised to adopt drone technology at a rapid clip. It is hard to dispute that over the past few years this market has grown fastest.

However, Michigan Central's mission to enable partners in our ecosystem to scale BVLOS drone operations in the real-world urban environment is informed by a view that Part 108 offers an upcoming inflection point that will allow drones to demonstrate their ability to reinvent business models across a broad spectrum of use cases. Within the commercial portfolio we can split the market into two primary segments of "data" and "delivery." Data being those opportunities focused on drone-based deployment of remote sensors (optical, thermal, lidar, and more) that can capture information from video footage to building inspection and more, and delivery being those operations focused on movement of goods and services.

Evidence from AAIR suggests that the data segment is likely to outpace delivery segment in the near term, unlocked by Part 108 rulemaking but existing without many of the operational complexities inherent in delivery business models. Despite this, we are equally excited by the fantastic progress we have seen partners like blueflite make as they continue to make huge strides in that more complicated delivery domain.

INSITU INTRODUCES PLEO SATCOM FOR SCANEAGLE UAS, ADDS LASER TARGETING CAPABILITY FOR ENHANCED OVER-THE-HORIZON ISR-T MISSION SETS

Insitu, a Boeing Company, is proud to announce the addition of Proliferated Low Earth Orbit (PLEO) Satellite Communication (SATCOM) datalinks and laser-targeting capabilities to its long-endurance, battle-tested ScanEagle Uncrewed Aircraft System (UAS). These enhancements position ScanEagle as the premier choice for reliable over-the-horizon Beyond Line of Sight (BLOS) Intelligence, Surveillance, Reconnaissance and Targeting (ISR-T) missions, further solidifying its reputation as the most proven small UAS in operation today. ScanEagle, recognized for its reliability with over 1.3 million flight hours logged across contested and combat conditions globally, now offers SATCOM datalinks leveraging PLEO satellite constellations. This capability will enable operators to achieve extended mission reach, even under the most challenging conditions, while controlling ScanEagle UAS from anywhere in the world. Resilience features include visual-based navigation and autonomous RF-switching, ensuring confidence in dynamic and challenging operational scenarios.

"As the leading small UAS on the market, ScanEagle has continuously earned accolades for readiness, reliability, and innovation," said Diane Rose, Insitu CEO. "The integration of PLEO SATCOM provides operators unparalleled BLOS capability, enabling real-time decision-making capability and operational success for land and maritime missions. The addition of laser targeting capability greatly expands ScanEagle's reach and mission capability for the most demanding ISR-T missions." With Vertical Takeoff and Landing (VTOL) launch and recovery, ScanEagle is ready to fly both maritime and land-based sorties from small ship decks and other expeditionary locations, meeting mission requirements with unequaled flexibility. Its robust capability set includes EO and multi-spectral optics, AI-assisted wide-area and maritime search, communications relay, Signals Intelligence, Electronic Warfare, and laser-designator targeting.

These upgrades are the latest evolution in ScanEagle's storied track record of innovation, ensuring mission-critical autonomy and resilience in the most demanding environments. Insitu announced PLEO SATCOM capability for Integrator in 2024, and Integrator ER has offered GEO SATCOM capability for years. As Insitu continues to push the boundaries of UAS capability, ScanEagle and Integrator remain the trusted choice for global operators seeking unmatched reliability and operational excellence.

ENABLING THE SWARM: EQUIPPING DRONES WITH ELECTRONIC WARFARE CAPABILITIES

Northrop Grumman is redefining the future of electronic warfare by creating cutting-edge technology that delivers unmatched capability – even in the smallest of systems.

The modern battlespace is defined by contested and degraded environments where allies and adversaries compete for crucial bandwidth. To maintain a decisive advantage and degrade the capabilities of enemy forces, the U.S. and its allies require electronic warfare (EW) technology that is not only advanced but also agile, resilient and scalable. That's why Northrop Grumman, has developed a revolutionary technology, compact yet powerful, that can dominate in any environment.

At Silent Swarm 2025, an annual U.S. Navy demonstration of advanced EW for small, unmanned systems, Northrop Grumman delivered a live, proof-of-concept. On-site, the company integrated its Tactical Edge Electromagnetic Solutions (TEEMS) onto compact platforms – ranging from tiny robots to unmanned surface vessels and drones – demonstrating how these small systems can produce outsized impacts. With TEEMS embedded, these platforms become powerful tools capable of detecting and jamming enemy signs with speed and precision, ensuring superiority across every domain.

A Big Punch in a Tiny Package
In contested environments, where every inch of space and ounce of weight matters, EW solutions must combine top-tier performance with ultra-efficient size, weight and power (SWaP) for unmatched mission

flexibility. Northrop Grumman's TEEMS solution delivers exactly that, integrating high-performance EW capabilities into a compact 1U Modular Payload. Measuring smaller than a business card, it was not only the smallest at the event, but also the most capable, packing powerful performance into an unprecedented form factor.

The demonstration was a testament to the power of resilient, scalable technologies, designed for mobility. While on-site, Northrop Grumman's team:

Countered Evolving Threats: The team successfully geolocated a frequency-agile target emitter – which are known to be difficult to disrupt – and performed stand-in jamming.

Achieved Intelligent, Integrated Operations: Through the integration with Tactical Assault Kit software, the team remotely controlled multiple unmanned ground and surface units across a large, 50-square-mile operational area. The system's ability to seamlessly coordinate with these diverse assets demonstrated its capacity for intelligent, integrated mission solutioning.

Maximized Combat Impact: In a single, simultaneous action, TEEMS knocked out three different radios that were spread across a wide frequency range.

Enabling the Swarm: Equipping Drones with Electronic Warfare Capabilities
Northrop Grumman is at the forefront of building technology that delivers maximum impact – packing big power into pocket-sized tech. The Tactical Edge Electromagnetic Solutions (TEEMS) Tactical Edge Device packages "Rock Ridge," Northrop Grumman's state-of-the-art electronic warfare (EW) transceiver, into a compact 1U Modular Payload. (Photo Credit: Northrop Grumman)

"Silent Swarm 2025 was a resounding success, not just for its technological achievements, but because it underscored our team's ability to innovate and execute under pressure," said Angela Johns, vice president, weapons integration & mission solutions, Northrop Grumman. "This effort reinforces our commitment to delivering mission-ready solutions tested in simulated environments and solidifying our role in advancing tactical operation dominance both today and in the future."

By successfully showcasing that high-end electronic warfare (EW) capabilities can be integrated in a compact, modular package, Northrop Grumman is empowering the U.S. and its allies to remain mission-ready at the tactical edge. The work accomplished at Silent Swarm 2025, along with technology such as the TEEMS device, illustrates how the company is architecting the advantage for today's performance and tomorrow's success along the tactical edge.

Drones World Editor Kartikeya In Conversation with

Kwang Oh Moon

Principal Researcher and Head of Future Technology Team, Korean Air's Aerospace R&D Center.

Q What was the most significant, unexpected safety risk identified during the Phase 2 flights in the metropolitan corridor, and how did the ACROSS system specifically mitigate it?

A The most critical safety risk identified during the Phase 2 demonstration was the operational integration with a major metropolitan airport - specifically, Gimpo Airport (GMP) - which handles approximately 400 conventional aircraft movements daily. The primary challenge lay in ensuring adequate aircraft separation and executing safe air traffic control (ATC) handovers as UAM, with its distinct flight characteristics, was introduced into the frequently utilized airspace.

Korean Air's proprietary UAM operations and traffic management platform, ACROSS (Air Control and Routing Orchestrated Skyway System) addressed this by providing real-time monitoring and tracking of all participating assets, including the demonstrator aircraft, simulated aircraft, and all active commercial flights. This comprehensive data, encompassing flight trajectory and status information, was fed directly to controllers to facilitate precise air traffic management. Critically, Korean Air stationed an experienced controller in the Gimpo Tower to ensure seamless integration of conventional ATC data with the new UAM control data, enabling appropriate and timely intervention.

Q The demonstration involved seamless handovers between multiple operators. What was the key technical or protocol breakthrough that made this possible, and how does it differ from traditional air traffic control?

A In Grand Challenge Phase 2, the transfer of control within Class B airspace was categorized into two types: transfers between UAM traffic management and ATC, and transfers between different UAM traffic management providers (PSU, Provider of Services for UAM).

ATC to UAM: Given the requirement for a regulatory framework and procedural consensus, this transfer relied on voice-based manual procedures. This mirrored conventional ATC handover protocols to ensure safety under current operational limitations.

Inter-PSU: Transfers between PSUs utilized an Information Sharing System. This system successfully demonstrated handovers across take-off, cruise, and landing phases by enabling the real-time sharing of flight plans, trajectories, and

vertiport status. This approach differs significantly from traditional ATC, which is primarily voice-based and centrally managed by a single Air Navigation Service Provider (ANSP).

Looking ahead, the UAM Information Sharing System anticipates a future of decentralized, automated management. It is expected to integrate with the System-Wide Information Management (SWIM) framework, linking Drone Traffic Management (UTM) and traditional ATM systems to facilitate seamless and safe UAM operations.

A notable achievement in Phase 2 was the successful trial of data-link-based control using Controller-Pilot Data Link Communications (CPDLC) over the 5G network, which demonstrated a clear potential to reduce voice communication workload for both pilots and controllers.

Q Can you provide a specific example of an "unexpected or abnormal situation" you simulated, and how ACROSS automatically provided an alternative routing to ensure operational stability?

A A variety of contingency scenarios were simulated, including navigation equipment failure, loss of communication, corridor deviation, bird strikes, and vertiport unavailability.

ACROSS continuously monitors the flight status by fusing data from the aircraft's transponder and ground radar, providing essential data for control actions. While alternative and emergency landing sites are pre-determined during the flight planning phase, automatic rerouting capability was not tested in Phase 2.

However, a critical component for robust contingency management is the planned integration of a Dynamic Corridor Generation function within ACROSS. This feature will automatically generate alternate routes in-flight, based on real-time factors such as ground risk analysis and the aircraft's system status and performance.

Q How did Korean Air's decades of experience as a scheduled airline directly influence the design and operational philosophy of the ACROSS platform, beyond just traffic management?

A Korean Air's decades of experience in commercial airline operations directly influenced the ACROSS design, extending its scope far beyond basic traffic management. To ensure comprehensive operational capability, the platform integrates critical operational functions, including: ground handling protocols, aircraft maintenance procedures, parts management, optimal schedule/flight planning, and seamless integration with vertiport operating systems. Our long history in both developing and operating Unmanned Aerial Vehicles (UAVs), alongside setting up the requisite support systems, proved critical, highlighting the necessity for truly integrated drone traffic management. This simultaneous experience in aircraft development and operation informed a design philosophy centered on fundamental airline imperatives: system redundancy, high reliability, and scalability. These principles are deeply embedded within the ACROSS system architecture, ensuring a robust platform that meets the rigorous standards of commercial airline operations.

Q Based on the Phase 2 data, what is the single biggest regulatory or technical hurdle that must be cleared before we see the first commercial passenger routes in Korea?

A The primary challenges lie predominantly within the policy and regulatory domains. This involves establishing practical frameworks for: flight procedures and standards, traffic control and handover protocols, as well as pilot and controller licensing and certification.

From a technical standpoint, since vertiports will operate across diverse urban environments (unlike centralized airports), ensuring the scalability and reliability of control system automation is a significant requirement. Furthermore, establishing standardized data exchange protocols and a robust security framework between different operators and service providers is critical, particularly for the sharing of sensitive information.

Ultimately, the most crucial prerequisite is the smooth and timely Type Certification of eVTOL aircraft. This must be followed by their deployment in public sector pilot operations to rigorously verify both utility and operational safety prior to launching commercial passenger services.

Q How does the consortium structure, which includes competitors like Hyundai, accelerate progress in a way that a single-company approach could not?

A The establishment and operation of a complex UAM ecosystem cannot be achieved by any single corporation or government entity. The "One Team" consortium successfully unites specialized domain experts to rapidly build a robust and safe ecosystem:

Hyundai Motor Company: eVTOL development

Korean Air: Aircraft development, MRO (Maintenance, Repair, and Overhaul), and operational expertise

Incheon International Airport Corporation (IIAC): Operation of a world-class international hub

KT (Korean Telecom): 5G communication infrastructure expertise

Hyundai Engineering & Construction: Construction and infrastructure

By aggregating these core, essential competencies, the consortium effectively covers all critical functions required for the UAM ecosystem. This collaborative approach, demonstrated in the Grand Challenge, ensures a safer and more efficient ecosystem build-out than any single-company effort could achieve.

Q What specific new capability—such as managing higher traffic density or more complex weather scenarios—will be the primary focus for enhancing ACROSS in the next phase of the Grand Challenge?

A The primary focus for ACROSS enhancement is the progressive refinement of core functionalities, grounded in concepts of operations (ConOps) shared by global partners such as Supernal and Skyports. We aim to advance essential functions, prioritizing alignment with U.S. and European operational standards to ensure global interoperability.

High-priority capabilities for the next phase include: Risk-based dynamic corridor generation: moving beyond static flight paths to dynamically adapt routes based on real-time risk assessments

Reliable trajectory tracking algorithms and Safety Net integration. Enhanced Interoperability: strengthening connectivity with both vertiport and broader UTM ecosystem.

This continuous evolution is underpinned by the establishment of a permanent testing and verification framework. In collaboration with local helicopter operators like K-Aviation, we will ensure the sustained validation of these critical technologies and features.

Dubai Air Taxi Network Takes Flight: Joby Completes Landmark Flight and Announces Next Vertiport Locations

Joby Aviation, Inc a company developing electric air taxis for commercial passenger service, today announced the next three vertiports to be added to Dubai's electric air taxi network, alongside Dubai's Road and Transport Authority (RTA) and Skyports Infrastructure, who will be responsible for building the vertiports. The sites, at the American University of Dubai, Atlantis the Royal and the Dubai Mall, will enable Joby to deliver high-speed, emissions-free connections between some of Dubai's most high-profile destinations, as part of its six-year exclusive agreement with the RTA to establish air taxi services in the Emirate.

The news comes as Joby successfully completed a landmark flight test, becoming the first electric air taxi company to conduct a point-to-point flight in the UAE. On Sunday 9 November, Joby landed its aircraft at Al Maktoum International Airport (DWC) following a 17-minute piloted flight from its test facility in Margham, underscoring Joby's commercial market readiness and ability to operate in shared airspace. Tens of thousands of attendees will have the opportunity to see Joby's aircraft in action at this week's Dubai Airshow, with demonstration flights planned for each day of the show.

His Excellency Mattar Al Tayer, Director General, Chairman of the Board of Executive Directors of Dubai's Roads and Transport Authority (RTA), stated that "the successful completion of the first crewed flight of the electric aerial taxi marks a new milestone in Dubai's distinguished record of leadership and innovation. The successful completion by Joby Aviation of the first air taxi flight between two distinct locations underscores the success of RTA's operational framework for developing Dubai's aerial mobility ecosystem. This milestone paves the way for a new phase of integration among smart mobility systems across the emirate, further strengthening the confidence of global partners in Dubai's regulatory and technological environment and establishing it as a leading global platform for future mobility trials.

"RTA is steadily progressing towards the commercial launch of the aerial taxi service in 2026, solidifying Dubai's position as the city of the future and a global hub for innovative and sustainable urban mobility solutions, combining efficient infrastructure with high quality of life," His Excellency confirmed.

JoeBen Bevirt, founder and CEO of Joby Aviation, said: "From flight demonstrations to infrastructure, we're making incredible progress on all fronts as we look ahead to launching commercial passenger service in Dubai next year. By working alongside the RTA, other government agencies and infrastructure partners, we've been able to streamline development of the world's first air taxi service and are closer than ever to making urban air transport an everyday reality for residents and visitors across the UAE."

EHANG EH216-S CONDUCTS FIRST URBAN HUMAN-CARRYING PILOTLESS EVTOL FLIGHTS IN THE MIDDLE EAST, PARTNERING WITH QATAR'S MINISTRY OF TRANSPORT

EHang the world's leading Advanced Air Mobility (AAM) technology platform company, announced the successful completion of a landmark series of trial airtaxi flights, including point-to-point and human-carrying flights, with its EH216-S pilotless electric vertical takeoff and landing (eVTOL) aircraft in the core district of Doha, Qatar. Conducted in close partnership with Qatar's Ministry of Transport, these pioneering point-to-point flights between the Port of Doha and the Katara Cultural Village, a prominent landmark in the heart of the city, represent the first urban flights of a pilotless eVTOL aircraft in the Middle East, setting a new benchmark for the future of AAM across the region.

The trial operation campaign demonstrated the real-world potential and future commercial operation value of the EH216-S in Urban Air Mobility (UAM) scenarios through point-to-point flights between the Port of Doha and Katara Cultural Village—two prominent urban landmarks. This strategic route served as proof of concept for aerial shuttle service connecting transport hubs with key urban destinations. More than just a test flight, it showcased a visionary model for intermodal connectivity, seamlessly linking maritime and aerial transport to bypass ground congestion—transforming a 30-minute car journey into a sustainable, 8-minute flight. It also provides a global reference—the EHang model—for scenario-based flight in advanced air mobility.

These flights marked the first point-to-point flight of the EH216-S pilotless eVTOL in an urban environment in the Middle East, underscoring the technical maturity and operational readiness of EHang´s pilotless eVTOL systems for real-world deployment. It will provide valuable references for civil aviation regulators in the Middle East and other countries worldwide to formulate and promote the improvement of policies and regulations, strengthens the confidence of operators of the EH216-S, and will accelerate the global commercialization of EHang's pilotless human-carrying eVTOLs.

Executed with the operational authorization from the QCAA, and the strategic support of the MOT of the State of Qatar, this flights reflect Qatar's pioneering vision to lead smart and sustainable mobility solutions in line with its Qatar National Vision 2030.

Strategic Cooperation for AAM Development in the Region
The achievement is the result of close collaboration between EHang, the MOT of Qatar, and the QCAA, working hand-in-hand to ensure the regulatory, safety, and operational readiness of this project.

Minister of Transport of the State of Qatar, HE Sheikh Mohammed bin Abdulla bin Mohammed Al Thani, described the trial operation as a new milestone in the State of Qatar's journey of adopting smart and sustainable mobility solutions and constitutes an advanced step forward toward a future enabled by innovation and environment-friendly technologies, something that emphasizes MOT's commitment to enhancing Qatar's regional and international pioneering position in modern transportation and supporting national efforts to reduce carbon emissions and improve the quality of life.

This initiative, he said, is a true translation of the MOT Strategy 2025-2030 that aims at creating a smart, resilient transportation system where sustainability, innovation, and integration between various transportation modes are front and center, thereby boosting the efficiency of the country's transportation system and advancing the goals of the Third National Development Strategy (NDS3) and Qatar National Vision 2030 (QNV2030).

Vertical Aerospace Welcomes UK CAA's Preparation for Commercial eVTOL Operations by 2028

Vertical Aerospace a global aerospace and technology company that is pioneering electric aviation expressed its support for the UK Civil Aviation Authority's (CAA) recent publication of a policy consultation outlining the regulatory framework for commercial electric vertical take-off and landing (eVTOL) aircraft operations from 2028.

The consultation represents a defining moment for the UK's advanced air mobility sector, aligning with both Vertical's certification and market entry timeline and the UK Government's objective of enabling first commercial eVTOL services by 2028.

The consultation sets out regulatory requirements for commercial eVTOL operations, including pilot licensing, flight operations, vertiport infrastructure, and aircraft airworthiness. Importantly, it reaffirms SC-VTOL as the basis for type certification – the high-safety certification standard first developed by the European Union Aviation Safety Agency (EASA), and equivalent to those used by commercial airliners. This alignment between the CAA and EASA ensures a globally recognized, fully exportable certification pathway.

The CAA is leveraging existing aviation frameworks wherever possible – covering pilot training, airspace management, and maintenance – and reinforces safety as the top priority, while ensuring regulation must also support innovation and sector growth. This continuity provides predictability and confidence to UK manufacturers, investors, and operators and ensures that new eVTOL services will be integrated safely and efficiently into the UK's established aviation system and compatible with international frameworks.

Trevor Woods, Director of Regulatory Affairs at Vertical Aerospace said: "Clear and consistent regulation is critical to Vertical's industrial scale-up and the VX4's safe entry-into-service. The UK's rigorous yet progressive approach provides a de-risked pathway to certification and operations in 2028, ensuring we can scale globally with confidence while meeting the highest safety standards in the industry. We value the CAA's collaborative approach – working side-by-side with industry to build a safe, efficient regulatory framework for the certification and operation of our aircraft."

This week, Vertical's Chief Engineer, David King, joined the 'CAA on Air' podcast to discuss how close collaboration between the regulator and manufacturer is accelerating progress toward safe, certified eVTOL operations. Vertical also announced this week that it has received its Permit to Fly from the CAA and commenced 'Phase 4 – Transition' flight testing, the final stage of its VX4 prototype flight-test programme.

ARCHER'S MIDNIGHT SHOWCASES IN-COUNTRY EVTOL FLIGHT TEST CAMPAIGN IN UAE AS PART OF ITS COMMERCIAL LAUNCH EDITION PROGRAM

Archer Aviation Inc.a leading developer of electric vertical takeoff and landing (eVTOL) aircraft announced the successful completion of an in-country eVTOL flight test campaign, showcasing Midnight's full eVTOL flight envelope – including vertical takeoff, transition, and wingborne flight – in the UAE's local operating environment and over desert areas. The campaign marks a major step forward in the implementation of Abu Dhabi's Advanced Air Mobility (AAM) vision, developed under the supervision of the Integrated Transport Centre (ITC). In connection with this progress, Archer has now begun receiving payments under its definitive agreement with Abu Dhabi Aviation (ADA) related to its Launch Edition program.

This marks another key step in Archer's expansion into the United Arab Emirates and is part of the company's Launch Edition commercialization program, which aims to make Abu Dhabi the first region in the world to begin commercial operations with Midnight.

Archer's flight test campaign in Abu Dhabi successfully demonstrated key aspects of Midnight's performance and reliability under UAE-specific operating and environmental conditions, supporting the company's path toward operational readiness in the region. The tests were conducted in close coordination with the UAE's regulator, the General Civil Aviation Authority (GCAA), Integrated Transport Centre and Archer's operations partner, Abu Dhabi Aviation.

In addition to flight test progress, Archer and its UAE partners continue to build momentum across aircraft certification and preparation for pilot training and aircraft maintenance. In October, Archer hosted the UAE's General Civil Aviation Authority (GCAA) at its Headquarters in San Jose, CA for another week-long working session to continue to accelerate its regulatory pathway in the Emirates. Additionally, Archer's airline team has continued its work alongside Etihad Aviation Training to mature its operational readiness by advancing pilot training.

Archer's commercial momentum also complements Abu Dhabi's recent announcement to develop an emirate-wide air taxi network of over 10 vertiport sites, under the supervision and coordination of the Integrated Transport Centre.

Archer's Midnight eVTOL aircraft taking off vertically during one of it's recent UAE test flights.

"We designed Midnight to be able to handle challenging weather environments like the UAE with its sand and heat, and it delivered the results we expected it to across all phases of flight," said Adam Goldstein, Archer's Founder and CEO. "Our 'Launch Edition' program has proven to be an effective framework to help accelerate Archer and our partners' progress toward commercialization in Abu Dhabi and the rest of the UAE."

"The successful completion of these initial flight tests highlights Abu Dhabi's commitment to creating an innovation-friendly environment that will support efforts to successfully implement eVTOL aircraft into the UAE's airspace," said Mahmood Al Hameli, Group CEO of Abu Dhabi Aviation Group. "Our collaboration with Archer continues to demonstrate how partnerships between global innovators and local industry leaders, via Archer's 'Launch Edition' program, can accelerate the arrival of this transformative new mode of transportation in the UAE and beyond."

Joby Celebrates 1st Flight of Turbine Electric Demonstrator Aircraft

Joby Aviation, Inc. announced the first flight of its turbine electric, autonomous VTOL aircraft. The demonstrator builds on Joby's fully-electric air taxi platform and integrates a hybrid turbine powertrain along with the Company's SuperPilot™ autonomy stack to deliver greater range and payload capability. Potential applications for Joby's hybrid aircraft include longer range air taxi services as well as sales to civilian, commercial and defense customers.

The start of flight testing comes just three months after Joby announced the aircraft concept alongside a new partnership with L3Harris Technologies (NYSE: LHX), who bring proven expertise on platform missionization, including sensors, effectors, communication and collaborative autonomy. L3Harris plans to equip Joby's commercial hybrid aircraft to address defense applications, such as contested logistics, "loyal wingman" operations and low-altitude support. The U.S. government has prioritized the acquisition of resilient, autonomous and hybrid aircraft, requesting over $9 billion in the FY26 budget for next-generation platforms.

"It's imperative that we find ways to deliver new technology into the hands of American troops more quickly and cost-efficiently than we have in the past," said JoeBen Bevirt, CEO and Founder of Joby. "Our vertical integration puts us in a unique position to deliver on this goal, moving from concept to demonstration - and from demonstration to deployment - at a pace that is unprecedented in today's aerospace and defense industry."

The aircraft completed its first flight at Joby's Marina, California, facility on November 7. It will continue ground and flight testing before taking part in operational demonstrations with government customers, planned for 2026.

"The magic of dual-use technology is that it creates value in both directions," added Bevirt. "By building on our proven technology stack, our partners can rapidly deliver new capabilities for the Department of War while we benefit from advancing the maturity of our hybrid and autonomous systems. In turn, this will help pave the way for commercial applications, from longer-range hybrid VTOL missions to autonomous air operations in commercial airspace."

"The future battlefield relies on unmanned systems augmenting manned platforms, and our partnership with Joby accelerates missionized VTOL aircraft to directly support defense requirements," said Jason Lambert, President, Intelligence, Surveillance and Reconnaissance, L3Harris. "L3Harris has delivered thousands of missionized aircraft, and our focus is scaling rapidly to bring these commercial VTOL aircraft to the fight."

VERTICAL AEROSPACE RECEIVES PERMIT TO FLY APPROVAL ALLOWING PILOTED TRANSITION TESTING TO PROCEED

Vertical Aerospace a global aerospace and technology company that is pioneering electric aviation announced it has received its Permit to Fly from the UK Civil Aviation Authority (CAA) and commenced 'Phase 4 – Transition' flight testing, the final stage of its VX4 prototype flight-test programme.

This regulatory approval enables Vertical's flight-test team to begin testing the VX4 prototype's defining transition manoeuvre - seamlessly shifting between hover ("helicopter mode") and wingborne flight ("airplane mode").

Vertical's Test Pilot, Paul Stone, flew the first flight of this phase at 10:11am GMT on 13 November 2025. 'Phase 4 – Transition' represents the final stage of the VX4 prototype flight test programme and follows completion of flight test Phases 1-3, earlier in the year. These confirmed the VX4's exceptional flying qualities, and included flying in open air space for the first time.

To prepare for piloted transition flight, Vertical's engineering and test teams recently completed extensive simulation, ground, and flight testing in collaboration with the UK CAA, verifying all 200 Minimum Safe Aircraft requirements.

In support of our Permit to Fly, more than 20,000 pages of safety and technical information were updated and submitted to the CAA. The CAA is working closely with the European Union Aviation Safety Agency (EASA) for their concurrent validation and certification of the VX4 to the highest safety standards required for commercial use.

Stuart Simpson, CEO, Vertical Aerospace, said: "Receiving our Permit to Fly and starting Phase 4 marks a defining moment for Vertical Aerospace. Our team has spent months verifying every core system under close regulatory oversight, reflecting our unique and robust approach to certification. This step is a critical demonstration of the VX4's unique tiltrotor capability and real-world capability and is a major technical and certification unlock."

Last week, as part of its Q3 Business & Strategy update call, Vertical shared an animation explaining this critical step of transition and a first look at it's new certification aircraft's leading cabin size and comfort.

URBANLINK AIR MOBILITY AND SIGNATURE AVIATION PARTNER TO EXPLORE DEVELOPMENT OF ALL ELECTRIC AIR OPERATIONS IN FLORIDA

Signature Aviation, the world's largest network of private aviation terminals, and UrbanLink Air Mobility, a pioneering South Florida-based advanced air and maritime mobility operator and subsidiary of URBYN Mobility announced a letter of intent (LOI) to explore the safe and scalable expansion of all-electric air operations in Florida. The partnership will allow for research and exploration of infrastructure for UrbanLink's future fleet of BETA Technologies electric conventional takeoff and landing (eCTOL) aircraft at Signature's extensive network of private aviation terminals across the state.

In addition, Signature and UrbanLink are actively pursuing the establishment of UrbanLink's operating and maintenance base at a South Florida Airport.

"We are honored to partner with Signature, the world's leading network of private aviation terminals, to expand our Florida network and establish our operations base at their location in South Florida," said Ed Wegel,

founder , chairman and CEO of UrbanLink. "Signature is already collaborating with BETA Technologies to explore the installation of charging infrastructure across its Florida locations, and our operating teams are working closely together on route development and base planning to ensure a seamless transition to all-electric air mobility."

"The use of private aviation terminals is critical as we launch operations and await the build-out of vertiport infrastructure to support flight operations beyond existing airports. We will also be working closely with Signature on the planning and development of those vertiports," added Wegel.

"We're always focused on creating exceptional experiences for our guests and elevating every moment of their journeys," said Tony Lefebvre, chief executive officer, Signature Aviation. "This partnership showcases how our team is looking to the future to deliver those great experiences and together with UrbanLink, we're looking forward to growing the infrastructure and access for all-electric air mobility throughout the state of Florida."

EHANG AND CHINA ACADEMY OF CAST FORGE STRATEGIC PARTNERSHIP TO ADVANCE HIGH-QUALITY DEVELOPMENT OF NEXT-GEN AVIATION TECHNOLOGIES

EHang Holdings Limited (a global leader in advanced air mobility technologies announced the signing of a strategic cooperation framework agreement with the China Academy of Civil Aviation Science and Technology (CAST).

The partnership aims to deepen cooperation in resource sharing, joint innovation, key project collaboration, breakthrough research and development, standards system development and high-level talent cultivation. Through this strategic collaboration, both parties will accelerate the commercialization of the low-altitude economy and jointly promote the high-quality development of civil unmanned aerial vehicles (UAVs) and electric vertical takeoff and landing (eVTOL) technologies, enhancing China's global competitiveness in aviation science and technology.

The signing ceremony took place on November 10 at Luogang Park in Hefei. Yuan Fei, Member of the Standing Committee of the Hefei Municipal Committee and Vice Mayor of Hefei, Li Yu, President of CAST, and Zhao Wang, Chief Operating Officer of EHang, attended and witnessed the signing. Chen Guangcheng, Vice President of CAST, and Longxuan Hu, Senior Vice President of EHang and Chairman of EHang General Aviation, signed the strategic cooperation framework agreement

on behalf of both parties.

In a significant step for China's low-altitude economy, the Civil Aviation Regulations and Standardization Research Institute of CAST (CAAC) and eVTOL leader EHang have formalized a comprehensive strategic partnership. The agreement, solidified in Hefei, follows a demonstration flight of EHang's certified EH216-S aircraft and brings together CAST's regulatory and research prowess with EHang's technical and operational expertise.

The collaboration is structured around six core areas: flight safety, operational support, route management, ecosystem development, technological cooperation, and policy and standards formulation. The partnership aims to address key industry challenges by jointly working on airworthiness compliance, establishing operational standards, developing operator training systems, designing vertiports and flight routes, and creating integrated low-altitude management platforms.

CAST President Li Yu emphasized that the partnership concretely implements national strategic initiatives, while EHang COO Zhao Wang highlighted its role in overcoming compliance, safety, and efficiency challenges for scaled operations. By integrating resources across the entire value chain, the collaboration is designed to accelerate technological innovation, improve the low-altitude ecosystem, and promote the safe, commercial application of next-generation aircraft, ultimately contributing Chinese innovation to the global aviation industry.

Drones World Editor Kartikeya In Conversation with

Pavle Jeremic

CEO and Founder Aether Biomachines.

Q Which specific drone performance metrics—like strength, weight, or speed—do your new 3D print polymers directly improve?

A Our new 3D print polymers directly improve strength, flexibility, and processability of materials used to produce drone components. Our first commercial product line focuses on super materials for additive manufacturing, using a new class of polymer additives that embed evenly within host materials, similar to how steel rebar reinforces concrete.

Our first two products, RapidPrint and Ultra, enable materials to 3D print up to 10x faster and 2x stronger than current industry benchmarks, and are already being used to power drones for defense as well as complex parts for the aerospace industry.

Some of the materials we're making right now are among the strongest polymers on the planet, offering aluminum and even aerospace-grade aluminum strength at roughly half the weight, something that is unprecedented in additive manufacturing.

Q How can your proteins make the drone industry's supply chain more resilient and domestic?

A To truly make the drone industry's supply chain more resilient and domestic, we need to rethink manufacturing.

Today, most products, including those required for the drone industry, rely on traditional chemical manufacturing. It's expensive, wasteful, carbon-intensive, and concentrated in massive factories overseas. This setup makes the supply chain vulnerable to supply chain disruptions or geopolitical tensions.

At Aether, we're taking a different approach. By combining purpose-built AI and high-throughput robotics, we can design proteins that act like molecular assemblers, tiny machines that build, one atom at a time. These nanoscale machines have the precision and sophistication of massive chemical factories, but at a fraction of the size, enabling Aether to make new products faster, more affordably, and more sustainably while moving toward local, on-demand production here in the U.S.

It's essentially a new model for how things get made, one that makes the U.S. less dependent on foreign suppliers and more in control of its own future of manufacturing.

Q How does building materials "atom by atom" enable new, previously impossible drone designs?

A Aether's Protein Function Model allows us to design proteins with very specific molecular functions, thanks to the massive proprietary datasets we generate by testing large panels of proteins against different functions in parallel. This means we can specify exactly what we want a protein to do, whether it's creating a particular molecule, binding to a rare earth, or reinforcing a polymer, and the model outputs a protein capable of executing that function.

By building materials "atom by atom" with these proteins, we gain unprecedented control over the structure and performance of materials at the most fundamental level. For example, Ultra Print can incorporate 40–50% carbon fiber, far beyond conventional limits, producing airframes that are lighter than aluminum but stronger than standard composites. Combined with RapidPrint's high-speed printing, this allows intricate geometries and drone designs that were previously impossible due to material limitations or manufacturing speed

constraints.

Q Beyond stronger materials, what drone-specific functions (e.g., stealth, self-repair) can your proteins enable?

A Today, Aether is already enabling a major leap in strength, speed, and thermal performance through its super materials. These materials are being sold directly into defense and aerospace applications and are already powering drone components.

While we don't make specific claims around stealth or self-repair today, Aether's broader platform is designed to unlock entirely new classes of functional proteins. Fundamentally, this is a new way to approach chemistry and manufacturing, which opens up a wide future design space for advanced drone capabilities as the platform continues to scale.

Q Can your rare earth extraction proteins lower the cost or environmental impact of drone motors and batteries?

A Yes, that is exactly the goal of Aether's rare earth extraction program. Critical minerals are a huge bottleneck in advanced manufacturing, including drone motors and battery systems. Conventional extraction is capital-intensive, environmentally damaging, and highly concentrated outside the U.S.

Aether designs ultra-selective binding proteins that mechanically latch onto specific ions, which are needed for high-temperature, high-stress permanent magnets and release them on command. Think of them as molecular gates that let the wrong atoms flow by.

This creates a faster, cheaper, and more adaptable way to extract rare earths from low-ppm brines or complex ores without building massive new plants. The result is both lower environmental impact and a more resilient, domestic supply of critical materials needed for drone motors and other high-performance components.

Q How does your rapid protein design shorten the R&D timeline for new drone prototypes?

A Aether's platform uses AI and high-throughput robotics to design proteins at an unprecedented scale and speed. Instead of running slow, sequential experiments, our system can test trillions of protein candidates simultaneously, generating far more data than traditional methods.

For drone R&D, that means new materials or chemical processes can be discovered, optimized, and deployed much faster. A part that might have taken months or years to design using conventional approaches can now be prototyped in days or weeks. Combined with our drop-in super materials for additive manufacturing, this lets flight lines quickly iterate on components, test new geometries, and improve performance without waiting on slow chemical development cycles.

Essentially, we're collapsing the traditional R&D bottleneck, letting engineers move from idea to functional prototype faster than ever before.

Q How will this technology create a new, agile industrial base for drone manufacturing in the U.S.?

A Aether's technology makes it possible to re-industrialize the U.S. in a completely new way. Instead of relying on massive factories and global supply chains, AI-designed proteins reduce energy use, waste, and infrastructure requirements. Chemical manufacturing, which traditionally required enormous, centralized plants, can be reduced to a much smaller footprint, even down to the size of shipping containers in the future.

On the materials side, Aether's drop-in polymer additives run on existing additive manufacturing equipment. That means the current installed base of 3D printers can immediately start producing faster, stronger parts without new hardware. A flight-line facility can pivot from printing one drone component to another in hours, not months.

On the raw materials side, Aether is re-industrializing mineral extraction itself, enabling low-cost, environmentally responsible recovery of critical elements like rare earths within the United States. Together, this creates a more agile, decentralized, and secure industrial base; one that allows the U.S. to produce advanced drones and defense technologies domestically, at scale, without reliance on foreign supply chains.

Tokyo Metropolitan Government Selects Japan Airlines Consortium to Join 1st Phase of "eVTOL Implementation Program" Featuring Archer's Midnight Aircraft

Archer Aviation Inc. announced the Japan Airlines-led consortium, which features Archer's Midnight Aircraft, was selected by the Tokyo Metropolitan Government to participate in phase one of Tokyo's "eVTOL Implementation Project."

Phase one of the project will assess the market and build the operating ecosystem, leading up to planned demonstration flights over Tokyo Bay and river routes, which represents critical steps towards ramping commercial operations in the coming years.

The selection recognizes the strength of the existing strategic partnership Archer has developed with Japan Airlines and Sumitomo Corporation through their joint venture eVTOL operating company, Soracle.

Archer and Soracle previously announced a strategic alliance in November 2024 to jointly launch air taxi operations in Japan, with the goal of offering services in cities where existing ground transportation is constrained by traffic or geographic barriers.

Adam Goldstein, Archer's Founder and CEO, said: "We applaud the Tokyo Metropolitan Government's 'eVTOL Implementation Program.' The selection of our consortium to be a part of this innovative government approach gives Archer, together with JAL, Sumitomo Corporation and Soracle, a critical opportunity to help make the promise of urban mobility an everyday reality in Tokyo, the world's largest city."

Takao Suzuki, Executive Officer, Senior Vice President-Innovation of Japan Airlines, said: "Japan Airlines is honored to work with the Tokyo Metropolitan Government and our consortium partners on the first phase of the eVTOL Implementation Project."

This announcement builds on the recent momentum achieved by Archer in key Asia-Pacific markets. In October, Archer announced an exclusive deal with Korean Air that includes the potential purchase of up to 100 Midnight aircraft.

JOBY BEGINS POWER-ON TESTING OF 1ST CONFORMING AIRCRAFT, ENTERS FINAL STAGE OF TYPE CERTIFICATION PROCESS

Joby Aviation, Inc. a company developing electric air taxis for commercial passenger service announced that it has begun power-on testing of the first of several FAA-conforming aircraft to be built for Type Inspection Authorization (TIA). With this milestone, Joby can now begin conducting thousands of hardware and software integration tests in preparation for "for credit" flight testing with FAA test pilots operating the aircraft. TIA testing is part of the final stage of the FAA Type Certification process and today's achievement marks a critical milestone on Joby's path to commercialization.

"Beginning this aircraft subsystem testing is the culmination of more than a decade of focused engineering and certification refinements," said Didier Papadopoulos, President of Aircraft OEM at Joby. "This is the moment where our intended type design, our manufacturing process, and our certification strategy converge into one physical asset. It validates that we can design a safe aircraft and produce it reliably. This first testing step is one of the most important milestones in Joby's history to date and puts us closer than ever to achieving FAA certification."

Joby's first TIA-ready aircraft has been manufactured using Joby's established quality management system and adheres precisely to the intended type design for TIA testing. Each of Joby's TIA aircraft will be built with FAA-conforming components as required by Joby's FAA-approved test plans, with these components built to FAA Designated Engineering Representative-approved designs and inspected and signed off by FAA Designated Airworthiness Representatives.

Power-on testing is the first step in preparing Joby's TIA aircraft for "for credit" flight testing, with flight testing by Joby pilots expected to start later this year, ahead of FAA pilots taking the controls in 2026. During TIA testing, Joby will be working side-by-side with the FAA to ensure the aircraft meets all safety and performance requirements. The testing includes:

Performance Validation: FAA pilots and Joby test pilots will validate the aircraft's performance envelope, including range, speed and energy management under real-world conditions.

Control and Handling: Pilots will test the flight controls and handling qualities across all regimes of flight, from vertical takeoff and landing through wingborne cruise and back to hover.

Maintenance and Operations: The TIA phase validates the operational procedures that will govern Joby's commercial service, including inspecting maintenance manuals, pilot training curriculum, and verifying the functionality and reliability of all onboard systems, such as avionics, propulsion and redundancies.

The data collected during these TIA tests will be used by the FAA to make its final determination on issuing a Type Certification for Joby's aircraft, the approval needed to operate the aircraft commercially.

EVE AIR MOBILITY EXPANDS MIDDLE EAST PRESENCE WITH BAHRAIN FRAMEWORK AGREEMENT

Eve Air Mobility announced a landmark Framework Agreement with the Ministry of Transportation and Telecommunications (MTT) of the Kingdom of Bahrain during the Gateway Gulf Investment Forum 2025, reinforcing its commitment to advancing sustainable air mobility solutions across the Middle East. The Agreement supports Bahrain's vision to become a pioneer in next-generation mobility.

The partnership with MTT will accelerate the readiness of Bahrain's regulatory, operational and infrastructure ecosystem for eVTOL operations. Key objectives include establishing a sandbox environment to test and refine Advanced Air Mobility systems, developing vertiport infrastructure for safe and scalable eVTOL deployment. The collaboration also emphasizes zero-emission, low-noise operations, and workforce training. Commercial operations are expected to begin in 2028 and expand to international routes by 2029.

"Signing this Framework Agreement with the Kingdom of Bahrain represents a historic step in our journey to bring sustainable air mobility to the Middle East," said Johann Bordais, CEO of Eve. "Bahrain's vision to become a hub for innovation and clean transportation aligns perfectly with our mission to transform the way people move in cities and regionssustainably. Together, we are building the foundation for safe, efficient, and environmentally responsible eVTOL operations that will connect communities and unlock new economic opportunities."

"The Agreement with Eve Air Mobility, a globally trusted partner in eVTOL aircraft development, demonstrates Bahrain's firm commitment to establishing the region as a center of excellence for innovation in aviation," said His Excellency the Minister Dr Shaikh Abdulla bin Ahmed Al Khalifa. "Together, we are committed to making safe and sustainable aviation a reality for Bahrain, the GCC region and the world."

Eve is evaluating premium shuttle and tourist routes in Dubai, Abu Dhabi, Riyadh, Jeddah, Doha, Istanbul, and Manama. These routes will save passengers valuable time and deliver unique mobility experiences for both residents and tourists. Designed for the region's climate, Eve's eVTOL incorporates features such as advanced UV/IR window protection, microclimate air conditioning and a Lift + Cruise design that minimizes exposure to dust and sand, ensuring reliability and comfort even under extreme conditions.

LANZAJET ANNOUNCES SELECTION OF FLUOR FOR FEED FOR PROJECT SPEEDBIRD - LANZAJET'S FLAGSHIP UK SAF PLANT

LanzaJet, Inc., a leading next-gen fuels technology company and producer of sustainable fuels, has recently awarded the Front-End Engineering and Design (FEED) for Project Speedbird to Fluor Corporation (NYSE: FLR).

Developed with support from British Airways, LanzaJet's Project Speedbird is a commercial scale ethanol-to-SAF facility to be located in Teesside, UK, which will produce over 90,000 tonnes (30 million gallons) of SAF and renewable diesel annually, reducing British Airways' CO2 emissions by approximately 230,000 tonnes per year – equivalent to 26,000 British Airways domestic flights.

"Project Speedbird is the next commercial scale facility in our portfolio that LanzaJet is developing, working closely with British Airways. It is an important step in the continued scale-up of our leading sustainable fuels technology," said Jimmy Samartzis, CEO of LanzaJet. ?"Partnering with the globally recognized engineering, procurement, and construction (EPC) company Fluor Corporation shows our commitment to the highest standards in project execution."

The project is expected to bring significant opportunities for the North East region and create hundreds of jobs through construction to operation, was recently awarded £10 million

($13 million) by the U.K. Government through its Advanced Fuels Fund.

"Project Speedbird marks a pivotal advancement in the global effort to decarbonize aviation," said Mike Alexander, Group President, Project Execution, Fluor Corporation ?"By accelerating the adoption of sustainable fuel technologies, this project will help redefine the future of flight. Fluor is proud to bring our engineering and design expertise to this visionary initiative."

Project Speedbird is set to transform the aviation sector by producing SAF from low-carbon ethanol using LanzaJet's patented and fully integrated Alcohol-to-Jet (ATJ) technology solution. The LanzaJet ATJ solution is deployed at commercial scale at LanzaJet's Freedom Pines Fuels facility in Georgia, USA.

SKYDRIVE ESTABLISHES STRATEGIC PARTNERSHIP WITH ABU DHABI'S INTEGRATED TRANSPORT CENTRE

SkyDrive Inc a leading eVTOL aircraft manufacturer based in Japan, is pleased to announce that it has signed a memorandum of understanding (MOU) with the Integrated Transport Centre (ITC), a government organization and affiliate of the Department of Municipalities and Transport that oversees and manages the overall transportation system in the Emirate of Abu Dhabi (UAE). The ITC signed several strategic cooperation agreements with leading local and international companies, including SkyDrive, on day two of DRIFTx 2025, held as part of the inaugural Abu Dhabi Autonomous Week organized by the Smart and Autonomous Systems Council. ITC is going to introduce the eVTOL "SKYDRIVE as a means of transportation in the Emirate of Abu Dhabi.

Background and Objectives : Abu Dhabi is emerging as a global leader in Advanced Air Mobility (AAM), strategically positioning eVTOL technology at the heart of its future transportation ecosystem. Under the leadership of the Integrated Transport Centre (ITC), the Emirate has launched a comprehensive initiative encompassing regulatory framework development, vertiport and charging infrastructure planning, and extensive feasibility studies—positioning Abu Dhabi to become one of the world's first cities to launch commercial eVTOL operations.

This partnership between SkyDrive and ITC represents a pivotal step toward realizing this vision. The collaboration will focus on three key pillars: establishing a comprehensive eVTOL ecosystem in Abu Dhabi, developing critical infrastructure including vertiports and charging stations, and conducting thorough commercialization feasibility studies for the "SKYDRIVE (SD-05)" aircraft. Together, SkyDrive and ITC aim to transform urban mobility in the UAE capital, offering residents and visitors an innovative, sustainable, and efficient transportation solution that seamlessly integrates air mobility into Abu Dhabi's smart city infrastructure.

"We are deeply honored to partner with the Integrated Transport Centre and the Abu Dhabi government, who are demonstrating exceptional leadership in advancing both the infrastructure and regulatory frameworks necessary for eVTOL commercialization," says Tomohiro Fukuzawa, CEO and Founder of SkyDrive. "Abu Dhabi's proactive approach and commitment to innovation make it an ideal partner as we work toward our vision of making the sky a part of everyday transportation. Through this collaboration with ITC, we look forward to delivering a transformative mobility experience that offers residents, business travelers, and tourists a faster, cleaner, and more sustainable way to navigate the Emirate."

"These agreements reflect Abu Dhabi's commitment to building a smart, integrated transport system and adopting the latest autonomous-driving and advanced air mobility technologies, in support of our vision for more efficient and better-connected cities", says Dr. Abdulla Hamad AlGhfeli, Acting Director General at ITC. "As the regulatory authority for the transport sector, we are forging strategic local and international partnerships that will accelerate the shift towards future mobility solutions."

PIF'S THE HELICOPTER COMPANY, ARCHER AVIATION, AND RED SEA GLOBAL PARTNER TO LAUNCH EVTOL AIR MOBILITY IN SAUDI ARABIA

The Helicopter Company (THC), a Public Investment Fund (PIF) company and Saudi Arabia's premier commercial helicopter operator, has signed an agreement at this year's Dubai Airshow with Archer Aviation Inc. a U.S.-based aerospace innovator designing and developing the key enabling technologies and aircraft necessary to power the future of aviation and Red Sea Global (RSG), the developer behind regenerative tourism destinations The Red Sea and AMAALA. The partnership will focus on the development, testing, and potential integration of Archer's eVTOL aircraft into RSG's operations as one of the first deployments of eVTOL aircraft in the Kingdom of Saudi Arabia.

The signing marks a major step forward in the Kingdom's efforts to explore and integrate electric Vertical Takeoff and Landing (eVTOL) aircraft into its emerging mobility ecosystem. The Memorandum of Understanding (MoU) was signed by Captain Arnaud Martinez, CEO of THC, John Pagano Group CEO of Red Sea Global, and Nikhil Goel, CCO of Archer.

In the initial phase of the agreement, Archer Aviation will work together with THC and RSG to help build the foundational framework for their planned eVTOL operations in Saudi Arabia. This includes establishing a structured sandbox environment to conduct test flights with Archer's Midnight eVTOL under real-world conditions to assess aircraft performance, operational feasibility, regulatory alignment, passenger acceptance, and overall ecosystem readiness. They will also collaborate on testing advanced aerial technologies, exploring long-term strategic partnerships for large-scale deployment, and supporting regional innovation to advance next generation aviation systems.

As the framework progresses, RSG will lead the sandbox testing with Archer's Midnight aircraft to evaluate the potential for integrating eVTOL aircraft into the company's future operations. Given RSG's controlled airspace, sustainable infrastructure, and its position as a flagship developer under PIF, it offers a suitable platform to demonstrate the potential of advanced air mobility in supporting regenerative tourism and next-generation transportation options for the Kingdom.

"eVTOL is emerging as the future of urban passenger transportation, and with the right partners, we are glad to be a key part of ensuring that Saudi Arabia is at the forefront of this transformation in aviation," said Captain Arnaud Martinez, the CEO of THC. "Our partnership demonstrates confidence in emerging technologies, and a shared commitment to shaping a smarter, more connected tomorrow, together."

John Pagano Group CEO of Red Sea Global stated, "At Red Sea Global, we are committed to redefining sustainable travel and setting new standards for innovation within the Kingdom's tourism and mobility sectors. Partnering with THC and Archer, to explore the integration of eVTOL aircraft into our destinations aligns perfectly with our vision for regenerative tourism, creating cleaner, faster, and more connected ways for guests to experience the beauty of Saudi Arabia."

Archer Aviation's founder and CEO, Adam Goldstein commented, "A key part of Archer's strategy is partnering with the leading operators in each country who share our goals and vision, and both THC and RSG are similarly committed to ensuring that Saudi Arabia is operationally prepared to launch eVTOL aircraft. We look forward to working together to demonstrate how Archer's Midnight aircraft can transform travel within the Kingdom and set a regional benchmark for the future of aviation."

1ST URBAN SANDBOX HUMAN-CARRYING FLIGHT OF PILOTLESS EVTOL WITH CAAT DIRECTOR-GENERAL ABOARD

EHang Holdings Limited a global leader in advanced air mobility ("AAM") technology announced the successful launch of an urban human-carrying flight event in Bangkok with the Civil Aviation Authority of Thailand (CAAT) and local partners, under the AAM Sandbox Initiative. Air Chief Marshal Manat Chavanaprayoon, Director General of CAAT, personally boarded and experienced the experimental flight, becoming the world's first civil aviation authority chief globally to ride the pilotless EH216-S on an urban flight. This marks another milestone in EHang's global AAM commercialization layout.

On November 24, EHang officially initiated the urban human-carrying flight event under the AAM Sandbox Initiative at the headquarters of Siam Commercial Bank (SCB), a Bangkok landmark located in the city's central business district. The event received strong supports from senior Thai government officials, with distinguished attendees including Air Chief Marshal Manat Chavanaprayoon, Han Kok Juan, Director General of Singapore's Civil Aviation Authority, Dr. Arak Sutivong, Deputy CEO of SCB X Public Company Limited, together with nearly 100 Thai business leaders and media representatives. Under widespread attention, the EH216-S completed a series of takeoffs and landings, as well as route flights. Air Chief Marshal Manat Chavanaprayoon and Dr. Arak Sutivong then boarded the EH216-S to experience a pilotless urban flight. The aircraft flew smoothly in the Bangkok's core business district, with the Director General waving to audience, drawing extended applause.

These flights mark significant progress for the Thailand's AAM Sandbox Initiative toward commercial operation and lay a solid foundation for EHang to deepen its presence in the Thai market and launch future commercial services. It also sets a benchmark for the path to commercialization of the AAM industry in Southeast Asia.

In a landmark demonstration for Thailand's Advanced Air Mobility (AAM) ecosystem, EHang has successfully completed comprehensive overseas validation of its EH216-S autonomous eVTOL aircraft under the oversight of the Civil Aviation Authority of Thailand (CAAT). The event, held in central Bangkok, marked the first overseas demonstration of the EH216-S's full safety capabilities in extreme emergency scenarios.

The validation involved nine rigorous scenario tests and four technical exchanges, focusing on flight safety, product technology, after-sales maintenance, and operating systems. CAAT expressed strong approval of EHang's systematic support capabilities, including continuous airworthiness, full-lifecycle technical support, and rapid maintenance systems.

This successful demonstration establishes both technical and regulatory confidence for EHang to launch regular commercial operations under Thailand's AAM Sandbox Initiative. Following its inaugural Bangkok flight in November 2024, EHang plans to expand operations to key tourist destinations like Pattaya and Phuket, building a diversified low-altitude network for urban commuting and aerial tourism.

CAAT Director General Air Chief Marshal Manat Chavanaprayoon highlighted the achievement as a milestone in regional aviation development, noting Thailand's ambition to become an aviation hub. With ICAO's 2026 AAM Symposium scheduled in Thailand, the country is positioned to become a global model for AAM commercialization.

EHang CFO Conor Yang emphasized that Thailand is poised to achieve the world's first commercial eVTOL operations via a regulatory sandbox approach, creating a blueprint for Southeast Asia and beyond.

EUROPEAN ANTI-DRONE CAPABILITIES WITH A SIGNIFICANT PURCHASE ORDER FOR DEFENDAIR SYSTEMS FROM LEADING DUTCH DEFENSE DISTRIBUTOR

ParaZero Technologies Ltd. an aerospace defense company pioneering smart, autonomous solutions for the global manned and unmanned aerial systems (UAS) industry announced a significant purchase order for its DefendAir anti-drone defense systems from a Dutch distributor, one of Europe's largest integrators.

The order is for the Company's Counter-UAS DefendAir solutions and includes multiple DefendAir products for resale and distribution through the distributor's established European network. This partnership marks a key expansion in the Western Europe region, where the distributor serves as a leading supplier of defense and homeland security (HLS) applications.

ParaZero's DefendAir system, has demonstrated 100% succus rate in multiple field trial demonstrations and is a multi-layered soft-hard kill Counter-UAS solution that utilizes a patented net launcher against hostile drones, enabling safe urban interception and minimizing collateral damage.

"We believe that this order is part of the growing demand for robust anti-drone defenses across the world and Europe in particular, where airspace security is paramount," said Ariel Alon, CEO of ParaZero. "Our Dutch partner, a top distributor in Europe, aims to bring DefendAir to a wider customer base and we're thrilled to support their growth and strengthen our foothold in the Western Europe market."

MATRIXSPACE NAMED ACTIVE SENSORWINNER IN U.S. ARMY OPERATION FLYTRAP4.5, XTECHCOUNTER STRIKE COMPETITION

MatrixSpace, a leader in portable AI-enabled radar for counter-UAS missions, is the winner in the U.S. Army's xTechCounter Strike competition, part of Operation Flytrap 4.5. MatrixSpace was the only active sensing provider selected among 15 finalists, highlighting the company's breakthrough capabilities in rapidly deployable airspace awareness.

Operation Flytrap is the U.S. Army's key initiative to accelerate innovative, scalable C-UAS technologies through live soldier experimentation, rapid acquisition pathways, and transition to operational units.

MatrixSpace showcased its Expeditionary AI Radar and 360 AI Radar, powered by AiEdge software, demonstrating fast setup, seamless integration into Army FAAD-C2 via the NATO-standard SAPIENT protocol, and real-time situational awareness at the tactical edge. Four companies were selected overall, each receiving a $350,000 award and placement into the new Global Tactical Edge Acquisition Directorate (G-TEAD) Marketplace, enabling streamlined procurement by U.S. and NATO partners.

"Operation Flytrap 4.5 gave us a powerful opportunity to show MatrixSpace's tactical advantage," explained Matthew Kling, VP & GM, AI Systems at MatrixSpace. "Our ultra-low SWaP-C radars with AiEdge software integrate effortlessly into existing Army C2 networks and deliver dependable, soldier-ready airspace security."

MatrixSpace radar systems deliver affordable, all-weather, AI-powered detection and classification for airspace, perimeter, and object monitoring, enabling organizations to rapidly establish robust situational awareness in contested environments.

KULR TO DEVELOP NEXT-GENERATION BATTERY FOR COUNTER-DRONE DIRECTED ENERGY SYSTEMS

KULR Technology Group Inc. has announced the development of a new 400V battery system specifically engineered to power Counter-Unmanned Aircraft System (C-UAS) directed energy weapons. Demonstrating a rapid development cycle, the company is delivering a complete design package and a functional prototype just five weeks after receiving the purchase order, with plans for the system to enter full production in 2026.

This accelerated timeline highlights KULR's disciplined engineering framework, refined through years of work in aerospace and defense. The company leveraged its proprietary model-based electrical and thermal simulations, cell selection process, and safety architecture to create a battery capable of meeting the intense power demands of advanced energy weapon platforms.

The development is strategically timed

to capitalize on the rapidly expanding directed energy weapons market, which is projected to grow from $7.9 billion to $39.9 billion over the next decade. This growth is fueled by global military modernization and the urgent need for cost-effective, precise countermeasures against drone and missile threats.

According to Peter Hughes, VP of Engineering at KULR, the project was executed through the company's KULR ONE Guardian (K1G) platform, which is engineered to meet stringent military performance standards (MIL-STD-810H). The company's in-house manufacturing capabilities at its Webster, Texas facility were critical to accelerating the development process.

KULR's engineering approach emphasizes modular design, advanced thermal modeling, and rapid prototyping workflows that allow parallel progress across different technical domains. This methodology not only shortens the time-to-prototype but also creates a streamlined pathway to low-rate and full-rate production, positioning KULR as a key technical partner for defense programs requiring high energy density, robust safety, and fast execution.

ROSTEC UNVEILS NEW PANTSIR VARIANT AND COMPACT RADARS TO COUNTER DRONE THREATS

Rostec State Corporation has introduced a new modular version of the Pantsir air defense system, explicitly designed to counter modern UAV threats. According to Bekhan Ozdoev, Industrial Director of Rostec's Weapons Cluster, the system is engineered to protect critical infrastructure and can be flexibly deployed on building rooftops or prepared sites.

A key feature of this new Pantsir variant is its expanded ammunition capacity. The launching ramp can hold up to 48 miniature short-range missiles, a configuration intended to enable the system to repel large-scale, swarm-style drone attacks effectively.

Alongside the Pantsir, Rostec is highlighting several compact air defense solutions for the Middle East market. These include:

A short-range surveillance radar weighing only 45 kg, capable of detecting medium-sized UAVs at distances of 7.5 km or more.

An airspace control system designed to detect and track a variety of flying targets, including low-altitude, low-speed drones and cruise missiles.

The Verba man-portable air-defense system (MANPADS), which can be integrated with the "Dzhigit" launching unit. This unit can be deployed in three minutes and can fire two Verba or Igla missiles, offering enhanced mobility for crews.

AG3 LABS WINS U.S. ARMY XTECHCOUNTERSTRIKE PRIZE FOR DRONE THREAT SIMULATION

AG3 Labs has been selected as one of four winners in the U.S. Army's prestigious xTechCounterStrike competition. The company secured the "threat-simulated UAS" prize, a recognition of its capability to provide realistic "red air" drone threats for military training exercises.

As part of the win, AG3 Labs supplied the attritable drone systems used during Operation FlyTrap 4.5, enabling soldiers to train against sophisticated, coordinated aerial threats. The company also directly trained personnel from the 52nd Air Defense Artillery Brigade on deploying these drone systems, executing swarm tactics, and conducting field troubleshooting.

For its victory, AG3 Labs received $350,000 in prize funding. Additionally, the company gains access to the U.S. military›s Global Tactical Edge Acquisition Directorate (G-TEAD) Marketplace, a significant channel for further collaboration and contract opportunities with the Department of Defense. The win validates AG3 Labs' role in enhancing the realism and effectiveness of counter-drone training for the U.S. Army.

U.S. ARMY SEEKS INTERNATIONAL SUPPORT FOR COUNTER-DRONE "SYSTEM OF SYSTEMS"

The U.S. Army's Program Executive Office for Missiles and Space has issued a sources-sought notice for vendors capable of providing comprehensive international field support for its Counter-Unmanned Aircraft System (C-UAS) technologies. The notice underscores the complexity of modern drone defense, which relies on integrating a "System of Systems" (SoS) comprising various sensors, effectors, and command-and-control platforms.

To sustain these integrated capabilities across diverse multinational theaters, the Army requires highly skilled Field Service Representatives (FSRs). The anticipated requirements outline a broad and sophisticated scope of work:

Technical Field Support: Deployment of SoS-qualified FSRs to provide on-site diagnostics, repair, and calibration for interconnected subsystems, including RF detection, radar, EO/IR tracking, and kinetic/non-kinetic effectors. A key responsibility will be ensuring interoperability with host-nation and allied networks for seamless data exchange.

Training and Capacity Building: Delivery of tailored training programs for host-nation personnel, covering system operation, maintenance, and tactics. This includes «Train-the-Trainer» initiatives to build local expertise and reduce long-term reliance on U.S. support.

Logistics and Lifecycle Support: Management of a complex supply chain, including forecasting spare parts, coordinating international shipments, and ensuring compliance with ITAR and host-nation regulations. Support will also include managing software updates and configuration control across the integrated systems.

Operational Advisement: FSRs will act as the principal program representative in-country, liaising between host-nation military commands and U.S. combatant commands, and assisting with mission planning and analysis.

Responses from interested vendors are due by November 21. This initiative highlights the critical need for sustained, expert support to maintain the agility and resilience of counter-drone defenses in a globally dispersed operating environment.

DIGITAL FORCE TECHNOLOGIES SELECTS ECHODYNE RADAR FOR SERAPHIM COUNTER-UAS FAMILY OF SYSTEMS

Echodyne, the radar platform company, is pleased to announce that its radars have been selected by Digital Force Technologies (DFT) as the primary radars across its Seraphim C-UAS (Seraphim C-UAS) family of systems. DFT combines extensive defense expertise and cutting-edge technology to deliver unparalleled solutions that meet the evolving needs of the warfighter from concept to battlefield application. The Seraphim C-UAS is a modular, expandible family of autonomous solutions for detection, assessment, tracking, deterrence and defeat of UAS threats.

The end customer solutions range from expeditionary systems to fixed-site, in-garrison protection and maintain an agile, rapid-deployment approach. DFT was selected as part of the TERAPIN project to deliver an ultra-endurance autonomous mobile sensor/effector platform with robust edge processing for the expeditionary warfighter operating in austere, remote locations. Echodyne's portfolio of market-leading radars, including EchoShield® and EchoGuard®, are now integrated components, adding high fidelity detection, classification, and precision tracking data across the Seraphim C-UAS family of systems.

TERAPIN is part of a United State Marine Corps program to provide persistent, all-domain sensing and surveillance support, tactical early warning, multi-domain intrusion-detection, and forward edge processing/computing of an AI/ML based computer vision capability. These capabilities are being deployed by the Fleet Marine Force (FMF), at the Marine Littoral Regiment (MLR), down to any sized Marine element, to support the Naval Expeditionary Force (NEF) in the conduct of Sea Denial and Sea Control operations, and to enable force protection for Expeditionary Advanced Bases (EABs), forward fixed sites, and installations.

"Echodyne shares Digital Force Technologies' commitment to delivering adaptable solutions that advance mission success and enhance warfighter safety, awareness, and capabilities," said Justin MacLaurin, CEO of Digital Force Technologies. "The demand for autonomous systems that accurately sense their environment, identify threats, and inform and protect the warfighter is evolving quickly, and Seraphim C-UAS is proving that cutting-edge, autonomous solutions are available today."

Echodyne's patented MESA architecture creates ultra-low SWaP, high performance radar systems that deliver extraordinarily accurate situational awareness data. A solid-state, zero sustainment architecture makes MESA radars ideal for missions in water, coastal, land, and air domains and complements rapid adaptability to fixed, portable, temporary, or on-the-move (OTM) requirements.

"Echodyne is thrilled to be acknowledged by Digital Force Technologies as having the ideal radars for their Seraphim C-UAS solutions," said Eben Frankenberg, CEO of Echodyne. "Counter-UAS is critical to every force and mission, and this selection demonstrates again that cutting-edge Defense solutions are turning to Echodyne radar for market-leading accuracy, precision, and reliability."

OMNISYS UNVEILS FIELD-PROVEN BRO C-UAS PLATFORM TO SAFEGUARD AIRPORTS AGAINST EVOLVING DRONE THREATS

Omnisys introduces the BRO™)Battle Resource Optimization) C-UAS system, a field-proven, real-time optimization platform built to help airport organizations mitigate the growing threat of unauthorized and hostile unmanned aerial systems (UAS). The system enables data-driven, proportionate responses to aerial threats, ensuring passenger safety while maintaining airport operations.

In recent months, airports across Europe and the US have faced repeated shutdowns due to unauthorized drones. Munich Airport was halted twice within 24 hours; similar incidents in Copenhagen and Oslo led to partial closures, and the FAA now reports over 100 drone-related alerts per month. Each incident triggers significant financial losses, cascading delays, and reputational harm, forcing airport security teams to make rapid, high-stakes decisions under growing regulatory scrutiny.

To stay ahead of such challenges, airports require more than additional sensors. The real need lies in smart deployment and confidence in decision-making, knowing where detection blind spots exist, which assets to prioritize, and when it is safe to resume operations. This aligns with FAA and EASA guidance emphasizing proportionate, site-specific UAS response plans and real-time operational assessment.

The BRO™ platform addresses these needs by optimizing how counter-UAS assets are acquired, deployed, and maintained. Using physics-aware modeling and live environmental data, it guides decision-makers in configuring systems for maximum protection while reducing unnecessary shutdowns. Its dynamic vulnerability mapping continuously adapts to terrain, infrastructure, spectrum conditions, and interference, ensuring readiness and resilience even as conditions change.

BRO™ integrates seamlessly with existing airport command-and-control systems or operates independently as a real-time recommendation layer. High-fidelity simulations, analytics, and AI-driven recommendations allow operational teams to visualize real-time defensive coverage, identify degraded performance, and apply corrective actions instantly. This optimization-driven approach minimizes disruption, supports regulatory compliance, and accelerates a defensible return to normal operations.

"The BRO™ system gives security decision-makers the ability to make informed choices about which systems to acquire, where to deploy them, and how to operate them—ensuring effective protection while minimizing disruption, which can sometimes result in millions in losses and long-term harm to an airport's stability," said Alfred (Fredi) Tzimet, Deputy CEO of Omnisys. "Its optimization-driven approach empowers authorities to maintain airport functionality and safety even under evolving aerial threats."

WRAP TECHNOLOGIES ANNOUNCES BREAKTHROUGH IN NON-LETHAL AIR-TO-AIR DEFENSE

Wrap Technologies, in partnership with Vector, has successfully conducted the first known air-to-air interdiction using its patented BolaWrap® entanglement system. This test marks a significant milestone, demonstrating a viable non-lethal alternative to explosives or electronic warfare for neutralizing aerial threats.

During the test in Salt Lake City, the patent-pending MERLIN-Interdictor payload was deployed from a Vector Hammer drone platform. The system successfully neutralized a moving aerial target in mid-flight using its signature BolaWrap 150 Kevlar tether, showcasing a new method for counter-drone operations.

The companies position the achievement as a "new paradigm in defence"—a platform-agnostic, non-lethal layer that can protect critical assets without collateral damage. This transforms Wrap's proven ground-based law enforcement technology into a high-speed aerial defense capability, indicating its potential for both military and domestic security applications.

"We believe the results mark a pivotal step in bringing reliable, modern, and cost-effective Counter-UAS (CUAS) options to real-world mission environments," the company stated. The successful integration with Vector's drone also highlights the solution's adaptability and potential for rapid deployment.

Andy Yakulis, CEO and Co-Founder of Vector, echoed this sentiment: "The Wrap system quickly integrated with our Hammer drone platform, and together we demonstrated an effective and scalable solution that can redefine how we think about CUAS-as-a-service."

This successful test represents a crucial expansion of Wrap's non-lethal ecosystem into modern warfare and critical infrastructure defense, offering a scalable and sustainable option for aerial interdiction.

MBDA SIGNS 1ST SKY WARDEN EXPORT CONTRACT

MBDA has signed its first export contract with a Middle Eastern country to provide its SKY WARDEN counter-UAV solution.

Lorenzo Mariani, MBDA Executive Group Sales and Business Development, said: "Signing this export contract marks a crucial step in our commitment to ensuring the security and sovereignty of our partners around the world. SKY WARDEN provides an innovative and comprehensive response to the challenges posed by asymmetric air threats. This unique drone-fighting system combines state-of-the-art technology, unprecedented flexibility, and a constantly evolving capability. With SKY WARDEN, we offer our customers robust and adaptable protection against all UAV threats, today and tomorrow."

SKY WARDEN - for which MBDA has been awarded, by the European Border and Coast Guard Agency (Frontex), the Frontex C-UAS Prize 2025 and declared "best system to protect the EU's borders" - is a comprehensive multi-layer system that protects an area from micro to tactical drones, up to eight kilometers away. This solution is an evolution and enhancement of an MBDA developed multi-sensor and multi-effector command and control (C2) system, which enables the detection, identification and classification of threats with precision thanks to the use of artificial intelligence (AI).

SKY WARDEN offers a wide range of complementary effectors designed to counter and destroy enemy drones, such as CILAS HELMA-P laser weapon, omni and directional jammers, MBDA HTK (Hit-to-Kill) drone interceptors and MISTRAL 3 missile, boasting a success rate of more than 96%. Sensors and effectors are chosen according to their intrinsic performance and mission requirements. SKY WARDEN is therefore a scalable system perfectly adapted to the asymmetric aerial threats of today and tomorrow.

SKY WARDEN can evolve over time according to the needs of users and to the evolution of threats thanks to a completely modular architecture and the easy integration of new effectors. The system is highly flexible, either dismounted to protect fixed sites, or vehicle-mounted for mobile protection. It may also be integrated with other medium-range air defense capabilities like the VL MICA or CAMM-ER or connected to higher level.

The development of SKYWARDEN is constantly evolving. This is evidenced by the recent acquisition by MBDA of the HELMA-P laser from CILAS to complete the range of effectors available within the solution.

NETHERLANDS LAUNCHES COUNTER STRIKE DRONE CHALLENGE TO ACCELERATE C-UAS SOLUTIONS

The Dutch Ministry of Defence has launched the Counter Strike Drone Challenge, a direct call to industry for innovative solutions to detect, identify, and disable enemy drones. The initiative moves beyond simply acquiring new hardware, focusing instead on integrated solutions that deliver a clear operational advantage: the rapid neutralization of drones, even when operating in hostile territory.

"This means they're not about a single product, but rather solutions that actually work in practice," the Ministry stated, emphasizing the need for practical, deployable systems. The challenge aims to fast-track the identification and deployment of existing technologies in the market.

To foster genuine innovation, the Ministry is offering long-term collaboration and development partnerships to companies with promising solutions. This approach ensures that the selected technologies can be refined in close cooperation with end-users to meet the specific demands of modern combat.

The challenge is organized in partnership with Defport, a public-private platform that brings together government bodies, industry, financial institutions, and knowledge institutes. This ecosystem is designed to accelerate the development and financing of cutting-edge defence technology.

To further strengthen this collaborative network, the Ministry is also launching several supporting initiatives. These include the opening of 'Mindbases'—dedicated spaces for defence officials and businesses to meet—and a new partnership agreement with the Netherlands Enterprise Agency (RVO.nl). These steps are intended to streamline the process for companies to engage and collaborate with the Dutch defence sector.

USNORTHCOM VALIDATES NEW RAPID-DEPLOY COUNTER-DRONE CAPABILITY

In a recent week-long deployment to Minot Air Force Base, North Dakota, a US Northern Command (USNORTHCOM) team successfully certified as an operational counter-small unmanned aerial system (C-sUAS) unit. The exercise, which took place from October 21-27, saw the team engage over 100 drone targets while providing critical defense support to the 5th Bomb Wing.

The deployment served as the inaugural validation of USNORTHCOM's new C-sUAS "fly-away kit," developed by Anduril. This rapid-deployment system is specifically designed to detect, track, identify, and mitigate drone threats to military installations within the United States.

The 11-person team, which had only first trained on the system a month prior during the Falcon Peak 25.2 experiment in Florida, successfully managed the entire operational cycle. This included transporting the equipment via military aircraft from their Colorado Springs headquarters to North Dakota, executing the mission, and redeploying.

"This team far exceeded expectations of operators whose first time seeing the system was 30 days ago," said Chief Warrant Officer 3 Joey Frey, the command's C-sUAS response programme manager.

The integrated fly-away kit combines several advanced technologies into a single, cohesive system:

Heimdal: A mobile sensor trailer with radar, thermal optics, and a 360-degree pan-and-tilt unit for autonomous target acquisition.

Anvil: Autonomous drone interceptors designed to detect, track, and mitigate threats.

Pulsar: An electromagnetic warfare effector for radio frequency detection, tracking, and denial.

The Wisp: An AI-enabled, wide-area infrared system providing a 360-degree sight picture.

Operating in harsh, cold, and wet conditions, the team honed its skills on the system's command-and-control software, Lattice. Major Austin Fairbairn, the team lead, noted that the exercise provided a "solid foundation of skills" for real-world engagements, despite most members not having a prior C-sUAS background.

Beyond neutralizing drone threats, the team also navigated complex federal statutes and interagency coordination. Their work assisted Minot AFB in updating its drone defense plan to formally integrate the new fly-away kit, ensuring future commanders have the authority and tools needed to protect the base from aerial incursions.

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ECHODYNE RADARS INTEGRATE WITH NATIONAL GUARD IN MAJOR C-UAS EXERCISE

At the recent Thunderstruck C-UAS exercise hosted by the Oklahoma National Guard (OKNG), Echodyne demonstrated the critical role of its radar technology in enhancing battlefield decision-making. The event, held at Camp Gruber, brought together hundreds of personnel to train on counter-drone technologies and develop expertise for modern threats.

The OKNG is spearheading innovation through its C-UAS School and Launched Effects Alliance, focusing on collaborative efforts with industry and academic partners to counter the full spectrum of aerial threats.

During the exercise, Echodyne's radar systems were integrated into realistic training scenarios, including an enemy ISR and friendly maneuver drill. The company's two-tiered radar solution provided seamless, persistent airspace awareness:

The long-range EchoShield radar detected and tracked incoming aerial threats at a distance.

As threats advanced, target data was handed off to the short-range, highly portable EchoGuard radar to protect troops and base assets.

This precision radar data directly cued kinetic defeat systems to neutralize drones and provided a enhanced common operating picture for commanders. The system proved vital in a troop insertion scenario, allowing leaders to accurately track Chinook aircraft and make timely decisions to protect exposed soldiers upon landing. Echodyne's track data—including target size, distance, and speed—was seamlessly fed into the Tactical Awareness Kit (TAK) via a network provided by partners TrellisWare and Persistent Systems.

This integration enabled warfighters to maintain persistent situational awareness and accelerate operational decisions.

"We are proud to contribute to OKNG's growing and active drone readiness program," said Jeff Phillips, VP of DOD/IC Sales at Echodyne. The successful demonstration underscores how integrated radar systems are becoming a foundational element of effective C-UAS operations for the future fight.

NUAIR SELECTED FOR DHS COUNTER-DRONE GRANT FORUM AS APPROVED VENDOR

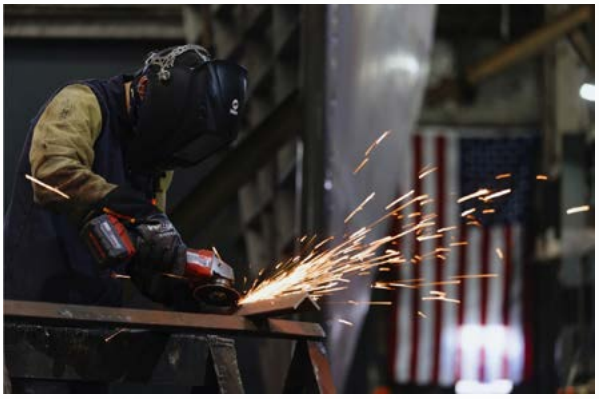
NUAIR has been selected by the U.S. Department of Homeland Security (DHS) and the Federal Emergency Management Agency (FEMA) as an approved vendor for the upcoming "Countering the Threat: C-UAS Industry and SLTT Grant Forum." This invitation-only event at George Mason University will convene federal leaders, state/local/tribal/territorial (SLTT) decision-makers, and industry innovators to shape the future of national drone threat mitigation and airspace security.

The selection positions NUAIR as a key

industry partner for government entities seeking proven counter-unmanned aerial systems (C-UAS) solutions. The company provides a critical capability: an FAA-accepted airspace surveillance network that currently delivers real-time situational awareness across more than 1,900 square miles.

A key feature of NUAIR's offering is its rapid deployability. This allows the system to be quickly established to support security-critical events, providing immediate airspace monitoring and threat detection for SLTT partners. This capability is essential for protecting public safety and critical infrastructure from evolving drone-based threats.

ANDURIL IS BUILDING AUTONOMOUS WARSHIPS WITH WORLD LEADER HD HYUNDAI HEAVY INDUSTRIES



Anduril Industries and HD Hyundai Heavy Industries have announced a strategic partnership to design and produce a new class of dual-use Autonomous Surface Vessels (ASVs). This collaboration merges HD Hyundai's world-class shipbuilding legacy with Anduril's expertise in software-defined autonomy and rapid mission systems integration. The joint effort will yield a modular family of vessels for both commercial and defense applications, including a variant specifically designed for the U.S. Navy's Modular Attack Surface Craft (MASC) program.

This initiative addresses a critical strategic need. With China outbuilding the U.S. fleet and challenging freedom of navigation across the Pacific, the economics of defending maritime interests using only traditional, manned warships are unsustainable. The Navy's MASC program represents a essential shift toward a distributed, autonomous, and hybrid fleet. To operate and survive in contested waters, the Navy requires affordable, modular vessels that can be produced at speed, deployed in volume, and continuously upgraded with new software and payloads. The Anduril-HD Hyundai ASV is engineered to meet this demand. Its design is defined by modularity and mission flexibility. An open-architecture allows for interchangeable payloads, enabling a single vessel to be rapidly reconfigured for roles in intelligence, surveillance, strike, and electronic warfare. A distinctive central superstructure provides a 360-degree field of view for optimal sensor performance. The vessel is built with steel for easier maintenance and repair, leveraging the existing domestic supply chain for scalability and durability. The partnership follows a deliberate development strategy: prototype in Korea, then build and scale in America. The first ASV prototype is currently being fabricated at HD Hyundai's facilities in Korea to validate the design and integrate core systems. For subsequent production, including the MASC variant, Anduril is establishing a U.S. manufacturing hub at the historic Foss Shipyard in Seattle, Washington. This facility will serve as the center for vessel assembly, integration, and testing. Anduril is also partnering with Hadrian to modernize the manufacturing of ship components, utilizing advanced automation to reduce lead times and strengthen the U.S. supply chain.

This new class of ASV marks the latest expansion of Anduril's maritime capabilities, building on the success of programs like the Ghost Shark autonomous undersea vehicle developed with Australia. By creating a layered ecosystem of autonomous systems—from the seabed to the surface—with shared autonomy software and modular payloads, Anduril aims to make maritime defense more capable, affordable, and resilient.

HII AND SHIELD AI SUCCESSFULLY COMBINE PROVEN AUTONOMY IN USV OPERATIONS

HII (NYSE: HII) and Shield AI announced at the Indo Pacific International Maritime Exposition that they have successfully completed the first major test of their integrated autonomy solution aboard HII's ROMULUS unmanned surface vessel (USV), marking a key step toward operational deployment of the AI-enabled ROMULUS fleet.

The three-day test, conducted in late October in Virginia Beach, Virginia, integrated Shield AI's combat-proven Hivemind autonomy software, using the Hivemind Enterprise software development kit (SDK), with HII's Odyssey autonomy suite onboard a ROMULUS 20 USV. The test also marked the first maritime deployment of Hivemind, which enables AI-powered mission autonomy across domains.

This milestone was achieved less than six weeks after the companies announced their partnership, demonstrating rapid adaptability, advanced capabilities, and strong collaboration between the two defense technology leaders.

"This collaboration between HII and Shield AI showcases how adaptable autonomy frameworks can accelerate development," said Andy Green, president of HII's Mission Technologies division. "Using the Hivemind Enterprise SDK, our teams integrated capabilities quickly and effectively. The successful deployment on ROMULUS 20 validates the power of this partnership and paves the way for even greater autonomy across the ROMULUS fleet."

ROMULUS is a modular, high-performance USV line built on commercial-standard hulls for fast production and operational flexibility. The lead vessel, ROMULUS 190, is currently under construction. Designed to exceed 25 knots and operate up to 2,500 nautical miles, ROMULUS 190 will carry four 40-foot ISO containers and feature both Odyssey and Hivemind for next-gen autonomous performance.

Hivemind enables unmanned systems to perform complex missions even in GPS- and communications-denied environments. Proven in aerial operations, Hivemind is now expanding into the maritime domain through this partnership with HII, supporting rapid development and deployment of autonomous capabilities across domains. Under this partnership, Hivemind and Odyssey will integrate into the ROMULUS fleet to operate seamlessly alongside crewed strike groups and surface action groups, while also enabling multi-agent autonomy and intelligent operations.

"Delivering autonomy across domains is key to maintaining a credible deterrent posture in today's complex geopolitical environment. Each integration strengthens Hivemind's role as the leading autonomy solution for defense systems," said Nathan Michael, Shield AI's chief technology officer and head of the Hivemind business unit. "Through close collaboration with HII and the shared use of Shield AI's modular, open architecture SDK, we integrated advanced maritime capabilities in less than six weeks — work that typically takes months or years. We look forward to continuing to expand multi-domain autonomy together."

Shield AI's Hivemind mission autonomy software and HII's Odyssey suite will deliver next-generation autonomous solutions. By combining Shield AI's advanced autonomy with HII's decades of maritime expertise as America's largest shipbuilder and leading global maritime unmanned vehicle provider, the two companies aim to accelerate autonomy across domains and platforms.

NEWT21 SHOWCASES RELIABLE AUTONOMOUS NAVIGATION ON ITS USV WITH UAV NAVIGATION-GRUPO OESIA'S SUPPORT

NEWT21, the Latvian manufacturer specializing in unmanned surface vessels (USVs), has successfully demonstrated advanced autonomous navigation on its FOG USV. This achievement follows the smooth integration of UAV Navigation-Grupo Oesía's autopilot system, carried out through close collaboration between both teams.

The demonstration highlights NEWT21's ability to deliver a reliable and capable USV platform, now enhanced with advanced autonomous functions that improve safety and mission effectiveness, even in harsh environments. The control system enables the FOG USV to perform complex tasks independently, including mothership approach protection to prevent collisions during close maneuvers, dynamic relative routes that automatically adjust to the position of the vessel hosting the Command and Control Station, and health monitoring with fault tolerance to ensure mission continuity in the event of sensor failures.

The integration and fine-tuning of the FOG USV were carried out smoothly and efficiently, with no incidents, and supported by satcom communications. During testing, the vessel successfully executed navigation plans with full autonomy, marking an important milestone for NEWT21. Equipped with a modern gimbal, the FOG is now ready to perform demanding surveillance missions at sea, even under challenging conditions.

The excellent cooperation between NEWT21 and UAV Navigation-Grupo Oesía was essential to completing the process in record time. This joint effort has not only enabled the autonomous operation of the FOG USV but also paved the way for an upcoming demonstration with the Latvian Navy and participation at the NATO exercise.

With this achievement, NEWT21 reinforces the reliability and autonomy of its FOG USV in critical unmanned operations, while UAV Navigation-Grupo Oesía is proud to contribute as a trusted technology partner. Together, both companies reaffirm their commitment to innovation and strategic autonomy in defense and security. This milestone sets the stage for future joint integrations across additional platforms.

THALES DELIVERS A NEW NAVAL DRONE EQUIPPED WITH THE LATEST GENERATION SONAR TO THE FRENCH NAVY

Thales has announced the delivery to the French Navy of a surface naval drone equipped with a TSAM towed sonar and on board the SAMDIS multi-view sonar. This new step marks the company's commitment and industrial dynamic in this strategic programme, managed by OCCAR with the support of the French (Direction générale de l'armement (DGA) and the UK Ministry of Defence (MoD).

This delivery follows the first production system delivered in December 2024, consisting of the surface drone (USV) equipped with the towed sonar TSAM, data analysis software using Artificial Intelligence (AI), MiMap and the M-Cube mission management system.

This unmanned system was designed to improve the operational performance of navies that are leaders in mine countermeasures, by minimising personnel exposure to hazardous environments. It provides a sea mine detection rate over 99% and thus guarantees naval forces operational superiority in the face of increasingly complex threats.

In close collaboration with Couach shipyard, Thales is upgrading the initial prototypes of surface drones, which have been tested by the French Navy and Royal Navy since 2021, thus demonstrating its expertise as a systems integrator. End user feedback, and more than 3,000 hours of sea trials, have been taken into account to adapt the systems to fully meet operational needs.

The autonomous surface drone system delivered represents a first-of-its-kind capability for maritime defence operations, integrating a range of advanced technical and software innovations developed by Thales:

very high-performance sensors, notably the world's unique "multi-view" SAMDIS antenna, which optimises operational performance;

a surface drone operated without a crew by the French Navy;

a system of drones that is resilient to cyber threats, approved for sensitive operations;

a robust and cyber resilient communication system in the face of threats;

unique mission planning and sonar data analysis software designed to optimise the work and workload of operators.

"Thales is supporting the French Navy to meet the challenges of the transition towards a new operational concept for mine countermeasures. The autonomous system developed by Thales significantly improves mission efficiency while limiting the exposure of crews to mine-related risks. The MMCM programme increases the operational superiority of naval forces, with its M-Cube software at core, designed for fast integration of heterogeneous drones, its high-performance sensors and innovative AI algorithms, reducing operators' cognitive load. This programme, a world first, is the result of unwavering commitment and a source of pride for our teams," said Sébastien Guérémy, Vice-President in charge of the Underwater Systems activities at Thales.

HII REMUS UUV MARKS 18 YEARS SERVING AUSTRALIA, AND CONTINUES TO LEAD GLOBALLY AS UNMANNED UNDERSEA VEHICLE OF CHOICE

At the Indo Pacific International Maritime Exposition in Sydney, HII (NYSE: HII) is marking a significant milestone: 18 years of REMUS unmanned underwater vehicle (UUV) operations in Australia. This legacy began in 2007 with the Royal Australian Navy's acquisition of the REMUS 600 and underscores the platform's enduring role in advancing regional maritime security and research.

The milestone highlights REMUS's global leadership and the critical partnership with the BlueZone Group, HII's official Australian partner for sales, maintenance, and logistics. "BlueZone Group is proud of our enduring partnership with HII," said Neil Hodges, the company's managing director. "This proven platform plays a vital role in strengthening national and regional autonomous underwater capabilities."

For nearly two decades, Australian military and scientific agencies have relied on the versatile REMUS family for missions ranging from naval training and mine countermeasures to environmental monitoring. "REMUS is a force multiplier beneath the surface — quiet, flexible and reliable," said Duane Fotheringham, president of HII's Unmanned Systems group. "We

are also building the future by delivering smarter, more integrated unmanned systems that help our partners maintain undersea dominance."

The REMUS platform's proven performance is matched by its remarkable durability. To date, over 750 vehicles have been delivered to more than 30 nations, and remarkably, over 90% of all REMUS systems deployed in the past 23 years remain in active service. This longevity is a testament to its lifecycle value and robust design.

The system continues to evolve with groundbreaking advancements. In a recent demonstration of its expanding capabilities, REMUS vehicles were successfully launched and recovered from the torpedo tubes of Virginia-class submarines, extending mission reach and enhancing stealth. The platform's modular, open-architecture design allows for rapid integration of new payloads, ensuring it stays mission-ready. This adaptability is exemplified by the REMUS 300, which forms the basis of the U.S. Navy's Lionfish program. From the compact REMUS 130 for shallow-water operations to the deep-diving REMUS 6000, the family offers a scalable solution for defense, commercial, and scientific missions. With a storied history that includes the search for Air France Flight 447 and the discovery of the USS Indianapolis, REMUS has consistently set the standard for undersea autonomy, proving it is a high-impact, low-risk solution ready for the future of maritime operations.

OPEX REPMUS/NATO DYMS EXERCISE IN PORTUGAL: RHEINMETALL DEPLOYS MISSION MASTER AS PART OF THE EXERCISE

The Düsseldorf-based technology group Rheinmetall has successfully demonstrated its advanced autonomous systems at OPEX REPMUS 2025 and DYMS, NATO's premier maritime autonomy exercises. Held in Troia and Sesimbra, Portugal, this strategic event, organized by the Portuguese Navy, NATO, and the European Defense Agency, served as a vital international platform for testing unmanned systems across all domains.

In this demanding, real-world environment, Rheinmetall proved its capabilities in advancing interoperability and mission effectiveness. The company showcased its world-class command-and-control systems, advanced sensors, and mission management platforms, all engineered for complex, multinational operations. A key achievement was the seamless integration of its systems with NATO-standard architectures, using STANAG-compliant interfaces and secure data-sharing protocols to ensure allied forces

can operate as one.

Central to the demonstration was Rheinmetall's 360-degree layered defense concept for protecting harbors, coastlines, and conducting land-based maritime operations. This was proven through live, manned-unmanned teaming scenarios. Key systems like the Mission Master SP – an Unmanned Ground Vehicle (UGV) – performed reconnaissance and surveillance despite harsh coastal conditions, highlighting its robustness and adaptability. These platforms were seamlessly connected through Battlesuite, an app-store-like information space that breaks down data silos and enables rapid integration of new capabilities.

The exercises provided invaluable operational feedback, allowing Rheinmetall to refine its technologies alongside military operators. According to Gregor Mannherz, Sales Manager Marine Systems at Rheinmetall Electronics GmbH, "The REPMUS exercise provided an excellent opportunity to test the interaction of ground- and air-based unmanned systems in a demanding NATO environment."

Rheinmetall's active role at REPMUS/DYMS 2025 reaffirms its position as a trusted partner in NATO's journey toward autonomous, interoperable defense. By collaborating directly with allied forces, the company is accelerating the development cycle, transforming innovative concepts into mission-ready solutions that enhance maritime security and shape the future of allied defense.

SAIC AND HAVOCAI PARTNER TO LINK AUTONOMOUS FLEETS TO GLOBAL C2 INFRASTRUCTURE FOR US NAVY

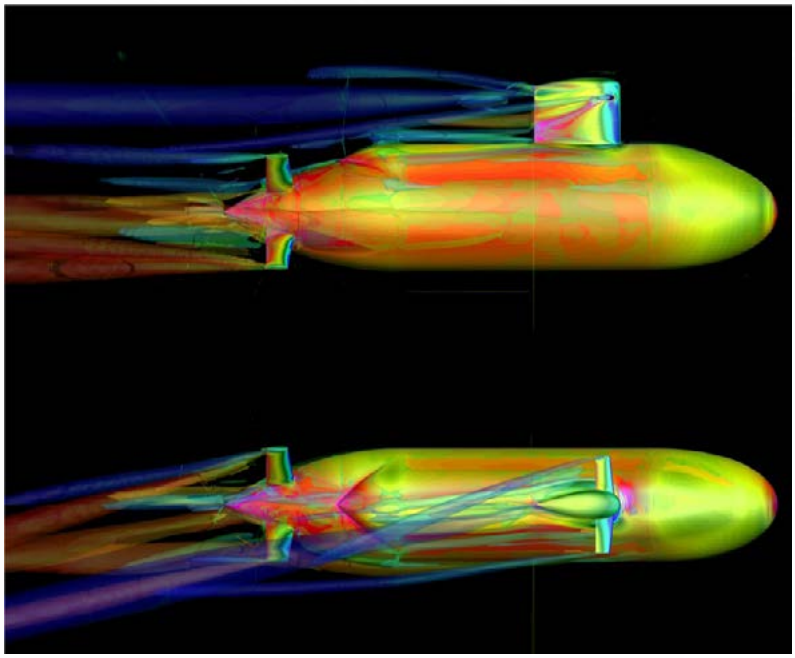
Science Applications International Corp. a premier Fortune 500 mission integrator, and HavocAI, the leader in collaborative maritime autonomy announced an effort to integrate SAIC's real-time, multi-domain communications and data backbone with HavocAI's fully-autonomous, problem-solving fleets. This collaboration will drastically improve maritime domain awareness within the joint, unified warfighting network for the U.S. Navy.

This integration connects HavocAI's collaborative autonomy stack — which currently powers dozens of autonomous vessels in self-organizing teams with the potential to scale to thousands — to broader command and control infrastructure through SAIC's advanced Joint Range Extension (JRE) system. JRE extends the range and interoperability of Link 16 (TADIL-J), which enables U.S. armed forces and allied air, ground, and maritime platforms to collect and exchange vast amounts of tactical data in real-time for faster decision-making. Adding maritime systems enabled with HavocAI's autonomy to Link 16 can ultimately connect huge, heterogeneous fleets of globally-networked sensors, lethal platforms, and command and control systems to the infrastructure of all military services and allies seamlessly and instantaneously. This meets multiple objectives of the U.S. military's Combined Joint All Domain Command and Control (CJADC2) effort to close all-domain kill chains near machine speed and provide U.S. and allied warfighters with unparalleled decision dominance.

"This is a significant leap forward in expanding the capability of large-scale collaborative autonomy," said Paul Lwin, CEO and co-founder of HavocAI. "By integrating with SAIC's proven JRE infrastructure, we're not just connecting our autonomous vessels to existing systems—we're fundamentally enhancing how autonomous maritime systems receive and provide real-time tactical data within joint and coalition C2 systems."

"SAIC's JRE has been the backbone of advanced joint interoperability for two decades and this partnership to bring HavocAI's innovative autonomous platform into the fold will provide immediate operational value and drive the future of maritime operations for the U.S. Navy," said Barbara Supplee, SAIC Executive Vice President of Navy Business Group. "The ability to seamlessly integrate dozens of autonomous vessels into our C2 architecture will provide warfighters with an unprecedented level of maritime domain awareness, sea denial, and sea control."

EDA PROJECT AIMS TO DESIGN QUIETER AUTONOMOUS UNDERWATER VEHICLES



The European Defence Agency (EDA) has launched a four-year research project to reduce the noise produced by autonomous underwater vehicles, aiming to boost naval stealth and limit the impact of human-made sound on marine life.

The SPHYDA (Submarine Hull/Rudder/Propeller Hydrodynamics Interaction and Hydroacoustics) project brings together four EU Member States and Norway, with Italy as lead nation, along with Germany, the Netherlands and Spain. There are nine industrial and research partners.

The consortium will develop advanced numerical models and experimental methods to predict and analyse how hull shapes, rudders and propellers generate noise. SPHYDA, a €4.8 million programme, runs until late 2029. It seeks to provide higher-fidelity simulations and improved measurement techniques to help designers build quieter and more efficient underwater platforms. The project also supports compliance with EU environmental rules.

The initiative builds on earlier EDA projects and EU-funded projects, focused on propeller noise and hydrodynamic performance, while broadening the scope to whole-vehicle acoustics. It also supports wider European capability priorities in underwater warfare, as well as complementing NATO research on sonar and autonomous systems.

The project will design and construct an autonomous underwater vehicle to carry out towing-tank experiments and manoeuvring-basin tests. It will conduct outdoor trials to measure far-field noise under realistic conditions.

Reducing radiated noise is increasingly important for navies seeking to avoid detection. Quieter vehicles offer a tactical advantage by reducing the range at which enemy sonar can identify them. SPHYDA is expected to deliver tools, datasets and design guidelines to support the next generation of low-noise underwater vehicles.

"SPHYDA is a crucial step toward developing the capability to diagnose and predict the complex hydrodynamic mechanisms responsible for the generation and propagation of noise from underwater vehicles in real operating conditions," said Riccardo Broglia, Research Director at the Institute of Marine Engineering of the Italian National Research Council, the project manager.

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HELSING OPENS ITS 1ST UK RESILIENCE FACTORY IN PLYMOUTH TO BUILD AI-ENABLED SUBMARINE-HUNTERS

Europe's leading defence technology company, Helsing, has officially opened its first UK Resilience Factory in Plymouth, marking a significant step in strengthening allied anti-submarine capabilities. The new 18,000-square-foot facility, opened by the Secretary of State for Defence, will serve as Helsing's Maritime Centre of Excellence, focusing on the production and development of autonomous underwater systems.

The factory will immediately create high-skilled manufacturing jobs in the South West, with plans to scale to hundreds of positions. Its primary focus is the manufacture and maintenance of the SG-1 Fathom, a British-designed and built autonomous underwater glider. These gliders are integrated with Helsing's proprietary Maritime AI platform, Lura, to form constellations that provide persistent underwater surveillance. This capability is crucial for detecting enemy submarines and protecting vital sea lanes and undersea critical national infrastructure.

The opening fulfills a plan announced by the Chancellor of the Exchequer and is part of Helsing's £350 million commitment to the UK. The facility, which has already begun production and sea trials from nearby Turnchapel Wharf and sites in Scotland, will also house a high-tech R&D hub to rapidly iterate and advance its maritime technologies.

The investment underscores the UK government's strategy to leverage defence spending for economic growth. Defence Secretary John Healey MP stated that the factory shows the benefits of defence growth deals, which are "making defence an engine for growth to deliver national and economic security." He highlighted the reversal of a trend that saw industrial jobs leave cities like Plymouth.

Ned Baker, Managing Director of Helsing UK, emphasized the local and strategic impact: "From Plymouth we'll be manufacturing the autonomous systems that keep our sailors, ships and infrastructure safe."

The initiative strengthens 'Team Plymouth', a partnership between Helsing, national government, the University of Plymouth, and Plymouth City Council, reinforcing the city's status as a designated Defence Growth Zone. Chancellor Rachel Reeves MP noted that this investment reflects confidence in Britain's engineering talent and is aligned with the government's goal to direct at least 10% of MOD procurement spending towards novel technologies.

UK CAA RELEASES UPDATED POLICY FOR BVLOS DRONE FLIGHTS IN ATYPICAL AIR ENVIRONMENTS

The UK's Civil Aviation Authority (CAA) has published an updated version of its policy document, CAP 3040, titled "Unmanned Aircraft Operations in an Atypical Air Environment: Policy Concept." This amendment provides clearer interim guidance for organizations planning to conduct Beyond Visual Line of Sight (BVLOS) drone operations in specific, low-traffic airspace zones.

The document aims to support the planning of future operations by clarifying the CAA's current position. It states that as technology and operational experience evolve, this guidance will inform more permanent regulations to better enable BVLOS activities.

A key update is a more precise definition of an Atypical Air Environment (AAE). The CAA describes an AAE as a volume of airspace where the proximity of ground infrastructure reasonably ensures a "greatly reduced" number of conventionally piloted aircraft. Importantly, an AAE is not a new airspace classification but a concept that can exist within any existing airspace class, with all standard rules still applying.

The policy provides practical examples to guide operators, including:

Airspace within 100 feet of any building or structure.

Airspace within 50 feet of a permanent, above-ground linear structure like a railway, road, or powerline.

Airspace within the confines of private property at a height not exceeding 50 feet, such as for perimeter inspections on an industrial site.

By defining these parameters, the CAA offers a framework to help operators mitigate mid-air collision risks within the UK's Specific Operations Risk Assessment (SORA) process and provides greater clarity on managing ground risk.

REFMAP PLATFORM LAUNCHES TO HELP AVIATION EXCEED PARIS AGREEMENT GOALS, INCLUDING BVLOS DRONE INTEGRATION

As global leaders convene at COP30 to address environmental crises, a new European initiative is providing the aviation sector with practical tools to surpass the targets of the Paris Agreement. The newly launched RefMap Platform, funded by Horizon Europe and developed by a consortium of leading EU research institutions, integrates advanced environmental modelling, AI-driven trajectory optimization, and detailed analytics into a unified digital system designed to reduce aviation's climate impact.

The platform combines real-time environmental data, noise and air-quality analytics, and specialized tools for drone route planning, including for Beyond Visual Line of Sight (BVLOS) operations. Its capabilities are now being explored and validated in a series of industry workshops led by project partner Future Needs, engaging airlines, airports, air traffic controllers, and drone operators.

For airlines and air traffic management, RefMap enables climate-optimized flight planning that accounts for both CO□ and non-CO□ warming effects, while managing operational costs. Airports can use the platform to reduce noise exposure and local air pollution. Critically, for the growing drone sector, the platform provides urban air mobility and BVLOS operators with the ability to design low-impact, environmentally optimized flight paths in complex airspace.

"Aviation's environmental transition cannot be driven by technology alone – it also needs viable business models and real-world adoption," said Anna Palaiologk, founder of Future Needs. "RefMap gives us the scientific tools to understand climate, noise and air-quality impacts in unprecedented detail, but it is the engagement of operators and regulators that will turn insights into real change."

Dr. Sotiris Xydis of the National Technical University of Athens highlighted the platform's technical foundation: "RefMap integrates climate science, trajectory optimization, noise modelling, air-quality analytics and U-space research, supported by High-Performance Computing and AI, into a single operational platform."

With global air traffic projected to grow 3.6% annually over the next two decades, and with BVLOS drone operations expanding rapidly, tools like RefMap will be essential to balancing aviation's economic role with its environmental responsibilities – helping the EU lead the way in sustainable aviation and UTM innovation.

PELAGUS CO GAINS BVLOS AUTHORITY WITH COLOMBIAN DRONE OPERATOR CERTIFICATION

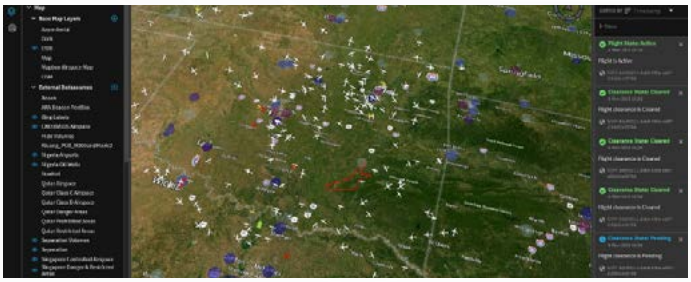
PELAGUS Co has achieved a key regulatory milestone by securing an Uncrewed Aerial Systems Operator Certificate (CDO-U) from Colombia's Civil Aeronautics Authority. This certification formally authorizes the company to conduct advanced commercial drone operations, with specific permissions for complex missions including Beyond Visual Line of Sight (BVLOS) flights.

The certification was the result of a months-long collaborative effort with UAV MASTERS, which began in January 2024. The partnership focused on developing and documenting a comprehensive Operational Safety Management System (SMS) and all required operational manuals to comply with Colombia's stringent civil aviation standards.

This rigorous process established the technical and operational framework that enabled PELAGUS to successfully demonstrate its capabilities. In addition to BVLOS authority, the certification covers other advanced operational profiles, including night flights, urban operations, and drone delivery services.

By obtaining this certification, PELAGUS is now positioned as a fully compliant operator capable of executing sophisticated, large-scale drone applications in the Colombian market. The BVLOS authorization, in particular, enables the company to pursue contracts in sectors like long-linear infrastructure inspection, large-area surveying, and extended-range logistics, where visual-line-of-sight operations are not feasible.

UAVIONIX AND ONESKY PARTNER TO POWER SCALABLE BVLOS OPERATIONS



The companies uAvionix and OneSky have announced a strategic partnership designed to enable the safe scaling of Beyond Visual Line of Sight (BVLOS) drone operations. This collaboration directly integrates uAvionix's certified FlightLine™ aircraft surveillance data into OneSky's enterprise Uncrewed Traffic Management (UTM) platform, creating a unified system for real-time airspace deconfliction.

The partnership leverages uAvionix's nationwide FlightStation™ ground network, which delivers validated, low-latency tracking data for cooperative crewed aircraft down to very low altitudes. By feeding this critical information via API into the OneSky UTM system, the solution provides drone operators with a reliable, real-time picture of manned aviation traffic. This capability is fundamental for obtaining regulatory approvals and safely executing BVLOS missions. The integrated offering delivers several key advantages for scaling advanced drone use. It ensures enhanced safety through low-latency detection of potential conflicts with low-flying crewed aircraft. Furthermore, its API-based, plug-and-play architecture allows for rapid deployment and scalability, supporting operations ranging from single missions to the management of entire national fleets. By combining uAvionix's established surveillance infrastructure with OneSky's sophisticated UTM software, this partnership addresses a major infrastructure requirement for the industry. It provides a critical, ready-made solution that reduces operational complexity and accelerates the path toward routine, large-scale commercial BVLOS drone operations.

PIRINEOS DRONE AVIATION OBTAINS BVLOS APPROVAL FOR HEAVY-LIFT LOGISTICS IN THE PYRENEES

Spanish drone operator Pirineos Drone Aviation SL has secured a significant operational authorization from the Spanish Civil Aviation Authority (AESA) for Beyond Visual Line of Sight (BVLOS) flights using the heavy-lift DJI FlyCart 30. The approval, which applies to the 95 kg maximum takeoff mass (MTOM) aircraft, enables continuous commercial logistics operations rather than limited test flights.

This authorization permits real-world missions in the challenging mountainous terrain of the Pyrenees, specifically in the Val

d'Aran region. The company will operate BVLOS routes spanning several kilometers to transport essential goods, including salt for livestock, supplies for remote mountain shelters, and materials for antenna maintenance.

The approval process was guided by Murzilli Consulting, which developed the full BVLOS concept of operations, prepared the comprehensive SORA (Specific Operational Risk Assessment) safety case, and ensured all documentation met AESA's stringent operational, technical, and organizational requirements. This milestone positions Pirineos Drone Aviation to execute sustained, heavy-lift drone logistics in one of Europe's most demanding environments.

SPHERE DRONES GAINS CASA APPROVAL FOR BROAD-AREA BVLOS DRONE OPERATIONS

Sphere Drones has received a significant regulatory authorization from Australia's Civil Aviation Safety Authority (CASA). The company is now approved under the Broad Area Beyond Visual Line of Sight (BVLOS) Self-Assessment framework, enabling it to independently assess and approve airspace for long-range drone missions.

This approval allows Sphere Drones to utilize its proprietary HubX and HubT remote operations system to safely conduct BVLOS operations. The system streams live command and telemetry data from the field directly to a central Remote Operations Centre (ROC), ensuring continuous oversight and control.

To accelerate adoption for clients, the company offers a streamlined service package called Sidero Local, designed to deploy a fully operational BVLOS system on-site within one week. For organizations navigating the regulatory process, Sphere Drones has also published a practical Broad Area BVLOS CASA Trial Guide, sharing its operational experience and key risk management lessons.

Beyond infrastructure and guidance, the company's Flight Operations team provides end-to-end mission support. This comprehensive service covers mission planning, on-site deployment, aerial data capture, and post-flight data processing and delivery, offering a complete BVLOS solution for commercial and industrial applications.

SUNFLOWER LABS SECURES NATIONWIDE FAA BVLOS APPROVAL AND $16 MILLION IN FUNDING

Sunflower Labs has achieved a major regulatory milestone, receiving nationwide approval from the U.S. Federal Aviation Administration (FAA) to operate its drone security system beyond visual line of sight (BVLOS). This blanket authorization for its Beehive system allows customers to legally conduct automated BVLOS flights, operate over people and vehicles, and fly in low-visibility conditions without needing individual, case-by-case approvals.

Concurrently, the company announced the close of a $16 million Series B funding round. The investment was led by Sequoia

Capital, with participation from Alarm.com, DRONE FUND, and other venture firms. The capital will accelerate AI development, fund geographic expansion into the U.S., European, and Latin American markets, and deepen integrations with strategic platforms like Alarm.com.

To support customer adoption, Sunflower Labs has also launched a new online design tool. This platform allows potential clients to visually map and preview how the autonomous Beehive security system would be configured and operate on their specific property. Together, the FAA approval, significant funding, and new customer tool position Sunflower Labs to scale its automated, drone-based perimeter security and monitoring solution for residential and commercial properties.

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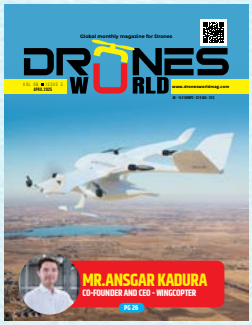

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