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DRONES WORLD is published by - Real Future Media Ltd

B. KARTIKEYA

Hello Readers,

As Drones World marks its sixth anniversary, we reflect on a remarkable journey of documenting the global evolution of unmanned systems and advanced aerial technologies. Over the past six years, the magazine has grown into a recognized international platform connecting innovators, policymakers, defence leaders, and technology companies across the drone and advanced air mobility ecosystem.

The unmanned aviation sector is now entering a new phase of maturity. What was once an emerging technology domain is today a strategic capability across defence, security, infrastructure, and commercial aviation. Autonomous systems, artificial intelligence, and integrated airspace management are rapidly transforming how nations secure their airspace, how industries conduct operations, and how new aerial mobility networks will emerge in the coming decade.

This special anniversary edition highlights those transformations through a diverse lineup of interviews with global industry leaders who are shaping the future of autonomous aviation. In this issue, readers will find insights from Philip Swinsburg, Director of Asia Pacific Business Development at Wisk; Derek Cheng, Head of Commercial Asia-Pacific at Vertical Aerospace; Agris Kipurs, CEO and Co-founder of Origin Robotics; Sarah Abdi, Head of Marketing at Parallel Flight Technologies; Colton Wood, CTO of Digital Force Technologies; and Vamsi Vikas from Arrobot (a Raghu Vamsi DeepTech brand). Their perspectives reflect the breadth of innovation taking place across advanced air mobility, defence technology, counter-drone systems, and next-generation autonomous platforms.

Beyond interviews, the issue also captures the dynamic pace of developments across the global drone industry. From advancements in autonomous swarm technologies and satellite connectivity for UAV operations to evolving counter-UAS capabilities and collaborative combat aircraft programs, unmanned systems are increasingly becoming central to modern defence and security strategies.

The Defence and Security segment highlights how nations and defence organisations are integrating drones, loitering munitions, and electronic warfare capabilities into modern battlefield concepts. At the same time, advancements in counter-drone technologies demonstrate the growing importance of layered airspace protection to safeguard critical infrastructure, public spaces, and national borders.

Alongside defence applications, the issue also reflects the rapid expansion of commercial and civil drone operations. Innovations in fleet automation platforms, operator training initiatives, and advanced air mobility programs are enabling new use cases in logistics, infrastructure inspection, disaster response, and urban mobility. These developments illustrate how unmanned aviation is steadily transitioning from experimental deployments to scalable operational ecosystems.

As we celebrate this milestone and step into our seventh year, Drones World remains committed to bringing credible reporting, global industry insights, and thought leadership that help shape the future of unmanned aviation.

To mark this special anniversary edition, we are also opening limited advertorial and advertisement opportunities for organisations wishing to showcase their technologies, programs, and capabilities to our global readership. These opportunities provide a platform for companies to enhance industry visibility and engage with decision-makers across the defence, aerospace, and drone sectors.

The journey of the past six years has been made possible by the continued support of our readers, contributors, and industry partners worldwide. As the unmanned systems ecosystem continues to evolve, Drones World will remain dedicated to highlighting the innovations, partnerships, and ideas that will define the next era of autonomous aviation.

Kartikeya B.

DIEHL DEFENCE UNVEILS NEW INTEGRATED MOBILE COUNTER-UAS SYSTEM GARM-R

Diehl Defence has launched its latest integrated mobile counter-unmanned aircraft system (C-UAS) known as GARM-R, designed to detect and defeat unauthorized drones in operational theatres and critical area protection roles. The system combines multiple sensor types and effectors within a mobile architecture to provide rapid, adaptable airspace defence against evolving unmanned aerial threats.

GARM-R brings together radar detection, electro-optical/infrared (EO/IR) cameras and electronic warfare (EW) suites into a single scalable package mounted on a mobile platform. This integration allows users to detect, track and classify small unmanned aerial systems at extended ranges before engaging them with appropriate mitigation measures. The modularity of the system enables tailored configurations to suit mission requirements, ranging from local base defence to support for manoeuvring units.

A key design feature of GARM-R is its mobility and rapid deployment capability. Built on a tactical vehicle chassis, the entire system can be moved quickly to where it is required, supporting dynamic battlefield

conditions or fast-moving operational scenarios. The mobile design also facilitates integration with existing command-and-control networks, allowing data sharing with higher-level air defence and situational awareness tools.

In addition to its sensor suite, GARM-R includes effective countermeasures such as radio frequency (RF) jamming and other electronic attack options that can disrupt or disable hostile drones' control and navigation links. The system's integrated approach

aims to minimise decision cycles by correlating sensor input and automatically suggesting or executing mitigation actions according to pre-determined rules of engagement.

Diehl Defence emphasises that GARM-R is designed to support layered airspace defence concepts, working in concert with other ground- and air-based protection systems. By providing early warning, precise target tracking and flexible engagement options, it contributes to reducing the risk posed by small, low-altitude unmanned aircraft in both military and critical infrastructure protection scenarios.

The introduction of GARM-R reflects a broader trend within defence technology toward fully integrated, mobile C-UAS platforms that combine multi-sensor detection with robust mitigation capabilities. As unmanned system threats become more sophisticated — including swarm tactics and low observable designs — integrated solutions like GARM-R are increasingly sought by armed forces and security organisations aiming to strengthen airspace sovereignty and force protection.

UAV NAVIGATION-GRUPO OESIA AND EAD STRENGTHEN THEIR COLLABORATION TO DRIVE ZEUS VTOL PLATFORM IN POLAND

UAV Navigation-Grupo Oesía, a leading provider of flight control systems for unmanned aerial vehicles, has announced its collaboration with the multinational company based in Poland Ekolot Aerospace and Defense (EAD) to integrate its advanced flight control system into ZEUS, Ekolot EAD's new fixed-wing VTOL (Vertical Take-Off and Landing) platform.

This collaboration brings together UAV Navigation–Grupo Oesía's cutting-edge guidance, navigation, and control solutions with Ekolot Aerospace & Defense's vision to create a new generation of VTOL aircraft. The result is ZEUS, a family of platforms in a MTOW (Maximum Take-Off Weight) range from 100 to 250kg that combines the aerodynamic efficiency of a fixed-wing design with the versatility of vertical take-off and landing, making it ideal for civil, defense, and security missions in remote or challenging environments. Ekolot Aerospace & Defense's with ZEUS family of unmanned aircraft is filling the gap between small tactical UAVs and heavy MALE-class systems. The ZEUS is uniquely modular and convertible

concept: a single base airframe accepts VTOL or CTOL (Conventional Take-Off and Landing) conversion kits, supports multiple MTOW (150kg, 200kg, 250kg for VTOL and 250kg – 350kg for CTOL), and payloads from 30 – 120kg on VTOL versions and up to 150kg on the CTOL ZEUS G variant, designed to deliver exceptional endurance of 12–24 hours and a modular, payload-agnostic configuration.

ZEUS UAV's family integrates UAV Navigation-Grupo Oesía's advanced autopilot systems, which provide precise flight control and a wide range of advanced capabilities for dual-use unmanned missions, including robust performance in GNSS-denied environments through high-precision

inertial navigation and the Visual Navigation System (VNS).

Together, both companies aim to reinforce their presence in the Polish market and support Ekolot Aerospace & Defense's expansion across the LATAM region. From the start of this relationship, UAV Navigation-Grupo Oesía and Ekolot Aerospace & Defense have maintained a close and seamless cooperation, built on trust and a shared vision to develop robust solutions for the global market. EAD emphasizes the importance of partnering with a company that not only provides critical systems such as flight control but also offers a team of highly qualified experts in the unmanned industry.

"For EAD (Ekolot Aerospace & Defense), working with UAV Navigation-Grupo Oesía means ensuring quality and reliability in one of the most critical components of our platform. This collaboration allows us to look to the future with confidence, exploring new opportunities and joint projects," said Edgardo Zapata, CEO at Ekolot Aerospace & Defense.

PALLADYNE AI ACHIEVES BREAKTHROUGH FLIGHT MILESTONE WITH 1ST FLIGHT OF INTELLISWARM

Palladyne AI Corp. a U.S.-based defense and industrial technology company delivering embodied AI-powered collaborative autonomy solutions, advanced avionics, precision-manufactured components, UAVs, and advanced aerospace engineering services announced the successful flight test of IntelliSwarm, the integrated autonomy stack combining its SwarmOS autonomy software with its BRAIN X2 Guidance, Navigation and Control (GNC) flight computer, demonstrated for the first time on Palladyne Defense's Banshee loitering munition platform and in autonomous collaboration with Red Cat (NASDAQ: RCAT) drone platforms.

Ben Wolff, President and Chief Executive Officer of Palladyne AI, commented: "IntelliSwarm is flight-proven technology today – not a future concept. This successful integration fundamentally changes what's possible and economically viable in AI-enabled unmanned systems. Demonstrating IntelliSwarm on our Banshee platform, while collaborating with Red Cat drone platforms, showcases our vertical integration, rapid execution, and commitment to delivering battlefield advantages. For defense customers and UAV manufacturers, IntelliSwarm provides the foundational autonomy layer to accelerate next-generation swarming while reducing costs, speeding deployment, and enabling decisive edge

performance in denied domains."

This milestone represents the inaugural flight of Palladyne AI's IntelliSwarm autonomy stack, deployed on its proprietary Banshee mini-bomber UAV concept, which autonomously collaborated with drones from Red Cat. Building on prior SwarmOS demonstrations with third-party UAV platforms, this test validates the combined, tamper-proof edge-AI solution in a real world, heterogeneous multi-vehicle scenario and represents a pivotal step in advancing both IntelliSwarm and Banshee towards operational readiness.

IntelliSwarm results from the rapid, three-week integration of Palladyne AI's patented SwarmOS autonomy software with its NDAA-compliant BRAIN X2 edge-AI avionics. By integrating GNC with autonomous swarming capabilities into a single, unified stack that embeds perception, decision-making, flight control, and coordinated behavior at the edge, Palladyne

Defense is delivering real-time performance in GPS- and communications-denied environments.

Unlike centralized command or homogeneous fleet approaches, IntelliSwarm enables platforms from different manufacturers with varying roles, payloads, and performance characteristics, to autonomously operate as intelligent, collaborative peers within a secure mesh network. This decentralized design supports graceful degradation, mission resilience, alignment with DoD open-systems requirements, robust security, and operator oversight.

Palladyne Defense's Banshee is a next-generation reusable mini-bomber UAV concept purpose-built for modern contested warfare, emphasizing autonomy, affordability, and resilience. It provides precision effects with a cost per effect that is substantially lower, while offering greater autonomy, reusability and mission resilience, than low-cost FPV (First Person View) drones.

"By natively integrating SwarmOS with BRAIN X2 we've created a seamless stack for embodied intelligence, precise flight control, and heterogeneous coordination," said Dr. Denis Garagic, Chief Technology Officer of Palladyne AI. "This allows platforms of any design, mission, or origin to function as a unified, adaptive force—achieving levels of interoperability and resilience that were previously out of reach."

RHEINMETALL DEMOS THE FV-014 LOITERING MUNITION SYSTEM TO A POTENTIAL NATO CUSTOMER

Rheinmetall has successfully demonstrated its new FV-014 loitering munition system to a potential NATO customer. The demonstration took place on 18 February 2026 at the National Test Centre for Unmanned Aerial Systems of the German Aerospace Centre (DLR) in Cochstedt, Saxony-Anhalt. During the demonstration, the FV-014 loitering munition system (LMS) simulated various mission scenarios and attack flights. For Rheinmetall, the successful test marks another milestone in its loitering munition activities.

Rheinmetall's state-of-the-art LMS FV-014 is designed for dynamic combat deployment at ranges of up to 100 kilometres. The system combines high effectiveness against armoured and soft targets with state-of-the-art sensor technology, network capability and deployment options even in GNSS-jammed environments.

The FV-014 is designed as a true LMS,

combining reconnaissance and effect in a single system. It supports tactical units in combating high-value point targets, such as combat vehicles, artillery positions or command vehicles, over long distances beyond the line of sight.

The system is launched from a launch container using a booster, but can also be deployed from a multi-launcher. After launch, the FV-014 unfolds its folding wings and transitions to aerodynamic flight. The system has an operational range of up to 100 kilometres with a

flight duration of 70 minutes, providing sufficient time for observation, target selection and attack decision-making.

Operation and system integration The FV-014 is initially designed as a portable system for use at troop level and is controlled via a user-friendly ground station that enables permanent human-in-the-loop control. The operator can identify targets, fly to them, launch a precise attack or abort the mission if conditions change.

Design and survivability The FV-014 flight body follows a classic wing concept with electric propulsion and faceted structures to reduce signatures and enable high approach speeds in the target area. The system is optimised for low acoustic and thermal signatures and can also be used in electromagnetically demanding scenarios with disrupted satellite navigation.

AIRBUS AND SINGAPORE SUCCESSFULLY COMPLETE HTEAMING FLIGHT TRIALS

Airbus and Singapore's Defence Science and Technology Agency (DSTA) have successfully concluded a pioneering HTeaming flight campaign at a Singapore airbase. This flight demonstration marks the very first time HTeaming has involved an Airbus Flexrotor uncrewed aerial system (UAS) and the Republic of Singapore Air Force's (RSAF) H225M helicopter.

This followed an agreement signed in June last year, with the two partners exploring how crewed-uncrewed teaming could enhance situational awareness and improve mission outcomes through a flight demonstration campaign.

The trials conducted in January using simulated scenarios, proved that a crewed helicopter can successfully and securely access real-time data from a UAS, significantly extending the aircraft's visual range and overall mission safety. To demonstrate this capability, the H225M and Flexrotor teamed up in a search and rescue mission, delivering enhanced situational awareness.

As part of the collaboration, Airbus managed the design of the HTeaming system and its integration into the H225M, including specialised data-link architectures. This integration enabled the helicopter crew to receive and process real-time data from the Flexrotor while maintaining direct command and control of the UAS. This synergy facilitated rapid decision-making and mission execution while minimising the crew's exposure to high-risk environments.

"The complexity of modern operations demands solutions that can adapt in real time. The successful flight demonstration underscores DSTA's commitment to innovation and strong partnerships with industry to deliver cutting-edge solutions. It marks a positive step forward in teaming capabilities to enhance the RSAF's mission effectiveness, while ensuring human decision-making remains at the centre of operations. This achievement gives us confidence to move further to redefine the boundaries of what's possible for more dynamic operations," said Ang Jer Meng, Director Air Systems, Defence Science and Technology Agency.

"The successful teaming is a game-changer for modern tactical operations. This flight campaign fully illustrates the ability to exploit dual-use technologies to support secure operations. By leveraging the strengths of both platforms, air commanders are enabled with unprecedented situational awareness in complex missions and high-risk environments," said Olivier Michalon, Executive Vice President of Global Business at Airbus Helicopters.

Airbus HTeaming is a brand new modular crewed-uncrewed teaming solution designed to be compatible across the entire Airbus helicopter range. As a UAS-agnostic system, it integrates a variety of uncrewed platforms, allowing helicopter crews to take full control of different UAS in flight to meet specific mission requirements.

The Flexrotor is a modern Vertical Takeoff and Landing (VTOL) uncrewed aircraft with a 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, and 10 hours in EMSA 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.

VIASAT LAUNCHES DEDICATED SATELLITE SERVICE PORTFOLIO FOR GOVERNMENT UAV OPERATIONS

Viasat, Inc. a global leader in satellite communications announced its next-generation satellite service portfolio engineered to meet the evolving demands for government uncrewed aerial vehicle (UAV) operations.

Designed to meet specific government requirements, the VuaLe portfolio supports UAV missions, providing flexibility, security and operational control through a range of terminals and connectivity services.

Connectivity services within the portfolio include Uncrewed Air, L-MAX, G2X Air, G2X Air Plus, and K-MAX. Each will provide specific benefits depending on the mission, giving operators flexible, budget-conscious options. This includes supporting intelligence, surveillance, and reconnaissance operations as well as public safety, border security, defense, and scientific research.

Uncrewed Air is a new service designed to provide reliable and cost-effective L-band connectivity plans through Viasat's global L-band network. It enables continuous, resilient communications for mission-critical UAV operations, making secure satellite links accessible to a broader range of operators than ever before.

To complement Uncrewed Air, Viasat has also unveiled a suite of compact, lightweight, low power terminals for UAVs. Starting from as light as 440 grams, these terminals provide dependable Command and Control (C2) link via reliable L-band, enabling operators to maintain continuous communication even in challenging environments. The small size, weight and power (SWaP) terminal is ideal for smaller UAV platforms, designed to deliver global reach, reliability, and operational flexibility.

Todd McDonell, President, International Government, Viasat, said: "The launch of this new service portfolio enforces Viasat's commitment to advancing UAV communications with secure, resilient, and flexible solutions. As demand grows for UAV missions, we aim to enable our customers across government and defense industries to operate with greater situational awareness, operational efficiency and cost control."

YFQ-44A FLIES WITH MISSION AUTONOMY SOFTWARE FROM ANDURIL & SHIELD AI

Just four months ago, the first flight of Anduril's YFQ-44A marked the start of a new chapter in the history of aviation: the first semi-autonomous flight of a fighter-class Collaborative Combat Aircraft.

Today, Anduril achieved another milestone for the U.S. Air Force's Collaborative Combat Aircraft program: YFQ-44A flew with two different mission autonomy software suites, made by two different vendors, on the same aircraft, on the same flight. The aircraft took off and autonomously approached a designated point where Shield AI's mission autonomy software stack, Hivemind, was activated to complete a series of test cards. Following completion of Hivemind tests, Anduril was able to seamlessly switch to Anduril's Lattice for Mission Autonomy stack to complete the same test points, before returning safely to land.

The flight test is the latest in a series of milestones that demonstrates the program's rapid progress: Anduril was selected to produce CCA prototypes in April 2024, achieved semi-autonomous flight 556 days later, and now has multiple aircraft flying regularly. The integration of a separately-developed autonomy stack is a significant technical endeavor that was achieved in rapid time because of the early implementation of A-GRA on both the YFQ-44A and the mission autonomy software stack. The integration of mission autonomy software unlocks the next critical phase of testing, including detailed mission CONOPs, weapons integration, multi-ship flights, integration with crewed fighters, and more.

Hivemind : For the past several months, Anduril's YFQ-44A team has been working in close collaboration with the team at Shield AI to integrate their Hivemind mission autonomy software suite into our CCA aircraft. The similarities we share in our approaches to software development, commitment to speed, and technology maturity have streamlined our collaboration during a critical period focused on rapid testing, iteration, and improvement.

Engineers from Anduril and Shield AI have worked shoulder-to-shoulder to integrate Hivemind seamlessly with the flight control software on YFQ-44A, testing the combined system's performance across countless software-in-the-loop simulations and milestone hardware-in-the-loop test events to build confidence in the stack's performance in the lead-up to our first mission autonomy flight. The result? During the flight test, Hivemind managed YFQ-44A through a complex series of test points that were representative of future mission CONOP. The software performed as expected, validating our shared approach to integration, development, and testing. We look forward to accelerating our work with the Shield AI team over the coming months.

Lattice for Mission Autonomy : The U.S. Air Force has designed the CCA program to emphasize constant competition, modularity, and the ongoing, rapid integration of best-of-breed hardware and software capabilities. That approach extends to mission autonomy software, where they have defined a universal Autonomy Government Reference Architecture (A-GRA) standard to foster a more competitive and innovative ecosystem of software suites.

Over the past year, Anduril has invested its own dollars and dedicated a team to aggressively build our Lattice for Mission Autonomy software baseline with a single goal: build the absolute best mission autonomy for air dominance product, period. That singular focus drove tireless execution across the team, because there is a belief that this capability must exist, and must exist at the highest of standards.

This flight with YFQ-44A marks a major milestone for Lattice for Mission Autonomy. We recognize that our work here is only just beginning and we are committed to building both the capability itself and warfighters' trust in the system.

Modularity unlocks capability : YFQ-44A was designed from the ground up as a highly modular, flexible aircraft. With a simple design, external stores, and open hardware and software architectures, YFQ-44A can easily be configured with a range of mission systems, software suites, and payloads to support a variety of missions.

The integration of two mission autonomy software suites into a single YFQ-44A sortie serves as the latest evidence of that modularity. It also validates the program's approach to acquisition: by emphasizing open hardware and software architectures, the CCA program has created a competitive ecosystem of software providers for the Air Force to draw upon as mission needs evolve.

VOLATUS SECURES DRONE TRAINING CONTRACT WITH NATO DEFENCE PARTNER

Volatus Aerospace Inc. a next-generation aerospace and defence company delivering dual-use uncrewed systems, aerial intelligence, and mission-critical operational services announced it has been awarded a new contract with a NATO defence organization to deliver advanced remotely piloted aircraft system (RPAS) (drone) training supporting operations in remote and extreme environments.

The contract value is undisclosed due to confidentiality. Volatus expects to fulfill the entire contractual obligation within fiscal year 2026, with margins expected to be in line with historical performance.

The engagement will focus on preparing operators for real-world defence and security missions, including emergency response, patrol, and surveillance operations, as well as search-and-rescue and reconnaissance applications. Training will combine classroom instruction with live flight exercises designed to ensure safe, compliant, and effective deployment of uncrewed systems under demanding operational conditions.

"This award highlights Volatus' ability to support defence customers across the entire drone ecosystem," said Glen Lynch, Chief Executive Officer of Volatus Aerospace. "It reflects continued demand for our expertise in preparing operators to use uncrewed systems in demanding, real-world environments."

The contract reinforces Volatus' expanding role within NATO-aligned defence and security programs and reflects growing demand for providers capable of delivering end-to-end uncrewed systems capabilities, rather than standalone products or services. The contract was awarded following a competitive procurement process.

Volatus continues to see increasing engagement across defence, security, and government customers and expects to provide further updates as programs advance.

AUTONOMOUS UNDERWATER VEHICLE BLUEWHALE HANDED OVER TO GERMAN NAVY

TKMS and Israel Aerospace Industries (IAI) announced the delivery of the BlueWhale large autonomous underwater vehicle (AUV) to the German Navy. The handover took place at the Eckernförde naval base, marking a significant milestone for autonomous underwater systems and is a key component in TKMS's efforts to expand the maritime ecosystem of the future. Guests at the ceremony included Jens Plötner, State Secretary in the Federal Ministry of Defense, and Jan Christian Kaack, Vice Admiral of the German Navy.

BlueWhale is a mature, first of its kind fully autonomous large underwater vehicle that combines reconnaissance, sensor technology, and data fusion in a single system. Developed by IAI, a leading global provider of aerospace and defense systems. TKMS and its ATLAS ELEKTRONIK segment integrated the advanced anti-submarine warfare towed sonar. BlueWhale is thus a significant joint project between TKMS and IAI.

Michael Ozegowski, Executive Vice President of TKMS ATLAS ELEKTRONIK, explains: "TKMS is consistently expanding its capabilities in the autonomous sector. We are proud to support the navy as part of its 'Kurs Marine 2035+' future plan and to actively respond to current security threats with our solutions. The rapid introduction of new technologies is a common goal of industry and the navy and significantly strengthens Germany's defense capabilities."

Boaz Levy, CEO and President of IAI, explains: "IAI's autonomous systems in the air, at sea, on land and in space are in operational use that provides significant technological advantage, while improving the ability to protect the lives of combatants in the field. The delivery of the BlueWhale to the German Navy, demonstrates the close cooperation we have with TKMS ATLAS ELEKTRONIK and the degree of mutual trust between Israel and Germany."

BlueWhale was developed to support the German Navy in unmanned antisubmarine warfare and covert maritime missions. The vehicle is capable of conducting reconnaissance operations, detecting targets above and below the sea surface, collecting acoustic information, and locating sea mines on the seabed. The delivery of BlueWhale follows intensive testing in the Baltic Sea, one of the most demanding and complex areas of operation for the German Navy.

BlueWhale acts as an extended sensor arm for manned platforms, operating autonomously over long periods of time and covering large areas of sea. The prospective integration of BlueWhale into the overall network underscores TKMS's integrated systems approach. As Europe's only fully integrated maritime systems provider, TKMS combines proven platforms, autonomous systems, and a uniform software and data architecture.

The handover of the BlueWhale marks the future-oriented cooperation between TKMS, IAI, and the German Navy and sets another milestone for innovative projects in the field of unmanned underwater systems.

FLYTBASE LAUNCHES NEW CONNECTIVITY PLATFORM WITH AI AGENTS TO ADVANCE DRONE OPERATIONS

FlytBase has introduced a new connectivity platform powered by artificial intelligence agents, designed to simplify and scale drone fleet automation and remote operations across commercial and enterprise use cases.

The platform enables drones, ground stations and cloud systems to maintain robust, real-time connections, supporting automated workflows even in complex environments or over extended distances. Central to the offering are AI agents — software components that can analyse data from drones and sensors, make intelligent decisions autonomously and trigger mission actions without continuous human input. These agents are tasked with enhancing situational awareness, adaptive mission planning and error recovery during drone operations.

A key feature of the connectivity platform is its ability to streamline communication between airborne assets and backend systems. The platform supports data exchange between drones, edge computing nodes and cloud infrastructure, enabling fleets to operate cooperatively and respond dynamically to changes in mission conditions. For example, multiple drones can coordinate routes, share obstacle information and adjust plans in real time through the networked architecture. FlytBase says its AI agents can interpret telemetry, camera feeds and sensor data, elevating operational intelligence for tasks such as autonomous delivery, inspection or surveillance missions. The agents can be configured to handle repetitive tasks, select optimal responses to standard operational scenarios, and escalate decisions to human operators only when necessary, reducing manual workload and improving consistency.

The connectivity layer also supports integration with third-party systems and enterprise software such as fleet management dashboards, mapping tools and analytics platforms. This interoperability makes the platform suitable for organisations seeking to centralise operational control and insights across diverse hardware types and deployment locations.

FlytBase's launch comes at a time when organisations are increasingly deploying drone fleets for logistics, industrial inspection, emergency response and public safety missions. As adoption grows, so does the need for software that not only scales network connectivity but also incorporates intelligent automation that can adapt to varied operational challenges. By combining connectivity with AI-driven agents, the new platform aims to help operators achieve higher levels of autonomy while maintaining control and oversight. The system's architecture supports both live operational decisioning and historical data analysis, offering insights into fleet performance and enabling continuous optimisation. Overall, FlytBase's connectivity platform reflects the broader industry move towards software-defined drone operations that prioritise flexible integration, seamless networking and intelligent automation to unlock complex mission capabilities at scale.

EPIRUS AND DIGITAL FORCE TECHNOLOGIES PARTNER TO DEVELOP NON-KINETIC COUNTER-UAS CAPABILITIES

Epirus and Digital Force Technologies have announced a strategic collaboration to co-develop non-kinetic counter-unmanned aircraft system (C-UAS) solutions. The partnership focuses on advancing technologies that can disable or neutralise hostile drones without using explosive or kinetic force, addressing evolving threats with precision and reduced risk to nearby people and infrastructure.

The joint effort aims to combine Epirus's expertise in high-power microwave (HPM) systems and electromagnetic effects with Digital Force Technologies' experience in electronic warfare and signal processing. By integrating these capabilities, the companies plan to accelerate development of scalable, non-kinetic C-UAS architectures that are more adaptable, safer and cost-effective than traditional interceptors.

Non-kinetic technologies employ directed energy — such as high-power microwaves — or advanced signal jamming to disrupt or damage hostile drone electronics, communications and navigation systems. These methods offer several operational benefits over conventional

kinetic interceptors, including near-instant engagement, minimal collateral debris and lower per-engagement costs. In crowded or populated environments, such attributes are especially valuable, enabling defenders to mitigate drone threats without endangering personnel or property.

The partnership will prioritise research, prototyping and field testing to refine integration between modular non-kinetic payloads and command-and-control frameworks. This includes developing user interfaces and automation features that allow operators to assess airspace threats and select appropriate engagement responses quickly. The work also involves exploring how non-kinetic systems can be integrated with broader airspace awareness and layered defence

networks, ensuring seamless operation alongside existing radar, optical and RF detection platforms.

Epirus and Digital Force Technologies say that the collaboration will support a range of potential applications, from protecting military installations and critical infrastructure to securing public events and urban airspace. As drone technology becomes more affordable and accessible, both state and non-state actors increasingly deploy unmanned aerial systems for intelligence gathering, disruption or attack — driving demand for advanced countermeasures.

By focusing on non-kinetic approaches, the partnership seeks to provide flexible, repeatable and lower-risk options for neutralising unmanned threats. This reflects broader trends in the defence and security sectors, where directed-energy and electromagnetic techniques are gaining traction as key components of layered counter-UAS strategies. The collaboration between Epirus and Digital Force Technologies positions both firms to contribute to next-generation airborne threat mitigation solutions that prioritise safety, scalability and operational effectiveness.

ROBIN RADAR TO BOOST WORLD CUP SECURITY WITH COUNTER-UAS RADAR SYSTEM

Robin Radar Systems is set to support airspace security at the 2026 FIFA World Cup by supplying its counter-UAS radar technology for deployment around key venues. The move reflects the increasing emphasis on comprehensive airspace protection at major public events, where unauthorised drones can pose safety and security risks to spectators and infrastructure.

The radar system from Robin is designed specifically for detecting, tracking and analysing small unmanned aerial systems. Unlike conventional surveillance radars optimised for larger aircraft, counter-UAS radars are calibrated to identify low-altitude, low-radar-cross-section targets typical of commercial and hobbyist drones. Robin's technology continually scans designated airspace, providing operators with real-time target information and enabling rapid assessment of potential threats.

At World Cup venues, the radar will form part of an integrated counter-UAS defence architecture. This typically includes detection

sensors, command-and-control systems and response tools that work together to maintain continuous awareness of aerial activity. Early detection is a critical first step in these layered approaches, feeding accurate target data to decision-makers and to mitigation systems should unauthorised drones be detected.

Robin Radar Systems has developed a range of products used in air traffic monitoring, security and critical infrastructure protection, but its counter-UAS solutions are increasingly in demand as organisations confront the challenge

of drone proliferation. These systems are capable of distinguishing between benign objects such as birds and true unmanned threats, reducing false alarms and focusing response efforts where they are most needed.

The deployment at World Cup sites aligns with broader trends in airspace security for global events, where organisers and national authorities seek to pre-empt and manage risks associated with unmanned aerial activity. With millions of spectators expected across multiple cities, proactive counter-drone measures help ensure that aerial incursions do not disrupt operations or compromise public safety.

By incorporating Robin's counter-UAS radar into its security framework, World Cup planners aim to enhance situational awareness and provide a robust detection capability that contributes to overall event safety. Continuous airspace monitoring enables security teams to identify emerging risks early and coordinate appropriate responses, supporting a secure environment for players and fans alike.

ELBIT SYSTEMS WINS MAJOR CONTRACT FOR BORDER CONTROL AND COUNTER-UAS TARGET DETECTION

Elbit Systems has been awarded a significant contract to provide advanced target-detection and surveillance solutions aimed at enhancing border control and counter-UAS (unmanned aircraft systems) capabilities. The deal reflects growing demand for integrated systems that can identify and track aerial and ground-based threats along national frontiers and in sensitive airspace environments.

Under the agreement, Elbit Systems will supply a suite of sensor and detection technologies capable of monitoring wide areas and identifying unauthorized activity. These systems are designed to detect, track and classify targets — including small drones — with high accuracy, feeding data into command-and-control architectures that support real-time situational awareness and response.

A central component of the solution is advanced radar technology optimised for detecting objects with low radar cross-sections, such as small unmanned aerial vehicles and other low observable targets. Combined with electro-optical and infrared imaging sensors, the integrated system delivers multi-domain visibility that enhances both aerial and ground surveillance. The data streams from these sensors are fused and analysed to assist operators in prioritising potential threats and cueing appropriate countermeasures.

Beyond aerial threats, the suite also supports conventional border security missions, helping authorities monitor and respond to incursions on land or at sea. High-resolution imaging and detection capabilities enable long-range coverage, while automated tracking aids in distinguishing between benign and suspicious activity.

Elbit Systems has extensive experience supplying surveillance and defence solutions to military and homeland security customers around the world. This contract builds on that legacy, integrating mature technologies into a coherent system tailored to complex operational environments where rapid detection and decision support are critical.

The deployment of these systems is expected to strengthen border protection by providing enhanced awareness across expansive areas and supporting faster, more informed responses to unauthorised movements or incursions. With unmanned aircraft technology proliferating globally, the integration of robust detection tools into border security architectures is increasingly seen as essential to national defence and public safety strategies.

Overall, the contract reinforces Elbit Systems' position as a key supplier of advanced surveillance and target detection technologies and underscores the expanding role of integrated sensor solutions in protecting borders and critical airspace from evolving threats.

UNIFLY LAUNCHES ONLINE SORA TRAINING SERIES TO SUPPORT DRONE OPERATIONS SAFETY

Unifly has launched a new online training series focused on Specific Operations Risk Assessment (SORA) to help drone operators, service providers and regulators enhance safety and compliance in unmanned aircraft operations.

SORA is a widely adopted methodology used to systematically assess and mitigate risks associated with specific drone missions, particularly those involving complex environments or operations beyond visual line of sight (BVLOS). The framework guides operators through a structured evaluation of potential hazards, risk levels, mitigation measures and operational limitations, helping demonstrate that safety objectives are met before conducting real-world flights.

Unifly's training series is delivered online, offering participants flexibility to learn at their own pace. It is designed for a broad audience, including commercial drone pilots, airspace service suppliers and organisational users who must prepare SORA submissions to regulators or integrate risk assessment practices into their operational planning.

The curriculum covers the core components of the SORA process, starting with identifying the type of operation and its associated risks, progressing through threat and error analysis, and culminating in the development of tailored mitigation strategies. Participants also explore examples of common operational risk factors — such as proximity to people, other aircraft or critical infrastructure — and learn how to apply safety objectives that reduce overall risk to acceptable levels.

By providing structured guidance on how to apply the SORA methodology, Unifly aims to help operators enhance safety management and meet evolving regulatory requirements. As drone use expands in commercial, emergency response and industrial contexts, robust risk assessment skills are increasingly necessary for lawful and responsible operations — particularly for advanced missions such as BVLOS, urban air mobility trials or flights over people.

The training series also supports users of Unifly's software tools by demonstrating how SORA principles can be integrated with digital planning and compliance platforms. This can streamline preparation of risk assessments and submissions to national aviation authorities, reducing administrative burden while promoting best practices.

Overall, the launch of the SORA training series reflects growing demand for accessible, high-quality educational resources that build competence and confidence among drone professionals operating in today's complex airspace environments.

U.S. JOINT INTERAGENCY TASK FORCE 401 ORDERS $5.2M OF BUMBLEBEE V2 COUNTER-UAS INTERCEPTORS

Joint Interagency Task Force 401 has awarded a USD 5.2 million purchase order for Bumblebee V2 counter-unmanned aircraft system (C-UAS) interceptor systems as part of its ongoing efforts to strengthen airspace defence capabilities. The procurement underscores the U.S. government's commitment to fielding advanced counter-drone technologies across key installations and operational environments.

The Bumblebee V2 interceptor is designed as a mobile, rapid-response C-UAS solution capable of detecting, tracking and defeating unauthorized drone threats. The system integrates multiple sensor types with autonomous targeting and engagement capability to address a wide range of aerial threats, including small, fast-moving unmanned platforms. Its versatility enables deployment across fixed and expeditionary locations depending on mission needs.

Funding for the purchase comes through Task Force 401's counter-UAS acquisition programmes, which aim to equip military, federal and allied partners with interoperable systems that support layered defence strategies. The Bumblebee V2 order represents one of several recent procurements aimed at broadening the portfolio of available C-UAS tools and ensuring rapid delivery to field units.

Task Force officials emphasise that mobile interceptor systems like Bumblebee V2 provide crucial flexibility in responding to evolving drone threats. These systems can be repositioned quickly and integrated with existing detection networks to enhance situational awareness and engagement options. The autonomous components reduce operator burden while maintaining effective decision support for threat prioritisation and defeat.

Procurements such as this reflect increasing demand for adaptable, scalable counter-drone capabilities as unmanned systems become more prevalent across civilian and contested environments. Governments and military organisations seek solutions that can respond to diverse threat profiles with speed and precision, and vectoring interceptor platforms like Bumblebee V2 form an important part of that multi-layered defensive mix.

The order also reinforces Task Force 401's role in accelerating the fielding of innovative technologies and standardising capability sets across customers. By investing in off-the-shelf systems that can be delivered and sustained rapidly, the Task Force aims to enhance overall readiness against unauthorised or hostile unmanned aerial activity. This procurement is expected to support ongoing deployments and contribute to broader airspace sovereignty goals.

TELEDYNE FLIR ENHANCES RANGER COUNTER-UAS SOFTWARE WITH FAST-SCAN CAPABILITY

Teledyne FLIR has upgraded its Ranger counter-UAS (unmanned aircraft system) software to include a new Fast-Scan technology feature designed to improve detection and tracking performance against increasingly agile drone threats. The enhancement aims to boost situational awareness and responsiveness in layered airspace defence systems.

The Ranger software suite serves as a central processing and management tool that correlates data from multiple sensors such as radar, electro-optical/infrared (EO/IR) cameras and radio frequency (RF) detectors. With the addition of Fast-Scan, the system can process sensor data more rapidly and update target tracks with greater frequency, enabling faster recognition of fast-moving or low-observable unmanned aerial systems.

Fast-Scan technology works by increasing the refresh rate of sensor feeds and algorithmic processing loops, allowing operators to see changes in the airspace picture almost in real time. This is particularly valuable in environments where drones may manoeuvre unpredictably or operate at varying speeds and altitudes. By rapidly refreshing tracks and threat assessments, the upgraded software assists operators in making quicker engagement decisions.

The enhancement also improves the integration between sensor types. When radar detects an airborne contact, the software's increased processing speed enables quicker handoff to EO/IR cameras or RF systems for classification and identification. This tight integration supports faster cueing of selected effectors or mitigation tools, improving overall effectiveness in counter-UAS operations.

Teledyne FLIR says the upgrade is compatible with existing Ranger installations, allowing users to benefit from the new capability without significant changes to hardware infrastructure. The updated software can be deployed via field updates, providing Defence, homeland security and critical infrastructure customers with an immediate performance uplift.

The introduction of Fast-Scan comes amid growing demand for more agile and responsive counter-drone systems, as small unmanned aircraft become more accessible and manoeuvrable. Defence and security organisations are under increasing pressure to detect and respond to diverse threat profiles, ranging from commercial off-the-shelf drones to sophisticated custom UAVs.

By enhancing the Ranger platform with faster data processing and improved sensor fusion, Teledyne FLIR aims to help users maintain airspace awareness and rapid reaction capability. The upgrade supports layered defence strategies where accurate detection, tracking and identification are foundational for effective counter-UAS engagements across military and civilian operational contexts.

UTAH SELECTED AS TENTH CANDIDATE FOR FAA'S EVTOL INTEGRATION PILOT PROGRAM

U tah has been named the tenth candidate state to participate in the Federal Aviation Administration's eVTOL Integration Pilot Program, a major initiative to advance the safe integration of electric vertical take-off and landing (eVTOL) aircraft into the national airspace. The programme brings together regulators, industry partners and local governments to develop frameworks for advanced air mobility (AAM) operations, including passenger air taxis and cargo drones.

Utah's selection follows a competitive application process in which states demonstrated their readiness to support pilot projects and collaborate on regulatory, infrastructure and community engagement aspects of eVTOL operations. As a programme participant, Utah will work with state and local aviation authorities, industry stakeholders and the FAA to undertake research, testing and demonstration flights that inform future standards and operational practices for Urban Air Mobility (UAM) and regional eVTOL services.

The FAA's Integration Pilot Program aims to address key challenges associated with integrating advanced air mobility into everyday airspace. These include safety assurance, air traffic management, noise and community impact, infrastructure requirements such as vertiports, and alignment with existing crewed aviation operations. Partner states help shape how these technologies can be deployed responsibly and efficiently within their jurisdictions.

Participation in the programme opens opportunities for local economic development, innovation partnerships and early access to emerging air mobility networks. For Utah, the designation aligns with broader state interests in aerospace, technology investment and transportation modernisation. Stakeholders hope that involvement will attract industry investment, support workforce development and position the state as a leader in next-generation aviation.

Across the current programme, participating states are exploring a range of use cases, from urban air taxi services and emergency response flights to cargo delivery operations. Data and best practices generated through the pilot projects are shared with federal and state partners to guide future rulemaking and safety protocols. Utah's inclusion expands the geographic diversity of test environments, spanning dense urban areas to more rural and mountainous terrain.

As electric and autonomous air mobility concepts transition toward commercial reality, the Integration Pilot Program plays a critical role in building regulatory confidence and operational knowledge. Utah's selection underscores continued momentum in government-industry collaboration to safely integrate advanced aerial vehicles into the national airspace system.

WRAP SIGNS DISTRIBUTION AGREEMENT WITH CRYSTAL WORKS OF INDIA FOR COUNTER-UAS SOLUTIONS

W RAP Technologies has entered a distribution agreement with Crystal Works to supply counter-unmanned aircraft systems (C-UAS) into the Indian market. The partnership aims to expand access to WRAP's non-kinetic aerial threat detection and mitigation technologies across India, addressing the growing need for airspace protection amid rising drone use.

Under the agreement, Crystal Works will act as WRAP's authorised distributor in India, bringing a range of counter-drone products — including radar, sensors, command-and-control systems and effectors — to public safety, defence and critical infrastructure customers throughout the country. With India increasingly investing in modern airspace security solutions, the collaboration is positioned to support both government and private sector efforts to strengthen layered defences against unauthorized or malicious unmanned aerial vehicles.

WRAP's technology portfolio focuses on non-kinetic counter-UAS tools designed to detect, classify and disrupt drones without resorting to explosive measures. This approach suits dense urban and sensitive environments, where minimizing risk to people and infrastructure is critical. By leveraging Crystal Works' local market expertise, WRAP aims to accelerate adoption of its systems while offering regional support, training and after-sales services.

The agreement reflects a broader trend in the defence and security sectors, where partnerships between international solution providers and local distributors are used to enhance technology transfer and ensure compliance with national procurement frameworks. For India, which faces a diverse set of aerial threats and is expanding its use of unmanned systems for both civil and defence applications, partnerships like this help build domestic awareness and capacity in advanced C-UAS solutions.

Crystal Works will engage with local agencies to showcase WRAP's counter-UAS offerings, facilitate demonstrations and support implementation in operational settings. Through this collaboration, WRAP is expected to become more visible to Indian government buyers and integrators seeking scalable, cost-effective airspace defence technologies.

Overall, the distribution agreement represents a strategic entry point for WRAP into a key regional market and signals increasing demand in India for integrated counter-drone systems that can operate in complex airspace environments.

FRANKENBURG AND HANWHA PARTNER TO DEVELOP COUNTER-UAS SYSTEMS FOR LAND WEAPON PLATFORMS

Frankenburg Defence and Hanwha Aerospace have announced a strategic collaboration to co-develop advanced counter-unmanned aircraft system (C-UAS) solutions tailored for integration with land-based weapon platforms. The agreement seeks to combine each company's strengths to deliver modular, scalable air defence capabilities that can be mounted on combat vehicles, tactical vehicles and mobile armoured platforms.

Under the partnership, Frankenburg Defence will contribute expertise in platform integration and weapon systems engineering, while Hanwha Aerospace brings its extensive experience in air defence technology, fire control systems and battlefield automation. Together, the two firms aim to accelerate development of C-UAS systems that enhance protection for ground forces against increasingly sophisticated unmanned threats.

The joint effort focuses on technologies that can autonomously detect, track and defeat hostile drones using a range of effectors, including directed energy, electro-optical systems, radio frequency (RF) jammers and precision munitions. By embedding these capabilities on existing land weapon platforms, the goal is to provide integrated air-defence functionality without requiring dedicated standalone units, improving tactical flexibility and response time for forward deployed forces.

Modern battlefields have seen a marked proliferation of small unmanned aerial systems, including commercial off-the-shelf drones and purpose-built loitering munitions, which pose challenges to traditional force protection methods. Mobile C-UAS solutions are increasingly viewed as critical enablers, allowing units to defend themselves while remaining agile and mission-focused. The collaboration between Frankenburg and Hanwha reflects this trend, emphasising modularity and ease of integration alongside performance.

The program is expected to explore advanced sensor fusion techniques that combine radar, electro-optical/infrared (EO/IR) imagery and RF detection into a coherent air-picture, enabling reliable target classification and tracking. Integrating such sensor suites with responsive mitigation options — whether through jamming, directed energy or kinetic effects — allows for layered defence tailored to threat profiles and mission priorities.

Developing C-UAS capabilities for land weapon platforms aligns with broader defence strategies that prioritise networked, multi-domain situational awareness. The partnership aims to produce systems that can contribute to an integrated air defence network, sharing data with higher-level command and control systems and facilitating coordinated engagements.

By leveraging Frankenburg's platform expertise and Hanwha's technical heritage, the collaboration seeks to accelerate production and field readiness of mobile C-UAS solutions. The initiative reflects rising global demand for systems that protect ground forces from aerial threats while preserving mobility, survivability and operational effectiveness in contested environments.

WHITEFOX AND MITAC PARTNER TO DEVELOP COUNTER-UAS SOLUTIONS FOR TAIWAN

WhiteFox Defense Technologies and MITAC International Corp have formed a strategic partnership to co-develop counter-unmanned aircraft system (C-UAS) solutions tailored to meet Taiwan's evolving airspace security requirements. The collaboration is part of broader efforts to enhance layered drone defence capabilities amid increasing regional interest in counter-drone technologies.

Under the agreement, the two companies will work together on integrated C-UAS systems that combine detection, tracking, classification and mitigation technologies suitable for Taiwan's defence environment. This includes leveraging WhiteFox's experience in autonomous counter-drone systems and MITAC's expertise in systems integration, electronics and local production. The joint solutions are intended to provide adaptive defences against a wide spectrum of unmanned threats, from small commercial drones to more advanced unmanned aerial systems.

The partnership reflects growing recognition by governments and defence planners of the challenges posed by proliferating drone technologies, which can be used for reconnaissance, disruption or combat roles in contested airspace. The co-developed solutions aim to integrate multiple sensor types — such as radar, electro-optical/infrared (EO/IR) imaging and radio frequency (RF) detection — into coherent airspace awareness networks that enable rapid threat identification and response.

In addition to sensor fusion, WhiteFox and MITAC will explore mitigation strategies that prioritise non-kinetic and precision engagement options. Approaches such as electronic warfare, signal disruption and automated tracking will be considered to neutralise hostile drones while minimising collateral impact. These capabilities are particularly relevant for Taiwan's densely populated areas and critical infrastructure, where safe and controlled counter-UAS operations are paramount.

Local production and technology transfer are expected to be key elements of the collaboration, enabling Taiwan to build sustainable defence industrial capacity and adapt systems to national requirements. By partnering with a local contractor, WhiteFox aims to ensure that solutions are compatible with existing defence networks and support long-term maintenance, training and upgrade pathways.

Overall, the WhiteFox–MITAC partnership highlights increased demand across the Indo-Pacific region for tailored counter-drone solutions that address complex and dynamic aerial threat environments. By combining international technical expertise with domestic integration capabilities, the initiative seeks to deliver advanced, resilient C-UAS systems capable of supporting Taiwan's current and future airspace defence needs.

ELECTRA'S COMMITMENT TO ADVANCING THE EIPP (EVTOL INTEGRATION PILOT PROGRAM)

At Electra, we evaluate the future of advanced air mobility through the Rule of Six. To succeed at scale, AAM aircraft must deliver access and quiet, payload and range, and be affordable and safe—all six together. These are not competing priorities, but the baseline for aircraft that earn trust, serve communities, connect people and operate reliably within the national airspace through a point-to-point strategy called Direct Aviation.

The eIPP (eVTOL Integration Pilot Program), led by state and local government entities and supported by the U.S. Department of Transportation (USDOT) and the Federal Aviation Administration (FAA), reflects this same systems-level thinking. By emphasizing early operations, infrastructure (we think of it as an ecosystem) coordination, and close collaboration between regulators and industry at all levels, the program creates a practical framework for learning what works, what's ready to go, and what needs time

to grow.

The eIPP program will deliver real, everyday benefits by expanding air transportation options, making travel easier and more affordable, and ensuring communities can count on lifesaving medical flights, emergency response, and time-sensitive cargo delivery when it matters most.

Electra celebrates the leadership shown by the DOT and FAA in establishing eIPP. In full support of

the program, we are enthusiastically engaged and committed to several leading applications alongside state, local, and regional partners. These efforts are grounded in a shared belief that thoughtful, operational engagement early leads to better decisions, high-value innovation, stronger readiness, shared intention and prioritization, and lasting public benefit—in short, more meaningful human connection.

What distinguishes eIPP is its focus on steady, early, and credible progress. By enabling real missions and shared learning, the program aligns expectations across stakeholders and lays the groundwork for responsible growth—measured not by ambition, but by performance.

That approach mirrors how we design at Electra: building aircraft that meet Rule of Six requirements from the outset, and do so in partnership with the people, communities and institutions they are meant to serve.

VERTICAL AEROSPACE SIGNS STRATEGIC MOU WITH AHQ GROUP AND SAUDI NATIONAL INDUSTRIAL DEVELOPMENT CENTRE TO ACCELERATE AAM IN THE KINGDOM

Vertical Aerospace a global aerospace and technology company pioneering electric aviation announced the signing of a strategic three-party Memorandum of Understanding ("MoU") with Abdel Hadi Abdullah Al-Qahtani & Sons Group of Companies (Tariq Al-Qahtani & Brothers) ("AHQ Group"), a leading Saudi industrial conglomerate, and the Saudi National Industrial Development Centre ("NIDC"), part of the Ministry of Industry and Mineral Resources.

The MoU, signed in Riyadh, establishes a framework to explore the development of a long-term Advanced Air Mobility (AAM) ecosystem in the Kingdom of Saudi Arabia, aligned with Vision 2030, the country's national programme to diversify its economy and build advanced industrial capability.

Building an AAM ecosystem aligned with Vision 2030 Under the MoU, the parties will evaluate a broad set of opportunities spanning manufacturing localization, commercial eVTOL operations and potential investment and incentive opportunities, supporting Vertical's certification programme and long-term growth. Saudi Arabia represents one of the largest and most attractive emerging markets for AAM globally, with the potential to support the

operation of over 1,000 Valo aircraft – Vertical's industry leading commercial aircraft.

As a leading Saudi industrial group, AHQ Group will support the evaluation of industrial, commercial and investment structures required to establish a scalable and sustainable AAM ecosystem in the Kingdom.

Together, Vertical, AHQ Group and NIDC will explore how Saudi Arabia can become a regional hub for electric aircraft manufacturing, battery systems and AAM services, supporting Vision 2030's ambitions for industrial diversification, highly skilled job creation and clean transport.

Stuart Simpson, CEO of Vertical Aerospace, said: "Saudi Arabia is one of the most strategically important future markets for Advanced Air Mobility. Signing this MoU here in Riyadh reflects the Kingdom's ambition to build a world-class aerospace industrial capability under Vision 2030. Partnering with AHQ Group and NIDC brings together deep industrial expertise, capital strength and a shared commitment to establishing Saudi Arabia as a regional leader in this new sector."

Chairman Tariq Abdel Hadi Al-Qahtani, AHQ Group, said: "Advanced Air Mobility represents

a new frontier for Saudi Arabia's industrial and mobility ambitions. Through this MoU with Vertical Aerospace and NIDC, we are exploring potential investment opportunities to build a scalable, globally competitive AAM ecosystem that combines advanced manufacturing, sustainable mobility and long-term economic value. AHQ Group brings deep industrial experience and local insight, and we see this partnership as an important step in supporting Vision 2030's goals for diversification, innovation and high-quality job creation."

Eng Saleh Al Solami, CEO of the National Industrial Development Centre (NIDC), added: "This MoU reflects NIDC's mandate to enable advanced industries and attract high-value manufacturing to the Kingdom. Advanced Air Mobility has the potential to become a strategic industrial sector for Saudi Arabia, spanning aircraft manufacturing, battery systems and future mobility services. Working with Vertical Aerospace and AHQ Group allows us to assess potential pathways for localisation, investment and incentives, positioning the Kingdom as a regional hub for next-generation aerospace technologies in line with Vision 2030."

NASA INVESTIGATES HOW PEOPLE RESPOND TO AIR TAXI NOISE

New kinds of aircraft taking to the skies could mean unfamiliar sounds overhead — and where you're hearing them might matter, according to new NASA research. NASA aeronautics has worked for years to enable new air transportation options for people and goods, and to find ways to make sure they can be safely and effectively integrated into U.S. communities. That's why the agency continues to study how people respond to aircraft noise.

In this case, NASA's work focused on air taxis, shorthand for a variety of aircraft intended to carry people short distances for everything from personal travel to medical treatment. Researchers investigated whether residents in loud cities would respond differently to air taxi sounds than those in quieter suburban settings.

From late August through September 2025, 359 participants in the Los Angeles, New York City, and Dallas-Fort Worth areas took part in NASA's Varied Advanced Air Mobility Noise and Geographic Area Response Difference (VANGARD) test.

Researchers played 67 unique sounds simulating aircraft, including NASA-owned industry concept designs. To ensure unbiased feedback, the research team withheld aircraft manufacturer names. Participants were also not shown images of the aircraft they were hearing. Initial results reveal that residents living in noisy areas reported being more bothered by the air taxi sounds than those in quieter areas. The VANGARD team members are currently analyzing the data to better understand these findings, but so far, they're hypothesizing that people in loud environments may simply be more sensitive to additional noise.

"With air taxis coming soon, we need to understand how people will react to a variety of future aircraft sounds," said Sidd Krishnamurthy, lead researcher at NASA's Langley Research Center in Hampton, Virginia. "This test filled a critical gap, and its results will improve how we predict human reactions to noise, guiding the design and operation of future aircraft."

During the study, participants listened to individual aircraft flyover sounds and rated their annoyance levels. The participants also provided their zip codes, allowing the researchers to sort their locations into high and low background noise levels. "We wanted to know if people in low or high background noise zones would be more annoyed by the air taxi sounds, and to what extent, even without their usual background sounds present during the test," Krishnamurthy said.

Most participants listened from their home locations, with their own audio devices. But to complement that testing, a control group of 20 people listened in-person at NASA Langley in June, using tablets and headphones with fixed audio settings.

Results showed that the control group responded similarly to those who tested from home. Many factors influence how humans respond to aircraft noise. This study was not designed to answer every question — for example, it did not look at the potential effects of high background noise masking air taxi noise — but it provided the VANGARD team with initial insights.

The results from this study, and any follow-on efforts, will guide the design and operation of future advanced air mobility aircraft to help designers and regulators determine how and where these aircraft may fly. This research was led under the Revolutionary Vertical Lift Technology project and contributes to NASA's advanced air mobility research. The project falls under the Advanced Air Vehicles Program within NASA's Aeronautics Research Mission Directorate.

VERTICAL AEROSPACE SIGNS NEW CUSTOMER JETSETGO TO ACCELERATE ELECTRIC AND HYBRID-ELECTRIC AVIATION IN INDIA

JetSetGo, one of India's leading private aviation operators and Vertical Aerospace a global aerospace and technology company that is pioneering electric aviation announced the signing of a Memorandum of Understanding (MoU) for the intended purchase of 50 Valo aircraft, alongside a strategic collaboration to develop Advanced Air Mobility (AAM) services in India.

The MoU establishes a framework for the two companies to jointly develop route networks, operating models, regulatory engagement and the commercial rollout of electric and hybrid-electric aircraft across India. Valo will be Vertical's certification electric aircraft, designed to fly up to 160 km at speeds of 240 km/h with zero operating emissions and engineered to meet airliner-level safety standards. Vertical is also developing a hybrid-electric variant, offering increased range and mission flexibility, well-suited to use cases across India.

As part of the agreement, JetSetGo will lead market research and operational planning for metro and short-haul regional routes, and is already running technical evaluations, demand modelling and feasibility studies in select corridors. The company said Valo's design, including the future long-range hybrid-electric variant, fits its strategy to connect dense cities and underserved regional markets where ground travel options are slow. Kanika Tekriwal, founder and chief executive of JetSetGo, said: "From an operator's standpoint, aircraft capability and certification timelines are decisive factors. We are seeing early indicators of demand on specific city pairs and intra city corridors. The Valo platform, particularly the hybrid-electric configuration, fits the operating profiles we are analysing for India. Vertical's progress to date has been impressive, and we are confident that the recently launched Valo design is an excellent fit with future customer needs in India."

Stuart Simpson, CEO of Vertical Aerospace, said: "We are delighted to welcome JetSetGo as a new customer and partner. India is a dynamic and rapidly growing market for Advanced Air Mobility and working with an experienced operator like JetSetGo allows us to explore how Valo's all-electric and hybrid-electric variant can unlock new routes and transport solutions across the country."

Vertical is targeting type certification of Valo by 2028 under UK and European regulators, with global validations to follow, which JetSetGo said could enable early commercial rollout of Advanced Air Mobility services in India, subject to approvals. The partnership comes as Indian regulators work on certification and infrastructure frameworks for AAM, and will feed into JetSetGo's long-term fleet planning for deploying next-generation aircraft.

AIRX SIGNS FIRM ORDER AGREEMENT WITH EVE AIR MOBILITY FOR 2 EVTOL AIRCRAFT

Eve Air Mobility a global leader in the development of next-generation electric Vertical Take-Off and Landing (eVTOL) solutions, has signed its second binding order with Tokyo-based, AirX, a leading Japanese provider of innovative air mobility services. The binding order includes the purchase of up to 50 eVTOL aircraft. This agreement marks a significant step toward advancing sustainable urban air mobility solutions in Japan.

"Our first agreement in Asia-Pacific, achieved in partnership with AirX in Japan, is more than a milestone; it launches a new era that will redefine urban mobility," said Johann Bordais, chief executive officer at Eve Air Mobility. "Asia-Pacific is poised to help lead the global transformation toward sustainable air transportation, and together we are pioneering solutions that will redefine how cities connect, move, and thrive. This partnership is a bold step toward a cleaner, smarter future for generations to come."

Under the terms of the agreement, AirX will integrate Eve's cutting-edge eVTOL aircraft into its operations, supporting the company's vision to offer efficient, zero-emission transportation alternatives for urban and regional travel. The initial two aircraft are expected to be delivered in 2029, with the potential for further expansion as demand for advanced air mobility grows.

"We are excited to partner with Eve Air Mobility to bring next-generation air transportation to Japan," said Kiwamu Tezuka, founder and chief executive officer at AirX. "This collaboration reinforces our commitment to sustainability and innovation, and positions AirX at the forefront of the evolving air mobility market."

Eve Air Mobility's eVTOL aircraft are designed to provide safe, reliable, and environmentally friendly transportation, leveraging advanced technology to reduce noise and emissions while enhancing passenger experience.

"Receiving this award from AirX underscores our shared commitment to elevating the traveler experience," said Megha Bhatia, chief commercial officer at Eve Air Mobility. "Japan is positioned to be one of the leaders in this region with its strategic focus on AAM to provide cleaner and accessible transportation solutions.

Eve's eVTOLs will be used to serve sightseeing routes and last mile missions in cities such as Tokyo and Osaka."

This agreement builds on Eve's growing global footprint and underscores the increasing demand for sustainable air mobility solutions worldwide.

ELECTRA JOINS VIRGINIA SMART AIRSPACE PROGRAM TO ESTABLISH NATIONAL BLUEPRINT FOR ADVANCED AIR MOBILITY INSTRUMENT FLIGHT RULES

Electra announced a new partnership with the Virginia Advanced Air Mobility (AAM) Smart Airspace Program to design, implement, and test a first-of-its-kind, low-cost instrument flight rules (IFR) network for Ultra Short and other AAM aircraft complete with new, FAA-certified access points.

Nearly all commercial aviation services operate under IFR to ensure reliability, predictability, and safety, especially when the weather is not clear. However, existing IFR arrival and departure procedures are not designed with AAM aircraft in mind. Without AAM-specific procedures, there could be unsustainable airport congestion, reduced time savings for passengers, and challenges in attaining full commercial viability of AAM aircraft.

The program's IFR routing, procedures, and new access points will separate AAM traffic from conventional flights, enable more direct routing, and be based on GPS navigation, making it a low-cost, scalable model for replication around the United States.

Electra, which has developed the world's first hybrid-electric Ultra Short aircraft, joins as a technical lead alongside NAVOS Air. The program is led by Virginia Tech's Mid-Atlantic Aviation Partnership (MAAP), supported financially by the Virginia Small Aircraft Transportation Systems Lab, and supported financially and technically by the Virginia Department of Aviation.

"The Virginia AAM Smart Airspace Program is establishing the regulatory, procedural, and operational foundation for real-world AAM deployment—not in the future, but now," said Tombo Jones, the Director of MAAP, an FAA Designated Test Site. "With FAA engagement, proven technical methods, and scalable infrastructure, Virginia is helping to define the national blueprint for how Advanced Air Mobility will operate in everyday airspace."

"This partnership marks a critical step forward on our path to unlocking a new era of aviation – one that is simpler, faster, and without the hassle of today's commercial services," said Parker Vascik, Director of Product Strategy, Electra. "By creating the necessary operational, physical, and digital infrastructure in an affordable package, we are one step closer to enabling safe, scalable, and reliable all-weather AAM operations across the country. Ultimately, our goal is to transform the future of travel, giving people the freedom to travel from where they are to where they want to go."

Electra's team of aerospace engineers and pilots will work with the other technical leads to design, implement, and test instrument procedures for Ultra Short aircraft, including during the most technically difficult part of flying in poor weather – proceeding from cloud coverage to a landing site. The GPS-developed procedures will enable flight in instrument meteorological conditions: broadly, when flight visibility is less than 3 miles and cloud ceilings are less than 1,000 feet above the ground. The program will also research the successful implementation of Ultra Short access points.

The program will also create a repeatable and scalable model for expanding AAM IFR networks, starting with the strategic connection of four Virginia nodes:

Virginia Tech Transportation Institute (VTTI): an off-airport Ultra Short access point in Blacksburg

Roanoke–Blacksburg Regional Airport (KROA): an on-airport Ultra Short access point that keeps AAM aircraft separated from conventional runways and flight patterns at a large airport

Allen C. Perkinson Airport, Blackstone (KBKT): an existing FAA-approved vertiport in a mixed civilian/ military use environment that supports Ultra Short access Shannon Airport: an existing rural airport with a turf runway in a commuter community in northern Virginia

ELECTRA SECURES ADDITIONAL PATENTS PROTECTING ITS ADVANCED HYBRID-ELECTRIC ARCHITECTURE FOR ULTRA SHORT TAKEOFF AND LANDING AIRCRAFT

Electra has been granted a series of U.S. patents that protect core components of its groundbreaking hybrid-electric propulsion and flight control architecture, a system designed to enable Ultra Short takeoff and landing operations while maintaining conventional aircraft performance and safety margins. These patents cover critical elements necessary to deploy electric blown lift practically, advancing the company's protection of its nine-passenger Ultra Short aircraft.

Together, the patents safeguard the control logic, power management, and pilot interface systems that define how Electra integrates electric propulsion into a practical, FAA-certifiable hybrid-electric platform. They cover systems and methods for controlling the flight path of a blown lift aircraft (US Pat. #12384550), pilot guidance display for that aircraft (U.S. Pat. #12298151), and a battery disconnect system that improves maintenance, performance, and safety (U.S Pat. #12489181).

"Our patent portfolio protects our architecture and the ability to manage power, lift, and energy safety in a scalable hybrid-electric configuration," said Chris Courtin, Director of Technology Development at Electra. "Where traditional aircraft rely on aerodynamic control surfaces, our distributed propulsion system makes the motors themselves an active flight control element. That improves precision, reduces workload, and makes Ultra Short aircraft fly like any other fixed wing aircraft."

Integrating Power and Control
The flight path control patent describes a closed-loop system that enables pilots to command the aircraft's flight path angle through a single integrated power control interface. Instead of manipulating multiple throttles or configuration switches, the pilot simply selects a mode—takeoff, cruise, descent, or reverse—and the onboard computing system dynamically adjusts thrust across multiple electric propulsion units to maintain the desired flight path.

This architecture underpins Electra's blown-lift approach, in which distributed electric propulsors mounted along the wing accelerate airflow to dramatically increase lift at low speeds. The algorithms and lookup tables continuously optimize each propulsor's thrust by referencing real-time air data, aircraft attitude, and configuration sensors. The result is finely tuned, power-based control of lift and attitude, which is key to achieving reliable Ultra Short performance without compromising efficiency at cruise.

A Practical Path to Hybrid-Electric Flight
Electra's approach solves the range and infrastructure limitations that have hindered fully electric aircraft. Its hybrid-electric architecture uses a turbogenerator to supply continuous power to distributed electric propulsors, enabling long-range, payload-capable operations without relying on ground charging infrastructure.

Electra's system architecture enables Ultra Short takeoffs and landings in under 150 feet, utilizing existing runways, parking lots, and soccer-sized fields. The combination of distributed electric propulsion and a hybrid-electric powertrain delivers helicopter-like performance with the safety, range, and cost efficiency of a fixed-wing aircraft.

"These patents capture how we make electric propulsion not just feasible, but practical in the real world," said Courtin. "By simplifying control logic and embedding safety at the system level, we're enabling commercial hybrid-electric blown lift certification and deployment, on a proprietary basis."

Next Stop: Certification
Electra's EL2 technology demonstrator aircraft has already completed successful flight testing using Electra's proprietary hybrid-electric propulsion system. Electra continues to refine the integrated control software and power management logic as it advances toward commercialization of its flagship, nine-passenger EL9 Ultra Short aircraft.

With the EL9, Electra is pioneering Direct Aviation, a new model of regional air mobility that saves travelers time, maximizes existing infrastructure, and connects underserved communities. The first test flights are planned for 2027, with certification and commercial service entry anticipated in late 2029, into 2030 under FAA Part 23 regulations.
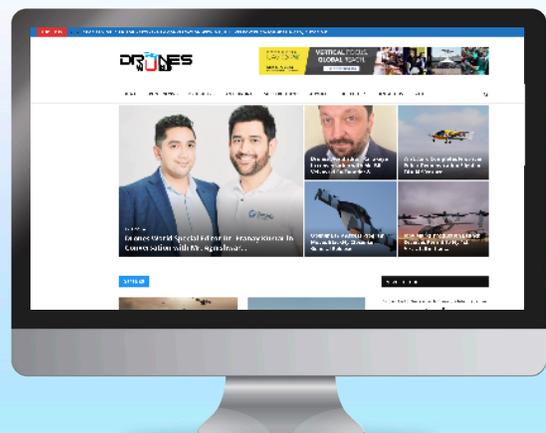
With over 2,200 pre-orders from more than 60 commercial customers worldwide, including both airlines and helicopter operators, the EL9 is already one of the most in-demand aircraft in the advanced air mobility (AAM) sector.

Drones World Editor Kartikeya In Conversation with

Agris Kipurs

CEO & co-founder at Origin Robotics

Q Origin Robotics has begun delivering the BLAZE interceptor only months after contract announcements—what internal capabilities enabled such rapid operational delivery?

A What sets Origin Robotics apart is that BLAZE is a complete, field-ready capability, not a development project. Customers are procuring an operational system that can be delivered immediately, rather than funding a program that begins after contract award. Our R&D has consistently stayed ahead of demand; we do not wait for requirements to be defined before building capability. BLAZE has been purpose-built and refined over several years, shaped by real operational experience, including an R&D contract awarded by Latvia already in 2025 and multiple successful demonstrations.

Because we have been working on the project for a considerable time and anticipated demand, and because orders are structured in multiple batches, we were prepared to deliver the first units quickly after contract announcement.

Q Latvia, Belgium, and Estonia are the first in Europe to field a fully autonomous, warhead-equipped interceptor drone—what does this signal about the shift in European air-defence thinking?

A It signals realism and urgency. One of the defining challenges in modern conflict is asymmetric cost. A loitering munition such as the Shahed-type drone is relatively inexpensive to produce and deploy, while intercepting it with a high-end air defence missile can be dramatically more expensive—often by an order of magnitude. This imbalance places sustained pressure on even well-resourced defence systems.

Defence planners recognize that countering mass, low-cost aerial threats requires solutions that are fast to deploy, scalable in large quantities, and economically sustainable over time. Autonomous interceptors introduce a new layer within air defence designed specifically for this environment. They prioritize speed, adaptability, and cost efficiency, enabling forces to respond to swarms and repeated attacks without exhausting strategic assets. Rather than replacing traditional systems, they complement them.

Q How important was NATO codification and STANAG compliance in accelerating adoption of the BLAZE system across multiple countries?

A Interoperability matters. NATO codification and alignment with relevant STANAG standards reduce friction in procurement, logistics, and integration. For us, it is not a marketing label but a practical enabler. It builds institutional confidence that the system can integrate within existing structures.

Q With unauthorized drone activity rising across NATO's eastern flank, how do you see autonomous interceptor drones fitting into layered counter-UAS and air-defence architectures?

A They provide a high-speed response layer within that architecture. Interceptors like BLAZE are particularly relevant when non-kinetic measures are insufficient or when reaction time is critical. However, impact depends on integration. Interceptors must be properly cued by sensor networks and aligned with command structures.

Q The BLAZE programme contrasts sharply with traditional multi-year defence procurement cycles—what changes are needed for governments to consistently adopt faster acquisition models?

A Counter-UAS is a rapidly evolving domain; acquisition models must reflect that pace. Shorter evaluation cycles, phased contracts, and structured feedback loops enable faster capability deployment without sacrificing oversight. Speed does not mean cutting corners. It means aligning requirements, testing, and industrial capacity around measurable operational outcomes instead of static paperwork processes.

Q As national evaluation and integration processes are underway, how does Origin ensure that autonomous systems translate effectively into real-world tactics and doctrine?

A Technology alone does not create capability. We work closely with end users to ensure the system integrates into their operational frameworks. This includes training and structured feedback loops. Lessons learned, including those from the Ukrainian battlefield, are incorporated through controlled updates.

The hardware architecture of BLAZE has remained stable since launch, with incremental refinements based on operational feedback. Software development, however, is continuous. As with any modern autonomous system, updates and improvements are ongoing, managed under disciplined release processes.

Q With further NATO and partner-nation deliveries already in progress, how is Origin Robotics managing rapid scaling while maintaining operational reliability and security?

A We are able to produce everything that our clients need, and this is all produced at Origin Robotics facilities in Latvia. Production processes are standardized, and critical components are sourced through qualified channels with resilience in mind. Growth is important, but reliability and trust are non-negotiable. Operational credibility is earned through consistent performance, not volume alone.

CAE TO DELIVER BREAKTHROUGH FFS TO EMBRAER-CAE TRAINING SERVICES TO TRAIN THE 1ST WAVE OF EVE AIR MOBILITY PILOTS

CAE, a leading provider of civil aviation training solutions announced at the Singapore Airshow 2026 that Embraer-CAE Training Services (ECTS), a joint venture between Embraer and CAE, has purchased its first full-flight simulator (FFS) dedicated to training pilots for Eve Air Mobility. The simulator will be the first device delivered to ECTS following its selection in October 2024 as Eve's training provider and will be operated by ECTS to deliver training to Eve and its customers. The FFS will also play a critical role in the certification process for Eve's eVTOL aircraft and in preparing pilots for safe, efficient operations ahead of Eve's planned entry-into-service.

The CAE 3000 series full-flight simulator integrates high-fidelity motion cueing, a precision flight deck replica, and the next-generation CAE Prodigy™ Visual System powered by Unreal Engine, delivering the ultra-realistic training environment required for commercial single-pilot eVTOL operations in dense urban settings.

"As development at Eve Air Mobility progresses, high-fidelity simulation is key to training the first wave of pilots and ensuring a safe entry into service

of this new aircraft," said Alexandre Prévost, President, Civil Aviation at CAE and ECTS Board Member. "CAE and ECTS are proud to support Eve in developing a scalable, certifiable training ecosystem. This simulator sets a new benchmark for advanced air mobility training infrastructure and underscores our shared commitment to safe, seamless urban air transportation."

"This simulator is a critical investment in ensuring Eve pilots receive world-class training as we advance toward commercial operations. It strengthens pilot readiness while reinforcing our unwavering

commitment to safety and operational excellence," said Luiz Mauad, Vice President, Customer Services at Eve Air Mobility. "It also reflects our disciplined approach to scaling operations responsibly, ensuring our training infrastructure evolves in lockstep with aircraft certification and market entry."

The simulator will be integrated into the ECTS global training network, leveraging Embraer's decades of operational excellence and CAE's broad footprint in major aviation hubs. The infrastructure will support pilot, maintenance, and ground handling training as part of EveTechCare, the company's comprehensive aftermarket services portfolio.

"We are excited to see another step taken by ECTS in the development of Eve's eVTOL training solution," said Ayslan Anholon, Vice President of Flight Operations & Training at Embraer Services & Support and ECTS Board Member. "This first full-flight simulator will be key to supporting aircraft certification while also playing a vital role in training and qualifying the first generation of eVTOL pilots. It represents a significant milestone as we prepare for a safe and efficient entry-into-service."

NORWAY CONCLUDES LANDMARK ELECTRIC AVIATION TRIAL, PAVING WAY FOR ZERO-EMISSION FLIGHTS

Norway has successfully completed its first national electric aviation test programme, marking a significant step toward low- and zero-emission air transport. Conducted as part of the country's international test arena initiative, the six-month project demonstrated how electric aircraft can be safely integrated into an already highly regulated aviation system.

The trial centred on the ALIA electric aircraft developed by BETA Technologies and operated by Bristow Group. The aircraft carried out regular test flights along a cargo route between Stavanger and Bergen in western Norway. After months of operational evaluation, the programme concluded with a final landing in Stavanger, delivering extensive real-world insights into aircraft performance, charging systems, winter operations, and regulatory processes.

The initiative was coordinated in collaboration with Avinor and the Norwegian Civil Aviation Authority. Together, the partners assessed how new propulsion technologies could be introduced gradually without compromising safety or efficiency.

For Avinor, the project provided practical guidance on preparing airport infrastructure for

electric aviation. This included evaluating charging solutions, grid capacity, and operational procedures required to support future commercial routes powered by electricity. The experience gained is expected to shape the next phase of airport development and sustainability planning across Norway's regional network.

Regulators also benefited from hands-on participation. The Civil Aviation Authority established an initial Regulatory Sandbox framework, enabling it to test how existing safety rules apply to electric aircraft and to refine oversight methods suited to emerging technologies. This collaborative approach

strengthened institutional knowledge and built trust among stakeholders involved in advancing sustainable aviation.

Air traffic controllers reported that the electric aircraft was integrated into existing airspace with minimal additional workload, reinforcing the view that innovation and safety can progress together. Continuous coordination between operators and air navigation services proved critical to the project's success.

The programme further identified strategic priorities for scaling electric aviation, including robust fast-charging infrastructure, winter-resilient ground systems, and specialised training for emergency response teams handling battery technologies.

As global interest in advanced air mobility accelerates, Norway's completed test project positions the country as a leading real-world laboratory for sustainable flight. With validated operational data and strengthened regulatory frameworks now in place, the partners are moving toward the next development phase—where infrastructure, certification, and market readiness must evolve in parallel to enable commercially viable electric air services.

IDE LAUNCHES NATO AIS FUNDED PROJECT ON USV STANDARDIZATION

INTRACOM DEFENSE (IDE) has been recently awarded by the NATO Accelerating Interoperability and Standardization (AIS) Fund, a new project entitled "Unmanned Surface Vehicles (USV) Standardization: Current Status and Future Outlook". The project's goal is to accelerate USV standardization by identifying standardization gaps and providing guidelines and recommendations to NATO for steering related standardization activities. Within the project, relevant NATO and non-NATO standards and certification frameworks will be analyzed and recommendations for collaboration with external Standards Developing Organizations (SDOs) and the industry will be provided.

IDE is the Implementing Agent (primary contractor), partnering with DEFENCE STANDARDIZATION ADVICE P.C. (DEFSTAND), a Greek SME with unique expertise on interoperability and standardization management, and ASTM International, a global leader in the development and delivery of voluntary consensus standards, for the successful implementation of the project.

Following the project award, Mr. Georgios Troullinos, CEO of IDE, stated: "It is a great honor for IDE to be selected by the NATO as the Prime Contractor for a project concerning a technological sector of high strategic importance worldwide, that of USVs, having already since 2019 developed the first Greek USV, in collaboration with other Greek companies."

HELLENIC NAVY PROCURES CAMCOPTER S-100 UAS FOR NEW FDI FRIGATES

The Hellenic Navy has signed a contract to procure ship-based CAMCOPTER® S-100 Unmanned Air Systems (UAS) to be deployed on the Hellenic Navy's Frégate de Défense et d'Intervention (FDI) Belharra-class frigates, namely HS (Hellenic Ship) Kimon, Nearchos and Formion. The HS (Hellenic Ship) Kimon, which arrived in Greece in January 2026, will be equipped with the CAMCOPTER® S-100 in spring 2026. Another system will be operated from land and used for training, as well as to enhance operator proficiency. The training of the initial Greek CAMCOPTER® S-100 crews is scheduled to be completed in spring 2026.

The remaining S-100 systems will be ship-based and deployed from the Hellenic Navy's Frégate de Défense et d'Intervention (FDI) Belharra-class frigates, namely HS (Hellenic Ship) Nearchos and Formion. HS Nearchos is scheduled for late 2026, while HS Formion is expected to arrive by early 2027. The French Naval Group-built frigates are pre-fitted for the CAMCOPTER® S-100 integration, enabling rapid installation and operational introduction.

Equipped with a Wescam MX-10 EO/IR camera gimbal and an Overwatch Imaging PT-8 Oceanwatch, the S-100 systems will enhance the Hellenic Navy's frigate fleet operations across a wide range of missions, such as maritime security, search and rescue operations, environmental monitoring, control of the country's exclusive economic zone (EEZ) and Anti-Submarine Warfare (ASW).

"We are extremely proud that the CAMCOPTER® S-100 is the UAS of choice for the Hellenic Navy. With its proven maritime performance, endurance and payload capacity, the S-100 will provide commanders with extended situational awareness, further enhancing the operational capabilities of the Hellenic Navy's surface forces", said Hans Georg Schiebel, Chairman of the Schiebel Group.

AUSTRALIAN MARITIME COLLEGE AND HII REPORT NEAR-PERFECT AVAILABILITY AS REMUS 100 COMPLETES 935 MISSIONS WITH ONLY 2 DAYS OF DOWNTIME

The Australian Maritime College (AMC) and HII announced a major reliability milestone for AMC's Legacy REMUS 100 autonomous underwater vehicle (AUV). Over seven years, the AMC REMUS 100 completed 935 operational deployments with only two days of downtime caused by material issues. During this period the AUV supported the training of more than 400 Royal Australian Navy AUV operators.

Despite frequent use in challenging environments, the system maintained operational availability above 99.9%, which is a standout result for autonomous maritime technology.

This performance record reinforces the REMUS 100's reputation as one of the most dependable autonomous underwater systems operating today. In 2026, HII REMUS will celebrate 25 years of reliable, innovative service to customers worldwide. To date, more than 750 REMUS AUVs have been delivered to customers in over 30 countries, with more than 90% still in active service.

The legacy REMUS 100 is a versatile, reliable, and easy-to-maintain system that played an important role in oceanographic research, environmental monitoring, and defence operations around the world.

Since the arrival of the REMUS100 at the AMC the vehicle has been maintained in-house by staff at the AMC's Autonomous Maritime Systems Laboratory in Northern Tasmania, with remote support provided directly from HII technical staff in the U.S.

"This reliability record is an outstanding testament to both the REMUS 100's robust engineering and technical expertise of the AMC team who maintain and operate the vehicle," said Chris White, AMCS manager of Defence & Autonomous Systems. "To sustain such high performance across hundreds of missions and diverse marine conditions is a reflection of both the system's design integrity and the autonomous system technical skills resident at the AMC."

"The REMUS 100's reliability has enabled the AMC to plan and execute complex missions with full confidence in the system. This level of dependability has a direct impact on mission success, data quality and training outcomes." said Duane Fotheringham, president of HII's Unmanned Systems. "Its performance record reinforces HII's commitment to delivering innovative, reliable, and upgradeable mission-ready autonomous underwater systems that set industry standards for performance and durability."

INVARIANT CORPORATION'S STAKE SYSTEM SUCCESSFULLY DEMOS ADVANCED MARITIME AUTONOMOUS CAPABILITY

Invariant Corporation's Surface-to-Air Kinetic Engagement (STAKE) system has once again demonstrated a significant advancement in autonomous maritime Counter Unmanned Systems (C-UxS) capabilities. Earlier this month, STAKE was integrated onto a Textron Systems' TSUNAMIR Unmanned Surface Vessel (USV) and performed early integration testing at Lake Guntersville.

This milestone marks a significant step forward in the application of APKWS in the maritime domain. The success of the demonstration highlights the STAKE system's versatility and performance in a highly dynamic, complex environment as well as Invariant's C-UxS team's commitment to advancing autonomous weapons development. STAKE, a modular system, can be integrated onto a variety of vehicles with minimal engineering.

STAKE's maritime payloads consist of two core subsystems: the Hunter, which houses the sensor and

laser designation package responsible for acquiring and tracking targets, and the Killer, the precision engagement platform. Together, as previously shown, the Hunter and Killer subsystems operate seamlessly in the maritime setting, confirming the system's readiness for shipboard C-UxS mission, no matter the size.

"This successful demonstration represents a significant development and reflects Invariant's

position at the forefront of C-UxS innovation as well as kinetic maritime autonomy," says President Danny Levis. "We are committed to advancing adaptable, high-performance systems that align with the Department of War's objective to enhance lethality, especially in the maritime domain".

The TSUNAMI USV provides advanced battlefield connectivity and mission agility to maritime mission sets while keeping warfighters out of harm's way. With a MOSA design, the system is adaptable to a variety of mission sets and payload integrations. The TSUNAMI family of USVs benefit from over four decades of Textron Systems' autonomous technology development and integration.

With this milestone, the STAKE team shows that its technology goes beyond computer models. Invariant is committed to not only supporting the fight where it is today, but advancing technology to be where the fight is going.

EDA PROJECT DEVELOPS TECHNOLOGY FOR UNDERWATER DRONES TO MOVE IN SWARMS

The European Defence Agency (EDA) has concluded the second stage of its Swarm of Biomimetic Underwater Vehicles (SABUVIS II) project after four years, preparing for a shift in naval operations beneath the seas. Instead of deploying separate drones loosely connected to one another, the project sought to create a coordinated swarm of autonomous underwater vehicles (AUVs) operating as one coherent system.

The project, which was managed by EDA with a budget of €3.7 million, brought together four participating Member States, with Poland as lead nation, and Germany, Portugal and Slovenia contributing. It concluded in early February 2026.

Building on the first phase, the project addressed the technological and operational problems that are inherent to underwater autonomy: satellite-based tracking does not function beneath the surface, communication bandwidth is severely constrained, latency is high and the environment itself is unpredictable.

With field demonstrations in Poland, Germany, and Portugal during REPMUS 2025, mixed swarms of drones were tested in real-life settings. These trials enabled the coordination

of swarm movement, reliable data exchange, formation control, and adaptive mission execution. They also advanced the integration of disparate systems through command-and-control (C2), ensuring interoperability among vehicles from different countries and manufacturers.

These results also build on earlier EDA work, notably the EDA SALSA project, which developed adaptive protocol technologies for self-configurable underwater acoustic networks. That enables reliable connectivity and data exchange among multiple autonomous platforms.

Machines with a 'brain'
Traditionally, AUVs operate largely on their own. A swarm, however, shares data in real

time and coordinates movements and tasks far more quickly and cost-effectively. The group can also adapt: if one unit fails, the other compensates. Losing one vehicle no longer jeopardises the entire mission.

SABUVIS II developed and assessed three complementary concepts:

Scalable, lower-cost AUV swarms

Biomimetic vehicles optimised for manoeuvrability in shallow or cluttered littoral waters

Mixed swarms integrating underwater and autonomous surface vehicles

SABUVIS II demonstrated that mission execution does not need to depend on a single platform. Heterogeneous systems can be aligned through common standards and interfaces. Beyond hardware and algorithms, the project established advanced simulation and testing environments where swarm behaviours could be evaluated and optimised as well as validated before deployment.

EDA believes the outcome is directly relevant to a range of future naval missions, including using intelligence, surveillance and reconnaissance (ISR), protecting of critical maritime infrastructure, harbour security, and high-risk operations.

HAVELSAN, PILODA DEFENCE AND VN MARITIME FORGE STRATEGIC ALLIANCE FOR ITALY'S UNMANNED MARITIME FUTURE

HAVELSAN, Piloda Defence and VN Maritime Technologies have signed a strategic Memorandum of Understanding to jointly develop, integrate and commercialize unmanned and hybrid maritime platforms for the Italian market. The agreement establishes a long-term industrial partnership focused on delivering next-generation naval solutions tailored to Italy's operational and strategic requirements across the Mediterranean.

Under the framework, Piloda Defence and VN Maritime Technologies will serve as HAVELSAN's exclusive representatives and industrial partners in Italy for all Unmanned Surface Vehicle (USV) programmes. Engagements with Italian defence authorities, coast guard commands, public institutions and private stakeholders will be coordinated through the VN Maritime–Piloda structure, ensuring a unified commercial and industrial interface within the country.

The cooperation blends advanced Turkish defence technologies with Italy's established maritime industrial base. HAVELSAN will contribute the digital and mission-critical backbone of the platforms, including autonomous control systems, mission management software, AI-enabled perception capabilities and secure communication architectures. These systems are designed to enable scalable operations ranging from remote control to high levels of autonomy while maintaining robust cybersecurity and operational resilience.

VN Maritime Technologies will assume the role of prime contractor for overall platform architecture. Its responsibilities include high-performance maritime platform design, development of hybrid operational concepts and advanced system integration. The company's expertise ensures that hull design, propulsion, onboard systems and autonomy layers function seamlessly in demanding maritime conditions.

Piloda Defence, through Piloda Shipyard, will oversee local industrial participation in Italy. This includes production infrastructure, platform manufacturing, system integration, harbour and sea trials, acceptance procedures and full life-cycle support. By anchoring production and integration activities in Italy, the partnership aims to strengthen domestic capability while ensuring rapid responsiveness to national requirements.

The platforms will support fully autonomous, remotely operated and manned–unmanned hybrid configurations. Mission profiles are expected to cover intelligence, surveillance and reconnaissance, counter-smuggling operations, port and critical infrastructure protection, coastal security and search and rescue support. Designed for high seakeeping performance, the systems are optimised for the complex and varied maritime environment of the Mediterranean.

The partners are targeting the first procurement contract in Italy in the first half of 2026. This initial programme is envisioned as the foundation of a broader unmanned maritime roadmap, fostering long-term capability development, industrial collaboration and progressive fleet expansion.

Strategically, the alliance strengthens defence industry ties between Türkiye and Italy while positioning autonomous maritime technologies at the forefront of Europe's evolving naval landscape.

AURORA SUCCESSFULLY DEMOS AI-ENABLED CONTROL TECHNOLOGY

Aurora Flight Sciences, a Boeing company, demonstrated its 'Fast Adaptation and Learning for Control Online' (FALCON) technology, showing the positive impact of the AI-enabled control system on maintaining safe maritime operations. The work is part of the Defense Advanced Research Projects Agency's (DARPA) Learning Introspective Control (LINC) program.

Aurora, teamed with the Massachusetts Institute of Technology (MIT) Aerospace Controls Laboratory and the MIT Marine Autonomy Laboratory, has been developing a machine learning-based control architecture that enables land, maritime, and aerial vehicles to adapt their control laws in real time. With this technology, called FALCON, vehicles can operate more safely during unforeseen hazards such as component failures or environmental conditions. The learning-based control architecture can be used as an assistant to a human operator or as the primary method of vehicle control.

The demo, held in late 2025, used a 1.5-meter-long, uncrewed surface vessel (USV) paired with a 5-meter-long USV in a relative station-keeping scenario to simulate underway replenishment (UNREP), where two vessels align to allow the transfer of supplies. The goal is to maintain a consistent location relative to another vessel while overcoming hazards such as wind loading, thruster failure, and simulated Venturi effects. Operation is considered to be within the 'safe zone' when a consistent and safe position is maintained between the two vessels.

The demo compared the performance of two different levels of AI-enabled control technology against a manual control baseline. In AI-assisted mode, the AI quickly compensates for the effect of hazards, helping the human operator to maintain safe operation. In AI-guided mode, the human operator sets desired parameters like speed and position while the AI guides the vehicle in real time.

The team collected data on the percentage of a test run that was operated within the pre-determined 'safe zone' and on how long it took the vessel to recover and return to safe operation after an induced hazard.

Without AI, a human operator piloted the USV within the safe zone 63% of the time. In AI-assist mode, that percentage increased to 82%. In AI-guided mode, operation within the safe zone was 94%.

When hazards were introduced, the recovery time needed to regain control and return to safe operation was reduced by 61% on average when using AI-guided control compared to manual control.

The team is continuing to refine its algorithms in preparation for its next demonstration event this summer.

ATLAS UGV PUT THROUGH ITS PACES

BAE Systems announced successful trials for its Autonomous Tactical Light Armour System (ATLAS) Uncrewed Ground Vehicle (UGV). The trials are part of the ongoing development for a next generation modular autonomous land capability designed to support main battle tank or combat reconnaissance vehicle capabilities.

Launched at Land Forces in September 2024, the ATLAS Collaborative Combat Variant (CCV) has been the focus of significant trial activities at all levels of autonomy – from teleoperation to waypoint-based navigation, to full 'sense and avoid autonomy' – and is a fully functional prototype demonstrator.

ATLAS represents a true combat multiplier – a fighting vehicle that increases combat mass and reduces the soldier's exposure to risk. The prototype platform is manoeuvrable and fast, making it an ideal companion for both tracked and wheeled crewed

combat vehicles across difficult terrain and in all weather and environmental conditions.

The ATLAS CCV can be delivered in multiple payload configurations. As shown in the assault configuration, the vehicle is armed with a new, lightweight, affordable, highly automated medium calibre turret system called 'VANTAGE', designed for use on uncrewed platforms.

The VANTAGE turret integrates BAE Systems' passive Multi-Spectral Automatic Target Detection, Tracking and Classification System (ATTCS), delivering high levels of automated operation, reducing operator cognitive load, enabling one-to-many operation and reducing the probability of detection and the time to target engagement.

Andrew Gresham, Managing Director – Defence Delivery, BAE Systems Australia, said: "In just sixteen months, we have gone from launching ATLAS at Land Forces to operating a fully functional prototype demonstrator. "ATLAS has been developed to give soldiers the advantage on the modern battlefield.

"This has resulted in an autonomous platform that will deliver the dull, dirty and dangerous tasks expected in a combat environment. "We are currently engaged in significant marketing and customer engagement activities in international markets."

MILREM ROBOTICS AND EOS DEFENCE SYSTEMS SIGN TEAMING AGREEMENT TO ADVANCE UNMANNED GROUND SYSTEMS CAPABILITIES

Milrem Robotics, the world's leading developer of robotics and autonomous systems, and EOS Defence Systems, a global leader in advanced remote weapon systems and integrated defence solutions for Counter-UAS, have signed a teaming agreement to jointly pursue new business opportunities and advance network-centric collaborative combat robotics. The agreement establishes a framework for cooperation across marketing, product development, and research and development, enabling both companies to combine their complementary expertise in unmanned platforms, weapon systems, and integrated defence solutions.

"By combining Milrem Robotics' unmanned ground vehicle expertise with EOS Defence Systems' advanced weapon and integration capabilities, we are strengthening our ability to deliver scalable and mission-ready solutions for modern armed forces," said Kuldar Väärsi, CEO of Milrem Robotics. "This teaming agreement reflects our shared commitment to innovation, interoperability, and responding to evolving operational requirements."

"The drone threat environment is increasingly mobile and contested, and effective defence can no longer be confined to fixed sites

or crewed platforms," said Andreas Schwer, CEO of Electro Optic Systems (EOS). "This teaming agreement extends EOS' world-leading counter-drone systems onto unmanned ground platforms, supporting more flexible and layered defence approaches."

Under the agreement, the companies will collaborate to identify business opportunities in new markets and customer segments of mutual interest, as well as to develop and execute joint marketing initiatives. The cooperation also enables the potential co-development of products, technologies, and integrated solutions aligned with the companies' respective areas of expertise. A key focus of the partnership

is joint research and development, including the integration of advanced weapon systems, sensors, and effectors onto Milrem Robotics' unmanned ground vehicles. Planned activities may include non-ITAR counter-UAS solutions, missile and grenade launcher integrations, large-calibre weapon systems for heavy UGVs, and the integration of laser-based capabilities on medium and large uncrewed platforms, in cooperation with selected international partners.

The agreement further supports the sharing of relevant intellectual property, technical know-how, and research outcomes to accelerate the commercialisation and deployment of jointly developed or marketed solutions.

INDRA GROUP AND ELT GROUP SIGN A FRAMEWORK AGREEMENT TO ENHANCE THEIR STRATEGIC COOPERATION IN MULTI-DOMAIN DEFENCE

ndra Group, a global company at the forefront of defence, aerospace, and advanced technologies in Europe, and ELT Group, an international champion in developing and applying innovative and proprietary technologies in the use of the electromagnetic spectrum and cyberspace, have signed a strategic framework agreement designed to enhance their industrial and technological cooperation in multi-domain defence.

The agreement establishes a common framework for developing and fostering a collaboration in three key areas, namely the land and space domains and Uncrewed Aerial Vehicles (UAVs).

The partnership will bring together two strategic players in the European defence ecosystem, thus leveraging their complementary capabilities and aligning their technological visions and operational maturity so as to drive the reinforcing of Europe's critical capabilities, technological sovereignty and strategic autonomy in the face of the current-day challenges.

On the one hand, Indra Group will contribute its capabilities as a benchmark integrator of next-generation defence programs, and its leadership of multi-domain systems, radar technology, space, electronic warfare, and cyberdefence. On the other, ELT Group will provide its best-in-class

expertise in EMSO (Electromagnetic Spectrum Operations) advanced solutions and systems designed to ensure the control, protection and exploitation of the electromagnetic spectrum in military operations, to gain information superiority and operational edges.

Indra Group Executive Chairman Ángel Escribano declared that "this agreement with Elettronica will consolidate Indra's ambition to drive a more sovereign, interoperable, and multi-domain form of European defence. By bringing together our complementary capabilities we're taking a decisive step towards deploying high-value European solutions to protect our citizens and reinforce the continent's strategic autonomy in the land, space and unmanned system domains".

According to José Vicente de los Mozos, Indra Group's CEO, the agreement "opens instant opportunities to submit integrated and competitive proposals to European programs, combining Indra's experience and ELT's expertise in advanced electronic warfare solutions, signals intelligence, spectrum monitoring, and the protection of critical communications in multi-domain environments. Mastering the electromagnetic spectrum is essential, because much of modern military technology currently depends on it. By teaming up with ELT we'll be

able to bolster our joint capabilities, move forward in a coordinated manner within the European framework, expand our portfolio in prioritized areas, and provide sovereign solutions to increase our customers' resilience and operational superiority".

ELT Group President and Ceo Enzo Benigni, declared that: "This agreement marks an important step forward in strengthening European industrial cooperation in the Defence sector. Indra Group and ELT have already actively collaborated in consortium programmes like the Eurofighter and share a common vision on the need to develop advanced technologies and integrated capabilities to address emerging multi-domain challenges. By combining our technological excellence, we are confident we can create value for our customers and contribute concretely to Europe's security"

Domitilla Benigni, CEO and COO of ELT Group stated: "Distinctive capabilities such as those of ELT Group and Indra Group in sigint, EW and management of the electromagnetic spectrum are, at this historical moment, a strategic asset for Europe. The challenges we face, the technological strength outside Europe and Nato blocks push us towards valuable partnerships. This is a pillar of our strategic plan that we are pleased to share with Indra".

SRC SHOWCASES GMFA CAPABILITIES IN MQ-28 LIVE FIRE DEMO

S RC, Inc. a defense research and development company, announced that its cutting-edge Generic Multi-Function Array system (also referred to as Payload B) was featured in the recent MQ-28A Ghost Bat Collaborative Combat Aircraft (CCA) live fire demonstration. This milestone highlights the system's role as a critical enabler of collaborative, multi-domain operations and underscores SRC's commitment to advancing next-generation defense technologies for both autonomous and crewed platforms across air, sea, land and space.

"The MQ-28A live fire demonstration showcased how GMFA has matured from concept to capability and proves that our systems don't just participate in missions; they transform them," said Kevin Hair, president and CEO of SRC. "By combining adaptability, autonomy and resilience, we are redefining what's possible in electronic warfare."

At the heart of the GMFA system is a multi-function array designed to provide agile, scalable and resilient sensing and effecting capabilities. The array integrates advanced electronic warfare functions into a single, compact architecture. Complementing the array is a multi-function processor that delivers real-time signal processing and adaptive mission execution. The processor harnesses advanced algorithms transforming raw data into actionable insights that ensure decisive responses to evolving threats.

SCOUT AI INTRODUCES FURY AUTONOMOUS VEHICLE ORCHESTRATOR

S cout AI Inc. publicly showcased for the first time its Fury Autonomous Vehicle Orchestrator running a heterogeneous fleet of autonomous air and ground systems from natural language mission intent.

Filmed during live operations in Central California, the demo captures Scout AI's Fury foundation model translating a commander's high-level objective into coordinated actions across an unmanned ground vehicle and multiple unmanned aerial systems. The demonstration was executed on real hardware, in mission-relevant terrain, without scripted control, CGI, or manual operating.

In the video, the commander provides mission intent through Scout AI's C2 interface. From there, Fury builds the mission plan and submits it to the commander for approval before executing. It then tasks each asset in natural language and monitors mission progress, adjusting the plan as the situation changes. It coordinates the ground vehicle and drones, manages timing and priorities, and completes the mission with a battle damage assessment. Fury Orchestrator also enforces fleet-level constraints, including timing, priorities, mission phasing, and operational authorities, issuing updated intent to ensure autonomous systems remain aligned with commander objectives.

Throughout the mission, Fury Orchestrator continuously fuses telemetry, video feeds, and C2 data to maintain a live common operational picture. When one aerial asset identifies the target vehicle, Fury redirects supporting systems in real time, adjusts tasking, and autonomously sequences follow-on actions, all while keeping a human operator in the loop for supervision.

Unlike traditional autonomy stacks that rely on hand-engineered code and conditional logic, Fury functions as an agentic interoperability layer. The orchestrator reads platform documentation and tool definitions, then generates structured JSON instructions native to each vehicle's API, without modifying underlying flight controllers, mobility stacks, or autonomy software.

The result is as simple as it is impactful: one software layer that can run mixed fleets, work in degraded comms, deploy at the edge, and scale across all domains.

MARSHALL AEROSPACE JOINS UK GOVERNMENT-INDUSTRY NETWORK OF ENGINEERING EXPERTS

M arshall Aerospace has been unconditionally accepted into the Engineering Delivery Partnership (EDP) network, a select group of expert providers of engineering services to the UK Ministry of Defence (MoD).

Established through a collaboration between Defence Equipment & Support (DE&S) and the Aurora Engineering Partnership, the EDP programme aims to access UK-resident skills, expertise and resources to deliver national operational readiness and ensure Armed Forces and Front Line Commands receive the best equipment and support. The network is the default route for procurement of engineering services by DE&S, and is available to other MoD departments and agencies.

Securing a place in the EDP network as a Specialist Provider ensures that Marshall Aerospace can be called upon to support current and emerging capability areas where assured engineering authority and continuity of support are critical, including avionics systems and uncrewed and autonomous platforms.

The assessment process also recognised Marshall's depth and breadth of capabilities across a wide range of other areas, including systems engineering, integration, mechanical systems, structures, test and evaluation, and modelling and simulation. These capabilities are delivered through UK-based teams operating with recognised design and assurance approvals, enabling complex engineering work to be undertaken with confidence in safety, integrity, and long-term supportability.

"Joining the EDP network reinforces Marshall's role as a trusted UK engineering partner, enabling us to apply our decades of experience in direct support of national defence readiness and long-term capability.

"As a proudly British business backed by design organisation status and a wide range of approvals, we stand ready to support DE&S and the UK MoD in providing agile, efficient engineering solutions that deliver outcomes for those on the front line." Said Mark Hewer, ero Engineering Services Director, Marshall

BLIGHTER BOOSTS STEALTH OF RADARS FOR MOBILE SURVEILLANCE

Blighter has further boosted the stealth characteristics of its e-scan radars to better serve the growing number of developers of crewed and autonomous multi-sensor surveillance vehicles and platforms. According to Blighter, the growing sophistication of electronic counter-countermeasures (ECCM) means that demand for Low-Probability-of-Intercept (LPI) radars is increasing rapidly. The need for covert radars that can see but not be seen is particularly strong in the mobile surveillance market where stealth, information superiority and data security are paramount.

Blighter radars, including its B400 series, feature Low-Probability-of-Intercept (LPI) waveforms; this makes the radar signal difficult to detect and therefore difficult to jam. Radar performance remains exceptional, with Blighter's industry-leading capability in the detection and classification of people, vehicles, and near-ground airborne threats. Mark Radford, co-founder and chief technology officer (CTO) at Blighter says: "Our radars are inherently covert due to the design choices we made at the outset. We were first to market with a solid-state, non-rotating electronic scanning ground radar, and

our adoption of the dual antenna FMCW (frequency modulated continuous wave) architecture and the decision to operate in the Ku-band spectrum have led to an exceptionally tough, EMC robust and stealthy radar design." Blighter continues to fine-tune its technology to improve detection, tracking and classification of targets while staying covert. For example, new fast scanning modes, featuring sub-second update rates, result in even less radar energy being transmitted in any specific direction. Furthermore, when the radar is used with BlighterNexus' 'Scan-Manager Application Module', the radar can operate in a Multi-Function Radar (MFR) mode with greater randomisation of the low-power waveforms being transmitted.

"Developers of crewed and autonomous

surveillance vehicles and platforms are already benefitting from Blighter's LPI credentials," says Mark Radford. "The radar's solid-state design and extremely low transmit power (4 Watts) reduces the EMC and acoustic signatures and results in a smaller safety zone around the radar to aid sensor integration. But fundamentally, it's the complexity and length of the combined e-scan, FMCW and Doppler chirp waveforms that make the Blighter radar so difficult to detect and jam."

In 2025, Blighter radars were integrated into a fleet of custom-built multi-sensor mobile surveillance vehicles for on-the-go monitoring of a European land border; by Allen-Vanguard for its SECURIS rapid deployable counter drone system, and by a SE Asian military customer for mobile border surveillance vehicles.

"Our radar is probably the stealthiest and most resilient ground radar in its class and an excellent fit for developers in the multi-sensor mobile surveillance space," says Mark Radford. "A great fit for customers wanting to add a covert radar into modernisation programmes, electric and hybrid autonomous vehicles, as well as for patrol and target designator vehicles."

BAE FALCONWORKS AND SURVICE ENGINEERING HAVE SIGNED A FRAMEWORK AGREEMENT TO ENABLE COLLABORATION ON THE DEVELOPMENT OF UAS TECHNOLOGIES

The agreement builds on an existing agreement established in 2015 with Malloy Aeronautics (which was acquired by BAE Systems in 2024) who supply their uncrewed all electric logistics platform (T-150) to SURVICE Engineering, who support the US Armed Forces, including the US Marine Corps, with specialist combat equipment including uncrewed logistics platforms.

"The agreement comes at a time when UAS are increasingly important to defence and security, conducting a variety of roles from low-cost logistics to more complex and capable uncrewed systems that can operate alongside crewed combat aircraft. We look forward to working together with SURVICE Engineering to develop this capability for today's rapidly evolving battlespace." Anthony Gregory, Business Development Director, BAE Systems FalconWorks

"Partnering with Malloy, our successes include fielding the TRV-150 to the USMC and

US Army and demonstrating use cases beyond logistics, including mine clearing, obscurant deployment, and weaponisation. The agreement with FalconWorks is a logical next step to continue advancing UAS technologies and use cases and we are excited to expand our relationship across the BAE FalconWorks portfolio and look forward to many more successes" Greg Thompson, President, SURVICE Engineering

The new agreement will see BAE Systems and SURVICE Engineering working together to explore opportunities for collaboration across a wider product portfolio of small / tactical UAS.

This agreement forms part of a wider BAE Systems strategy to accelerate new possibilities in uncrewed air systems to meet national and international defence and security requirements.

HONEYWELL AND LIG NEX1 ESTABLISH FRAMEWORK TO EXPLORE UNMANNED AERIAL VEHICLE, DEFENSE TECHNOLOGIES

Honeywell announced it has signed a Memorandum of Understanding (MOU) with LIG Nex1 to explore opportunities for future collaboration on the development and commercialization of solutions for the unmanned aerial vehicle (UAV) market, including Unmanned Combat Aerial Vehicles (UCAVs) and Collaborative Combat Aircraft (CCAs), as well as selected space, electromagnetic defense and cybersecurity applications.

The MOU outlines a non-exclusive framework for potential cooperation, combining Honeywell's advances in unmanned technologies — including resilient navigation, drone management systems and advanced communications — with LIG Nex1's expertise in advanced precision electronic systems and its experience across unmanned air, surface and marine platforms.

The companies intend to explore opportunities to assess market needs, identify potential customers and evaluate pathways for adapting existing commercial unmanned capabilities to support defense-specific applications, subject to further evaluation and applicable approvals.

"This framework provides an opportunity to evaluate how our experience in advanced defense systems can be aligned with Honeywell's unmanned and navigation technologies. By exploring these areas together, we aim to better address evolving requirements for unmanned and autonomous platforms," said Jongsung Park, president, Corporate Strategy & Investment, LIG Nex1.

"Honeywell's work with LIG Nex1 represents a disciplined approach to advancing the future of aviation and defense technologies. By exploring opportunities with LIG Nex1, we are evaluating how proven commercial unmanned capabilities can be responsibly adapted to support next-generation defense and autonomous systems," said Sathesh Ramiah, vice president, Defense & Space, Asia Pacific, Honeywell Aerospace.

LIG Nex1 is a leading developer of advanced precision electronic systems in the Republic of Korea and works with major aircraft and defense original equipment manufacturers. The framework also considers potential export opportunities, leveraging LIG Nex1's established customer base, subject to further assessment and regulatory review.

DRAGANFLY SELECTED TO PROVIDE DRAGANFLY FLEX FPV DRONES AND TRAINING TO U.S. AIR FORCE SPECIAL OPERATIONS COMMAND UNITS IN PARTNERSHIP WITH DELMAR AEROSPACE

Draganfly Inc. an award-winning developer of drone solutions, software, and robotics announced an award to provide Flex FPV Drones and Training to U.S. Air Force Special Operations Command units with partner DelMar Aerospace Corporation, a leading provider of advanced uncrewed aircraft systems (UAS) training, tactics, techniques, and procedures (TTPs), for U.S. Government customers.

The partnership with DelMar brings together Draganfly's operationally proven uncrewed platforms with DelMar Aerospace's expertise in delivering cutting-edge, mission-relevant UAS instruction to Government operators. Initial training activities include First Person View (FPV) UAS instruction, with a comprehensive curriculum covering FPV assembly, repair, flight operations, advanced mission planning and execution.

The award is to provide foundational FPV training with Draganfly Flex FPV Drones to U.S. Air Force Special Operations Command units. Training will take place at DelMar Aerospace's Camp Pendleton UAS range training facility, a controlled environment purpose-built to support advanced instruction that replicates a range of battlefield scenarios. The first training cohort is scheduled to begin in mid-February.

Draganfly's Flex FPV serves as the modular backbone for future small UAS configurations, uniquely capable of meeting evolving Department of War operational requirements. The Flex FPV's innovative design enables rapid transition across operating profiles, allowing a variety of flight characteristics and payload capacities to be deployed with a single unit. This adaptability enables widespread adoption via a common training and sustainment baseline while providing a unique and compelling value proposition to any tactical drone program. "Our shared focus is on readiness and combat capability," said Cameron Chell, CEO of Draganfly. "Partnering with DelMar Aerospace helps ensure operators are training on systems and tactics designed for real-world conditions, with the Flex's modularity and reliability required to adapt as missions and threats evolve."

DelMar Aerospace will lead instruction delivery, curriculum development, and standards alignment, ensuring training remains tactically relevant while compliant with U.S. Government contracting and security requirements.

"This collaboration is about developing operators who are prepared to employ uncrewed systems effectively in demanding environments," said Stanley Springer, DelMar Aerospace's Chief Operating Officer. "Our focus is disciplined training grounded in combat-proven TTPs and operational realism."

Drones World Editor Kartikeya speaks with

Philip Swinsburg

Director of Asia Pacific Business Development at Wisk about autonomy certification, Boeing integration, airspace modernisation, and the future of pilotless air taxis.

Q Congratulations on your recent demonstration. How are you accelerating Wisk's FAA certification timeline for Gen 6 while keeping full autonomy as your core differentiator?

A Thank you. One of the biggest opportunities we plan on participating in the FAA's EIPP programme. That initiative is specifically designed to accelerate autonomy and explore the full potential of Advanced Air Mobility (AAM).

We're excited to collaborate with the FAA and other stakeholders to fast-track autonomous certification. Historically, the FAA used similar mechanisms to successfully integrate drones and automation into the airspace. We aim to replicate that success through the EIPP programme for AAM.

Autonomy is our key enabler and the EIPP framework gives us a structured pathway to accelerate that safely and effectively.

Q What is your strategy for integrating Wisk's operations with Boeing's resources to scale urban air mobility production?

A We're in a unique position as a wholly owned subsidiary of Boeing. That allows us to leverage their deep expertise, infrastructure, and technical competencies while still maintaining our agility.

We work closely with Boeing's sister companies. For example, Aurora Flight Sciences has more than 100 team members embedded within Wisk. Similarly, over 100 Boeing engineers are directly integrated into our programmes. This collaboration enables faster problem-solving and access to mature aerospace processes while we continue building next-generation autonomy.

Q Does UTM and future airspace integration play a role in this strategy?

A Absolutely and that's a critical piece.

Our subsidiary, SkyGrid, is a major enabler

> "Autonomy is our key enabler and the EIPP programme gives us a structured pathway to accelerate certification."

of future airspace design. SkyGrid is working with the FAA to help define new operational frameworks for autonomous aircraft.

Today, aviation operates under VFR and IFR. We believe the future will evolve toward automated flight rules. Through the EIPP programme, supported by SkyGrid, we hope to generate key learnings that contribute to broader FAA modernisation efforts.

Airspace integration is not an afterthought and it is central to autonomy deployment.

Q You've experienced the full

aircraft development lifecycle. How does that apply to leading a company like Wisk?

A Wisk has been around for 15 years. In its early days, it was part of a Larry Page-backed venture within Google's ecosystem. That gave us a strong Silicon Valley foundation with rapid innovation, prototyping, and iterative development.

In 2019, Boeing recognised that advantage and entered into a joint venture. By 2023, Boeing acquired the remaining stake, making Wisk a fully owned subsidiary.

What's important is that Boeing deliberately allows us to preserve our innovation culture. We maintain agile teams, flat hierarchies, and an open-desk environment, our CEO sits among engineers on an open floor.

We operate within Boeing's traditional aviation structure, but we retain the

> "We operate with a Silicon Valley mindset inside a traditional aerospace structure."

Silicon Valley mindset necessary to certify autonomy quickly and effectively.

Q   How have you preserved agility while transitioning from a startup to a corporate subsidiary?

**A   **We rely heavily on a systems-based engineering approach supported by Integrated Project Teams (IPTs).

Each IPT owns its centre of excellence and has decentralised responsibility for solving its respective challenges. We empower teams to own their problem space and develop solutions independently.

These teams are then integrated by a group of chief engineers to ensure overall product cohesion.

We also have a dedicated Services IPT that looks holistically across aircraft certification, ground control systems, and operations. Since our end goal is autonomous air taxi services, that integration ensures every component, from hardware to regulatory compliance, is aligned with operational reality.

Q   What key challenges in autonomy, airspace integration, and hardware-software coordination have you overcome?

**A   **Autonomy at this level requires bringing together systems that have never previously been integrated in this way. Our aircraft relies on a sophisticated autonomy stack that combines flight computers, detect-and-avoid radar, lidar systems, cameras and multiple sensor fusion layers.

Each sensor has its own requirements and behaviours. We must validate not only the hardware and software individually but also their interaction including RF interference between systems and environmental impacts.

The real challenge lies in integrating these elements into a single, cohesive, certifiable autonomy framework. That integration process forms the backbone of our certification strategy.

Q   How do you prioritise safety while moving toward commercial launch of pilotless air taxis?

**A   **Safety is our number one priority as it should be in aviation.

We are designing the system to a 10⁻⁹ safety standard, which is equivalent to commercial airliner certification levels. Technically, operating under a Part 135 framework would not require that level. However, we have chosen to hold ourselves to the highest standard because we are building a passenger-carrying aircraft.

We are deliberately setting the bar at the highest possible certification threshold to guarantee safety, both from an engineering standpoint and from an operational perspective.

When we begin operations in the United States, we will operate under Part 135 regulations, ensuring robust regulatory oversight of both the aircraft and the organisation. That regulatory framework, combined with our engineering standards, ensures a safe and scalable autonomous air taxi service.

SHIELD AI DEMOS AI-ENABLED AUTONOMY FOR FUTURE CCA

Shield AI, in partnership with the Navy's Strike Planning and Execution (PMA-281) and Aerial Targets (PMA-208) programs, successfully demonstrated Hivemind, its AI-enabled mission autonomy software, autonomously flying two Navy BQM-177A aircraft during a December flight test at Point Mugu Sea Range in California.

The flight served as the capstone event of a multi-month integration and test campaign and followed an initial August demonstration, during which Hivemind first flew the BQM-177A to validate Advanced Vehicle Control Laws (AVCL) and integrate foundational autonomous behaviors. In this capstone event, Hivemind piloted two BQM-177As in a Live-Virtual-Constructive (LVC) environment that included a virtual F-18 and constructive adversary aircraft. The autonomous aircraft executed coordinated defensive behaviors—maneuvering to defend designated Combat Air Patrol (CAP) positions as adversaries attempted to penetrate those areas or target friendly forces. The event showcased more advanced autonomous decision-making than previous tests and progressed integration with the Navy's Autonomy

Government Reference Architecture (A-GRA), supporting future interoperability across unmanned platforms.

"This demonstration highlights Hivemind's ability to operate as a low-risk, adaptable autonomy stack integrated onto a Navy platform," said Christian Gutierrez, vice president of Hivemind Solutions at Shield AI. "We appreciate the Navy's continued partnership as we move these capabilities forward. Developing mission autonomy that excels in operational environments requires rigor, collaboration, and close coordination with operators, and these events reflect that joint effort."

Hivemind is Shield AI's core artificial intelligence software that assumes the role of a human pilot or operator, enabling unmanned defense systems to sense, decide, and act. Unlike traditional autopilots that simply follow preplanned routes, Hivemind can reroute

around no-fly zones, avoid or engage obstacles, respond to unexpected conditions, and complete missions safely and effectively without human intervention. Hivemind is A-GRA-compliant, platform-agnostic, and has demonstrated A-GRA aligned flight operations across multiple government and industry test efforts.

Originally designed as a high-performance aerial target, the BQM-177A served in this event as a surrogate autonomy research platform, generating insights that may inform the Navy's emerging thinking around future Collaborative Combat Aircraft (CCA) concepts and unmanned teaming roles. Shield AI served as the lead systems integrator and mission autonomy provider for the event, managing platform modification, payload integration, and technical coordination across industry and government stakeholders.

In 2024, the Navy selected Shield AI to integrate Hivemind onto the Kratos-built BQM-177A and develop a prototype testbed for autonomous flight. The capstone flight represents a key engineering milestone, and an inflection point for continued development and fleet experimentation in 2026 and beyond.

AF AWARDS DARPA/GA-ASI LONGSHOT NEW DESIGNATION: X-68A

General Atomics Aeronautical Systems, Inc., (welcomes the February 17 announcement confirming that the Defense Advanced Research Projects Agency (DARPA) uncrewed air superiority system known as LongShot has received U.S. Air Force designation X-68A.

LongShot, a collaborative effort by DARPA and GA-ASI, is expected to fundamentally change air combat: it's an uncrewed aircraft that flies from larger aircraft and engages hostile targets with its own air-to-air missiles. This approach augments traditional fighter aircraft, enabling them to remain further from the front lines, drastically increasing pilot safety while extending the overall force package's reach and mission effectiveness.

DARPA commissioned GA-ASI to begin work on the platform and the agency said on February 17 that it has completed wind tunnel testing and other program milestones. The Air Force has awarded it an official experimental platform designation, X-68, by which it will be known alongside its earlier codename.

The LongShot concept is intended to be host-platform agnostic, providing opportunities to integrate an operational variant onto fighters, bombers, or employed as a palletized munition from mobility aircraft. The program is building toward a flight test campaign as early as the end of this year. These tests will prove the safe and effective employment of the X-68A from an F-15 Eagle, confirm the flight worthiness of the LongShot vehicle, and demonstrate its ability to safely eject a captive sub-munition.

"We couldn't be prouder of the great work being done at GA-ASI in support of this DARPA program," said GA-ASI President David R. Alexander. "X-68A joins our growing fleet of

advanced jet fighters, including the YFQ-42A Collaborative Combat Aircraft, and supports GA-ASI's broader turn into supporting long-range strike, integrated autonomy, advanced sensing and other modern warfighting concepts."

X-68A is GA-ASI's second X-Plane, following the designation of the XQ-67A Off Board Sensing Station, an aircraft built for the U.S. Air Force Research Lab. It joins a growing fleet of advanced jet fighters, including the YFQ-42A Collaborative Combat Aircraft, and supports a broader turn by GA-ASI into supporting long-range strike, integrated autonomy, advanced sensing and other modern warfighting concepts.

The U.S. aerospace sector leads the world partly thanks to the tradition of collaboration between the government and its vendors on cutting-edge experimental aircraft, which is the origin of the Air Force's "X" designation. For example, the X-1 was the first aircraft to break the speed of sound; the nimble X-31 demonstrated jet thrust vectoring; the X-47B was the first uncrewed jet to land on an aircraft carrier, and so on.

USMC SELECTS GA-ASI FOR MUX TACAIR COLLABORATIVE COMBAT AIRCRAFT PROGRAM

General Atomics Aeronautical Systems, Inc. (GA-ASI) was competitively selected by the U.S. Marine Corps (USMC) for evaluation in the Marine Air-Ground Task Force Uncrewed Expeditionary Tactical Aircraft (MUX TACAIR) Collaborative Combat Aircraft (CCA) program. The agreement integrates GA-ASI's expertise in autonomy and uncrewed aircraft systems with a government-provided mission package, using the YFQ-42A platform as a surrogate to evaluate integration with crewed fighters.

The contract initiates integration of a Marine Corps mission kit into the YFQ-42A surrogate platform for assessment within the Marine Air Ground Task Force (MAGTF).

The USMC contract includes the rapid development of autonomy for the government-supplied mission kit — a cost-effective, sensor-rich, software-defined suite capable of delivering kinetic and non-kinetic effects — positioning the solution for use in expeditionary operations. This work will support evaluations of future MUX TACAIR capabilities.

"This selection builds upon the GA-ASI autonomous systems in use today and demonstrates our commitment to delivering next generation capabilities for critical USMC missions," said Mike Atwood, Vice President of Advanced Programs for GA-ASI. "Our FQ-42, combined with our proven autonomy architecture and integration expertise, positions us to rapidly deliver an affordable CCA solution that enhances the Marine Air-Ground Task Force's operational effectiveness in contested environments."

GA-ASI was selected by the U.S. Air Force in April 2024 to build production-representative flight test articles for the CCA program. The YFQ-42A successfully conducted its maiden flight in August 2025, validating a "genus/species" concept for rapid, modular, and low-cost uncrewed fighter aircraft development. This approach enables a common core aircraft design that can be rapidly adapted for different mission sets and service requirements.

The YFQ-42A is a purpose-built CCA platform developed as part of GA-ASI's ongoing investment in next-generation autonomous combat aircraft. The aircraft's modular design enables rapid integration of mission systems. GA-ASI's autonomy architecture, demonstrated through multiple live flight tests, provides the foundation for human-machine teaming in complex combat scenarios.

PARAZERO ACHIEVES EXTRAORDINARY RESULTS IN INTERCEPTING HIGH SPEED HOSTILE DRONES AT HIGH SPEED OF 70 MPH

ParaZero Technologies Ltd. an aerospace defense company pioneering smart, autonomous solutions for the global manned and unmanned aerial systems (UAS) industry, proudly announces outstanding results from an internal live testing of its DefendAir™ system.

In the trial, DefendAir successfully intercepted a fast-moving drone traveling at 70 mph using its patented net-launching technology. This marks the first-ever successful net-based interception of a drone at such high speed by ParaZero.

The system demonstrated its capability for real-time, on-the-move protection against rapidly approaching aerial threats. The test simulated a realistic combat scenario of a hostile drone closing in at high speed on ground forces.

The achievement elevates DefendAir as a solution, capable of countering tactical platforms such as FPV attack drones at very high speeds and other fast, lethal unmanned systems.

"We are thrilled to demonstrate DefendAir's strong and reliable performance in demanding operational conditions," said Ariel Alon, CEO of ParaZero. "We believe that intercepting a 70 mph threat represent a significant advancement for force protection in modern battlefields."

DefendAir offers a non-explosive, low-collateral net-based interception and is available in multiple configurations: handheld, stationary point protection and drone-mounted — delivering layered defense for troops, convoys, and high-value assets.

RED CAT SECURES NEW ORDERS FOR BLACK WIDOW DRONES FROM ASIA-PACIFIC ALLY
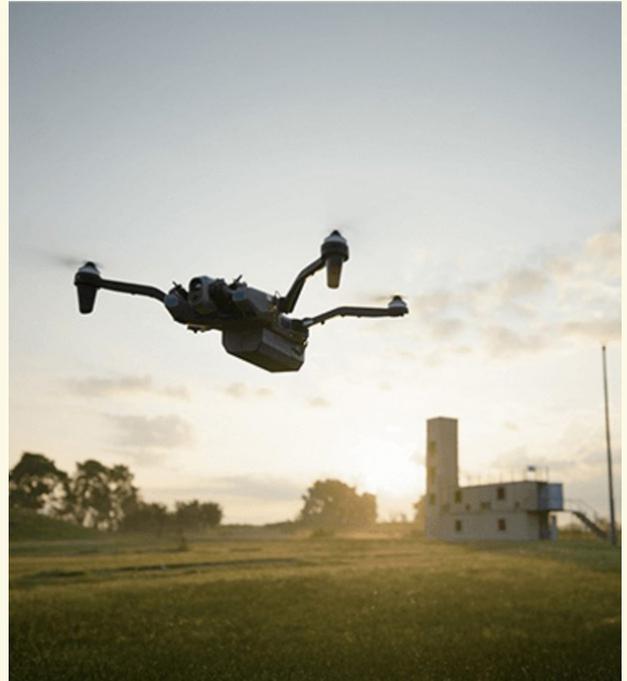
Red Cat Holdings, Inc . a U.S.-based provider of advanced all-domain drone and robotic solutions for defense and national security announced that in December 2025, an Asia-Pacific ally selected its Black Widow™ sUAS on a competitive tender, with delivery of an undisclosed number of systems scheduled for delivery during calendar year 2026. This is the second Asia-Pacific ally to recently order Black Widow systems for military use. Further details on both orders are expected to be made available in the near future.

Each system includes two Black Widow aircraft, a ground control station (GCS), and other mission-critical components.

"This agreement highlights the trust our international partners place in Red Cat to deliver secure, U.S.-built drone systems purpose-built for today's battlefield," said Jeff Thompson, CEO of Red Cat. "We're honored to support our Asia-Pacific allies with a portable ISR platform engineered for performance in contested environments. As geopolitical dynamics shift, we see accelerating demand for autonomous, interoperable technologies that enhance allied operational readiness. This order underscores Red Cat's growing role as a strategic partner in the region."

The Black Widow™ is Red Cat's flagship small, unmanned aircraft system (sUAS), engineered for tactical edge ISR missions with a compact, rugged design and secure communications architecture. Built in the U.S. and compliant with the National Defense Authorization Act (NDAA), the platform is a key part of Red Cat's Family of Systems, offering modular, scalable solutions across multiple operational domains.

SKYETON INTEGRATES SATELLITE COMMUNICATIONS INTO RAYBIRD UAS

Ukrainian-born aviation production holding Skyeton has successfully integrated satellite communications (SATCOM) systems into its Raybird, significantly expanding the platform's operational reach and enabling uninterrupted real-time data transmission during long-duration missions.

The SATCOM integration complements Raybird's 28+ hours of endurance capability, removing limitations on data link range. With satellite connectivity, Raybird operators can now maintain a stable, real-time data link throughout the entire mission profile, including deep reconnaissance tasks conducted far beyond the traditional coverage of ground-based communications.

Raybird, a small tactical unmanned aviation system (UAS), is compatible with several SATCOM solutions, allowing customers to select the system that best fits their operational requirements and existing command-and-control infrastructure.

In 2025, Skyeton delivered its first Raybird UAS with satellite communications to a unit of the Ukrainian Defense Forces. Since then, the company has continued deploying SATCOM-enabled unmanned aerial vehicles (UAVs) to the combat zone to validate system readiness in real operational conditions.

Roman Knyazhenko, CEO of Skyeton: "We deliberately tested satellite communications not in laboratory conditions, but in the most hostile operational environment possible. Over the past year, we gathered detailed feedback directly from military operators. This experience allowed us to refine the integration and ensure stable performance under electronic warfare pressure and during extended missions. Before scaling deliveries, we had to ensure that the SATCOM-equipped Raybird is fully ready to conduct deep ISR missions in enemy territory exactly when it matters most."

Raybird is designed for extended intelligence, surveillance, target acquisition, and reconnaissance (ISTAR) missions. Powered by an internal combustion engine, the mass-produced version of the UAV offers more than 28 hours of continuous flight, making it one of the longest-endurance tactical UAVs in its class. The addition of satellite communications elevates the platform's effectiveness in large-scale and distributed operations, where reliable long-range connectivity is critical.

Combat-proven in Ukraine, Raybird has accumulated over 350,000 flight hours, demonstrating high resilience to electronic warfare, operational reliability, and cost efficiency. Its compact design and low detectability allow it to operate effectively in contested airspace while delivering real-time intelligence to decision-makers.

SHIELD AI, RSAF, AND DSTA EXPAND PARTNERSHIP TO PROGRESSIVELY FIELD AUTONOMY CAPABILITIES

Shield AI announced the expansion of their partnership with Singapore's Defence Science and Technology Agency (DSTA) and the Republic of Singapore Air Force (RSAF) to co-develop and proliferate Artificial Intelligence (AI) across a wider range of autonomous drone applications using Shield AI's Hivemind software development kit (SDK).

Building on existing explorations and early use cases, the expansion looks to develop and embed autonomous capabilities across multiple drone's applications, using the SDK to tailor AI solutions for current operational and future environments. The collaboration has allowed RSAF and DSTA to use Shield AI's SDK to independently design, test, and deploy mission autonomy.

Within six months, operational and developer feedback from the RSAF and DSTA has led to refinements to the SDK, strengthening their developers' capability to develop and deploy mission autonomy for RSAF's Concept of Operations (CONOPs). The mission autonomy thus supports users in completing missions safely and effectively without human intervention and is able to reroute around no-fly zones, avoid threats and respond to unexpected conditions.

"RSAF and DSTA have been outstanding partners," said Brandon Tseng, Shield AI's president and co-founder. "Through their adoption of the Hivemind platform, Singapore is on a path to become the first country outside the United States with true sovereign autonomy, meaning the ability to develop and field its own AI pilots across its platforms. This matters because autonomy is a way to decouple military fighting strength from population size, and in Singapore's case, from a declining population, a challenge many nations around the world also face."

"Building our capability to independently develop and field mission autonomy is a priority and an important step forward," said DSTA's chief executive Mr Ng Chad-Son. "This collaboration goes beyond technology adoption. It allows our defence engineers and aircrew to develop hands-on experience that will grow a sustainable pipeline of AI specialists with good operational understanding. We will continue to leverage market solutions to integrate autonomy across a broader spectrum of applications for the RSAF, ensuring our unmanned systems are highly adaptable and mission-ready for any challenge."

The agreement was announced during the Singapore Airshow 2026, where Brandon Tseng participated in a panel on autonomy and human-machine teaming. Tom Schaefer, vice president of Hivemind engineering at Shield AI, spoke the same day at the Singapore Aerospace Technology and Engineering Conference, held on the sidelines of the airshow, on software-driven autonomy for next-generation defense systems.

TEXTRON SYSTEM' DAMOCLES LOITERING MUNITION SELECTED FOR US ARMY LASSO CONTRACT

Textron Systems Corporation, a Textron Inc. company, announced today it was awarded a prototype agreement from the U.S. Army for the Low Altitude Stalking & Strike Ordnance (LASSO) program. Under the prototype agreement, Textron Systems will deliver a DamoclesTM loitering munition system and demonstrate it to the U.S. Army.

The DamoclesTM loitering munition, equipped with Textron Systems' advanced GEN2 Explosively Formed Penetrator (EFP), is a cutting-edge system designed to deliver decisive lethality in peer warfare environments. For the LASSO program, the Damocles system is integrated with a vertical take-off and landing (VTOL) uncrewed aircraft system (UAS) to deliver top-attack capability. In the VTOL configuration, no launch or recovery equipment is required.

The Damocles system is built with a modular open systems approach (MOSA), allowing other payloads to be integrated into the system to support various concepts of operation (CONOPS), such as electronic warfare effects.

For operational safety, the system includes features to prevent unexploded ordnance (UXO), reducing the risk of hazardous remnants on the battlefield.

"Loitering munitions technology will be key in protecting the warfighter on the battlefield – they allow warfighters to send systems like Damocles beyond-line-of-sight (BLOS) to engage a target from a safer standoff distance," said Henry Finneral, Senior Vice President, Weapon Systems. "Textron Systems is proud to support this mission and leverage our industry-leading EFP technology to provide next-generation capability at speed and at scale."

SHIELD AI SELECTED AS MISSION AUTONOMY PROVIDER FOR THE USAF CCA PROGRAM

Shield AI, the deep-tech company building state-of-the-art autonomy software products and aircraft announced its selection as a mission autonomy provider supporting the U.S. Air Force Collaborative Combat Aircraft (CCA) program. Shield AI was selected following a competitive evaluation to support mission autonomy Technology Maturity and Risk Reduction (TMRR) efforts for the program.

Under the program, Shield AI's Hivemind autonomy software has successfully integrated on Anduril's Fury (YFQ-44A) aircraft and is supporting system-level testing in preparation for flight demonstrations expected in the coming months.

"Shield AI is proud to be named a mission autonomy provider supporting the Collaborative Combat Aircraft program," said Gary Steele, CEO of Shield AI. "The Air Force is moving with urgency to explore how autonomy can reshape air combat, and we have spent

years preparing for this—building, testing, and flying mission autonomy in the real world. We will work relentlessly to deliver and to help advance the next era of airpower alongside the Air Force and its industry partners."

Hivemind is Shield AI's core artificial intelligence software that assumes the role of a human pilot or operator, enabling unmanned defense systems to sense, decide, and act. Unlike traditional autopilots that simply follow preplanned routes, Hivemind can reroute around no-fly zones, avoid or engage obstacles, respond to unexpected conditions, and complete missions safely and

effectively without human intervention.

"Delivering mission autonomy in real-world combat conditions is hard, which is why Shield AI has spent more than a decade building Hivemind and the technical and operational foundation to do it right," said Christian Gutierrez, vice president of Hivemind Solutions at Shield AI. "Our team brings proven experience fielding mission-critical autonomy on complex weapon systems, deep operational understanding across domains, and a development model built for speed. We value the opportunity to work with the U.S. Air Force on the future of mission autonomy."

Hivemind is Autonomy Government Reference Architecture (A-GRA) compliant, platform-agnostic, and has demonstrated A-GRA-aligned autonomy across multiple government and industry test efforts, including work with General Atomics' MQ-20 Avenger, Northrop Grumman's Talon IQ™ autonomous ecosystem, U.S. Navy BQM-177 test aircraft, and the Airbus UH-72A Lakota helicopter.

RHEINMETALL DEMOS THE FV-014 LOITERING MUNITION SYSTEM TO A POTENTIAL NATO CUSTOMER

Rheinmetall has successfully demonstrated its new FV-014 loitering munition system to a potential NATO customer. The demonstration took place on 18 February 2026 at the National Test Centre for Unmanned Aerial Systems of the German Aerospace Centre (DLR) in Cochstedt, Saxony-Anhalt. During the demonstration, the FV-014 loitering munition system (LMS) simulated various mission scenarios and attack flights. For Rheinmetall, the successful test marks another milestone in its loitering munition activities.

Rheinmetall's state-of-the-art LMS FV-014 is designed for dynamic combat deployment at ranges of up to 100 kilometres. The system combines high effectiveness against armoured and soft targets with state-of-the-art sensor technology, network capability and deployment options even in GNSS-jammed environments.

The FV-014 is designed as a true LMS, combining reconnaissance and effect in a single system. It supports tactical units in combating high-value point targets, such as combat vehicles, artillery positions or command vehicles, over long distances beyond the line of sight.

The system is launched from a launch container using a booster, but can also be deployed from a multi-launcher. After launch, the FV-014 unfolds its folding wings and transitions to aerodynamic flight. The system has an operational range of up to 100 kilometres with a flight duration of 70 minutes, providing sufficient time for observation, target selection and attack decision-making.

Operation and system integration : The FV-014 is initially designed as a portable system for use at troop level and is controlled via a user-friendly ground station that enables permanent human-in-the-loop control. The operator can identify targets, fly to them, launch a precise attack or abort the mission if conditions change.

Design and survivability : The FV-014 flight body follows a classic wing concept with electric propulsion and faceted structures to reduce signatures and enable high approach speeds in the target area. The system is optimised for low acoustic and thermal signatures and can also be used in electromagnetically demanding scenarios with disrupted satellite navigation.

RAYTHEON'S NON-KINETIC COYOTE VARIANT DEFEATS MULTIPLE DRONE SWARMS
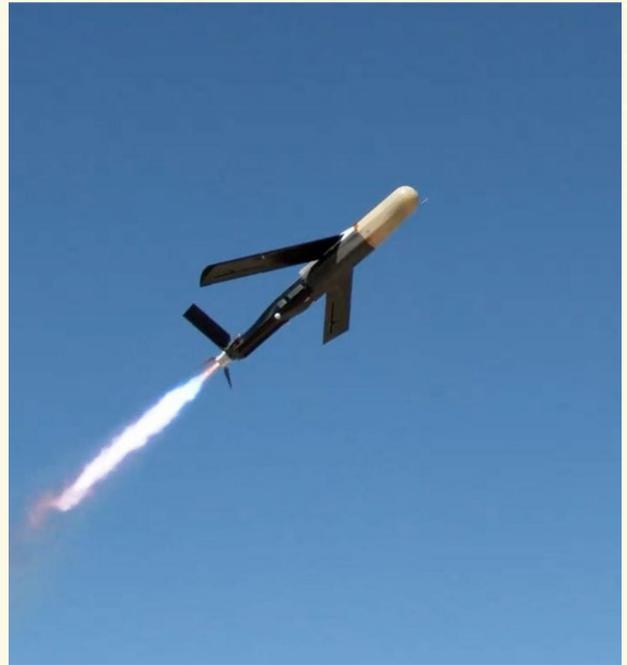
Raytheon, an RTX business successfully showcased the capabilities of Coyote® Block 3 Non-Kinetic (NK) during a recent U.S. Army demo. The system defeated drone swarms launched during the exercise and demonstrated exceptional launch, flight, intercept, and recovery capabilities.

Coyote Block 3NK is a counter-unmanned aircraft system that can loiter and defeat drone swarms by using a non-kinetic payload that minimizes the potential for collateral damage. The system can then be recalled and redeployed for additional engagements. Raytheon produces both kinetic and non-kinetic Coyote variants that defeat small to large drone systems at longer ranges and at higher altitudes than similar class effectors.

"Coyote provides warfighters a cost-effective defense for individual drones and swarms," said Tom Laliberty, president of Land & Air Defense Systems at Raytheon. "We continue to invest in Coyote's combat-proven capabilities, ensuring that allies around the globe gain an affordable operational advantage over sophisticated and evolving drone threats."

Raytheon was recently awarded its largest counter-drone contract ever as part of the U.S. Army's LIDS program, short for Low, slow, small-unmanned aircraft Integrated Defeat System. To support growing global demand for affordable and proven counter-drone systems, the business has invested significantly in Coyote kinetic variant production and performance enhancements to keep pace with next-generation threats. These upgrades enable faster launches, higher speeds and greater range at higher altitudes to counter UAS threats that carry heavier payloads over longer distances.

HMS DUNCAN NEUTRALISES SWARMS OF DRONES DURING QINETIQ EXERCISE

QinetiQ has successfully delivered Sharpshooter a four-day, live-firing exercise off the Welsh coast, with Royal Navy personnel facing drone attacks, replicating real-life threats.

Working in collaboration with Fleet Operational Standards and Training, QinetiQ managed a challenging and dynamic training environment that saw HMS Duncan having to defend itself while facing a number of simultaneous threats.

The ship was put through its paces in a scenario designed by Inzpire, a QinetiQ-owned company that specialises in creating immersive and realistic military training solutions. Live and synthetic drones, including QinetiQ's Banshee Whirlwind aerial targets and Hammerhead uncrewed surface vehicles were used to target the ship alongside simulated threats such as cruise missiles, anti-ship ballistic missiles and an assortment of enemy aircraft to increase the intensity of the attack.

The training environment at MOD Aberporth tested the full spectrum of the ship's offensive and defensive capabilities from initial detection to neutralisation - both in the day and overnight - replicating real-life deployments.

The crew successfully met their objectives, tracking and neutralising five aerial targets, as well as sinking two

Hammerheads. Will Blamey, Chief Executive, UK Defence, QinetiQ, said: "We are proud to deliver dynamic, real-life scenarios that best prepare our armed forces for the complex warfare challenges of today and tomorrow.

"Our combination of live and synthetic threats mean we can deliver training scenarios that provide the very latest in threat representation, helping our warfighters to achieve mission-readiness at pace."

Commander Dan Lee, UK Royal Navy, said: "The realism of Sharpshooter, particularly the engagement of dynamic moving targets using operational procedures,

gave my Ship's Company the opportunity to prove they are ready to defend, ready to fight and ready to win. My team fully embraced the challenge and leave this exercise more confident, more capable and better prepared."

QinetiQ provides test and training to the UK armed forces, designing and delivering exercises across land, air, sea and cyber. In December, the Netherland Navy's HNLMS Evertsen took part in another QinetiQ-run exercise, strengthening training alignment across NATO members to improve collective readiness.

KNDS AND TYTAN DEVELOP C-UAS SOLUTIONS

KNDS and TYTAN Technologies (TYTAN) are expanding their existing collaboration in the field of drone defense for military land systems and operational solutions. In the presence of the Federal Minister for Economic Affairs and Energy, Katherina Reiche, the Memorandum of Understanding (MoU) was signed on February 6, 2026, by Balázs Nagy, CEO and Co-founder of TYTAN and Mathias Nöhl, Executive Vice President for Digitalization at KNDS.

The collaboration follows on the successful integration of TYTAN's kinetic Interceptor-S into the compartment box of the BOXER RCT30. The fully integrated system has been showcased during the Bundeswehr's Experimentalserie Land in Munster/Bergen during fall 2025. Now KNDS and TYTAN commit to collaborate to field those solutions to protect KNDS land systems and their crews from unmanned aerial

threats using TYTAN counter drone-on-drone technology.

The cooperation will also cover the joint development the new European standard for mobile UAS launch solutions well as the further development of C-UAS (Counter-Unmanned Aircraft Systems) technologies in the fields of military base protection and frontline air defence.

Balázs Nagy: "Two companies with a clear track record of battle-proven systems are joining forces to set the standard in C-UAS systems. We strongly believe in the synergy of innovation at scal in partnership with a strong industrial parter."

KNDS and TYTAN have been working together successfully since 2025. KNDS international presence and battlefield-proven land systems footprint form a perfect combination with TYTAN's specialized C-UAS

systems and expanding drone-on-drone air defence layers.

"As a leading European provider of land systems, we are convinced that agile and innovative companies like TYTAN and KNDS are an ideal fit to drive the integration of new, innovative solutions and offer soldiers the best possible systems," Mathias Nöhl adds.

Katherina Reiche, Federal Minister for Economic Affairs and Energy, emphasizes in this context: "Drones are enablers. As dual use systems, they protect critical infrastructure while at the same time contributing to the defence against hostile aerial threats in Ukraine.This technology is not developed at a desk alone. Its evolution is shaped by real operations, by experience from the field, including Ukraine, and by the willingness to take responsibility and accept risk. Only this creates real capability."

BAE TO PARTNER WITH TECH START UP ON COUNTER DRONE TECHNOLOGIES

B AE Systems has signed a Memorandum of Understanding (MoU) with defence firm Frankenburg Technologies to explore collaboration opportunities, with an initial focus on addressing the growing challenges of drone warfare.

Both companies will explore opportunities to combine their expertise to accelerate the development of warheads for Frankenburg's intended mass producible, low-cost missile systems for use in counter drone operations, as well as exploring other future technologies for development.

"Collaborating with innovative companies like Frankenburg Technologies enables us to accelerate the development of advanced, affordable solutions that meet the evolving needs of our customers."

"By bringing together our proven munitions expertise with Frankenburg's disruptive missile technology, we're helping to deliver the next generation of counter drone capability at pace to stay ahead of emerging threats." Scott Jamieson, Managing Director of BAE Systems' Maritime & Land Defence Solutions business

"This partnership marks a powerful step forward for the UK defence ecosystem. By bringing together Frankenburg's agility and rapid innovation with BAE Systems' scale, industrial depth and global reach, together we're creating the conditions for new technologies to move from concept to capability far faster."

"I am proud that this MoU further highlights the UK as a place where SMEs and primes can collaborate to deliver the next generation of sovereign capability." Dan Hallett, Managing Director of Frankenburg Technologies

This collaboration is part of BAE Systems' wider work harnessing its established industrial scale and defence expertise to support disruptive small and medium-sized enterprises in driving technological advancement and performance at pace.

DRONE DEFENCE UNVEILS AEROSTRIKE HIGH-SPEED COUNTER-UAS INTERCEPTOR

D rone Defence has announced the launch of its new AeroStrike high-speed interceptor designed to counter hostile unmanned aerial systems (UAS). The AeroStrike represents a next-generation solution aimed at addressing rapidly evolving drone threats with improved engagement speed, accuracy and flexibility.

The AeroStrike interceptor is engineered to rapidly engage small and agile drones at close to medium ranges. It combines advanced detection, tracking and guidance technologies to autonomously detect an incoming aerial threat, lock on and intercept at high velocity. This capability enables faster response times and improved hit probability against fast-moving targets, including those used in swarm tactics or low-altitude incursions.

Key design features include a lightweight yet robust airframe optimised for quick launch and agile manoeuvrability. The propulsion and targeting systems are tailored for rapid acceleration and precise intercept trajectories. This makes AeroStrike suitable for deployment from ground-based launcher platforms integrated with counter-UAS sensor networks, or adapted for mobile defensive units requiring flexible, rapid engagement capability.

The development of AeroStrike comes amid a broader global shift toward autonomous and scalable counter-drone systems. As drone technology becomes more accessible and adversaries increasingly deploy both commercial and custom-built unmanned systems in conflict zones, defence organisations are prioritising solutions that can neutralise threats quickly without significant collateral risk. High-speed interceptors like AeroStrike aim to fill this operational gap by providing a kinetic countermeasure that effectively engages threats before they can pose harm.

In addition to kinetic interception, the system's architecture is designed to integrate with layered air defence frameworks. This allows operators to combine AeroStrike engagements with other mitigation methods such as electronic warfare or jamming, depending on mission requirements and rules of engagement. Integration with existing radar and sensor systems enhances situational awareness and target hand-off, enabling coordinated defence actions across multiple platforms.

Drone Defence says that AeroStrike is suited not only for military deployments but also for protecting critical infrastructure, sensitive facilities and high-value assets where drone incursions pose security risks. The ability to rapidly neutralise threats and seamlessly integrate into broader counter-UAS operations makes it a compelling addition to modern airspace defence portfolios.

With demand for advanced counter-drone capabilities rising worldwide, systems like AeroStrike reflect a growing emphasis on speed, autonomy and interoperability in counter-UAS engagement strategies.
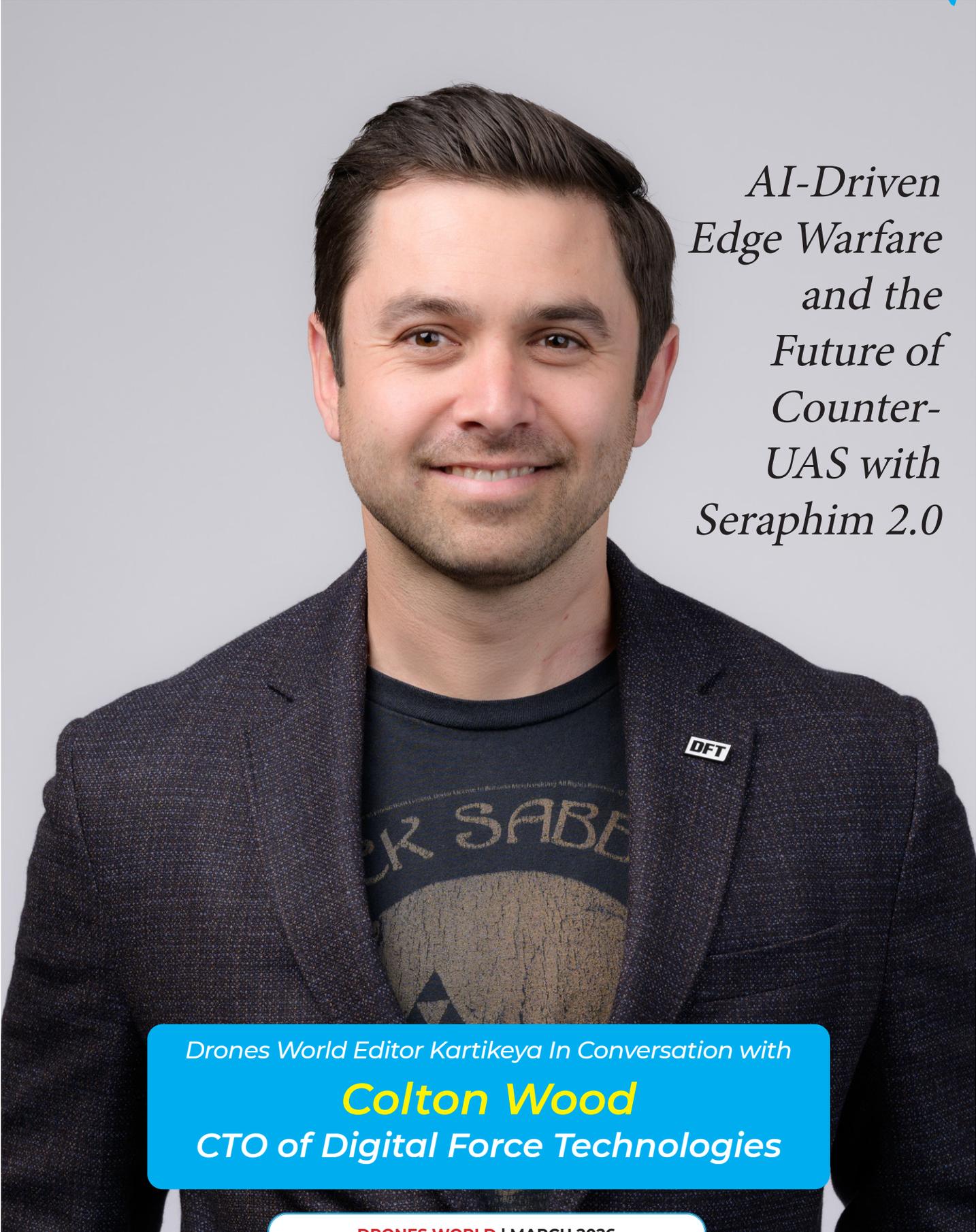
AI-Driven Edge Warfare and the Future of Counter-UAS with Seraphim 2.0

Drones World Editor Kartikeya In Conversation with

Colton Wood
CTO of Digital Force Technologies

Q Seraphim 2.0 is positioned as a full kill-chain counter-UAS platform. How does it technically fuse multi-sensor data in real time while maintaining low latency and decision accuracy in contested or disconnected environments?

A Seraphim is an edge-based sensor processing and fusion architecture which enables real-time assessment, classification, and threat analysis. This approach shortens the "sense to make sense" decision loop and avoids reliance on vulnerable and latent communication layers.

Q With the integration of Seraphim and Leonidas HPM, how do you ensure safe, auditable AI-enabled decision-making from detection through non-kinetic defeat, particularly in complex urban or critical infrastructure scenarios?

A The Seraphim 2.0 release includes Digital Force Technologies' Engagement Decision Engine allowing the operator to intelligently decide when and how to engage the threat. The AI-based system provides the operator with recommended courses of action based on the fused multi-modal sensing data. The system is highly configurable with pre-mission planning to set rules of engagement, "no fire" zones, and location specific safety guidelines to help ensure effects are deployed safely. Additionally, the integration with Epirus' Leonidas provides a precision defeat system that is able to direct energy only at the identified threat mitigating collateral effects.

Q AI at the tactical edge is becoming central to modern defense systems. How does DFT manage model validation, updates, and resilience against adversarial tactics while maintaining operator trust?

A Utilizing AI at the tactical edge is critical for Seraphim 2.0's autonomous assessment and classification of threats. Digital Force

> "We are building a high-confidence 'human before the loop' experience that hyper-enables our warfighters to execute complex taskings at machine speed."

Technologies' approach balances lab testing and verification with extensive operational assessments and frequent warfighter feedback allowing rapid iteration of the models while instilling operator confidence in the system. This approach has been successfully validated in real-world operations.

Q Seraphim is designed to be sensor- and effector-agnostic. What architectural choices enable rapid integration of new sensors or effectors without compromising system stability or cybersecurity?

A Seraphim is built on an open, standards-based plugin architecture with dedicated modules for handling new sensors and effectors. The modules handle the individual subsystems which are isolated from other core system elements. Seraphim supports common data formats and provides a flexible SDK that can extend format support rapidly without impacting the security of the system.

Q As drone threats evolve toward autonomous swarms and low-observable systems, what are the top technical priorities for DFT over the next 3–5 years to stay ahead of adversary adaptation?

A Digital Force Technologies is focused on reducing the cognitive load leveraging tactically relevant AI and advanced sensor fusion to increase the 'speed to action' for operators combatting advanced drone threats. The current model of singular drone engagement and heavy user interaction to defeat threats does not scale when trying to defeat a swarm. DFT is building a high confidence "human before the loop" experience that hyper enables our warfighters to execute complex taskings at machine speed.

ECHODYNE TO OPEN NEW FACILITY TO PRODUCE 30,000 COUNTER-UAS RADARS ANNUALLY

EchoDyne has announced plans to build a new manufacturing plant dedicated to producing large volumes of its counter-UAS radar systems, with an annual output expected to reach 30,000 units. The initiative aims to scale production to meet rapidly growing global demand for affordable, high-performance radar sensors used in detecting and tracking small unmanned aerial systems.

The expanded facility will significantly boost capacity for EchoDyne's proprietary radars, which are designed to provide reliable detection of small, low, slow, and hard-to-detect drones — a class of threats that traditional air defence radars often struggle to spot. These specialized sensors are widely used as a core component of layered counter-UAS architectures, feeding accurate airspace data to command-and-control systems and other mitigation technologies.

EchoDyne's leadership has highlighted the importance of scalable domestic production amid rapidly evolving threat environments. With small unmanned systems increasingly employed for reconnaissance, disruption and weaponised missions around the world, governments and private security customers alike are investing in radar-centric detection capabilities that can integrate into broader defence networks.

The new plant is expected to house advanced automated production lines, quality assurance labs and assembly cells capable of streamlining high-volume manufacturing while maintaining performance standards. By localising production and leveraging automated processes, EchoDyne aims to reduce costs, improve supply chain resilience and accelerate delivery timelines — factors that are increasingly valued by defence procurement agencies under pressure to field counter-UAS technologies quickly.

EchoDyne radars are typically compact and modular, designed for easy installation on fixed, mobile or expeditionary platforms depending on mission needs.

The sensors use a combination of digital signal processing and modern antenna architectures to reliably detect low-observable UAVs at meaningful ranges, enabling early warning and tracking for decision makers in defence and critical infrastructure protection roles.

Industry analysts note that the counter-UAS radar segment has seen explosive interest as nations prioritise airspace sovereignty and protection of key facilities. EchoDyne's production expansion is intended to position the company as a major supplier capable of meeting both domestic demand and international orders without long lead times.

The manufacturing project will also support workforce growth in the region, creating new jobs in engineering, production and quality control. EchoDyne says the facility will foster innovation and allow closer collaboration between its research teams and manufacturing operations, shortening development cycles for future product enhancements.

By scaling up production to the tens of thousands of units per year, EchoDyne aims to ensure that more organisations can access capable detection sensors — a foundational element of effective counter-UAS systems — and strengthen layered defences against the increasing prevalence of unmanned aerial threats.

PARSONS DEPLOYS DRONEARMOR COUNTER-UAS SYSTEM TO U.S. SOUTHERN BORDER

Parsons Corporation has deployed its DroneArmor™ counter-unmanned aircraft system (C-UAS) to strengthen security operations along the U.S. southern border. The system is now operational following government testing and validation, supporting efforts to counter unauthorized and potentially malicious drone activity in the region.

DroneArmor is a modular, military-grade platform designed to detect, track, identify and mitigate unmanned aerial threats. The system integrates radar, electro-optical and infrared sensors with radio frequency detection capabilities to provide comprehensive situational awareness. Powered by artificial intelligence and machine learning algorithms, DroneArmor can prioritise multiple airborne threats simultaneously while reducing operator workload.

The deployment comes amid increasing concerns about the use of small drones
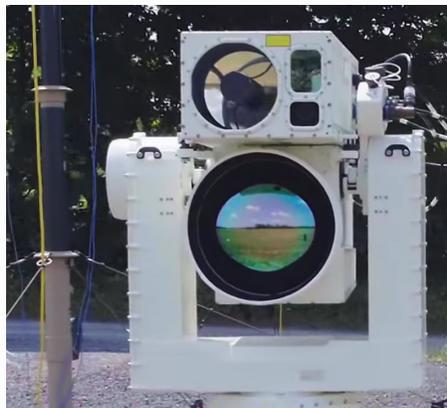
for surveillance, smuggling and other illicit activities near sensitive border areas. Traditional airspace monitoring tools are often insufficient to counter low-flying, small unmanned systems, creating demand for specialised counter-UAS technologies that can respond rapidly and operate continuously.

DroneArmor supports a range of mitigation options, including non-kinetic

techniques such as radio frequency disruption, depending on mission requirements and rules of engagement. Its scalable architecture allows integration into broader security and command-and-control networks, enabling coordinated response across agencies.

By deploying this system at the southern border, federal authorities are reinforcing layered defence strategies designed to address evolving aerial threats. The move reflects a broader national trend toward investing in autonomous and AI-enabled counter-drone solutions capable of operating in complex and high-traffic environments.

For Parsons, the deployment demonstrates operational readiness of its counter-UAS technology in real-world conditions. As drone proliferation continues, integrated systems like DroneArmor are expected to play an increasingly important role in protecting personnel, infrastructure and national security interests.

ALLEN CONTROL SYSTEMS EXPANDS OPERATIONS TO MEET SURGING DEMAND FOR BULLFROG COUNTER-UAS PLATFORM

Allen Control Systems is expanding its operational footprint in Austin, Texas, to accelerate production of its flagship Bullfrog autonomous counter-UAS system, responding to growing military demand for advanced counter-drone capabilities.

The company has significantly increased the size of its Austin facility, enabling enhanced low-rate initial production, expanded research and development activities, and integrated testing and evaluation. The upgraded infrastructure is designed to support faster delivery timelines to U.S. and allied defence customers as counter-drone requirements continue to intensify globally.

Bullfrog is an AI-enabled autonomous weapon station engineered to transform conventional or modern weapon platforms into highly precise counter-drone systems. By integrating artificial intelligence, computer vision and proprietary fire-control software, the system can automatically detect, track and engage hostile unmanned aerial systems with minimal human intervention. This capability is particularly critical in

countering fast-moving or swarm-based drone threats that can overwhelm traditional defence setups.

Company leadership has emphasized that the expansion is a strategic move to keep pace with evolving battlefield realities. Small unmanned systems have become a persistent threat across conflict zones, driving urgent demand for scalable, adaptable and rapidly deployable counter-UAS solutions. As adversaries increasingly leverage commercially available drones for surveillance and attack roles, autonomous defensive

systems are becoming central to force protection strategies.

The Austin expansion will also support workforce growth, with additional engineering, manufacturing and systems integration roles expected to be created. By strengthening domestic production capacity, the company aims to ensure supply chain resilience while delivering high-performance counter-drone systems at speed.

The move reflects a broader industry shift toward AI-driven autonomy in defence platforms. Modern militaries are prioritizing layered airspace protection architectures that combine detection, tracking and neutralization in a single integrated framework. Bullfrog's autonomous engagement capability positions it as a key solution in this evolving defence ecosystem.

As global drone proliferation continues, Allen Control Systems' expanded production capacity signals both confidence in market demand and a long-term commitment to advancing next-generation counter-UAS technology.

U.S. DEPARTMENT OF DEFENSE OPENS COUNTER-UAS MARKETPLACE TO ACCELERATE PROCUREMENT

The U.S. Department of Defense (DoD) has officially launched its Counter-Unmanned Aircraft Systems (C-UAS) Marketplace, marking a significant step toward modernizing and streamlining the procurement of counter-drone technologies. The digital platform is now open for authorized users, providing a centralized hub where military and government personnel can access vetted C-UAS solutions more efficiently.

Spearheaded by the Joint Interagency Task Force 401 (JIATF-401), the marketplace is designed to simplify acquisition processes that have traditionally been complex and time-consuming. By consolidating approved products and services under a structured contracting framework, the initiative reduces administrative delays and enables faster deployment of critical counter-drone capabilities.

The platform features an extensive catalog of more than 1,600 approved systems and components, including detection

sensors, tracking radars, electronic warfare tools, kinetic and non-kinetic effectors, and integrated command-and-control solutions. Each offering has undergone evaluation to ensure compliance with operational requirements and performance standards. This allows authorized users to compare technologies, review specifications, and initiate procurement through an established contracting vehicle.

Access to the marketplace is restricted to credentialed government personnel using secure authentication methods such as Common Access Cards (CAC). Once inside the system, users can assess available solutions based on mission needs, enabling installation commanders and operational units to select

appropriate counter-UAS tools without launching separate contracting actions.

The creation of the marketplace reflects growing urgency within the defense community to address the expanding threat posed by small unmanned aerial systems. Drones are increasingly used for reconnaissance, surveillance, disruption, and potential weaponized operations by both state and non-state actors. As a result, rapid deployment of layered and adaptable airspace defense systems has become a strategic priority.

By adopting a centralized and digital procurement model, the Department of Defense aims to enhance operational agility, improve visibility across available technologies, and foster greater innovation within the defense industrial base. The C-UAS Marketplace is expected to play a key role in accelerating the fielding of advanced counter-drone capabilities across U.S. military installations and operational theaters worldwide.

Hybrid Propulsion, FAA 44807 Approval, and the Commercial Scale-Up Strategy of Parallel Flight Technologies
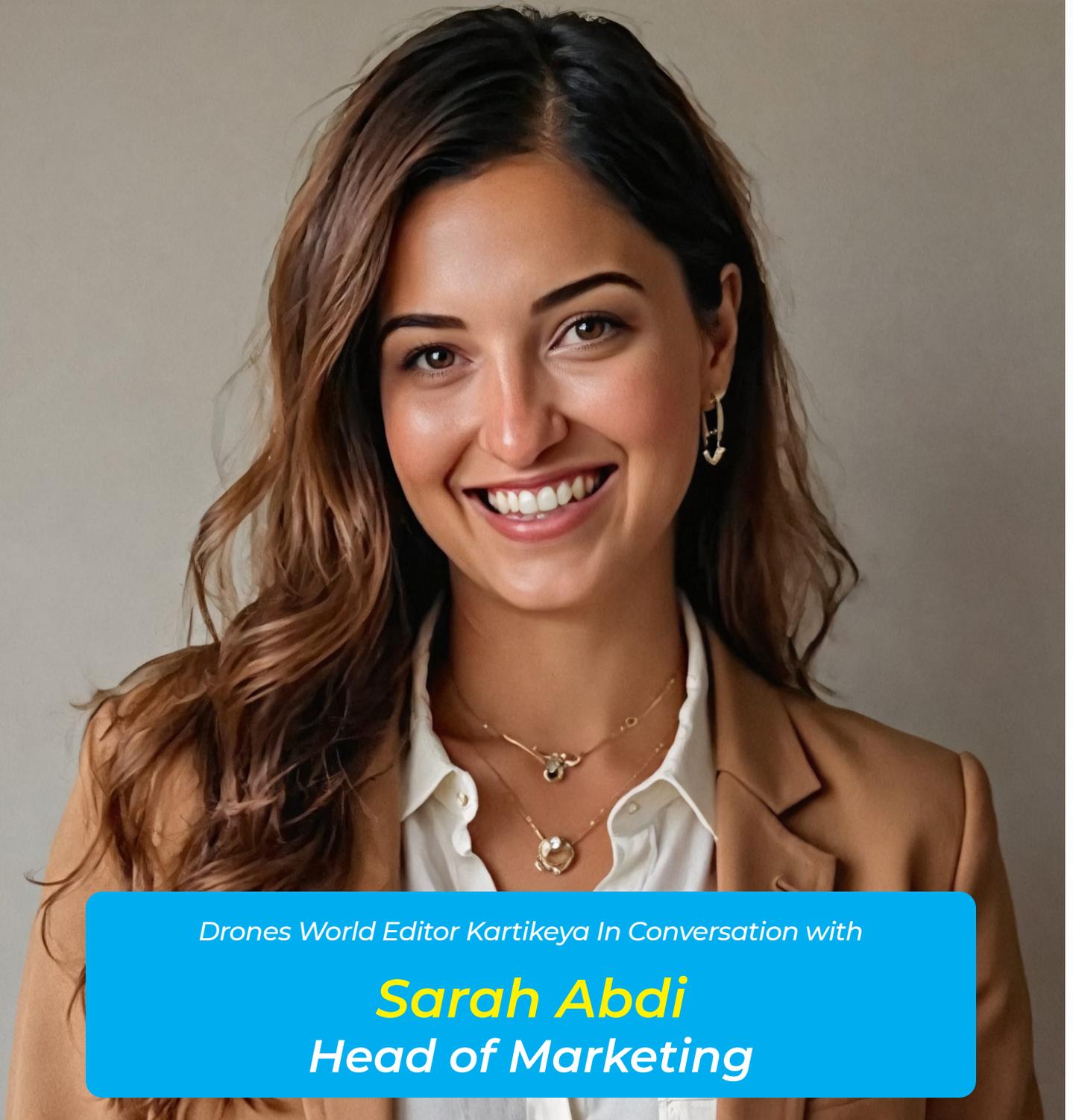
Drones World Editor Kartikeya In Conversation with

Sarah Abdi
Head of Marketing

Q Parallel Flight recently secured an FAA 44807 exemption. What specific operational limitations were lifted under this approval, and how does it change your commercial deployment strategy in the U.S. market?

A Historically, Firefly operated under FAA Certificates of Authorization (COAs), which restricted flights to development and test activities within designated airspace. The recently granted 49 U.S.C. §44807 exemption authorizes commercial operations in the United States.

However, operators are still required to obtain their own 44807 exemption to conduct operations with the aircraft.

This enables broader U.S. operations in applications like heavy sensor integration, remote logistics, and infrastructure support—missions that leverage Firefly's extended endurance and onboard power.

Strategically, it shifts us from test-based operations to scalable commercial deployment and allows us to convert pipeline into active U.S. revenue.

Q Firefly's Parallel Hybrid Electric Multirotor (PHEM) prop system is a key differentiator. How does hybrid architecture fundamentally outperform all-electric heavy-lift UAS in endurance, payload flexibility, and mission economics?

A Gasoline has roughly 14x the delivered specific energy density of today's batteries, which creates a fundamental endurance advantage. In essence, our energy storage is lighter than a battery option. Our Parallel Hybrid Electric Multirotor (PHEM) architecture captures that energy benefit while preserving the control precision of electric propulsion.

Unlike a serial hybrid, our parallel system distributes hybrid capability at each propulsor—think of it like a Prius at every rotor—allowing us to use combustion, electric, or both simultaneously depending on mission demand. That flexibility is how we achieve up to 10x the range of comparable all-electric heavy-lift UAS.

Beyond endurance, the architecture improves mission economics and reliability. We eliminate charging downtime, reduce cost per mission hour, and maintain full flight capability and redundancy even in the event of an engine failure.

Q With up to 100 lb payload capacity and extended endurance, which commercial sectors—wildfire response, logistics, utilities, defense—are showing the strongest near-term adoption signals?

A Defense is a natural near-term market for us, as it has historically been an early adopter of emerging technologies. We're also seeing strong signals in heavy sensor integration and geospatial survey work, where operators are often deployed in remote environments and need long endurance without charging infrastructure. Remote logistics is another high-potential sector, especially for missions requiring sustained lift capacity and reduced cost per delivery in austere or infrastructure-limited locations.

Across these sectors, the common thread is operating where endurance, payload, and mission efficiency materially change what's possible.

Q Heavy-lift UAS face unique safety and redundancy challenges. How did your safety architecture and reliability testing support the FAA's confidence in granting the 44807 exemption?

A Our proprietary propulsion and control architecture—built around a true parallel hybrid system—was designed from the ground up with fault tolerance in mind.

> "Hybrid propulsion isn't just about longer flight time — it fundamentally changes mission economics, logistics, and what's operationally possible in remote and high-stakes environments."

Each rotor system maintains independent hybrid capability, allowing continued controlled flight even in the event of an engine-related failure. That distributed redundancy is fundamentally different from centralized architectures and materially enhances operational resilience.

In addition, we've logged more than 3,400 hours of drivetrain testing, generating the reliability data and operational experience necessary to demonstrate system maturity.

Q Hybrid systems introduce fuel management, thermal considerations, and mechanical complexity. How have you engineered reliability and maintainability for field operations in remote or austere environments?

A We designed Firefly from the outset for modularity and field maintainability. Each propulsion arm is a self-contained module that can be swapped in under five minutes—whether for corrective maintenance or routine servicing. An aircraft-level overhaul can be completed in under 30 minutes using a standard toolkit, without requiring highly specialized technicians.

That modular architecture enables rapid maintenance -- it minimizes downtime,simplifies logistics, and supports sustained operations in remote or austere environments.

Operationally, this translates into greater than 96% platform availability. The aircraft can also refuel in under five minutes and return to flight immediately, eliminating charging cycles and enabling continuous mission tempo in the field.

Q As NDAA-compliant, U.S.-manufactured platforms gain importance, how do you see domestic production shaping procurement decisions across both commercial and DoD customers?

A Recent rulings and enforcement actions from the Federal Communications Commission, along with evolving policies within the Department of War (or DoW)., are accelerating the shift toward secure, domestically sourced platforms. Supply chain transparency, cybersecurity, and geopolitical resilience have become primary procurement criteria—not secondary considerations. Being U.S.-manufactured positions us

strongly as agencies and enterprises actively de-risk their vendor base.

That said, domestic sourcing does introduce cost pressures, particularly prior to achieving large production volumes. Some components remain difficult to source entirely within the U.S., but we've developed strong supplier partnerships to close those gaps and progressively strengthen our onshore supply chain.

Q Looking ahead, do you envision hybrid propulsion becoming the dominant architecture for Group 3 and heavy-lift UAS, or will battery density advances challenge that advantage in the next 3–5 years?

A While battery density will undoubtedly improve, there is still an elephant in the room that all electric systems require a HUGE amount of infrastructure. Extra batteries, generators, gas to power the generators, trailers to house all of this equipment, which make solutions like this less than ideal in remote scenarios. 10 gals of gas is equivalent to 880lbs for batteries - in a critical situation for wildfire, defense or disaster relief, it truly is not realistic to lug around 880 lbs of batteries, or a large generator to power even half of those batteries.

FORTEM WINS $18 MILLION U.S. ARMY CONTRACT FOR ADVANCED COUNTER-DRONE BASE PROTECTION

Fortem Technologies has secured a three-year, USD 18 million contract from the United States Army to deliver advanced counter-UAS (C-UAS) systems designed to protect military bases from emerging drone threats. The award reflects the Army's increasing focus on safeguarding personnel, infrastructure and critical assets against the rapid proliferation of hostile and unauthorized unmanned aerial systems.

Under the agreement, Fortem will supply its autonomous counter-drone solutions, including the company's DroneHunter® interceptor platform. The system is engineered to detect, track and intercept intruding drones using a net-based capture mechanism, enabling safe neutralization without explosive force or collateral damage. This approach aligns with modern defence requirements for precise, controlled engagements in complex operational environments.

The contract includes an initial delivery valued at approximately USD 4 million, marking the first phase of deployment under the programme. Alongside hardware supply, Fortem will provide technical support, system integration and field services to ensure sustained operational readiness across multiple Army locations worldwide.

Fortem's technology integrates advanced radar, AI-driven tracking software and autonomous interception capabilities. The system is capable of identifying multiple airborne threats simultaneously and responding to coordinated drone incursions, including potential swarm scenarios. Such scalability is increasingly critical as drone technology becomes more affordable, sophisticated and widely accessible.

Military planners have identified small unmanned systems as one of the most pressing security challenges on modern battlefields and within domestic installations. From reconnaissance missions to potential weaponized applications, drones present asymmetric risks that demand agile and layered defence solutions. Autonomous counter-drone systems are therefore becoming an essential component of base defence strategies.

This latest award strengthens Fortem's position in the rapidly expanding counter-UAS sector. As defence forces worldwide accelerate investments in drone detection and mitigation technologies, companies offering integrated, AI-enabled and non-kinetic interception systems are expected to play a central role in shaping the next generation of airspace security frameworks.

The contract underscores the U.S. Army's commitment to staying ahead of evolving aerial threats while prioritizing safe, controlled and technologically advanced defensive measures.

FORTEM TO DEPLOY DRONEHUNTER COUNTER-UAS INTERCEPTORS AT U.S. WORLD CUP VENUES

Fortem Technologies has been selected to deploy its DroneHunter® counter-unmanned aircraft systems to protect U.S. venues during the 2026 FIFA World Cup. The deployment forms part of a broader homeland security effort to safeguard one of the world's largest sporting events from unauthorized drone activity.

The 2026 tournament, co-hosted by the United States, Canada and Mexico, is expected to draw millions of spectators across multiple U.S. cities. With large crowds and global media attention, security planners have identified small unmanned aerial systems as a growing risk, whether for surveillance, disruption or malicious intent. As a result, advanced counter-drone capabilities are being integrated into venue protection strategies.

Fortem's DroneHunter system is a net-based autonomous interceptor designed to capture rogue drones in mid-air rather than destroy them with explosive force. The platform works in coordination with radar detection and command-and-control software to identify, track and safely intercept unauthorized drones above protected areas. This net-capture approach is particularly suited to crowded environments where debris or collateral damage must be avoided.

The deployment includes ground-based radar units to provide continuous airspace monitoring, along with autonomous interceptor drones capable of engaging aerial threats rapidly. The integrated system offers layered defence, combining detection, tracking and mitigation within a single operational framework.

Fortem has previously supported major international events with its counter-UAS technology, and the upcoming World Cup deployment represents another high-profile application of its systems. The selection highlights growing reliance on autonomous, precision-based counter-drone solutions for securing stadiums and large public gatherings.

As drone accessibility and capabilities continue to expand globally, event security strategies are evolving to address airborne risks alongside traditional ground-based threats. The integration of DroneHunter systems at World Cup venues underscores the increasing importance of proactive airspace management in protecting critical infrastructure and ensuring public safety during globally significant events.
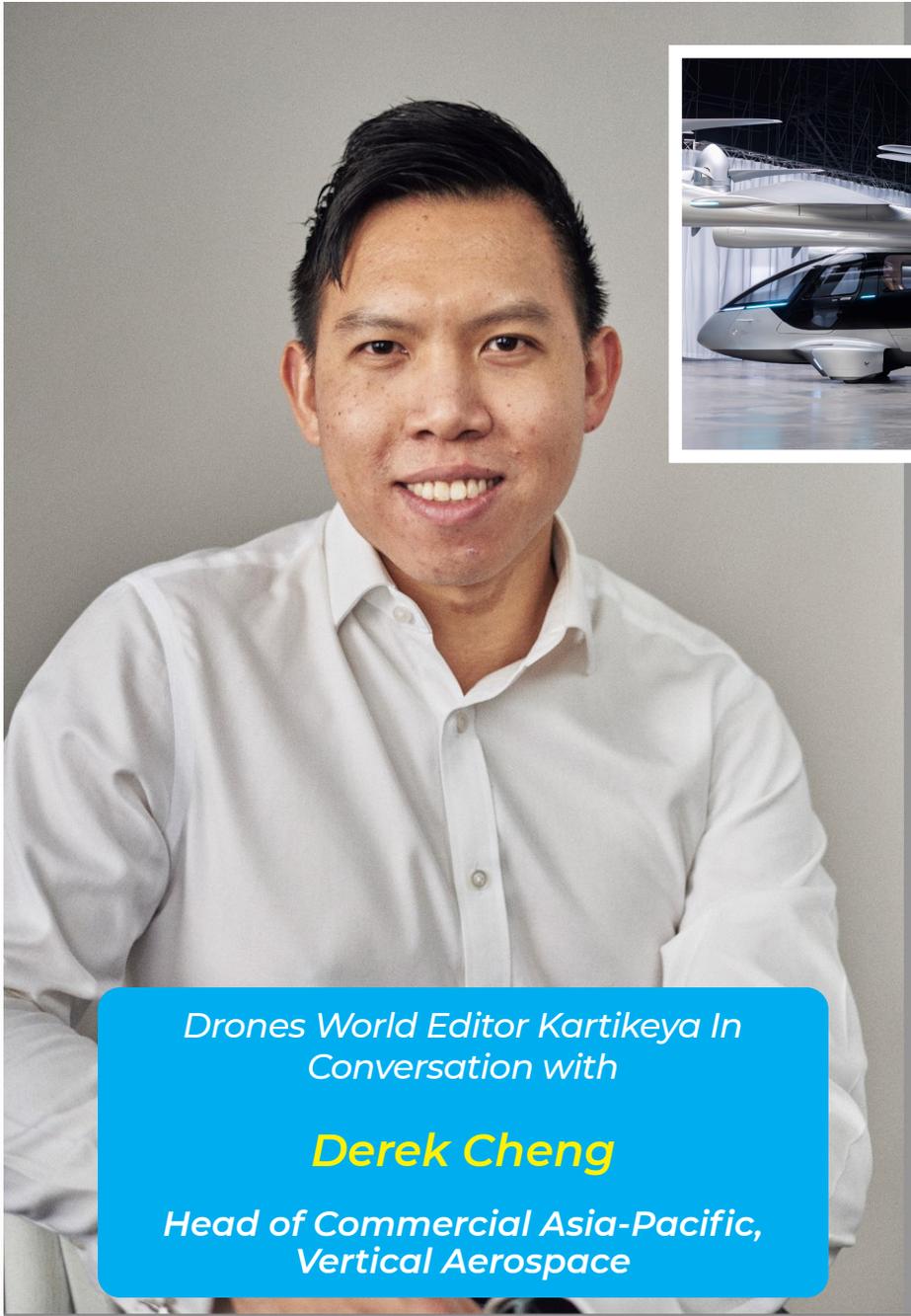
Drones World Editor Kartikeya In Conversation with

Derek Cheng

Head of Commercial Asia-Pacific, Vertical Aerospace

Q Japan is emerging as one of the most structured early adopters of advanced air mobility. What makes the partnership with Marubeni Corporation and the Osaka region strategically important for Vertical's global commercial rollout?

A We are proud to be partnering with Marubeni, a leading aerospace and industry conglomerate in the region, to develop a scalable AAM route network and make electric air travel a reality in Japan. In addition to pre-ordering up to 200 aircraft, Marubeni has also paid slot reservation fees for 25 aircraft, demonstrating their strong commitment to the partnership.

The Osaka region provides an ideal launch city, with dense urban populations, major commercial and tourism hubs, and government support for mobility innovation. Planned use cases for AAM include:

Tourism and sightseeing: Rapid access from major urban centres to scenic destinations such as Osaka to Awaji Island

Airport shuttles and integrated connections: Providing fast, first- and last-mile connections between cities and major regional airports, significantly reducing journey times for travelers, including between Kansai International Airport and Osaka City, Kobe Airport and Kansai International Airport, and Awaji Island to Osaka City

Emergency Services: Medical transfers within Osaka

Customer demand in Japan represents nearly one-fifth of Vertical's global order book, positioning the country as a key early launch market in the APAC region. Our partnership with Marubeni underscores our deliberate, step-by-step approach to developing real-world Valo operations, with a strong focus on safety, certification, and public acceptance, laying the groundwork for a successful launch in this strategically important market.

Q Piloted eVTOL demonstration flights in the Osaka Bay area are targeted for 2026. What operational and certification milestones must be achieved between now and then to transition from demonstrations to revenue-generating services?

A We remain fully committed to the Japanese market and target to bring
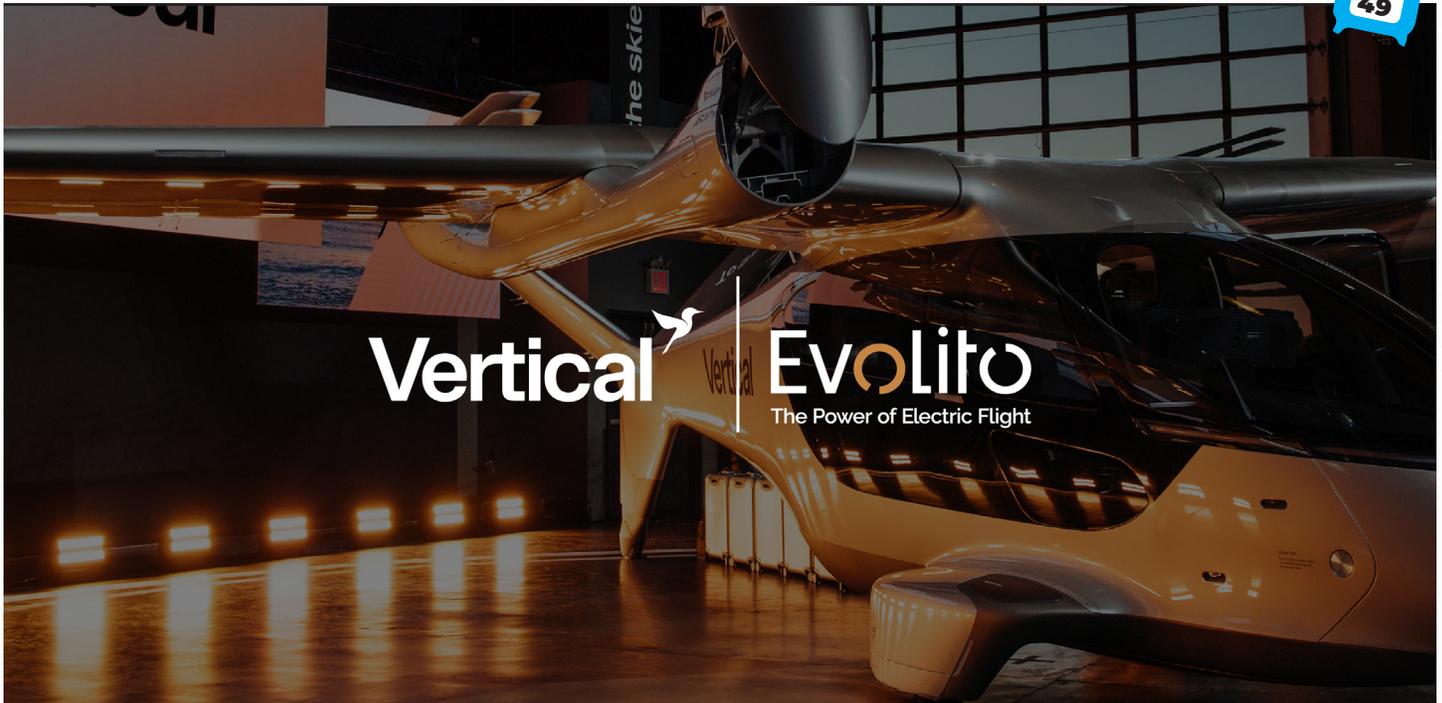
our aircraft prototype to Osaka Bay area to conduct piloted demonstration flights in 2026, subject to regulatory readiness and approvals.

In advance of this demonstration, we are focused on scaling execution and translating momentum into sustained commercial success.

This year we expect:

Piloted Transition Flight in the UK– the final flight phase. This is the critical de-risk of the technology platform and marks the defining capability of eVTOL aircraft. Successful transition proves the core flight dynamics and is a fundamental technical de-risk. When completed, Vertical will be only the second eVTOL OEM in the world to conduct piloted transition flight and the first under the strict regulatory scrutiny mandated in the UK/EU.

Completed build of our final prototype, to double our flight test capacity that will support our public demo flying efforts – such as in the Osaka Bay area, targeted for 2026. This will also serve as the prototype platform for our hybrid-electric flight tests.

Working closely with JCAB - We have started our engagements with the JCAB to provide regular updates on our piloted transition flight test campaign, and discuss the Japan Permi-to-fly demonstration flight regime.

Q **Your analysis suggests travel time reductions of up to 80% on key Kansai corridors. How do you see these time savings reshaping urban commuting, tourism, and large-event mobility in densely populated cities like Osaka?**

A We are working closely with Marubeni and other partners to develop a scalable AAM route network in Japan intended to reduce travel times by up to 80%. These travel time reductions will be totally transformative for urban commuting, tourism, and large-event mobility by taking journeys that take hours and turning them into minutes, especially when crossing the Osaka Bay region.

We see that our commercialisation roadmap in Japan could be replicable across the world, where Osaka will be a wonderful initial showcase for all of these different sectors.

Q **The Valo is positioned as a quiet, zero-emission aircraft designed to airliner-level safety standards, while a hybrid-electric variant is also in development. How do these two**

platforms complement each other in terms of range, mission profiles, and airline adoption?

A Vertical has developed a Valo aircraft family concept - with the all-electric to target certification in 2028, and with the hybrid-electric variant scheduled to follow in 2029. While the battery-powered aircraft is ideal for short missions (up to 100 miles), the hybrid-electric variant offers greater range/payload and mission flexibility to meet the diverse use cases and evolving needs of the Advanced Air Mobility market. The hybrid-electric variant targets to fly up to 1000 miles and carry a payload of up to 1200kg, opening up new opportunities in defence, logistics, emergency medical services, and wider commercial applications.

We believe both all-electric and its hybrid-electric variant will complement different mission end use cases. Our new customer JetSetGo, is evaluating how the hybrid-electric Valo variant could serve is Regional Air Mobility needs.

Q **With the Japan Civil Aviation Bureau accepting Valo into its type validation programme, how significant is this regulatory progress for Japan—and**

could it serve as a template for certification pathways in other Asia-Pacific markets?

A We are very excited to be working with the Japan Civil Aviation Bureau (JCAB), for the safe commercialisation and entry-into-service of Valo into Japan. Japan has demonstrated vision through its national AAM roadmap and real desire to make AAM a reality in Japan. We believe this will create a template for how we work with other regulators around the region. Given Valo will be certified to the highest global safety standards, we will be uniquely positioned to passport into other regions following certification.

Q Marubeni's pre-delivery payments to secure early delivery slots for the first 25 aircraft from a conditional 200-aircraft order signal strong confidence. What does this level of commitment say about operator readiness and investor sentiment toward eVTOL services today

A We are at a critical stage in a burgeoning AAM industry, where the 'hype' has faded and those with the

technical and operational readiness are emerging as industry frontrunners. Operators and investors are now able to assess the peer set across certain metrics like technology, capital efficiency, certification progress, and customer traction – all of which Vertical leads in. Confidence in the industry continues to rise and we are seeing increasing investment and operator & regulator readiness across the sector.

Q As airlines, infrastructure providers, and city authorities globally evaluate advanced air mobility, what is your key message to stakeholders

watching Japan closely as a potential blueprint market for commercial eVTOL deployment?

A Japan has always been forward leaning in terms of transport and urban mobility, and we believe that Japan is well-positioned to be of the lead adopters for AAM and eVTOLs in the world across several market use cases. Beyond the aircraft, we look forward to working with like-minded partners who share our vision to create the new AAM ecosystem - comprising air and ground infrastructure, charging solutions, as well as the aftermarket support and services for the safe EIS and scaling of AAM.

ANTI DRONES

ORIGIN ROBOTICS BEGINS BLAZE COUNTER-UAS DRONE DELIVERIES TO LATVIA, BELGIUM AND ESTONIA

Origin Robotics has commenced deliveries of its BLAZE autonomous counter-UAS interceptor drones to the armed forces of Latvia, Belgium and Estonia, marking a significant milestone in Europe's accelerating push to strengthen airspace defence capabilities.

The contracts for the BLAZE systems were secured in late 2025, with Latvia among the first to confirm procurement, followed by Belgium and Estonia. Initial batches are now being delivered, with additional units scheduled as part of phased rollouts. The relatively rapid turnaround from contract award to delivery reflects growing urgency among European nations to field effective counter-drone technologies in response to rising security challenges.

BLAZE is designed as a fully autonomous interceptor drone capable of detecting, tracking and neutralising hostile unmanned aerial systems, including high-speed targets and loitering munitions. The platform integrates advanced sensors, AI-driven computer vision and an onboard engagement mechanism to intercept aerial threats with precision. Engineered for operational flexibility, the system is compatible with NATO standards and can be integrated into layered air defence architectures.

Unlike traditional air defence systems that may rely heavily on fixed installations or high-cost missile interceptors, BLAZE offers a mobile and potentially more cost-effective solution for countering small, agile drones. Its autonomous operation allows rapid response times and reduced operator workload, which is particularly valuable when addressing multiple simultaneous threats.

National defence authorities in each of the three countries are expected to conduct evaluation and integration activities as the systems enter service. In Latvia, testing and assessment will support decisions on deployment strategies and interoperability within existing defence frameworks. Belgium and Estonia are also advancing integration efforts to align the new capability with their broader air defence networks.

The rollout underscores a broader trend across Europe: accelerating procurement cycles and greater investment in autonomous counter-UAS systems. As drone threats continue to evolve in complexity and scale, governments are prioritising adaptable, rapidly deployable technologies that enhance force protection and safeguard critical infrastructure.

For Origin Robotics, the commencement of deliveries strengthens its position within the European defence market and highlights the growing demand for innovative, AI-enabled counter-drone solutions.

CZECH CSG GROUP AND TÜRKIYE'S ASELSAN PARTNER ON COUNTER-UAS AND AIR DEFENCE PROJECTS

Czechoslovak Group (CSG) and ASELSAN have entered into a strategic partnership aimed at strengthening cooperation in counter-UAS and broader air defence programmes. The agreement outlines plans to establish a joint venture within the European Union to develop, produce and market advanced defence systems tailored to European and allied requirements.

The collaboration will focus on short-range air defence, counter-drone technologies, electronic warfare systems and smart munitions. By combining ASELSAN's expertise in defence electronics and combat-proven systems with CSG's manufacturing capabilities and European industrial base, the partnership seeks to deliver integrated and cost-effective solutions to address rapidly evolving aerial threats.

One of the key elements of the cooperation involves integrating ASELSAN's air defence technologies onto mobile platforms manufactured within the CSG portfolio. This includes adapting proven Turkish systems onto European vehicle platforms to create highly mobile and modular configurations capable of countering drones, helicopters and low-flying aerial threats. The emphasis is on providing scalable systems that can be deployed quickly and maintained within Europe.

A major objective of the partnership is localisation of production. Manufacturing, integration and lifecycle support activities are expected to be carried out at facilities in the Czech Republic and Slovakia. This approach supports European defence industrial resilience, reduces supply chain dependency and aligns with broader EU efforts to strengthen regional defence autonomy.

The collaboration comes amid heightened demand across Europe for layered air defence and counter-UAS systems. The proliferation of small unmanned aircraft and loitering munitions in modern conflicts has underscored the need for mobile, precise and economically sustainable engagement solutions. Gun-based air defence systems equipped with programmable ammunition are increasingly viewed as a cost-effective response to large volumes of low-cost drone threats.

For CSG, the partnership reinforces its position as a significant European defence industrial player, expanding its portfolio beyond vehicles and munitions into integrated air defence solutions. For ASELSAN, the venture strengthens its footprint within the European market and enhances its ability to align with NATO and EU procurement frameworks.

Together, the two companies aim to deliver next-generation counter-UAS and air defence capabilities that combine mobility, precision and industrial cooperation across allied markets.
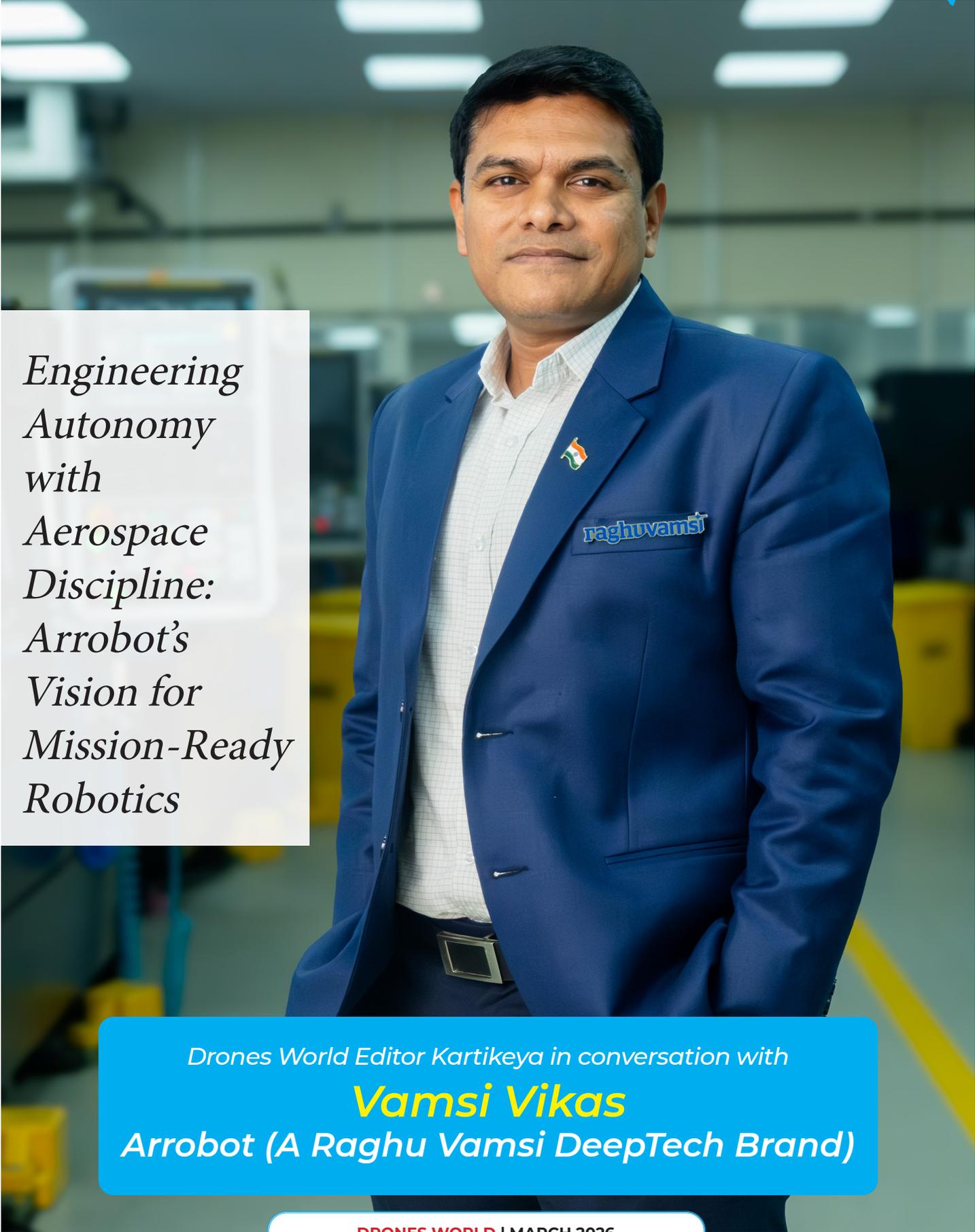
Engineering Autonomy with Aerospace Discipline: Arrobot's Vision for Mission-Ready Robotics

Drones World Editor Kartikeya in conversation with

Vamsi Vikas
Arrobot (A Raghu Vamsi DeepTech Brand)

> "Autonomy must enhance decision velocity, survivability, and mission repeatability. It must be rugged, interoperable, and engineered with the same discipline as flight-critical systems — not built as experimental technology."

Q Arrobot was founded to advance autonomous solutions for defence and industrial applications. What is your long-term strategic vision for unmanned and robotic systems in an increasingly AI-driven world?

A Arrobot was built on the execution discipline and engineering depth of Raghu Vamsi Aerospace Group. Our foundation is not experimental robotics, it is precision manufacturing, certification rigor, and program accountability developed in aerospace and defence.

As autonomy evolves, we see the shift from platform-centric products to mission-integrated systems powered by AI at the edge. The future lies in coordinated unmanned systems — aerial and ground that are operating reliably in contested and GPS-denied environments.

Our long-term vision is to combine Raghu Vamsi's legacy of reliability and lifecycle accountability with next-generation autonomy. Autonomy must enhance decision velocity, survivability, and mission repeatability. It must be rugged, interoperable, and deployment-ready that is engineered with the same discipline as flight-critical systems, not built as experimental technology.

Q Your portfolio includes unmanned ground systems and autonomous platforms. How do you see the convergence of aerial and ground unmanned systems shaping future battlefield and industrial operations?

A Future operations will require multi-domain coordination. Aerial systems do reconnaissance and targeting, while ground systems handle logistics, payload delivery, or tactical mobility. The points of convergence are common autonomy stacks, coordinated mission planning, and secure communications. The interoperability of air and ground systems will decide the scalability of industrial automation and the effectiveness of the battlefield.

Q Which core technologies — such as AI-driven autonomy, sensor fusion, secure communications, or edge computing — form the backbone of Arrobot innovation roadmap?

A Our fundamental technologies include AI-driven autonomy at the edge, secure and encrypted communications, reliable navigation systems, sensor fusion for real-time situational awareness, and modular payload integration. We appreciate autonomy that functions reliably even when it is denied or diminished. Robustness of both hardware and software is considered equally vital.

Q Mission-critical defence platforms require high reliability and ruggedization. How does Arrobot (A Raghu Vamsi DeepTech Brand) ensure operational robustness, testing validation, and lifecycle sustainment?

A The precision manufacturing experience of Raghu Vamsi Aerospace Group has improved Arrobot's operational robustness. Every system is built from the ground up with lifetime accountability, validation depth, and reliability based on engineering of the aerospace type. We employ coordinated design validation, subsystem redundancy frameworks, and stringent endurance and environmental

testing to satisfy defence-grade standards. Platforms are stress tested in controlled and real-world deployment scenarios to ensure robustness and repeatability.

Sustainability is not an afterthought; it is a natural part of the lifecycle. Modular architecture, field-replaceable units, configuration control, and upgrade pathways all contribute to long-term mission continuity. Performance comes second, reliability first, and mission assurance is never sacrificed for experimentation. We handle unmanned systems with the same level of care as flight-critical aircraft components since we are a Raghu Vamsi DeepTech trademark.

Q **As global demand for unmanned systems accelerates, what steps is Arrobot taking to position itself in international markets and align with global interoperability standards?**

A Arrobot's international positioning is anchored in the global export legacy of Raghu Vamsi Aerospace Group. The group has long operated within international aerospace supply chains where certification rigor, audit readiness, traceability, and lifecycle accountability are mandatory. That foundation gives us structural credibility in global markets.

We are aligning our unmanned systems with international interoperability standards, secure communication architectures, and modular integration frameworks to ensure

compatibility with allied defence ecosystems. Our export strategy is capability-led and program-oriented — built on reliability, compliance, and long-term participation rather than transactional sales.

Q **How important are partnerships with government agencies, defence forces, and technology collaborators in accelerating product development and deployment?**

A Partnerships are fundamental to accelerating deployment-ready innovation. In the last few months, Arrobot has formalized strategic MoUs with defence and technology stakeholders to co-develop and validate autonomous ground systems for mission-specific applications. These collaborations enable faster field testing, subsystem integration, and operational feedback loops.

Deep-tech robotics cannot scale in isolation. Structured partnerships ensure that autonomy stacks, secure communications, and rugged platforms are aligned to real deployment requirements rather than lab-based demonstrations.

Q **Talent is a major differentiator in deep-tech robotics. What strategies do you use to attract and retain highly skilled engineers in autonomy, robotics, and AI?**

A We attract engineers who want to build mission-critical systems, not prototypes. Our approach combines

challenging real-world problem statements, structured R&D frameworks, and exposure to defence-grade system validation. Retention comes from ownership—engineers see their work deployed in operational environments. That accountability creates commitment.

Q **Which segments of the unmanned ecosystem — surveillance, logistics, swarm systems, counter-UAS, or industrial automation — present the most immediate growth opportunities for Arrobot?**

A Surveillance and tactical logistics remain immediate opportunities, particularly in defence applications. Autonomous ground mobility for hazardous environments and industrial inspection also show strong growth potential. Swarm coordination and counter-UAS will evolve rapidly but require robust regulatory and operational frameworks.

From your perspective, what are the biggest barriers to widespread adoption of autonomous systems — regulatory, ethical, cybersecurity, or technological — and how should the industry address them?

Regulatory clarity, cybersecurity resilience, and trust in autonomous decision-making remain key barriers. Systems must be secure against electronic warfare and cyber intrusion. Ethical and operational doctrines need to evolve alongside technology. The industry must prioritize standards, validation transparency, and mission accountability over rapid but untested deployment.

SKYGRID AND TEXAS A&M CC TO RESEARCH COOPERATIVE SEPARATION FOR ADVANCED AIR MOBILITY TRAFFIC

SkyGrid and Texas A&M Engineering Experiment Station are partnering on a research project aimed at improving cooperative separation management for Advanced Air Mobility (AAM) traffic under a programme supported by the Federal Aviation Administration (FAA). The initiative focuses on developing technologies and operational concepts that enable safe and efficient spacing and conflict resolution among diverse aircraft — including drones, air taxis and other unmanned or piloted vehicles — as airspace becomes more crowded with new entrants.

The collaboration will evaluate algorithms, communications protocols and decision support tools that allow multiple aircraft to share airspace while maintaining safe separation distances, even when operating beyond traditional visual line of sight. This cooperative separation approach is expected to be essential as AAM operations scale, requiring more autonomous coordination between vehicles and with ground-based traffic management systems.

SkyGrid's expertise in airspace data platforms and autonomous traffic management will be combined with Texas A&M's research capabilities in aerospace systems and control theory to conduct simulations, prototype developments and real-world concept demonstrations. The research aims to address emerging challenges associated with mixed traffic environments, where manned aircraft, delivery drones and passenger-carrying AAM vehicles may operate concurrently across urban and regional corridors.

As Advanced Air Mobility evolves, cooperative separation methods are being investigated as a way to move beyond traditional air traffic control paradigms, which rely heavily on centralized oversight. Instead, the new concepts focus on distributed decision-making, interoperability between onboard and ground systems, and robust fail-safe measures that ensure safety even in complex or congested conditions.

The FAA programme supporting this work underscores regulators' interest in enabling future aviation frameworks that accommodate new types of vehicles and flight operations without compromising safety. By studying cooperative approaches, the research aims to provide insights into both the technical requirements and operational procedures needed for scalable AAM traffic management.

Industry stakeholders view such research as critical for unlocking the potential of AAM services — from on-demand passenger flights to automated cargo deliveries — which will require sophisticated coordination tools as airspace use diversifies. The partnership between SkyGrid and Texas A&M represents a step toward building the foundational technologies and standards that could underpin next-generation separation assurance systems in advanced aviation environments.

NETHERLANDS CONDUCTS BVLOS DRONE TRIALS FOR INCIDENT RESPONSE AHEAD OF NEW RULES

The Netherlands has begun testing beyond visual line of sight (BVLOS) drone operations for emergency and incident response missions as the country prepares new legislation to govern long-distance unmanned flights. These exercises represent proactive steps by Dutch authorities and operators to explore how BVLOS drones can support public services such as firefighting, search and rescue, and disaster assessment once formal regulatory frameworks are established.

Under the trials, authorised drone teams are flying BVLOS missions to simulate real-world response scenarios. Unlike standard visual line of sight flights where pilots must always see their aircraft directly, BVLOS operations allow drones to operate over extended distances without continuous visual contact, enabling rapid deployment to remote or congested areas. Practitioners are using advanced sense-and-avoid systems, satellite navigation and command-and-control links to ensure safety and separation from other airspace users during these flights.

Dutch aviation regulators and emergency services are closely monitoring the outcomes to better understand operational challenges, safety risks and infrastructure requirements associated with BVLOS missions. Lessons from the trials will help shape the government's forthcoming BVLOS legislation, which is expected to define certification standards, risk mitigation measures and operational procedures for routine beyond visual line of sight flights across differing classes of airspace.

The initiative also reflects coordination with air navigation service providers to assess how BVLOS drones can be integrated alongside manned aircraft safely. Participating teams are evaluating existing airspace management tools and communication protocols to identify gaps and opportunities for improvement ahead of formal rulemaking.

Industry stakeholders have welcomed the tests as a constructive step toward enabling advanced drone capabilities in public service roles. Emergency response organisations in particular see BVLOS flights as a way to improve situational awareness and response times during critical incidents, especially where ground access may be slow or hazardous.

While the Netherlands continues development of regulatory frameworks, the ongoing BVLOS trials demonstrate a forward-looking approach to balancing innovation with safety. By gathering empirical data and refining operational concepts now, authorities are better positioned to implement legislation that supports both aviation safety and effective use of unmanned systems for societal benefit.

MANNA SEEKS APPROVAL FOR BVLOS DRONE DELIVERIES IN CORK CONTROL ZONE

Manna Air Delivery has applied for permission to conduct beyond visual line of sight (BVLOS) drone flights within the Cork Air Traffic Control Zone, marking a significant step in expanding commercial drone delivery services in Ireland. If approved, the move would enable routine long-range operations over parts of Cork city under controlled airspace procedures.

The proposal is currently under review by the Irish Aviation Authority in coordination with AirNav Ireland. To accommodate BVLOS operations safely, authorities are considering the establishment of a UAS Geographical Zone (UGZ) within the Cork control zone. Such a designation would introduce specific operating requirements and coordination procedures for unmanned aircraft flying in the area.

Under the proposed framework, drone operators would need to submit advance coordination requests to air traffic control before conducting flights within the designated zone. This structured approach is intended to ensure safe integration between crewed aviation and unmanned aircraft operating beyond the pilot's direct visual line of sight.

BVLOS capability is critical for scaling commercial drone delivery services, as it allows operators to control aircraft over longer distances without maintaining constant visual contact. Manna has previously demonstrated large-scale delivery operations in Dublin and aims to replicate similar services in Cork, expanding access to rapid aerial delivery for residential and commercial customers.

However, the proposal has prompted discussion within the broader drone community. Some local operators have raised concerns about how airspace adjustments could affect recreational and professional visual line of sight drone flights. As part of the regulatory process, aviation authorities are engaging with stakeholders to assess the operational impact and determine whether the proposed airspace structure should be temporary or permanent.

Emergency and priority services will retain unrestricted access to the airspace, ensuring that search and rescue, medical and law enforcement operations are not impeded by commercial drone activity.

The application reflects a broader European trend toward enabling BVLOS drone operations within controlled airspace, balancing innovation in urban air mobility with stringent aviation safety standards.

VERSATERM ACQUIRES UTM SERVICE PROVIDER ALOFT TO EXPAND PUBLIC SAFETY DRONE CAPABILITIES

Versaterm has acquired Aloft, a U.S.-based unmanned traffic management (UTM) service provider, in a move aimed at strengthening integrated drone operations for public safety agencies. The acquisition brings together airspace authorisation services and operational drone management under a unified technology platform.

Aloft is a Federal Aviation Administration (FAA)-approved UAS Service Supplier (USS) and a key provider of Low Altitude Authorization and Notification Capability (LAANC) approvals, which enable near real-time flight authorisation for drones operating in controlled airspace. By incorporating Aloft's airspace intelligence and authorisation tools into its existing drone operations ecosystem, Versaterm aims to streamline mission planning and regulatory compliance for government and emergency response users.

The integration is expected to enhance Versaterm's DroneSense platform, widely used by law enforcement, fire services and emergency management agencies for drone fleet management and real-time situational awareness. With Aloft's UTM capabilities embedded directly into the system, agencies will be able to plan missions, secure flight approvals and monitor operations within a single interface, reducing administrative friction and improving operational efficiency.

Traditionally, public safety agencies have relied on separate tools for airspace authorisation and drone mission management, often requiring manual coordination between platforms. The acquisition addresses this fragmentation by creating a more seamless workflow that connects regulatory compliance with live operational data.

The move reflects a broader industry trend toward consolidating UTM services, compliance management and mission execution into comprehensive drone operation suites. As drone usage expands across emergency response, disaster management, search and rescue and infrastructure inspection, agencies are increasingly seeking integrated systems that ensure both operational readiness and regulatory adherence.

For Versaterm, the acquisition represents a strategic step in expanding its footprint within the drone technology ecosystem. By combining Aloft's airspace management expertise with its own public safety software capabilities, the company positions itself to deliver end-to-end drone solutions tailored for government and first-responder environments.

The transaction underscores the growing importance of UTM services in enabling safe, compliant and scalable drone operations across complex airspace environments.

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