

Global monthly magazine for Drones



DRONES WORLD

VOL 07 ■ ISSUE 8
OCTOBER 2026

UK - 15 € EUROPE - 22 € USA - 22 \$

www.dronesworldmag.com



**CHRISTIAN
HOLZER**

CEO & FOUNDER
ASO AIRSPACE SURVEILLANCE

Pg 41

MADE IN INDIA. BUILT FOR THE WORLD.

How AKSI Aerospace Is Pursuing
Global UAV Manufacturing



**KEVIN
BRUNDISH**

CEO, LionVolt

Pg 19



**PANKAJ
AKULA**

FOUNDER & MD
AKSI AEROSPACE GROUP

Pg 27



Arrobot
raghuvamsi deep tech

RV Rudra

(ICE Loitering Munition)



RV Lakshya

(High Speed Expendable Target)



RV Maya

(Jet Powered Bomber/ Decoy)



RV Dhristi

(Tethered Drone)



RV Astra

(Jet Powered Kamikaze UAV)

RV Yodha

(Unmanned Ground Vehicle)



www.arrobot.co

GA-ASI Mojave First UAS To Complete Battlefield Short Field Ops

Page 11



KNDS AND AERIX SYSTEMS ANNOUNCE A STRATEGIC COOPERATION TO DEVELOP A DRONE INTERCEPTION CAPABILITY

Page 14



Elroy Air Announces Bristow's Reservation of 10 Additional Early Delivery Positions for Chaparral Aircraft

Page 16



AV's Locust Selected for Nearly \$500M Army Counter-UAS Contract for Enduring-high Energy Laser (E-HEL) Program

Page 22

DIEHL DEFENCE AND ELBIT SYSTEMS SUCCESSFULLY DEMONSTRATED SKYSTRIKER'S CAPABILITIES

Page 24



KONGSBERG SELECTS ECHODYNE MESA RADAR FOR COUNTER-UAS WEAPON SYSTEMS

Page 26



RHEINMETALL DEMONSTRATES NETWORKED MARITIME UNMANNED SYSTEMS AT REPMUS26

Page 40

DRONES WORLD

VOL 07 | ISSUE 8 | OCTOBER 2026

Publisher ♦ Mr.Sankar Krishnamoorthy
Editor-in-Chief ♦ B. Kartikeya

EDITORIAL

Special Editor ♦ Naheda Imtiyaz
Correspondent ♦ B. Martin
CREATIVE HEAD ♦ Swati Sharma (Design Garage)
PHOTOGRAPHER ♦ Krishanth

MARKETING

Mr. Rohith
VP- Business Development - India & Global, +91 9035723494
Europe : Mr.Sankar Krishnamoorthy
sankar@dronesworldmag.com, +44 7855771217
dronesworld@gmail.com
Global : B. Kartikeya,
editorial@dronesworldmag.com | Mobile:- +91 94444 99221

SUBSCRIPTION

Manager, Subscription ♦ C.R.S SARMA, India & Global
+91 9440331463

FINANCE & ADMINISTRATION

Sr.Manager ♦ Karunandhi
Asst.Manager ♦ Md. Wajid Ali
Editorial & Advertising Offices

EDITORIAL & ADVERTISING OFFICES DRONES WORLD

126 Wheatfield Drive Bradley Stoke Bristol United Kingdom
BS32 9DD, For all magazine related enquires
E-mail: dronesworldmag@gmail.com

All information in Drones World is derived from sources, which we consider reliable and a sincere effort is made to report accurate information. It is passed on to our readers without any responsibility on our part. The publisher regrets that he cannot accept liability for errors and omissions contained in this publication, however caused. Similarly, opinions/ views expressed by third parties in abstract and/or in interviews are not necessarily shared by Drones World. However, we wish to advise our readers that one or more recognized authorities may hold different views than those reported. Material used in this publication is intended for information purpose only. Readers are advised to seek specific advice before acting on information contained in this publication which is provided for general use and may not be appropriate for the readers' particular circumstances.

Contents of this publication are copyright.

No part of Drones World or any part of the contents thereof may be reproduced, stored in retrieval system or transmitted in any form without the permission of the publication in writing. The same rule applies when there is a copyright or the article is taken from another publication. An exemption is hereby granted for the extracts used for the purpose of fair review, provided two copies of the same publication are sent to us for our records. Publications reproducing material either in part or in whole, without permission could face legal action. The publisher assumes no responsibility for returning any material solicited or unsolicited nor is he responsible for material lost or damaged. This publication is not meant to be an endorsement of any specific product or services offered. The publisher reserves the right to refuse, withdraw, amend or otherwise deal with all advertisements without explanation. All advertisements must comply with the International Advertisements Code. The publisher will not be liable for any damage or loss caused by delayed publication.

DRONES WORLD is published by - Real Future Media Ltd



B. KARTIKEYA

Hello Readers,

Beyond Drones: Powering the Next Era of Autonomous Aviation

The uncrewed systems industry is evolving rapidly, with advances in energy storage, artificial intelligence, autonomous navigation and manufacturing reshaping applications across commercial aviation, defence, infrastructure, agriculture and maritime operations. As these technologies mature, the focus is shifting from developing individual platforms to building reliable, integrated systems capable of operating at scale.

In this October 2026 issue of Drones World, we examine these developments through industry interviews, global news, defence updates, advanced air mobility and emerging autonomous technologies.

Our interview with Kevin Brundish, CEO of LionVolt, explores the role of next-generation battery technology in improving drone endurance, payload capacity and operational efficiency. As manufacturers seek longer flight times without increasing aircraft weight, advances in energy density, charging performance and battery safety could help determine the capabilities of future UAVs.

In our conversation with Pankaj Akula, Founder and Managing Director of AKSI Aerospace Group, we examine India's ambition to move beyond drone assembly towards integrated aerospace manufacturing. His vision encompasses UAV platforms, composites, batteries, autopilots, propulsion and imaging technologies, alongside plans to develop proprietary capabilities and international OEM partnerships. The discussion highlights the opportunity for Indian manufacturers to strengthen technological independence and compete in global aerospace supply chains.

Our third interview, with Christian Holzer, CEO and Founder of ASO Airspace Surveillance, addresses the importance of trusted aircraft identification in increasingly crowded low-altitude airspace. Through its UAID approach, ASO is exploring cryptographic identification to help strengthen confidence in aircraft identity as BVLOS operations and autonomous aviation expand.

Beyond these interviews, this issue covers developments across the wider uncrewed technology ecosystem. Our Global News section tracks industry announcements, acquisitions and emerging technologies, while Defence examines military UAV capabilities, collaborative combat aircraft, tactical systems and international industrial partnerships. The eVTOL and Advanced Air Mobility coverage explores electric air taxis, autonomous flight and the infrastructure required to support new forms of aviation.

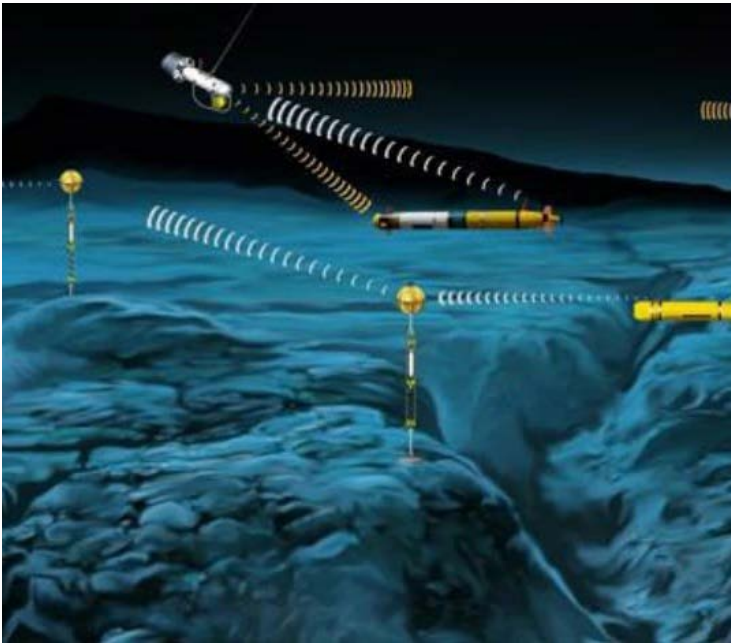
We also examine counter-drone technologies, including radar, electronic warfare, directed-energy systems and interception capabilities, reflecting the growing need to detect and respond to evolving aerial threats. Our UGV/UUV/USV section broadens the perspective beyond aviation, covering autonomous ground, surface and underwater platforms and their expanding roles in defence and maritime operations.

Across these categories, one message remains consistent: technological innovation must be supported by dependable engineering, effective regulation, manufacturing discipline and practical operational experience.

At Drones World, our commitment is to bring readers closer to the companies, technologies and people shaping this transformation. We hope this issue provides valuable insight into the opportunities and challenges ahead as autonomous systems become an increasingly important part of the global aerospace and defence landscape.

Kartikeya

KONGSBERG COMPLETES SONATECH ACQUISITION



KONGSBERG has completed the acquisition of Sonatech, a leading underwater acoustics specialist. The acquisition supports KONGSBERG's growth ambitions in the US and strengthens the company's position as a committed partner to the US Navy. Sonatech is a California-based undersea acoustics engineering and manufacturing company with more than 50 years of experience and a long history as a key technology supplier to the US Navy.

"Maritime domain awareness is critical in today's rapidly evolving security landscape, and this acquisition strengthens KONGSBERG's position as a partner to the US Navy and provides exciting growth opportunities in the US. Sonatech and KONGSBERG's technology portfolios and expertise are complementary, and together they will expand the systems and products available in the US," said Eirik Lie, President and Chief Executive Officer of KONGSBERG.

Strengthening underwater capabilities KONGSBERG's expertise spans acoustic sensors, advanced navigation and positioning technology, autonomous systems and advanced signal processing. Its autonomous underwater solutions include the HUGIN family of autonomous underwater vehicles (AUV). It enables covert seabed intelligence gathering and can carry customised payloads for different mission profiles.

Modern unmanned underwater and surface vehicles equipped with advanced sonar technologies are supporting missions including mine countermeasures, underwater operations, harbor defence and the protection of critical undersea infrastructure.

"The HUGIN family of AUV's provides a wide range of capabilities. From shallow to deep water capabilities – from a few days to weeks of endurance and from high-quality survey with the highest-resolution sensors to special missionised versions for the defence market. Our technology aligns well with Sonatech's capabilities and will give the US Navy access to cutting-edge products, systems and solutions," said Camilla Kiss, Executive Vice President, KONGSBERG and President of the Discovery division.

Sonatech is a key provider to the US Navy of advanced sonar and underwater communication solutions and expertise in technical design, development and manufacturing.

KONGSBERG acquired 100 percent of Sonatech. The transaction value is undisclosed.

RHEINMETALL'S LUNA NG RECEIVES PROVISIONAL AIRWORTHINESS CERTIFICATION



A significant milestone has been reached in the process of achieving full aeronautical certification for the LUNA NG unmanned reconnaissance system: the Bundeswehr Aviation Authority (LufABw) has granted provisional airworthiness certification for the system developed by Rheinmetall. This marks the completion of a key step towards the intended type certification.

The provisional airworthiness certificate for the LUNA NG allows a European military drone to be seamlessly integrated into regular, restricted airspace. Unlike comparable systems, LUNA NG meets civil safety standards, overcoming the restriction to purely military areas. Compliance with the aviation sector's stringent test procedures paves the way for regular flights over densely populated European territory. The system therefore overcomes a regulatory barrier and sets new standards for the operational capabilities of military reconnaissance in Europe.

Mike Schmidt, CEO of the Air Unmanned Space business unit at Rheinmetall, said: "Certification is carried out according to the same standards as for large aircraft, such as an A320. A particular challenge in this case was that critical components, such as the autopilot or safety-critical navigation systems, had to be developed and certified in-house. There are simply no certified systems for tactical unmanned aerial vehicles on the market."

The LUNA NG's technical maturity has already been demonstrated in extensive flight trials conducted under civil operating licences. In total, the system completed around 150 flights, totalling approximately 200 flight hours. At the same time, the first 'pilots and verifiers' from the Bundeswehr were successfully trained on the LUNA NG. This means that qualified personnel are already available for independent operation for training and testing purposes.

The Bundeswehr is introducing the LUNA NG system under the designation 'HUSAR' (Highly Efficient Unmanned System for Medium-Range Reconnaissance). The system is designed for sustained airborne reconnaissance, classification, and real-time detection of objects. With a flight time of over 12 hours, LUNA NG boasts long-range capabilities.

Rheinmetall has reached another important milestone in the realisation of the HUSAR system with the provisional type certificate. Work on obtaining full type certification is ongoing.

TEXTRON SYSTEMS EXPANDS AEROSONDE UAS MARKET IN NIGERIA WITH ARCO GROUP

As demand for reliable, high-performance uncrewed aircraft solutions grows across Nigeria, we are advancing a business model built around in-country channel partners who can operate, sustain and expand access to Group 3 Uncrewed Aircraft System (UAS) capabilities.

The recent sale of three Aerosonde® UAS Mk. 4.7 vertical takeoff and landing (VTOL) systems to ARCO Group PLC (ARCO) marks our first commercial Aerosonde UAS delivery in Africa. ARCO will provide fee-for-service flight support to customers to sustain securing oil pipeline infrastructure, an environment where persistent surveillance and rapid intelligence delivery are critical.

ARCO's role as both reseller and operator enables Nigerian customers to access Group 3 UAS capability quickly and efficiently. By serving as the country face of operations and sustainment, ARCO allows customers to benefit from advanced UAS performance without requiring immediate investment in internal training, staffing or maintenance programs. We provide the aircraft, technical expertise and ongoing support, ensuring reliable operations while empowering ARCO to manage day-to-day mission delivery.



The Aerosonde UAS were delivered in a fully ITAR-free configuration to make high-quality Group 3 capability available to a wider range of commercial and government users across Nigeria and Africa as a whole.

Despite the ARCO contract being our first commercial Aerosonde UAS sale in the country, it builds on multiple prior foreign military sales (FMS) to the Nigerian government. Aerosonde systems delivered under those cases are flying today, supported by our field service representatives and additional hardware deliveries.

ARCO is currently transitioning sustainment activities from FMS to direct commercial sales (DCS), with local Aerosonde UAS training expected to be available in 2027 to support the Nigerian Army. Three additional Aerosonde UAS are set to be delivered early next year, further expanding capability in the region.

Our collaboration with ARCO drives meaningful Aerosonde UAS expansion in Nigeria, creating a scalable sustainment model, strengthening customer responsiveness and opening new commercial pathways.

ANDURIL STRENGTHENS SECURITY PARTNERSHIP WITH TAIWAN THROUGH ALTIUS MILESTONES AND EXPANDED LOCAL INVESTMENT

The Taiwan Army successfully employed Altius-600M systems as part of a joint live-fire exercise at the Jiupeng Military Base in southern Taiwan. Anduril's Altius-600M demonstrated its effectiveness as an autonomous loitering munition in support of Taiwan's combat readiness in a rapidly evolving defense technology landscape.

The exercise centered on a single operator employing 2 systems against multiple maritime targets, marking another step forward in Taiwan Army's integration of the system into its operational formation and doctrine. It builds on a previous Altius-600 live fire, executed in June, in which the Taiwan Army deployed dozens of Altius systems, and successfully hit all targets.

The latest live fire coincided with keynote remarks delivered by Anduril founder Palmer Luckey on Saturday, 19th September at the 2026 Whole-of-Society Defense Resilience Summit in Taipei. The forum is hosted by the Presidential Office, exploring Taiwan's whole-of-society preparedness and resilience, with attendance from national leaders, international



government officials, domain experts, and industry.

In his speech, Palmer argued "freedom is the most powerful weapon that Taiwan has" in its mission

to deter conflict and maintain peace in the Taiwan Strait. He outlined a vision for national resilience, a "fortress of freedom" built on three foundations – strengthening operational resilience, building industrial resilience, and forging democratic resilience.

Anduril is supporting this vision through deeper engagement in Taiwan, onboarding a diverse set of Taiwanese suppliers and growing its local workforce to support long-term capability delivery.

In the past year, the company has brought more than 15 new Taiwanese companies into its global supply chain, ranging from precision machined parts, batteries, motors, electronics, and optics. Spending with local suppliers is on track to grow 15-fold this year. Concurrently, Anduril has hired Taiwanese talent to support program delivery, engineering, and sourcing.

"Anduril seeks to do business differently in Taiwan than traditional defense companies. We are investing in the people, industrial capacity, and technologies required to harness mass and autonomy to enhance deterrence in the Strait," said Alexander Chang, Managing Director for East Asia.

SKYDIO EXTENDS ITS FAMILY OF FLYING ROBOTS PLATFORM WITH F10 LIGHTRUNNER AND MEGADOCK, 2 NEW COMMANDS, AND FLEET-WIDE UPGRADES



Skydio is expanding its autonomous drone ecosystem with the introduction of the F10 Lightrunner, its first fixed-wing aircraft, alongside the MegaDock automated deployment platform. The new system is designed to address longer-distance and higher-speed missions for emergency response, search and rescue, infrastructure inspection and security operations.

The F10 Lightrunner is designed to reach speeds of up to 100 mph and is scheduled to begin deploying to customers in 2027. Skydio says the aircraft can launch within seconds and provide live aerial visibility while ground teams are still travelling to an incident.

A key feature is the aircraft's SideEye camera configuration, which positions the camera outside the rotor plane and is designed to maintain a consistent view of a subject during flight. The system is also equipped with Robotic Takeoff and Landing (RTOL), using a suction-based robotic gripper to autonomously launch and catch the aircraft.

The accompanying MegaDock can accommodate up to five F10 aircraft, enabling multiple missions to be managed from a single location. With an advertised 30-mile flight radius, Skydio says one MegaDock could provide coverage across nearly 3,000 square miles.

The F10 is designed for autonomous operation in a range of conditions, including significant wind, moderate rain and day-or-night missions. Its capabilities include an integrated parachute and Connect Fusion+, which combines multiple cellular connections to maintain command, control and live video during long-range operations.

Skydio is also extending its existing autonomy technology to the new fixed-wing platform. Pathfinder plans routes before launch using information such as terrain, structures, geofences, agency boundaries and airspace restrictions. Once airborne, Foresight continuously evaluates aircraft status, environmental conditions and obstacle information to adapt the flight path.

The company's Skydio Airspace Assurance System (SAAS) combines real-time airspace information, organizational policies and onboard perception to support compliant flight operations. Skydio says the system can also automatically manoeuvre away from nearby crewed aircraft when necessary.

The F10 joins the company's existing X10 and R10 platforms, which use the same underlying autonomy engine. Skydio says its customer fleet now conducts approximately two million missions annually, while Pathfinder has accumulated more than 600,000 autonomous flight miles.

Alongside the new aircraft, Skydio is introducing Asset Command and Security Command, software platforms designed to integrate autonomous drones directly into infrastructure inspection and physical security workflows.

Asset Command connects drone inspections with existing asset-management systems and inventories, while Security Command is designed to enable automated drone patrols, threat detection and rapid response across multiple locations.

Skydio is also introducing Controller 2, featuring a 7-inch display, up to 5.5 hours of runtime and an IP55 rating. The company is further upgrading its existing X10 platform with the VT300-Z Rev 2 telephoto camera and new imaging capabilities including ThermalBoost and Low-Light Enhance.

Together, the developments represent Skydio's broader push toward autonomous drone fleets capable of operating with reduced operator intervention across public safety, infrastructure, security and other critical-industry applications.

GOGO AND INSITU COLLABORATE ON GROUP 3 UAS CONNECTIVITY



Gogo Special Missions, the military/government division of Gogo (NASDAQ: GOGO), and Insitu, a Boeing company, announced the successful completion of testing and integration of a new, modified high-speed satellite connectivity solution, tailored specifically for Group 3 Uncrewed Aerial Systems (UAS). The leading Group 3 UAS OEM and the leading Global UAS connectivity supplier have partnered to optimize the Gogo Galileo HDX antenna for installation on Insitu's Integrator UAS.

"The Integrator UAS offers theater-level range and capacity for multiple customer payloads. Adding an ITAR-free, high-speed SATCOM option is an essential capability for our global customers—extending command and control and allowing seamless backhaul of sensor data with minimal latency. We are pleased to partner with Gogo, which will deliver a turnkey solution that includes UAS equipment, satellite services, and 24/7 support," says John Kelly, Vice President of Growth of Insitu.

"The collaboration with Insitu is particularly exciting, as it gives us the opportunity to modify our proven HDX solution, specifically to address the fast-growing Group 3 UAS market," explains Ben Massey, Senior Vice-President & General Manager of Gogo Special Missions. "With our antenna system further optimized for size and weight, Insitu customers will now be able to access high-speed, global internet over Eutelsat's OneWeb LEO satellite constellation, with a single line replaceable unit (LRU) configuration."

The two companies successfully completed integration and testing of the customized Gogo Galileo HDX on the Integrator this month, alongside the FLARES Vertical Take-off and Landing kit. This new capability requires minimal deck space, can launch in high seas and gusty winds, and requires zero aircraft modifications.

TEXTRON SYSTEMS' AEROSONDE UAS COMPLETES 1ST UAS VERTIPORT FLIGHTS IN COMMERCIAL AIRSPACE IN SUPPORT OF THE VIRGINIA ADVANCED AIR MOBILITY SMART AIRSPACE

Textron Systems Corporation announced that it participated in a demonstration collaborating with the Mid-Atlantic Aviation Partnership (MAAP) at Virginia Tech supporting the Virginia Advanced Air Mobility Smart Airspace Program, becoming the first uncrewed aircraft system (UAS) to fly in commercial airspace utilizing two vertiports. MAAP is one of seven Federal Aviation Administration (FAA)-designated unmanned aerial systems (UAS) test sites.

MAAP was charged with leading the Virginia Advanced Air Mobility Smart Airspace Program when it launched in March 2025. The Aerosonde® UAS launched from a vertiport at the Virginia Tech Transportation Institute located in Blacksburg, VA and flew through commercial airspace nearly 150 nautical miles, landing at a vertiport located at Textron Systems' Aerosonde Center of Excellence in Blackstone, VA. This demonstration supports the program's mission to research advanced air mobility (AAM) aircraft in the local region through the utilization of vertiports.

The Aerosonde Mk. 4.7 VTOL UAS transited two and a half hours, completing its flight at the Aerosonde



Center of Excellence. Textron Systems' global logistics and training hub for the Aerosonde family of aircraft. At 38,000 sq. ft, the Center of Excellence supports assembly, testing and training, both in the classroom and on the flight line.

"We are excited to collaborate with Virginia Tech in supporting the aviation and local communities through this opportunity with the Virginia Advanced Air Mobility Smart Airspace Program," commented Vice President, Uncrewed Air and Land Systems Sara Willett. "The Aerosonde UAS' ability to provide reliable aerial monitoring and critical data collection makes

it an ideal platform for helping develop the smart airspace technologies that will enable the future of advanced air mobility."

Designed for both land-and-sea-based operations, Textron Systems' Aerosonde UAS has amassed more than 750,000 hours supporting missions ranging from intelligence, surveillance, reconnaissance (ISR) to electronic warfare. With over 40 payload options and vertical takeoff and landing (VTOL) and fixed-wing configurations, the Aerosonde UAS offers the versatility to support missions both locally and across the globe.

ELBIT SYSTEMS UK PLAYS KEY ROLE IN LANDMARK LIVE VIRTUAL CONSTRUCTIVE TRAINING EXERCISE

Elbit Systems UK (ESUK) has partnered with the British Army's 16 Air Assault Brigade Combat Team to use its in-service training systems to undertake one of the largest live virtual constructive training exercises in the UK. The exercise, which included over 300 soldiers ranging from dismounted close combat to logistics, used the full suite of ESUK's integrated Recce Strike Training System (RSTS). This includes the Joint Fires Synthetic Trainer (JFST), Deployable Virtual Constructive Simulator (DVCS), and Interim Indirect Fires Simulation (IIDFS). The partnership approach saw ESUK tailor each system to meet the soldiers' needs.

The Live Virtual Constructive Training, known as Exercise Pegasus Athena, was undertaken over three days with JFST, DVCS and IIDFS integrated for the first time with the British Army. Soldiers were able to find targets using JFST and call in fires from the teams using IIDFS to strike these targets with the effect seen across all the simulators. DVCS was used to provide the synthetic layer where all virtual and live events were recorded, as well as providing



the system for drone pilot operations. Alongside the integration of the three in-service training capabilities, ESUK was also able to collect data to measure outcomes and assess performance.

As well as the use of synthetic training, the exercise included realistic operational situations, including ammunition resupplies, dismounted combat operations and vehicle manoeuvres. Air assets were also deployed throughout the week, with Chinook helicopters being used to reposition the light guns during the exercise.

This training exercise was the first demonstration of ESUK's integrated Recce Strike Training Solution, showcasing the value of integrated high-tech solutions provided to the British Army. It represents a step change in capability for the Armed Forces, allowing troops to conduct live and virtual training without the need for external assets and at a much lower cost than live fire exercises, without using ammunition stockpiles.

FINLAND AND UKRAINE SIGN DRONE DEAL TO BOOST THEIR DEFENCE AND SECURITY COOPERATION



President of the Republic of Finland Alexander Stubb and President of Ukraine Volodymyr Zelenskyy signed an enhanced defence and security cooperation agreement on 23 September. The agreement, commonly referred to as the drone deal, establishes a framework for defence materiel cooperation between the two countries.

"The agreement signed by Finland and Ukraine is an important step also for Patria and our objective to initiate drone production in Finland in collaboration with General Cherry. The collaboration will support the development of Europe's defence capabilities and Patria's aim to be a pioneer in defence technologies and an innovative product developer," says Mikko Leino, Executive Vice President of Patria's Defence and Weapon Systems business area.

Patria and Ukrainian drone manufacturer Center of Unmanned Technologies LLC ("General Cherry") signed a Letter of Intent (LoI) in August 2026.

PHASA-35 SELECTED FOR ARIA BACKED POWER BEAMING PROJECT



A UK designed and built solar powered stratospheric aircraft has been selected to support the UK's Advanced Research + Invention Agency (ARIA) Enduring Atmospheric Platforms programme to develop low cost, long endurance platforms for high-altitude communications.

Under the new £15.7m contract Prismatic, the BAE Systems company which has developed the PHASA-35 High Altitude Pseudo Satellite (HAPS) Uncrewed Air System (UAS), will provide the aircraft as the flight demonstration platform for a new power beaming technology designed to keep solar-powered stratospheric aircraft flying year-round, day or night.

This technology could be transformative as solar powered HAPS like PHASA-35 currently rely on the sun to sustain flight. That becomes a significant challenge in places like the UK, where winter daylight is limited and the nights are long. Power beaming removes that dependency, providing a constant supply of power regardless of the season and making it easier to continuously fly for up to several months at a time.

PHASA-35 has already proven its worth in the stratosphere as a low-cost alternative to satellites and now this exciting project will explore whether we can make it even more capable.

"This is a strong example of British organisations working together to advance an emerging technology," Bob Davidson, CEO BAE Systems' Prismatic This research expands the UK's leadership in high-altitude platforms to become the place where this industry is designed, built and scaled.

"Getting there means backing bold ideas, from fixed-wing solar aircraft to designs nobody predicted, including aircraft that fly on spinning wings instead of propellers." Rico Chandra, Programme Director for Enduring Atmospheric Platforms at ARIA With a 35-metre wingspan and a weight of just 150kg, PHASA-35 has the potential to operate above 66,000ft in the stratosphere for months at a time, operating continuously to deliver persistent communications, Earth observation and surveillance at a fraction of the cost of traditional satellites, and with far greater flexibility to deploy and upgrade.

The new system uses a highly controlled ground-based energy beam directed at a dedicated receiver, built into the aircraft's wing, which converts it back into electricity to power the aircraft and charge its batteries. Similar microwave frequencies are already widely used in aviation, satellite communications and radar systems.

For PHASA-35, the benefits potentially extend beyond persistent flight. Reducing the weight of onboard battery arrays could free up additional capacity on the aircraft with an already class-leading payload of up to 15kg. That payload can be used flexibly to carry a wide range of sensors across intelligence, surveillance and reconnaissance, communications, Earth observation and defence applications.

The three-stage, 3.5-year programme will conclude with an integrated flight demonstration with PHASA-35 to prove the power beaming solution that could open further potential for stratospheric flight.

Global monthly E-magazine for Drones

DRONES WORLD

Keep Up-to-date with the latest Drones industry news!

Visit Drones World Website now
www.dronesworldmag.com



SHIELD AI AND SEDARO DEMO TRUSTED AUTONOMY CAPABILITIES ON NOVI SATELLITE

Shield AI, Sedaro and NOVI Space announced the successful on-orbit demonstration of trusted satellite autonomy operations facilitated by NOVI operator verification and validation.

Across multiple on-orbit experiments, Shield AI's Hivemind pilot ran onboard a NOVI satellite in low Earth orbit (LEO) — the first time the AI pilot has flown in orbit. The demonstration represents both the highest-altitude and longest-duration Hivemind deployment to date, extending Shield AI's autonomy from airborne platforms to an operational satellite in orbit.

With NOVI's satellite serving as the leader of a six-satellite constellation alongside five virtual satellites, Hivemind, in collaboration with Sedaro's Autonomy Framework for the Edge (SAFE), performed multi-objective optimization, balancing imaging tasking, spacecraft health, battery state of charge, and pointing across the constellation. Over a 24-hour experiment window, the spacecraft executed 189 Hivemind-generated and SAFE-approved commands. In a second experiment, SAFE and Sedaro's Edge Deployable Simulators (EDS) performed similar multi-



objective optimizations and increased the satellite's Iridium communications contact initiation by 8 percentage points. Satellite constellations underpin communications, Earth observation, and national security missions, but are still largely managed through manual workflows. This demonstration showed how trusted autonomy capabilities can be layered onto existing and future constellations, significantly reducing operator workload. This exercise also showed that satellites not originally designed for autonomy can successfully orchestrate intelligence, surveillance, and reconnaissance (ISR) missions using Hivemind.

"By integrating Hivemind with Sedaro's EDS's and SAFE framework, we demonstrated how operators can move from manually operating distributed assets to autonomous mission tasking in a seamless

workflow," said Todd Wesley, vice president of Hivemind engineering at Shield AI. "As satellite constellations grow in size and complexity, autonomy will make future space missions more scalable, efficient, and responsive without increasing operator burden."

"The hardest part of autonomous space operations is trust," said Robbie Robertson, CEO and co-founder of Sedaro. "By providing a predictive, onboard model of the spacecraft and its environment, SAFE and our Edge-Deployable Simulators let operators validate autonomous decisions before they execute."

"NOVI's satellites are built to advance edge computing and AI capabilities on orbit, providing customers with a platform for actual on-orbit testing," said Dr. Michael Bartholomew, CEO of NOVI Space. "We're proud to support this important technology demonstration."

"This effort provides a significant milestone to the integration of autonomy and satellite operations to meet future mission needs," said Dr. Sean Phillips, Technology Advisor, Space Control Branch, Air Force Research Laboratory.

PDW AND USCG VALIDATE SHIPBOARD OPERATIONS FOR THE C100

Aboard the Coast Guard Cutter Olivia Hooker in Pascagoula, Mississippi, PDW and Coast Guard personnel recently completed preliminary shipboard testing of the C100 sUAS. The evaluation demonstrated reliable aircraft performance in the cutter's active radio frequency environment while successfully validating shipboard launch and recovery.

In recent months, the U.S. Coast Guard has awarded PDW two contracts for C100 systems, payloads, and operator training, establishing the foundation for an operational assessment of mission-ready unmanned aircraft for maritime operations.

PDW CEO James Slider stated: "The measure of a system isn't when it's delivered. It's when operators begin putting it to work. That philosophy has shaped PDW's growing relationship with the United States Coast Guard. Welcoming the Coast Guard to our growing customer base further demonstrates the C100's ability to perform across diverse environments and mission sets without compromising reliability or capability."

The evaluation was requested by the Coast Guard to determine whether the C100 could safely operate aboard a fast response cutter while



the vessel's primary radio frequency emitters remained fully energized. Testing also validated launch and recovery procedures, communications reliability, and overall aircraft performance.

The results demonstrated reliable aircraft performance throughout the event. The C100 experienced no electromagnetic interference, communications degradation, flight anomalies, or navigation issues while operating within the

cutter's active RF environment. The aircraft also completed successful launches and recoveries from the vessel's all-steel flight deck.

Following the successful electromagnetic interference evaluation, Coast Guard operators used the C100 to conduct a 360-degree mast inspection, inspect the cutter's hull, and provide aerial overwatch during an active towing evolution. One inspection that would normally require launching a small boat was completed in less than 10 minutes while collecting high-quality imagery.

Much of the flying was performed by Coast Guard personnel themselves. Operators highlighted the C100's rapid setup, ease of operation, stable flight characteristics, and reliable communications. The aircraft was assembled, synchronized, calibrated, and airborne in less than 10 minutes.

Slider concluded: "Our goal has never been to build an aircraft for a single mission. It's to build a robotic system operators can trust wherever the mission takes them. We believe this demonstration reinforced that the C100 can perform reliably in the demanding maritime environment while giving Coast Guard crews the flexibility to take on a wide range of missions from a single platform. That's exactly how modern capability should work."

GA-ASI MOJAVE FIRST UAS TO COMPLETE BATTLEFIELD SHORT FIELD OPS



General Atomics Aeronautical Systems (GA-ASI) and Hanwha Aerospace have completed the first-ever flight operations from a simulated battlefield by a medium altitude, long endurance uncrewed aircraft. The partners proved that the Mojave Short Takeoff and Landing aircraft, or Mojave STOL, could land at a tank and artillery live-fire range during simulated combat conditions and then take off again to continue the mission.

"This demonstration showcased Mojave's ability to perform tactical missions that are representative of real battlefield requirements and challenges," said GA-ASI CEO Linden Blue. "Whether the user needs contested and austere battlefield operations, ISR, weapons delivery, Air-Launched Effects deployment, troop resupply, counter-UAS, or missions requiring short and unimproved roads for takeoff, our aircraft answer the bell."

"This demonstration marks an important milestone in delivering tangible results through the partnership between Hanwha and GA-ASI," said Buhwan Lee, CEO nominee of Hanwha Aerospace. "Going forward, we will work closely with the ROK defense industry to develop unmanned systems designed for future operating environments and expand our presence in global markets."

The Defense Drone Technology Exhibition took place in the countryside north of Seoul and highlighted Mojave's ability to operate from an austere environment with a short runway. Configured with dual weapon rails and inert payloads, Mojave executed a concept of operations designed to illustrate how STOL capability enhances operational flexibility, survivability, and responsiveness for future ROK defense applications. The demo took place at the runway of ROK Army 513th Aviation Battalion and the Seungjin Training Field in Pocheon-si.

Under the control of pilots operating from ground control stations, Mojave took off from a conventional runway at ROK Army 513th ROK Aviation Battalion, flew to the Seungjin Training Field where it joined air operations, then landed on a rough maneuver trail used mostly by ROK Army tanks and artillery vehicles. The aircraft then took back off again, resumed operations, and returned to ROK Army 513th Aviation Battalion. In an actual combat situation, soldiers could have refueled and re-armed Mojave during its time on the ground at the range. No other aircraft with Mojave's endurance, range or payload has this ability.

In 2025, GA-ASI announced that it was partnering with Hanwha to co-develop and co-produce UAS with STOL capability for a worldwide customer base, including the ROK Ministry of National Defense, the United States Department of War and other global customers. Critical Design Review (CDR) for a production Mojave STOL is expected in November this year with first flight in 2027.

The Mojave STOL demonstrator now is scheduled to travel to Changwon where it will be on display at Hanwha's Industry Day on September 21. The event will include an array of ROK suppliers, with many contributing to the production of Mojave STOL.

TEKEVER AND THREOD SYSTEMS SIGN MOU TO 'DEVELOP LONG-TERM STRATEGIC PARTNERSHIP



TEKEVER, Europe's leading provider of AI-driven autonomous systems, and Threod Systems, a leading developer and manufacturer of unmanned aerial systems and defence technologies announced the signing of a Memorandum of Understanding (MoU) to establish a framework for long-term cooperation and the development of strategic partnership opportunities.

The agreement reflects a shared commitment to strengthening Europe's sovereign manufacturing capabilities through collaboration, innovation, and the development of advanced autonomous technologies. Under the MoU, the two companies will identify areas of mutual interest and evaluate opportunities to combine their respective expertise, technologies, and operational experience to address emerging defence and security requirements.

TEKEVER has become a trusted provider of autonomous intelligence solutions, delivering actionable intelligence through its integrated ecosystem of unmanned systems, artificial intelligence and data analytics. Threod Systems brings extensive experience in the design, development and manufacture of unmanned aerial systems, payloads, and mission-critical technologies with a global customer base.

The MoU establishes a foundation for deeper cooperation across a range of potential initiatives, including technology development, operational capability enhancement, market opportunities and future joint programmes.

On signing the MoU, Ricardo Mendes, CEO of TEKEVER, said: "There is a need for stronger collaboration across Europe's technology ecosystems. By signing this Memorandum of Understanding with Threod Systems, we are creating the foundation for a long-term partnership built on shared values, complementary capabilities, and a common ambition to deliver innovative solutions which help protect and secure our customers' interests."

Arno Valk, CEO of Threod Systems, said: "This agreement represents an important step towards closer cooperation between two companies which share a commitment to innovation and operational excellence. We look forward to exploring opportunities with TEKEVER and identifying ways in which our combined expertise can create new capabilities and deliver greater value to customers across Estonia and beyond."

Tuuli Vors, TEKEVER, Market Lead (Nordics) added: "Building Europe's sovereign defence capabilities requires more than innovation alone. It requires strong partnerships between organisations that share a common vision and complementary expertise. Our agreement with Threod Systems creates a foundation for exploring new technologies, accelerating capability development, and ensuring Europe remains at the forefront of autonomous systems innovation."

ASELSAN EXPANDS ITS FOOTPRINT WITH NEW EXPORT CONTRACT AT MSPO 2026



ASELSAN is expanding its footprint in Poland with a new export contract signed with AMZ Kutno for the delivery of 24 sets of ARSUS Reconnaissance and Surveillance Systems for the Polish Armed Forces, as the company showcases its growing multi-domain defense capabilities at MSPO 2026.

ASELSAN, Türkiye's leading defense company and Europe's fifth-largest defense company by market capitalization, has signed the export contract with Polish company AMZ Kutno at MSPO 2026, for an additional delivery of 24 sets of ARSUS Reconnaissance and Surveillance Systems, in addition to the Framework Agreement signed between ASELSAN and AMZ Kutno in 2024, for the end use of the Polish Armed Forces. Deliveries are planned between 2028 and 2029 and will complement deliveries planned through 2035 under the Framework Agreement.

The agreement further strengthens ASELSAN's long-term presence in Poland, where the company is expanding its engagement through advanced technologies, its local office, ongoing programs and local industrial partnerships. Beyond its growing cooperation with Poland and the agreements signed at MSPO 2026, ASELSAN is showcasing an integrated portfolio spanning air defense, electronic warfare, counter-UAV systems, UAV payloads, and naval and underwater technologies, reflecting the expanding scope of its cooperation with Poland.

Key highlights include DRONEDEF, ASELSAN's Counter-UAS layer within the STEEL DOME integrated air defense architecture, bringing together a range of complementary capabilities against drone threats. The layer includes IHTAR Counter UAV System, GÖKBERK Laser Weapon System, KORKUT 100/25 SB Anti-Drone Weapon System, GÖKALP Autonomous Kinetic Drone Kill System, SAHIN Dual 40 mm Hard-Kill System and EJDERRA/AD HPEM Anti-UAV Countermeasure System. The portfolio also features KORAL family electronic warfare solutions; key STEEL DOME air defense components; UAV payloads including ANTIDOT and FULMAR 200 A Synthetic Aperture Radar Pod System; and naval systems such as KILIÇ Kamikaze Autonomous Underwater Vehicle family, TUFAN Kamikaze Unmanned Surface Vehicle and MARLIN 100 ASW Unmanned Surface Vehicle.

The latest agreement builds on the strong momentum of ASELSAN's cooperation with Poland, following the USD 410 million electronic warfare export agreement signed in December 2025.

ASELSAN is now working with more than 20 Polish suppliers and exploring further opportunities in areas including training, maintenance and centers of excellence, further expanding its cooperation beyond individual procurements toward a broader and long-term industrial partnership with Poland.

"As a global defense brand, ASELSAN is continuing to expand its international footprint, particularly across Europe, NATO markets and other key regions. Poland is an important part of this broader international growth, and our partnership with the country has been gaining momentum. This new contract is another important step in deepening our cooperation. Following last year's major electronic warfare contract, we are now expanding our collaboration into reconnaissance and surveillance, further strengthening the relationship between ASELSAN and Polish industry," said Ahmet Akyol, President & CEO of ASELSAN.

DRAGANFLY SELECTED BY GOVERNMENT OF CANADA TO SUPPLY LOW-COST TACTICAL ISR UAS TO THE CANADIAN ARMED FORCES



Draganfly Inc. an award-winning, industry-leading developer of drone solutions and systems announced that it has been awarded a five-year contract by the Government of Canada to provide Low-Cost Tactical Intelligence, Surveillance and Reconnaissance ("ISR") Uncrewed Aircraft Systems ("UAS") to the Canadian Armed Forces ("CAF").

The initial contract includes a firm commitment for 100 Low-Cost Tactical ISR UAS systems, together with associated ground control stations, payloads, data links, support equipment, documentation, spare parts and training. Contracted pricing for the systems is commercially sensitive.

Under the five-year agreement, the Government of Canada has retained the right, at its sole discretion, to order up to an additional 4,900 UAS systems. If all available options were exercised, the total number of UAS systems supplied under the agreement to the Government of Canada would be 5,000. The contractual option for the additional 4,900 UAS systems has an aggregate value of approximately C\$24.25 million if exercised in full. Any exercise of those options would require the appropriate written contract authorization or amendment.

The contract also includes initial cadre training for CAF personnel and provides Canada with options for additional training. Draganfly will support the program across system delivery, training, sustainment, spare parts, documentation, software and firmware support.

Draganfly was recently accepted as a qualified supplier in all five categories of Canada's Defence Drone Initiative ("DDI") Marketplace. This contract represents a subsequent procurement by the Government of Canada under the initiative and advances Draganfly's participation in Canada's expanding domestic defence and uncrewed systems ecosystem.

"This award is an important milestone for Draganfly and a meaningful opportunity to support the Canadian Armed Forces with systems designed to be fielded, supported and scaled in response to real operational requirements," said Cameron Chell, President and CEO of Draganfly. "Canada is moving quickly to strengthen its sovereign defence capabilities and domestic industrial base. We are proud that Draganfly's technology and team have been selected to contribute to that effort and look forward to delivering these systems into the hands of Canadian operators."

Canada's Defence Drone Initiative is intended to accelerate access to Canadian-developed uncrewed and autonomous capabilities while strengthening the country's domestic defence industrial base. Low-cost tactical ISR drones are one of the initiative's initial priority areas, with a focus on secure and affordable systems that can be widely deployed, field-tested and adapted based on operator requirements.

FQ-42 VENGEANCE FINDS NEW HOME AT CREECH AIR FORCE BASE

General Atomics Aeronautical Systems, Inc. (GA-ASI) congratulates the U.S. Air Force (USAF) on the pace of progress for its Collaborative Combat Aircraft program, which features the FQ-42 Vengeance designed and produced by GA-ASI. The latest milestone took place Sept. 18, when a new FQ-42 Vengeance was delivered to Creech AFB, Nev., to continue operations with test and evaluation units.

"The CCA program's rate of progress has been incredible," said Mike Atwood, GA-ASI Vice President of Advanced Programs. "Every week, the Air Force is pushing forward with new and more impressive accomplishments using Vengeance. It's amazing to think of how far this program has come in such a short amount of time."

The FQ-42 that arrived at Creech will continue regular test and evaluation operations with the Air Force aimed at experimentation with the new aircraft. Previous efforts with Vengeance and other GA-ASI jets, including XQ-67A Off-Board Sensing Station and MQ-20 Avenger® - have found the trio of combat jets flying in various scenarios that push the boundaries of combat aviation. GA-ASI's jets have flown semi-autonomously and autonomously with various AI pilots and under collaborative control of human fighter pilots operating F-22 Raptor and F-35 Lightning II jets.

FQ-42 Vengeance, a 5th-generation uncrewed fighter with an internal weapons bay and other



features designed for low observability and increased survivability, has flown formation flights alongside F-35 and F-15E Strike Eagle in preparation for collaborative control operations with manned aircraft. Those experiments will replicate company demonstrations previously flown by GA-ASI using MQ-20 as a CCA surrogate to advance CCA operations in parallel to the primary U.S. Air Force development program.

GA-ASI was selected by USAF in April 2024 to build production-representative flight test articles for the CCA program. FQ-42 Vengeance made its maiden flight in August 2025 and was selected in June 2026 for an initial production contract. GA-ASI has completed a new low-observable paint facility to support CCA production, and the company is currently positioned to deliver six aircraft per month to meet USAF goals, with more manufacturing space available to respond to additional

orders.

Production of FQ-42 Vengeance is underway on company investment as government funding plans mature, with GA-ASI continuing its longstanding tradition of working at-risk with its own funds to support U.S. procurement planning and prevent delays in delivery. GA-ASI plans to build multiple fighters for its own company aircraft fleet, to invest in inventing new technologies that reduce risk and increase capabilities for its global customers.

XQ-67A and FQ-42 represent two customer-delivered examples of GA-ASI's Gambit Series of next-generation combat jets. The modular design of the Gambit Series enables rapid integration of new systems, weapons and autonomy software, allowing customers to quickly pivot the platform to new missions without significant redesign.

ITALY ORDERS TWO MORE MQ-9A BLOCK 5 REAPERS

The Italian Air Force (ItAF) has ordered two new MQ-9A Block 5 Reaper® Remotely Piloted Aircraft (RPA) from General Atomics Aeronautical Systems, Inc. (GA-ASI). When the new aircraft are delivered at the end of 2027, they will increase the size of the ItAF fleet. The purchase is part of a Foreign Military Sale (FMS) with the U.S. Air Force that also includes Ground Control Stations.

"Italy has been a very important partner for GA-ASI for more than 20 years," said GA-ASI President David R. Alexander. "The Italian Air Force has continued to be a leader in the utilization of MQ-9A to support a wide range of Intelligence, Surveillance, and Reconnaissance (ISR) missions in Italy, over the Mediterranean, and in support of NATO operations."

MQ-9A Block 5 has endurance of up to 26 hours and can operate up to 45,000 feet (13,716 meters). It has a 4,600 pounds (2,087 kilogram) of payload capacity that includes 3,750 pounds (1,701 kilograms) of external stores. It provides



long-endurance, persistent surveillance capability with Full-Motion Video, Synthetic Aperture Radar/Moving Target Indicator/Maritime Radar, and auto takeoff and landing. An extremely reliable RPA, MQ-

9A Block 5 is equipped with a fault-tolerant flight control system and a triple-redundant avionics system architecture. It is engineered to meet and exceed manned aircraft reliability standards.

NORTH EAST DEFENCE COMPANY OPENWORKS ENGINEERING EXPANDS INTO THE US MARKET

OpenWorks Engineering, a UK-based developer of counter-uncrewed aircraft systems (C-UAS), air defence and surveillance technologies, is expanding its operations into the United States with a new regional headquarters in Ashburn, Virginia. The company also plans to establish a manufacturing facility in Detroit, Michigan, with the facility expected to open during 2026.

Founded more than a decade ago in Northumberland, England, OpenWorks will retain its UK headquarters while expanding its presence in the US. The company says the new American subsidiary will strengthen its operations and collaboration with NATO nations and allied countries.

OpenWorks began with the development of SkyWall Patrol, an early handheld UAS net-capture system designed to physically intercept drones. The company has since expanded its portfolio into AI-powered autonomous vision technologies through its Vision product family.

These systems are designed to provide real-time detection, tracking, identification and targeting of dynamic threats at extended ranges. According to OpenWorks, its technologies have been deployed at major international events, including the G7 Summit, World Economic Forum, 2024 Paris Olympics and the



2026 FIFA World Cup.

The company says its workforce has grown significantly, increasing from 26 employees in 2024 to 125 in 2026. As part of the North American expansion, Chris Bigwood has been appointed Executive Vice President responsible for business development and corporate strategy in the region.

Bigwood brings nearly three decades of defence-industry experience and will also lead plans for the Detroit manufacturing operation. The location is expected to provide access to engineering and manufacturing capabilities as OpenWorks expands its production activities in the United States.

OpenWorks also reports substantial growth in adoption of its technologies, with product

adoption increasing fourfold between 2025 and mid-2026. Its Vision Flex system, a modular solution for surveillance, tracking and classification, has increased production capability by 2.75 times over the previous year.

The company says its systems are already used by customers in the US and that its personnel have trained elite Federal Bureau of Investigation operators on the technology to support operational readiness. Research and development remains another major area of investment. OpenWorks says it invested more than £2 million in UK-based R&D initiatives during the past year, including university research, PhD programmes focused on autonomous vision systems and post-doctoral research.

The company is also investing in artificial intelligence to improve detection, tracking, identification and targeting capabilities against increasingly dynamic threats.

The US expansion represents a major step in OpenWorks' international growth while maintaining its engineering and development base in the UK. The company expects its expanded manufacturing, technology and commercial presence to support growing demand for C-UAS and autonomous surveillance solutions.

KNDS AND AERIX SYSTEMS ANNOUNCE A STRATEGIC COOPERATION TO DEVELOP A DRONE INTERCEPTION CAPABILITY

KND S and AERIX SYSTEMS are announcing a strategic cooperation for the development and industrialization of the AXS-µ1 interceptor drone. The collaboration aims to integrate it into the TARGAS DSP10 system, complementing the counter-drone capabilities of KNDS' TARGAS ecosystem.

KNDS is partnering with AERIX SYSTEMS to strengthen the capabilities of TARGAS (Tactical Advanced Response for Ground, Air and Surface threats), KNDS's counter-drone ecosystem.

Within this ecosystem, the TARGAS DSP10 solution combines electronic warfare and physical interception capabilities. Designed to be readily deployable and integrated onto military vehicles, TARGAS DSP10 aims to give ground forces a scalable close-in protection capability tailored to their operational needs.

The system pairs Nuances Technologies' Raptor 2, dedicated to electronic countermeasures against



certain drones, with the AXS-µ1 interceptor drone developed by AERIX SYSTEMS.

This combination is designed to deliver a response tailored to aerial threats, bringing together jamming-based and kinetic neutralization means.

The AXS-µ1 interceptor drone, produced by AERIX SYSTEMS, is built to achieve physical neutralization through direct impact ("hit-to-kill"), fully autonomously. It is intended in particular to counter

the growing threat posed by FPV (First Person View) drones, adding a new aerial interception capability to TARGAS.

Its integration will combine the system's electronic warfare capabilities with a physical interception solution, strengthening the range of neutralization means available.

Under the agreement signed by the two parties, KNDS will support the AXS-µ1 drone through its maturation phase, with production set to begin in 2027.

By combining KNDS's expertise as an architect of complete mission solutions and its industrial capabilities with AERIX SYSTEMS's aerial robotics technologies, this cooperation will accelerate the development of a sovereign, scalable interception solution suited to the operational needs of ground forces.

WORLD'S FIRST FLYING CAR

Dutch company PAL-V has obtained its European Production Organisation Approval (POA). With this milestone, PAL-V now holds both the automotive and aviation production approvals required to manufacture its products on an industrial scale. This approval authorises PAL-V to manufacture aviation products under EASA regulations and marks a significant step toward bringing certified FlyDrive mobility solutions to market.

PAL-V is the first company in the FlyDrive segment of Advanced Air Mobility to receive this approval, placing the company in a unique position worldwide, ahead of both American and Chinese initiatives within the Advanced Air Mobility sector.

PAL-V has ensured compliance with existing regulations across all areas of its development programme. With the achievement of its POA, PAL-V has successfully completed several critical certification milestones, including receiving a "No Technical Objection" from EASA in 2025. These certification achievements confirm PAL-V's leading position in the emerging FlyDrive market and demonstrate the maturity of the company, its technology and its products.

Whether it involves saving lives, deploying specialists to remote locations or transporting critical goods, traditional mobility solutions force operators to choose between, or combine, road and air transport. This results in delays, additional complexity and operational inefficiencies.



FlyDrive products provide a unique solution to this challenge. They are the only vehicles capable of transporting professionals at flight speed while offering the flexibility of a car immediately after landing. As such, a FlyDrive vehicle represents a valuable capability for organisations where speed, accessibility and operational effectiveness are critical.

The Production Organisation Approval confirms that PAL-V's production system meets the stringent requirements for airworthy manufacturing. This milestone validates nearly two decades of development of certification experience and regulatory expertise that have established the company as the clear leader in the emerging FlyDrive market.

"Obtaining the POA is a major milestone for PAL-V," said Robert Dingemans, Founder and CEO of PAL-V. "It confirms that we have not only developed a groundbreaking platform for FlyDrive products but have also built a world-class organisation capable of developing, certifying and manufacturing airworthy products."

The development of PAL-V extends far beyond a single product. Around the company, a growing ecosystem has emerged consisting of Dutch and European partners, suppliers, knowledge institutions and certification specialists. The expertise developed in aviation certification, manufacturing, engineering and regulation represents a valuable strategic asset for both the Netherlands and Europe within the rapidly expanding Advanced Air Mobility industry.

PAL-V also integrates developments in autonomous flight, advanced materials and components, and zero-emission propulsion systems which are driving a wave of innovation entering the aviation market through this emerging sector. Through its activities, PAL-V contributes to strengthening European technological autonomy while safeguarding high-value knowledge, employment and industrial capabilities, thereby supporting the future economic competitiveness of both the Netherlands and Europe.

With its Production Organisation Approval secured and a reservation portfolio sufficient to fill the first three years of production, PAL-V has taken a major step towards creating an entirely new mobility category that enables professionals to overcome operational challenges more quickly, efficiently and effectively.

As a result, the Netherlands once again has an aircraft manufacturer with international potential, and a technology company whose capabilities and ecosystem are of strategic importance to Europe.

ARCHER'S 'NO ROADS' TOUR TAKES OFF BY COMPLETING MIDNIGHT'S PILOTED ROUNTRIP FLIGHT FROM SALINAS TO HOLLISTER



Archer Aviation Inc. announced the completion of Midnight's city-to-city roundtrip flight between Salinas and Hollister, CA - the first stop on the company's 'No Roads' flight tour. Midnight completed the round trip between Salinas Municipal Airport and Hollister Municipal Airport in roughly 12 minutes each way, which by comparison can each take ~40 minutes or more by car. The all-electric aircraft reached speeds of 125 mph, cruised at 3,550 feet, and covered over 40 miles roundtrip.

The flight comes days after Archer launched its plans for its 'No Roads' flight tour and follows a stretch of more than 70 completed test flights in August, including Midnight's piloted roundtrip journey between Salinas Municipal Airport and Monterey Regional Airport.

The tour is now set to continue in the coming weeks across Northern California with planned flights to Monterey, San Martin, San Jose, Oakland and San Francisco. Working closely with the FAA and state and local partners, this series of flights set the stage for Midnight to then begin flying in the Los Angeles area and conducting operations under the White House's eVTOL Integration Pilot Program (eIPP) in Texas, Florida and New York.

"On Friday, Midnight flew between two California communities in a fraction of the time the trip would take by car. That's the point of the 'No Roads' tour: bring Midnight to cities across America, fly real routes, and build the operational muscle for eIPP operations and LA28 alongside the FAA. Every route we fly makes the next one easier. By the time the world comes to LA for the Games, people will be ready for it," said Adam Goldstein, Founder and CEO of Archer.

Archer's goal with its Midnight aircraft is to transform urban travel, replacing 60-90 minute commutes with quiet, all-electric flights that dramatically reduce travel times compared to traditional ground transportation. Archer's all-electric Midnight air taxi is designed around the urban air mobility use case with the ability to conduct rapid back-to-back flights with zero operating emissions.

JOBY LAUNCHES EIPP FLIGHTS IN TEXAS

The state of Texas officially kicks off its first White House-backed eVTOL Integration Pilot Program (eIPP) flights. Joby Aviation, Inc. a company developing electric air taxis for commercial passenger service, is carrying out a week-long flight campaign across the Dallas-Fort Worth region. The Joby eVTOL aircraft will fly real-world routes across North Texas, including direct flights into Dallas Fort Worth International Airport (DFW) and major urban hubs.

Framed against the North Texas skyline, the campaign builds on electric air taxi demonstrations conducted earlier this year, including flights in the San Francisco Bay Area and New York City, and shows the aircraft's ability to integrate into busy airspace. Conducted under TxDOT's winning Project Nexus proposal, part of the U.S. Department of Transportation eIPP initiative announced in March 2026, the North Texas flights bring together federal, state, and local governments with private industry to accelerate the safe integration of electric air taxis into U.S. airspace.

Throughout the week, Joby will fly missions between Perot Field Fort Worth Alliance Airport, key urban locations, and DFW Airport, one of the world's busiest and most connected airports. These flights are expected to generate the real-world operational data the FAA needs to build safety rules for commercial service at scale.

Flight Campaign Schedule from Sept 10 through Sept 14*
AFW Airport: Campaign kickoff and joint flight



demonstration from Joby and other aircraft manufacturers in partnership with TxDOT

DFW Airport – Corporate Aviation Fixed-Base Operator (FBO): Joby's aircraft will enter DFW's controlled airspace, landing directly at DFW Corporate Aviation

Arlington, TX: Round-trip flight from AFW demonstrating low-noise operations over major infrastructure, including the Fort Worth Stockyards

Toyota Motor North America HQ (Plano): Flight along the planned operational route connecting AFW to Toyota's corporate campus

The effort builds on years of airspace research with the FAA and NASA, which began studying electric air taxi integration in North Texas in 2018. A 2023 high-fidelity simulation by Joby and NASA at the Future Flight Central facility at the agency's Ames Research Center in California's Silicon Valley examined the feasibility of operating up to 50 electric air taxi operations

per hour at the DFW terminal area. To support this week's campaign and long-term growth in the region, Joby recently leased a 45,000-square-foot facility at Perot Field within the AllianceTexas Mobility Innovation Zone.

The typical Dallas-Fort Worth driver loses around 44 hours a year to traffic congestion, according to independent transportation research. Joby's long-term vision is to give communities that time back, offering commercial air taxi service that could one day turn long, frustrating highway drives into quick, emission-free flights.

Texas offers a distinct opportunity for this next era of aviation: a fast-growing population, expanding infrastructure, and, through the eIPP, a framework for government and industry to work together early. AFW and DFW both already handle heavy daily traffic by keeping public agencies and private operators in sync. This week's flights are intended to demonstrate the same system can work for electric air taxis too.

"I'm incredibly excited by the potential for vertical lift in Texas, a state with the infrastructure, expertise, and partnerships to help lead the next era of American aviation," said Joe Ben Bevirt, Founder and CEO of Joby. "With TxDOT's leadership and support, the eIPP gives us an incredible opportunity to bring our aircraft into urban areas and accelerate our path to commercial service. This is just the beginning of what Texas and Joby can build together."

ELROY AIR ANNOUNCES BRISTOW'S RESERVATION OF 10 ADDITIONAL EARLY DELIVERY POSITIONS FOR CHAPARRAL AIRCRAFT

Elroy Air announced that Bristow Group Inc. has expanded its early delivery reservations for the Chaparral autonomous cargo aircraft, reserving 10 additional early delivery positions for a total of 15. Bristow previously secured early delivery slots for five Chaparral drones and announced a pre-order agreement for up to 100 Chaparral drones.

This announcement follows the first autonomous, uncrewed flight demonstrations conducted in Houma, Louisiana, as part of the Federal Aviation Administration's (FAA) and the U.S. Department of Transportation's eVTOL Integration Pilot Program (eIPP), in collaboration with government and industry partners.

"Seeing Chaparral in action during the recent demonstration activities in Louisiana gave us an opportunity to explore how it could support a range of transportation and logistics missions," said David Stepanek, Executive Vice President, Chief Transformation Officer at Bristow Group. "It's great to work with a partner like Elroy Air. We see potential applications across commercial, government services, and



special mission operations and we're continuing to evaluate where technologies like this could create value for our customers."

Bristow and Elroy Air have collaborated for several years to explore potential applications for autonomous cargo aircraft. Aircraft such as Chaparral may create new opportunities to support cargo and logistics operations in environments where flexibility, range, and limited infrastructure are important considerations.

"We're proud to have partnered with the Bristow Group over the last few years and it was amazing to be in Louisiana

flying alongside Bristow's helicopter fleet in one of the busiest airports for rotorcraft in the nation," said Dr. Andrew Clare, CEO of Elroy Air. "We appreciate Bristow's continued confidence in the platform and look forward to supporting the evaluation of Chaparral across a variety of cargo and logistics missions."

Elroy Air's Chaparral is an uncrewed, autonomous VTOL aircraft that carries 500+ pounds of cargo and requires no runways, airstrips, or other fixed infrastructure to operate. Its hybrid-electric powertrain delivers the reliability of electric propulsion with extended range of up to 450 miles, and requires no charging infrastructure, further reducing the logistics footprint needed to sustain operations. Multi-mission pods allow rapid reconfiguration across payload types for multi-mission capabilities.

Kratos Defense & Security Solutions, the exclusive U.S. manufacturer of Chaparral, will produce the aircraft at its expanding Sacramento, California facility, with the first production aircraft planned for late 2026.

SKYDRIVE PARTNERS WITH SOUTH KOREA'S VERTY TO TARGET COMMERCIAL EVTOL OPERATIONS BY 2028



SkyDrive Inc. a leading compact eVTOL (*1) aircraft developer based in Japan announced that it has signed a memorandum of understanding (MOU) with Verty Co. Ltd. ("Verty"), a South Korean company building an integrated operational framework spanning flight operations, air traffic management and vertiport infrastructure. The agreement establishes a partnership to prepare for the introduction and commercial deployment of the SKYDRIVE (SD-05 model) eVTOL in South Korea.

Under the agreement, SkyDrive and Verty will launch a joint feasibility study to assess flight safety, build infrastructure and map out operational routes – including scenic tourist flights and regional inter-city transit – with the goal of launching commercial deployment in South Korea by 2028.

Background and Strategic Objectives

South Korea is actively establishing policy roadmaps to foster Advanced Air Mobility (AAM) as a foundational component of its future transportation infrastructure (*2).

Verty is driven by its mission to accelerate AAM adoption by offering end-to-end operational solutions. Following guidelines established by the South Korean government, Verty has verified integrated operating procedures across flight operations, air traffic control and vertiport management, aiming to become South Korea's first operator to secure an Air Operator Certificate (AOC) for eVTOLs. Through its "AAM as a Service" business model, Verty provides operational capability to client companies without requiring them to make heavy upfront investments in infrastructure.

SkyDrive continues to advance its mission to lead the once-in-a-century mobility revolution by making daily air transportation a reality. Beyond Japan, SkyDrive is actively expanding its global footprint across key international markets, including the U.S., the U.A.E., India, Thailand, Indonesia, Vietnam, Australia and Taiwan.

Through this partnership, SkyDrive and Verty will work together to establish diverse commercial business models in South Korea. Focus areas include scenic sightseeing routes in key tourist destinations such as Jeju Island, as well as inter-city transport routes connecting urban centers around the Seoul Metropolitan Area, including Goyang City.

Dong-Woo Kim, CEO of Verty "We are thrilled to join hands with SkyDrive, Japan's sole compact eVTOL developer currently pursuing type certification, as pioneering partners opening up a new era of air mobility in both nations," said Kim. "Verty is preparing a tourism-focused operational model for initial commercialization, which requires an aircraft that can operate short routes cost-effectively. We determined that SkyDrive's three-seater SD-05 is the ideal aircraft for this purpose. As a committed partner, we will devote our full energy to delivering the new value SkyDrive envisions, not only in Japan but also across South Korea."

Tomohiro Fukuzawa, founder and CEO of SkyDrive "We are deeply honored to partner with Verty, a team that brings exceptional expertise and a strong network in the South Korean market," said Fukuzawa. "South Korea is making remarkable progress with public and private sectors working together to pave the way for commercial eVTOL services. By combining our technologies and operational expertise, we look forward to offering safe, convenient and innovative air mobility options to the people of South Korea."

JOBY COMPLETES FIRST-EVER FULLY AUTONOMOUS FLIGHT ACROSS THE US



Joby Aviation has completed what it describes as the first fully autonomous flight across the United States, demonstrating the potential of autonomous aircraft for cargo, emergency response and defence logistics. The aircraft completed a 3,199-mile journey without control inputs from the onboard safety pilot, marking a significant demonstration of long-distance autonomous flight capability.

The aircraft used for the demonstration was a modified Cessna Caravan equipped with Joby's autonomous flight technology. The system enabled autonomous taxiing, takeoff, navigation and landing, while the aircraft was remotely supervised from Joby's autonomy headquarters in California and Shaw Air Force Base in South Carolina. During the journey, the aircraft operated at distances of up to 2,323 miles from its remote supervision locations.

The eastbound journey began at Buchanan Field in Concord, California, and included stops in Phoenix, Fort Worth, Shaw Air Force Base and North Carolina's Outer Banks. In Phoenix, Joby demonstrated autonomous operations in a dual-use environment supporting potential defence, cargo and emergency-response applications.

The aircraft also operated in complex airspace environments and demonstrated its ability to reroute around severe weather and thunderstorms without requiring prior familiarity with the destination airport. In North Carolina, the flights supported the NCDOT eLIFT-NC programme, which is examining aviation-based healthcare logistics.

Joby has also been testing autonomous operations for military logistics. The company said its autonomy technology has already been demonstrated during several U.S. military exercises, including Agile Flag, where autonomous logistics operations helped deliver replacement parts significantly faster than conventional logistics methods. During REFORPAC, aircraft were remotely operated between Hawaii and Guam, demonstrating the potential for long-distance remote operations.

The company acquired the autonomy technology from Xwing in 2024 and has since integrated it into an existing certified aircraft platform. According to Joby, the technology has accumulated more than 400 flights and approximately 800 hours of automated flight operations across both controlled and uncontrolled airspace.

The demonstration also highlights potential applications beyond passenger transportation. Autonomous aircraft could support commercial freight, medical supply delivery, disaster response and defence logistics, particularly in situations where operating conventional crewed aircraft may be difficult or where rapid delivery is required.

Joby is continuing its cross-country demonstration programme, with the aircraft beginning its westbound journey after reaching North Carolina. The company plans additional stops across the United States as it continues evaluating autonomous operations in different environments.

ELECTRA COMPLETES GROUNDBREAKING FLIGHTS USING HELICOPTER-STYLE PROCEDURES FOR ULTRA SHORT AIRCRAFT

Electra has completed a series of flight demonstrations in Virginia, testing its fixed-wing Ultra Short aircraft using helicopter-style instrument procedures and non-traditional take-off and landing locations. The flights were conducted under the FAA's Advanced Air Mobility Integration Pilot Program and are intended to support future operations of Electra's EL9 Ultra Short aircraft.

The demonstrations included operations from small heliports, vertiports, taxiways and other access points that have traditionally been used by helicopters. Testing took place at several Virginia locations, including Virginia Tech/Montgomery Regional Airport, Roanoke-Blacksburg Regional Airport and Allan C. Perkins/Blackstone Army Airfield, along with additional sites in Newport News and Richmond.

Electra used its EL2 Ultra Short technology demonstrator for the flights. The aircraft operated using point-in-space instrument procedures and dedicated instrument routings developed through the Virginia Smart



Airspace Program. These procedures are intended to enable fixed-wing Ultra Short aircraft to use access points that conventional airplanes generally cannot reach.

The programme has involved more than a year of development involving Electra, the FAA, Virginia Tech, the Virginia Department of Aviation and other partners. During the testing, operational data was collected to compare aircraft performance with procedure requirements and help inform future fixed-wing Advanced Air Mobility operations.

According to Electra, the demonstrations are

designed to show how Ultra Short aircraft could operate at major airports without relying exclusively on conventional runways. The company is developing an operating concept called Direct Aviation, which aims to provide regional air connectivity closer to passengers by using underutilised airport surfaces and alternative landing areas.

Electra CEO Marc Allen said the Virginia flights demonstrated that fixed-wing Ultra Short aircraft can use vertical-flight landing areas and new instrument procedures to reach locations that conventional aircraft were not designed to access. The company sees this approach as a way to expand regional connectivity while reducing pressure on congested airport runways.

The EL9 is designed as a hybrid-electric aircraft intended to combine the accessibility of helicopter operations with the characteristics of fixed-wing flight. Electra says its Ultra Short technology is intended to support short-field operations while delivering lower operating costs and reduced noise compared with conventional regional aviation solutions.

HEART AEROSPACE UNVEILS ES-36 WITH JSX PURCHASE AGREEMENT FOR UP TO 100 AIRCRAFT

Hearth Aerospace has unveiled the ES-36, a 36-seat hybrid-electric regional airliner that the company describes as its production aircraft. Alongside the unveiling, U.S. air carrier JSX announced a deposit-backed purchase agreement for 50 ES-36 aircraft, with purchase rights for an additional 50 aircraft. The agreement builds on the companies' existing partnership and supports JSX's plans for a next-generation regional fleet designed to expand nonstop connectivity from convenient community airports.

The ES-36 evolves Heart Aerospace's previously announced ES-30 with a simplified two-nacelle airframe and series-hybrid electric propulsion architecture. The new configuration is designed to improve operating economics while increasing passenger and payload capacity.

Compared with the ES-30, the ES-36 adds six passenger seats and 1,415 pounds of payload capacity, representing a 20 percent increase in both while retaining the same maximum takeoff weight and battery capacity. The aerodynamic design allows greater capacity for passengers and payload, while reducing the propulsion system from four nacelles and propellers to two, potentially lowering maintenance requirements.

The aircraft uses twin series-hybrid powertrains, with each incorporating a 1.65-megawatt electric motor to drive a propeller. Ground-charged batteries provide an all-electric range of 125 miles (200 kilometres), plus reserves, allowing operators to serve short-haul routes without fuel burn.

For longer missions, the ES-36 is designed to provide a



hybrid range of 745 miles (1,200 kilometres), plus reserves. Each powertrain incorporates a megawatt-class turbogenerator powered by a compact gas turbine. The turbogenerators generate electricity during flight to supplement the batteries and power the electric propulsion motors.

Ben Stabler, Chief Technology Officer at Heart Aerospace, said the ES-36 incorporates lessons from the company's X1 demonstrator programme. He said the production aircraft is designed to carry more passengers and payload while targeting operating costs at least 40 percent lower than legacy regional aircraft.

JSX's agreement converts its 2023 letter of intent with Heart Aerospace into a deposit-backed purchase commitment and secures early delivery positions. The aircraft is intended to support JSX's operations at community airports, including Santa Monica, Westchester County, Naples and Napa

Valley.

With a 95-foot wingspan, the ES-36 is approximately 11 feet shorter than the ES-30. Heart Aerospace says the compact configuration is designed to support higher-frequency operations and efficient use of airport infrastructure.

The aircraft's all-electric operations are designed to provide zero emissions during those flights and significantly lower noise. These characteristics could help support operations at community airports where environmental and noise considerations influence aviation activity.

JSX CEO Alex Wilcox said the hybrid-electric ES-36 could enable more nonstop routes from convenient airports while maintaining the airline's passenger experience. Heart Aerospace and JSX will work together on cabin configuration, charging and turnaround procedures, route planning and airport readiness.

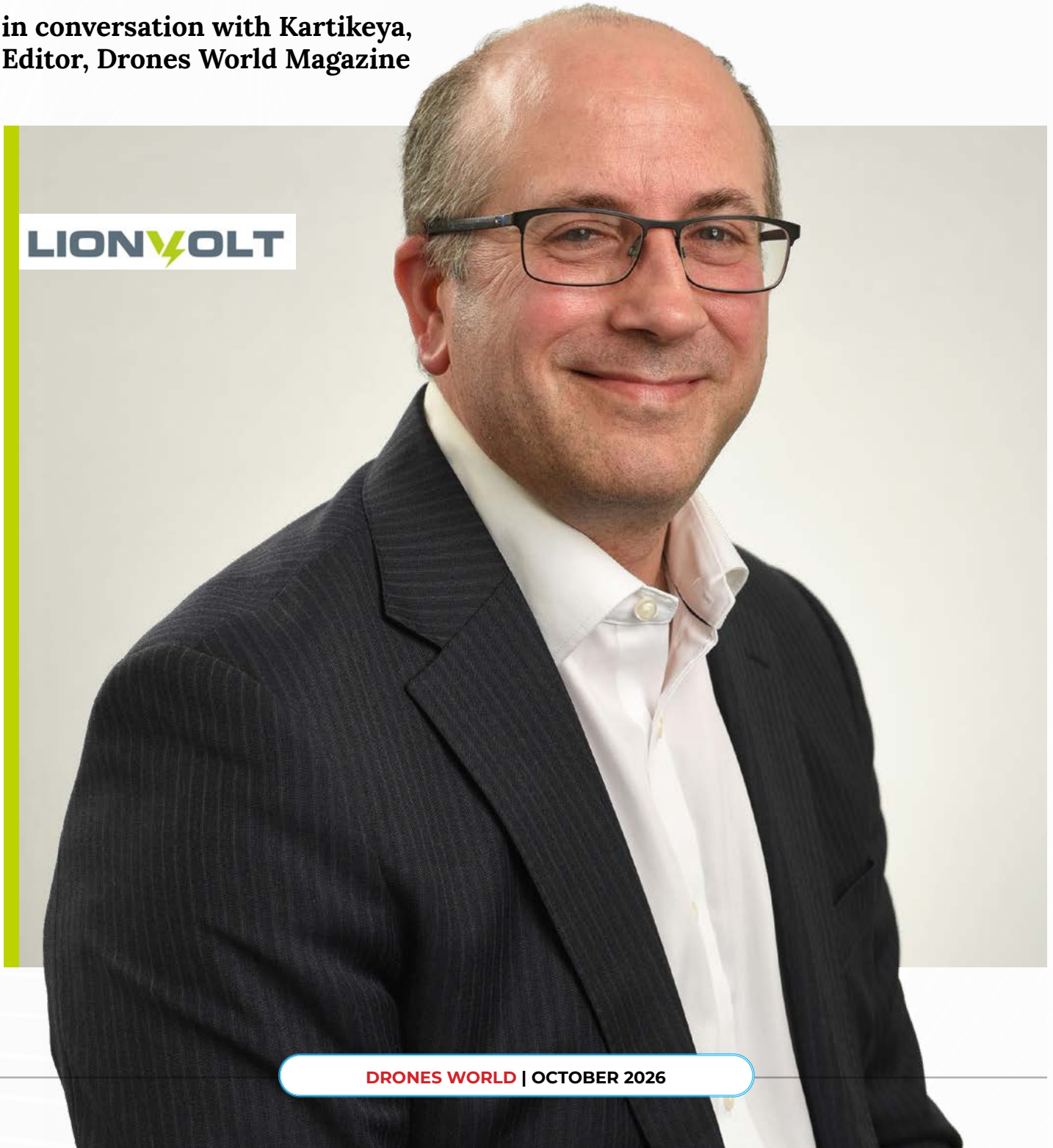
POWERING THE NEXT GENERATION OF DRONES

Kevin Brundish

CEO, LionVolt

in conversation with Kartikeya,
Editor, Drones World Magazine

 LIONVOLT





Battery performance is becoming a critical limiting factor for drones. What are the biggest challenges today in achieving higher energy density, longer flight times and greater payload capacity?



"It's key to ensure we are increasing the energy density of a battery cell without compromising the power, safety, and cycle life that drones also require. So, one of the biggest challenges is the limitations caused by one of the subcomponents in the cell: the anode. Historically, graphite has been used as the anode material, but we are now seeing more advanced anodes, including lithium metal, which can store significantly more energy.

"At LionVolt, we are bringing a next-generation anode on board that can deliver substantially better performance in terms of energy. That gives you two options: you can have a lighter cell that delivers the same amount of energy, or you can have more energy for the same weight and size. That represents a substantial step, with the potential for a 50 to 100% increase in the amount of energy, which translates directly into flight time.

"Flight time means you can fly longer, fly further, carry more, or trade between these. That is the immediate benefit of increasing the amount of energy available.

"But the anode is not the only part of the equation. Energy by itself is not enough if you cannot get it out of the cell. That is where power comes in: how quickly you can extract that energy. Drones can require quite high power at certain points in a mission, so the battery needs to be able to deliver energy at a sufficient discharge rate as well as provide the required cycle life.

"As the anode improves, it also creates an opportunity to look at more advanced cathode materials. Historically, cathodes have continued to improve while graphite has remained the weaker partner in the cell. With the introduction of more advanced anode materials, we can start looking at further improvements on the cathode

side as well, including technologies such as solid-state. So there is still substantial scope to increase the performance of the cell as these technologies develop."



LionVolt is developing lithium-metal battery technology, including cells targeting up to 420 Wh/kg. What could this level of energy density mean for the next generation of UAVs and autonomous drones?



"For the next generation of UAVs, this gives the drone designer substantially more energy for the same weight, or the same energy for substantially less weight. Watt-hours per kilogramme is particularly important when you are flying because you are lifting the battery into the air, so weight has a direct impact. Effectively, with flight, it comes down to the power-to-weight ratio: if you can deliver more energy for less weight, that has a direct impact on the aircraft.

"Our 420 Wh/kg product is a starting point, not the end of the road. We have broken the 400 Wh/kg threshold, and we are not stopping there. We see further evolutions, towards 500 Wh/kg and beyond, as we mature the technology.

"In terms of what that means for drones, it is fair to assume that higher energy density directly translates into an extension of flight time. We give the drone designer greater flexibility. The impact on payload is more complicated because it depends on the size and configuration of the drone and its battery pack. They could build a pack with the same weight as their existing pack but with substantially more energy, which could enable them to fly further or for longer. Alternatively, they could configure a lighter pack with the same energy and use the weight they have saved to carry more.



For commercial and defence drone operators, endurance is only one consideration. How is LionVolt addressing fast charging, power delivery, safety and battery lifecycle requirements?



"There are several different considerations here, and they are all interconnected. The important thing is not simply endurance; it is being able to balance fast charging, power delivery, safety and cycle life around the requirements of the mission.

"When it comes to fast charging, drones are typically charged on the ground, and operators can overcome charging limitations by having more than one battery pack. Our 3D architecture is designed to provide both fast charge and fast discharge. This can reduce downtime and, importantly for continuous operations, reduce the number of battery packs an operator needs to maintain 24/7 availability.

"The important point is that fast charging can often involve a trade-off with energy density. In our case, because we start with a high-energy cell, we do not have to sacrifice a substantial amount of energy to achieve fast-charge capability. Our use of very thin layers within the cell also contributes to that fast-charging capability; the electrons have an easier pathway through a thin layer, residence is reduced.

"Power delivery is closely related. Our 3D architecture has demonstrated very high discharge rates. With our current product, we have demonstrated continuous discharges of 6C, which means all of the stored energy can be provided in around 10 minutes (1C would be one hour). We expect that capability to increase to 10C continuous as the architecture is further optimised. For drones that need to build speed quickly, that ability to deliver high power is particularly important.

"Cycle life is a different consideration because drones have very different requirements depending on their function. A loitering drone may require a high number of cycles, whereas an interceptor drone has a very different mission profile. We therefore design the cell architecture around the requirements of the end application. Energy, power, charge rate, and cycle life all involve some level of trade-offs, so you essentially pick the parameter you want to optimise around. The great news is that we have the ability to maintain high levels of each, due to our advanced architecture in the cell.

"We also have to have a safe cell. Our cells go through certification and testing to ensure they are fit for purpose before they can even be shipped. Safety is therefore at the heart of what we do.

"Looking further ahead, we are also an enabler of semi-solid and solid-state cells. Removing the liquid element significantly increases safety, while also creating



So, the benefit is not simply one particular outcome. We are giving the drone OEM the design flexibility to decide how best to use that additional energy or reduced weight. They can choose whether they want to fly further, fly longer, or carry more.

opportunities to use more advanced energy materials. So, we see safety continuing to improve alongside the performance of the technology."

Q As BVLOS (Beyond Visual Line of Sight) and long-range autonomous operations expand, what battery characteristics do you believe will become essential for drones operating for extended periods and in demanding environments?

A "There are not really many other parameters you can have on a cell. It is actually intentionally very simple: you put as much energy as you can safely into it, you give the operator the ability to put that energy in or remove it very quickly, and you enable the battery to be reused as many times as possible.

"Those are energy, power, and cycle life. We are constantly looking to drive all three up in unison, while recognising that there is typically always a trade-off between them.

"The important thing is therefore not simply maximising one characteristic in isolation. It is about giving the operator the right balance of energy, power, and cycle life for the particular mission the drone needs to perform."

Q How do you see next-generation battery technology changing drone design itself? Could higher energy density allow manufacturers to rethink payloads, aircraft configuration and mission profiles?

A "Power and energy are such an integral part of the aircraft. Drone manufacturers will obviously continue to evolve their UAV, but I think there is a broader philosophical shift taking place. Historically, in my experience, the drone has been designed first, and then the power solution has been sought.

"Power and energy are such an integral part of the drone that I think, as new battery products come online, drones will increasingly be designed around the power and energy available to them.

"We are already seeing benefits from retrofitting next-generation cells into existing designs, but the bigger opportunity comes when the drone manufacturer can configure the UAV in ways that were previously not possible. As these packs and cells become more commonplace, manufacturers have the opportunity to develop another iteration of the drone around the capabilities of the next-generation power pack, rather than retaining characteristics that were designed around an older generation of cells.

"That is the exciting part. It gives manufacturers the ability to decide how they want to take advantage of the additional energy and power being offered. They could make the drone faster, fly further, or carry more. Ultimately, the battery technology gives the drone designer a much greater degree of freedom over its design against the specific mission profile."

Q LionVolt is developing its technology in Europe. How important is establishing a European battery supply chain for the growing UAV and advanced mobility sectors?

A "Establishing a European battery supply chain is critical because it provides greater security and resilience of supply. The simple answer is that you want either a sovereign supply chain or a friend-shored supply chain. You want to have control over where your critical components and materials come from, or you want them to come from countries and partners you can rely on.

"That is particularly important when you are operating in a defence and security environment. Ideally, you don't want your supply of a critical component to be under the control of a third party that could potentially restrict access to it. Securing supply therefore means bringing more of that supply chain onshore, friend-shore, or near-shore.

"In Europe, I do not think you necessarily need every part of the supply chain in every individual country, but you do need a strong European supply base. It is a critical requirement for the growth of sectors such as defence, UAVs, and advanced mobility.

"That is why we are building in Europe. We are also looking at the supply chain around us and how we can bring more of those elements closer to Europe over time. The objective is not simply to have a European company making batteries; it is to build a more accessible and resilient supply chain around the technology."

Q Looking ahead to the next five years, what developments in battery technology do you believe could have the greatest impact on the commercial, defence and autonomous drone markets?

 *Flight time means you can fly longer, fly further, carry more, or trade between these.* 

A "What we can be sure of is that batteries will continue to play a key role in the drone space.

"I think solid-state is probably the next step. It not only offers some safety advantages; it can also enable the use of additional high-energy materials on the cathode side. That can take battery performance and safety up another notch.

"But I don't think we have reached the limits of the technology that is emerging today. These technologies have only been on the market for a relatively short period, and there is still a substantial amount of second- and third-generation optimisation available. That is why our roadmap goes to 500 Wh/kg and beyond. There are already lab cells being tested at those kinds of levels, as are we, so although today's cells are around the 400 Wh/kg region, there is much more development to come.

"There is also further opportunity in the cathode. The anode has made a very significant step forward in terms of how much energy it can store, so the cathode now has substantial room for development to catch up and allow us to extract more of the full potential of the anode.

"We also see lithium as a particularly adaptable anode material. As new cathode technologies come online, we see an opportunity to continue developing our anode and matching it with those materials to extract more and more of the potential of the cell.

"So I think it's safe to say this technology hasn't reached its ceiling. We are still at a relatively early stage, and there is a substantial amount of development still to come."

 *The battery technology gives the drone designer a much greater degree of freedom.* 

AV'S LOCUST SELECTED FOR NEARLY \$500M ARMY COUNTER-UAS CONTRACT FOR ENDURING-HIGH ENERGY LASER (E-HEL) PROGRAM



AeroVironment, Inc. a global leader in proven autonomous and counter-drone systems announced it has been awarded a landmark contract valued at \$464.8 million by the U.S. Army Portfolio Acquisition Executive for Fires (PAE Fires) program office for the Enduring-High Energy Laser (E-HEL) program.

This award represents the first-ever production contract for directed energy systems in United States history, signaling a historic transition from prototype to production for laser weapon systems.

"This award marks a defining moment not only for AV, but for the future of modern defense," said Wahid Nawabi, Chairman, President, and Chief Executive Officer at AV. "The transition of directed energy from experimentation to an enduring, fielded capability reflects years of collaboration, innovation, and operational success alongside the U.S. Army. We are proud to deliver these production systems and support the Army's mission with scalable, modular, and cost-effective defense solutions."

Under this Other Transaction Agreement (OTA), AV will deliver dozens of LOCUST® X3 laser weapon systems over the next few years in support of multi-year fielding requirements, advancing the Army's layered air defense capabilities against group 1-3 unmanned aircraft systems (UAS) while also solidifying directed energy as a cornerstone of future battlefield operations.

AV's LOCUST X3, a 30-kilowatt platform-agnostic system, will be integrated with various platforms such as the Army's Joint Light Tactical Vehicle (JLTV), with options for palletized configurations, while analyzing the potential to integrate on an Infantry Squad Vehicle (ISV) in the near future. As part of the program, AV will also provide ongoing system support and training.

The E-HEL program builds upon the success of the Army Multi-Purpose High Energy Laser (AMP-HEL) prototypes currently in use by the Army.

The contract follows LOCUST's successful testing at White Sands Missile Range, led by Joint Interagency Task Force 401 (JIATF-401) and PAE Fires, which demonstrated safe, effective counter-drone operations in U.S. airspace and directly enabled a DOW-FAA safety agreement validating the system for domestic use.

By entering production, the E-HEL program enables the Army to field a sustainable, scalable, and cost-effective solution against UAS. The ramp up in production will be supported by a \$30 million investment in AV's Albuquerque, NM facility that was announced in March of 2026.

"This program represents the culmination of years of operational lessons learned and rapid prototyping," said John Garrity, Vice President of Directed Energy Systems at AV. "E-HEL is not a future capability, it is a production-ready system, built on proven technology, and designed to meet the demands of today's fight while scaling for tomorrow's threats."

SHIELD AI EXPANDS TRACKER C-UAS INTEGRATION WITH L3HARRIS VAMPIRE



Shield AI announced that L3Harris Technologies has licensed Shield AI's Tracker Counter-Unmanned Aircraft System (Tracker C-UAS) to equip its VAMPIRE™ platform, creating an integrated counter-drone solution.

The combined system provides passive, AI-powered drone detection and precision engagement, enabling operators to better detect, track, and defeat unmanned aerial threats. L3Harris licensed Tracker C-UAS to equip VAMPIRE systems with AI-powered detection, and Shield AI is making the software available for licensing across other platforms operators already use.

Tracker C-UAS, part of Shield AI's Vision Systems product line, is software that uses proprietary AI and computer vision to detect, discriminate, and track faraway threats in electro-optical/infrared (EO/IR) video, providing early warning to aid rapid engagement without radar or RF emissions.

"Aerial threats continue to evolve, driving the need for advanced, passive sensing technologies that enable operators to identify threats without exposing their position," said Tony Calderon, President, Targeting & Sensor Systems, Communications & Spectrum Dominance, L3Harris. "The integration of Tracker C-UAS with our proven VAMPIRE platform delivers an operationally effective solution that enhances threat detection, target tracking and counter-UAS engagement while improving force survivability."

This integration builds on the companies' earlier demonstration, where L3Harris integrated its WESCAM® MX®-Series EO/IR sensor systems with Shield AI's Tracker C-UAS software to detect multiple classes of unmanned aerial systems at ranges beyond those achievable with existing systems.

"The rapid proliferation of low-cost drones is forcing militaries to rethink how they detect and defeat aerial threats," said Christian Gutierrez, Shield AI's senior vice president of Hivemind. "Pairing passive AI sensing with VAMPIRE gives operators the ability to detect threats early and act with speed and confidence."

INDRA UNVEILS DRIZZLE, ITS NEW FAMILY OF AUTONOMOUS EFFECTORS TO COUNTER MASS DRONE ATTACKS

Indra has unveiled at UNVEX, Spain's leading unmanned systems trade fair, its new DRIZZLE interceptor drone, a cutting-edge system designed to neutralize drones, such as those being used in today's conflicts, and to protect infrastructure, convoys and units deployed in the field.

This compact and lightweight unmanned system can reach speeds of more than 400 kilometers per hour thanks to its propulsion system, and has an approximate range of 80 kilometers, which can be extended to 130 kilometers with the support of a mothership drone.

Its main advantage over other systems lies in the search and detection system developed by Indra, which allows it to discriminate threats and lock onto the target with high precision.

Its 'brain' has enormous real-time processing capacity to analyze the information collected by electro-optical and



infrared sensors that guide it during the terminal phase of the attack. The company is working to equip the system, in subsequent phases, with a radar that will further strengthen this detection capability.

DRIZZLE can be integrated into counter-drone systems, acting as a hard-kill effector, or used as an onboard self-

protection solution for land vehicles or helicopters.

To extend its reach using expendable elements, Indra has also developed a mothership drone capable of carrying several smaller interceptors. This vector can fly at 30,000 feet over the first 80 kilometers before releasing the interceptors in the final phase of the mission, enabling them to cover an additional 50 kilometers and increasing the total range to around 130 kilometers to reach the target. These mothership drones can also fly in swarms to release a fine rain, or drizzle, of interceptors that saturate the adversary's defenses and, in turn, act as attack vectors after completing their mission.

DRIZZLE has been developed under a fungible system concept, designed to be expendable, in order to provide allied armed forces with a competitive solution in terms of economies of scale and effectiveness against low-cost drone attacks.

PARAZERO AND THIRDEYE SYSTEMS SIGN MOU TO DEVELOP A 360 DETECT-TO-DEFEAT COUNTER-UAS SOLUTION FOR ARMORED VEHICLES AND CRITICAL ASSETS

ParaZero Technologies Ltd. an aerospace defense company pioneering smart, autonomous solutions for the global manned and unmanned aerial systems (UAS) industry, announced the signing of a non-binding Memorandum of Understanding ("MOU") with ThirdEye Systems Ltd. (TASE: THES), an Israeli defense technology company specializing in advanced electro-optical recognition and Counter-UAS systems.

The non-binding MOU establishes a framework for the companies to explore the development, integration, and commercialization of a complete Counter-UAS solution combining ThirdEye's advanced detection and sensor capabilities with ParaZero's DefendAir net-based physical interception technology, which shall be subject to the execution of definitive documentation.

The cooperation includes the creation of a complete integrated detect-to-defeat architecture covering the full Counter-UAS engagement cycle – from detection and identification of an approaching aerial threat, through threat analysis and engagement management, to controlled physical interception and neutralization. The companies will initially focus on protecting armored vehicle platforms from the rapidly evolving drone threats and may also explore applications for critical infrastructure, strategic sites, and other sensitive assets requiring an integrated detection-to-interception capability.

The already field-tested architecture is intended



to connect detection, threat analysis, engagement management, safety, and controlled physical interception within a unified Counter-UAS system. This approach reflects the growing operational requirement for solutions capable of supporting the full engagement cycle, from identifying an approaching drone to physically stopping it.

"Protecting armored vehicles and strategic assets from evolving drone threats requires detection, decision-making, and interception capabilities to operate as one integrated system," said Ariel Alon, CEO of ParaZero Technologies. "ThirdEye brings advanced electro-optical detection and AI-driven recognition capabilities, while ParaZero provides the physical interception layer through

DefendAir. This MOU creates a framework to combine these technologies into a practical and complete Counter-UAS architecture."

Lior Segal, CEO of ThirdEye Systems, added: "Our collaboration with ParaZero represents a significant force multiplier for both our company and our operational customers. The ability to provide field forces with a comprehensive protection solution, from the initial detection of a threat through to its actual interception, is critical, particularly for armoured vehicles and sensitive assets. We are confident that the combined system will deliver significant value to defence markets in Israel and around the world

DIEHL DEFENCE AND ELBIT SYSTEMS SUCCESSFULLY DEMONSTRATED SKYSTRIKER'S CAPABILITIES



Diehl Defence and Elbit Systems have reached the next crucial milestone in their strategic partnership. Following the cooperation agreement signed in June 2026 at the ILA Berlin, the operational capabilities of the SkyStriker system were successfully demonstrated in a comprehensive live demonstration in early September 2026.

The demonstration focused on the long range and endurance of the system, including the "hand-over" function, which was successfully executed at a distance of 80 km. The system demonstrated its ability to autonomously detect, track, and engage targets with the highest precision. During the live demonstration, SkyStriker was launched from a canister to reconnoiter, track, and subsequently successfully strike a prepared target. Cooperation with the SkyLark 1 eVTOL reconnaissance drone also proceeded smoothly. This highlights the system's seamless integration into complex ISR UAV networks and the associated capabilities for highly specialized "Seek & Strike" missions.

The SkyStriker system is a latest-generation, electrically powered loitering munition specifically developed for tactical precision strikes over long distances. With a range of over 200 km and a loiter time of more than two hours, the system covers a broad spectrum of mission requirements. Thanks to its electric propulsion system, the system also features an extremely low acoustic and thermal signature, making it difficult to detect.

SkyStriker is already a battle-proven, successful system in use in various countries. Thanks to high-resolution video reconnaissance and the ability to autonomously track targets - enabling precise, effective engagement—collateral damage can be minimized. Thanks to its high operational flexibility, SkyStriker can be launched from a wide variety of platforms - including ground vehicles, containers, aircraft, and the EuroPULS rocket artillery system, which is relevant to the German Armed Forces and other European countries. This enables the armed forces to make optimal use of the ISR and attack capabilities of the system.

"The successful demonstration confirms the technological maturity and enormous versatility of the SkyStriker system. For Diehl Defence, it is a decisive step to demonstrate the synergies between our systems and the requirements of modern armed forces directly on the ground. We are proud to be working with Elbit Systems to lay the groundwork for state-of-the-art, local production in Germany in order to strengthen European defense capabilities in the long term," explained Gunnar Pappert, Head of the Army Systems Product Division at Diehl Defence.

Marian Rachow, CEO of Elbit Systems Deutschland, added: "We are very pleased to have the opportunity to showcase the capabilities of our SkyStriker here and to offer it to various nations to meet their individual needs. Our system is already setting the standard for future long-range loitering munitions. This demonstration marks another milestone for the SkyStriker in Europe and on the path to German production."

AV SECURES FIRST INTERNATIONAL ORDER FOR LOCUST DIRECTED ENERGY COUNTER-DRONE SYSTEMS



AeroVironment, Inc. announced it has received its first international purchase order for the LOCUST® Laser Weapon System. The landmark, first of its kind direct commercial sale (DCS) order, valued at more than \$50 million, marks a significant milestone in the global adoption of AV's directed energy counter-drone capabilities.

The purchase order covers an initial delivery of AV's mission-proven LOCUST systems and associated support. The award follows AV's recent selection by the U.S. Army for a \$464.8 million Enduring-High Energy Laser (E-HEL) contract, representing the first-ever production contract for high energy laser weapon systems in United States history.

"This first international order signals increasing global recognition that high-energy laser weapon systems are essential to modern air defense," said Wahid Nawabi, President, Chairman and Chief Executive Officer at AV. "The threat from low-cost drones is global and has fundamentally changed the economics of warfare. LOCUST gives our customers an affordable, scalable way to defeat drone threats at scale without relying solely on expensive interceptors."

"This first international order for LOCUST is a pivotal milestone in our directed energy roadmap," said Mary Clum, President of Space, Cyber, and Directed Energy at AV. "We are not only accelerating the fielding of an operationally proven laser weapon system, we are also establishing a foundation for sustained and expanded international adoption to provide layered innovation in counter-drone defense."

To support the growing demand for LOCUST, AV recently announced it is investing more than \$30 million to expand its Albuquerque, New Mexico manufacturing campus, creating a vertically integrated production hub to scale domestic and international production of directed energy, space, and advanced defense technologies while also adding more than 450 jobs and generating over \$670 million in economic impact.

In addition to this latest international award, LOCUST has helped drive first-of-its-kind milestones for U.S. directed energy, from achieving the military's first acknowledged laser kills on the southern border and defeating multiple drones from the deck of the USS George H. W. Bush, to successful integrations on Infantry Squad Vehicles and Joint Light Tactical Vehicles under the AMP-HEL initiative and multiple high-profile live-fire events at White Sands Missile Range observed by military and defense leaders, including Secretary of War Pete Hegseth who recently operated the system at White Sands.

L3HARRIS DELIVERING COUNTER-DRONE SYSTEMS TO US NAVY

L3Harris Technologies has been selected by the U.S. Navy to deliver VAMPIRE™ counter-unmanned systems (C-UxS) in support of the U.S.' growing integrated C-UxS defense architecture.

The VAMPIRE system is a self-contained weapons solution that delivers advanced reconnaissance and precision strike against drones and remotely piloted platforms across domains.

"VAMPIRE is a flexible and effective system that meets the unique requirements of the U.S. Navy for littoral C-UxS defense," said Tony



Calderon, President, Targeting & Sensor Systems, Communications & Spectrum Dominance, L3Harris. "We're engineering new capabilities to adapt to our customers' missions and ruggedizing VAMPIRE against the environmental stresses of maritime environments."

L3Harris is also delivering VAMPIRE systems to the U.S. Army. Separately, the company unveiled its Wraith Shield™ software earlier this year, which provides a radio-as-a-sensor capability to defeat small drones and can be incorporated with VAMPIRE and Drone Guardian® systems to deliver layered defense against UxS threats.

PARAZERO SIGNS AN MOU WITH A TIER-1 EUROPEAN DEFENSE COMPANY TO INTEGRATE AUTONOMOUS COUNTER-UAS SYSTEM ACROSS ITS ARMORED VEHICLE ARSENAL

ParaZero Technologies Ltd. an aerospace defense company pioneering smart, autonomous solutions for the global manned and unmanned aerial systems (UAS) industry announced that it has signed a Memorandum of Understanding ("MOU") with a leading European Defense Company, to advance the development of a vehicle-integrated active protection system designed to protect armored platforms against incoming attack drones.

The collaboration is intended to combine the Tier-1 armored vehicle with ParaZero's DefendAir net-based physical interception technology. The system is designed to provide armored platforms a built-in, autonomous, Counter-UAS protection layer capable of physically intercepting an approaching hostile drone before it reaches the vehicle.

The cooperation has already progressed into active integration work, following an initial purchase of DefendAir Net Pods for integration. As part of this phase, ParaZero's engineering team are expected to travel to the Tier-1 company facility in Europe, to provide on-site technical support and work directly on the integration process.

Modern armored vehicles were designed primarily to withstand conventional battlefield threats, including ballistic fire, mines, improvised explosive devices, rockets and anti-tank missiles. The rapid proliferation of small FPV attack drones and has introduced a fundamentally different threat profile. These drones can approach armored vehicles from multiple directions, pursue moving platforms and strike exposed or less-protected areas with high precision. Their speed, maneuverability, low signature and comparatively low cost have made them a persistent risk to vehicles, crews and maneuvering forces.

Electronic warfare remains an important part of Counter-UAS defense, but it does not provide a universal



response. Fiber-optic-controlled, autonomously navigating and other communications-resilient drones may continue toward their targets even when conventional radio-frequency links are disrupted.

This new threat creates a requirement for layered vehicle protection that extends beyond passive armor and electronic countermeasures to include an integrated physical interception capability.

The system contemplated under the MOU applies the principle of active protection to the drone threat. Rather than relying only on the vehicle to withstand an impact, the integrated capability is intended to actively engage and physically stop an incoming drone before it reaches the platform. ParaZero's DefendAir Net Pods are designed to provide this final interception layer through controlled, non-explosive, net-based neutralization.

"Active protection can no longer be designed only around traditional anti-armor threats. The modern armored platform must also be capable of defeating a small, fast attack drone at its final approach," said Ariel Alon, CEO of ParaZero

Technologies. "Together with this European Giant, we are working to integrate DefendAir as an organic protection layer within the vehicle itself. The upcoming on-site engineering work demonstrate that this cooperation is already advancing from strategic alignment into practical integration."

DefendAir's modular Net Pod architecture is designed for integration into vehicle-mounted, autonomous, remotely operated and fixed Counter-UAS systems. The system provides defense manufacturers and platform integrators with a physical interception component that can be incorporated into broader protection architectures according to the platform, threat profile and operational environment.

For ParaZero, the collaboration supports the Company's strategy of establishing DefendAir as the net-based physical interception layer within next-generation defense platforms. By working directly with Tier-1 vehicle manufacturers and system integrators, ParaZero aims to embed its technology into broader defense programs and support the transition from individual Counter-UAS products to integrated, platform-level protection capabilities.

KONGSBERG SELECTS ECHODYNE MESA RADAR FOR COUNTER-UAS WEAPON SYSTEMS



Low-SWaP, precision-tracking radar integrated with PROTECTOR RS4 and RS6 remote weapon stations to strengthen detection-to-defeat performance against drones

Echodyne, the radar platform company, today announced that KONGSBERG has selected Echodyne's MESA® radar platform for a range of air and surface applications. Among the first use cases, KONGSBERG has integrated MESA radar into the PROTECTOR RS4 and PROTECTOR RS6 remote weapon stations (RWS), adding the precision radar data needed to turn the world's most widely deployed RWS family into a highly effective counter-unmanned aircraft system (C-UAS) effector. The selection pairs KONGSBERG's proven weapon-station architecture and Collaborative Fire Control capabilities with Echodyne's compact, solid-state radar. The result is a scalable approach for adding high-fidelity detection, tracking and targeting data to static, crewed and uncrewed platforms without the size, weight and power demands traditionally associated with high-performance electronically scanned array radar.

"KONGSBERG has set the standard for remote weapon systems through decades of field experience, disciplined engineering and close collaboration with operators," said Eben Frankenberg, CEO of Echodyne. "Integrating MESA radar gives the PROTECTOR family the precise, stable and persistent tracks needed to cue the fire-control system, sustain target lock and act decisively against fast-moving, low-signature drone threats. Just as important, MESA delivers that performance in a compact, software-defined package that can scale across a large installed base and adapt as the threat evolves."

Radar track quality is fundamental to effective fire control. Echodyne's low-SWaP MESA radar supplies high-fidelity range, range-rate, bearing and kinematic data while maintaining the track stability and persistence needed to compute and execute a firing solution. By stabilizing and cueing the optical fire-control system onto a target, the radar helps the weapon station hold lock longer, shorten the detection-to-engagement timeline and improve hit probability against agile, low-radar-cross-section threats.

That precision is particularly important when PROTECTOR systems employ programmable airburst munitions. Accurate range and range-rate measurements support the timing needed to place the munition's effect at the correct point in the target's flight path. In networked operations, a cooperative search radar or another sensor can pass a threat track to the radar-equipped RWS; the local MESA radar then refines and sustains the track for fire-control use. This search-cue-track-engage workflow allows distributed systems to share the air picture, assign targets and rapidly retarget as threats are defeated.

Echodyne and KONGSBERG have spent multiple years integrating, testing and demonstrating the radar-enabled solution in keeping with KONGSBERG's philosophy to prove capability in the field. Beyond the various PROTECTOR integrations, Echodyne and KONGSBERG are exploring additional uses for high-performance radar across air and surface missions within the KONGSBERG portfolio. The companies expect to continue joint technical work focused on resilient sensing, networked fire control and scalable protection against rapidly evolving threats.

DRONESHIELD AND AIM DEFENCE COLLABORATE ON DIRECTED ENERGY IN COUNTER-DRONE ARCHITECTURE



DroneShield announced the expansion of its open counter-drone architecture to include AIM Defence's Fractl™ high-power laser effector, extending its layered ecosystem beyond RF sensing, electronic warfare and command-and-control.

The expansion comes through a collaboration with Australian directed energy company AIM Defence, which will bring the Fractl high-power laser system into DroneShield's ecosystem of sensing and defeat technologies.

The collaboration reinforces DroneShield's long-term position as an open, software-led counter-drone platform provider, enabling customers to combine complementary sensors and effectors as threat environments and mission requirements evolve.

As unmanned threats continue to increase in scale, autonomy and complexity, defence organisations recognise a layered counter-drone architecture is required to combine multiple sensing and defeat technologies. Such an approach incorporates complementary capabilities without replacing existing infrastructure.

DroneShield's solutions are highly effective for many RF-controlled drone threats, while AIM Defence's directed energy offering provides an additional engagement option for scenarios where different defeat mechanisms are operationally advantageous. Together, they expand the range of operational responses available to defence and security organisations.

AIM Defence is a global leader in the development of deployable directed energy systems. Its AI-enabled, high-power laser is designed to be interoperable with external sensors and command-and-control platforms, enabling precision engagement as part of broader layered defence architectures. The Fractl High Power Laser system is one of the few counter-drone lasers in the world to have been operationally deployed, and is currently being exported to multiple countries.

Through the collaboration, DroneShield's DroneSentry operational platform will be interoperable with AIM Defence's Fractl high-power laser. This will enable operators to coordinate RF-sensing, AI-enabled software, sensor fusion, command-and-control and directed energy from a common operating environment.

"Customers are no longer asking which specific sensor or effector is best," said Angus Harris, Chief Technology Officer of DroneShield. "They're asking how to combine the best technologies into a single operational capability that can adapt as threats evolve. Expanding our ecosystem with AIM Defence's high-power laser gives customers another defeat option within that same open architecture. It is great to be working with AIM Defence which, like DroneShield, is a shining example of Australia's defence tech landscape."

“BEYOND DRONE ASSEMBLY

AKSI Aerospace’s Vision to Build a Globally Competitive Indian Aerospace OEM by 2030”

AKSI Aerospace Group: Building a Globally Competitive, Vertically Integrated Aerospace Ecosystem

An Interview with
Pankaj Akula

Founder & MD
AKSI Aerospace Group



 **AKSI Aerospace is building a vertically integrated aerospace ecosystem covering UAVs, composites, batteries, autopilots, propulsion and imaging. What is the long-term vision behind bringing these capabilities together under one group?**

 Our long-term vision at AKSI Aerospace is to establish an Indian aerospace group capable of designing, developing, manufacturing and supporting complete aerospace platforms and their critical subsystems, with the technological independence and manufacturing depth necessary to compete internationally.

We believe the future of the UAV industry will not be determined solely by companies that can assemble drones or integrate commercially available components. Sustainable leadership will increasingly belong to organisations that understand, control and continuously improve the critical technologies underlying their products.

A modern UAV is an integrated system of aerodynamics, structures, propulsion, energy storage, flight control, communications, navigation, imaging and intelligent software. Each subsystem influences the performance, reliability, safety and commercial viability of the entire aircraft.

Our approach is therefore to develop these capabilities within a common industrial ecosystem rather than depend entirely on fragmented external supply chains.

Through our group companies and specialised technology divisions, we are building capabilities in advanced composite aerostructures, precision metallic manufacturing, lithium-based battery systems, autopilots, propulsion technologies, imaging systems and multiple UAV configurations.

This integration creates three important strategic advantages.

First, technological independence. By developing critical subsystems in-house, we gain greater control over product architecture, design modifications, component availability, performance optimisation and long-term technology roadmaps.

Second, manufacturing competitiveness. Vertical integration allows us to coordinate design, engineering, procurement, manufacturing and quality assurance across the product lifecycle. This can reduce development

iterations, improve cost control and enable faster product customisation.

Third, strategic resilience. Recent global developments have demonstrated the risks associated with dependence on internationally concentrated supply chains for electronics, propulsion, energy systems and aerospace components. Our objective is to progressively reduce these vulnerabilities through indigenous design, diversified sourcing and local manufacturing.

Importantly, we do not view vertical integration as an objective to manufacture every component regardless of economic viability. We believe in owning technologies that are strategically important while continuing to collaborate with global technology leaders wherever partnerships provide meaningful advantages.

Our Hyderabad manufacturing ecosystem is being developed as a foundation for this approach, combining engineering, prototyping, composite processing, precision manufacturing and subsystem integration.

In the longer term, our ambition extends beyond UAVs into electric aircraft, advanced propulsion, autonomous aerospace systems and next-generation aviation technologies.

Our vision is to transform AKSI from a collection of drone-related businesses into a globally relevant aerospace technology and manufacturing group—one that can deliver complete aircraft, critical subsystems and manufacturing solutions to customers worldwide.

 **AKSI is positioning itself beyond drone assembly, with capabilities spanning design, prototyping, manufacturing, integration and production. How do you see this end-to-end model strengthening the company's competitiveness in the global UAV market?**

 The global UAV industry is undergoing an important transition. During its early growth phase, market entry was relatively accessible because companies could develop products by integrating commercially available motors, controllers, batteries, cameras and airframes.

However, as UAVs move into critical industrial, logistics, infrastructure and government applications, customers increasingly demand performance consistency, reliability, product customisation, lifecycle support and secure supply chains.

This fundamentally changes the competitive landscape.

At AKSI, we believe that an end-to-end engineering and manufacturing model provides a much stronger foundation for addressing these requirements.

Our approach begins with understanding the customer's operational requirements and translating them into aircraft architecture, aerodynamic design, structural engineering, subsystem selection and manufacturing processes.

By bringing design and production teams closer together, we can incorporate manufacturability, serviceability and cost considerations at the earliest stages of product development.

For example, our capabilities in composite fabrication, CNC machining, battery manufacturing, electronic integration and propulsion development allow us to evaluate alternative engineering solutions without relying exclusively on external vendors.

This is particularly valuable when developing specialised UAVs where conventional off-the-shelf configurations may not meet payload, endurance, environmental or operational requirements.

A second advantage is the ability to optimise the complete aircraft rather than individual components.

An improvement in structural weight can influence battery capacity, propulsion requirements, payload capability and endurance. Similarly, improvements in propulsion efficiency or battery management can produce benefits across the entire aircraft.

When engineering teams control multiple interconnected technologies, such optimisation becomes more practical.

A third advantage is the ability to transition from prototypes to repeatable manufacturing.

The industry has many organisations capable of demonstrating promising prototypes. However, consistently manufacturing hundreds or thousands of reliable systems, supported by documentation, inspection processes and after-sales service, is a different challenge.

Our manufacturing strategy is focused on bridging this gap between innovation and industrial production.

For international customers, we also see significant value

in our ability to offer engineering flexibility, competitive Indian manufacturing economics and access to a growing domestic aerospace supply chain.

We intend to compete not merely on lower labour costs, but on the combined strengths of engineering capability, manufacturing depth, product reliability and responsiveness.

Ultimately, our objective is to position AKSI as an aerospace OEM capable of taking a product from an initial concept through engineering development, qualification, serial production and lifecycle support.

That is the capability we believe will distinguish serious global UAV manufacturers from assembly-oriented businesses.



You have a portfolio covering agricultural, industrial and cargo UAVs. Which applications and markets do you believe will drive the next major phase of growth for AKSI?



We see the next phase of UAV industry growth being driven by applications where unmanned systems deliver measurable economic value, improve operational safety or enable services that are difficult to perform using conventional methods.

For AKSI, we have identified several complementary growth opportunities.

Agricultural UAVs represent an important volume-driven opportunity.

India has a large agricultural economy, and mechanisation through UAVs can improve spraying efficiency, reduce manual exposure to chemicals and support precision farming.

Through AKSI Khetpilot, our focus extends beyond agricultural spraying into seeding, crop monitoring, multispectral imaging and data-driven agricultural management.

We believe agricultural UAV adoption will increasingly shift from standalone equipment sales towards integrated service models involving drones, sensors, analytics, trained operators and agricultural decision-support systems.

Markets in Africa, Southeast Asia and other agricultural economies also offer meaningful opportunities, particularly where affordability, local serviceability and



operational simplicity are essential.

Industrial UAVs represent a technology- and service-driven growth opportunity.

Infrastructure inspection, power transmission monitoring, mining surveys, geospatial mapping, environmental monitoring, asset management and industrial security are becoming increasingly important applications.

These customers require reliable aircraft capable of carrying specialised payloads, operating in demanding environments and integrating with enterprise software systems.

Our industrial UAV strategy combines multiple airframe configurations with imaging, geospatial data acquisition and application-specific payload integration.

We see particularly strong opportunities in applications where drones are part of a recurring industrial workflow rather than a one-time equipment purchase.

Cargo and logistics UAVs represent one of the most strategically significant long-term opportunities.

Through our Slatup cargo UAV initiatives, we are exploring unmanned logistics applications involving remote-area delivery, industrial transportation, medical supplies, emergency response and specialised government logistics.

Cargo UAVs can become especially valuable in regions where conventional transportation infrastructure is limited, geographically challenging or expensive to operate.

However, we recognise that large-scale cargo UAV adoption depends on more than aircraft technology. Regulatory approvals, airspace integration, operational economics, safety assurance and supporting infrastructure will determine the speed of market development.

We are therefore approaching this segment with a long-term perspective, focusing on aircraft architecture, propulsion efficiency, payload capability and practical operational use cases.

Beyond these three segments, we also see substantial opportunities in public safety, disaster management, border monitoring and specialised government aerospace applications.

Our broader technology investments in propulsion, batteries, autopilots and aerostructures are intended to support multiple market segments rather than remain dependent on a single product category.

We believe agriculture can provide scalable deployment opportunities, industrial UAVs can generate specialised high-value applications, and cargo UAVs can create an entirely new category of autonomous logistics.

The combination provides AKSI with a diversified growth strategy across different customer groups, technology requirements and international markets.



For a UAV manufacturer targeting global markets, reliability, certification, traceability and repeatable production are critical. How is AKSI building its manufacturing and quality systems to meet international aerospace requirements?

A Our understanding is that global aerospace competitiveness cannot be achieved through engineering innovation alone. It requires a manufacturing culture built around process discipline, configuration control, documentation, traceability and consistent product quality.

At AKSI, we are working towards developing our manufacturing ecosystem around these principles.

Our approach begins with the recognition that aerospace production must be fundamentally different from conventional prototype-oriented manufacturing.

Every critical component must have a defined specification, approved manufacturing process, inspection methodology and documented acceptance criteria.

We are progressively strengthening our systems across several areas.

Design and configuration management: We aim to establish controlled engineering drawings, bills of materials, design revisions, manufacturing instructions and product configuration records so that each manufactured system can be linked to an approved technical baseline.

Incoming material and component control: We are developing stronger supplier evaluation, incoming inspection and material traceability processes, particularly for aerospace composites, precision-machined components, electronic systems, batteries and propulsion assemblies.

Manufacturing process control: Our production model emphasises standard operating procedures, defined process parameters, inspection checkpoints and documented manufacturing records.

Testing and validation: We recognise the importance of structural testing, environmental testing, electrical safety, battery validation, propulsion endurance testing, hardware-in-the-loop evaluation, ground testing and progressive flight-test programmes.

Digital manufacturing management: We are strengthening our internal ERP-based workflows to improve coordination between engineering, procurement, inventory, production, quality assurance and product delivery.

An important part of our strategy is to establish traceability from raw material procurement through manufacturing, assembly, testing and final product delivery.

For international aerospace programmes, we recognise the relevance of quality frameworks such as ISO 9001 and AS9100, together with applicable aviation regulations, product-specific standards and customer qualification requirements.

Our objective is to progressively align our systems with these expectations, pursue appropriate certifications and develop the organisational maturity necessary to support international aerospace supply chains.

We also recognise that certification requirements vary considerably across UAV categories, operating environments and jurisdictions.

For Europe, this means evaluating applicable EASA requirements, operational categories, product conformity obligations and customer-specific approval pathways.

For other markets, we intend to adopt a similarly structured approach to the relevant national regulatory frameworks.

We believe that quality cannot be treated as an inspection activity performed at the end of manufacturing.

Quality must be engineered into the product, embedded in the manufacturing process and demonstrated through documented evidence.

Our long-term goal is to establish AKSI as a trusted manufacturing organisation where international customers can expect consistent product quality, transparent technical documentation and dependable lifecycle support.

Q AKSI has developed capabilities in critical technologies such as autopilots, smart batteries, propulsion and advanced composites. How important is owning these technologies and intellectual property to your strategy of becoming a complete UAV OEM?

A Ownership of critical technologies and intellectual property is central to our strategy.

In the aerospace industry, the most valuable companies are not necessarily those that manufacture the largest

number of aircraft. They are often those that control the technologies, engineering knowledge and intellectual property that determine aircraft performance, reliability and future development.

For AKSI, developing proprietary capabilities in autopilots, battery systems, propulsion, aerostructures and related technologies is a deliberate long-term investment.

Autopilots and flight-control systems are among the most important technologies in an unmanned aircraft. They influence flight stability, navigation, autonomy, mission execution, safety management and integration with other onboard systems.

Developing our own flight-control capabilities provides greater flexibility to customise aircraft behaviour, integrate specialised payloads and support different UAV configurations.

It also allows us to pursue greater control over software development, system architecture and long-term product support.

Battery systems and energy management are equally important.

For electrically powered UAVs, battery performance directly affects endurance, payload, safety, operational costs and lifecycle economics.

Our focus is not limited to battery-pack assembly. We are interested in intelligent battery management, pack architecture, thermal management, safety monitoring and optimisation for aerospace operating conditions.

Propulsion technology represents another strategically important area.

Through our propulsion development initiatives, including Siddhjet, we are working towards strengthening capabilities in specialised aerospace propulsion systems.

Our broader objective is to develop propulsion solutions appropriate for different aircraft categories, including electric systems and advanced engine technologies.

Advanced composite materials and aerostructures are another area where we see considerable strategic value.

Through Roboclave and our wider manufacturing ecosystem, we are developing capabilities in composite manufacturing, tooling, structural components and

precision aerospace fabrication.

Control over aerostructure design and manufacturing allows us to pursue lighter structures, improved manufacturability and aircraft-specific optimisation.

Collectively, these capabilities create opportunities not only to improve our own aircraft but also to supply subsystems and manufacturing services to other aerospace OEMs.

This is an important distinction in our business model.

We do not want our technology investments to remain captive to AKSI-branded UAV platforms. Wherever commercially appropriate, we intend to offer these technologies as independent products, subsystems or engineering solutions to other manufacturers.

At the same time, we believe that proprietary technology must be developed with commercial discipline. Not every technology needs to be reinvented internally, and international collaboration will remain an important part of our innovation strategy.

Our objective is to own the critical technologies that define our competitive advantage, collaborate where it accelerates progress, and retain sufficient intellectual property to build sustainable long-term enterprise value.



AKSI has stated ambitions to build a strong international presence. What is your strategy for entering European markets, and what types of European customers or partnerships are you particularly looking to develop?



Europe is an important strategic market for AKSI, not only because of its demand for advanced aerospace systems but also because of its established engineering ecosystem, regulatory frameworks, industrial expertise and global aerospace customer base.

Our European strategy is based on long-term industrial partnerships rather than simply exporting finished drones from India.

We see several complementary routes to market entry.

The first is collaboration with European UAV OEMs.

Many European aerospace companies possess strong product concepts, specialised technologies, established customer relationships and application-specific expertise.



However, scaling manufacturing while maintaining cost competitiveness and supply-chain resilience can present challenges.

We believe AKSI can offer a complementary manufacturing and engineering capability through our Indian industrial ecosystem.

This could include composite airframes, precision-manufactured components, battery systems, propulsion integration, electronics, subassemblies and complete UAV manufacturing.

The second opportunity is technology co-development.

We are interested in partnerships where European companies and AKSI jointly develop products for international markets, combining European domain expertise and market access with Indian engineering and manufacturing capabilities.

Such collaborations could involve shared development programmes, licensing arrangements, joint ventures and clearly structured intellectual property ownership.

The third opportunity is to establish European customer-support and business-development capabilities.

For aerospace customers, local technical support, responsive communication, regulatory understanding and after-sales service are essential.

We therefore see value in developing an appropriate European presence that can support customer engagement, engineering coordination, qualification activities and long-term service requirements.

Germany is of particular interest because of its engineering ecosystem and its connections with the wider European aerospace industry. We are also interested in opportunities across other European aerospace and unmanned-systems markets.

The fourth opportunity is participation in European aerospace supply chains.

We would like to engage with manufacturers seeking qualified suppliers for composite structures, metallic components, propulsion systems, battery assemblies and

integrated aerospace subsystems.

Our intention is to progressively establish the quality systems, documentation standards and delivery performance required for such relationships.

From a regulatory perspective, we understand that market access requires careful attention to applicable EASA frameworks, national requirements, product conformity, export controls and operational authorisations. We do not consider regulatory compliance a formality; it must be integrated into product development and market-entry planning.

In terms of customers, we are particularly interested in industrial UAV companies, logistics and cargo-drone developers, specialised aerospace OEMs, geospatial technology companies, infrastructure inspection operators and organisations developing advanced autonomous aviation systems.

We are also open to working with European companies seeking a reliable manufacturing base in India for both domestic and international requirements.

Our ambition is to position AKSI as a trusted Indo-European aerospace industrial partner—combining India's manufacturing potential with Europe's advanced engineering, technology and market ecosystem.

 **Do you see AKSI primarily building its own branded UAV platforms, or do you also see a significant opportunity to become an OEM/contract manufacturer for European and other international drone companies that need scalable production?**

 We see these as two complementary and equally important parts of our long-term business strategy.

Our intention is to develop AKSI into a diversified aerospace group with both proprietary products and manufacturing partnerships.

The first business model is the development and commercialisation of our own branded platforms.

Through our specialised group companies, we are building products for agricultural, industrial, logistics and other application-specific UAV markets.

These platforms allow us to develop intellectual property, establish brand recognition, maintain direct customer

relationships and continuously improve our technologies based on operational feedback.

Owning product platforms also gives us greater control over product roadmaps, customer support and long-term commercial strategy.

The second business model is OEM, contract manufacturing and technology-enabled manufacturing services.

We see significant opportunities to work with European and other international aerospace companies that require manufacturing scale, engineering support and a dependable industrial partner.

These partnerships can take different forms.

At one level, AKSI can manufacture individual components such as composite structures, precision metallic parts, battery assemblies or mechanical subsystems.

At another level, we can provide integrated manufacturing services involving procurement, fabrication, subsystem assembly, testing and final integration.

For selected partners, we also envisage licensed manufacturing or co-development arrangements where products are manufactured in India for domestic and international markets.

Our existing investments in manufacturing infrastructure and multidisciplinary engineering capabilities are intended to support this flexible approach.

One important advantage of the dual model is that manufacturing expertise developed for external OEM customers can strengthen our own products, while our internal aircraft development programmes continuously expand our engineering capabilities.

It also creates multiple revenue opportunities across complete aircraft, components, subsystems, engineering services and manufacturing contracts.

We believe this diversification is particularly valuable in an industry where individual UAV market segments may experience different adoption cycles.

However, we recognise the importance of protecting customer intellectual property, maintaining confidentiality and ensuring clear separation

between proprietary AKSI programmes and contract-manufacturing activities where necessary.

International OEM customers must be confident that their technology, drawings, software and commercial information are protected.

Our approach is therefore to build transparent contractual structures, strong information-security practices and disciplined manufacturing systems.

We do not see AKSI merely as a drone brand or a contract manufacturer. We want to become an aerospace industrial platform capable of creating our own products while enabling other global aerospace companies to manufacture competitively and reliably.

In our view, this combination can create a stronger and more resilient business than dependence on either model alone.

 **As AKSI moves towards becoming a global OEM manufacturer, what are the biggest investments required in product development, certification, manufacturing capacity and engineering talent to compete with established international players?**

 Becoming a globally competitive aerospace OEM requires sustained investment over several years. It is not simply a matter of purchasing manufacturing equipment or increasing factory space.

The most important investments must be made simultaneously across technology, people, manufacturing infrastructure, quality systems and market development.

The first major investment area is research and product development.

Advanced UAV platforms require multidisciplinary engineering capabilities covering aerodynamics, flight mechanics, structural design, electronics, embedded systems, propulsion, battery technology, software and autonomous systems.

As our products become more sophisticated, we expect to invest increasingly in simulation, digital engineering, hardware-in-the-loop testing, system integration laboratories, environmental qualification and flight-test infrastructure.

We also see a growing requirement for engineering tools



that enable model-based development, configuration management and traceable verification of product requirements.

The second major investment area is testing, certification and airworthiness-related capability.

Global customers increasingly require evidence that products can operate safely and reliably under defined environmental and operational conditions.

Building this capability requires laboratories, test equipment, documented engineering processes, trained personnel and structured qualification programmes.

For more advanced UAV categories and future aircraft programmes, certification can represent a substantial proportion of overall development effort and expenditure.

We believe investment in compliance engineering and certification readiness must begin during product design rather than after development is completed.

The third area is scalable manufacturing infrastructure.

Our existing manufacturing ecosystem provides a foundation in composite processing, precision machining, fabrication and system integration.

The next stage involves increasing production maturity through improved tooling, production fixtures, process automation, inspection equipment, digital production planning and more specialised manufacturing capabilities.

We are particularly interested in developing flexible manufacturing systems that can support multiple

aerospace product families while maintaining repeatability and quality.

We also believe manufacturing capacity should expand in alignment with confirmed customer demand, qualification milestones and sustainable commercial opportunities.

The fourth and perhaps most important investment is engineering talent.

Aerospace manufacturing is ultimately a knowledge-intensive industry.

India has a large pool of engineering graduates, but advanced aerospace programmes require specialised experience in areas such as flight testing, systems engineering, reliability, safety assessment, embedded flight-control software, composite structures, propulsion and production quality assurance.

We intend to strengthen our engineering organisation by combining experienced aerospace professionals with younger engineers who can be trained through practical development and manufacturing programmes.

We also see value in collaborations with universities, research institutions, technology laboratories and international engineering organisations.

The fifth investment area is supply-chain development.

A strong aerospace OEM requires an equally strong supplier ecosystem.

We believe India has considerable potential to develop competitive suppliers in electronics, materials, precision components, tooling, motors, batteries and other

aerospace technologies.

Our strategy includes working with suppliers to improve quality consistency, technical capability, documentation and production reliability.

Finally, international market development requires investment in relationships and credibility.

Establishing a global aerospace brand requires customer demonstrations, technical support, regulatory engagement, dependable delivery performance and long-term service commitments.

These capabilities cannot be built overnight.

Our investment philosophy is therefore focused on creating durable industrial capabilities rather than pursuing growth based only on short-term product sales.

The real challenge is not to manufacture a drone successfully once, but to develop an organisation capable of manufacturing reliable aerospace products consistently, economically and at scale over many years.

That is the transition we are working towards at AKSI.

 **Looking towards 2030, what would you like AKSI Aerospace to have achieved in terms of global customers, European market presence, proprietary technology and its position as an Indian aerospace OEM?**

 By 2030, our ambition is for AKSI Aerospace to be recognised as a globally competitive Indian aerospace OEM with a diversified portfolio of proprietary platforms, critical aerospace technologies and international manufacturing partnerships.



We would like to measure our progress not simply by the number of drones produced, but by the depth of our technology, the quality of our customers, the reliability of our products and the industrial capabilities we have established.

First, we would like AKSI to have a meaningful international customer base.

Our goal is to serve customers across multiple regions, including Europe, Asia, Africa and other strategically important markets.

We want international customers to view AKSI as a long-term aerospace technology and manufacturing partner rather than merely a low-cost equipment supplier.

Second, we would like to establish a credible European presence.

By 2030, we envisage having an established network of European OEM relationships, technology collaborations and customer-support arrangements.

We would also like to participate in European aerospace supply chains through qualified manufacturing programmes and long-term industrial partnerships.

Our aspiration is to demonstrate that Indian aerospace manufacturers can contribute meaningfully to demanding international engineering and production programmes.

Third, we want to establish a strong portfolio of proprietary aerospace technologies.

This includes flight-control systems, intelligent battery technologies, advanced composite aerostructures, propulsion solutions and integrated UAV platforms.

We would like these technologies to be recognised not only as components used within AKSI aircraft, but also as competitive products and solutions supplied to other aerospace manufacturers.

Fourth, we intend to build scalable and internationally credible manufacturing capabilities.

Our vision includes production systems capable of supporting multiple aircraft categories, from smaller agricultural and industrial UAVs to more advanced logistics and specialised aerospace platforms.

We would like to establish manufacturing processes that meet the quality, documentation and traceability expectations of international aerospace customers.

Fifth, we want to expand beyond conventional UAV manufacturing.

Our longer-term technology roadmap includes electric aviation, advanced propulsion, autonomous aircraft and other emerging aerospace applications.

We believe the technologies developed for unmanned systems can provide an important foundation for broader aerospace innovation.

Sixth, we would like AKSI to contribute to the development of a larger Indian aerospace manufacturing ecosystem.

India has the engineering talent, industrial capability and market potential to become a major contributor to global aerospace manufacturing.

However, achieving this requires more than a few successful companies. It requires a network of capable suppliers, specialised engineering organisations, testing facilities, skilled technicians and technology

developers.

We would like AKSI to play an active role in building this ecosystem through manufacturing partnerships, technology development, supplier engagement and engineering employment.

Ultimately, our ambition is to demonstrate that an Indian aerospace company can build sophisticated technologies, own meaningful intellectual property, manufacture at international standards and compete successfully in global markets.

We do not believe India's aerospace future should be limited to assembling imported technologies or supplying low-value components.

India has the potential to become a centre for complete aerospace product development and manufacturing.

By 2030, I would like AKSI Aerospace to be recognised as one of the Indian companies that helped move the country from being primarily a consumer and integrator of aerospace technologies towards becoming a designer, developer, manufacturer and exporter of complete aerospace systems.

For us, that would represent success not only as a company, but also as a contribution to India's long-term technological and industrial capabilities.

Closing Perspective

At AKSI Aerospace, we believe the next decade will redefine the global UAV and autonomous aviation industry. The companies that succeed will be those that combine innovation with manufacturing discipline, technological independence with international collaboration, and ambitious product development with long-term commercial sustainability.

Our mission is to build that combination within India while remaining connected to the global aerospace ecosystem.

We want AKSI Aerospace to represent a new generation of Indian aerospace enterprises—companies that do not merely participate in global supply chains, but contribute proprietary technologies, complete products and manufacturing capabilities to the future of aviation.

DRONEX EXPO 2026 REVIEW: UNCREWED TECHNOLOGY MOVES FROM INNOVATION TO REAL-WORLD DEPLOYMENT



DroneX Expo 2026 returned to ExCeL London on 29-30 September, bringing together the commercial drone, defence, emergency services and advanced air mobility sectors for two days of exhibitions, technical discussions and industry networking. Organised by Uncrewed Tech Ltd, with ARPAS-UK as its headline industry partner, the event formed part of the wider Uncrewed Tech Expo and reflected the increasingly diverse role of uncrewed systems across the economy.

The central message emerging from the event was that the industry's challenge is no longer simply to demonstrate what drones can do. The priority is to turn technological capability into safe, repeatable, commercially sustainable operations. Beyond-visual-line-of-sight (BVLOS) flight, airspace integration, autonomous decision-making, endurance, regulatory approval and counter-drone technology featured prominently in a programme designed to connect technology developers with regulators, operators, infrastructure owners and public-sector users.

A broad platform for the uncrewed systems industry : DroneX 2026 was held across ExCeL London's Halls S13-S15. Organiser information

promoted more than 300 exhibitors, over 4,000 professional visitors, approximately 150 seminars and more than 50 hours of conference content. These were the event's published promotional figures; a separately verified final attendance total was not available in the material reviewed.

The event's four principal sectors provided a useful structure for a market that is expanding well beyond conventional commercial drones. The commercial category covered inspection, surveying, delivery, agriculture, energy and infrastructure. Emergency services addressed applications such as search and rescue, police response, coastguard operations, mountain rescue and border patrol. Military and defence covered intelligence, surveillance and reconnaissance (ISR), counter-uncrewed aircraft systems (C-UAS), training and dual-use technologies. The future-of-flight category extended the discussion to electric vertical take-off and landing (eVTOL) aircraft, advanced air mobility, autonomous logistics, uncrewed maritime platforms and ground systems.

This breadth was one of the show's strengths. Drone manufacturers and component suppliers could engage with organisations

responsible for operating, procuring, regulating or integrating their products. The exhibitor directory included companies associated with propulsion, batteries, electronics, imaging, navigation, manufacturing, software and aircraft systems. Participants included ARPAS-UK, the UK Civil Aviation Authority, the German Aerospace Center (DLR), Septentrio, SiMa.ai, Kitemill, H2MOF and the Satellite Applications Catapult.

The resulting mix gave the event relevance for both established aerospace businesses and emerging technology companies. It also highlighted the importance of collaboration between airframe developers, component manufacturers, software specialists, communications providers and end users.

Regulation and BVLOS take centre stage : A major theme of the conference was the transition from limited drone trials to routine, scalable operations. For operators, BVLOS capability can unlock longer routes, wider geographic coverage and more efficient services. Achieving that scale, however, requires more than suitable aircraft: it depends on demonstrable safety, reliable communications, risk management, airspace coordination and regulatory confidence.



The keynote programme addressed these challenges directly. A session titled From Research to Regulation examined how the US Federal Aviation Administration (FAA) and UK Civil Aviation Authority (CAA) approach the development of rules from operational experience, including the role of exemptions and waivers. Another discussion, Integrating Shared Airspace to Unlock the Potential of the UK Drone Industry, explored the practical steps needed to move from segregated operating areas towards more widely integrated BVLOS activity.

The agenda also included a CAA session on making Specific Category operations more straightforward for UK operators, covering changes to application processes, tools for operational risk assessment and updates to the UK's SAIL marking approach. Separate sessions examined SORA 2.5 and the potential for more consistent risk assessment across European operations.

These topics matter because regulatory complexity can become a barrier to commercial growth even when the underlying technology is capable. Repeated, operation-specific permissions may make expansion difficult for companies seeking to deploy fleets across multiple sites. More standardised processes, supported by strong safety evidence, could help reduce that burden without compromising operational safeguards.

The programme also made clear that

approval is not simply an airframe issue. Safety management systems, assurance processes and organisational competence are important in enabling complex operations. For the sector, the task is to develop a regulatory environment that supports innovation while maintaining the confidence of aviation authorities, customers and the public.

AI, autonomy and the next generation of drone intelligence : Artificial intelligence and onboard processing formed another important strand of DroneX 2026. As uncrewed aircraft are expected to operate with greater autonomy and in more demanding environments, developers must process increasing volumes of sensor data without introducing excessive latency, weight or power consumption.

SiMa.ai, which won the 2026 DroneX Innovation Award, was among the companies drawing attention to this challenge. Its conference session, Autonomy at Flight Speed: Engineering AI for Next-Generation Drones, explored how onboard computing can transform high-resolution sensor inputs into timely decisions under strict power and weight constraints. The presentation also considered sensor fusion and the use of AI in defence, industrial inspection and agriculture.

The emphasis on onboard intelligence reflects a broader industry requirement. Autonomous systems need to perceive their environment and respond reliably, particularly

where communications are intermittent or remote human intervention is difficult. The commercial value of such technology will depend not only on the capabilities demonstrated in controlled conditions, but also on reliability, integration and performance during routine deployment.

Other sessions addressed the sensing technologies required for increasingly autonomous aircraft. A discussion on radar examined the demands associated with detect-and-avoid systems, interception and operations in GPS-denied environments. These applications underline the continuing importance of robust sensing alongside advances in software. AI alone cannot guarantee safe autonomy; dependable sensors, reliable positioning, well-designed control systems and comprehensive validation remain essential.

The exhibition's combination of computing, electronics, imaging and navigation companies helped put these technical discussions into a wider systems context.

Endurance and energy technologies remain critical : Flight endurance continues to influence what drones can accomplish commercially. Longer flight times can expand inspection coverage, improve logistics economics and support missions that require an aircraft to remain airborne for extended periods.

DroneX featured sessions on several approaches to the problem, including advanced



battery chemistry, solid-state hydrogen storage, electric propulsion and hybrid-electric systems. Kitemill discussed developments in magnetic materials for electric flight, while H2MOF presented its approach to solid-state hydrogen storage for UAV applications. A separate session explored emerging technologies for persistent unmanned flight, including hybrid-electric propulsion, vertical take-off and landing configurations, and solid-oxide fuel cells.

Battery performance was also examined in terms of the trade-offs between energy density, power, weight, operating life, production scale and cost. These considerations are important because a single headline measure, such as watt-hours per kilogram, does not determine the overall performance of a complete aircraft. Payload, propulsion efficiency, safety, battery longevity and operational requirements all influence the final result.

The event's energy technology discussions demonstrated that the future of drone endurance will not depend on one universal solution. Different missions will favour different technologies: lightweight battery systems may suit short-range commercial operations, while alternative power systems may be valuable for longer-duration missions or heavier payloads. Commercial adoption will depend on proving that the advantages outweigh the costs and integration challenges.

Practical applications across industry and

public services

DroneX's commercial programme placed considerable emphasis on applications rather than hardware alone. One session examined DrSOLAR, a drone-based solar panel inspection solution combining high-resolution cameras, short-wave infrared imaging and AI-assisted analysis to identify and classify faults. Such systems illustrate how drones can gather data at scale and help asset owners move towards more targeted maintenance.

Infrastructure inspection, surveying, energy and industrial operations remain important opportunities because they can benefit from improved access, reduced inspection time and repeatable data collection. Yet the value of a drone service is determined by more than its ability to fly. Customers need reliable results, integration with existing workflows, dependable reporting and a clear commercial return.

The programme also considered emergency-response applications. A session on autonomous UAVs for first responders described the use of complementary small-drone platforms equipped with visual, thermal, ultraviolet, chemical, biological, radiological and nuclear (CBRN), acoustic and other sensing capabilities. Onboard processing and simultaneous use of different sensors can help teams build a more complete picture of an incident, including in environments where satellite navigation is unavailable.

Police operations were another focus. The

keynote programme explored the evolution from visual-line-of-sight drone flights towards automated and autonomous capabilities in policing. The potential benefits include improved situational awareness and more effective responses, but the move towards broader deployment requires appropriate procedures, personnel training, dependable technology and regulatory approval.

These examples reinforce the practical value of bringing emergency services, infrastructure users and technology suppliers into the same environment. Their operational requirements help developers identify problems that may not be apparent during product development alone.

Defence and counter-drone technology

Defence was a prominent part of the event's structure, reflecting the growing relevance of uncrewed systems to military operations and national security. The programme included sessions on the economics of air defence, lessons from Ukraine's drone industry, integrated counter-UAS systems and hard-kill approaches to defeating drones.

The discussions reflected a rapidly evolving operational environment in which low-cost uncrewed platforms can challenge more expensive defensive systems. Cost, production capacity, deployment speed and the ability to adapt technology in response to operational feedback all influence the effectiveness of modern drone and counter-drone capabilities.



The emphasis on integrated protection was particularly relevant. Detecting a drone is only one part of the challenge; effective defence can require detection, tracking, identification, command and control, electronic warfare and, where appropriate, physical interception.

Different environments and threat profiles demand different combinations of capabilities.

For the wider industry, defence requirements can also stimulate developments in autonomy, resilient communications, navigation, sensors and power systems. Some resulting technologies may have applications in commercial or public-service operations, although military and civilian systems operate under different requirements and constraints.

Innovation, collaboration and industry networking

Beyond the conference theatres, networking was central to the event's format. DroneX Connect provided a dedicated meeting area for participants, while the Geeksvana Industry Hub hosted interviews and conversations with exhibitors, speakers and industry figures. An evening networking reception on the first day offered additional opportunities for discussions beyond the exhibition floor.

For an industry made up of manufacturers, software developers, regulators, operators and specialist suppliers, these interactions can be as valuable as formal presentations. Partnerships are often necessary to combine aircraft,

communications, autonomy software, sensors, data processing and operational services into a working solution.

The Innovation Award added a further competitive element. Shortlisted companies presented their technologies in a live, pitch-style format before a panel of industry judges. SiMa.ai was named the 2026 winner, while Kitemill, Arkensight and H2MOF were among the other listed nominees. The award recognised the role of new technologies in advancing the wider uncrewed systems sector.

Overall assessment: a sector moving towards maturity

DroneX Expo 2026 brought together a broad cross-section of the uncrewed technology ecosystem, from commercial inspection and emergency response to defence, autonomy, power systems and future air mobility. Its strongest feature was the connection between technology development and the practical requirements of deployment.

The conference agenda demonstrated that the industry's major challenges are increasingly interconnected. Longer endurance is of limited value without operational approval; autonomous decision-making depends on reliable sensing and processing; and BVLOS expansion requires resilient communications, effective safety management and airspace integration. The exhibition's diversity helped illustrate how these components must work together.

The breadth of the programme was also a reminder that the sector does not advance at the same pace in every application. Some uses, such as inspection and surveying, are comparatively established, while more complex BVLOS services and advanced air mobility depend on further progress in regulation, infrastructure and operational assurance. Defence introduces additional requirements around resilience, deployment speed and threat response.

As with any event of this scale, the value of the exhibition ultimately depends on what happens afterwards: whether discussions lead to partnerships, technology trials, procurement decisions and repeatable services. Published event information establishes the scale and breadth of DroneX, but the longer-term commercial impact will be measured by those outcomes rather than exhibition figures alone.

Overall, DroneX 2026 provided a useful forum for assessing the direction of the uncrewed systems industry. Its emphasis on real-world applications, regulatory pathways and system-level integration reflected a sector moving beyond demonstrations towards broader operational use. The next phase will require not just better aircraft, but dependable technology, clearer rules, skilled personnel and commercial models capable of supporting sustained deployment. DroneX - Uncrewed Tech Expo 2027 is scheduled for 28-29 September 2027 at ExCeL London.

LEIDOS AUTONOMY EARNS ITS PLACE AT RIMPAC AND WITH CARRIER STRIKE GROUP



Leidos has reached two significant milestones in maritime autonomy, with its Sea Hunter unmanned surface vessel participating in RIMPAC 2026 and Seahawk operating alongside the USS Theodore Roosevelt Carrier Strike Group. The developments demonstrate the growing use of autonomous vessels in naval operations and the transition of unmanned maritime systems from experimentation toward operational fleet applications.

At RIMPAC 2026, Sea Hunter participated as the exercise's only Medium Unmanned Surface Vessel (MUSV). Originally developed by Leidos, the vessel is powered by the company's Leidos Autonomous Vessel Architecture (LAVA), a modular software system supporting autonomous navigation, mission execution and obstacle avoidance.

During the exercise, Sea Hunter operated autonomously over more than 2,000 nautical miles between Pearl Harbor, Hawaii, and San Diego, California. The vessel demonstrated autonomous surveillance and manned-unmanned teaming, operating both as part of a larger naval force and as a standalone platform.

A second milestone involves Seahawk, which is operating with the USS Theodore Roosevelt Carrier Strike Group. According to Leidos, Seahawk is the first MUSV to deploy operationally with a carrier strike group, integrating into the group's communications, command-and-control and operational framework.

Seahawk's autonomous capabilities include navigation, perception and collision avoidance. The system is designed to comply with the International Regulations for Preventing Collisions at Sea (COLREGs), while also identifying and avoiding hazards.

The vessel can automatically navigate around designated Keep Out Zones and maintain control through communications failover and remote-control capabilities. Another demonstrated capability is GPS-denied navigation, allowing Seahawk to follow commanded waypoints without GPS before reintegrating GPS while remaining on its planned track.

Both Sea Hunter and Seahawk use LAVA as their autonomy foundation. The modular architecture is designed to support different

vessels and mission requirements while providing autonomous navigation, mission execution and obstacle avoidance capabilities.

Leidos says its autonomous maritime portfolio has accumulated more than 200,000 nautical miles of autonomous operation and 14,000 hours of safe autonomous operation, supported by more than a decade of autonomous maritime development and operational experience.

The company's experience also extends to unmanned systems carrying out more complex missions. In 2021, the Leidos-built MUSV Ranger, operating with LAVA, test-fired an SM-6 Standard Missile from a modular launch system during the U.S. Navy's Ghost Fleet Overlord programme.

Together, Sea Hunter, Seahawk and Ranger demonstrate how maritime autonomy is being developed across different vessels, missions and operating environments. The latest deployments also highlight the growing emphasis on autonomous navigation, manned-unmanned teaming and resilient operations as naval forces explore new roles for unmanned maritime systems.

RHEINMETALL DEMONSTRATES NETWORKED MARITIME UNMANNED SYSTEMS AT REPMUS26



Rheinmetall is demonstrating modular and interconnected technologies for maritime operations at REPMUS26 (Robotic Experimentation and Prototyping with Maritime Unmanned Systems) in Portugal. The multinational proving exercise, taking place from 31 August to 25 September 2026, brings together navies, research institutions and industry to test unmanned systems in realistic and multidimensional maritime environments.

Rheinmetall has participated in the exercise since 2024, contributing its expertise as a systems integrator for complex maritime systems. This year's trials are being conducted on the Troia Peninsula and in surrounding Portuguese waters, with a focus on developing the interoperability of unmanned platforms and technologies.

A central theme of Rheinmetall's contribution is the networked operation of unmanned systems across different environments, ranging from the seabed to space. The company highlights the importance of connecting platforms and integrating sensor information rather than relying solely on the capabilities of individual unmanned systems.

By combining data from multiple sensors into a multidimensional operational picture, the technology is designed to provide operators with improved situational awareness and support more precise responses to emerging threats. Rheinmetall is particularly focusing on applications involving critical port infrastructure, strategically important maritime facilities and coastal waters.

One of the key elements of the company's REPMUS26 demonstration is a containerised, relocatable mission-control system. The mobile setup is being used as a command-and-control centre for the German Navy during the four-week exercise and is supporting operational port-security activities.

The technological backbone of the demonstration is the Rheinmetall Battlesuite, which is based on the Tactical Core Middleware developed by blackned GmbH. The open integration architecture is designed to allow sensors, effectors and mission modules from different technology partners to be integrated according to specific operational requirements.

Another major focus of the 2026 trials is the use of unmanned underwater sensors.

Rheinmetall is working with industry partners to demonstrate how underwater sensing technologies can contribute to a persistent operational picture.

The system is also intended to allow operators to control multiple unmanned platforms from different manufacturers through a common user interface. Such interoperability could simplify the management of heterogeneous unmanned fleets and allow different systems to contribute information to a shared operational environment.

Gregor Mannherz, Head of the Rheinmetall Delegation, said REPMUS provides an opportunity to test prototype technologies under realistic conditions while working with naval customers and government agencies.

Rheinmetall says the exercise is helping validate collaborative operational concepts and improve interoperability between unmanned systems. The company views these capabilities as important for strengthening the maritime defence capabilities of NATO partners and supporting the protection of global maritime supply routes.

SECURING THE LOW-ALTITUDE SKY

How UAID Is Bringing Cryptographic Trust to Uncrewed Aviation

CHRISTIAN HOLZER

CEO & FOUNDER

ASO AIRSPACE SURVEILLANCE

in conversation with Kartikeya,
Editor, Drones World Magazine

 **What specific limitations or gaps in today's Remote ID and low-altitude identification systems led ASO to develop UAID?**

 Remote ID solved the right problem in the wrong direction. It made aircraft announce who they are, and that was a necessary first step. But an announcement is not a proof. In the usual implementation, the aircraft broadcasts an identifier and anyone within range can receive it, record it and repeat it. The receiver cannot tell the aircraft that owns that identifier from a device that has simply copied it.

The second gap is that everything in the message comes from the aircraft itself, including its position. In our part of Europe, GNSS jamming and spoofing are now a routine operational condition. A self-reported position is the weakest possible foundation for an identity decision.

The third gap is coverage at the low end. Military identification solved this long ago with interrogation and cryptography. But a Mark XIIA Mode 5 transponder cannot go on a four-kilogram drone, for reasons of mass, cost and export control. So below the altitude where Mode 5 lives, there was nothing. UAID exists to close that specific gap.

 **UAID uses a ground-to-air cryptographic challenge-and-response mechanism. How does that work operationally, and what makes it different from an aircraft broadcasting its identity?**

 Operationally it is four steps: A ground station on a mast sends a challenge containing a single-use number, a nonce.

Every UAID node within range wakes and answers with its identifier and an elliptic-curve signature over that specific challenge.

The station verifies the signature in milliseconds, measures the signal itself,



timestamps the event and resolves the identifier against the registry.

Anything without a valid signature is discarded at the station and never enters the air picture.

The difference from broadcast is the direction of trust. A broadcast asks you to believe what the aircraft says. A challenge forces the aircraft to prove something it can only prove with a key that never left its chip. The key is generated inside a secure element during manufacture and cannot be read out, so copying the identifier gains an attacker nothing. Because every challenge is new, a recorded answer is worthless the moment it is replayed.

There is a second, quieter difference: the station is the observer. Verification does not depend on what the aircraft claims about its own position. Jamming and spoofing degrade the picture, but they do not blind it.

 **How does UAID complement Remote ID, ADS-B and U-space, and where does each fit in the future low-altitude architecture?**

 I see four layers, and only one of them is ours. Remote ID is the announcement layer. It is cheap, universal and mandated, and it should stay. UAID is not a replacement for direct Remote ID, and we never present it as one. The standards community saw the gap early: ASTM F3411 already defines authentication messages, including a UAS ID signature and a message set signature, and Japan requires a signature to be sent this way. In Europe that capability is largely optional and rarely implemented in the field.

ADS-B is the manned aviation layer, and it should stay there. Regulators have been cautious about ADS-B Out on small drones because of spectrum congestion. ICAO asked States not to use 1090 MHz for drones below 500 feet, and the FAA prohibits ADS-B Out under Part 107 by default. Where the door is opening, it is on the less crowded 978 MHz band, which the UK CAA and Ofcom authorised for drones in March.

U-space is the service layer. Regulation (EU) 2021/664 requires U-space service providers to offer a network identification service, alongside geo-awareness, flight authorisation and traffic information.

UAID is the assurance layer underneath all of that. It answers the one question the other layers do not: is this identity real, right now, measured from the ground.



A broadcast asks you to believe what the aircraft says. A challenge forces the aircraft to prove it.



How can cryptographic verification help airports, vertiports and other sensitive sites separate a legitimate cooperative aircraft from an unidentified one?



It turns the question around. Today an airport operator sees a track and asks whether it is a threat, with very little to go on. With UAID, cooperative aircraft prove themselves continuously. The survey drone, the inspection flight, the delivery run and the police aircraft all answer the challenge. They can be set apart with confidence rather than by assumption.

What remains is the set of contacts that cannot prove anything. That is exactly where human attention and counter-UAS resources belong. In military language this is the IFF principle, applied below the altitude where Mode 5 operates. Two honest qualifications. First, UAID only identifies aircraft that carry a node, so it complements radar, RF and electro-optical detection rather than replacing them. It tells you what is friendly; it does not tell you that something is there. Second, we have completed first field trials but not full validation. So I talk about a cleaner air picture, not a percentage reduction in alarms. That number has to be measured in pilot deployments, not promised in an interview.



With BVLOS operations and eVTOL/AAM increasing airspace complexity, how important will trusted aircraft identity become for safe integration?



It becomes the precondition for almost everything else. Every automated decision in dense low-altitude airspace rests on knowing which

aircraft you are dealing with. That covers flight authorisation, conformance monitoring, dynamic geofencing, priority for emergency services, and the response when something goes wrong.

Think about what BVLOS actually removes. It removes the pilot who could see and be seen, and replaces that with data. If that data is unauthenticated, the whole automation chain inherits the weakness of its weakest field. We already accept this logic elsewhere in aviation: nobody would build a safety case on an unsigned data link.

There is also an accountability dimension the industry underestimates. In a leased, mixed fleet, the operator and the airframe change constantly. After an incident at 14:22, insurers, investigators and regulators need to know who owned the aircraft, who had it on lease and who flew it at that minute. Identity bound to hardware, recorded in a time-stamped registry, answers that. An identifier a fleet manager can reassign in software does not.



What are the biggest technical, regulatory and interoperability challenges ASO expects when introducing a new identification layer?



Three groups. I would not rank them by difficulty, because they interact. Technical. The hard parts are radio and integration. Spectrum use has to be approved country by country. The node has to fit the size, weight and power budget of a small airframe. Ground coverage has to be planned like any other sensor network. The node itself is deliberately modest:

it needs power and an antenna position, and no access to the flight control.

Regulatory. Our honest position is that UAID is designed against the regulatory logic of U-space, not approved under it. Nobody certifies a new identification layer overnight. Civil deployment needs the competent authority at the table from the first meeting. The authority decides who runs the registry, what is stored, for how long, and who can query it. Data protection is not an afterthought here; it is part of the architecture.

Interoperability. This is where a young company either earns credibility or wastes years. We do not want anyone to build a custom integration for us, so we output into formats that already exist. That means network Remote ID towards UTM, and ASTERIX CAT-129, which EUROCONTROL defines for UAS identification reports, towards air traffic control.

 **ASO is a young company. What is your roadmap for UAID over the next few years?**

 We move in stages, and deliberately in this order.

Stage one: state and defence. It is available now and does not depend on new civil rules. The verification anchor is a NATO unit identifier rather than an EASA operator ID. The registry stays sovereign, with nothing forwarded outside, and nodes are assigned per mission and rotated across airframes. A hardened variant of the node is in design for the fourth quarter of 2026. Stage two: protected sites. Airports, ports and energy infrastructure. That is where our detection business already operates, and where the buyer feels the problem every day.

Stage three: civil U-space, as the verification layer under a network identification service. That is a partnership with an authority and a U-space service provider, not a product we can ship on our own. Across all three, the constraint is manufacturers. The node is easiest to integrate while an airframe's mechanical and electrical interface is still open. So we are looking for OEM partners now rather than later.

And one commitment: we publish what we have tested and what we have not. Today's figures for refresh rate, capacity and range describe design intent. Turning them into validated numbers, with an authority or a defence customer watching, is the real roadmap for the next eighteen months.



Trusted aircraft identity is becoming the foundation for safe BVLOS and autonomous operations in increasingly complex low-altitude airspace. 



ELBIT SYSTEMS' FUSE INTRODUCES MILITARY-GRADE AUTONOMOUS SYSTEMS BUILT FOR SCALE



Elbit Systems Ltd.'s FUSE unveiled its AI-driven autonomous combat systems and One2Many operational capabilities, enabling centralized real-time coordination of large numbers of autonomous aerial and ground systems.

Built on years of operational experience, proven technologies and advanced autonomy developed within Elbit Systems, FUSE delivers mature military-grade autonomous systems designed for scalable coordinated operations across land and air domains.

At the core of the portfolio is Dominion-X, an AI-powered unified operating system enabling One2Many operations in GNSS-denied environments, supported by advanced automatic target recognition (ATR) and homing capabilities. Dominion-X enables centralized real-time coordination and management of autonomous aerial and ground systems, including real-time mission data exchange between platforms and distributed operations across battlefield environments through a shared mission network.

Designed for contested and GPS-denied environments, FUSE's solutions support resilient mission execution, distributed autonomous operations and manned-unmanned teaming (MUM-T) alongside maneuvering forces and crewed platforms within existing military formations and command structures.

FUSE's solutions also enable military forces to rapidly integrate autonomous capabilities into existing tactical assets, unmanned systems and combat vehicles, creating scalable coordinated autonomous formations while leveraging current force structures.

Supported by Elbit Systems' operational experience, manufacturing infrastructure and global defense footprint, FUSE's solutions are designed for scalable production, rapid field integration and sustained operational deployment across multi-domain operations.

The technologies and autonomous systems within FUSE's portfolio have already accumulated more than 1,000,000 operational flight hours and over 100,000 autonomous ground operation hours, with thousands of drones and hundreds of unmanned ground platforms already delivered to customers worldwide.

"Military forces are entering a new operational era in which combat effectiveness will increasingly depend not only on autonomous platforms themselves, but on the ability to integrate and coordinate large numbers of autonomous systems within existing maneuver forces in real time," said Eyal Dahan, CEO of FUSE. "FUSE was established to deliver that capability today - combining autonomous platforms, operational AI and scalable One2Many command capabilities into integrated operational solutions that can be rapidly deployed and integrated into modern combat formations."

AMERICAN RHEINMETALL SELECTED TO SUPPORT U.S. MARINE CORPS WITH ADVANCED MISSION MASTER SP AUTONOMOUS UNMANNED GROUND VEHICLES



American Rheinmetall has been awarded a \$7.28M contract to support the U.S. Marine Corps through the manufacture and delivery of Mission Master SP Autonomous Unmanned Ground Vehicles (A-UGVs), associated Marine Kits, and supporting equipment. The procurement is being executed through the Defense Logistics Agency (DLA) with ADS Inc. serving as the prime contractor in support of the U.S. Marine Corps Warfighting Laboratory (MCWL).

The effort includes the delivery of 12 Mission Master SP A-UGVs and five amphibious kits, marking the most advanced Mission Master configuration developed by Rheinmetall to date. The vehicles will support continued operational evaluation, experimentation, and capability development as the Marine Corps expands its autonomous logistics and expeditionary mobility initiatives.

"This award represents a significant milestone in our long-standing partnership with the United States Marine Corps," said Matt Warnick, CEO, American Rheinmetall. "For more than four years, we have worked side-by-side with Marines to mature, refine, and advance autonomous ground capabilities. The Mission Master SP captures the full breadth of those lessons learned and showcases Rheinmetall's commitment to delivering cutting-edge, reliable, and mission-ready autonomous systems."

President and CEO of Rheinmetall Canada Pietro Mazzei said, "This collaboration between Rheinmetall colleagues enables the U.S. Marine Corps to deploy the Mission Master SP in multi-domain environments and continue to push boundaries of Canadian innovation". A new phase in Marine Corps autonomous capability development

The new Mission Master SP vehicles incorporate Rheinmetall's PATH autonomy architecture, expanded vehicle characterization, and modular payload integration. The systems also feature the Marine Kit—an upgrade enabling reliable, extended amphibious operations in littoral environments. The combined enhancements represent the latest evolution of the Mission Master family, driven by extensive user feedback, developmental testing, live-fire events, and operational experimentation.

The procurement includes a comprehensive suite of program management, engineering support, logistics coordination, technical documentation, operator training, and acceptance testing. Work will be led by American Rheinmetall in the United States with engineering and production support from Rheinmetall Canada, the original equipment manufacturer and technical partner.

IDV SELECTED FOR U.S. ARMY “ENGINEER AUTONOMOUS BREACHING CAPABILITY” INITIATIVE

IDV, a Leonardo company, through its U.S. subsidiary IDV USA, announced that it has been selected by the U.S. Army's Capability Program Executive Office Mission Autonomy as one of four industry participants in the Army's Engineer Autonomous Breaching Capability (EABC) initiative. The EABC program is focused on developing autonomous systems designed to support battlefield forces in breaching complex obstacles and minefields under direct observation and fire, minimizing risk for human personnel.

IDV's proposed solution leverages the company's expertise in autonomous military ground systems and integrates several key technologies from its portfolio: the VIKING Uncrewed Ground Vehicle (UGV) is equipped with ground autonomy software architecture, which enables rapid integration of mission systems and payloads together with navigation capabilities designed to support operation in contested and GNSS-degraded environments. Together, these technologies are intended to provide a flexible and scalable autonomy foundation capable of supporting future engineering and maneuvering missions.

Corey Kashner, CEO of IDV USA, commented: “We are honored to be selected by the U.S. Army for the EABC



initiative. The EABC program aligns directly with IDV's vision for autonomous systems and robotic maneuver support. By combining the proven VIKING UGV platform with our autonomy framework, we are delivering a solution designed to enhance mission effectiveness while reducing risks to soldiers. We look forward to supporting the Army's modernization objectives.”

Following contract awards, the Army has indicated that the EABC initiative will progress through a series of demonstrations and operational assessments designed to evaluate autonomous breaching capabilities in relevant

military environments, culminating in a unit assessment with soldier feedback to inform future decisions regarding next-generation autonomous engineer systems.

IDV continues to invest in advanced mobility, autonomy integration, and mission-enabling technologies that support the evolving needs of the U.S. military and allied defence forces worldwide. The company's participation in EABC reflects its commitment to delivering innovative solutions that enhance soldier survivability, mobility, and mission effectiveness across future operating environments.

CTECH UNVEILS HYBRID COMMUNICATIONS CONCEPT FOR UNMANNED SURFACE VEHICLE SWARMS

CTech has unveiled a hybrid communications concept that combines satellite and line-of-sight communications (LOS) to enable unmanned surface vehicles (USVs) to operate as a swarm. Integrating the AquaARX SATCOM Terminal with the UfuLink Mini Pro line-of-sight (LOS) communication solution, this architecture allows the vehicles to communicate with one another and with a command centre thousands of kilometres away.

In the configuration shown in the demonstration video, one vehicle in the swarm is equipped with both AquaARX and UfuLink Mini Pro. AquaARX establishes a satellite connection with the command centre, while UfuLink Mini Pro on the same vehicle relays this connection to the other vehicles. Kamikaze USVs equipped with UfuLink Mini Pro can thus join the communications network and connect to the command centre.

Line-of-sight (LOS) communications allow vehicles within a certain range to communicate with one another. The satellite connection provided by AquaARX enables the swarm to be controlled from thousands of kilometres away, without requiring a separate SATCOM terminal on every vehicle.

Instructions from the command centre are first



transmitted via satellite to the vehicle equipped with AquaARX, then relayed to the other vehicles in the swarm through UfuLink Mini Pro. Live video from the operational area can also be transmitted to the command centre over the same network. This allows operators to remotely command and control the vehicles while monitoring the mission in real time.

In this architecture, the vehicle equipped with AquaARX serves as a communications bridge between the swarm and the command centre. Combining satellite and line-of-sight (LOS) communications enables the vehicles in the swarm to operate in coordination, following instructions transmitted from the command centre.

DIEHL DEFENCE AND FLANQ COMBINE EXPERTISE

Diehl Defence and the German defence-tech company FLANQ have signed a Memorandum of Understanding (MoU) for strategic collaboration in the field of autonomous maritime systems. Through this cooperation, both companies aim to pool their expertise and capabilities to extend maritime defence capabilities to unmanned platforms.

The partnership enables both companies to enter the technological field of autonomous surface and underwater platforms as carriers for sensors and effectors. Together, they will further develop existing systems and prepare them for new maritime mission scenarios. The objective is to establish themselves early on as reliable partners for the German Navy and its international partners, leveraging the synergy between the two German companies and their shared approach to expand and strengthen German resilience.

For this purpose, FLANQ contributes its expertise in the areas of autonomy, mission software, and sensor fusion, as well as the development and integration of modular unmanned maritime platforms. Diehl Defence complements these capabilities with its established portfolio of effectors



and its long-standing experience in the development and industrialization of complex defence systems.

For both companies, this cooperation represents a significant step in expanding their maritime product

portfolios. The common goal is to realize an initial demonstrator within the current year, thereby creating the basis for further development and procurement projects.

DRONESHIELD COMPLETES INSTALLATION AND ACCEPTANCE OF DRONESENTRY-X MK2 UNDER U.S. JIATF-401 PROGRAM

DroneShield, a global leader in advanced counter-drone technology announced the successful installation and acceptance of its DroneSentry-X Mk2 counter-uncrewed aircraft system (C-UAS) units on U.S. military Infantry Squad Vehicles (ISVs) under its previously announced Joint Interagency Task Force 401 (JIATF-401) contract.

The milestone was achieved approximately 80 days after contract award, with DroneShield completing delivery, vehicle installation, acceptance testing and operator training as part of the program. Three additional DroneSentry-X Mk2 units are planned for installation under a recent modification to the contract.

The completed work establishes initial operational capability (IOC) for the deployed technology.

DroneSentry-X Mk2 provides vehicle-mounted detection and electronic countermeasure capabilities against uncrewed aerial threats. Installed directly on the ISV, it gives forces a counter-UAS capability that can operate while mobile or stationary, extending protection beyond established bases and fixed infrastructure.

DroneShield personnel completed the vehicle installations and supported a full system acceptance test using live uncrewed aircraft. All operators were also trained as part of the delivery, moving the program beyond



equipment handover to an accepted capability ready for operational use.

"Counter-UAS capability has to be deployable at the speed the threat is evolving," said Nate Webb, Director of Strategic Projects at DroneShield. "In approximately 80 days, our team moved from contract award through delivery, vehicle installation, live-UAS acceptance testing and operator training. Reaching initial operational capability is a strong demonstration of what it takes to turn a counter-UAS requirement into capability in the field."

Small uncrewed aircraft are increasingly shaping the operating environment, creating threats that are mobile, inexpensive and difficult to address through fixed defenses alone. Vehicle-mounted counter-UAS gives forces the ability to carry detection and electronic countermeasure capability with them as they move, providing another layer of protection where permanent infrastructure is unavailable or impractical.

The JIATF-401 program builds on DroneShield's more

than decade-long focus on counter-UAS and its growing support of U.S. Department of War requirements. The company develops RF sensing, electronic countermeasures, command-and-control software and AI-enabled technology across dismounted, mobile and fixed-site applications.

"We know that there is no silver bullet to defeat every drone threat and that counter-UAS capabilities go beyond technology. The threat continues to change, and our work at the Southern Border is not finished. We will continue working alongside USNORTHCOM, JTF-SB and our interagency partners to deliver the capabilities our warfighters need to stay ahead of the threat along with effective training and authorities that enable them to make the right decisions when countering drone threats at home and abroad." — U.S. Army Brig. Gen. Matt Ross, director of JIATF-401

"We know that there is no silver bullet to defeat every drone threat and that counter-UAS capabilities go beyond technology," said U.S. Army Brig. Gen. Matt Ross, director of JIATF-401. "The threat continues to change, and our work at the Southern Border is not finished. We will continue working alongside USNORTHCOM, JTF-SB and our interagency partners to deliver the capabilities our warfighters need to stay ahead of the threat along with effective training and authorities that enable them to make the right decisions when countering drone threats at home and abroad."

RHEINMETALL BREAKS GROUND TO EXPAND QUEBEC FACILITY



Rheinmetall Canada marks its 40th anniversary with a groundbreaking ceremony to expand its Saint-Jean-sur-Richelieu facility, reinforcing its long-term commitment to driving Canadian innovation and increasing its advanced manufacturing capacity. Rheinmetall's expansion will increase the production space by 4830 m² and grow the warehousing capacity by 2230 m², which will significantly enhance the industrial foundation required to produce, integrate, and sustain advanced autonomous Uncrewed Ground Systems (UGS) in Canada.

This increased footprint in the Montérégie, Quebec, region comes at an important time as Rheinmetall adapts to the growing demand of its land autonomy solutions. In the last year alone, Rheinmetall has established three Advanced land autonomy centres of excellence to fully localize Canadian-developed solutions and expedite the delivery of these strategic capabilities.

At the core of this expansion are Rheinmetall's PATH autonomy technology and the Mission Master suite of autonomous UGSs. Developed in Canada with feedback from Rheinmetall's closest allies across the transatlantic, these solutions are now positioned for domestic scalable production and long-term support.

Rheinmetall has been deeply rooted in the Canadian defence ecosystem, which has enabled a rapid, responsive, and creative approach to research and development. Over the years, Rheinmetall has collaborated with a growing list of Canadian partners across industry, academia, and research centres, including Zeal Motor, Université de Sherbrooke, Quaze Technologies, and the Centre d'Innovation du Haut-Richelieu. This ecosystem of land autonomy collaborators continues to grow and demonstrates that the sovereign industrial capability is here and ready to respond.

Rheinmetall's domestic supply chain spans nearly 1000 Canadian small- to medium-businesses, more than 600 of which are based in Quebec alone. These partnerships remain central to Rheinmetall's international success as it expands production and responds to future domestic and allied requirements.

BABCOCK AND ARK ROBOTICS PARTNER TO BRING COMBAT-PROVEN UGVs TO UK FORCES



We've signed a Memorandum of Understanding (MoU) with Ark Robotics to explore manufacturing uncrewed ground vehicles (UGVs) in the UK, bringing a platform already proven on the frontline in Ukraine to British and allied forces.

Through this agreement, signed at DVD 2026, we intend to jointly explore UK manufacturing, systems integration and payload integration, along with the development of a full support solution including training, logistics, infrastructure and operational support. We will also explore opportunities for Ark Robotics' Frontier system, which provides robots with autonomous navigation capabilities and allows a single operator to control multiple vehicles at once.

UGVs are taking on a rapidly growing share of frontline tasks, re-supplying teams with ammunition, weapons and equipment. They lay smokescreens and evacuate casualties, keeping people out of the most exposed positions. Ark Robotics' A1, which is deployed with the Armed Forces of Ukraine, has a range of up to 20km per charge, a top speed of 40kph and a payload capacity of 15kg.

As a leading manufacturing and systems integration partner, we are well positioned to work with Ark Robotics to develop and deliver UGV solutions and autonomous systems. At DVD 2026, together with Ark Robotics, we are demonstrating the A1 fitted with a Concept smoke generator, which lays a smokescreen automatically, where and when it is needed.

Louise Atkinson, Chief Executive of our Land and Mission Systems sector, said: "In a more volatile and unpredictable world, our customers need the latest and most innovative solutions to ensure they maintain the operational edge. As a business, we connect people, platforms, technology, information and operations across every domain – and by partnering with Ark Robotics, we can leverage our expertise in autonomy, manufacturing and systems integration to deliver next-generation uncrewed ground systems for the UK and international customers."

Achi Takagama, CEO, Ark Robotics, added: "Ark Robotics has been at the forefront of the development of unmanned systems in Ukraine. We are building infrastructure for a future in which militaries field many times more unmanned systems than soldiers. Meeting that shift requires more than technology. It requires the manufacturing capacity, systems integration and through-life support that turn a proven platform into a sovereign capability. Partnering with Babcock, a global defence leader, is how we bring what we have learned on the frontline to the UK and other allies at scale."

CARGO DRONE DEMONSTRATION IN ITALY HIGHLIGHTS POTENTIAL FOR FASTER MEDICAL DELIVERIES



A cargo drone has transported biomedical materials from mainland Italy to the island of Ischia in just 15 minutes, demonstrating the potential of uncrewed aircraft to improve medical logistics for island communities.

The demonstration was conducted under the Aetos project, delivering the materials to Rizzoli Hospital in Lacco Ameno. The mission took place within the area served by ASL Napoli 2 Nord, with participation from Unmanned4you, FlyingBasket and the municipalities of Bacoli and Casamicciola Terme. Unify Consulting supported operational planning, risk analysis and the authorisation process.

The project aims to develop a reliable and repeatable drone delivery service that can reduce transportation time, logistical constraints and costs associated with supplying islands. Further work will focus on validating procedures, training personnel and integrating drone missions with existing ground-based healthcare operations.

Unify emphasised that regulatory compliance and safety assessments must be incorporated from the earliest stages of service development to support sustainable, repeatable operations.

Separately, Unify is preparing to participate in a European project with San Raffaele Hospital, ABzero and the Metropolitan City of Milan. The initiative will test drone transport of blood, biological samples, medicines and other critical medical materials between healthcare facilities.

medical drone delivery Italy, cargo drones medical logistics, Aetos project Italy, biomedical transport by drone, Ischia drone delivery, Rizzoli Hospital drone logistics, FlyingBasket cargo drone, Unify Consulting, healthcare drone transportation Europe,

GUAMOBILITY ADVANCES OMAN'S NATIONAL ADVANCED AIR MOBILITY STRATEGY



French consultancy GUAMobility has launched its second mission in Oman to advance the development of the country's National Advanced Air Mobility (AAM) Strategy, supporting the Sultanate's long-term aviation and transport ambitions under Oman Vision 2040.

The latest phase focuses on consultation, data collection and validation of proposed strategic priorities against Oman's operational requirements. Seven workshops have been scheduled in Muscat during September, bringing together government authorities, aviation operators, technology companies, academic institutions and investment stakeholders.

The workshops cover AAM applications and use-case prioritisation, urban planning, training and skills development, regulation, safety, security, airspace management, unmanned traffic management, financing and public-private partnerships.

The initiative aims to identify the requirements, opportunities and constraints involved in integrating drones and electric vertical take-off and landing (eVTOL) aircraft into Oman's airspace. Potential applications include passenger transport, cargo logistics, emergency medical services, search and rescue, infrastructure inspection, security and oil and gas operations.

The programme is led by GUAMobility in coordination with Oman's Ministry of Transport, Communications and Information Technology, the Civil Aviation Authority and the Oman Logistics Center.

The consultation phase will help establish a national roadmap for phased AAM deployment, including regulatory development, operational readiness, infrastructure planning and investment opportunities. The strategy is intended to support a safe, sustainable and commercially viable advanced aviation ecosystem in Oman.

GUAMobility Oman, Oman advanced air mobility strategy, Oman Vision 2040 aviation, advanced air mobility Middle East, Oman drone regulations, eVTOL development Oman, unmanned traffic management Oman, urban air mobility strategy, drone logistics Oman,

ZIMBABWE APPROVES NATIONWIDE VLOS AND BVLOS DRONE DELIVERY OPERATIONS

The Civil Aviation Authority of Zimbabwe (CAAZ) has approved Drone Solutions International to conduct commercial drone delivery operations nationwide, including flights beyond visual line of sight (BVLOS).

The authorisation covers the company's KITE uncrewed aircraft system, supporting long-range logistics and deliveries across Zimbabwe. The approval follows a six-month regulatory review involving the aircraft, operating manuals, operational risk assessment and airspace integration procedures, supported by a demonstration flight programme in August 2026.

Drone Solutions plans to begin regular operations with medical and pathology logistics between regional healthcare facilities and central laboratories. The service is expected to support the transportation of essential medical supplies while improving connections between healthcare providers and diagnostic facilities.

Kite Aero supported the approval process with operational data from AXIOM, its drone operations management platform. The company reported that AXIOM had recorded more than 41,000 autonomous flights and



20,000 flight hours across multiple regions.

The approval marks an important step towards expanding commercial drone logistics in Zimbabwe, with potential applications in healthcare, emergency deliveries and regional parcel transportation.

Zimbabwe drone delivery approval, CAAZ BVLOS approval, Drone Solutions International, KITE drone Zimbabwe, nationwide BVLOS operations, medical drone deliveries Africa, Kite Aero uncrewed aircraft, autonomous drone logistics, drone pathology transport,

UK CAA UPDATES DETECT-AND-AVOID POLICY FOR BVLOS DRONE OPERATIONS

The UK Civil Aviation Authority (CAA) has published Version 2 of its Detect and Avoid (DAA) Policy Concept, CAP3015, providing clearer guidance on how drone operators and technology developers can demonstrate that their systems are suitable for beyond-visual-line-of-sight (BVLOS) operations.

The updated policy outlines expectations for system testing, supporting evidence and regulatory assessment. It also provides further detail on pilot interaction, automation, alerting and encounters between uncrewed aircraft.

Applicants may be able to use relevant previous testing and recognised technical standards to support their applications. Testing requirements can also be tailored where objective evidence demonstrates that the approach is sufficient for the proposed operation.

The CAA has also confirmed that residual Air Risk Class ARC-a operations under the UK Specific Operations Risk Assessment (SORA) do not require detect-and-avoid-based tactical air-risk mitigation. The regulator has withdrawn planned changes to the associated Acceptable Means of Compliance and Guidance Material that were scheduled to take effect on 1 October 2026.

The existing guidance that was in force immediately before 3 July 2026 will therefore continue to apply. The CAA intends to combine the paused changes with further



updates in a consolidated release planned for 2027.

CAP3015 remains a policy concept under controlled testing rather than a blanket approval for unrestricted BVLOS flights. Applications will continue to require operation-specific assessments and regulatory scrutiny.

UK CAA BVLOS regulations, detect and avoid drone systems, CAP3015 policy concept, UK drone regulations 2026, beyond visual line of sight operations, UK SORA air risk assessment, ARC-a drone operations, BVLOS safety requirements, uncrewed aircraft regulatory guidance,

AVI-SPL AND MATTERNET PARTNER TO DEPLOY DRONE DELIVERIES FOR SERVICE LOGISTICS



AVI-SPL and Matternet have partnered to introduce autonomous drone deliveries for mission-critical service logistics in metropolitan markets. The collaboration aims to help field technicians receive essential equipment and replacement parts more quickly, particularly in congested urban areas where road traffic can delay ground transportation.

The partnership combines AVI-SPL's service, integration and supply chain network with Matternet's established drone delivery technology. The companies intend to use the system to improve parts availability, accelerate service response times and integrate aerial deliveries into existing logistics operations.

Matternet's delivery platform includes its M2 drone, Matternet Station and Matternet Software Platform. According to the company, its technology has supported more than 60,000 commercial flights across urban and suburban environments in the United States and Europe.

Matternet also holds Federal Aviation Administration (FAA) Type Certification and Production Certification for its drone delivery system. Its commercial operations include partnerships with logistics providers such as UPS and Ameriflight.

The agreement highlights the expanding role of autonomous drones beyond consumer deliveries, with service logistics emerging as another application for faster, more flexible urban transportation.

AVI-SPL Matternet partnership, drone delivery service logistics, Matternet M2 drone, autonomous drone deliveries, field technician parts delivery, urban drone logistics, mission critical service logistics, commercial drone delivery USA, drone supply chain solutions,

SKYPORTS AND RAKTA FINALISE PLANS FOR FOUR-VERTIPORT ADVANCED AIR MOBILITY NETWORK IN RAS AL KHAIMAH



Skyports Infrastructure and the Ras Al Khaimah Transport Authority (RAKTA) have signed a binding agreement to develop and operate a four-vertiport Advanced Air Mobility (AAM) network across Ras Al Khaimah in the United Arab Emirates. Commercial services are targeted to launch in the third quarter of 2027.

The first phase will focus on Al Marjan Island and Jebel Jais, connecting two of the emirate's major tourism destinations. Two additional vertiports are planned in subsequent phases, subject to further planning, business case development and regulatory requirements.

The network is intended to enable faster point-to-point travel within Ras Al Khaimah and support future air mobility connections with other emirates. The first planned inter-emirate connection will link Ras Al Khaimah with Dubai, complementing the advanced air mobility infrastructure being developed there.

The agreement builds on a strategic partnership between RAKTA and Skyports that began in 2024, followed by a framework agreement in 2025. The latest development moves the programme from strategic planning towards implementation.

The vertiports are being planned to accommodate different certified aircraft types and approved operators as the AAM sector evolves. The project also supports Ras Al Khaimah's Comprehensive Mobility Plan 2030, which emphasises connectivity, sustainability and transport innovation.

Development will continue in coordination with relevant local and federal authorities, with safety, regulatory compliance and integration into the wider transport network remaining key priorities.

Skyports Ras Al Khaimah, RAKTA vertiport network, advanced air mobility UAE, Ras Al Khaimah air taxi, four vertiport network UAE, Skyports Infrastructure, Al Marjan Island air mobility, Jebel Jais air taxi, UAE eVTOL infrastructure,

US AVIATION OFFICIALS WITNESS STATEWIDE BVLOS DRONE OPERATIONS DEMONSTRATION

The Northern Plains UAS Test Site (NPUASTS) and its industry partners demonstrated beyond-visual-line-of-sight (BVLOS) drone operations to aviation officials from across the United States on 16 September 2026.

The demonstration took place at Gorman Field during the National Association of State Aviation Officials (NASAO) Annual Convention, showcasing the Vantis unmanned aircraft system (UAS) network and its potential to support wider drone operations.

Participating organisations included NPUASTS, CVS Health, SkyfireAI, Kelly Hills Unmanned and Thales. The demonstrations highlighted two key applications: delivering critical medical supplies by drone and using autonomous aircraft for agricultural operations.

The event illustrated how drone technology, communications infrastructure and industry collaboration can support the transition towards practical, scalable BVLOS services. It also gave state aviation leaders an opportunity to understand how these operations could benefit their respective states and communities.

The demonstration reflects growing efforts in the



United States to advance BVLOS operations beyond limited trials and towards broader commercial and public-service applications.

US BVLOS drone operations, statewide BVLOS

demonstration, Northern Plains UAS Test Site, Vantis UAS system, NASAO aviation convention 2026, drone medical supply delivery, agricultural drone operations, autonomous aircraft technology, BVLOS drone infrastructure,

CASA APPROVES SYPAQ SYSTEMS FOR BROAD-AREA BVLOS DRONE OPERATIONS IN AUSTRALIA

Australia's Civil Aviation Safety Authority (CASA) has approved SYPAQ Systems Pty Ltd under its Broad Area Beyond Visual Line of Sight (BA-BVLOS) programme, providing the company with a streamlined pathway for eligible drone operations across broad geographical areas.

The BA-BVLOS framework allows approved operators to assess operational risks and conduct BVLOS flights without requiring separate, site-specific approvals for every operating location, subject to the programme's applicable conditions.

SYPAQ Systems develops unmanned aircraft platforms for a range of applications. Its portfolio includes a flat-pack cardboard drone designed for rapid deployment, with a reported range exceeding 100 kilometres.

The approval marks a step forward for SYPAQ's operations under Australia's evolving regulatory framework for beyond-visual-line-of-sight flights. By simplifying the approval process, the BA-BVLOS programme is intended to support broader deployment of drone technology while maintaining operational safety requirements.

The development also reflects CASA's efforts to make BVLOS operations more accessible to eligible operators and expand the use of unmanned aircraft across Australia.

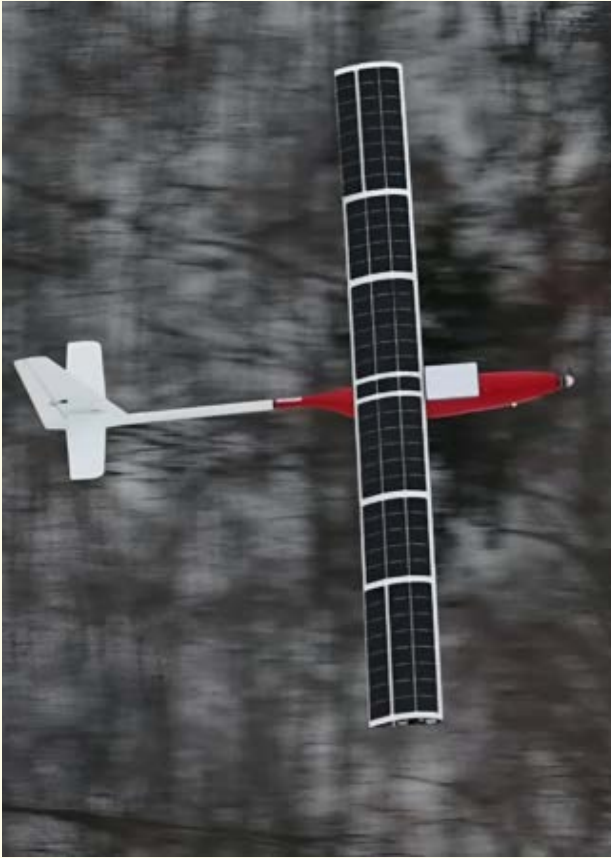
SYPAQ Systems Australia, CASA BVLOS approval, broad area BVLOS Australia, SYPAQ drone systems, beyond visual



line of sight drones, Australian drone regulations, flat-pack cardboard drone, long range UAV Australia, commercial

drone operations Australia,

SUPERWAKE SECURES TRANSPORT CANADA APPROVAL FOR SW-117 BVLOS DRONE OPERATIONS



Canadian drone manufacturer Superwake has received Transport Canada approval for a Pre-Validated Declaration under Standard 922.10, covering the detect-and-avoid (DAA) capability of its SW-117 long-endurance unmanned aircraft.

The approval supports beyond-visual-line-of-sight (BVLOS) operations using the company's proprietary detect-and-avoid system. The technology is designed to detect conflicting air traffic and enable the aircraft or remote pilot to take appropriate avoidance action.

According to Superwake, the approval follows a staged flight-test programme that helped establish the system's regulatory safety case. The development is expected to support long-endurance intelligence, surveillance and reconnaissance (ISR), surveying and communications relay missions.

The company is targeting applications in remote and northern regions, where BVLOS operations can extend the reach of drone-based services without relying on chains of visual observers.

The approval marks a significant milestone for Superwake as it advances its long-range drone capabilities and seeks to support operations in demanding environments across Canada.

Superwake SW-117 drone, Transport Canada BVLOS approval, BVLOS drone operations Canada, detect and avoid drone technology, SW-117 long endurance drone, Canadian drone manufacturers, beyond visual line of sight drones, drone intelligence surveillance reconnaissance, long range UAV Canada,

KEETA DRONE RESUMES FOOD DELIVERY OPERATIONS IN DUBAI



Keeta Drone has resumed commercial drone delivery operations in Dubai following a pause to meet updated regulatory and operational requirements. The service initially operates from Silicon Central Mall, serving eligible areas around Dubai Silicon Oasis (DSO).

The company began its Dubai operations in 2024 after receiving a commercial drone delivery certificate from the Dubai Civil Aviation Authority (DCAA). Under a revised regulatory framework, the company was required to obtain specific clearances for designated flight routes to ensure safe separation from restricted airspace, emergency corridors and other low-altitude traffic.

The resumption follows regulatory approval and updated safety arrangements designed to integrate commercial drone deliveries into residential communities, parks and shopping areas.

Customers can place orders through the Keeta app from participating food and beverage outlets. Deliveries are available to designated collection lockers, including locations at RIT and the Emirates Building in DSO. In selected areas, a rider collaboration service also supports delivery directly to customers' homes.

The renewed service marks another step in Dubai's adoption of autonomous last-mile logistics, with operations focused on regulatory compliance and the safe integration of drones into urban environments.

Keeta Drone Dubai, drone delivery Dubai, Dubai drone delivery service, Keeta food delivery, Dubai Silicon Oasis drone deliveries, Dubai Civil Aviation Authority, commercial drone operations UAE, autonomous food delivery drones, drone logistics Middle East, urban drone delivery UAE

US TSA SEEKS INDUSTRY INPUT ON SECURITY RULES FOR BVLOS DRONE OPERATIONS

The US Transportation Security Administration (TSA) is inviting eligible industry representatives to participate in technical roundtables aimed at developing security approaches for beyond-visual-line-of-sight (BVLOS) drone operations.

The initiative will help TSA shape guidance for security programmes required for certain unmanned aircraft system (UAS) operators. Proposed measures include personnel vetting and TSA-approved security programmes, developed in coordination with the Federal Aviation Administration (FAA).

The planned roundtables will gather industry experience on organisational procedures, technology and physical security measures already used by BVLOS operators. TSA expects some existing practices adopted under FAA waivers or exemptions may help operators meet future security requirements.

Participation is restricted to qualified representatives of BVLOS operators and relevant industry associations. Participants must also receive approval to access Sensitive Security Information (SSI). Requests to participate are due



by 19 October 2026, subject to possible changes linked to publication of the final rules.

TSA BVLOS drone security rules, US drone regulations 2026, beyond visual line of sight drone operations, BVLOS

security requirements, TSA drone operator security programme, FAA BVLOS final rule, unmanned aircraft security regulations, BVLOS drone operator requirements, TSA drone industry roundtables, US commercial drone regulations

GNSS SIGNAL DEGRADATION POSES HIDDEN RISKS FOR UTM AND BVLOS DRONE OPERATIONS

As uncrewed aviation expands, degradation of Global Navigation Satellite System (GNSS) signals is emerging as a wider safety concern for beyond-visual-line-of-sight (BVLOS) drone operations. The risk extends beyond navigation, potentially affecting aircraft containment, flight conformance, traffic management and remote-pilot decision-making.

A complete loss of satellite navigation can trigger alerts and established contingency procedures. More challenging is a situation in which an aircraft continues transmitting plausible position data that does not accurately reflect its actual location. Ground control stations and traffic-management systems may continue displaying apparently normal flight information, creating a false sense of confidence.

This is particularly significant in connected airspace environments, where aircraft position data supports flight monitoring, geographical containment, conformance checks and traffic coordination. If multiple systems rely on the same compromised position source, their apparent agreement does not necessarily provide independent confirmation of the aircraft's location.

Effective resilience therefore requires more than adding redundant GNSS receivers. Operators and system developers must consider independent navigation sources,



sensor cross-checking, position integrity monitoring and clear procedures for handling uncertainty. Potential solutions include inertial navigation, alternative positioning technologies and complementary positioning, navigation and timing capabilities. The challenge also has human-factors implications. Remote pilots depend on digital displays to understand an aircraft's position and trajectory. When those displays remain convincing despite unreliable underlying data, operators may make decisions based on an inaccurate picture of the flight. For uncrewed traffic management (UTM), the distinction between receiving position information and trusting that information is essential. Future systems may

need to communicate position uncertainty more explicitly and adapt monitoring or conflict-management decisions when navigation integrity cannot be assured.

As BVLOS operations become more widespread, ensuring the reliability of shared position information will be increasingly important to maintaining safe, scalable and resilient digital airspace.

GNSS degradation drone operations, BVLOS drone safety, UTM position integrity, GNSS spoofing UAV, GNSS jamming drones, uncrewed traffic management, BVLOS navigation resilience, drone containment monitoring, alternative navigation systems UAV,



AKSI AEROSPACE GROUP

MAKE IN INDIA AEROSPACE AND DRONE TECH GROUP

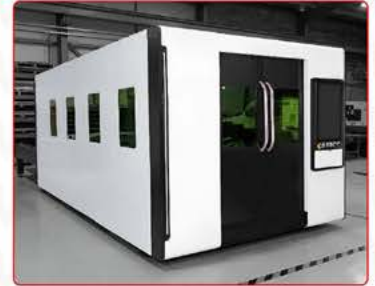
From concept to aircraft, Aksi Aerospace Group delivers end-to-end manufacturing solutions.

Precision engineering, advanced materials, and cutting-edge technology drive every stage we handle.

Design, prototyping, production and assembly all seamlessly integrated under one roof.

With AKSI, innovation takes flight with reliability you can trust.

Drone OEMs looking for scalable production may reach out to us.



Machinery Images from Shop Floor



1 lakh square feet integrated shop floor



Agricultural Drones



Industrial Drones



Cargo Drones



Autopilots



Batteries



Motors



Cameras



Drone Composites



Training Academy



+91 93419 71308



www.aksiaerospace.com



business@aksiaerospace.com

Advertorial Packages

(Only For Startups)

1-Page Feature – £600

Format Options:

- Advertorial – product showcase with brand story.
- Editorial – industry insights written by our editorial team.
- Executive Interview – Q&A format with your spokesperson.

What You Get:

- Premium full-page presence (print + digital).
- Company logo + product visuals.
- Website Banner Advertisements (1 Month).
- Quarter page Ad – 3 Months of your choice.
- Advantage: Ideal for first-time advertisers who want impactful visibility at an entry-level investment.



2-Page Spread – £1,000

Format Options:

- Extended Advertorial – deep dive into product range/solutions.
- Thought Leadership Article – editorial content positioning you as an expert.
- In-Depth Interview – extended Q&A with high-res visuals.

What You Get:

- Double-page showcase with visual storytelling (photos, diagrams, infographics).
- Guaranteed prime placement in the issue.
- Extended coverage across our digital magazine + website.
- Website Banner Advertisements (2 Months)
- Quarter page Ad – 6 Months of your choice
- Advantage: Balance of storytelling and strong visibility – excellent for launches, brand repositioning, or market education.



DRONES
WORLD

**GLOBAL MONTHLY MAGAZINE
FOR DRONES INDUSTRY**

Real Future Media Ltd
126 Wheatfield Drive Bradley Stoke Bristol United Kingdom BS32 9DD
Mobile : +44 7855771217
For Advertisement : sankar@dronesworldmag.com
For Interviews : editorial@dronesworldmag.com
For Press Releases : sony@dronesworldmag.com

RNI No. : TNENG/2014/59266

Postal Regn No: TN / CH(C) / 505 / 15-17, Publication Date: 1st of Every Month.

Postal Permission Date: 5th or 7th of Every Month

**ANANTH
TECHNOLOGIES**



An AS-9100D & ISO
9001:2015 certified company
Committed Partner for Indian
Aerospace & Defence Programs

Facilities

- Complete satellite manufacturing facilities under one roof
- Launch Vehicles Facilities
- Design and Manufacture of Space and Defence Equipment
- Contributed to 109 Satellites and
- 89 Launch vehicles so far
- In-house environmental test facilities
- Class 100K, 10 clean rooms with SMT Production lines

Products

- Assembly, Integration & Testing (AIT) of Satellites for LEO and for GEO orbits
- Digital & Embedded systems
- EW systems & Simulators
- Laser & Optical Systems
- Sights for weapons
- AIT of Launch Vehicles
- Telemetry & Tracking systems
- On-board computing systems
- Sensor Systems
- Navigation & Controls systems
- RF and Microwave systems

Meeting Quality & Reliability Standards for Space & Defence programs
Dr. SUBBA RAO PAVULURI, CHAIRMAN & MANAGING DIRECTOR,
E-mail : subbarao@ananthtech.com

Headquarters

ANANTH TECHNOLOGIES PVT LTD.

Ananth Info Park, Plot No.39,
Phase-II Madhapur

Hyderabad – 500 081

Tel:+91-40-6615 6615

Fax:+91-40-6615 6531

E-mail: subbarao@ananthtech.com

mail@ananthtech.com

Satellite Facilities

ANANTH TECHNOLOGIES PVT LTD.

No:64, KIADB Bangalore
Aerospace Park, Singahalli Village,
Budigere Post, Bangalore
North Taluk

Bangalore – 562129

Tel:+91-80-6616 6616

E-mail: mail@ananthtech.com

Launch Vehicles Facilities

ANANTH TECHNOLOGIES PVT LTD. Plot No.51(b) KINFRA Park ,
Menamkulam Sub-Dist : Kazhakuttom Thiruvananthapuram, Kerala
Tel:+91-471-2315913 E-mail: mail@ananthtech.com

