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Mr. Sanjay Singh-Founder

(Trade promotion Council for Geospatial & Space Industry)

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Sanjay Singh : +91 9910990553

Lt Gen RKS Kushwaha, PVSM, AVSM (Retd.) : +91 7827869114

Kartikeya B. : +91 9444499221

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Editor-in-Chief ◆ B. Kartikeya

EDITORIAL

Associate Editor ◆ Rohith Reddy

Special Editor ◆ Naheda Imtiyaz

Correspondent ◆ B. Martin

CREATIVE HEAD ◆ Swati Sharma (Design Garage)

PHOTOGRAPHER ◆ Krishanth

MARKETING

marketing@futureaviation.in

India : Mr.Sanjay Singh, Trade Promotion Council For Geospatial & Space Industry | secretariat@tpcgsi.com | Mobile:- +91 9910990553

SUBSCRIPTION

Asst.Manager, Subscription ◆ Sony

FINANCE & ADMINISTRATION

Sr.Manager ◆ Karunandhi

Asst.Manager ◆ Md. Wajid Ali

Editorial & Advertising Offices

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DRONES WORLD
99 FUTURE DREAMS MEDIA LTD, 128 City Road, London, EC1V2NX For all magazine related enquires
For all magazine related enquires
E-mail: dronesworldmag@gmail.com

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B. KARTIKEYA

Hello my dear readers,

The monthly e-magazine Drones World documents the rapid expansion of the drone market by showcasing the most recent product introductions, evaluations, and UAV-focused initiatives. Current news on developments in the drone industry is given to our readers in this issue. The publication covers the most recent advancements in defence, including work in fields like anti-drones and EVTOL.

Many people find drone technology intriguing, and some amazing product promises are made by it. In the end, the most effective and economically viable technology matters, not the most attractive. The industry must create viable business models, and artificial systems must find their market.

The material has significant worth thanks to several enhancements introduced in this edition. We constantly endeavour to discuss and expose industry-related issues crucial to the drone sector's expansion. Anti-Drones are need of the hour in the market. Defense companies are seeing good no of orders and growth in this sector is very promising. Most importantly skilling for unmanned industry is neglected and its importance is very high in demand.

In this issue we have conversation with Mr. Sanjay Singh, Founder of Trade Promotion Council for Geospatial & Space Industry (TPCGSI) & also we will be pleased to inform all our readers (TPCGSI) will be our exclusive one point contact for Indian Market for Advertisements, advertorials and other promotional activities. Don't hesitate to approach him on +91 9910990553. Drones World & TPCGSI jointly organising an event in Pune on September 2024.

Drones World Magazine helps link manufacturers, suppliers, component makers, technology providers, installers, purchasers, and consumers by reaching thousands of industry professionals across the commercial drone business.

With that, I take your leave this month. More when we meet again in our next issue.

Till then, stay safe, God bless.

SWISS EV ENTREPRENEUR FRANCOIS RANDIN JOINS AEROVOLT

Aerovolt have appointed Francois Randin, Swiss entrepreneur and electric vehicle charging infrastructure pioneer to its Board of Directors. In a growing but still small eco-system that is electric aviation, it was obvious that Francois Randin, who designed and launched the very first charging station for electric aircraft in 2020 and Aerovolt decide to join forces developing solutions for a more sustainable aviation.

Prior to pioneering the electric aviation market, Francois has been the founder and CEO of two electric mobility start-ups which have both been bought by blue chips. Founded in 2009, Green Motion was amongst the first start-up designing and manufacturing charging infrastructure for electric vehicles, acquired by Eaton in 2021. Founded in 2018, evpass is the largest charging network for electric vehicles in Switzerland and has been acquired by Shell in 2023.

'Francois is one of the most successful entrepreneurs in the EV industry. He is bringing to the team his unique 15 years' experience in our business, his international network and an extensive start-up and entrepreneurship expertise.' said Philip Kingsley-Dobson, Aerovolts Founder and CEO.

Francois Randin says 'Lead by experienced and visionary entrepreneurs, Aerovolt is the most promising start-up in the electric mobility space today. I am proud to join the team and to support the company in its growth and international plans.'

PYKA DELIVERS FIRST OF THREE LARGE-SCALE AUTONOMOUS ELECTRIC CARGO AIRCRAFT TO AFWERX

Flight operations personnel from Pyka and AFWERX gathered on the tarmac at New Braunfels National Airport to witness the arrival of Pyka's Pelican Cargo, a large-scale autonomous electric cargo aircraft with a 400 pound payload capacity and 200 mile range, built for remote off-airport operations.

This is the first delivery in a fleet of three Pyka Pelican Cargo on lease to AFWERX, the innovation arm of the Department of Air Force (DAF) and a directorate within the Air Force Research Laboratory, for the United States Air Force's Agility Prime program. The program will explore operational use cases for Pyka's technology to address the most pressing challenges in the DAF.

"The AFWERX Agility Prime program looks forward to learning about the deployment and operational capabilities of electric aircraft through this contract," said Lt Col John Tekell, Agility Prime Branch Chief.

The California-based startup, founded in 2017 in the backyard of a Silicon Valley home, is now well on its way to create and provide innovative solutions that could strengthen the national defense of the United States of America. As the

largest autonomous electric cargo aircraft in its class, Pelican Cargo is able to take off and land in remote areas with minimal ground infrastructure, can be recharged in under 90 minutes, and requires few personnel to operate.

"We're proud to deliver Pelican Cargo to AFWERX for the United States Air Force's Agility Prime program," says Michael Norcia, Chief Executive Officer at Pyka. "Our aircraft offers an unparalleled platform for heavy-payload and long-range autonomous electric cargo logistics. We believe the DAF is an ideal customer to harness the benefits of this technology, and is helping to advance zero-emission aviation in the United States by partnering with companies like ours.»

DOMO TACTICAL COMMUNICATIONS (DTC) AND INERTIAL LABS PARTNER TO DELIVER A BREAKTHROUGH INTEGRATED UNCREWED SYSTEMS SOLUTION FOR GNSS-DENIED NAVIGATION AND COMMUNICATIONS

Domo Tactical Communications (DTC), the leading provider of wireless IP mesh technology, and Inertial Labs, Inc., the leading developer of global navigation satellite system (GNSS)-independent navigation solutions, today announced a partnership to develop a breakthrough integrated uncrewed systems solution to benefit UxV manufacturers and end users worldwide. The new solution combines technologies from both companies to create a single navigation, command and control (C2), and intelligence, surveillance and reconnaissance (ISR) system.

DTC's MANET Mesh with MeshUltra™ family waveforms deliver robust, high-bandwidth C2 and ISR links, enabling uncrewed vehicles to operate successfully in the most hostile RF environments. Leveraging Inertial Labs' inertial navigation system (INS) and DTC's Mesh-based RF ranging capability, those same vehicles will also be able to operate even when space-based positioning systems are unavailable due to jamming, spoofing, or lack of sky view. The INS provides assured position, navigation, and timing (APNT), and alternative navigation (ALTNAV) solutions directly to the uncrewed vehicle.

"DTC is committed to ensuring connectivity in most any environment or situation. This partnership with Inertial Labs offers a breakthrough combined solution for uncrewed systems," said Rob Garth, Business Unit Director for Unmanned Systems at DTC. "The cohesive communications and positioning package will reduce customers' time to market and increase their beyond-line-of-sight connectivity."

"DTC is a trusted partner with a track record of delivering mission-critical Unmanned systems communication solutions," said Jamie Marraccini, President and CEO of Inertial Labs. "By combining our Inertial Navigation capability with DTC's MANET radio and Mesh-based ranging, we are providing our current and future customers with an unparalleled solution set perfectly tailored for the most demanding of GNSS-contested environments."

AEROVIRONMENT'S TOMAHAWK PRODUCT LINE AWARDED $2.67 MILLION CONTRACT BY THE DEPARTMENT OF DEFENSE FOR GRIP TAB ACTIVE CONTROLLERS

AeroVironment's Tomahawk product line has been awarded a $2.67 million contract from Advanced Technology International (ATI) that will be managed by the U.S. Marine Corps Warfighting Lab (MCWL). This contract supports the Marine Corps' Force Design 2030 and other Department of Defense (DoD) initiatives of enhancing lethality and mission success across the warfighting functions.

AeroVironment to deliver Tomahawk Grip Tab Active controllers to the U.S. Marine Corps to evaluate for future operations (Photo: AeroVironment)

Under the contract, AeroVironment will deliver prototype Tomahawk Grip Tab Active (Grip TA) controllers and supporting test kits, allowing the DoD to evaluate the technical capabilities for future operations. The controller, combined with the RAID System, provides a large screen and ensures current and future cyber, safety, and fire control requirements are met.

The Tomahawk Grip TA controllers will be part of the larger Kinesis Ecosystem that already includes 20+ robotic systems, various input devices, and numerous AI-enhanced capabilities. This ecosystem uniquely enables multi-domain, many-to-many UxV operation through a single user interface, all while reducing the physical and cognitive burdens placed on the operator.

"AeroVironment is excited to deliver these systems to the DoD," said Scott Bowman, Tomahawk Robotics product line manager at AeroVironment. "The tablet-based Grip Tab Active Controller will provide a larger viewing area and dedicated safety functions to operate large vehicles and weapon systems, all while maintaining the low-profile, ruggedized design our customers have come to expect from the Tomahawk product line. This controller will improve operator efficiency and unlock new use cases such as fire control and sensor-to-shooter."

This contract extends the ongoing work between the Tomahawk Robotics product line and the DoD to provide a common controller for the DoD's tactical robotic systems.

GEOCUE AND CHC NAVIGATION JOIN FORCES TO UNVEIL AN EXCLUSIVE LIDAR INNOVATION WITH THE NEW TRUEVIEW 540

GeoCue, a leading geospatial hardware and software provider, and CHC Navigation, a pioneer in precision positioning solutions, proudly announce the launch of the TrueView 540. This innovative collaboration brings forth a new efficient and flexible survey-grade LiDAR system to North America, introducing an unparalleled combination of the LiDAR payload with LP360 3D Point Cloud Processing Software.

TrueView 540 is a next-generation intelligent aerial surveying system developed by CHC Navigation, available through GeoCue. This next generation of intelligent aerial surveying is the result of six years of innovation and three years of meticulous product development, harnessing the power of CHCNAV's state-of-the-art LiDAR technology.

The TrueView 540 integrates survey-grade high-precision LiDAR, an accurate positioning and orientation system, and a full-frame industrial camera. This unique combination enables fast and accurate acquisition of 3D data in a compact and lightweight LiDAR system that can be easily installed on various drones like the popular DJI Matrice 350 or any 3rd party compatible UAVs.

"GeoCue is excited to bring the TrueView 540 to the market," explains Frank Darmayan, CEO of GeoCue. "This collaboration with CHC Navigation represents a significant advancement in aerial surveying technology, providing professionals with a unique combination of a best-in-class LIDAR sensor with the best-in-class processing software," says Darmayan."

George Zhao, founder, and CEO of CHC Navigation, also looks forward to the new collaboration. "I am proud to join forces with GeoCue to introduce the TrueView 540 to the market," he said. "Our collaboration is built on shared principles and ideologies, such as integrity, excellence, and a commitment to the vision of creating an intelligent world through precise geospatial information. GeoCue mirrors our dedication to delivering competitive, high-value-added technologies and services to our customers. Together, we embark on a journey to redefine geospatial solutions and set new standards in the industry."

KEY FEATURES OF TRUEVIEW 540:

- **Survey-Grade LiDAR:** The system features high-precision LiDAR technology, comparable to the range, density, and accuracy of high-end industry-standard payloads.
- **Availability:** TrueView 540 is available through GeoCue and authorized GeoCue distributors, providing a unique product in the market.
- **Efficient Data Processing:** All processing for TrueView 540 is done using GeoCue's LP360 Drone, ensuring streamlined and efficient data processing.
- **Attractive Pricing:** GeoCue and CHCNAV bring a high-performance yet competitively priced alternative to the UAV LiDAR market.

Vivien Heriard-Dubreuil, CEO of GeoCue parent company mdGroup explained, "With the launch of TrueView 540, we now present a distinctive and compelling choice, blending exceptional performance with an appealing price point, available exclusively from GeoCue and our trusted distribution partners. Our new product provides geospatial professionals with a game-changing, high-end payload at an accessible price, enhancing end-user efficiency and maximizing their return on investment."

The powerhouse potential of the Aero2 drone: a hefty payload and maximum versatility

The Aero2's 40 kilogram payload capacity sparks curiosity. (That's 88 pounds, for those measuring in Imperial!) Why such a specific number? What advantages does the Aero2 offer over lighter or heavier drones? To understand, let's consider the world of critical cargo delivery and the unique capabilities of the Aero2.

While smaller drones offer portability, their payload restrictions often hinder their effectiveness in critical applications. The Aero2 bridges this gap, delivering the power an operator might need. Large helicopters or drones designed for bulk cargo transport are just too expensive for many missions. The Aero2 offers the necessary muscle without the excessive cost or operational complexity.

Drones, in the Real World

The 40kg payload stems from real-world needs. A U.S. Navy study revealed that 90% of critical mission failures could be addressed with parts under 20 pounds. Similarly, in medical emergencies, a 40kg payload allows for delivering blood, organs, or medical samples quickly and safely. The Aero2's capacity surpasses the limitations of smaller drones, ensuring life-saving interventions reach remote areas efficiently. However, it can reach city hospitals as it will be certified aircraft to fly above cities. This payload also proves useful in search and rescue missions, allowing for the delivery of life rafts, first aid kits, and essential supplies in disaster zones or harsh terrain on top of the sensor payload, thanks to the Aero2's capability to carry sensors and additional payload.

The Aero2 also excels in industrial applications. For example, large-scale forestation projects become more feasible with the ability to transport tree seedlings over vast distances. The Aero2 becomes a powerful tool to scale up tree planting initiatives and other seeding projects. Similarly, in the oil and gas industry, critical cargo payloads vary between 10 and 30kg for 80% of missions, which can be easily serviced by the Aero2.

A Versatile Drone Platform: Massive Range, Cost-Effective, And In Many Conditions

The Aero2's strength lies not just in its payload capacity, but in its versatility. It's designed to handle a variety of sensors and attachments, making it a true multi-mission marvel. With a 3-hour flight time and 400km range (with reserves), the Aero2 covers vast distances, reaching areas inaccessible to smaller drones. (It can travel even further when part of the payload is additional fuel.) This opens doors for long-range inspections, search operations, and deliveries, expanding an operator's reach significantly.

Its advanced sensor systems integrate high-resolution IR cameras, 4K video systems, 3D Hi-Res photography rigs, or radiation detection equipment. Imagine capturing detailed aerial imagery, conducting search operations with unparalleled clarity, or monitoring environmental factors with unmatched precision. Unlike many lighter drones grounded by frost or snow, operators can install an optional de-icing system that ensures that Aero2's can perform even in challenging weather conditions. While the 40kg payload of the Aero2 may seem specific, it strikes a perfect balance between surpassing the limitations of smaller drones and cost-effectiveness compared to larger alternatives. While smaller drones offer portability, their payload restrictions often hinder their effectiveness in critical applications. The Aero2 bridges this gap, delivering the power you need. The Aero2 offers the necessary muscle without the excessive cost or operational complexity.

ANNOUNCING FIRST SHIPMENTS OF MATRIXSPACE RADAR

MatrixSpace Radar – the smallest, lightest, low cost, high-performance radar – is now shipping to commercial and public organizations in the United States and approved international countries. The award-winning product›s commercial delivery follows its recent Federal Communications Commission authorization.

Designed and developed in the USA, MatrixSpace Radar offers robust situational awareness of both airborne and ground-based objects, regardless of lighting and weather conditions. This facilitates highly accurate drone detection and Counter Unmanned Aircraft System (CUAS) capabilities, Beyond Visual Line of Sight (BVLOS) flight for uncrewed, autonomous and tethered aircraft, and overall general aviation safety.

MatrixSpace Radar is a very low SWaP-C (size, weight, power and cost), requires no additional infrastructure and is deployable in minutes without specialist training.

Quote from Dan Nobbe, Vice President of RF and Radar Systems, MatrixSpace "The demand for fast, effective ground and air surveillance is growing rapidly, and partners and customers tell us of their limitations with current solutions. MatrixSpace Radar is designed to provide radar for the rest of us - cost and performance which allows for use cases previously out of reach to commercial, public safety and defense situations."

Quote from Manu Lubrano, CEO and co-founder, INVOLI, "MatrixSpace provides scalable, comprehensive, low altitude, non-cooperative detection at any time of day or weather, at a price point that finally makes powerful radar readily accessible. This is key for accelerating advanced air mobility as well as a wide range of public safety and commercial programs such as drone first responder, drone detection and critical infrastructure inspections."

AUTEL ROBOTICS EVO MAX SERIES HAS RECEIVED C2 CERTIFICATION

Autel Robotics says its EVO Max drone series has received the coveted Class C2 type certificate under the new European drone regulations. For drone operators, Max's C2 certification involves a firmware update to ensure compliance with the latest regulatory standards of the European Aviation Safety Agency (EASA).

C2 certification for the EVO Max series involves firmware updates to ensure compliance with the latest regulatory standards. As a remote pilot, from 1 January 2024, the C2 class designation on the Evo Max is permitted in the "Open Category" (A2 sub-category) following successful online training, known as the A2 Certificate of Competence (A2 CofC) Operations, as well as in the A3 subcategory. Please check your state aviation authority's website to find out how to take this training and exam. Training can be conducted in any EASA member state.

To meet these standards to achieve the stringent

requirements of C2, Autel Robotics works with Applus, an EASA-approved notified body; they act on behalf of EASA and ensure that all requirements of C2 are tested and met before EASA awards the class mark.

How to apply for a C2 level identification label:

Step 1: Check and update your MAX aircraft firmware to the latest version V1.7.0.123.

Step 2: Check the color of the forearm LED indicator (when the aircraft is powered on).

Step 3: Visit Autel Robotics support and provide the following information for further verification.

1. Aircraft serial number; (Enter the remote control [More-Settings-More-About])
2. LED indicator picture;
3. Your shipping information.
4. Wait for further notification from the support team to obtain the final C2 tag.

With Autel Robotics taking the lead in achieving C2 certification for the EVO Max series, drone enthusiasts can look forward to an era of possibilities and simplified regulatory compliance. The C2 certification is in line with Autel Robotics' commitment to providing users with cutting-edge technology while ensuring compliance with the latest industry standards and best practices.

Next, Autel Robotics will strive to obtain more EU C certifications for the EVO II V3 series, EVO Nano series, and EVO Lite series as soon as possible, so that pilots can fly without worries!

ANDURIL UNVEILS IRIS SENSOR FAMILY FOR PASSIVE AIRBORNE IMAGING AND TARGETING

Iris is a family of airborne imaging and targeting sensors designed to autonomously detect and track hundreds of targets at long ranges in contested environments. Anduril Industries is excited to announce Iris, a family of passive airborne imaging and targeting sensors with advanced technology to support a range of airborne combat applications such as infrared search and track (IRST), missile warning, visualization, and targeting. Iris is a passive sensor, meaning that it does not emit significant radiation and cannot be easily detected or disrupted when operating in contested environments.

Iris is adaptable to most aircraft, including Autonomous Air Vehicles (AAVs) and uncrewed platforms, to enable autonomous, artificial intelligence-powered image processing at the edge to detect and track hundreds of targets at long ranges. Like all Anduril products, Iris is built to be future proof. As a software-defined, hardware-enabled family of systems, Iris benefits from rapid iterations and timely software updates to continuously improve performance, adapt to new situations, and ensure that operators are able to keep pace with the speed of modern conflict.

"In a future fight, airborne systems will be faced with numerous targets and threats moving across

all domains," said Brian Schimp, Co-Founder and CEO of Anduril Industries. "Airborne sensors must be able to rapidly and autonomously detect, track, identify, and classify each of those targets simultaneously. We built Iris with this in mind, leveraging our expertise in advanced infrared imaging technology and sensor integration that has been at the core of Anduril's product offerings since our founding."

Iris leverages Anduril's proprietary and proven Computational Pixel Imager (CPI) technology that uses processors in every pixel to reduce noise and enable accurate detections at more extreme ranges than previously thought possible. That capability is facilitated by real-time AI detection and classification that autonomously identifies and tracks hundreds of objects of interest to help operators see potential targets through the noise.

"Iris builds on the success and broad adoption of WISP, our CPI-enabled long-range passive sensing solution that is now deployed for critical Counter UAS, Air Defense, and Counter Intrusion missions around the world," said Matthew Steckman, Chief Revenue Officer at Anduril. "We are proud to offer cutting-edge performance at low cost, with scalable production that leverages novel material science and manufacturing approaches to drive affordability and competitive lead times of critical components. Like all Anduril products, Iris is backed up by our software-first mindset that ensures continuous algorithm improvements across the entire lifecycle of the platform."

SKYPORTS DRONE SERVICES AND GROUND CONTROL LAUNCH DRONE SURVEY PROJECT WITH NETWORK RAIL

Skyports Drone Services (Skyports), the global leader in drone deliveries, surveys and monitoring, and Ground Control, the UK's leading environmental maintenance and Biodiversity Company, have announced a new drone survey and AI data capture service with Network Rail.

The project combines Skyports' best-in-class drone services and Ground Control's longstanding relationship with Network Rail to streamline infrastructure surveys for Network Rail. By capturing mission-critical environmental data, vegetation encroachment, tree type and health, the service enables the UK railway infrastructure owner to make data-led decisions on their vegetation management, reduce impact on biodiversity, respond rapidly to risks, and limit delays for rail users.

Network Rail has over 10,000 miles of railways to manage and maintain. Inspection of these routes extends beyond addressing vegetation overgrowth issues; it also involves monitoring the diverse flora and fauna that grow in these ecosystems. Managing vegetation must strike a balance between keeping railways clear and safe while protecting natural

habitats. And, while currently optional, the requirement for developers and landowners to protect and improve natural habitats around the UK, is set to become mandatory within the next 18 months.

In combining Ground Control's expert arboreal and biodiversity experience, and Skyports' long-range drone service and AI data capture capabilities, Network Rail is obtaining a new level of insight about the habitats alongside their railway lines.

The announcement follows a trial period in Cornwall last year during which Skyports and Ground Control performed asset inspection and data capture flights for ecological survey, vegetation and plant health monitoring, and to identify tree species. Skyports Drone Services and Ground Control aim to roll out the new service to rail, roads, and power transmission and distribution companies across the UK and Ireland.

Skyports' will deploy its Stellaire (previously Field) Explorer drone. The aircraft, which Skyports onboarded to its fleet in December 2023, is specially designed for linear infrastructure inspection and capable of simultaneously capturing a range of datasets, including nadir and oblique images, thermal images and LiDAR.

Peter Stirratt, Survey & Inspection Project Lead, "This is the start of a great journey. The adoption of this new technology by Network Rail is a testament to the industry's readiness to embrace innovation and find alternative solutions that are faster, more sustainable and safer."

"We look forward to expanding our service with Ground Control to continue to demonstrate how drone services can transform data capture capabilities."

Austin Brown, Infrastructure Director, at Ground Control, said: "This initial project has been a real success with our main objectives being achieved. Having the ability to collect a multitude of high quality data will allow our clients and operational teams to make better informed decisions, while improving safety, environmental and financial performance."

SKYPORTS AND PORT AUTHORITY OF NEW YORK AND NEW JERSEY TO EXPLORE MIDDLE-MILE DRONE LOGISTICS

Skyports Drone Services (Skyports), the global leader in drone logistics, surveys, and monitoring, has today announced a strategic partnership with the Port Authority of New York and New Jersey (PANYNJ) to explore the feasibility of middle-mile drone logistics in the New York and New Jersey region.

The "middle mile" refers to the segment of the supply chain between the distribution center (or warehouse) to a retail store or local fulfillment center, but not directly to the end consumer. This part of the supply chain is critical for efficiently moving large quantities of goods closer to their final destinations, thus preparing for the "last mile" delivery, which is the final step of delivering goods to customers.

Skyports, which has spearheaded the implementation of drone services across several industries in multiple countries, including medical, maritime, oil & gas, and logistics, will leverage its

extensive experience to support and scale drone operations for PANYNJ. The company's best-in-class fleet can support a wide variety of applications, including beyond visual line of sight ("BVLOS") operations, light and heavy cargo transport, and accessing hard-to-reach locations.

Alex Brown, Director of Skyports Drone Services, said: "Our partnership with the Port Authority of New York and New Jersey is a pivotal step for maritime and logistics focused drone operations in the US.

"The Port Authority, with its extensive portfolio of maritime and aviation assets, including three of the busiest airports in the US, and the nation's second-largest port by total cargo volumes, is well positioned to integrate UAS applications in a highly complex operating environment. We look forward to partnering to explore the feasibility of drone operations in the Hudson River airspace, onboarding initial customers, and producing an actionable roadmap for UAS in New York City, with a view towards launching proof-of-concept operations within the Port District."

Seth Wainer, Innovation Program Director at Port Authority of New York and New Jersey said: "It may seem like something from the Jetsons, but if drone cargo proves viable it may be a low-carbon way to move the most valuable items between New York and New Jersey," said Seth Wainer, the Port Authority's program director of innovation. "We are exploring routes and starting to look for customers who may be interested in investing in this space alongside us."

Flexxbotics Appoints Former Senior Vice President of Aras, Marc Lind, as Chief Strategy Officer and Chief Marketing Officer

Flexxbotics, delivering workcell digitalization for robot-driven manufacturing announced the appointment of accomplished manufacturing software executive, Marc Lind, as Chief Strategy Officer (CSO) and Chief Marketing Officer (CMO). The addition strengthens Flexxbotics' leadership in the emerging field of robot-driven manufacturing for the smart factory.

During his more than two decades at Aras, Marc Lind led global marketing, strategy and corporate development building the business into the disruptor of the enterprise product lifecycle management (PLM) market. He has a proven track record in the development and execution of high growth strategies for industrial SaaS solutions that scale recurring revenue and operations worldwide.

Marc Lind's accomplishments at Aras range from driving the 'large deal size' inbound go-to-market to leading successful strategic partnerships and multiple international acquisitions. He helped design and implement a capital strategy that spanned angel funding, venture capital, corporate strategic and private equity investments resulting in the most valuable pure-play company in the history of the PLM software category.

His start-up experience and deep industry knowledge of manufacturing software will help Flexxbotics expand operations while continuing to extend its technology leadership in SaaS/Hybrid solutions that transform the way companies use robotics in Industry 4.0 production.

"Flexxbotics breakthrough innovation is truly exciting and will redefine smart factory operations by enabling the robot-driven manufacturing era," said Marc Lind, newly appointed CSO & CMO of Flexxbotics. "Joining Flexxbotics I see the opportunity to build a founder-led, global powerhouse in intelligent software solutions that enable autonomous robotic manufacturing."

Flexxbotics robotic workcell digitalization is the backbone of the Smart Factory delivering autonomous process control for next generation machining environments. Flexxbotics unique FlexxCORE™ technology seamlessly connects and coordinates robots with existing automation equipment, IT systems and people. More powerful, flexible and open, Flexxbotics revolutionizes the use of robotics in complex production.

"We're proud to have Marc Lind join Flexxbotics' management team, and believe he will be instrumental to our efforts as we scale the business and expand internationally," said Tyler Bouchard, Co-founder & CEO of Flexxbotics. "We are looking for executives that share our vision of 'lights out' robotic production with autonomous process control as we build out Flexxbotics leadership."

The addition of Marc Lind follows the recent oversubscribed funding round which included investment from Scott Harris, co-founder of SOLIDWORKS and Onshape, Michael Marsh, a former President at Tecnomatix (now part of Siemens Digital Industries Software), and Peter Schroer, founder and former CEO of Aras. Together these milestones further reinforce Flexxbotics' innovation in robotics and factory automation software solutions.

VOLOCOPTER NOW HOLDS PILOT TRAINING APPROVAL

Volocopter, the pioneer of urban air mobility (UAM), announced that it is now an Approved Training Organisation (ATO) from the German Federal aviation office (Luftfahrtbundesamt) through its subsidiary, Volocopter Air Services. This certification allows Volocopter to train pilots for its future products. The company is the first electric take-off and landing (eVTOL) aircraft developer to receive ATO.

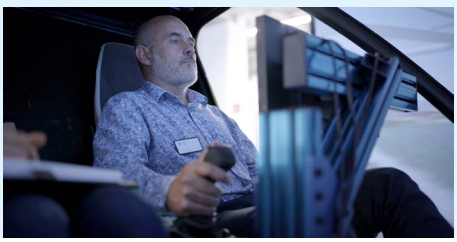
The Approved Training Organisation certification allows Volocopter to deliver training towards pilot licenses. The approval was handed over with zero findings in the final audit. Over the past year the Luftfahrtbundesamt rigorously checked if the company adheres to the strict rules and standards required to produce training materials for the aircraft/simulators that the training will be delivered on.

As part of the approval, the company will now work on the transition to finalize the training program for its electric VoloCity aircraft in close cooperation with the German Federal Aviation office. They have kicked off the approval of the program in preparation for commercial launch of electric air taxis later this year, implementing the newly published EASA regulations applicable to the operation and pilot licensing of this novel category of electric air taxis (eVTOL).

Oliver Reinhardt, – Chief Risk and Certification of Volocopter, "This is another substantial milestone on the way to bring electric air taxis to cities around the world. It bears witness to the robust aviation company Volocopter has become over the past decade and how diligent and professional our entire team works."

Volocopter develops electrically powered air taxis that are set to transform urban transportation. As the first electric vertical take-off and landing (eVTOL) company to receive Design Organisation Approval (DOA) from the European Union Aviation Safety Agency (EASA) in 2019, and over ten years of development experience, Volocopter is the clear leader in this airspace.

Being awarded ATO is an important puzzle piece in the journey towards receiving the Air Operator Certificate – which will allow the company to operate electric air taxis once the VoloCity aircraft receives type certification which is expected later this year.



SKYDIO BEGINS DELIVERY OF X10D SMALL UAS TO DEFENSE CUSTOMERS; DEBUTS DYNAMIC CHANNEL SWITCHING

Skydio, the leading U.S. drone manufacturer and world leader in autonomous flight announced it has begun delivery of its first X10Ds, Skydio's new flagship drone for defense and government applications, to customers across the U.S. and Allied Nations. It follows the success of its predecessor the X2D, which is the drone of choice for U.S. and allied government customers with thousands of systems delivered. Skydio also announced dynamic channel switching to monitor signal interference and move to a clearer channel to improve wireless transmission signal quality during flight, ensuring troops maintain communication with the drone to accomplish their mission.

The introduction of Skydio X10D – an offline variant of Skydio's X10 platform – marks a pivotal advancement in organic intelligence, surveillance, and reconnaissance capabilities, along with a wide range of situational awareness use cases. Dynamic channel switching enables the X10D to provide adaptable communications between the drone and its accompanying controller in both contested and congested environments, unlocking reliable command and control and real-time data feeds in crowded airspace or under electronic warfare conditions. Skydio also plans to offer dynamic channel switching soon to customers already using the X10.

The X10 platform was introduced in late 2023 and is quickly becoming the drone of choice for many applications in the commercial and public safety markets. The X10D has been optimized for ISR applications critical to defense and government agencies and delivers the best of human-machine teaming with unparalleled sensor technology, advanced autonomous navigation, and a modular, open architecture that is critical for the dynamic nature of military needs. Skydio leads the world in onboard AI and autonomy for sUAS, delivering best-in-class obstacle avoidance and autonomous flight. Skydio Autonomy is now even more powerful with NightSense, making X10D the first sUAS capable of 24/7 operations, enabling autonomous obstacle-avoidance in zero-light environments. It is also the first Group 1 sUAS to integrate a Teledyne FLIR Boson+ sensor, achieving the category's highest thermal imaging quality to improve operational outcomes at any time, day or night.

"The arrival of X10D to customers is truly a milestone moment for Skydio and the allied defense and government community," said Mark Valentine, President of Global Government at Skydio. "There is no doubt that the advantage in future conflict favors a decentralized application of small, many, and agile systems over fewer, larger exquisite systems. The X10D, with dynamic channel switching and onboard AI & Autonomy, is a force multiplier for warfighters that helps them see the unseen, increasing awareness, precision, and safety."

UNIFLY JOINS EUREKA PROJECT ADVANCING URBAN AIR MOBILITY WITH VERTIPORT INTEGRATION IN EUROPEAN AIRSPACE

Unifly, a leading provider of Unmanned Aircraft System Traffic Management (UTM) solutions, proudly announces its pivotal role in the €12 million EUREKA project, initiated by the SESAR Joint Undertaking in June 2023. Led by EUROCONTROL, this groundbreaking initiative aims to seamlessly integrate air mobility into urban landscapes by 2026, addressing the growing need for efficient, sustainable, and interconnected transportation solutions.

The EUREKA project is set to revolutionize urban transportation by creating a network of vertiports—specialized hubs for Electric Vertical Take-off and Landing (eVTOL) aircraft inside European airspace, connecting urban areas, and facilitating swift and eco-friendly transportation. 35 participants include Airport Providers, Air Navigation Service Providers (ANSPs), U-Space Service Providers (USSPs), UAM manufacturers and other stakeholders.

The project focuses on developing four essential

SESAR solutions:

Arrival/Departure Procedures to/From Vertiports: Encompassing route and trajectory planning.

Vertiport Collaborative Traffic Management: Optimizing resource utilization and capacity allocation.

Vertiport Disruption and Emergency Management: Ensuring preparedness for unforeseen circumstances.

Vertiport Network Flow, Capacity & Operational Management: Enabling efficient coordination across the vertiport network.

Unifly plays a pivotal role in the EUREKA project, holding a unique position within the Vertiport Collaborative Traffic Management (VCTM) initiative, and leveraging its expertise to integrate vertiports into Unifly's UTM solution. The project will use certified unmanned Vertical Take-off and Landing (VTOLs) aircraft for cargo operations to validate VCTM at strategic, pre-tactical, and tactical levels, covering all VTOL flight segments.

Validation and demonstration activities are planned between March 2024 and December 2025. The live trial will be in the controlled airspace between Mallorca and Menorca Islands (Spain), within active LEPA and LEMH airports.

Andres Van Swalm, CEO of Unifly commented, "The EUREKA project represents a significant milestone in the evolution of UAM, and Unifly is proud to be at the forefront of this transformative initiative. Our UTM solutions will contribute to creating a harmonious and efficient airspace, laying the foundation for the widespread adoption of UAM and revolutionizing the way people and goods move within cities."

PDRL'S '1ST AEROGCS GLOBAL COMPETITION - 2024' CONCLUDES WITH PHENOMENAL SUCCESS AT SANDIP UNIVERSITY, NASHIK

PDRL, a trailblazer in the realm of drone technology, concluded the highly anticipated 1st AeroGCS Global Competition. In the vibrant city of Nashik, Maharashtra, India, the grand finale turned to be a spectacular showcase of talent, innovation, and AeroGCS expertise.

In a pioneering move that has resonated with drone enthusiasts across the globe, PDRL proudly unveils the culmination of the AeroGCS Global Competition. This event has not only captivated the attention of the drone community but has also set the stage for global awareness, providing a unique platform for enthusiasts to present their skills and push the boundaries of innovation in the world of drones.

PDRL's AeroGCS, a pioneer in Ground Control Software (GCS), introduces a suite of insightful features that empower every facet of drone missions. From meticulous mission planning to precise execution and thorough analysis of post-mission data, AeroGCS amplifies operational excellence. With around 50% of Indian drone manufacturers Type-certified with AeroGCS, and around 75% of Indian agriculture drones licensed with AeroGCS Green, the demand for skilled resources is evident. PDRL is already on the path to certifying 10,000 professionals on its AeroMegh platform.

The event commenced with a ceremonial lamp lighting by distinguished guests Dr. Amol Potgantwar, Professor & Director at the School of Computer Sciences and Engineering (SOCSE), and Dr. Vishal Sulakhe, Professor and Head of Department in the Mechanical Engineering department of the School of Engineering and Technology, Sandip University. They were joined by Mr. Anil Chandaliya, CEO of PDRL, and Mr. Vishal Dharankar, CTO of PDRL

AeroGCS Global Competition Highlights:

First Prize: Mr. Pratyush Akepati secured the 1st prize with a title of AeroGCS Global Champion, earning a prestigious Rs 1 Lakh Cash award and PDRL Certified Drone Professional (PCDP) Certification.

Second Prize: Mr. Vijay Babu Veramallu secured the 2nd award with a title of AeroGCS Expert, receiving a Rs 50,000 Cash award and PDRL Certified Drone Professional (PCDP) Certification.

Runner-ups: The top ten runners-up Ms. Vridhi Sachdev, Ms. Vanshika Oberoi, Mr. Jignesh Patil, Mr. Saiesh Sutar, Mr. Fardeen Khan, Mr. Harshil Shah, Mr. Yash Bajaj, Mr. Balaji T.A., Mr. Arindam Sharma, Mr. Dipanshu Dhote each one awarded with a title of AeroGCS Professional and Rs 25,000 along with the PDRL Certified Drone Professional (PCDP) Certification.

All these winners are also eligible for the invaluable job opportunities from PDRL and its esteemed partners.

During his speech the Chief Guest, Dr. Sandip Jha, Chairman of Sandip University, conveyed his gratitude for having Sandip University as the venue partner and assured his continued support for the future editions of AeroGCS Global Competition as well. He highlighted the importance and the opportunities of drone technology in various fields like Agriculture, Surveying, Mapping, Defence, Air-taxi to enhance commute services. Dr. Sandip Jha also announced his plans for setting up a dedicated drone lab in the campus with the support of PDRL. This initiative will provide students with hands-on experience and resources to explore the potential of drone technology.

Mr. Anil Chandaliya, Founder & CEO of PDRL, conveyed his joy regarding the remarkable response to the inaugural AeroGCS Global Competition. He highlighted the user-friendly design of AeroGCS software, emphasizing its accessibility for even first-time users to flawlessly execute missions throughout the competition. Proudly Made in India for global use, AeroGCS has achieved significant scalability worldwide. The PDRL team takes pride in this accomplishment and eagerly anticipates the upcoming AeroGCS Global Competition 2.0. Brace yourselves for another thrilling round of competition as the global stage prepares for the event.

JOUAV EXPANDS JOLIDAR SERIES WITH TWO POWERFUL NEW LIDAR SENSORS

JOUAV is proud to announce the expansion of its popular JoLiDAR series with the introduction of two innovative drone LiDAR sensors – the JoLiDAR-1000 and JoLiDAR-120. These cutting-edge sensors offer unmatched precision, efficiency, and ease of use, empowering professionals in various industries to capture high-quality data and achieve remarkable results.

JoLiDAR-1000: Conquer Challenging Terrain with Unparalleled Accuracy

Designed to excel in demanding environments, the JoLiDAR-1000 boasts unrivaled precision of 5cm at 300m, allowing users to capture exceptionally detailed data in complex landscapes like mountainous regions or dense forests. Its 1000m detection range ensures comprehensive data collection, even in areas with limited visibility.

Furthermore, the JoLiDAR-1000 eliminates the need for base stations or ground control points (GCPs), offering operational flexibility and reduced setup time. This streamlined approach makes it ideal for rapid deployments in remote locations. Additionally, the integrated half-frame camera and real-time control with JOUAV FlightSurv software provide enhanced data visualization and mission management capabilities.

Key benefits of JoLiDAR-1000:

- Capture intricate details in challenging terrain.
- Gather comprehensive data from dense vegetation.
- Reduce setup time and increase operational flexibility.
- Gain real-time insights and control over missions.
- JoLiDAR-120: Streamline Corridor Mapping with Efficiency and Precision

The JoLiDAR-120 is specifically tailored for professional corridor mapping applications, such as power line inspections, pipeline surveys, and highway construction monitoring. This advanced sensor combines high-precision LiDAR, a high-accuracy IMU, and a 26MP RGB camera to deliver exceptional data quality and streamlined workflows.

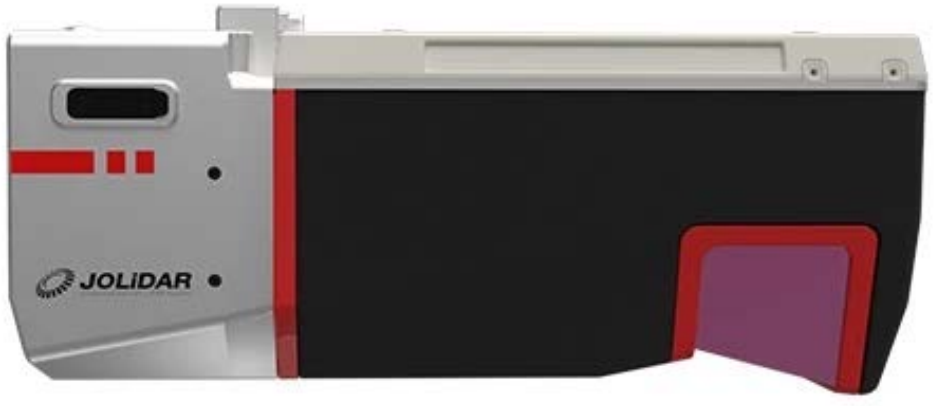
The JoLiDAR-120 offers industry-leading precision of 10mm and accuracy of 5mm, ideal for capturing intricate details in corridors.Its innovative NFB scanning ensures comprehensive 3D data capture, accurately representing even vertical surfaces like cliffs or walls.

Additionally, the sensor boasts a long operating range of up to 1430m and 1TB of internal storage, making it suitable for extensive mapping projects.

Key benefits of JoLiDAR-120:

- Capture highly detailed data for accurate corridor mapping.
- Increase efficiency with streamlined data collection.
- Store large d`atasets with ease thanks to the ample internal storage.

Eric Lee, product manager at JOUAV, stated: "The JoLiDAR-1000 and JoLiDAR-120 represent a significant leap forward in LiDAR technology. These powerful systems empower professionals with the tools they need to capture accurate and detailed data across diverse applications. We are confident that these innovative solutions will further solidify JOUAV's position as a leader in the drone LiDAR market."



Surf Air Mobility and Electra Enter Bilateral Agreement to bring eSTOL Aircraft to Market

Surf Air Mobility Inc. a leading green regional air mobility platform, and Electra.aeroInc. ("Electra"), a next-gen aerospace company, have joined forces to introduce affordable, sustainable, and easily accessible regional air travel to a broad customer base leveraging Electra's hybrid-electric short takeoff and landing(eSTOL) aircraft on Surf Air's technology-driven, on-demand air mobility platform, and through Surf Air's Aircraft-as-a-Service (ACaaS) offering to air operators.

Surf Air has secured early delivery positions for 90Electra eSTOL aircraft for integration into the Surf Air national flight network including Southern Airways Express and Mokulele Airlines, as part ofSurf Air's aim to use its platform to support the launch, growth, and optimization of new electrified aircraft. The Electra eSTOL aircraft's ability to take off and land in as little as 150 feet will enable direct-to-destination air transportation beyond large airports, including small regional airports and novel Advanced Air Mobility (AAM) infrastructure, expanding regional transportation to a broader customer base than private aviation currently serves.

The agreement between Surf Air and Electra highlights several key points of collaboration:

SurfAir secures preferred delivery positions on 90 eSTOL aircraft from Electra

SurfAir and Electra will collaborate on the development of route networks to be served by Surf Air's air mobility network leveraging the Electra eSTOL aircraft

SurfAir is the preferred lessor and provider of Electra eSTOL aircraft to Surf Air customers under its Aircraft-as-a-Service leasing program

SurfAir, its data services partner(s), and Electra will collaborate on the development of predictive analytics systems to reduce overall operating costs and streamline operations.

"Electra stands out as one of the early market leaders in regional air mobility, and we're excited to bring them onto our platform. Their innovations around hybrid-electric, short takeoff and landing aircraft—which can essentially take off and land on a football field-sized space—will unlock tremendous opportunities within the changing landscape of regional air mobility. We intend to leverage our leading position to become the definitive launch platform for new advanced aircraft technologies such as Electra," saidStan Little, Chief Executive Officer (CEO) of Surf Air Mobility.

"As the country's largest commuter airline, Surf Air is at the forefront of addressing the growing demand for cleaner, more affordable and convenient travel options. Electra is pleased to partner with Surf Air in spearheading the decarbonization of regional business aviation through the integration of our eSTOL aircraft into their fleet," said John S. Langford, founder and CEO of Electra.

Volocopter Receives Green Light for VoloCity Serial Production

Volocopter, the pioneer of urban air mobility (UAM), announced that it reached a landmark milestone in certification. It has received the German Federal Aviation Office's (Luftfahrtbundesamt or LBA) Production Organisation Approval (POA) extension that allows the production of the VoloCity aircraft. This POA extension applies to the two new Volocopter production and hangar facilities in Bruchsal, Germany, that were first unveiled in April 2023.

Volocopter is the world's first and only eVTOL company to hold both Design Organisation Approval (DOA) and POA. Volocopter received EASA's DOA in 2019, followed by the initial POA in 2021 with the acquisition of DG Flugzeugbau. This POA extension is industry-first, which lists specifically the approved production of an eVTOL in the POA's scope of work, from prototyping to serial manufacturing. In layperson's terms, Volocopter now has the full trust and authority to design and produce the VoloCity in-house autonomously and has entered the pre-serial production stage of manufacturing.

Andreas Fehring – Chief Operating Officer of Volocopter "This is a major milestone for us. Aircraft design and production are strongly regulated for a good reason: to produce safe mobility products. I am pleased that Volocopter's production facility has the trust of and stamp of approval from LBA to manufacture commercial aircraft that can be delivered to customers once the VoloCity receives type certification. Our team has proven that we can produce safe and high-quality test aircraft, and we now look forward to shortening our production lead time for scaling."

Under EASA's SC-VTOL (Special Condition VTOL) Enhanced certification category, the VoloCity will become the first commercial eVTOL with the highest global safety standards in aviation. Achieving this safety standard allows VoloCity to fly above congested urban areas quietly and efficiently, adding an extra layer of alternative mobility to the transportation mix in cities.

Airbus and LCI to Partner on Development of Advanced Air Mobility Ecosystems

Airbus and LCI, a leading aviation company, have announced a collaboration agreement to jointly develop ecosystems for Advanced Air Mobility (AAM). The collaboration will focus on the development of partnership scenarios and business models in three core AAM areas: strategy, commercialisation and financing.

"We are excited to extend our long-standing relationship with LCI, an innovative lessor that is globally unique in its positioning across the commercial fixed wing, helicopter and advanced air mobility sectors," said Balkiz Sarihan, CEO and Head of Urban Air Mobility at Airbus. "LCI's combination of operational expertise, customer networks, and financial insights, complements Airbus' technical innovation in flight technologies, and will enable us to collectively drive the development of advanced air mobility. Together, we will take concrete steps towards the co-creation of next generation AAM ecosystems and our decarbonisation roadmap."

"We are delighted to be forging this new partnership with Airbus. For two decades, LCI and Airbus have delivered capacity and financing solutions to airlines and operators across the globe, and we are now extending that to advanced air mobility," said Jaspal Jandu, CEO of LCI. "Transportation and logistical networks have a duty to be efficient, sustainable, and scalable. Both LCI and Airbus take a holistic and pragmatic view of advanced air mobility, including vehicles and also infrastructure, financing, and network adoption. By combining our respective strengths, we will incubate and accelerate an entirely new generation of aviation."

Both partners will collectively develop AAM market perspectives and forecasts, conduct industry research, and harness data analytics to understand new applications and missions. They will support the development of new AAM solutions, evaluate new commercial structures in areas including fleet, battery and charging network solutions.

As part of the collaboration, LCI will become a key financial partner for Airbus' Advanced Air Mobility projects around certain mission types, such as emergency medical services, and will leverage its network to aid global take up and acceptance. It will also explore innovative leasing and finance solutions for potential customers for CityAirbus NextGen.

Airbus finalised the assembly of its CityAirbus NextGen and powered on the vehicle at the end of 2023. In the next phase, the Company will commence the vehicle's test campaign, during which it will make use of its new AAM test centre in Donauwörth, Germany. Airbus is also expanding its global network and partnerships to create a unique ecosystem that will foster a successful and viable AAM market.

Sikorsky Looks to Future Family of VTOL Systems

Sikorsky, a Lockheed Martin company unveiled its plan to build, test and fly a hybrid-electric vertical takeoff and landing demonstrator (HEX / VTOL) with a tilt-wing configuration.

The design is the first in a series of large, next generation VTOL aircraft – ranging from more traditional helicopters to winged configurations – which will feature varying degrees of electrification, and an advanced autonomy system for optionally piloted flight.

"We never stop innovating at Sikorsky," said Sikorsky President Paul Lemmo. "Autonomy and electrification will bring transformational change to flight safety and operational efficiency of large VTOL aircraft. Our HEX demonstrator program will provide valuable insights as we look to a future family of aircraft built to the scale and preferred configurations relevant to commercial and military customers."

The HEX program will put a premium on greater than 500 nautical mile range at high speed, fewer mechanical systems to reduce complexity, and lower maintenance costs.

Sikorsky Innovations, the company's prototyping group, and GE Aerospace are finalizing designs to build a hybrid-electric power systems testbed with a 600kW electric motor. The testbed is a first step to evaluate hover performance of the follow-on HEX demonstrator – a 9,000-pound maximum gross weight aircraft with 1.2MW-class turbogenerator and associated power electronics.

"Within Sikorsky's electric pillar, we are designing electric motors, power electronics and our own vehicle management hardware and actuation," said Igor Cherepinsky, Sikorsky Innovations director. "HEX will integrate these components, showcase the growing maturity of our MATRIX™ autonomy suite, and the potential for maintenance-free systems. Seeing the results will lead us to more efficient overall designs."

Sikorsky Innovations was formed in 2010 to overcome technological challenges to rotary wing speed, autonomy, and intelligence.

JOBY COMPLETES 3RD STAGE OF FAA CERTIFICATION PROCESS

Joby Aviation, Inc. a company developing electric air taxis for commercial passenger service, announced it has become the first developer of electric vertical take-off and landing (eVTOL) aircraft to complete the third of five stages of the Federal Aviation Administration ("FAA") type certification process.

During the third stage of the process, Joby submitted certification plans that cover all of the aircraft's structural, mechanical, and electrical systems, as well as the Company's intended certification approach to cybersecurity, human factors, and noise.

These certification plans, which detail the tests and analyses that Joby will use to certify every aspect of its aircraft for commercial use, have now all been reviewed and accepted by the FAA, laying the groundwork for Joby to submit test plans and begin for-credit testing across every area of the Company's aircraft program.

JoeBen Bevirt, Founder and CEO of Joby, commented: "Joby continues to lead the industry towards bringing electric air taxis to the commercial

market. Our certification and engineering teams are best-in-class and, working closely with the FAA, continue to support U.S. leadership in this new area of aviation."

Joby is now fully focused on the fourth stage of the certification process, where the Company will complete tests and analysis for FAA credit covering every component and system on the Joby aircraft – as well as the entire aircraft itself.

"With all of our certification plans accepted by the FAA, we are now completely focused on the execution phase of the certification process. We have a clear path to certifying every aspect of our aircraft, and the team is full steam ahead on executing against that path as we continue to lead the industry to commercialization," said Didier Papadopoulos, President of Aircraft OEM at Joby.

In the fourth quarter of 2023, Joby completed 30 for-credit tests covering a number of flight electronics units as well as structural materials. The testing methods and processes validated through these tests lay the foundation for the Company's continued expansion of FAA for-credit testing.

Joby also recently received its Part 145 Repair Station Certificate from the FAA, allowing the Company to perform select maintenance activities on aircraft and marking another key step on the path to commercializing Joby's electric air taxi service.

Joby's electric air taxi is designed to carry a pilot and four passengers at speeds of up to 200 mph, offering high-speed mobility with a fraction of the noise produced by helicopters and zero operating emissions.

Wisk and the City of Sugar Land, Texas, Partner to Bring Autonomous Air Taxis to the Greater Houston Region

Wisk Aero, a leading Advanced Air Mobility (AAM) company, and the City of Sugar Land, Texas, have entered into a partnership to bring autonomous Advanced Air Mobility (AAM) to the Greater Houston region.

Under this new partnership, Wisk and Sugar Land will identify and assess a location at the Sugar Land Regional Airport for the development of vertiport infrastructure that would allow for Wisk's autonomous air taxi operations. This initial partnership will lay the foundation and act as a gateway for the establishment of a larger network across the Greater Houston region.

Wisk CEO, Brian Yutko, said: "The Greater Houston area is experiencing some of the highest population growth in the country, which calls for new and efficient ways to move across the region. Sugar Land's strategic location within the Greater Houston region, and its forward-thinking city leadership, make it an ideal partner for us and one that is uniquely positioned as an early leader in the launch of air taxi services. We look forward to working with Sugar Land, local ecosystem stakeholders, and the FAA on both ground and air infrastructure, as we bring autonomous air taxi services to the Greater

Houston region."

Sugar Land City Manager, Michael W. Goodrum, said: "Sugar Land is committed to blazing new trails, and I believe our relentless approach has caught the attention of the private sector as we've sought innovative solutions to mobility in our community through efforts like Advanced Air Mobility. We are excited to partner with Wisk Aero on a new concept that just might change the way we travel — not only in our city but across the world. Sugar Land is a great place to start in the Houston region, because we want to be a city where innovation is second nature, where creativity is encouraged and where change is embraced. We couldn't ask for a better partner than Wisk Aero to join us on this journey."

Texas State Representative David Cook, said: "I am thrilled to see a leading AAM Company like Wisk commit to the future of Advanced Air Mobility here in Texas. These public-private partnerships are exactly what we hoped would result from the passage of our legislation during the 88th Legislative Session and solidifies Texas as a leader in this new technology space."

Wisk and Sugar Land will engage in a number of activities to advance the overarching goal of the partnership.

Wisk will provide advice on technical needs for autonomous eVTOL operations, including infrastructure, training, ground operational procedures, and plans for potential site expansion.

Sugar Land will focus on integrating AAM into its long-term plans, championing community engagement, and establishing operational policy, such as infrastructure permitting and noise levels.

Together, the two organizations will explore incorporating maintenance and training facilities in Sugar Land, and engage local and regional stakeholders to develop routes that connect Sugar Land to the Greater Houston region, such as downtown Houston and the Houston Airport System.

EHang and Telefonica Tech Partner Up on Network Connectivity to Boost UAM

EHang Holdings Limited the world's leading Urban Air Mobility ("UAM") technology platform company, announced it has entered into a strategic alliance with Telefónica Tech, a subsidiary of Telefónica, a world-leading telecommunications service provider with over 300 million customers and digital and telecom solutions offered in over 170 countries. The two companies will partner up on network connectivity solutions for deploying UAM intelligent solutions in Europe and Latin America.

The two companies will join forces to combine Telefónica Tech's cutting-edge connectivity and Internet of Things ("IoT") expertise with EHang's technical capabilities in the unmanned Advanced Air Mobility sector to implement use cases encompassing Air Mobility, Smart City Management and Aerial Media solutions in passenger transportation, logistics, medical delivery services and emergency response across Europe and Latin America.

Telefónica Tech and EHang will also set out to develop connectivity solutions based on mobile networks for the safe and efficient integration of drones and electric vertical take-off and landing ("eVTOL") aircraft with digital Unmanned Aircraft System Traffic Management ("UTM" or U-Space) systems.

The two companies will also collaborate on Drone Light Shows, performed with swarms of drones, to digitalise and improve sustainability of large-scale shows and events.

Both companies will rely on the operational and technical capabilities of EHang's European UAM Center located in Spain, a global pioneer in Advanced Air Mobility and intermodal transportation, and Telefónica Tech's TheThinX laboratory, one of the most advanced and best equipped IoT environments in the world. Mr. Alfredo Serret, Global Head of IoT at Telefónica Tech, commented, "The partnership with EHang means being part of a pioneering project for the air mobility of the future. The fact that EHang relies on our connectivity to develop the sector in Europe and Latin America confirms the strong positioning of our service in both markets, and means combining capabilities to enable connected, safe, efficient and green air mobility for all."

Ms. Victoria Xiang, COO of EHang Europe and Latin America, said, "We are delighted to join forces with Telefónica Tech to jointly deploy UAM and the low altitude economy in Europe and Latin America. Telefónica Tech's capabilities and expertise in connectivity and the IoT will enable EHang to deploy its solutions efficiently and securely, allowing millions of people to benefit from its applications in their daily lives."

Vertical Wins New UK Government Backing to Transform the Future of Flight

Vertical Aerospace (Vertical) a global aerospace and technology company that is pioneering zero emissions aviation announces it has been awarded £8 million ($10 million) in grant funding by the UK Government, through the Aerospace Technology Institute (ATI) Programme, to develop its next-generation propellers for use on its VX4 aircraft.

The project is the fourth awarded to Vertical by the ATI Programme and brings total UK Government grant funding to £37 million ($47 million). This demonstrates a significant vote of confidence in Vertical's potential to lead the next generation in aviation. The award puts the UK at the heart of the future global market in urban air mobility, which promises to transform how people move around and between cities, providing a clean, green and low-noise means of travel. Vertical is pioneering these efforts through the VX4, with a new, more advanced and full-scale prototype currently in production.

Industry Minister Nusrat Ghani MP added: "This exciting sustainable propeller project is a fantastic example of our commitment to our world-leading aviation sector, supporting high-skilled, high-paid jobs across the UK while developing technologies of the future."

"When government and industry collaborate like this, we help our aerospace sector soar to new heights, leading the charge towards net zero air travel by 2050."

The UK is a global leader in aerospace R&D and manufacturing, continuing its proud history in aviation. This specific project will bring together the UK's foremost experts and technical partners to further develop Vertical's eVTOL propellor technology and propulsion system. The final technology will be lower in weight, inertia and noise than their existing propellers, and be delivered to a higher safety standard than any model currently on the market.

"This project will be another major step towards delivering the next generation of novel electric aviation technologies in Britain," said Stephen Fitzpatrick, Founder and CEO of Vertical Aerospace. "With the support of the ATI Programme and our consortium partners, this project will keep the UK and Vertical at the forefront of aerospace innovation, electric aviation, and urban air mobility."

This award follows Vertical's recent announcement that Stephen Fitzpatrick has committed to invest a further $50 million into the business to support the continued development of the aircraft programme. Taken together, Vertical's announcements over the last month deliver approximately $60 million in additional committed funding.

The total investment into the propeller project is almost £20 million, with Vertical having been awarded over£8 million, representing a contribution of 50% of Vertical's eligible development costs. A further £3.5 million will be awarded to the other consortium members.

The consortium, led by Vertical, includes world-leading academic institutions: the University of Glasgow, the University of Bristol and Cranfield University, and the UK's helicopter monitoring specialists, Helitune.

Mark Scully, Head of Technology – Propulsion and Advanced Systems, ATI, noted: "The project will see advancements in rotor technologies vital to the success of eVTOL aircraft developed here in the UK growing knowledge, skills and capability in the process. Through this investment the ATI Programme is enabling the development of ultra-efficient and cross-cutting technologies in a competitive global market expected to be worth £24bn to the UK up to 2050, accelerating the delivery of zero-emission aircraft on our journey to Destination Zero."

Thales air data solution to enable the smooth and safe flight of Eve Air Mobility's eVTOL aircraft

Eve Air Mobility selected Thales air data solution to equip its future eVTOL, providing pilots and onboard systems with critical information, such as airspeed, airflow and altitude, to ensure the safe and efficient flight of the aircraft, in all weather conditions. Electric Urban Air Mobility (UAM) is emerging as a solution to the dual challenge of traffic congestion and reducing the environmental impact of transport in urban areas. 100% electric, EVE's aircraft has seduced the market, amassing letters of intent for more than 2,800 aircraft.

Committed to environmental protection and supporting its customers with innovative and eco-responsible solution, Thales invents technological solutions to enable new forms of sustainable mobility. Selecting Thales air data solutions to secure its eVTOL flights, Eve is underlining the leading position of the Group's technologies and expertise on the emerging UAM market and the added value of this product range.

Powered by eight lift rotors and one push propeller and featuring fixed wings, the aircraft requires a light and compact air data solution offering superior performance in both the low- and high-speed conditions of vertical flight and cruise flight.

Comprising MEMS sensors (Micro Electro Mechanical System) and a computer, Thales air data solution inherits from more than 20 years' experience of in-house development and series production of MEMS pressure sensors and millions of flight hours in regional air transportation, military aircraft and helicopters. It offers the lowest Size, Weight and Power ratio (SWaP) on the market and optimized performance for vertical Take Off and Landing as well as cruise speed conditions.

While more than 50,000 air data units have been delivered for conventional aircraft, this new-generation solution extends Thales's recognized product range to the booming Urban Air Mobility Market.

"With Eve, we share an innovative spirit combined with aeronautics expertise that will enable to shaping the sustainable skies of the future," said Yannick Assouad, Executive-Vice President, Avionics, Thales. "We are thrilled to consolidate our partnership and widen Thales portfolio of solutions contributing to environmentally-responsible Urban Air Mobility."

LILIUM GEARS UP FOR PRODUCTION OF THE LILIUM JET'S REVOLUTIONARY ELECTRIC PROPULSION UNITS

Lilium N.V. developer of the first all-electric vertical take-off and landing ("eVTOL") jet, announced that it has started installation of state-of-the-art assembly equipment for the serial production of the Lilium Jet's propulsion units. Prototype Lilium Jet propulsion units are due to start coming off the new line in Q2 2024, to be used for testing and the flight test campaign. This development marks another important milestone in the industrialization of the Lilium Jet, following the start of production of the Lilium Jet in late 2023.

For design and construction of the Lilium Jet's propulsion assembly line, Lilium has partnered with Schnaithmann Maschinenbau GmbH, the German automation and Robotics Company that is also supporting Lilium with workflow design and jigs and tools for Lilium's aerostructures assembly and the Lilium Jet final assembly line. Based near the automotive hub of Stuttgart, Schnaithmann is a global leader in designing and supplying automated, scalable industrial solutions, with long-standing partnerships in high-volume industries, especially automotive.

Collaboration between Lilium and Schnaithmann started several years ago with initial development of production plans for the Lilium Jet. Lilium's aerostructures assembly line is already utilizing equipment provided by Schnaithmann for handling of the Lilium Jet's wings and canards. The propulsion assembly line announced today is located in the same building as Lilium's aerostructures assembly line.

Jan Nowacki, Lilium Senior Vice President Manufacturing said: "We are delighted to be able to move forward towards production of our jet propulsion system. The electric jet engine is a unique, core Lilium technology, critical for aircraft performance and for which we have secured not only a team of highly qualified system suppliers but also important intellectual property. With the support of Schnaithmann, we look forward to implementing state-of-the-art manufacturing solutions capable of being scaled-up and replicated for high-volume production."

Gerd Maier, Schnaithmann Member of the Management Board, Sales and Marketing remarked: "With nearly 40 years of experience in supplying automation technology to global industries, we are proud to participate in the industrialization of the Lilium Jet. The eVTOL industry has the potential to change aviation in a positive, sustainable way, and we are delighted to be able to play a key role in helping Lilium scale up towards high-volume production."

HERMES 650 SPARK UNVEILED: ELBIT LAUNCHES A NEW STATE-OF-THE-ART UAS

Elbit Systems, a global leader in defense technology, unveiled its latest addition to its market leading Hermes family. This Next Generation Unmanned Aerial System (UAS) boasts outstanding endurance, versatility, and cost-effective performance across land, air and sea operations.

Key Benefits and Features:

- Autonomous Operation
- Unique Wide Flight Envelope
- High Payload Capacity
- Minimum Life Cycle Cost (LCC)
- Exceptional Safety, Survivability, and Immunity Standards
- Increased Range (BLOS), Flight Speed and Efficiency
- NATO STANAG 4671 compliant

Yoram Shmuely, General Manager of Elbit Systems Aerospace: "The launch of our Hermes™ 650 Spark marks an important milestone for Elbit Systems. This cutting-edge UAS, built on decades of market leadership, underscores our commitment to pushing the boundaries of technology, and providing exceptional capabilities to our global partners. I am confident that this new addition to our diverse and innovative aerospace defense portfolio will further solidify our commitment to advancing defense technology, ensuring security, and meeting the dynamic needs of the modern battlefield."

Introducing the Hermes™ 650 Spark: Elbit Systems is proud to introduce the Hermes™ 650 Spark, a tactical UAS designed to meet the evolving challenges of the aerospace and defense industries. As the latest addition to the highly acclaimed Hermes family, the Hermes™ 650 Spark expands the operational flight envelope with next-generation multi-mission capability, versatility, and survivability. The tactical UAS with Medium Altitude Long Endurance (MALE) capabilities delivers exceptional payload capacity with increased range, flight speed, endurance, and operational efficiency. This next-generation, autonomous, and digital UAS is designed to meet diverse operational needs across Air, Land, Sea, Homeland Security (HLS), and civilian applications. With its high payload capacity facilitated by exceptional large payload bays, the Hermes 650TM Spark allows for multi-payload configurations without compromising flight endurance. The comprehensive design considerations focus on minimizing the Life Cycle Cost (LCC), ensuring cost-effective mission performance. The UAS upholds the highest standards of safety, survivability, and immunity, complemented by modern, autonomous, and predictive maintenance practices, ultimately contributing to a low Life Cycle Cost.

The Hermes™ 650 Spark tactical UAS stands out for its exceptional operational capabilities. Engineered for versatility and reliability, it excels in medium altitude long endurance aerial missions, thanks to features like automatic takeoff and landing (ATOL) and auto-taxi capability from short runways. With a remarkable useful load of 260kg, the UAS boasts eight modular storage stations, accommodating large payload bays in the fuselage and six hard points on the wings. This allows it to carry payloads up to 120kg on full fuel capacity without compromising flight endurance.

The system's multi-payload capability integrates high-quality electro-optics (EO), radar, SIGINT, and other advanced functionalities simultaneously. It has the ability to execute long missions within SATCOM range and has an extended endurance lasting up to 24 hours.

Eve Air Mobility and SkyScape Announce 1st Urban ATM Agreement in Japan

Eve Air Mobility and SkyScape, a Japanese vertiport development and management company headquartered in Osaka, Japan, have announced an agreement to use Eve's Urban ATM (air traffic management) as a part of the Advanced Air Mobility (AAM) concept of operations published by the Japanese government. The announcement makes Skyscape Eve's 13th Urban ATM customer and it becomes its sixth Urban ATM vertiport customer as the company continues to grow its business globally.

Eve's Urban ATM software solution is a key enabler to the efficient implementation and scalability of urban air mobility (UAM) by providing services for air navigation service providers, urban authorities, fleet operators, vertiport operators, and other UAM stakeholders. The solution includes UAM flight coordination, vertiport automation airside support, airspace flow management and conformance management.

"This agreement represents a key milestone for Eve as SkyScape becomes our first Urban ATM customer in Japan as we continue to grow our portfolio of vertiport customers around the world," said David Rottblatt, vice president of sales and government affairs at Eve Air Mobility. "Japan has been very proactive and is a global leader in pursuing urban air mobility. Eve's Urban ATM solution will play a critical role in helping to transport eVTOL passengers quickly and safely in densely populated cities in the future."

"Our team at SkyScape is focused on developments that move the needle forward and get us closer to launching real AAM services," said Asa Quesenberry, CEO of SkyScape. "Working directly with the EVE team pushes us one step closer to the reality we're looking to create within Advanced Air Mobility and enables the variety of aviation operations we're planning to offer from our facilities."

As part of the agreement, the two companies will collaborate in a number of different ways including promoting Urban Air Mobility in Japan and the test and trial of Urban ATM software including data collection and sharing. The companies will also work together on showcasing eVTOL design and testing, vertiport design, operation certification and future autonomous operation development at SkyScape locations including their planned country research site known as the "Integrated Aviation Center" (IAC) when it opens in the future.

SkyScape is pioneering a unique approach to Vertiport development focused on their aviation facility "building blocks," as a set of ready-made units that house various elements of vertiport operations. These blocks are meant to empower site developers by allowing them to design aviation facilities and vertiports with only the elements that are applicable to their unique situation and use case. The blocks are intended to make use of upcycled conex containers as well as high-grade aluminium to enable quick set up and resilience through the facilities lifecycle while emphasising a focus on sustainable materials. The hope of SkyScape's approach is to develop aviation facilities that can support a high number of co-located services not limited to eVTOL operations but also first response, medical deliveries, security and more in the name of empowering communities through AAM.

Joby to Launch Air Taxi Service in UAE

Joby Aviation, Inc. a company developing all-electric aircraft for commercial passenger service announced it has signed a definitive agreement with Dubai's Road and Transport Authority (RTA) to launch air taxi services in the Emirate by early 2026, with Joby targeting initial operations as early as 2025. The agreement, signed at the World Governments Summit in Dubai in the presence of His Highness Sheikh Mohammed bin Rashid Al Maktoum, UAE Vice President, Prime Minister and Ruler of Dubai, provides Joby with the exclusive right to operate air taxis in Dubai for six years, and will position Dubai as a world leader in delivering the fast, clean and quiet air travel enabled by Joby's revolutionary technology. The agreement secures a variety of support from the RTA, including financial mechanisms, for entry and maturing of service operations in Dubai.

JoeBen Bevirt, founder and CEO, Joby Aviation, said: "It is an honor to partner with the government of Dubai to demonstrate the value of sustainable air travel to the world.

"Today's landmark agreement delivers on all three ingredients required to successfully launch an air taxi service - a definitive path to operations, well-placed infrastructure supported by dedicated partners, and an aircraft with the capacity and range to deliver meaningful journeys.

"We're looking forward to delivering an incredible experience for residents and visitors to Dubai as early as 2025 and we're excited to be laying the groundwork for the expansion of our service across the wider UAE."

His Excellency Mattar Al Tayer, Director-General, Chairman of the Board of Executive Directors for RTA, commented on the agreement, saying, "the air taxi service is part of RTA's efforts to embrace future transportation technologies and offers a novel and efficient mobility option for Dubai's residents and visitors, enabling fast, safe, and convenient travel to key city spots. This service will also enhance seamless multimodal transportation, improving citywide connectivity, and ensuring a smooth travel experience for passengers."

Joby additionally signed an agreement with Skyports, who will design, build and operate four initial vertiport sites across Dubai. RTA, Skyports and Joby have worked together to identify Dubai International Airport (DXB), Palm Jumeirah, Dubai Marina and Dubai Downtown as the launch locations for Dubai's air taxi service.

Joby's aircraft, which was displayed in the region for the first time at the World Governments Summit, is designed to carry a pilot and four passengers at speeds of up to 200 miles per hour and will be operated by the Company, with a journey from Dubai International Airport to Palm Jumeirah expected to take just 10 minutes compared with 45 minutes by car.

Joby and the RTA have been working closely with the General Civil Aviation Authority (GCAA) of the UAE to ensure there is a regulatory route to support His Highness Sheikh Mohammed's vision of being a world leader in the introduction of air taxis. The GCAA regulatory framework builds upon FAA standards with additional company testing and analysis alongside a high level of regulator oversight and an ongoing operational review process to ensure continued safety for early operations.

RTA, Joby and Skyports will now work on a wide range of topics, from customer journey design to stakeholder engagement and the integration of Joby's service into the wider public transport network in Dubai. To support the development of its operations in Dubai, Joby has established a local operating entity and intends to recruit locally for the majority of its operational team. The company will also consider localization of other global business activities in Dubai and across the region. Joby recently announced it will participate in the Smart and Autonomous Vehicle Industry (SAVI) cluster established by the Abu Dhabi Investment Office (ADIO), as part of exploring broader operations across the UAE.

In November 2023, Joby's aircraft became the first electric air taxi to fly in New York City, building on a number of recent successes including the launch of production at the Company's initial manufacturing facility in California in June 2023 and the first ever delivery of an electric air taxi to the U.S. Department of Defense in September 2023. Joby is listed on the New York Stock Exchange and has raised more than $2 billion of funding to date, including investments from Toyota, Delta Air Lines, SK Telecom, Uber and Baillie Gifford.

Drones World Editor Kartikeya in conversation with

Mr. Sanjay Singh

Founder Trade promotion Council for Geospatial & Space Industry

Q With what mission and objectives, the TPCGSI was set up? In short, tell us about your journey since the inception of the Trade Promotion Council for Geospatial and Space Industry?

A The Trade Promotion Council for Geospatial and Space Industry was established with the mission to foster growth, collaboration, and innovation within the geospatial and space sector. Our primary objectives include promoting the industry on national and international fronts, facilitating partnerships, advocating for supportive policies, promoting research and development, and nurturing a skilled workforce.

Since our inception, we have worked tirelessly to build a robust ecosystem for the geospatial and space industry. We've forged strategic partnerships, organized industry events, provided market intelligence, advocated for favourable policies, and supported innovation and entrepreneurship. Our journey has been marked by milestones such as the establishment of partnerships with key stakeholders, the launch of initiatives to promote innovation, and the facilitation of cross-border collaboration. Moving forward, we remain committed to contributing to the sustainable growth and global competitiveness of the geospatial and space industry.

Q As a Trade promotion Council for Geospatial & Space Industry what you would like to offer to companies/ Industry & how will they be benefitted by becoming a member?

A As the Trade Promotion Council for Geospatial and Space Industry, we offer a range of benefits to companies that choose to become members:

Policy and Regulatory Advocacy Support:

- Lobbying efforts to influence policies and regulations favourable to the geospatial and space industry.
- Providing guidance and expertise to members on navigating regulatory frameworks and compliance requirements.
- Representing members' interests in discussions with government agencies, policymakers, and regulatory bodies.

Research & Development Support:

- Facilitating collaborative research projects between industry stakeholders, academia, and research institutions.
- Providing funding opportunities or connecting members with grants for R&D initiatives.
- Organizing conferences, seminars, and workshops to share the latest research findings and technological advancements.

Business Development Assistance and Support:

- Offering market intelligence reports, industry analysis, and market entry strategies to help companies expand their business.
- Facilitating matchmaking between companies seeking partnerships, joint ventures, or collaborations.
- Assisting members in accessing financing options, investment opportunities, and venture capital funding.

Networking Opportunities:

■ Organizing industry events, trade shows, and networking sessions to facilitate connections and collaboration.

■ Hosting online platforms or forums where members can engage in discussions, share best practices, and seek advice from industry experts.

■ Facilitating introductions and meetings with potential clients, suppliers, investors, and other industry stakeholders.

Skill Development Support:

■ Offering training programs, workshops, and certification courses to enhance the skills and capabilities of professionals in the industry.

■ Providing access to resources, educational materials, and online learning platforms.

■ Partnering with educational institutions and training providers to develop customized training programs tailored to industry needs.

Manpower Support:

■ Assisting members in recruitment efforts by providing access to a talent pool of skilled professionals and job seekers within the industry.

■ Offering internship programs, apprenticeships, or job placement services to support workforce development and talent acquisition.

■ Providing guidance on workforce planning, talent management, and HR best practices.

Legal Support:

■ Offering legal advice, consultations, and referrals to members on issues related to contracts, intellectual property rights, and regulatory compliance.

■ Providing access to legal resources, templates, and documentation to help members navigate legal challenges.

■ Representing members' interests in legal matters or disputes through advocacy and legal representation.

■ By offering comprehensive support in these areas, the Trade Promotion Council for Geospatial and Space Industry aims to empower its members and drive growth and innovation within the industry.

Q What are your predictions about the future of the drone/Geo-Space industry and TPCGSI role in bridging the gap of whole ecosystem?

A Predicting the future of the drone/geo-space industry involves envisioning a landscape of continued growth, innovation, and integration across various sectors. Here are some predictions and the role that the Trade Promotion Council for Geospatial and Space Industry (TPCGSI) can play in bridging the gap within the ecosystem:

Integration of Drones and Geospatial Technologies: Drones are becoming integral tools for data collection, monitoring, and analysis across industries like agriculture, infrastructure, and disaster management. TPCGSI can facilitate collaboration between drone manufacturers, geospatial technology providers, and end-users to enhance integration and interoperability.

Advancements in Remote Sensing and Earth Observation: With more satellites and advanced imaging technologies, the geospatial industry will see significant advancements in remote sensing capabilities. TPCGSI can support R&D initiatives, promote technology transfer, and advocate for policies enabling responsible use.

Expansion of Commercial Space Activities: The commercial space sector

is growing rapidly with advancements in launch technology and satellite manufacturing. TPCGSI can foster collaboration between space startups, established aerospace companies, and governments to accelerate innovation and investment.

Emergence of Autonomous Systems and AI: Drones equipped with AI can collect and analyze vast geospatial data, enabling rapid insights and decision-making. TPCGSI can promote the development and adoption of AI-driven solutions and address ethical and regulatory considerations.

Global Collaboration and Partnerships: Increased international collaboration and partnerships will drive innovation and address global challenges like climate change and natural disasters. TPCGSI can serve as a facilitator for international cooperation, providing a platform for dialogue, networking, and collaboration.

Overall, TPCGSI plays a crucial role in bridging gaps within the drone/geo-space ecosystem by fostering collaboration, promoting innovation, advocating for supportive policies, and providing resources and support services. By facilitating partnerships and knowledge exchange, TPCGSI can accelerate industry growth, enabling it to address societal challenges and drive economic development effectively.

Q How does TPCGSI & Drones world Magazines (Future Avaiations) will bring difference to the industry in policies & industry?

A The partnership between the Trade Promotion Council for Geospatial and Space Industry (TPCGSI) and Drones World Magazine holds significant potential for driving positive change in the industry, especially in shaping policies and advancing industry interests. Here's how they can make a difference:

Policy Advocacy and Awareness: Drones World Magazine can raise awareness about key policy issues in the geospatial and space industry through articles and interviews. This collaboration can advocate for regulatory frameworks supporting innovation and safety.

Education and Information Sharing: Using Drones World Magazine as a platform, TPCGSI can share industry insights and best practices with professionals, policymakers, and stakeholders. By publishing thought leadership pieces and case studies, they can foster dialogue on critical industry issues.

Networking and Collaboration: TPCGSI and Drones World Magazine can jointly organize industry events, providing networking opportunities for stakeholders. These events can facilitate collaboration, ultimately enhancing industry cohesion and cooperation.

Promotion of Innovation: Drones World Magazine can showcase innovative technologies and solutions developed by TPCGSI members, inspiring others to adopt best practices and drive innovation within the industry.

Thought Leadership: TPCGSI and Drones World Magazine can collaborate on thought leadership initiatives, providing insights on industry issues through research reports and policy briefs. This partnership can shape policy debates and advocate for industry interests on a broader scale. In essence, the partnership between TPCGSI and Drones World Magazine has the potential to positively impact the geospatial and space industry by influencing policies, fostering collaboration, promoting innovation, and providing thought leadership.

Q Can you brief us about the upcoming events & opportunities to explore for startups, academia and industries?

A Here's a summary of the upcoming events and opportunities for startups, academia, and industries:

Drone Shaurya: Global Summit, Expo, and Awards on Unmanned Systems:

Date: September 19-20, 2024

Location: Pune, India

Tagline: "Brave Bharat, Secure Bharat"

Theme: "Innovate, Integrate, and Indigenize"

Overview: Focuses on unmanned systems, including drones, promoting innovation, integration, and indigenous development. Provides a platform for showcasing technologies, discussing trends, and recognizing excellence.

The New Bharat Geo-Space Defense Summit & Expo:

Date: November 2024 (specific date TBD)

Location: Hyderabad, India

Theme: "From Pixels to Planets: Unlocking the Universe"

Overview: Explores geospatial and space technologies with defense applications. Discusses strategies for leveraging these capabilities for defense and national security.

Young Scientists Awards 2024:

Recognizes young scientists' contributions across disciplines.

Provides a platform for showcasing work, sharing insights, and networking.

Drone Marathon 2024:

Offers drone enthusiasts a chance to showcase technology and endurance.

Participants compete in a marathon-style race, pushing the limits of drone capabilities.

Resilience 360 : Global Conference & Expo on Climate Change & Disaster management

Date: August 29-30, 2024

Location: New Delhi, India

Focuses on climate change adaptation and disaster management.

Features climate adaptation strategies, disaster risk reduction, and innovation showcases.

TPCGSI

TRADE PROMOTION COUNCIL FOR GEOSPATIAL & SPACE INDUSTRY

ACCELERATING ADOPTION OF GEO-SPACE TECHNOLOGY

भू-स्थानिक एवं अंतरिक्ष उद्योग व्यापार संवर्धन परिषद

Global Technology Week 2024

International Technology Marketing Celebration:

A week-long celebration showcasing technological innovations on a global scale.

Brings together industry leaders, innovators, entrepreneurs, and policymakers.

Features keynote speeches, panel discussions, workshops, and exhibitions.

These events provide platforms for showcasing innovations, sharing expertise, forging partnerships, and contributing to the advancement of the geospatial, space, and technology sectors. They offer valuable opportunities for startups, academia, and industries to participate and collaborate, driving innovation and progress in these fields.

Q What is your biggest USP that differentiates Trade Promotion Council for Geospatial and Space Industry from other associations? How does TPCGSI helps small & medium industries?

A The Trade Promotion Council for Geospatial and Space Industry (TPCGSI) offers unique selling propositions (USPs) that differentiate it from competitors and benefit its members, especially small and medium-sized industries (SMEs):

Industry Focus: TPCGSI is solely dedicated to promoting the geospatial and space industry, providing specialized support tailored to its unique needs. This focus allows the council to offer targeted solutions that directly benefit its members.

Comprehensive Support: TPCGSI offers a wide range of services, including advocacy, networking, market intelligence, business development, skill development, and legal assistance. This support ecosystem addresses various member needs, ensuring holistic support for growth and success.

Partnerships and Collaboration: TPCGSI actively fosters partnerships with government agencies, industry associations, academia, and international organizations. These collaborations open doors to new opportunities and amplify the impact of the council's initiatives, ultimately benefiting its members.

Advocacy and Representation: TPCGSI advocates for supportive policies and regulations, representing members' interests in discussions with policymakers and regulatory bodies. This advocacy creates a favorable business environment supporting SME growth and

competitiveness.

Access to Resources: TPCGSI provides SMEs with access to resources, funding opportunities, market insights, and networking platforms. This access helps SMEs overcome growth barriers, expand market reach, and stay competitive.

Tailored Support for SMEs: TPCGSI offers specialized support programs, mentorship initiatives, and capacity-building activities for SMEs. This tailored support helps SMEs thrive and succeed in the competitive landscape.

Overall, TPCGSI's industry focus, comprehensive support, partnerships, advocacy efforts, and tailored support for SMEs distinguish it from competitors, making it a valuable partner for small and medium-sized industries in the geospatial and space sector.

Q What are your suggestions to youngsters/ entrepreneurs who wish to enter into the Drone /GIS Industry?

A For aspiring individuals and entrepreneurs venturing into the Drone/Geo-Space Industry, here are condensed suggestions to kickstart their journey:

Understand the Industry Landscape:

Explore sectors like aerial surveying, agriculture, and space exploration.

Stay updated on trends through publications and networking.

Acquire Relevant Education and Skills:

Pursue education in aerospace

engineering or computer science.

Develop technical skills in drone operation and GIS software.

Gain Practical Experience:

Seek internships or part-time roles with relevant organizations.

Participate in collaborative projects to apply skills.

Build a Strong Network:

Attend industry events and join professional associations.

Connect with mentors and peers for guidance.

Stay Updated on Regulations:

Understand drone operation and space activity regulations.

Ensure compliance and obtain necessary certifications.

Identify Niche Opportunities:

Explore emerging trends and underserved markets.

Embrace innovation and new technologies.

Keep Innovating:

Embrace Creativity: Think outside the box and explore unconventional ideas.

Stay Curious: Seek new knowledge and perspectives continuously.

Challenge Assumptions: Question norms to drive innovation forward.

Experiment and Iterate: Take risks, learn from failures, and refine ideas.

Collaborate: Work with diverse teams to leverage different expertise.

Listen to Customers: Understand their needs and focus on delivering value.

Invest in R&D: Allocate resources to explore new opportunities.

Adapt to Change: Stay flexible and responsive to industry shifts.

Celebrate Successes: Acknowledge achievements to fuel further innovation.

Never Settle: Strive for continual improvement and excellence. By adhering to these suggestions and fostering a culture of innovation, individuals and organizations can thrive in the dynamic Drone/Geo-Space Industry.

General Atomics Expands International Collaborations and Partnerships with Japan in Critical and Emerging Technologies

General Atomics, a defense and diversified technologies company with affiliates operating on five continents, is expanding its collaborations and partnerships across Japan with new investments in the nuclear energy and rare earth elements sectors.

Numerous teaming arrangements are in the late stages of discussion and are set to be announced in early 2024. These partnerships will complement the company's existing relationships as a long-term partner collaborating with Japanese industry and government agencies.

"General Atomics is committed to collaborating with its Japanese partners to advance the development of cutting-edge technologies in the maritime security, nuclear energy, and rare earth elements sectors," said Dr. Vivek Lall, chief executive at General Atomics Global Corporation. "Building on a legacy of successful collaborations, we have held a series of strategic engagements with government officials, industry leaders, and research institutions in Japan. These engagements have laid the foundation for future partnerships aimed at advancing the development of critical and emerging technologies."

In 2023, Japan's Kyoto Fusioneering announced an agreement with GA to supply two advanced gyrotrons to the U.S. Department of Energy's DIII-D National Fusion Facility in San Diego, Calif.

Currently, the Japan Coast Guard (JCG) and Japan Maritime Self-Defense Force (JMSDF) are testing and deploying the MQ-9B SeaGuardian® Remotely Piloted Aircraft (RPA) built by General Atomics Aeronautical Systems, Inc. (GA-ASI). SeaGuardian is a long-endurance maritime surveillance aircraft that can be used for a variety of missions, including search and rescue, disaster response, and maritime law enforcement.

GA-ASI's MQ-9B aircraft is revolutionizing the global RPA systems market by providing true all-weather capability and full compliance with STANAG-4671 (NATO UAS airworthiness standard). This feature, along with GA-ASI's operationally proven collision avoidance radar, enables flexible operations in civil airspace.

ENHANCING US NAVY'S MQ-25A UAS WITH NEXT-GENERATION VEHICLE MANAGEMENT SYSTEM COMPUTER

BAE Systems has been selected by Boeing to upgrade and modernize the vehicle management system computer (VMSC) for the U.S. Navy's MQ-25 unmanned aerial refueling system. The technology refresh will increase computing power and address obsolescence issues, providing the unmanned aerial tanker with an integrated solution that improves aircraft performance and allows for future capability growth.

BAE Systems' next-generation VMSC controls all flight surfaces and performs overall vehicle management duties for the autonomous MQ-25. The MQ-25 is the Navy's first operational carrier-based unmanned aircraft and is designed to provide a much-needed aerial refueling capability. It also aims to relieve the refueling mission workload for F/A-18 aircraft, allowing them to take on other key mission roles, increasing the fleet's capacity.

"BAE Systems is a leader in flight-critical systems and solutions," said Corin Beck, senior director of Military Aircraft Systems for Controls and Avionics Solutions at BAE Systems. "Our upgraded VMSC for the MQ-25 will deliver advanced functionality—enabling this platform to execute today and tomorrow's critical missions, while also reducing the amount of hardware required on the aircraft through consolidation into this computer."

The cost-effective VMSC upgrade will use quad-core processors to increase computing power while optimizing size, weight, and power footprint on the aircraft. The multi-core processor selected for the MQ-25 VMSC has recently completed qualification on another U.S. military platform thereby reducing cost, schedule, and integration risk for this program.

This highly efficient and integrated system will deliver more capability by replacing multiple other onboard computers, improving aircraft reliability and reducing total lifecycle cost of ownership for the Navy. The new VMSC also provides growth capability to support future missions of the MQ-25, such as intelligence, surveillance and reconnaissance (ISR) technologies, and lays the foundation for all future carrier-based unmanned systems by pioneering the cutting-edge manned-unmanned teaming (MUM-T) operational concept.

BAE Systems also provides the Identification Friend or Foe (IFF) System for the aircraft.

The company has more than 40 years of experience developing and integrating flight control technology for military and commercial platforms. Work on the VMSC occurs at BAE Systems' state-of-the-art engineering and manufacturing facility in Endicott, New York.

INDIA - MQ-9B REMOTELY PILOTED AIRCRAFT

The State Department has made a determination approving a possible Foreign Military Sale to the Government of India of MQ-9B Remotely Piloted Aircraft and related equipment for an estimated cost of $3.99 billion. The Defense Security Cooperation Agency delivered the required certification notifying Congress of this possible sale.

The Government of India has requested to buy thirty-one (31) MQ-9B Sky Guardian aircraft; one hundred sixty-one (161) Embedded Global Positioning & Inertial Navigation Systems (EGIs); thirty-five (35) L3 Rio Grande Communications Intelligence Sensor Suites; one hundred seventy (170) AGM-114R Hellfire missiles; sixteen (16) M36E9 Hellfire Captive Air Training Missiles (CATM); three hundred ten (310) GBU-39B/B Laser Small Diameter Bombs (LSDB); and eight (8) GBU-39B/B LSDB Guided Test Vehicles (GTVs) with live fuzes. Also included are Certifiable Ground Control Stations; TPE-331-10-GD engines; M299 Hellfire missile launchers; KIV-77 cryptographic appliques and other Identification Friend or Foe (IFF) equipment; KOR-24A Small Tactical Terminals (STT); AN/SSQ-62F, AN/SSQ-53G, and AN/SSQ-36 sonobuoys; ADU-891/E Adapter Group Test Sets; Common Munitions Built-In-Test (BIT) Reprogramming Equipment (CMBRE); GBU-39B/B tactical training rounds, Weapons Load Crew Trainers, and Reliability Assessment Vehicles-Instrumented; Portable Pre-flight/Post-flight Equipment (P3E); CCM-700A encryption devices; KY-100M Narrowband/wideband terminals; KI-133 cryptographic units; AN/PYQ-10 Simple Key Loaders; Automatic Identification System (AIS) transponders; ROVER 6Si and TNR2x transceivers; MR6000 ultra high frequency (UHF) and very high frequency (VHF) radios; Selex SeaSpray Active Electronically Scanned Array (AESA) surveillance radars; HISAR-300 Radars; SNC 4500 Auto Electronic Surveillance Measures (ESM) Systems; SAGE 750 ESM systems; Due Regard Radars (DRR); MX-20 Electro-Optical Infrared (EO-IR) Laser Target Designators (LTDs); Ku-Band SATCOM GAASI Transportable Earth Stations (GATES); C-Band Line-of-Sight (LOS) Ground Data Terminals; AN/DPX-7 IFF transponders; Compact Multi-band Data Links (CMDL); initial spare and repair parts, consumables, accessories, and repair and return support; secure communications, precision navigation, and cryptographic equipment; munitions support and support equipment; testing and integration support and equipment; classified and unclassified software delivery and support; classified and unclassified publications and technical documentation; personnel training and training equipment; transportation support; warranties; studies and surveys; U.S. Government and contractor engineering, technical, and logistics support services; and other related elements of logistics and program support. The estimated total cost is $3.99 billion.

This proposed sale will support the foreign policy and national security objectives of the United States by helping to strengthen the U.S.-Indian strategic relationship and to improve the security of a major defense partner which continues to be an important force for political stability, peace, and economic progress in the Indo-Pacific and South Asia region.

The proposed sale will improve India's capability to meet current and future threats by enabling unmanned surveillance and reconnaissance patrols in sea lanes of operation. India has demonstrated a commitment to modernizing its military and will have no difficulty absorbing these articles and services into its armed forces.

The proposed sale of this equipment and support will not alter the basic military balance in the region. The principal contractor will be General Atomics Aeronautical Systems, Poway, CA. The purchaser typically requests offsets. Any offset agreement will be defined in negotiations between the purchaser and the contractor.

Implementation of this proposed sale will not require the assignment of any additional U.S. Government or contractor representatives to India. There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

The description and dollar value are for the highest estimated quantity and dollar value based on initial requirements. Actual dollar value will be lower depending on final requirements, budget authority, and signed sales agreement(s), if and when concluded.

SCHIEBEL WINS CAMCOPTER S-300 CONTRACT FOR SOUTH KOREAN NAVY

Schiebel, together with Korean based defence solutions companies Hanwha Systems and UI Helicopter, has been awarded a contract by the Defence Acquisition Programme Administration (DAPA) for the development and delivery of the Vertical Take-off and Landing (VTOL) CAMCOPTER® S-300 Unmanned Air System (UAS), to be operated by the South Korean MOD.

The contract was signed with Hanwha Systems for the supply of the S-300 for Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) missions for the South Korean Navy and Marine Corps.

The South Korean Navy has been a Schiebel customer for over 10 years, regularly carrying out maritime ISR operations with its CAMCOPTER® S-100 UAS fleet. The changing geo-political situation and North Korean threat call for an expansion of their UAS fleet, adding larger and heavier UAS with greater capability.

"We are extremely excited that the South Korean Navy and Marine Corps is building on its extensive experience and success with the S-100 by awarding Hanwha the contract for Schiebel's new long-endurance, heavy-lift-capable UAS. The S-300 marks a major milestone in the company's history," said Hans Georg Schiebel, Chairman of the Schiebel Group.

The STANAG-compliant and fully certifiable S-300 has an endurance of up to 24 hours and operates at an altitude of up to 21,000 feet, offering a persistent loiter capability for ISTAR operations. The heavy-lift UAS carries payloads of up to 250 kg, making it an ideal cargo delivery solution over long distances in complex and high altitude terrain. The versatility and flexibility of the S-300 also allows for the release of payloads such as dropping multiple sonar-buoys for Anti-Submarine Warfare (ASW) operations.

To ensure maximum mission versatility and cost effectiveness, the heavy-lift-capable S-300 can be controlled by the same proven Ground Control Station used by the CAMCOPTER® S-100. Schiebel's 'system of systems' approach ensures the interoperability of its unmanned fleet for many years to come building on its experience derived from over 20 years of building a robust and proven VTOL core system.

Schiebel recently announced the expansion of its Abu Dhabi facility extensively increasing its global footprint for the CAMCOPTER® S-300. However, the new platform's open architecture will also ensure it will be able to meet countries' sovereignty and offset requirements.

Teledyne FLIR to Supply Canadian Government More Than 800 Drones Worth CAD$95M for Ukraine

Teledyne FLIR Defense, part of Teledyne Technologies Incorporated announced that Canada's Department of National Defence is seeking over 800 SkyRanger R70 Unmanned Aerial Systems (UAS), valued at more than CAD$95 million (approximately US$70 million), that Canada will donate to the government of Ukraine.

Built by Teledyne FLIR in Waterloo, Ontario, SkyRanger® R70 drones feature autonomous navigation capability, plus advanced thermal and daytime sensors enabling them to detect and identify targets at long range. The advanced multi-mission drone can handle a variety of payloads up to 3.5 kilograms, including munitions.

This latest order from Canada adds to the unmanned systems and counter-unmanned aerial systems (C-UAS) capabilities Teledyne FLIR Defense is already providing to Ukraine's military through governments worldwide. Teledyne FLIR Black Hornet® nano-drones are currently being used by Ukrainian forces through previous donations made by the Norwegian and British governments. They have performed successfully in numerous operations under the harshest of environments. Furthermore, via a contract with Kongsberg Defence & Aerospace, Teledyne FLIR is providing advanced thermal/visual imaging systems with highly sensitive radar sensors onto a mobile platform to rapidly identify drone threats as part of a total C-UAS solution for Ukraine.

"I would like to thank the Canadian government and the Honourable Bill Blair, Minister of National Defence, for turning to SkyRanger drones in their support for Ukraine," said Edwin Roks, Chief Executive Officer of Teledyne Technologies. "As a world leader in small unmanned aerial systems and remote sensing solutions, Teledyne FLIR Defense is proving that tactical platforms such as SkyRanger and Black Hornet can deliver immediate covert situational awareness on today's battlefields, where and when warfighters need it most."

High Eye wins International Tender of the Netherlands MoD

We are thrilled to share remarkable news with you! High Eye has emerged victorious in an international open tender issued by the Ministry of Defence Netherlands, marking a significant milestone in our journey of innovation and growth.

This prestigious tender victory signifies not only a tremendous achievement by High Eye but also a testament to the quality and capability of our Airboxer. As part of a comprehensive program spanning more than two years, our team will diligently work to integrate the Airboxer seamlessly into all aspects of the Netherlands Ministry of Defence's operations, both in Europe and abroad.

The comprehensive program encompasses the integration of our Airboxer VTOL UAV along with its ground control system, training modules, maintenance packages, operational training, and cutting-edge EO/IR camera payloads. We are proud to announce that the first complete Airboxer System will be delivered this year, marking the beginning of

an exciting partnership with the Ministry of Defence Netherlands.

In response to this momentous achievement, our CEO, Mr. Joost de Ruiter, expressed his sentiments, stating, "We are pleased to win this tender and honoured to integrate our Airboxer in the operations of the Netherlands MOD. This partnership signifies not only a significant milestone for High Eye but also a testament to our commitment for years to deliver top-notch UAV solutions for defence and security applications."

As we celebrate this remarkable milestone, we extend our heartfelt thanks to everyone who contributed to this success, during many years, from our dedicated team members to our valued partners and stakeholders. It is through your unwavering support, blood sweat and tears that High Eye can continues to improve the Airboxer and the services of High Eye.

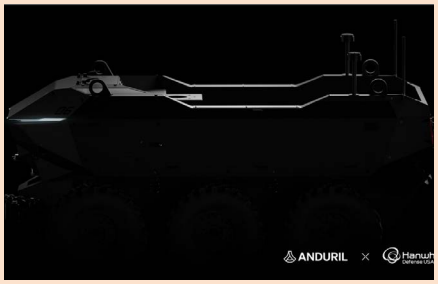
Looking ahead, we are excited about the opportunities that lie ahead as we continue to strengthen our partnership with the Ministry of Defence Netherlands and explore new horizons in defence and civilian UAV missions. Once again, thank you for your continued support and trust in High Eye. Together, we will continue to soar to new heights and achieve even greater success in the years ahead.

ANDURIL INDUSTRIES TO PARTNER WITH HANWHA DEFENSE USA ON THE US ARMY'S S-MET PROGRAM

Anduril Industries, a defense technology company on a mission to transform U.S. and allied military capabilities with advanced technology, has formed a strategic partnership with Hanwha Defense USA in pursuit of the U.S. Army's Small Multipurpose Equipment Transport (S-MET) Increment II program.

Anduril will serve as the prime contractor to deliver a modified, autonomy-ready Uncrewed Ground Vehicle (UGV) based on Hanwha's proven Arion-SMET platform, which has already demonstrated its performance in highly-relevant and varied environments in the Indo-Pacific, including the latest Foreign Comparative Testing with the U.S. Army and Marine Corps in Hawaii. In addition to Anduril Industries and Hanwha Defense USA, Forterra (formerly RRAI) will bring its AutoDrive® vehicle autonomy solution to enable complex on and off-road maneuvers.

By combining Anduril's mission software integration expertise with Hanwha's proven hardware platform and Forterra's mature autonomy stack, the partnership will deliver a differentiated UGV designed to bring capability



far beyond equipment transport to a range of missions. Equipped with significant load-carrying and power generation capacity, as well as a modular architecture that ensures the vehicle can integrate and power a vast range of payloads, the new, upgraded vehicle brings both advanced capability and a reduced sustainment burden to dismounted infantry operations.

"We are thrilled about partnering with Hanwha Defense USA and Forterra to provide mature and proven hardware and software solutions to the S-MET program," said Zach Mears, head of strategy at Anduril. "By combining Anduril's electronics and software, Hanwha Defense USA's proven hardware, and Forterra's proven off-road vehicle autonomy stack, the partnership will bring speed, flexibility, and advanced capabilities to dismounted infantry. With a simplified user interface powered by Lattice, users will be able to quickly and easily command and control the S-MET to support lethal effects at the tactical edge."

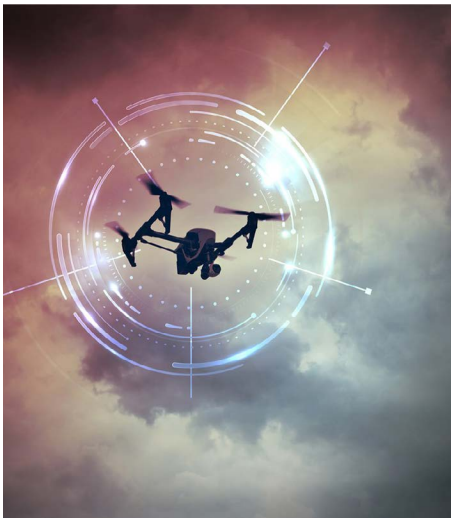
Anduril's S-MET vehicle is designed with survivability in mind, meeting power and performance needs while maintaining a low acoustic signature, ensuring that it serves as an asset, not a liability, on the modern battlefield. Built to military specifications to support ground troops, the vehicle will enable Soldiers to simultaneously operate the vehicle, power and manage payloads, maintain communications, and carry out force projection and protection missions safely in complex environments.

"The U.S. Army's S-MET Inc II requirement is a natural evolution for the Hanwha Arion-SMET vehicle, while the partnership with Anduril and Forterra provides a refreshing, innovative and agile addition to the Army's industrial base," said John Kelly, President & CEO of Hanwha Defense USA.

LEONARDO TO EQUIP CANADIAN ARMED FORCES WITH COUNTER-DRONE TECHNOLOGY

Leonardo has been awarded a contract by Public Services and Procurement Canada (PSPC) to provide its Falcon Shield C-UAS system for operation by the Canadian Armed Forces. The company will provide a number of systems and a 10-year sustainment package that includes options for additional equipment and the spiral development of new capabilities. First systems will be delivered later this year with the Canadian Armed Forces that will immediately deploy Falcon Shield to forward operating bases to protect deployed personnel.

Falcon Shield is the UK's operationally-proven solution to the growing threat from group 1 to 3 (smaller, slower and lower flying) UAS, which are usually undetectable by conventional air surveillance equipment. Using a mix of advanced sensors from Leonardo and industry partners, the system rapidly detects, tracks and prioritises threats and gives operators the means to neutralise them effectively. Produced at Basildon and Southampton sites, Falcon Shield is in service with the UK's Armed Forces, is trusted by close allies on operations and is readily



available for export customers worldwide. Leonardo continues to update Falcon Shield to ensure it remains cutting-edge in a rapidly evolving security landscape.

For its UK Royal Air Force (RAF) customer, Leonardo has delivered seven complete baseline counter-drone systems (called ORCUS in RAF service) for the service's 'Synergia' research and development programme.

The RAF is also employing these systems as a national standby capability in support of the Emergency Services. In this role, the RAF has operated Leonardo counter-UAS technology during a number of high-profile events including the 2021 G7 summit in Cornwall and Birmingham 2022 Commonwealth games. During Christmas 2018, Falcon Shield has been deployed at both London Gatwick and Heathrow airports following suspected drone sightings, allowing air operations to resume.

Leonardo has also been working with the United States Armed Forces as part of the ongoing collaboration between the UK and US on counter-drone research and development. Under this partnership, the company has integrated the US Air Force Research Laboratory (AFRL)'s NINJA technology into the RAF ORCUS system and demonstrated its ability to detect dozens of small drone platforms in the airspace around airbases and then mitigate them.

Leonardo will be operating Falcon Shield at Canada's 'Counter Uncrewed Aerial Systems Sandbox 2024' exercise, being held in Suffield, Alberta this June, where it will counter drones flown by the Canadian Armed Forces' 'red team' operators.

OWT GLOBAL AND ECHODYNE COLLABORATE ON NEXT-GENERATION SITUATIONAL AWARENESS SOLUTIONS AND GLOBAL SERVICES SUPPORT

OWT Global, a trusted services and solutions provider for C5ISR, UxS and Air Domain Awareness & Defense solutions, and Echodyne Corp, the radar platform company delivering high-performance commercial-off-the-shelf (COTS) radars announced a strategic relationship to develop and bring to market next-generation situational awareness solutions across OWT Global's portfolio.

Echodyne's ultra-low size, weight, and power (SWaP) radars offer electronically scanned array (ESA) performance at COTS price points that radically expands situational awareness capabilities across deployed forces and assets. Integrated into OWT Global's advanced Intelligent Sensing as a Service (ISaaS) platform, the precision radar data improves end-end system performance.

The companies will focus on optimizing existing capabilities and expanding these into new applications. Additionally, the relationship establishes a proven services support model to grow with Echodyne radars. Strategic applications include: Counter-Unmanned Aircraft Systems (C-UAS), where data accuracy vastly

improves identification and targeting, and COTS equipment corrects financial asymmetry.

C5ISR, where highly portable, low-SWaP, high fidelity situational awareness improves mission outcomes.

UxS operations, where low-SWaP and high-fidelity performance are key design objectives for maritime assets, air & ground vehicles, and ground stations. Improved Critical Infrastructure Protection, where airspace awareness is paramount to security design and operations.

"OWT Global's vendor agnostic support to our customers enables us to see and use emerging products from across the market and keep pace with evolving requirements," said Eric Fuller, CEO of OWT Global. "It's clear to us that Echodyne's radars provide an accuracy and reliability far beyond existing legacy solutions and enable OWT to bring our customers optimized options to keep pace with the latest threats. We're excited about the growing partnership with Echodyne and are committed to always staying aligned with the best capabilities for our customers and their missions."

"As our radars are designed into more mission-critical systems, creating relationships with trusted suppliers is key to our success," said Eben Frankenberg, CEO of Echodyne. "OWT Global represents deep knowledge of systems and platforms that are being tasked with detecting, tracking, and defeating modern threats like drones. OWT Global's expertise augmented by best-in-class Echodyne radars is a winning combination for end users."

CANADA ACQUIRING AIR DEFENCE AND ANTI-DRONE CAPABILITIES FOR CANADIAN ARMED FORCES MEMBERS DEPLOYED WITH NATO IN LATVIA

Today, the Honourable Bill Blair, Minister of National Defence, announced that Canadian Armed Forces members deployed to NATO's Canada-led Battle Group in Latvia will soon have two new defensive capabilities that are being acquired on an urgent basis. This new equipment will strengthen the defence capacity of the Battle Group as a whole, further adding to the deterrence capabilities of soldiers from all contributing nations.

First, Canada is investing $227.5 million in an Air Defence capability for Canadian Armed Forces members in Latvia. Canada has finalized contracts with Saab Canada Inc. to procure the RBS 70 NG short-range Air Defence System, which will provide tactical air defence protection to Canadian troops in Latvia. This capability will enable Canadian troops to defend themselves against fixed-wing aircraft and helicopters within its range, close air support aircraft, class 1 small Uncrewed Aerial Systems, and larger Uncrewed Aerial Systems.

This is the first time since 2012 that the Canadian Armed Forces will have an Air Defence capability – and the first systems are expected to be delivered later this year.

Second, Canada is investing $46 million to acquire new counter-drone equipment. This will provide Canadian Armed Forces (CAF) members deployed on Operation REASSURANCE with improved protection against hostile Class 1 UAS (small drones) by enabling their detection, identification, tracking, and defeat – ensuring freedom of action for land operations. Initial operational capability for this new equipment is expected later this year. The project will deliver counter-UAS systems, command and control hardware and software, sensors, non-kinetic effectors, and in service support and training.

> "Canada's support for the NATO Alliance is steadfast. By investing in Air Defence and anti-drone capabilities for Canadian troops, we are also bolstering the defensive capabilities of the NATO Battle Group in Latvia as a whole. Through our leadership of the Battle Group in Latvia and our many other contributions to NATO – including our current participation in Exercise Steadfast Defender – Canada will continue to work with our Allies to strengthen Euro-Atlantic security."
> The Honourable Bill Blair, Minister of National Defence

Minister Blair announced these acquisitions during a visit to Brussels, Belgium, where he participated in a meeting of NATO Defence Ministers. Minister Blair emphasized how these new capabilities will strengthen NATO's defence and deterrence posture on Canada's eastern flank, where Canada leads NATO's enhanced Forward Presence Battle Group in Latvia. Canada is more than doubling its military presence on Operation REASSURANCE – from about 1,000 troops currently to up to 2,200 persistently deployed troops by 2026, as Canada committed in the July 2023 Roadmap on Scaling the eFP Latvia Battle Group to Brigade.

Today's announcement follows Minister Blair's December 2023 trip to Latvia, where he announced that Canada will deploy Royal Canadian Air Force helicopters to the Battle Group starting this summer, and highlighted Canada's recent deployment of a Canadian Army Tank Squadron of 15 Leopard 2A4M tanks to Latvia.

During his visit to Brussels, Minister Blair also highlighted that approximately 1,000 CAF sailors, soldiers, aviators, and special forces members (including the Canadian warship HMCS Charlottetown) are currently participating in NATO's Exercise Steadfast Defender 2024. This is the largest NATO exercise in decades and will serve to rehearse NATO's Deterrence and Defence plans to counter threats to the Euro-Atlantic area.

In addition, together with his Czech counterpart, Defence Minister Jana Černochová, Minister Blair also signed a Canada-Czechia Defence Cooperation memorandum of understanding (MOU). This MOU will establish a framework for cooperation and outlines how Canada and Czechia will work collaboratively to strengthen cooperation in several areas such as bilateral and multilateral training, military education, defence research and technology, and mutual logistics research. In addition to enabling closer bilateral cooperation, this MOU will also enable Canada and Czechia to work together more closely in supporting Ukraine.

During this important moment for Euro-Atlantic security, Canada is working closely with NATO Allies and international partners to provide and coordinate comprehensive military assistance for Ukraine, and to help build a more resilient Alliance.

Introducing VigilantHalo–BlueHalo's Integrated Command and Control System for the Future of Uncrewed Airspace

The future of national security will depend on our ability to command the next-generation of uncrewed airspace. To protect against tomorrow's threats, BlueHalo has introduced VigilantHalo–a software-driven integration platform for real-time airspace Command-and-Control (C2). VigilantHalo's versatile design supports multiple missions including air traffic control (ATC), beyond visual line-of-sight (BVLOS), and Counter-Uncrewed Aerial Systems (C-UAS).

In addition to its national security and National Airspace System (NAS) air traffic control capabilities, VigilantHalo is a complete situational awareness solution for disaster response and critical infrastructure defense with radar and multi-sensor surveillance that can be tailored to suit specific mission and application needs and deployed to cloud, mobile, or fixed-site installations.

"Drones are rapidly evolving our national security landscape and will soon transform commerce, transportation, and many other elements of our daily lives," said James Batt, BlueHalo Chief Growth Officer. "VigilantHalo is a critical tool for our government and industry partners to implement now in order to keep our airways and communities safe in the future."

With VigilantHalo's integrated data processing, fusion tracker, and communications system, an operator can monitor and separate air traffic in any environment and receive critical internal and external system health management. Informed by National Oceanic and Atmospheric Administration (NOAA) mesoscale predictions and weather stations, the system provides weather-based flight path analytics services and identifies potential safety risks. It is powered by a custom-built state-of-the-art Sensor Data Processor (SDP) that fuses diverse sensor types and surveillance data feeds into a consolidated display tailored to the mission(s) of interest (e.g., ATC, BVLOS, Air Defense, BMC2, Missile Defense, etc.).

BlueHalo recently revealed VigilantHalo during a demonstration for various military leaders, state officials, and industry partners at Camp Atterbury in Edinburgh, Indiana. BlueHalo highlighted VigilantHalo's BVLOS UAS mission controls, detect and avoid (DAA) capabilities, and non-cooperative or nefarious UAS and C-UAS detection and tracking. VigilantHalo was installed within a Nomad Tactical Command Vehicle for the demonstration to showcase its mobility, ease of integration, and flexible application to address unique mission needs.

"Our customers are excited about this system because it fills a giant void for complete UAS and C-UAS airspace command and control," said Mary Clum, BlueHalo Sector President. "VigilantHalo is another example of how BlueHalo is meeting the mission with technological innovation to support our warfighters."

Mercury Awarded Subcontract for the U.S. Army's Next-Generation LTAMDS Radar System

Mercury Systems, Inc. a technology company that delivers mission-critical processing power to the edge announced it signed a three-year subcontract worth as much as $96 million with Raytheon, an RTX business, to deliver high-performance signal processing sub-systems for the U.S. Army's Lower Tier Air and Missile Defense Sensor (LTAMDS).

Under the new production agreement, Mercury will deliver hardware to Raytheon for the next nine LTAMDS radars to support the U.S. Army and Poland, the first international LTAMDS customer.

In May 2023, Mercury completed the delivery of more than 160 hardware units for the first six LTAMDS radars, including signal data processor sub-systems, beamforming platforms, and ethernet switching hardware to fulfill its proof of manufacturing contract.

LTAMDS is the newest air and missile defense sensor that will operate on the Army's Integrated Air and Missile Defense network. It is a 360-degree, Active Electronically Scanned Array radar that provides significantly more capacity and capability against the wide range of advanced threats, including hypersonic missiles. Mercury developed an advanced, edge-ready processing solution for LTAMDS that will give U.S. and international forces an unparalleled strategic and tactical advantage on the battlefield.

Six Raytheon-built LTAMDS radars are advancing through integration and test activities simultaneously at multiple government and Raytheon test sites. A series of recent milestones validate the radar's performance and progression through developmental testing, including the recently completed contractor verification testing and tactical ballistic missile and cruise missile live fire tests. Formal testing continues in 2024.

"By leveraging many innovative, edge-ready technologies from the Mercury Processing Platform, Raytheon has developed a truly unrivaled air defense capability that will contribute to the safety and security of the United States and its allies around the world," said Mercury Chairman and CEO Bill Ballhaus. "As LTAMDS production ramps up in the coming years, it will become a strong driver of organic growth for the company."

WhiteFox Awarded $1M Phase I of a Multi-Phase Drone Defense Contract to Fortify South Asia's Critical Infrastructure

WhiteFox Defense Technologies, a globally recognized leader in advanced airspace management and counter-drone defense solutions, recently secured a significant $1 million contract. This milestone agreement, marking the first phase of a comprehensive multi-phase project, is aimed at bolstering the safety and protection of vital infrastructure and lives in South Asia. Amidst the rising global concern over drone-related threats, this contract highlights WhiteFox's unwavering dedication to deploying cutting-edge technology for ensuring worldwide airspace security and safety.

In recent years, the use of drones for malicious purposes has escalated, posing significant risks to critical infrastructure, national security, and public safety globally. The proliferation of drone technology has made it increasingly accessible, leading to its misuse for surveillance, unauthorized data collection, and disruptive activities. This volatile situation underscores the urgent need for effective drone defense systems.

L.R. Fox, Chief Executive Officer of WhiteFox, stated, "This contract marks a significant milestone in our mission to create a safer world. The growing

threats posed by rogue drones require advanced solutions, and WhiteFox is at the forefront of delivering these essential technologies. Our DroneFox NS system is uniquely designed to provide comprehensive protection against unauthorized drones, ensuring the safety of critical infrastructure and the public."

Manu Srivastava, Chief Revenue Officer of WhiteFox, added, "The implementation of our DroneFox NS system in South Asia is a testament to our global reach and the effectiveness of our solutions. We are committed to customizing and integrating our technology to meet the specific needs of our clients, ensuring enhanced drone detection and protection for vital installations and events."

WhiteFox will be providing a customized DroneFox NS system, an RF-based technology adept in detecting, locating, identifying, and classifying drones. The system offers several safe drone mitigation options and is designed for increased capability, durability, and mobility. This contract will focus on:

- Customization and integration of DroneFox NS systems for advanced drone detection and protection.

- Efficient integration of customized DroneFox NS to achieve enhanced drone detection within the specified area.

- Ensuring seamless data storage and management capabilities.

DroneFox NS has been proven ideal for protecting Critical Infrastructure, Airports, Border Surveillance, Prisons, and provides base and force protection. Its versatility and effectiveness make it a crucial asset in countering the growing drone threats.

FORTEM TECHNOLOGIES PARTNERS WITH INTRA DEFENSE TECHNOLOGIES TO OFFER ADVANCED C-UAS SOLUTIONS IN SAUDI ARABIA

Fortem Technologies, the leader in airspace intelligence, security, and defense for detecting and defeating dangerous drones announced its partnership with INTRA Defense Technology, a Saudi company leading in development, design, and manufacturing of Autonomous Systems and Advance Technologies. Together, the companies will leverage their technology and expertise to engineer, manufacture, and market advanced solutions against UAS threats in Saudi Arabia. Saudi Arabia is a strategically important market for Fortem Technologies. With the threat of drones increasing, this partnership will allow both companies to scale the building of new products and solutions and integration of existing technology into evolving C-UAS market offerings.

"Fortem Technologies has been looking for ways to venture beyond its current markets, and the Kingdom of Saudi Arabia is focusing on expanding its production of air defense systems,» commented Jon Gruen, CEO of Fortem Technologies. "We are honored to have a strong local partner like INTRA Defense Technologies join forces with Fortem to produce and distribute cutting-edge C-UAS solutions in Saudi Arabia."

Fortem offers leading C-UAS technology, providing both hardware and software solutions for entities looking to detect, track, identify and defeat/mitigate potential threats.

"Recognizing the escalating UAV threats in the region, and drawing upon our expertise in developing, manufacturing, and maintaining UAV systems, we're partnering with Fortem Technologies, renowned for their specialized Counter-Unmanned Aircraft Systems solutions. Together, we blend our UAV knowledge with their C-UAS proficiency to fortify our region's defenses comprehensively." commented Dr. Hamad Alfouzan, CEO of INTRA Defense Technologies.

INTRA Defense Technologies is a SAUDI company, leading in development, design, and manufacturing Autonomous Systems and Advance Technologies. INTRA provide advanced technological solutions that cater to diverse sectors.

UNIFLY'S NEXTGEN UTM SYSTEM UPGRADES THE ANTWERP-BRUGES PORT AREA TOGETHER WITH SKEYDRONE

Unifly and SkeyDrone proudly announce a significant upgrade to the Port of Antwerp-Bruges' (PoAB) Unmanned Aerial System Traffic Management (UTM), DronePortal, a cutting-edge UTM application developed by Unifly. This upgrade enhances the efficiency of drone operations in the complex Port of Antwerp's airspace and supports the expanded use of drone technology. Additionally, the upgraded services are now extended to include the Port of Bruges. This development is a crucial step in advancing the PoAB airspace towards U-space readiness.

Operational in the Antwerp Port area since mid-March 2021 and has processed over 5,000 flight authorizations, the PoAB DronePortal upgrade plays a pivotal role in the evolving U-space landscape. The latest improvements include optimized automated approvals, enhanced integration support with drone operations, and User Interface (UI)/User Experience (UX) enhancements, all based on the most recent Unifly product version.

The Port of Antwerp-Bruges is expected to become the first official U-space airspace in Europe, marking a significant milestone in uncrewed aerial operations. The Port of Antwerp-Bruges has become a hub for drone activities, hosting the highest volume of drone flights in Belgium. Beyond the D-Hive project that facilitates scalable Beyond Visual Line of Sight

(BVLOS) drone flights, numerous drone operators fly within the same airspace for various purposes, further solidifying the port's status as a key player in the drone ecosystem.

Erwin Verstraelen, Chief Digital Information & Innovation Officer, Port of Antwerp-Bruges, states that "Embracing innovation is at the heart of our strategy, and this partnership with SkeyDrone and Unifly reaffirms our commitment to fostering a smart, connected, and future-ready port. Together, we're shaping a new frontier in uncrewed aerial operations".

Andres Van Swalm, CEO of Unifly, commented, " We are excited about the growing number of drone operators gearing up for autonomous flights. The recent system upgrade, extending support to the Port of Bruges and advancing PoAB towards U-Space readiness, is a significant milestone. The PoAB stands as a global exemplar of how drones can be seamlessly integrated into non-segregated airspace."

According to Hendrik-Jan Van Der Gucht, Managing Director of SkeyDrone, "With this upgrade of the DronePortal, SkeyDrone is not only enhancing the user experience for drone operators but is also taking the next step towards U-space readiness, ensuring safe and seamless integration of unmanned aerial vehicles in the European airspace".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ProStar and Topcon Announce Technology Integration with PointMan

ProStar Holdings Inc., a world leader in Precision Mapping Solutions, is pleased to announce a technology integration with Topcon Corp. The integration combines ProStar's utility mapping software, PointMan®, and Topcon's fixed and portable GNSS antennas. The technology integration provides Topcon users with a seamless and easy to use utility data collection solution to capture, record, and display the precise location of critical underground infrastructure anywhere in the world.

"It's imperative from a strategic business relationship standpoint to forge collaborative partnerships with best-in-class solution providers, fostering symbiotic relationships across the situational awareness sector," said Scott Wielt, Senior Product Manager, Topcon. "PointMan stands out unequivocally as a premier utility mapping solution that enhances our extensive suite of asset mapping and utility data collection solutions."

The technology integration of PointMan with Topcon GNSS receivers means that PointMan now supports Topcon Hiper VR highly versatile GNSS receivers for mobile devices running the Google Android operating system. The seamless integration empowers Topcon users with PointMan's unparalleled precision in subsurface utility mapping.

The completion of the integration with Topcon marks a major milestone for ProStar as it means PointMan is now integrated into every major utility detection hardware equipment manufacturer and is consistent with the Company's strategy is to maximize the probability of market share dominance. ProStar's has now established strong strategic business partnerships with the world's leading equipment manufacturers of cable and pipe locate devices, ground penetrating radar, and GPS/GNSS receivers. These partnerships represent indirect global sales distribution channels in a variety of industry sectors. Further, it allows clients to leverage PointMan with legacy equipment with no additional investment required in hardware.

"We're thrilled about the collaboration with Topcon and their dynamic product development team," affirmed Page Tucker, CEO of ProStar. "This partnership significantly enriches our worldwide distribution network, leveraging Topcon's esteemed reputation as a global frontrunner in delivering utility data collection solutions, precision GNSS receivers and machine control systems. By creating business partnerships with all of the major hardware manufacturers in the utility detection space including electromagnetic utility locate devices, ground penetrating radar, as well as GPS/GNSS receivers, ProStar materially has positioned itself to dominate market share for utility mapping over the coming years."

AGEAGLE ANNOUNCES SALE OF ALTUM-PT MULTISPECTRAL CAMERAS TO DEPARTMENT OF DEFENSE CUSTOMER THROUGH ADS, INC.

AgEagle Aerial Systems Inc. an industry-leading provider of full stack flight hardware, sensors and software for commercial and government use has been awarded a contract from ADS, Inc., a leading solutions provider to the Department of Defense ("DOD"), for the purchase of Altum-PT™ multispectral cameras from AgEagle for use by the DOD customer.

The Altum-PT is among AgEagle's most pioneering drone sensor innovations, which seamlessly integrates an ultra-high resolution panchromatic imagery, a built-in 320X256 radiometric thermal imager and five discrete spectral bands to produce synchronized outputs such as RGB color, crop vigor, heat maps and high resolution panchromatic in just one flight.

The Altum-PT Multispectral Imagery (MSI) sensor will be employed by multiple Military Occupational Specialties (MOS's) to fill voids in geospatial information and aid in categorizing military aspects of the terrain.

Bill Irby, AgEagle President, commented, "We are very proud to support ADS in its efforts to supply the Department of Defense customer with highly advanced aerial imagery solutions capable of meeting its mission critical needs and requirements."

SIMACTIVE USED FOR 3D MAPPING FROM OBLIQUE CAMERAS

SimActive Inc. announces the use of its Correlator3D™ product with multi-camera drone payloads for improved 3D mapping. The software allows users to import oblique and nadir camera configurations to develop better 3D mapping products.

Multi-camera payloads on drones, such as the Oblique D2M from Quantum-Systems, are enabling drone mappers to texturize the sides of buildings and infrastructures. Correlator3D's project setup and aerial triangulation modules take the guesswork out of importing these complex multi-camera configurations. SimActive is proven to process large datasets rapidly, and this is key when capturing multi-camera data for better 3D maps.

"Our customers are capturing 5 times the number of images as would be acquired with a traditional single camera setup, which requires robust processing software", said Robert Leake, Head of commercial sales at Quantum-Systems. "SimActive is proven to process large datasets rapidly, and this is key when capturing multi-camera data for better 3D maps."

Stonex launches hybrid mobile mapping solution

Stonex has launched the X70GO SLAM laser scanner designed for fast and efficient large-area surveys. It combines mobile scanning with a stationary mode to scan with high resolution to enhance overall surveying capabilities.

X70GO is a real-time 3D model reconstruction device that integrates an inertial navigation module, high-performance computer and storage system. It is equipped with a 360° rotating head, which, combined with the SLAM algorithm, can generate high-precision point cloud data. The built-in 512GB memory disk stores survey results and the dismountable handle has a 1.5-hour battery life.

A 12MP RGB camera offers texture information, while a visual camera aims to enhance the real-time preview with the GOapp. Mapping results can be generated immediately inside the scanner. Users can then color the points and improve their accuracy during post-processing with GOpost software.

The system comes with a hybrid scanning capability. The X-Whizz mode combines the advantages of SLAM mode with the resolution of a static scan, which eliminates the need for multiple scan stations. Users can move around the scene to collect the entire 3D point cloud without time-consuming cloud-to-cloud alignment.

The technology incorporated in the new scanner is designed to provide extended range, a higher number of points per second and advanced onboard processing algorithms. The SLAM laser scanner is well-suited for challenging and demanding environments and can be used in a variety of applications, including BIM, industrial sites, real estate, heritage preservation, tunnels and mining.

Users can add an RTK module to set a point cloud in a global coordinate system. This can support the addition of GNSS information to lidar and inertial measurement unit (IMU) in the SLAM algorithm. In situations with limited GPS connectivity – such as indoors or in challenging environments – the system will rely on lidar and the IMU for positioning purposes.

AERODYNE GROUP AND DRONEDASH TECHNOLOGIES COLLABORATE TO INTRODUCE CROSS-BORDER DRONE DELIVERY SERVICES BETWEEN MALAYSIA AND SINGAPORE

Aerodyne Group (Aerodyne), a global leader in drone-based enterprise solutions provider headquartered in Malaysia inked an agreement with DroneDash Technologies (DroneDash), a leading air mobility company headquartered in Singapore. This initiative is set to introduce cross-border drone delivery services between Malaysia and Singapore, leveraging the specialised technologies of both entities to boost logistics efficiency across the two countries and advance the region's delivery and supply chain capabilities.

In aligning with the agreement, Aerodyne and DroneDash will navigate the regulatory framework, securing all necessary permits to pioneer shore-to-shore drone operations along the Malaysia & Singapore corridor. This venture is supported by the latest in unmanned sea and air technologies, heralding a new era of logistical efficiency.

Central to the operation is a cutting-edge navigation system, crafted from satellite communications with expansive dual city 5G roaming, to ensure drones safely navigate through congested maritime and aerial paths, significantly boosting operational safety and reliability.The initiative will initially focus on establishing delivery routes to Johor Bahru and Iskandar Malaysia, strategically chosen for their proximity to Singapore. This phase sets the foundation for future expansion throughout Malaysia, with commercial operations anticipated to start in the third quarter of 2024.

> "With the formation of the recent Johor-Singapore Special Economic Zone (JS-SEZ), we are proud to play a part in strengthening economic connectivity between the two regions," said Mudzakkir Hatta, CEO of Aerodyne (Malaysia's operation). "We look forward to venturing beyond the state of Johor with increased shipments to other parts of Malaysia, forging a longstanding trade cooperation with the two partnering nations."

The deployment of drones, capable of carrying up to 30 kilograms and achieving speeds of 150 km/h within a four-hour flight span, promises secure and efficient deliveries.

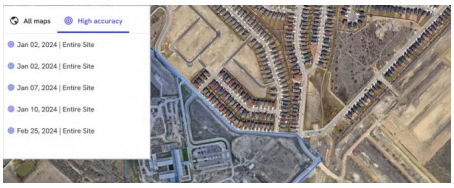
"Organisations in the logistics, cargo delivery and freight services sector stand to gain a double6digit percentage improvement in overall productivity and cost. Drone deliveries are also beneficial for the environment with emissions and carbon footprint being reduced by up to 100 per cent and 80 per cent respectively," said Paul Yam, CEO of DroneDash. "Drone deliveries are transforming the speed and reach of logistics operations, and they can help reach remote areas where traditional air and sea freight are unable to access. They also add to the creation of a revitalized and vibrant logistic sector through job creation in operating and maintaining the drones." Designed for critical deliveries such as urgent documents, high-value electronics, medical supplies, and perishable foods, this service promises to redefine logistics between Malaysia and Singapore. With real-time tracking, advanced security protocols including 256-bit encryption, and blockchain technology for logistical oversight, this initiative establishes a new benchmark for secure, efficient cross-border logistics.

TRIMBLE AND DRONEDEPLOY INTRODUCE PREMIER POSITIONING ACCURACY AND STREAMLINED WORKFLOW FOR REALITY CAPTURE FROM DRONES

Trimble announced the integration of the Trimble Applanix POSPac Cloud post-processed kinematic (PPK) GNSS positioning service, featuring CenterPoint RTX, with the drone mapping and data collection capabilities of DroneDeploy's reality capture platform. With the Trimble cloud positioning service, DroneDeploy customers can expect centimeter-level accuracy and an automated, streamlined workflow when performing reality capture with drones.

To achieve centimeter-level accuracy with its high-accuracy offering, DroneDeploy worked with Trimble and its Applanix POSPac Cloud PPK service using Trimble post-processed CenterPoint RTX. The easy-to-use cloud API enables the post-processing of GNSS kinematic positions based on dual-frequency observables logged by the drone and CenterPoint RTX.

The Trimble RTX family of corrections services offers users real-time and post-processed centimeter-



level accuracy almost anywhere in the world. Delivering corrections via satellite or cellular/IP, Trimble RTX removes the need for base stations and simplifies workflows for drone operators. With no onsite setup, a fixed global datum and reduced time in the field, the Applanix POSPac Cloud PPK solution with RTX greatly increases accuracy and workflow efficiency.

"This collaboration with DroneDeploy is leading the trend for PPK-enabled drone data capture without base stations, enabled by Trimble RTX," said Joe Hutton, director of inertial technology and airborne business at Trimble. "This evolution will expand the possibilities for operators who can now more quickly and more consistently deliver highly accurate maps, enabling drones to be used in precision geospatial applications."

The enhanced capabilities afforded to DroneDeploy customers using Applanix POSPac Cloud PPK and RTX will elevate the accuracy of 3D reality capture models. This opens new opportunities for drone operators across various industries and applications, including construction, topography and temporal analysis.

"DroneDeploy is delivering high accuracy by default. The collaboration with Trimble allows us to provide centimeter-level accurate data collection as simple as drag and drop," said Michael Winn, CEO and co-founder of DroneDeploy. "In testing, we've seen large construction, energy and agriculture customers get high-accuracy drone maps simply and reliably to gain insights about the projects and assets they care about, while operating with more confidence."

INTRODUCING GEOSPATIAL MANAGER BY MAPTEK

We have introduced our latest innovation—Maptek GeoSpatial Manager—at Geoweek 2024 in Denver. This groundbreaking solution brings simplicity and efficiency to your workflow, revolutionising the way mining and civil engineering projects handle data from laser scans and drones.

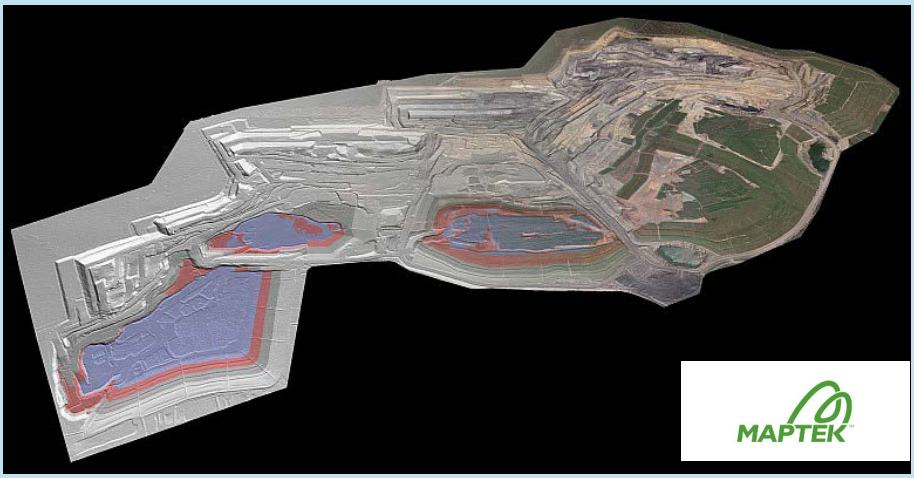
GeoSpatial Manager effortlessly connects users with real-time updates for surveyed surfaces. Its smart visualisation tools and user-friendly interface redefine how you interact with as-built surfaces, enabling seamless collaboration and accessibility for all project teams within an organisation through a convenient web interface.

GeoSpatial Manager dynamically updates surfaces, allowing users to manage, visualise, and download any as-built surface at any given point in time throughout the project lifecycle.

'Customers can say goodbye to the challenges of managing vast volumes of survey data,' said Global Strategy Manager, Jason Richards.

GeoSpatial Manager automatically updates as-built surfaces when new data is imported. Centralised storage on a cloud or network server avoids uncertainty around locating survey files that may be stored in various folders on a local or server machine.

'Having the latest data at your fingertips



eliminates the risk of using outdated surfaces for critical design work.'

GeoSpatial Manager allows users to review surfaces for specified dates and times, providing clarity on an operation's current state and key historical stages.

'We see improved collaboration and understanding – GeoSpatial Manager bridges the gap between data and value,' Richards said.

Customers will be able to send surface data to other Maptek products knowing that GeoSpatial Manager provides the single source of truth for multiple systems. This interoperability harnesses the power of the Maptek ecosystem and streamlines project management. Having all team members working within the same framework enhances communication and workflow. A cost-effective single licence covers unlimited users across your organisation creating flexibility for changes in team size without licence adjustments.

GeoSpatial Manager is not just a product, it's a game-changer. Experience the future of surveyed surface management with Maptek. Embrace efficiency, collaboration and clarity like never before.

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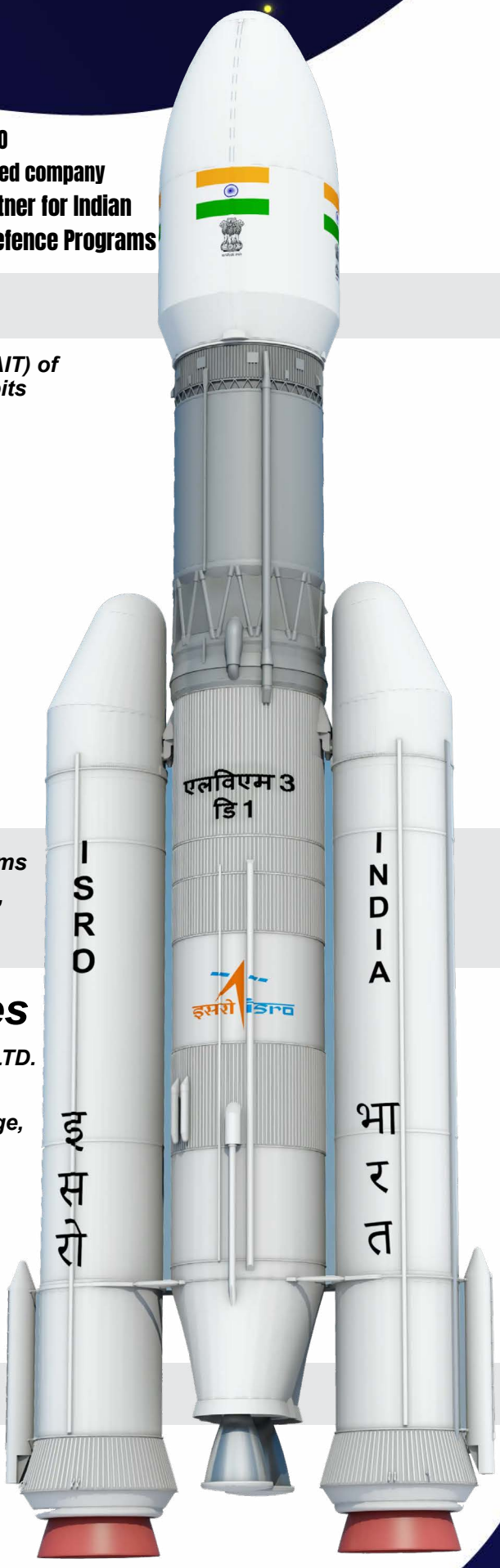

Meeting Quality & Reliability Standards for Space & Defence programs

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

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