**47 . Date: 18-01-2024Cargo - Small - General - PlatformWing Unveils New Delivery Drone with Increased Payload CapacityURL: https://www.unmannedsystemstechnology.com/2024/01/wing-unveils-new-delivery-drone-with-increased-payload-capacity/**

Wing is introducing an additional aircraft into its delivery drone fleet that will simplify and streamline larger orders.

The company currently offer the ability for customers to fulfill larger orders, beyond what fits on one aircraft. According to Wing, 70% of all US orders are delivered by one of its aircraft, while 30% are delivered by two. To better serve that 30% and further optimize its business, the company is introducing an additional aircraft to complement its existing fleet.

Wing has taken an approach to aircraft development, called an Aircraft Library, where its team works on a variety of configurations and builds on core components already used for flight-proven aircraft. When a need is identified in the market – such as a larger aircraft for larger orders – the company can adapt its design to quickly and efficiently meet that need.

According to Wing, the new aircraft is the latest example of how it is using the design principles of the Aircraft Library to optimize drone delivery. By complementing Wing’s existing fleet of commercially operational aircraft, which carry about 2.5 pounds of payload, this additional aircraft is expected to make it even easier for customers to get what they need, when they want it.

The new aircraft has the same round-trip range of 12 miles and can cruise approximately 65 miles per hour, all while carrying a standard cardboard delivery box with a payload up to five pounds.

The aircraft is being designed to work with the existing infrastructure and automation systems that support the company’s current fleet.

With the new aircraft carrying more food, medicine, and household essentials, it will enable customers in urban and suburban areas to bundle their orders better and receive them in one quick trip.

According to Wing, the company intends to work with partners and regulatory stakeholders to introduce this new aircraft in its service areas within the next 12 months.

**48 . Date: 30-01-2024ISR / ISTAR - Mini - General - PlatformZiyan Unveils Long Endurance Unmanned Helicopter at UMEX 2024URL: https://www.unmannedsystemstechnology.com/2024/01/ziyan-unveils-long-endurance-unmanned-helicopter-at-umex-2024/**

Ziyan UAS has showcased its new product, the Shadow S3 long endurance unmanned helicopter at UMEX 2024, at the Abu Dhabi National Exhibition Center.

As a next-generation smart aerial platform, the Shadow S3 has undergone a complete upgrade in both its industrial design and performance. Designed to revolutionize operational efficiency, it brings forth several innovative highlights.

The innovations include:

Lightweight design and portability enabling “single operator” control

Drawing inspiration from elements like the Dugong and Nepalese kukri knife, the Shadow S3 adopts a streamlined design with a bow-shaped fuselage near the tail, integrating a ducted tail rotor.

This design combines practicality, durability, safety and aesthetics into a single entity. To meet various flexible operational needs, the Shadow S3 utilizes high-performance carbon fiber lightweight materials, allowing for a maximum take-off weight of less than 7kg (including the tri-sensor POD and two smart batteries). The airframe features a tool-free disassembly design, reducing storage volume by up to 50%, making it portable to be easily carried in a backpack and facilitating efficient and effortless transportation during transitions.

100 minutes of ultra-long endurance for long duration patrols

Shadow S3 is equipped with a new smart battery which has key-linked power ON/OFF, battery presence detection features, one-touch battery level check, hot swap and instant plug and play. Combined with the unique millisecond-level speed and pitch adaptive control, S3 collectively maximizes the endurance up to 100 minutes enabling wider operational range, improved continuity, and higher efficiency.

Portable smart battery case

The Shadow S3 supports the configuration of a brand-new smart battery case, providing a one-stop solution for battery management including charging, storage, and transportation. It can fully charge one set of batteries in 75 minutes and can simultaneously accommodate the charging of two sets of batteries (4 pieces). The waterproof battery pack is equipped with swivel wheels and a retractable handle, making it convenient for mobile operations, while providing long-lasting endurance.

Maximum flight speed of 100km/h short transfer time

Thanks to deep integration and optimization in hardware, structure, materials, software, and algorithms, the Shadow S3 achieves a maximum flight speed of 100km/h, allowing it to quickly reach the operation site or rapidly transition. It can maintain stability even during high-speed flights.

User-friendly UIOne-key autonomous operations

Ziyan has introduced a new generation of ground control station with upgraded UI possessing virtual remote-control sticks, full-touchscreen control and a more user-friendly UI interaction. The ground station has a battery which can last up to 10 hours. Coupled with the ZiyanGCS flight software, the ground station enables autonomous operation of the unmanned aircraft and simplifies workflow. ZiyanGCS integrates route assessment function and automatic risk alert, making operations autonomous and safer.

Flight safety in complex operating environments

The Shadow S3 has a wind resistance capability of level 7, and performs impressively in crosswinds. It also adopts multiple redundant designs and is equipped with built-in RTK centimeter-level positioning and 4D millimeter-wave radar obstacle avoidance module, effectively ensuring flight safety and stability. The aircraft has an IP55 protection rating, making it resistant to rain, dust, extreme cold, and extreme heat. It can fly smoothly without any obstacles, crossing mountains and seas.

Single machine multiple functions make industry inspections smarter and more efficient

The S3 carries a high-performance tri-sensor POD, megaphone spotlight, and other mission payloads to meet the diverse operational needs in fields like law enforcement, emergency rescue, oil and gas inspections, maritime and vessel management. Additionally, it incorporates AI recognition capabilities, enabling autonomous tracking and identification of inspection targets, compensating for human visual errors and limitations, and significantly improving operational efficiency and quality. Moreover, it supports personalized development and customization of mission payloads to serve a wider range of industry users.

**49 . Date: 07-02-2024Armed ISR / ISTAR - MALE - General - PlatformSchiebel Expands Production of Long-Endurance Heavy Lift UASURL: https://www.unmannedsystemstechnology.com/2024/02/schiebel-expands-production-of-long-endurance-heavy-lift-uas/**

Schiebel is extensively increasing its capabilities in Abu Dhabi to expand the development and production of the long-endurance, heavy-lift-capable CAMCOPTER® S-300 Unmanned Air System (UAS).

The expansion of Schiebel’s facility in the UAE follows the award of a significant contract for the supply of the CAMCOPTER S-300 UAS with sophisticated sensor suites for the South Korean Navy.

In addition to being designed to deliver significant persistence, the S-300 is capable of carrying up to 250 kg of payloads.

With its impressive performance and multi-sensor capability, the new UAS is ideal for Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) missions, such as submarine detection and early threat warning of missiles, as well as resupply missions requiring heavy lift over long distances in complex terrain.

Schiebel had its major breakthrough into the global UAS market in 2005, with the UAE being the launch customer for the operationally proven and highly successful CAMCOPTER® S-100. As such, the Middle East region has always been a major focus for the Schiebel Group.

Hans Georg Schiebel, Chairman of the Schiebel Group, said; “Having been at the forefront of VTOL UAS development and delivery for the last 20 years, Schiebel continues to listen to the market needs and by adding the S-300 to our product portfolio we are filling the gap for a long-endurance, heavy-lift UAS.

“Given our successful history in the region, our Abu Dhabi location is the logical choice for executing this exciting project.”

**50 . Date: 08-03-2024ISR / ISTAR - Small - ContractTEKEVER to Strengthen Coastal Surveillance in PortugalURL: https://www.unmannedsystemstechnology.com/2024/03/tekever-to-strengthen-coastal-surveillance-in-portugal/**

TEKEVER, a leading developer of unmanned aerial systems (UAS), has secured a contract with the Portuguese National Republican Guard (GNR) to deploy its state-of-the-art UAS.

The AR3 will strengthen coastal surveillance and tackle economic and environmental crimes including unauthorised fishing and drug trafficking.

Selected through a competitive public tender process, the AR3 is equipped with an impressive 3.5-meter catapult launch system, 100km surveillance radius, and 16-hour range, to deliver impressive monitoring capabilities across the Portuguese coastline.

The GNR’s Coastal and Border Control Unit will receive comprehensive training by TEKEVER’s experienced personnel to ensure they are equipped to tackle the evolving challenges of maritime security.

The public-private collaboration underscores the trust placed in TEKEVER’s technological expertise and reflects a shared commitment to safeguarding maritime interests and protecting coastal communities.

TEKEVER CEO, Ricardo Mendes said, “We are honoured to play a central and invaluable role in strengthening Portugal’s maritime security by monitoring for threats in territorial waters. TEKEVER is trusted by civilian and military agencies across the globe due to our unrivalled technical expertise and steadfast commitment to delivering innovative solutions that enhance safety and security of our waters.”

“We continue to be a primary choice for intelligence, surveillance, and reconnaissance services, having worked with government entities such as the UK Home Office for four years, and the European Maritime Safety Agency for five.”

**51 . Date: 05-04-2024Research - Tactical - General - Engine / PowersourceSupersonic Drone Hits Top Speed of Mach 0.9 in Test FlightURL: https://www.unmannedsystemstechnology.com/2024/04/supersonic-drone-hits-top-speed-of-mach-0-9-in-test-flight/**

The first flight of Venus Aerospace’s supersonic flight test drone has been completed, dropped at an altitude of 12,000ft.

The eight foot, 300lb drone accelerated to a top speed of Mach 0.9, flying for 10 miles.

It was powered by a hydrogen peroxide monopropellant engine at 80% thrust in order to not exceed Mach 1.

The test successfully demonstrated flight controls, stability, one leg of the ultimate Rotating Detonation Rocket Engine (RDRE) propulsion system, telemetry, ground operations, and air launch.

“Using an air-launched platform and a rocket-with-wing configuration allows us to cheaply and quickly get to the minimum viable test of our RDRE as a hypersonic engine. The team executed with professionalism and has a wealth of data to anchor and tweak for the next flight,” said CTO & Co-Founder Andrew Duggleby.

“This is how you do hard things: one bite at a time. Up next is RDRE flight, and ultimately hypersonic flight, proving that the RDRE is the engine that unlocks the hypersonic economy,” added CEO & Co-Founder Sarah “Sassie” Duggleby.

**52 . Date: 30-05-2024Armed ISR / ISTAR - MALE - General - PlatformFlight Trials for VTOL Tail-Sitter UASURL: https://www.unmannedsystemstechnology.com/2024/05/flight-trials-for-vtol-tail-sitter-uas/**

Sikorsky, a Lockheed Martin company, is carrying out flight tests to mature the control laws and aerodynamics of a novel vertical takeoff and landing uncrewed aerial system (VTOL / UAS).

The flight tests aim to prove the efficiency and scalability of a twin proprotor ‘rotor blown wing’ configuration, designed to sit on its tail to take-off and land like a helicopter, and transition easily to horizontal forward flight.

The configuration has been engineered for long-endurance missions, such as intelligence, surveillance, reconnaissance (ISR) and targeting.

The term ‘rotor blown wing’ refers to the constant airflow from the proprotor wash across the wing. Sikorsky chose the design to reduce drag on the wing in hover mode and when transitioning to forward flight, and to increase cruise efficiencies and endurance.

For the flight tests now underway, Sikorsky is flying a proof-of-concept vehicle powered by a battery. If selected to produce an air vehicle for a future ANCILLARY phase, the company plans to build a 300-pound hybrid-electric version to include a 60-pound ISR payload.

The ongoing flight tests support the ANCILLARY initiative by the Defense Advanced Research Projects Agency (DARPA). This initiative seeks to develop a Class 3 UAS VTOL X-Plane that can operate in most weather conditions from ship decks and unprepared surfaces without infrastructure. Sikorsky is among several competitors down-selected to advance UAS conceptual designs into the next development phase.

Igor Cherepinsky, director of rapid prototyping group Sikorsky Innovations, commented; “Flight tests are underway to verify our tail-sitting rotor blown wing UAS can launch and land vertically with high stability, and cruise efficiently on wing. Key enablers to flight maneuverability, and future vehicle scalability, are our MATRIX autonomy flight control system, and an articulated rotor system similar to those in traditional helicopters.”

**53 . Date: 07-05-2024ISR / ISTAR - Small - General - PlatformPerformance Enhancement to Edge Autonomy’s VXE30 Stalker UASURL: https://www.unmannedsystemstechnology.com/2024/05/performance-enhancement-to-edge-autonomys-vxe30-stalker-uas/**

The Edge Autonomy VXE30 Stalker unmanned aerial system (UAS) has received a major performance enhancement.

Through a series of subsystem upgrades, known as the “Havoc” configuration, Edge Autonomy has doubled the flight endurance and payload capacity of the base VXE30 Stalker system, closing the gap between the capabilities of small and large unmanned aerial systems.

With the flexibility and adaptability to host a wide variety of configurations, all without wasting time and budget on reconfiguring the airframe itself, the Havoc not only meets the demanding mission challenges faced by today’s uncrewed aerial systems but anticipates potential issues facing the battlefields of the future.

Joshua Stinson, Chief Growth Officer for Edge Autonomy, said; “We have been evolving the Stalker series for nearly two decades, and the VXE30 is the product of intense mission-focused innovation to meet the real needs of our customers.

“The Havoc configuration builds on years of deployed operations and direct user feedback accumulated over more than 100,000 flight hours across six continents to provide the warfighter with an unparalleled system that is ready for use on the battlefield.”

Allen Gardner, CTO of Edge Autonomy, said; “Our goal was to provide a single, highly flexible UAS that could meet the needs of a wide range of operational units, from the company level to the brigade.

“By upgrading key subsystems on the VXE30, we can provide a solution that is light and mobile enough for small forward-deployed units while also able to hit the payload capacity, range, and endurance numbers of the higher echelons – all with the field-proven, silent, VTOL configuration UAS that our customers have relied on for years.”

John Purvis, CEO of Edge Autonomy, added; “Edge Autonomy is committed to meeting the changing needs of the warfighters we support, and we are excited to see what they will accomplish with the Havoc.

“We built a system that would be easily reconfigurable, giving operators equipment to meet the growing mission demands they are facing now and in the future.”

Current VXE30 operators require no additional training in order to operate the Havoc configuration, and all user interfaces remain unchanged between the various configurations of VXE30. The system remains payload agnostic and is prepped for third party integrations through a Modular Open Systems Approach (MOSA) frequently utilized by customers to integrate new payloads and subsystems without the need for Edge Autonomy support.

**54 . Date: 21-06-2024ISR / ISTAR - Small - GeneralLightweight Tactical Drone System ReconfiguredURL: https://www.unmannedsystemstechnology.com/2024/06/lightweight-tactical-drone-system-reconfigured/**

At Eurosatory 2024, Edge Autonomy and Safran Electronics & Defense unveiled Lanner, a new configuration of the Penguin Vertical Takeoff and Landing (VTOL) Uncrewed Aircraft System (UAS).

The Lanner configuration is based on the field-proven Penguin UAS platform and has been specifically modified to meet the requirements of the SDTL (Light Tactical Drone System) program for the French armed forces.

In this configuration, the Penguin drone can address multiple missions through a simultaneous dual payload capability, including Electro-Optical/Infra-Red systems, electronic warfare (detection of radio signals or jamming for example), radar, and ammunitions. It can thus carry out land and maritime intelligence, surveillance and reconnaissance missions.

Developed and produced in Europe, the Lanner configuration establishes Safran Electronics & Defense and Edge Autonomy as a European leader in tactical UAVs. This partnership supports Safran Electronics & Defense response to the SDTL call for tenders to equip the French armed forces.

The capabilities of the two companies offer a unique combination of proven experience and technological innovation for a complete range of tactical UAS capable of meeting the full spectrum of operational needs of the French Ministry of Armed Forces and partner nations.

Josh Stinson, Chief Growth Officer for Edge Autonomy, said; “We are excited to partner with Safran Electronics & Defense to offer a world-class UAS to the French armed forces.

“The Lanner configuration capitalizes on the field-proven capabilities of Edge Autonomy’s Penguin UAS along with Safran’s system expertise in optronics, PNT (position, navigation, and timing), UAV airworthiness, and mission systems.”

Alexandre Ziegler, Executive VP, Defense Global Business Unit of Safran Electronics & Defense, added; “Safran Electronics & Defense worked with Edge Autonomy to customize the Penguin drone with specific enhancements meeting the unique and demanding needs of the Ministry of the Armed Forces. Penguin is a high-performance drone, combat-proven with tens of thousands of flight hours under a wide variety of conditions.”

**55 . Date: 21-06-2024ISR / ISTAR - Small - General - Engine / PowersourceSuccessful Flight Testing for Heavy Fuel VTOL UASURL: https://www.unmannedsystemstechnology.com/2024/06/successful-flight-testing-for-heavy-fuel-vtol-uas/**

AeroVironment (AV) has successfully demonstrated its JUMP® 20 uncrewed aircraft system (UAS) with a heavy fuel engine.

The higher horsepower and lower fuel burn rate provided by the heavy fuel engine expands the capabilities of AV’s proven JUMP 20 platform. Integration of the heavy fuel engine further establishes the JUMP 20 as a multi-domain multi-mission UAS capable of autonomously operating in challenging conditions.

AV’s JUMP 20 is a vertical take-off and landing (VTOL), fixed-wing UAS with 13+ hours of endurance and an operational range of 185 km (115 mi). The 15 hp engine is purpose-built for uncrewed systems and capable of running on multiple fuels and gasoline.

With over 15 hp output, the high endurance, minimal fuel burn engine also requires less frequent maintenance cycles and overhauls. It is lighter than traditional gasoline engines and has an auto-start capability that delivers customers a simplified UAS requiring less operator engagement to operate and sustain.

Shane Hastings, AV’s vice president and general manager of Medium UAS, said; “The addition of a heavy fuel engine to the JUMP 20 provides global forces an unparalleled VTOL solution with a longer operational lifespan, greater performance and efficient fuel consumption.

“It is well suited for land and sea domains where available fuel sources could be dictated by the respective logistics support plan. Heavy fuel compatibility continues to be a strong requirement for many customers, and we’ve made great strides in making our proven JUMP 20 fully compliant with these requirements.”

He continued; “With successful test flights under our belt, AV is excited to continue system testing and further optimizing JUMP 20 with heavy fuel capabilities. This milestone further demonstrates AV’s ability to deliver highly mature and reliable systems capable of working in the most extreme environmental conditions.”

**56 . Date: 10-06-2024ISR / ISTAR - Small - General - PlatformUltra-Long Endurance Drone Flies Over 1,000 MilesURL: https://www.unmannedsystemstechnology.com/2024/06/ultra-long-endurance-drone-flies-over-1000-miles/**

Platform Aerospace’s ultra-long endurance UAS, Vanilla, has successfully completed an Arctic flight campaign for a DoD customer. Vanilla flew two flights, totaling more than 65 hours in the Arctic Circle, including operations north of the 78th parallel.

In January 2024, Vanilla flew a mission for NASA to the inland sheet of Greenland, carrying a sensor provided by the Center for Remote Sensing of Ice Sheets (CReSIS).

In September 2023, the Vanilla Ultra-Long Endurance UAS carried a metrological sensor suite to measure environmental conditions in the Arctic and to validate Vanilla’s aircraft icing detection systems and mitigation strategy.

This mission was operated from Deadhorse, Alaska, with Vanilla flying over 500 miles toward the North Pole and back, for a round-trip of over 1,000 miles in 17 hours. Afterward, Vanilla continued data collection, using multiple 200-mile laps, for another 22 hours.

This was a single un-refueled flight of 39 total hours. A second flight of 26 hours increased Vanilla’s flight time to 65 hours operating north of the 70th parallel.

During the flights, cloud and icing warnings were provided in real-time to the UAS operators. The Atmospheric Sensing and Prediction Sensor (ASAPS) from PEMDAS Technologies & Innovation, takes high-quality measurements of pressure, temperature, and humidity to provide icing potential to our UAS operators.

This system was invaluable for both the science objectives and for giving operators confidence in the actual conditions around the aircraft.

Takeoffs were performed under Visual Flight Rules (VFR) with a chase escort to warning area airspace. On both flights, conditions at the airfield unexpectedly deteriorated to Instrument Meteorological Conditions (IMC).

In one instance, Vanilla stayed on mission for an additional 22 hours awaiting better weather before filing an Instrument Flight Rules (IFR) flight plan for the area navigation (RNAV) approach with the assistance of the FAA.

This event illustrates the power of Vanilla’s Ultra-Long Endurance to mitigate bad weather and demonstrated integration with the processes and procedures of the National Airspace System (NAS).

Vanilla is an Office of the Undersecretary of Defense for Research and Engineering (OUSD(R&E)) Rapid Defense Experimentation Reserve (RDER) Program.

Dr. Dan Edwards, Chief Technology Officer of Platform Aerospace, said; “Vanilla’s performance is ideal for environmental monitoring missions, such as this demonstration of flying multiple sensors to the polar ice cap.”

**57 . Date: 23-07-2024Cargo - Tactical - GeneralAutonomous Cargo Drone Service Trialled in OrkneyURL: https://www.unmannedsystemstechnology.com/2024/07/autonomous-cargo-drone-service-trialled-in-orkney/**

Windracers, the maker of low-cost self-flying cargo aircraft ULTRA™, is trialling a cargo drone delivery service in Orkney which could bring faster, more convenient and more reliable delivery services to residents and businesses on the remote islands.

Windracers is operating a scheduled service over a period of 90 days, with its ULTRA self-flying cargo aircraft – a robust, twin-engine fixed-wing aircraft with a 10-metre wingspan – moving autonomously between the islands of Eday, Westray and North Ronaldsay in Orkney a number of times each week.

The company expects to complete 2,000 kilometres of autonomous flights over the course of the trial and will integrate its flight schedule with the existing logistics network including Streamline Shipping Group, which handles over 90% of last-mile deliveries to the Scottish islands of Orkney and Shetland.

The trial is part of the Sustainable Aviation Test Environment (SATE) programme and is part-funded by the UK Research and Innovation (UKRI) Future Flight Challenge, delivered by Innovate UK and the Economic and Social Research Council. Its aim is to demonstrate readiness to operate a commercial drone service that can transport meaningful payloads reliably, cost-effectively and sustainably for the benefit of communities in remote locations, such as the Highlands and Islands.

Windracers’ ULTRA will operate in segregated airspace, with the Civil Aviation Authority (CAA) allowing it to fly autonomously within a number of temporary danger areas (TDAs) for the 90-day period. Longer-term, the company is looking towards non-segregated operations with the set-up of Transponder Mandatory Zones (TMZs), which would enable the system to see, and be seen by, other air traffic.

Simon Muderack, CEO at Windracers, said; “We are delighted to have secured regulatory approval to operate our low-cost platform in UK airspace for this scheduled service trial. It is testament to our robust technology, processes and training procedures.

“We have worked extensively with the CAA and we see a clear pathway to operating a full commercial service in Orkney.”

Will Rodger, service manager at Streamline Shipping Group, commented; “As part of our path to net zero, we are running a number of trials including drone-based deliveries, unmanned seafaring vessels, and hydrogen HGVs. Drones present an opportunity to make more regular deliveries to and collections of locally-produced goods from the island communities we have supported for over 40 years – potentially increasing twice-weekly routes to become daily, which would have a massive impact on residents and businesses.”

Jayne Golding, SATE Manager at HITRANS, added; “We’re delighted to reach this milestone for Windracers to trial the Ultra in the Highlands and Islands of Scotland. These trials are essential for the programme and for our technical partners, demonstrating capabilities and indeed the opportunities. We look forward to engaging the community and wider stakeholders in the activity.”

Windracers’ ULTRA – which can carry 100kg up to 1000km – is able to take off, fly and land safely without the need of a remote pilot thanks to its proprietary Masterless™ autopilot technology. Its systems are dual or triple redundant to ensure it can fly safely in the event of a hardware or software failure.

As well as flying across the Orkney Isles during July and August, Windracers is planning a further trial later in the year that will see it operating between Orkney and the islands of Shetland. Streamline Shipping Group, which was also the first delivery firm to introduce EVs to its fleet on Orkney, will again provide insight into how the technology can improve deliveries to and from the islands.

Windracers is exhibiting its ULTRA self-flying aircraft at Farnborough International Airshow, taking place from July 22-26, 2024.

**58 . Date: 02-07-2024PartnershipDual-Use Autonomous Transwing® UAS Expands to UK, KSA & UAEURL: https://www.unmannedsystemstechnology.com/2024/07/dual-use-autonomous-transwing-uas-expands-to-uk-ksa-uae/**

PteroDynamics Inc., and Overwatch Group have signed the first distribution agreement and announced a long-term strategic relationship to bring the pioneering dual-use autonomous Transwing® (VTOL) to certain territories outside the United States.

Overwatch will be the exclusive sales representative of the Transwing® unmanned aerial systems (UAS) aircraft on behalf of PteroDynamics within the United Kingdom (UK) for all non-commercial sales, and in the United Arab Emirates (UAE) and the Kingdom of Saudi Arabia (KSA) for all prospective commercial and defence sales. Overwatch has also made a strategic investment in PteroDynamics.

As the first distributor for this technology, Overwatch will help expand the employment of the Transwing® aircraft platform outside the United States, starting in the UK, UAE, and KSA. Overwatch will bring its engineering expertise in unmanned systems and payloads to satisfy the requirements of potential customers in these territories.

PteroDynamics’ Transwing® is a revolutionary VTOL aircraft system that overcomes the limitations inherent in other VTOL designs by marrying the speed, range, and endurance of fixed-wing aircraft with superior VTOL performance in an efficient, highly automated platform.

The aircraft folds its wings to transition seamlessly between vertical and winged horizontal flight, requiring no additional launch and recovery infrastructure, and occupying a minimal footprint, making it immediately ready for VTOL operations out of the box.

These unique performance characteristics provide defense and commercial operators with a cost-effective, autonomous alternative for critical logistics resupply and other missions to remote locations without runways, which are currently undertaken by crewed aircraft, boats, or other less practical means.

Prototypes of the Transwing® are currently under assessment by the U.S. Naval Air Warfare Center Aircraft Division (NAVAIR NAWCAD) for the Blue Water Maritime Logistics UAS (BWUAS) program for automated long-range maritime resupply missions.

Automating maritime logistics and resupply also represents a significant opportunity for commercial operators. Unplanned downtime of offshore oil and gas production results in average losses of U.S. $49M per year per producer, and nearly 100,000 commercial sea-going vessels of more than 100 gross tons make 4.4 million ports of call yearly, each time requiring deliveries prior to coming to port, which are costly and difficult to schedule.

Matthew Graczyk, CEO at PteroDynamics said, “PteroDynamics’ ability to build successful working strategic relationships with leaders in our industry enables us to accelerate innovation and build the solutions that solve the critical unmet needs of our customers.

“Not only does Overwatch have deep domain experience in avionics and aero-mechanical engineering, but their ties with commercial and defence customers in the UK, KSA, and UAE will prove to be a game-changing advantage for both companies. We are excited to work closely with Overwatch and look forward to growing this important strategic relationship.”

Drew Michael, CEO at Overwatch Group added “We are extremely proud to have secured our long-term strategic relationship with PteroDynamics. Both companies are dynamic engineering enterprises that design and manufacture unique, patented technology from the ground up. Our R&D of cutting-edge payload technologies continues to gather pace as we develop our next generation of drones, and we now wish to extend our expertise into wider markets. Having assessed the market, the Transwing® stood out as transformational dual-use technology, and the whole of Overwatch is excited by how we will enhance it.”

**59 . Date: 05-07-2024ISR / ISTAR - Small - ContractUnmanned Helicopters Supplied for Bulgarian Border ProtectionURL: https://www.unmannedsystemstechnology.com/2024/07/unmanned-helicopters-supplied-for-bulgarian-border-protection/**

A manufacturer of small tactical helicopter unmanned aerial vehicles (UAVs), Alpha Unmanned Systems has supplied its Alpha A900 helicopters for the Bulgarian Border Police.

As part of the agreement, the 200-ton ship “Balchik” of the Border Police Directorate has now been fully equipped with the next-gen Alpha A900 helicopter UAVs.

The Alpha A900 helicopters are set to increase the Bulgarian Border Police’s capabilities for border surveillance, tracking of suspicious objects, and maritime space surveys. This will support the prevention of potential illegal activities and assist with rescue operations.

The A900s are designed to operate in high sea states and are weatherproof in wind and rain. The helicopters can take off and land directly from a vessel, supporting maritime operations and surveillance.

When flying low, the A900s have been designed to be visible for warning purposes. When flying high, however, they remain hidden.

This upgrade is part of a larger European project under the Internal Security Fund, valued at over EUR 35 million. The vessel is already involved in collaborative operations with the European Border and Coast Guard Agency, Frontex.

**60 . Date: 21-08-2024ISR / ISTAR - Small - GeneralLong-Endurance UAVs Set to Enhance Defense CapabilitiesURL: https://www.unmannedsystemstechnology.com/2024/08/long-endurance-uavs-set-to-enhance-defense-capabilities/**

Astra Systems is collaborating with Adelanto Group Inc. (AGI) and Trident Aerospace to deliver innovative unmanned systems for defense applications.

As part of the joint venture, Astra Systems will offer the BE-45, a Group 3 unmanned aerial vehicle (UAV) with a 12-hour endurance and 120 km operational radius. The company will also provide the BE-50 (ASU-50), an enhanced version boasting a 14-hour flight endurance and larger payload capacity.

The Astra Systems product lineup also includes the Havoc attack UAS, the Ninja free-falling guided munition, and the Spear loitering munition, each designed to meet specific mission requirements with precision and reliability.

Trident Aerospace will bring its expertise in UAS manufacturing and AI development. This expertise will be supported by a partnership with Neuralio, with the company’s advanced AI technologies set to be integrated into Astra’s systems. Neuralio technology will enhance autonomous operations and decision-making capabilities, providing efficiency and effectiveness in mission-critical tasks.

AGI’s involvement provides Astra Systems with significant advantages through its 8(a) designation, enabling the company to access unique government opportunities and benefits. This status allows Astra to conduct operations more effectively in the defense sector, leveraging AGI’s experience as a commercial conduit to drive growth.

By harnessing the combined strengths of advanced UAS technology and cutting-edge AI, Astra aims to provide innovative and reliable solutions to meet modern defense challenges.

Todd Van Dahlen, CEO of Astra Systems, commented, “We are thrilled to launch Astra Systems and bring together the strengths of Adelanto Group Inc. and Trident Aerospace. This joint venture positions us to deliver innovative, reliable, and cost-effective defense solutions that meet the evolving needs of our clients. With our comprehensive range of UAS and munitions, combined with advanced AI capabilities, we are set to revolutionize the defense industry.”

**61 . Date: 20-09-2024General - Engine / PowersourceInnovative Pulsejet Engines for UAVsURL: https://www.unmannedsystemstechnology.com/2024/09/innovative-pulsejet-engines-for-uavs/**

Wave Engine Corp. is a developer of pulsejet engines for unmanned aerial vehicles (UAV), designed to provide the industry with reliable jet propulsion at previously unattainable economy and scale.

Unmanned Systems Technology is extremely proud to shine a spotlight on Wave Engine’s technologies in their position as a continued supplier partner on UST, and we will continue to highlight their unique solutions and capabilities across our channels.

Wave Engine’s Silver supplier profile, which was written and built by our team in collaboration with the company when they came on board, showcases their flight-proven drone propulsion systems, which are highly cost-effective and mass-producible with a thrust-specific fuel consumption that is competitive with turbine engines.

Read on to find out more:

Wave Engine’s technology utilizes pressure waves instead of rotating machinery, resulting in a much simpler and rapidly-producible design with no moving parts and extreme tolerance to debris ingestion and damage. These engines take advantage of the compressible nature of air to generate thrust for high-speed flight, and feature a unique combustion cycle:

• A fuel-air mixture is ignited in the combustion chamber.

• The temperature and pressure of the gasses increases.

• Hot combustion products are expelled from both ends of the tube, creating usable thrust.

• The inertia of the high-speed gas jets creates a partial vacuum inside the tube.

• Fresh air is sucked into the engine to fill this vacuum, more fuel is injected, and the cycle repeats.

This methodology results in numerous advantages for high-speed aircraft propulsion, including no blending requirements, fuel efficiency levels that are comparable to turbine engines, and a unique and proven mid-air starting and restarting capability. In addition to a wide range of commercially-available fuels, wave engines can also be run on biofuels such as bioethanol E85, making them ideal for decarbonization and sustainability initiatives.

The company’s launch product, the J-1 engine, is designed for high-speed UAVs with gross weights of up to 200 lbs. It is provided as a complete package with a fuel supply system and digital ECU (Engine Control Unit) with PWM inputs.

Delivering thrust levels of up to 53 lbf (236N), it is run on gasoline as standard with optional E85 bioethanol or Jet-A/JP-8 heavy fuel capabilities, and provides all the simplicity and operational advantages of Wave Engine’s innovative technology.

In addition to COTS products, Wave Engine also offers a comprehensive range of services to support your high-speed UAV propulsion requirements, including engine and fuel system development, laboratory and flight testing, and vehicle integration.

The company’s engineering team boasts decades of experience in aviation and propulsion technologies, and also maintains cutting-edge facilities with sophisticated in-house testing capabilities, including a wind tunnel and testbed aircraft.

To find out more about Wave Engine Corp. and their pulsejet engine technology for UAVs, please visit their profile page: https://www.unmannedsystemstechnology.com/company/wave-engine-corporation/

**62 . Date: 22-10-2024PartnershipExclusive Distribution Agreement Brings Transwing VTOL UAS to JapanURL: https://www.unmannedsystemstechnology.com/2024/10/exclusive-distribution-agreement-brings-transwing-vtol-uas-to-japan/**

PteroDynamics Inc. and Cornes Technologies Limited have formed a strategic distribution agreement to bring PteroDynamics’ revolutionary autonomous Transwing® vertical takeoff and landing (VTOL) unmanned aerial system (UAS) to the Japanese market.

PteroDynamics is an innovator in autonomous vertical takeoff and landing (VTOL) aircraft systems, while Cornes Technologies is a leading specialist importer and distributor of advanced electronic systems and devices to customers across Japan.

PteroDynamics’ Transwing is a revolutionary VTOL aircraft system that overcomes the limitations inherent in other VTOL designs by marrying the speed, range, and endurance of fixed-wing aircraft with superior VTOL performance in an efficient, highly automated platform.

The aircraft folds its wings to transition seamlessly between vertical and winged horizontal flight, requires no launch and recovery infrastructure, and occupies one-third or less ground footprint than other VTOL aircraft with a comparable wingspan.

Cornes Technologies will be the exclusive distributor of the Transwing UAS on behalf of PteroDynamics in Japan for commercial, defense, and other government sales. In addition to marketing, prospecting, and sales, Cornes Technologies will provide post-sales training and support for Japanese customers.

Japan’s growing focus on advanced technology in sectors including defense, disaster relief, and infrastructure management makes it an important growing market for autonomous UAS aircraft like the Transwing.

Japan’s investment in advanced drone technology for defense applications is expected to increase as part of its broader modernization efforts, making it a key focus for VTOL UAS solutions. This is complemented by commercial opportunities, particularly in logistics, infrastructure monitoring, and emergency services where the versatility and efficiency of autonomous VTOL aircraft like the Transwing can be a game changer.

The Transwing’s unique performance characteristics provide defense and commercial operators with a more cost-effective, autonomous alternative for critical logistics resupply and other missions to remote locations without runways, which are currently undertaken by crewed aircraft, boats, or other less practical means.

Multiple Transwing VTOL UAS recently demonstrated ship-to-ship and ship-to-shore logistics and maritime resupply missions from the deck of a U.S. Navy guided-missile destroyer during this summer’s Trident Warrior 2024, the Fleet experimentation arm of the 29th biennial Rim of the Pacific (RIMPAC) exercise. RIMPAC is the world’s largest international maritime warfare exercise.

PteroDynamics CEO Matthew Graczyk commented, “Japan is an important strategic market with significant need and growth potential for PteroDynamics’ Transwing aircraft. Success requires teaming with a world-class organization with deep and long-standing relationships within the Japanese commercial, aviation, and defense sectors.

“We are excited to forge such an important relationship with a company of Cornes’ high caliber and to work together to bring the unique and innovative capabilities of the Transwing UAS to the Japanese market.”

Kazuhiko Nishioka, president, representative director at Cornes Technologies, added, “We are pleased to announce that Cornes Technologies has chosen PteroDynamics because of their innovative Transwing VTOL UAS technology, which offers a high degree of performance and versatility in a variety of operational environments.

“Given the Japanese government’s commitment to integrating drones into defense and commercial applications, we see a significant opportunity for the Transwing in this rapidly expanding market. We believe that PteroDynamics’ cutting-edge technology is well suited to the evolving needs of Japan’s defense and commercial sectors, offering solutions that are robust and future-proof.”

**63 . Date: 25-11-2024H-Rotary - Target Drone - Small - General - PlatformAlpha Unmanned Systems Unveils UAV-Based Targets for Realistic TrainingURL: https://www.unmannedsystemstechnology.com/2024/11/alpha-unmanned-systems-unveils-uav-based-targets-for-realistic-training/**

Alpha Unmanned Systems has launched Alpha Target Systems to deliver versatile UAV-based targets, including the A900T and A800T.

Alpha Target Systems UAVs are specifically designed to simulate enemy aircraft, helicopters, and other threats for realistic defense exercises.

Each helicopter UAV platform can be equipped with a number of available payloads for a range of advanced military target and calibration scenarios.

With encrypted data transmission, fuel-powered engines for greater autonomy, and weatherproof performance, the A900T and A800T UAV helicopters enable versatile training scenarios for the development and improvement of modern air defense capabilities.

Remarkably smart and versatile, the A900T is a highly valuable operative resource. Weighing in with a MTOW of less than 25kg, it is designed and manufactured with STANAG 4738 compliancy for a range of applications in challenging conditions.

Specifications:

• 2.07m Rotor Diameter

• 1.76 Length

• 25Kg MTOW

• 4Kg Payload Capacity

• 100cc 2-stroke boxer engine fuel powered (Heavy/Regular)

• 150 Watts onboard generator 100Km radio range

• 4H endurance

• Low & Slow flight mode

• 100Km/h max speed

The fuel-powered A800T, at less than 14kg MTOW, is a reliable UAV helicopter. Similar in capabilities to a manned helicopter, it features a much lighter logistical footprint and far lower maintenance requirements and overall costs.

Specifications:

• 1.80m Rotor Diameter

• 1.7 Length

• 14Kg MTOW

• 29cc 2-stroke engine fuel powered Redundant Power Supply

• Fully Automatic

• 2.5H endurance

• Low & Slow flight mode

• High variety of payloads available and integrated

MDI Scoring Either for counting small projectiles or serving as a scalar MDI for larger projectiles and missiles, the Aerial Targets are capable of integrating a range of MDI Scoring systems.

Radar Enhancement Alpha can offer Radar Enhancement or Radar Cross-Section amplification by means of both passive or active payloads.

IR Enhancement System Infrared (IR) flares can provide the heat signature of a full-size enemy helicopter.

Visibility Enhancement Designed to make drones more detectable during training exercises or testing. These systems improve visibility for tracking by radar, infrared, or visual methods, ensuring that the aerial targets are easily detectable and can serve effectively in training and testing scenarios.

Laser Reflecting Mirrors By reflecting laser signals back to the source, laser reflecting mirrors allow for precise targeting and simulation of real combat scenarios, helping improve accuracy and performance in laser-based targeting systems.

Alpha Unmanned Systems asserts that in an era of rapidly evolving defense needs, there is a growing demand for innovative target systems that go beyond the representation of simple aerial threats.

Modern military training requires UAVs capable not only of simulating enemy aircraft but also to serve as system calibration tools.

Artillery fire correction aids, missed-distance indicators, radar visibility enhancement, and more are all required. These additional capabilities help provide comprehensive support in dynamic training and testing environments.

**64 . Date: 21-11-2024MarketFunding Secured for Expansion of AI-Powered UAS ManufacturerURL: https://www.unmannedsystemstechnology.com/2024/11/funding-secured-for-expansion-of-ai-powered-uas-manufacturer/**

TEKEVER, a European developer of AI-powered UAS (unmanned aerial systems) solutions, has raised 70 million euros in order to boost the next stage of the company’s expansion.

The company will accelerate investment in R&D to support product innovation, both enhancing its current product portfolio and developing new lines to ensure that its technology stays ahead of the curve in the rapidly-evolving technical landscape. TEKEVER will also expand its global production, delivery and support footprint to meet the ever-increasing demand for its products and services.

The funding round was led by Baillie Gifford, the investment manager and early backer of Airbnb, Spotify and SpaceX, and the NATO Innovation Fund (NIF), a standalone venture capital fund backed by 24 NATO allies that deploys €1 billion in deep tech to advance defence, security and resilience. Other participants in the funding round include the National Security Strategic Investment Fund (NSSIF), a UK government–owned fund supporting advanced technologies related to national security, Crescent Cove Advisors LP, an investment firm based in Silicon Valley with expertise in the defence sector, and existing investors Iberis Semper and Cedrus Capital. TEKEVER was advised by The Growth Stage and Houlihan Lokey during the process.

The new investors bring strategic expertise and provide significant sector experience and pathways to access priority markets, as well as boasting a strong track record of sustainably scaling pioneering, fast-growing companies over the long term. Their experience will be critical in helping TEKEVER prepare for the next phases of its multinational growth strategy.

Ricardo Mendes, CEO of TEKEVER, commented: “We’re living in a highly volatile world, experiencing exponential change and the transformative power of software, AI and robotics. TEKEVER was built to embrace and leverage this reality, providing its customers with future-proofed, AI-centric hardware- enabled systems that are produced at scale and effectively delivered and sustained globally. For our Series B, more than investment, we wanted to find partners that shared these beliefs and could help us execute on our vision.

We’re thrilled to have Baillie Gifford as a lead investor – an incredible organization with extremely long–term views, and an extensive track record of backing companies that have profoundly transformed our society. NIF, NSSIF and Crescent Cove bring profound knowledge and experience on the Global Security and Defence market to the table, both from a European and a US perspective, which will be important in helping us, and our customers, navigate the challenges ahead.”

Chris Evdaimon, Investment Manager, Private Companies at Baillie Gifford, noted: “TEKEVER is a rapidly growing and already profitable company, a rare combination in defence, national security and space start-ups. We were attracted by its approach to building drones – with a software-centric and vertically integrated model – along with the real-life experience TEKEVER has accumulated from operations in Ukraine and its work with the UK Home Office and European Maritime Safety Agency.”

Patrick Schneider-Sikorsky, Partner at the NATO Investment Fund, said: “Unmanned Aerial System technologies are critical to advancing defence, security and resilience. We are thrilled to support TEKEVER – whose technology is revolutionising the defence and commercial intelligence, surveillance, and reconnaissance sectors – and look forward to collaborating with the company on identifying pathways to use its technology in order to support more governments and businesses across the Alliance.”

**65 . Date: 11-12-2024PartnershipBabcock & PteroDynamics to Explore New Capabilities for Autonomous UASURL: https://www.unmannedsystemstechnology.com/2024/12/babcock-pterodynamics-to-explore-new-capabilities-for-autonomous-uas/**

Babcock Australasia and US-based autonomous aircraft developers PteroDynamics have signed a Memorandum of Understanding to explore new opportunities for unmanned aerial systems (UAS).

The two companies will come together to pursue greater autonomous capability within Babcock’s current and future defence and civil contracts across Australia and New Zealand.

PteroDynamics is a designer and manufacturer of autonomous vertical take-off and landing (VTOL) aircraft systems, including its patented Transwing UAS. The Transwing marries the speed, range, and endurance of a fixed-wing aircraft with superior VTOL performance, with foldable wings that allow it to transition seamlessly between vertical and winged horizontal flight. The system requires no launch and recovery infrastructure, and its ground footprint is up to a third less than other VTOL aircraft of comparable wingspan.

The Transwing’s unique capabilities make it ideal for automating time-sensitive delivery of critical high-value payloads to hard-to-reach locations with no runways and in austere conditions, including maritime logistics support and reconnaissance and surveillance. This was showcased during the recent Rim of the Pacific (RIMPAC) exercise, where multiple Transwing UAS demonstrated ship-to-ship and ship-to-shore logistics and maritime resupply missions from the deck of a US Navy guided-missile destroyer. RIMPAC involved 40 surface ships, three submarines, 150 aircraft, 14 national land forces, and more than 25,000 personnel from 29 countries including Australia.

Babcock and PteroDynamics will now collaborate on a series of initiatives to introduce PteroDynamics’ next-generation UAS to the Australasian market. The collaboration will also focus on the delivery of training for Babcock teams to provide in-country support of future contracts.

Duncan Milne, Managing Director of Aviation & Critical Services at Babcock Australasia, commented: “We are pleased to forge this strategic relationship with PteroDynamics. We can see many complementary capabilities between our two businesses, and we look forward to pursuing these opportunities in the UAS sector together.”

“This type of advanced technology has any number of applications, including surveillance, infrastructure management and disaster relief, which makes it particularly well aligned with Australian Defence Force priorities. The Transwing’s VTOL and wing-borne performance characteristics could also be of strategic use in the littoral environment in Australia’s north, where logistics and resupply missions in remote locations are currently undertaken by crewed aircraft. There are also many advantages in civil enterprise.”

Matthew Graczyk, CEO of PteroDynamics, noted: “Australia and New Zealand are leaders in the advancement of autonomous UAS, and opportunities for the Transwing in the region’s civil, defence and commercial sectors will expand quickly. Babcock is a world-class organization with decades of experience and deep working relationships with key customers. We are excited to explore together new ways to meet current and future needs of operators in a region of growing strategic importance.”

**66 . Date: 13-12-2024H-Rotary - ISR / ISTAR - Tactical - General - PayloadSynthetic Aperture Radar Integrated with Schiebel Unmanned HelicopterURL: https://www.unmannedsystemstechnology.com/2024/12/synthetic-aperture-radar-integrated-with-schiebel-unmanned-helicopter/**

Schiebel in collaboration with robotics technology developer MDA Space, has successfully demonstrated IMSAR’s NSP Synthetic Aperture Radar (SAR) with Ground and Maritime Moving Target Indication (GMTI and MMTI) capabilities on board the company’s CAMCOPTER S-100 UAS during a one-week intensive trial at the Foremost UAS Test Range in Western Canada.

The successful integration of the IMSAR NSP radar system to the CAMCOPTER S-100 was completed ahead of schedule, with all radar electronics housed within the antenna pod. The radar’s installed software allows for seamless mission planning, enabling the operator to upload radar flight plans directly to the S-100 platform.

During the trial, the fully integrated system showcased its unique capabilities during both day and night operations out to ranges exceeding 100 nm. The S-100, equipped with the IMSAR NSP radar, Wescam’s MX-8 EO/IR sensor, a GPS anti-jamming system and an Automatic Identification System (AIS), successfully conducted a series of simulated land and maritime tasks.

The system provided high-resolution SAR imagery, as well as Ground Moving Target Indication (GMTI) detections and tracks, all while demonstrating its versatility in challenging weather conditions. This capability highlights the IMSAR radar as a key sensor, enhancing the platform’s performance and situational awareness in complex operational environments.

Neil Hunter, Head of Global Sales at Schiebel, commented: “The integration of IMSAR’s radar with the S-100, in combination with a powerful EO/IR, significantly expands the platform’s surveillance and detection capabilities, allowing for wide-area coverage at impressive distances in all weather conditions. This trial underlines the continuing operational effectiveness of the CAMCOPTER S-100 as a multi-sensor platform, capable of delivering actionable intelligence in real-time, day and night.”

**67 . Date: 11-12-2024Fixed Wing - ISR / ISTAR - Small - ContractTEKEVER Drones to Enhance Border Protection & Maritime Surveillance Capabilities for Spain’s National PoliceURL: https://www.unmannedsystemstechnology.com/2024/12/tekever-drones-to-enhance-border-protection-maritime-surveillance-capabilities-for-spains-national-police/**

A €5 million contract with Spain’s Ministry of Interior will see TEKEVER supply drones to the National Police Air Unit.

The contract will enable the National Police Air Unit to acquire multiple TEKEVER AR3 systems, their accessories, cameras, and access to TEKEVER’s ATLAS platform. As part of the agreement, TEKEVER will also provide training for up to three years. The systems are expected to be delivered between 2024 and 2025.

According to TEKEVER, the AR3 was selected for its superior performance capabilities, including its proven ability to navigate challenging climate conditions. Other technical features that make the AR3 ideal for the National Police Air Unit’s surveillance and maritime missions include its agile and flexible architecture, its ability to be operational in under 15 minutes, its low logistical footprint, and its capability to integrate some of the best payloads on the market.

Under the terms of the contract, the AR3 systems will be equipped with high-definition day and night gimbals, a mobile ground control station, and Synthetic Aperture Radar (SAR) technology. This tool is critical for the identification of objects of interest under all weather conditions, both day and night. Additionally, the SAR’s extensive operational range, demonstrated by its ability to cover more than 20,000 square nautical miles per mission, makes it an optimal partner for surveillance and maritime missions.

TEKEVER’s AI-powered analytical intelligence platform, ATLAS, was also said to be a decisive factor in securing the contract. Its ability to enhance unmanned aerial vehicle (UAV) operations with advanced functionalities such as FPV video streaming, increased situational awareness for UAV operators, and heatmap tracking for efficient flight zone review and monitoring underscores its role as a key asset.

TEKEVER Head of Security Business Unit, Nadia Maaref, said, “We are pleased to support the Spanish National Police, an institution renowned for its expertise and dedication to safeguarding public security. This partnership allows us to deliver cutting-edge technology that enhances their capabilities in border protection and maritime surveillance. By equipping the Spanish Policía with our advanced systems and AI-powered platforms, we reaffirm our commitment to providing world-class solutions to agencies dedicated to ensuring safety and security globally.”