

## HADES DEFENSE SYSTEMS debuts LAMIA UAV

**HADES DEFENSE SYSTEMS recently announced the expansion of its line of Vertical Take-Off & Landing (VTOL) UAVs thanks to the continued efforts of its in-house engineering teams. New developments are primarily focused on increasing the load-bearing capacity of its UAVs by introducing new product lines and models, united by the common thread of improving payload capacity.**

The LAMIA is the latest example of these expansion efforts and is the product the company has chosen to announce to the world for the first time at UMEX 2024. The UAV represents a versatile VTOL with a payload capacity of 15 kilograms. This allows the LAMIA to

be outfitted with various equipment depending on its designated mission parameters, whether for civil or military applications.

The UAV features a hybrid design between a hexa-rotor multi-copter configuration and a fixed-wing aircraft with a six-metre wingspan for higher operational endurance. Furthermore, the LAMIA will be released in two variants: a full-electric version and an internal-combustion engine hybrid, with the latter boosting performance across the board and resulting in several hours of airtime. Driven by their proprietary Command, Control and Communication (C3) software and in-house built hardware, the UAV is capable of fully autonomous

operation as well as manual pilot-controlled flight. The LAMIA is expected to enter the HADES product portfolio during the second half of 2024, along with several other planned innovations, which are being discussed at the show. The company is also continuing the development of its heavy-lifter transportation UAVs with the ability to vertically lift and deliver cargos of up to 150 kilograms and above. With these innovations, HADES aims to expand its reach in both the defence and civilian sectors, adding versatility to its offerings and diversifying the range of challenges UAVs can overcome.

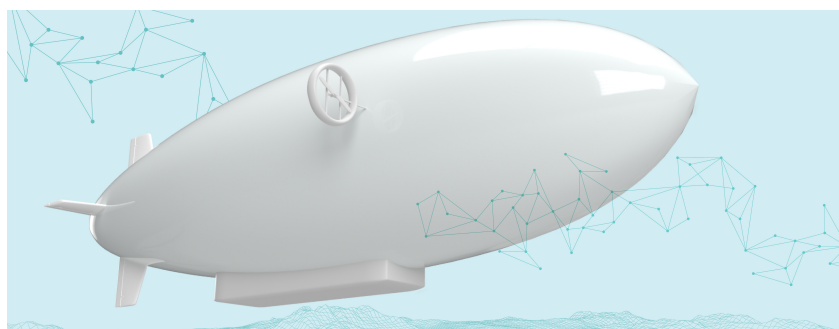
**Visit HADES DEFENSE SYSTEMS at stand 04-A02**



## Kintsugi launches autonomous AI innovations

**Kintsugi is developing solutions that address global challenges and significantly enhance human lives. At the show, the company is displaying its leadership in employing autonomous AI.**

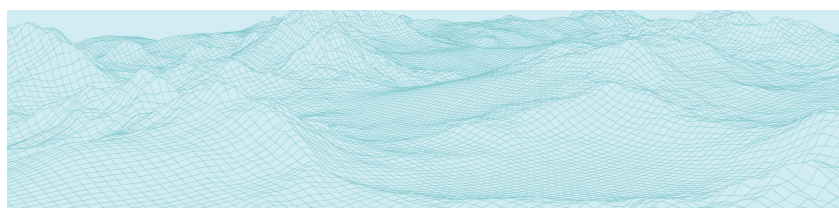
One of the company's highlights at the exhibition will be its latest breakthroughs in AI-driven human-machine and machine-machine collaboration, featuring a range of locally engineered autonomous components, from portable drones skilled in logistical support to strategic assets like the "Made in the UAE" FIREBIRD UAVs, experts in high-altitude maritime surveillance operations. Kintsugi's state-of-the-art swarm-enabled autonomous airships will demonstrate an innovative approach



to Autonomous AI, representing a cutting-edge solution to address the complexities of tomorrow's world. Additionally, the company is displaying how AI is transforming Decision Management and Support through its digital advisor and advanced control platforms. Another highlight of Kintsugi's presence at the show is the launch of MAGNUS by ENERON,

a Kintsugi subsidiary, on day one of the show at 10:30 am. Set to redefine the standards for four-by-four electric vehicles, which will be manufactured in UAE, MAGNUS combines unprecedented range with avant-garde command and control features and top-of-the-line autonomous systems and signifies a ground-breaking leap in mobility.

**Visit Kintsugi at stand 04-A10**



# Insitu unveils Integrator VTOL

**Insitu, a Boeing Company, is showcasing its Integrator Vertical Take-off and Landing (VTOL) uncrewed aircraft at the show. It launches and lands vertically on ships or land without sacrificing payload capacity or endurance. The system retains the performance of fixed-wing aircraft, providing the same long-range, wide-area surveillance capability for extended periods.**



Integrator VTOL is uniquely designed to operate as a portable system in tight quarters, such as ship decks, and in challenging maritime conditions with high seas and gusty winds. No stationary launch and recovery equipment is required, providing portability, self-sufficiency and modularity across UAS hardware and payloads while minimising impact on other flight operations. With over 24 hours of endurance and best-in-class modular payloads, the unique design offers a three-time improvement in range and endurance over hybrid VTOLs.

"Integrator VTOL is a no-compromise uncrewed aircraft system," said Diane Rose, Insitu president and CEO.

"Customers can finally have it all: vertical launch and recovery with industry-leading payload capacity and endurance for their most critical missions, even in the most extreme maritime environments and sea states, without sacrificing valuable deck space."

The system has two parts: FLARES

(Flying Launch and Recovery System), developed by Hood Tech, and the Insitu Integrator air vehicle. Requiring no modifications to the aircraft, FLARES performs normal operations at half throttle, allowing significant control authority to withstand gusts, lower-density air and higher ship deck motion.

To deploy, FLARES engages the Integrator and climbs into the sky. Once it reaches its desired altitude, FLARES dashes forward before releasing the Integrator, allowing it to perform its long-range, wide-area surveillance mission for extended duration. Once Integrator is released, FLARES returns to a ship's deck or ground to await Integrator's return. As Integrator approaches the end of its mission, FLARES climbs into the sky again with a recovery rope attached and performs Insitu's proven and reliable retrieval method. FLARES then lowers the Integrator to the landing area or the ship's deck to complete the mission.

**Visit Insitu at stand 04-B12**

analysis at the individual or squad level. It calculates and displays customisable key performance indicators, such as weapon handling performance, exact ballistics for all weapon types, trigger and shot accuracy, soldier position and stance. The comprehensive analysis incorporates physiological sensing, providing insight into the stress and cognitive load levels of trainees.

Guardiaris specialises in cutting-edge simulation technology, and its simulators have made a global impact, serving on four continents. NATO and neutral armies have adopted the company's solutions. The company excels in providing simulation and training solutions in virtual environments, utilising digital replicas and defence digital twins.

**Visit Guardiaris at stand 03-B34**





# CAE advances Joint Domain Simulation training to replicate complex RPA environment

In defence and security, staying ahead of the threat is not just a matter of strategy; it is a matter of training. The world is witnessing a transformation in the way security forces operate, and training is at the core of this evolution. CAE invests in and develops capabilities to ensure RPA crews can perform their missions in near-peer competition environments, integrating new operational concepts as they emerge.

The question is how to generate an effective all-domain synthetic environment for RPA crews to exploit in their training. Their role is pivotal, and their training must be exceptional. However, replicating real-world scenarios for RPA crew training demands not only the simulation of physical conditions but also the emulation of intricate interactions and behaviours exhibited by both friendly (blue) and hostile (red) forces.



To achieve true complexity for the ISR targets and red forces displaying doctrinally correct behaviours viewed through sensors, CAE has developed a Joint All-Domain Artificial Intelligence (JAD-AI) framework. This concept allows for the creation of intelligence agents that can control entities in a simulation and give those agents access to the latest doctrine, observed behaviour, and intelligence assessments for both blue and red forces. Not only do the entities

display the correct physical behaviour viewed through sensors, but they will also have the correct command and control interactions to produce Radio Frequency (RF) emissions and voice communications, which can be exploited for an intelligence assessment. These "bots" behave with the same level of complexity as live red forces across the spectrum of conflict, allowing intelligence analysts to train to their complete assessment mission.

**Visit CAE at stand 04-A20**

## Guardiaris redefines military training with SAMT

Slovenian hi-tech company Guardiaris is presenting SAMT, a mobile training solution featuring patented LED technology. Small Arms Mobile Trainer, or SAMT, is a highly customisable laserless system that can incorporate small arms, shoulder-launched weapons, anti-tank weapons, military vehicles, and remote weapon stations. The solution enables comprehensive training on the individual or squad level in a highly realistic synthetic environment with freedom of movement. The plug-and-play training system provides a unique training experience. Thanks to easily stackable LED screens that form the LED wall, the training area becomes easily expandable. The system allows simultaneous training of a vast number of soldiers dispersed around multiple, possibly dislocated

units. Therefore, multiple SAMT systems networked together provide comprehensive marksmanship and tactical training in one common scenario. This new level of system networking enables to move training grounds to any facility without quality or diversity sacrifices, unlocking brand-new constellations of training and enhancement of troop readiness.

SAMT system runs on laserless technology, enabled by the patented SAS module. Mounted on the picatinny rail or installed inside any modified real weapon or weapon replica, the SAS module ensures any weapon type or device can be used in the SAMT. Furthermore, the SAS module supports precise After-Action Review by gathering real-time information and provides a comprehensive post-training

# Strengthening local partnerships is the goal: Saab's New MD

**In an exclusive interview with *Nation Shield*, Saab's new MD, Heléne Bittmann, envisions a bright future in the UAE, emphasising local partnership strength, product portfolio expansion, and the showcase of DeployNet upgrades at UMEX.**

Acknowledged as an advanced AEW&C solution, the GlobalEye system enhances UAE's airborne surveillance. Bittmann highlights Saab's contributions at Tawazun Industrial Park, focusing on local supply chain growth and Emirati workforce expansion. Here is the detailed interview:

**Based on your experience at Saab AB's Tawazun facility, what strategic future do you see for Saab in the UAE, focusing on market positioning and product portfolio expansion?**

I am delighted to assume my new position as Managing Director of Saab in the UAE. Among my priorities is the reinforcement of our local partnerships and a dedicated effort to bolster our UAE-based offering. We are committed to nurturing local talent and, while growing the local supply chain. Our goal is to pursue fresh avenues for collaboration, placing emphasis on product advancement and innovation.

**What major initiatives or presentations can we expect from the company at UMEX?**

At UMEX this year, Saab UAE will be showcasing upgraded capabilities and heightened effectiveness of our locally developed DeployNet, illustrating how this product represents our commitment to expanding our footprint in the UAE, and beyond. DeployNet has received significant enhancements that bolster its role as an asset for critical operations. It now offers dual frequency support, enabling seamless operations across

Heléne  
Bittmann



diverse frequency bands, improving communication quality and reliability.

**How does Saab's DeployNet highlight the company's commitment to Emirati defence solutions for both national and global needs?**

DeployNet is a UAE-manufactured communications system, designed for security and crisis operations within military and civil infrastructure, as well as industry sectors.

Locally developed in collaboration with Tawazun Council, it provides high-capacity bandwidth, crucial for modern operations relying on multiple information sources, sensors, and user interactions. The product stands as a testament to how Saab is proudly investing in the UAE.

**How does Saab's GlobalEye enhance UAE's airborne surveillance capabilities?**

GlobalEye is the most modern and advanced system of its kind on the market and the only solution capable of early detection of threats in the air, sea and land domains at the same time, from a single platform. It combines Saab's latest Erieye Extended Range (ER) radar with an advanced suite of active and passive sensors and a multi-domain command and control (C4i) system that delivers the best situational awareness.

The command and control (C2)

**DeployNet is a UAE-manufactured comms system, designed for security operations within military and civil infrastructure.**



system aboard the aircraft enables the crew to perform multiple missions in complex and changing scenarios. The aircraft accommodates a number of workstations defined by system configuration and customer requirement. Each operator console is equipped with a 30in wide-screen high-resolution colour display offering the best possible interface for the operators. The displays present target data obtained by the onboard sensors or received via the data links, and allow the operators to find tracks, control own forces, monitor threats, command operations and manage all onboard systems. The C2 system also enables mission planning and mission evaluation.

**How do you see Saab's expansion at Tawazun Industrial Park contributing to the UAE's defence ambitions?**

Our partnership with the UAE defence ecosystem has been growing since the 1980s. Established in 2018, our production facility in Abu Dhabi is located within Tawazun Industrial Park, and it's developing advanced technologies, growing our local supply chain, and increasing the number of Emirati employees. Saab aims to offer UAE nationals with rewarding career paths that contribute to the country's growing economy through comprehensive training, internship and development programmes.

**Visit Saab at stand 04-A20**



## DSMC's PAIDA R&D Working Group exhibits innovations in defence and aerospace



**Defense Services Marketing Council (DSMC) is highlighting advancements in unmanned systems research and development at the Khalifa University (KU) stand today. The session under the Partnering to Achieve Innovation in Defence & Aerospace (PAIDA) R&D Working Group presents an insightful exploration of cutting-edge initiatives.**

Khalifa University and DSMC are shedding light on groundbreaking projects that are shaping the future of unmanned systems, delving into the details of initiatives such as the MBZIRC - Maritime Grand Challenge, Harsh and Extreme Environments Autonomous Robots, Heterogeneous Swarm of Underwater Robotic Fish, and Near Real-Time Insights from Space. Learn how you can actively contribute to and influence these initiatives. The event brings together leaders, innovators, and decision-makers in the

defence and aerospace sectors. The session promises valuable insights into the forefront of the UAE's research and development landscape, providing a unique opportunity for collaboration. Discover the potential for partnerships and connections that can drive innovation forward.

The goal of the PAIDA working group is to connect innovative aerospace and defence R&D with industry experts who have an intimate understanding of the industry's needs. DSMC works towards accelerating the defence and aerospace sector through monthly working groups that offer both face-to-face and virtual access to decision-makers and partners, providing a dynamic platform for organisations.

**Join DSMC at the Khalifa university (KU) stand 04-C04, 04-C05 today from 14:00 to 16:00** for a unique opportunity to delve into cutting edge research and development initiatives in the field of Unmanned Systems.

## Shield AI ushers in a new era of aerial autonomy in military operations

**Shield AI, the defence technology company building an AI pilot for aircraft, announced the official launch of its V-BAT Teams product.** V-BAT Teams enable multiple V-BATs to autonomously execute missions in electronically contested environments while reading and reacting to adversaries, the environment, and the other V-BATs executing the mission. It comes in the form of a modular Nvidia GPU upgrade running Hivemind, Shield AI's AI pilot, which is loaded into the modular payload bay of the V-BAT. "V-BAT Teams is the first step in intelligent, affordable mass not as a concept, but as an operational product. We're starting with a team size of four

V-BATs, but that number will double annually for the foreseeable future. Four V-BATs that work together in electronic warfare environments and as part of a human-machine team are an incredible force multiplier," commented Brandon Tseng, Shield AI's co-founder, President, and former Navy SEAL. "V-BAT Teams, as the team size increases, give squads the combat power of a battalion, or battalions the combat power of a corps or division." Powered by Shield AI's Hivemind AI pilot, V-BAT Teams operate autonomously in high-threat environments without dependence on GPS or communications.

**Visit Shield AI at stand 03 - A19**



# GA-ASI powers advancements in autonomy, AI pilots



**General Atomics Aeronautical Systems, Inc. (GA-ASI) President David R. Alexander has shed light on the company's recent collaborations, cutting-edge technologies, and aspirations for the integration of autonomy and Artificial Intelligence (AI) in combat aircraft in an exclusive Q&A with *Nation Shield*.**

From forging partnerships with EDGE to successfully demonstrating the MQ-9B SkyGuardian's Short Takeoff and Landing (STOL) capabilities, GA-ASI is at the forefront of innovation in the unmanned aerial vehicle (UAV) industry.

Alexander delves into the company's vision for the future of warfare, where AI-powered unmanned combat aerial vehicles (UCAVs) will play a pivotal role. Here's the detailed interview:

**In November, GA-ASI announced a partnership with EDGE. What's the nature of your collaboration?**



David  
R. Alexander

As the leading designer of state-of-the-art remotely piloted aircraft (RPA), like MQ-9B SkyGuardian, we routinely reach out to global partners that can help us advance the capabilities of our RPA. Our work with EDGE is to integrate their smart weapons onto SkyGuardian.

**Speaking of MQ-9B, I understand the UK Royal Air Force is operating its Protector in European airspace and Canada is procuring SkyGuardian.**

That's correct. In November 2023, the UK Royal Air Force (RAF) made its first flight in European skies of the Protector RG Mk1, which is an RPA

based on the MQ-9B SkyGuardian. A full slate of 16 Protectors is scheduled to be in place by the summer of 2025, which will unlock a huge swath of new capabilities for the RAF.

**GA recently had a successful experience with Short Takeoff and Landing (STOL) onto a carrier deck with the UK Royal Navy. Can you elaborate?**

It was a first-of-its-kind demonstration, and we were certain of our UAS' ability to launch and recover onto the flight deck of an aircraft carrier, but it had never been done before. So we appreciate the UK Royal Navy's foresight in working with GA-ASI to showcase our short takeoff and landing capability.

The demonstration took place on November 15, 2023, on the HMS Prince of Wales, and our Mojave UAS was controlled by an aircrew within a control station onboard the ship. The test flight included takeoff, circuits, and approaches, and ended with a landing back onto the carrier.

**Demonstrating such UAS capability opens new naval support avenues. How will autonomy and AI change combat in your view?**

GA-ASI is at the forefront in developing and demonstrating autonomy and AI pilots, where we can integrate and implement behaviors and services from a variety of military organisations and defence contractors. There's still "trust" in the AI Pilot to be matured before allied militaries will realise the vision for large-scale, integrated, autonomous unmanned combat aerial vehicles – or UCAVs – but GA-ASI and its partners are collaborating to develop and mature multiple emerging technologies to get there.

A combination of airborne high-performance computing, sensor fusion, human-machine teaming and AI pilots making decisions at the speed of relevance shows how quickly our capabilities are maturing as we move to operationalise autonomy for UCAVs.

**Visit GA-ASI at stand 04-A11**



# L3Harris emphasises strategic focus on AI at UMEX 2024

**Gary W. Rosholt, Corporate Vice-President for Middle East Operations at L3Harris Technologies, shared interesting insights regarding the company's strategic initiatives at UMEX 2024 in an exclusive interview with *Nation Shield*.**

Asked about specific areas of focus or potential collaborations at UMEX, Rosholt highlighted L3Harris's strategic partnership with Al Seer Marine on the Arabian Fox Unmanned Surface Vessel (USV).

The vessel, featured at the USNAVCENT CTF-59 display at UMEX and L3Harris's company booths, is custom designed and locally manufactured by Al Seer. The Arabian Fox USV integrates L3Harris's ASView control system technology, Falcon-III RF-7800W Multi-mission High-Capacity Line of Sight (HCLOS) radios, and the WESCAM MXTM-10 MS electro-optical/infrared sensor system. L3Harris has also committed to supporting the in-country build of the ASView system for the long-term sustainability of the unmanned programme in the UAE.

## Simulation to Solution

Regarding the growing focus on artificial intelligence (AI) and data-driven technologies in the defence sector, Rosholt highlighted L3Harris's expertise, built over four decades in modelling and simulation analysis. This has positioned the company as an industry leader in AI and machine learning, providing critical sense-making solutions for big data. Recently securing an Intelligence Advanced Research Projects Activity contract, L3Harris will contribute to the Hidden Activity Signal and Trajectory



Gary W. Rosholt

## Viper Shield offers radar threat countermeasures



Anomaly Characterisation programme, aiming to transform future autonomous systems by characterising and predicting human mobility. L3Harris will lay the groundwork for generating and analysing human activities that produce data captured by GPS, Bluetooth and other systems. In the context of UMEX, L3Harris's collaboration with BigBear.ai aims to deliver advanced AI capabilities for maritime defence. The ASView system, integrating BigBear.ai's forecasting computer vision technology, enhances vessel identification, classification, and situational awareness, supporting manned-unmanned teaming missions. This programme utilises communications networking through Falcon III radios and antennas, facilitating near-real-time data sharing

with low latency to expedite threat identification-to-action decision cycles.

## F-16 Shielded

Discussing the Viper Shield EW system, Rosholt highlighted its custom design for Lockheed Martin F-16 Block 70/72 aircraft. Setting a new industry standard, Viper Shield reveals radar threats and offers robust countermeasure capabilities, with emphasis on lower lifecycle costs, ease of upgrades, increased reliability, and reduced weight.

## Tech Transfer Takeoff

Elaborating on L3Harris's collaborations with local industries, particularly the EDGE Group and Calidus Aerospace, Rosholt revealed that an offset programme with EDGE Group was approved to enable technology transfer and contribute to the wider industry ecosystem.

The Electro-Optical Center of Excellence offset project, developed with Emirates Advanced Research and Technology Holding (an EDGE Group company), aims at localising WESCAMTM MX-Series service capabilities. This includes a WESCAM Authorised Service Center agreement through the transfer of knowledge, supporting the expansion of the depot-level service capability into an advanced assembly facility.

Calidus Aerospace chose L3Harris as the integrated mission systems provider for the B-250 Light Attack Aircraft programme. L3Harris supplied multiple B-250 system kits for the UAE's mission, featuring an integrated suite, including Widow 2.0 mission management solution, WESCAM MX-15D electro-optical/infrared sensor system, VORTEXi data link, Falcon III RF-7850A multichannel airborne networking radio, and other avionics. The first kit has been delivered to Calidus for integration, showcasing a trusted partnership.

**Visit L3Harris at stand 04-A14**



JENIAH

EDGE

# PRECISION WITH EVERY **MISSION**

At EDGE, our families of advanced UAVs and UGVs embody precision in every mission. From REACH-S our Medium Altitude Long Endurance drone, to JENIAH our Unmanned Combat Aerial Vehicle, we ensure your decisive edge in remote operations with unwavering precision. Delivering autonomous advantage and keeping your valuable human assets ever safer.

Discover how we achieve precision with every mission at [edgegroup.ae](https://edgegroup.ae)



## EDGE displays advanced unmanned tech solutions

EDGE is making its third appearance at UMEX and SimTEX, reinforcing its position as one of the world's leading advanced technology groups in the unmanned and autonomous systems sector.

Returning as the exhibition's official Strategic Partner, EDGE is highlighting its goal of accelerating UAE-manufactured advanced technology and autonomous capabilities with a showcase of industry-leading unmanned technologies and solutions, including autonomous unmanned aerial vehicles (UAVs) and unmanned ground vehicles (UGVs).

Mansour Al Mulla, Managing Director and CEO, EDGE Group, said: "UMEX presents EDGE with the perfect opportunity to demonstrate the rapid growth of our portfolio of advanced unmanned and autonomous technology systems while highlighting our vision of adopting advanced technologies to accelerate and reinforce our sovereign capabilities. We are fully dedicated to playing a pivotal



role as a growing industry leader in this domain. UMEX 2024 will also highlight the swift progress that EDGE has made in expanding our global footprint, forging valuable partnerships, and developing the latest solutions in the field of autonomous air, land, and sea systems, solutions, and services." Under autonomous systems, EDGE is displaying a range of autonomous unmanned jet-powered and electric-powered aircraft, including fixed-wing loitering munitions, a stealth

aircraft, a large fixed-wing intelligence, surveillance, target acquisition, and reconnaissance (ISTAR) aircraft, a multi-role performance helicopter, and tactical logistics helicopters. Under land systems, EDGE is showcasing autonomous ground vehicles, including mission-proven tracked UGVs, a rapidly deployable armed robotic vehicle, and small UGVs. The event also marks the first time that ETIMAD is participating at UMEX as part of EDGE Group.

## EDGE and Baykar collaborate on payload integration

EDGE, one of the world's leading advanced technology and defence groups, and Baykar, an international leader in unmanned aerial vehicle (UAV) and artificial intelligence technology, announced they are collaborating to integrate EDGE smart weapons onto Bayraktar UAVs. The integration programme is part of a Strategic Alliance Agreement between the two groups to collaborate on advanced technology solutions in the defence sector.

Under the programme, EDGE will integrate their DESERT STING 16 precision-guided munition onto the Baykar TB2 UAV, with other payload integrations on other BAYKAR platforms to follow.

H.E. Faisal Al Bannai, Chairman of the



Board of EDGE, said: "At EDGE, we are proud to partner with Baykar, a leading company in advanced unmanned aerial systems. The opportunity to add to both companies' capabilities is an important milestone in our partnership."

Selçuk Bayraktar, Chairman and CTO of Baykar, said: "Integration of the DESERT STING 16 and other EDGE weapons and systems will be valuable options in our UAV payload offerings. Our strategic alliance agreement with EDGE, an international leader in advanced technology, will provide further options to our client base."

The Bayraktar TB2 is a medium-altitude long-endurance tactical UAV, capable of conducting ISR and armed attack missions with fully autonomous taxiing, take-off, landing and cruise. EDGE and Baykar will continue to strengthen their partnership under the Strategic Alliance Agreement, seeking opportunities for further collaboration and mutually beneficial programmes.

**Visit EDGE at stand 05-A18**



## UMEX & SimTex 2024 The Biggest Edition

**15%**

increase in space of both exhibitions

**34%**

percentage of national companies

**245**

official delegations from around the world

**37**

companies on the Umex trade platform

**30,000**

square meters added to the exhibition area

**66%**

percentage of international companies

**200**

top leaders and decision-makers

**5,200 m<sup>2</sup>**

area of the UAE Pavilion

**214**

exhibiting companies, with a growth of 19%

**142**

international participating companies

**30%**

increase in the number of participating countries

**35**

participating countries, including 11 for the first time

**72**

national companies, with a 64% increase

**5****new initiatives for the first time:****1**

Live land and water shows

**2**

Aerial shows at the Sweihan Hills

**3**

Launch of the Programming Challenge Competition for local youth

**4**

Launch of a platform for commercial companies for civil uses of unmanned systems

**5**

Establishment of a specialized platform for small and startup companies

and their ability to attract major global specialised companies from the five continents.

"The second factor is the leadership of the UAE and its transformation into a global economic hub for innovation and creativity in unmanned systems, simulation and training, robotics, and artificial intelligence industries, providing an integrated legislative environment that leads the world in this field. The third key to success is Abu Dhabi's sophisticated infrastructure, combined with ADNEC Group's distinct business approach. This approach is implemented across ADNEC's seven specialised divisions, each adhering to the highest international standards relevant to their sector. The final factor contributing to success involves the ongoing and dedicated efforts of the Supreme Organising Committee. They collaborate with public and private sector partners to introduce new and additional events with each edition. This approach aims to surpass the expectations of both

participants and visitors."

The Chairman of the Supreme Organising Committee indicated that the current edition is witnessing the participation of many official delegations, with over 245 official invitations sent to visiting delegations from around the world. The first day will include an opening ceremony with local and international senior officials and guests, showcasing the significant development in unmanned systems industries and the leadership of the UAE in these vital sectors.

On his part, Hamid Matar Al Dhaheri, Managing Director and CEO of ADNEC Group, said: "The world turns its attention to Abu Dhabi as a new milestone is reached in the state's achievements in various economic and knowledge sectors through hosting the largest edition of the UMEX and SimTEX exhibitions since their first launch in 2015."

Al Dhaheri explained that the current edition will witness the launch of five new initiatives for the first time, including the launch of the

UMEX commercial platform with the participation of more than 37 international and local companies specialised in the civilian and commercial uses of unmanned systems. For the first time, live land and marine unmanned systems shows will be organised at the main platform and ADNEC's water channel, in addition to aerial shows in the Sweihan Hills area. The current edition of the events will also witness the launch of the first edition of the programming challenge within the exhibitions, targeting national talents specialised in programming sectors in cooperation between the Ministry of Defence and ADNEC Group. Furthermore, a new platform for start-ups from around the world will be launched, inviting these companies to present their latest innovations and technologies to compete for the 'UMEX Next Gen Innovation Award', in addition to launching a programme of daily dialogue sessions for the commercial sector with speakers from leading companies.



# UMEX & SimTEX 2024 to showcase global excellence in unmanned systems



**Under the patronage of His Highness Sheikh Hazza bin Zayed Al Nahyan, Deputy Ruler of Abu Dhabi, the Unmanned Systems (UMEX) and Simulation and Training (SimTEX) exhibition and conference is taking place at the Abu Dhabi National Exhibition Centre, with record participation from major local and global specialised companies.**

The event's sixth edition is set to witness an exceptional turnout of local suppliers in the unmanned systems sector, showcasing the region's growing strength and innovation. EDGE Group, UMEX and SimTEX 2024's strategic sponsor is anticipated to have an expertly designed stand, highlighting their leadership in the industry. A remarkable presence of international

companies is also expected, presenting their latest advancements and adding a global dimension to the event. This convergence of local expertise and international innovation underscores the event's role as a pivotal hub for cutting-edge developments in unmanned systems. It promises a dynamic and interactive experience for all attendees. Major General Mubarak Saeed bin Ghafan Al Jabri, Chairman of the Supreme Organising Committee of the exhibitions, said: "Since their first launch in 2015, the UMEX and SimTEX exhibitions have witnessed significant developments on all fronts, thanks to four main success factors. The first factor is the significant and unlimited support from the wise leadership and their gracious patronage of these events, providing all aspects of support for their success, in addition to the leading global stature of the country and its diplomatic relationships with all countries of the world, which contributed to enhancing the competitiveness of the exhibitions

## Day 1 Agenda

### 10:00 - 15:00

MoD Coding Challenge: Emiratis have the chance to showcase their programming skills.

### 11:00 - 11:30

Official Opening Ceremony, which is set to be an impressive display, combining ceremonial traditions with advanced technological exhibits. This grand opening event will mark the start of the exhibitions.

### 12:00 - 16:00

Introduction of UMEX Talks at Onsite Stage Hall 6, creates a unique platform where both civilian and military companies can converge, offering parties an opportunity to showcase their latest technologies.

### 13:00 - 16:00

Inaugural UMEX NEXT\_GEN Pitch Competition for startups at Pitch Stage Hall 6. This platform connects startups with industry leaders for networking, partnerships, and investment opportunities.

### 13:30 - 14:30 & 14:45 - 15:45

Live Demonstrations for Land and Maritime Systems, at Abu Dhabi National Exhibition Centre. Unmanned vehicles from local and international companies will showcase their versatility and manoeuvrability in diverse environments.



# EDCC fosters global collaboration

Since its establishment in 2014, the **Emirates Defense Companies Council (EDCC)** has served as the primary communication platform for the UAE's domestic and international industry players, providing a forum for the exchange of information and expertise while also developing capabilities in the defence industry and technologies.

In an interview, Mona Ahmed Al Jaber, Chairwoman of Emirates Defense Companies Council (EDCC), shared: "Our role at UMEX and SimTEX 2024 is amplified by organising the UAE National Pavilion, through which the EDCC hopes to boost networking among the companies and to secure a larger share of the global market. The pavilion also serves as a display for the UAE's premier defence industry and technology." Excerpts:

**What are the primary pillars of communication among local and international defence companies?**

Our primary goal is to provide a platform for establishing and developing shared interests, creating opportunities for collaboration, facilitating international dialogue between interested international parties and those in the UAE defence sector, and allowing defence companies to exchange ideas and technological expertise. This will strengthen the synergy culture among our members working in various industries such as aviation and aerospace, satellites, training and simulators, service supply, and research and development.

**How is the EDCC leveraging collaboration to create an integrated base for defence industries?**

The UAE defence industry has advanced significantly in terms of capabilities and quality as a result of the country's forward-thinking vision and long-term development strategy. Today, several Emirati companies are emerging as regional and global industrial players. This provides us with the necessary incentive to grow our membership list



Mona Al Jaber

**The UAE defence industry has advanced significantly in terms of capabilities and quality as a result of the country's forward-thinking vision and long-term development strategy.**



by attracting new SMEs and start-ups. I would also like to highlight the Ministry of Defense's and Tawazun Council's continuous support for the EDCC. Such support has helped to strengthen the sector's capabilities and position the UAE as a significant industrial centre.

**How does the EDCC's aims match with the leadership's vision?**

The EDCC plays an important role in supporting the defence industries in the UAE and enabling local defence companies to thrive through collaboration, sharing of expertise, and the UAE Pavilion. The UAE National Pavilion serves as a platform to promote the UAE's renowned defence industry and technology.

**What can we expect to see at UMEX and SIMTEX?**

We see UMEX and SIMTEX as an excellent opportunity to highlight our role as a conduit for collaboration and dialogue between local defence enterprises and international defence actors. Our pavilion at the event will showcase key government partners and member firms such as the Ministry of Industry and Advanced Technology, the Abu Dhabi Department of Economic Development, SAAB, Canadian Aviation Electronics (CAE), and Avantguard.

**Visit EDCC at stand 04-A20**





# UMEX & SimTEX 2024

## elevate Abu Dhabi as a global business hub

**Humaid Matar Al Dhaheri, Managing Director and Group CEO of ADNEC Group said that the UMEX & SimTEX 2024 exhibitions, held under the patronage of His Highness Sheikh Hazza bin Zayed Al Nahyan, Deputy Ruler of Abu Dhabi, demonstrate ADNEC's strategic quest to strengthen Abu Dhabi's status as a unique global destination for business tourism and hub for major international conferences and exhibitions.**

Al Dhaheri said: "The UMEX & SimTEX exhibitions and accompanying conference provide a platform for the latest insights on the advanced use of unmanned systems technologies driven by AI adoption that we are likely to see in the years to come. The event will play a key role in accelerating innovation and the strategic business partnerships that are critical to the sector. The exhibition will demonstrate the potential of unmanned systems and further emphasise ADNEC Group's commitment to supporting vital sectors in the UAE and diversifying our national economy in line with our leadership's visionary 50-year plan. UMEX & SimTEX also further enhances



Humaid Matar Al Dhaheri

**The 2024 edition of UMEX & SimTEX will see the number of exhibiting companies rise to 214, representing a growth rate of 19 per cent**



Abu Dhabi's position as a preferred global destination for major events across a range of sectors."

Al Dhaheri added: "Five new initiatives will take place for the first time alongside the exhibition. Special features will include the hosting of live land and water shows for the first time at the main platform and ADNEC water channel, along with aerial shows at Tilal Swaihan. The event will also see the launch of a programming challenge in collaboration with the UAE Ministry of Defence to attract national talents specialised in the unmanned systems sector. A new platform for commercial companies developing civilian uses of unmanned systems will see the participation of 37 international companies. In addition, the inaugural UMEX Next Gen Innovation Award will provide a specialised competition for small and emerging companies."

The 2024 edition of UMEX & SimTEX will see the number of exhibiting companies rise to 214, representing a growth rate of 19 per cent. In addition, 35 countries will participate, with 11 being present for the first time. The new countries are Saudi Arabia, Qatar, Switzerland, Luxembourg, Singapore, the Netherlands, Slovenia, Taiwan, Estonia, the Virgin Islands, and the Czech Republic. 34 per cent of the companies are national, compared to 66 per cent of international companies participating, with the number of national companies amounting to 72, a 64 per cent increase on last year's edition. This year, the overall exhibition space has increased by 15 per cent to over 30,000 square metres.

Al Dhaheri affirmed that ADNEC would ensure that the event's organisation reflects Abu Dhabi's global prominence and status as one of the best and safest cities in the world.



# UMEX and SimTex

## are a global platform for decision-makers

**H.E. Maj. Gen. Staff Mubarak Saeed bin Ghafan Al Jabri, Chairman of the Higher Organising Committee for UMEX and SimTEX exhibitions, said that the current edition of the two exhibitions provides a suitable opportunity for all stakeholders in the sector to explore the latest developments in unmanned systems, simulation, training, and artificial intelligence (AI) globally, with the launch of many exceptional technologies and leading innovations. These strategic events are the first of their kind in the region, playing a pivotal role in supporting the country's efforts to establish its global leadership through the utilisation of innovations that support the economy, enhance national and regional stability and security.**

H.E. said: "The accompanying conference for UMEX and SimTEX exhibitions provides a strategic platform that hosts key experts, specialists, decision-makers, and officials from around the world. They discuss the growth prospects of the unmanned systems industry, exchange perspectives and ideas, and foresee opportunities for the development, growth and future of these systems. The exhibitions and their accompanying conference are the only events of their kind in the Middle East in this vital and promising field." H.E. emphasised that the unmanned systems, simulation and training sectors in the UAE are witnessing noticeable growth in the investment volume. This growth positions the exhibitions as an ideal platform for companies specialised in these sectors to showcase their latest innovations that meet global simulation and training requirements. UMEX and SimTEX have successfully solidified



Mubarak Saeed bin Ghafan

**The unmanned systems, simulation and training sectors in the UAE are witnessing noticeable growth in the investment volume.**



their strategic position by attracting major international and regional companies specialised in unmanned systems, simulation, training, artificial intelligence, as well as robotics and multi-purpose systems in defence and civil sectors, to showcase the latest technologies and innovations in these vital sectors.

He highlighted the significance of the exhibitions as a leading platform that captures the world's attention with each edition, reinforcing the

UAE's status as a global hub. The current edition will witness the launch of the Programming Challenge Competition for the first time as part of the exhibitions, targeting national competencies in programming in collaboration with the Ministry of Defence and ADNEC Group. He stressed that, with over 214 exhibiting companies and more than 35 participating countries, the exhibitions will provide a space for pioneering experiences that support the country's efforts to stay abreast of the latest innovations in unmanned systems, enhancing national capabilities. We look forward to the success of this edition as a catalyst for even larger editions in the coming years.

He noted that UMEX and SimTEX hold strategic importance on the agenda of the events organised by ADNEC Group and hosted in Abu Dhabi. The goals of the two exhibitions align with the UAE's 'Principles of the 50' by focusing on building the world's best and most active economy. The exhibitions contribute to solidifying the global reputation of the UAE as a safe and attractive global destination, as well as enhancing the leading position of Abu Dhabi as a regional business tourism hub. The exhibitions focus on supporting artificial intelligence technologies and diversifying the local economy in line with the economic vision of Abu Dhabi, actively contributing to the growth of non-oil GDP for the Emirate.

Al Jabri concluded by stating that UMEX and SimTEX 2024 are the best platforms for building effective partnerships and enhancing communication among key international players in the field of unmanned systems, and training and simulation systems.





## UMEX and SimTEX conference sheds light on impact of new tech on unmanned systems

The inaugural welcome was given by His Excellency Mohamed Mubarak Fadhel Al Mazrouei, Minister of State for Defence Affairs, followed by Omran Sharaf, Assistant Foreign Minister for Advanced Sciences and Technology, at the Ministry of Foreign Affairs' keynote address. The event saw largescale international participation, with a total of 26 speakers from around the world and hosted over 200 delegations at ADNEC.

In his welcoming speech, His Excellency Mohamed Mubarak Fadhel Al Mazrouei, Minister of State for Defence Affairs, said: "I am pleased to welcome you to the opening of the conference. Hosting such events in the UAE is a proud and important achievement, which furthers the development of unmanned systems, robotics and artificial intelligence industries, in addition to simulation, training and uses in the military and civilian sectors.

"This conference aims to provide a global platform that brings together officials and decision-makers as well as innovative minds in the scientific fields of unmanned systems and artificial

intelligence, to discuss the topics of the Fourth Industrial Revolution and the role of artificial intelligence in moving unmanned systems to new horizons, while also highlighting the latest scientific and technical developments in these fields. The sixth edition of this event contributes to strengthening the position of the UAE as a distinguished global destination for hosting conferences specialised in unmanned systems, simulation systems and training."

His Excellency Major General Mubarak Saeed Ghafan Al Jabri, Chairman of the Higher Organising Committee for UMX and SimTEX, added: "UMEX and SimTEX Conference provides a strategic platform that brings together industry specialists and decision-makers from across the world to share and exchange views and ideas on unmanned systems. The UMX and SimTEX conferences and exhibitions are the only events of their kind in the Middle East region in this vital and futuristic field, reflecting the growing significance of unmanned systems in upholding international peace and security. Additionally,

these industries and their innovative advancements play a crucial role in driving the sustainable development of national economies, extending beyond defence applications to encompass commercial and civilian uses."

Humaid Matar Al Dhaheri, Managing Director and Group CEO, highlighted: "We witnessed the launch of the UMX and SimTEX Conference, organised by ADNEC Group and Ministry of Defence, with EDGE Group as a strategic partner, in the presence of leading diplomatic missions, industry leaders, academic researchers and global thought leaders to exchange views in the unmanned systems sector. This conference has been the largest since its inception in 2015 and part of ADNEC Group's strategy to support vital and promising sectors and enhance the competitiveness of national companies at local and international levels."

This year's conference featured four keynote presentations, three-panel discussions and a fireside chat. Industry leaders gave the keynote presentations in their respective fields.

Under the patronage of Hazza bin Zayed Al Nahyan

# UMEX and SimTEX opens today

Under the patronage of His Highness Sheikh Hazza bin Zayed Al Nahyan, Deputy Ruler of Abu Dhabi, His Highness Lt. General Sheikh Saif bin Zayed Al Nahyan, Deputy Prime Minister and Minister of Interior will open UMEX and SimTEX 2024.



## Conference sheds light on impact of new tech on unmanned systems

Held under the patronage of His Highness Sheikh Hazza bin Zayed Al Nahyan, Deputy Ruler of Abu Dhabi, the UMEX and SimTEX Conference took place yesterday at the Abu Dhabi National Exhibition Centre (ADNEC) Hall 2.

Organised by ADNEC Group and the UAE Ministry of Defence, with EDGE Group as a strategic partner, the conference brought together top experts, decision-makers, academia, government officials and diplomatic missions from the unmanned systems sector, under the theme of 'Soaring to New Heights: Impact of New Technologies in the Evolving Unmanned Systems Era'. » 02



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