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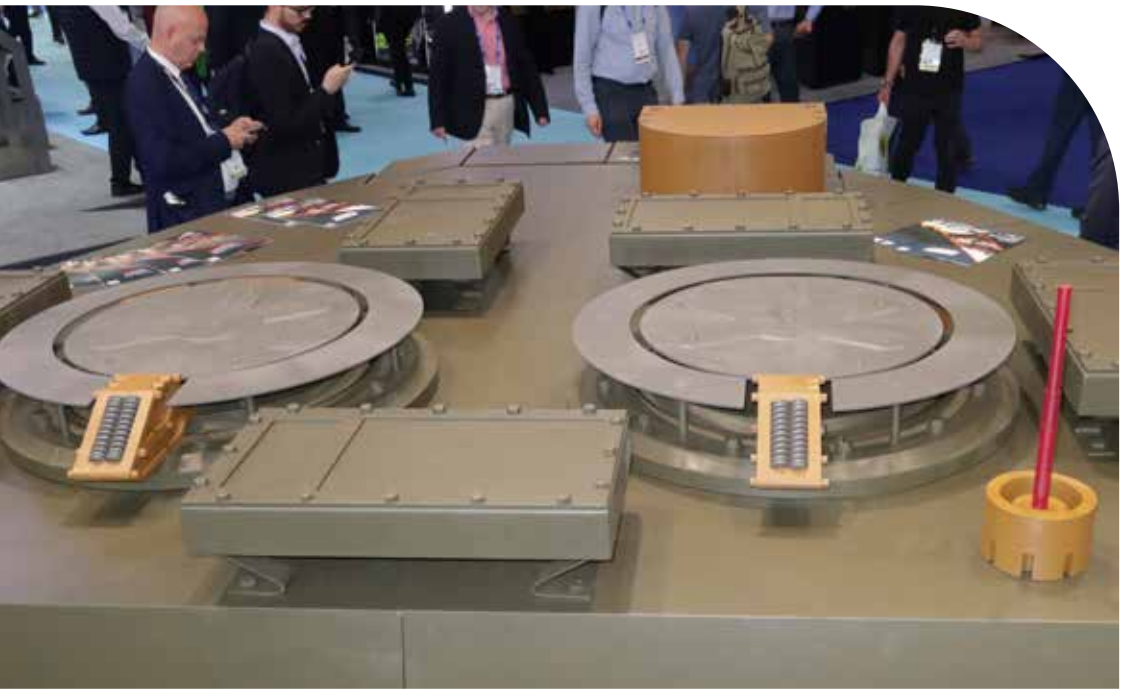

# EODH INTEGRATES UGVS AND TETHERED UAVS ON MBT PLATFORM

BY VALERIO DEL GRANDE

**HALL 6 STAND G380**

Based in Thessaloniki, Greece, EODH specialises in developing comprehensive survivability solutions for land, sea, and air platforms. It produces upgrade kits for wheeled and tracked AFVs and proposes solutions to deal with current and upcoming threats in conventional and asymmetric operations.

Conventional MBT upgrades and modernization programmes no longer suffice to address the full spectrum of modern battlefield threats. Recent combat experience in Ukraine, illustrated by the extensive losses of armoured vehicles, highlights the need for a new operational approach that combines manned platforms with unmanned systems in what is known as manned-unmanned teaming, or MUM-T for short.

EODH has developed a concept for integrating a UGV and a tethered UAV on a legacy MBT such as the Leopard 1A5. The concept trans-

*continues p 3*










# RAPIDFIRE

## The Arrow for Victory


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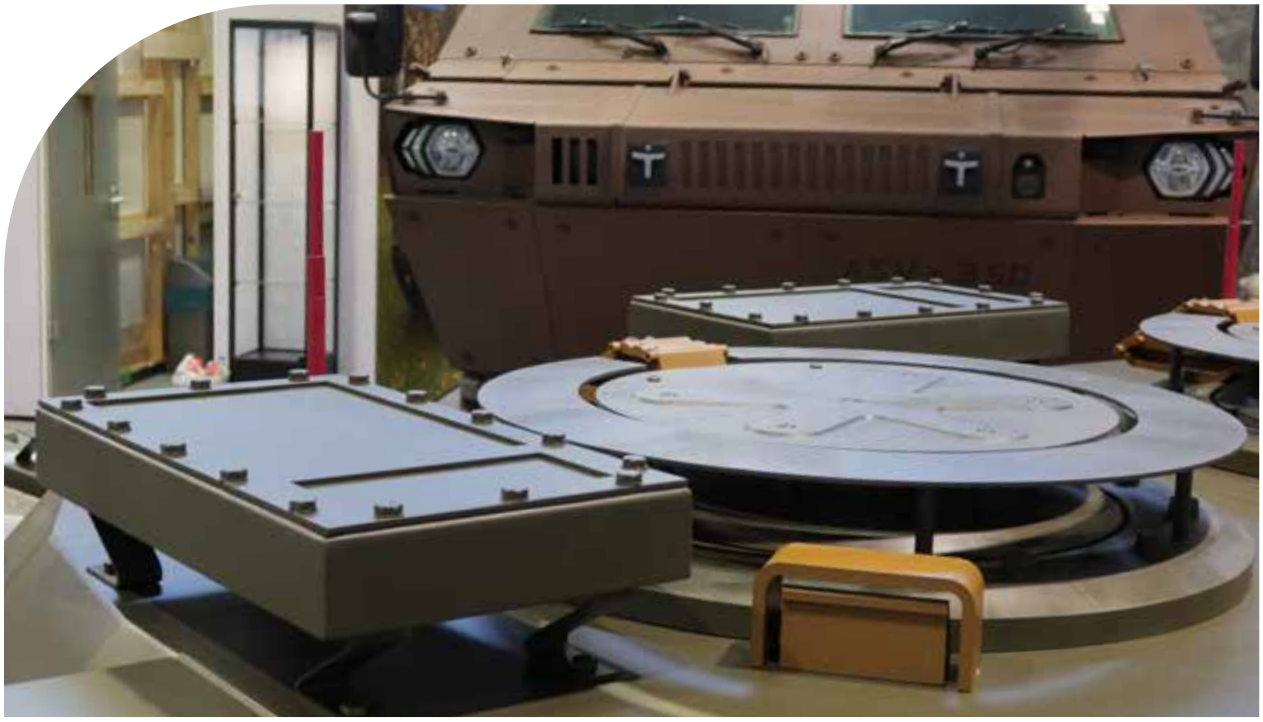

forms the tank into a MUM-T combat system, significantly enhancing situational awareness, reconnaissance capability, survivability and firepower.

The first modification was to add an additional crew station for UGV control; the Leopard 1A5's forward ammunition rack, located beside the driver in the front hull, has been removed to create space for an additional protected crew station for the UGV operator. He remotely controls an armed UGV that can act as a robotic 'wingman for the tank crew. Within a tank or mechanised unit, it can conduct forward reconnaissance, flank security, rear-area protection or route screening operations or can directly engage enemy targets.

To support UGV operations and improve battlefield awareness, a tethered UAV is installed in a dedicated launch-and-recovery compartment - a 'drone box' located at the rear of the hull.

The UAV remains continuously connected to the MBT through a tether that provides electrical power and secure data transmission, allowing it to remain airborne for extended periods, delivering persistent reconnaissance, surveillance and target acquisition (RSTA) capabilities. The operator's workload is greatly reduced when compared with a free-flying UAV, and high-resolution imagery is easily streamed via the cable, ensuring high throughput. Image and command data are exchanged via cable in a manner that does not add to the tank's RF signature and makes it immune to enemy EW.

Tethered UAVs are designed to be launched and recovered rapidly. Not only this, but modern systems include automatic cable tension regulators, allowing the air vehicle to remain in flight even when the ground vehicle is moving, providing continuous 360° observation during the manoeuvre. Should terrain issues complicate communications, a radio relay can be installed under the UAV to considerably improve voice and data communications range - a feature that becomes increasingly important when considering the distance from the tank at which UGVs can operate: they may well be beyond line-of-sight without the help of an elevated relay platform.

The MBT acts as mother vehicle both for the UGV and the UAV. The latter's 'drone box' not only allows the drone to be recovered and protected when not in operation, but it also features a recharging system that automatically 'refuels' the UAV as soon as it is back from its mission, ensuring that turn-around time is minimised. The same is true for the UGV, although this is usually not recovered on-board the tank, therefore recharging is done via umbilical cable, often when the UGV is towed behind the tank while awaiting commencement of a mission forward of the tank formation.

The UGV operator on board the MBT is the one who receives all the imagery, a layered sensor architecture combining the feeds coming from the UAV. The architecture provides a 360° aerial view unless the on-board sensor suite is not required to zoom into specific areas to verify possible targets, while additional imagery comes from the UGV's driving cameras, the remote weapon station optronic package, and additional battlefield sensors or players such as MBTs of the same formation. This considerably extends the tank crew's view, providing the commander with better situational awareness. It allows, for example, advance detection of possible threats, increasing the tank's safety and combat power.

Modern MBTs include indirect fire effectors such as loitering munitions, allowing the tank to engage engage beyond-line-of-sight targets detected and identified thanks to the improved situational awareness.

Overall, these features show the importance of the MUM-T concept, which increases the overall effectiveness of the MBT while enhancing crew safety. ●

# EUROPEANS MUST FORGE THEIR OWN WAY OF WAR

PAR FRÉDÉRIC MAURO

The old transatlantic bond is dying, European defence is slow to emerge and in this strategic twilight, monsters may arise. Indeed, what happened in Ukraine could happen again in the Baltic States: a territorial fait accompli backed by nuclear blackmail.

Can we therefore hope that Article 5 of the North Atlantic Treaty - that "paper tiger" - will deter a cornered Vladimir Putin from seizing this last opportunity while Donald Trump is still in power? What US president would send American soldiers to die for Zilupe, Narva or Riga?

And what will the other Europeans do? Unable to defend themselves as the Americans do - which is neither financially realistic nor strategically desirable – they will not want to fight as the Ukrainians have fought, at the cost of tens of thousands of lives. Better to "take change by the hand before it takes us by the throat," as Winston Churchill might have said.

In theory, there is no obstacle preventing Europeans from building a defence capable of containing Russia. In 2025, the combined defence spending of EU countries amounted to €393 billion, or €523 billion including the United Kingdom, Norway and Türkiye. That is well above the €145 billion Russia spent in 2024, even when measured in purchasing-power parity. The requirements are measurable and the Kiel Institute has estimated the cost at €500 billion over ten years - that is, €50 billion a year - for Europe as a whole. But do we still have time?

For money, though necessary, is not in itself sufficient to produce military effectiveness. History is full of examples of apparently overwhelming military powers that ended in political defeat and humiliating retreat.

More than budget increases and capability enhancements, what is needed is a deep reform in the way Europeans think. European states must forge their own way of war - a war that will not be the same as the one being fought in Ukraine.

## No European defence without European nuclear deterrence

***The credibility of NATO's nuclear deterrent has been eroded in the face of a strengthened Russian nuclear threat***

The only way to prevent nuclear blackmail is to counter one nuclear threat with another. Yet Russia's hybrid war against European countries since at least 2016 has highlighted the failure of both American and, even more so, European leaders to deter it.

Putin is confident that he can carry out hybrid actions with impunity because he believes he can manage escalation - nuclear or conventional - better than NATO. That confidence has been reinforced by Russia's 2024 revision of its nuclear doctrine, designed to restore the offensive potential of its "aggressive sanctuarisation".


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Under these conditions, if a Russian attack were to occur in one of the Baltic states, it would be hazardous to assume that the American president would agree to a nuclear escalation. He would most likely confine himself to symbolic support and launch into the kind of strategic pirouettes he has made his trademark. He could even use the crisis to weaken Europeans further, demanding financial concessions while negotiating one-to-one with Putin.

The real question, in any case, is not so much what Trump would do within NATO, but what Putin thinks he would do. As Thomas Schelling, the theorist of the "diplomacy of violence", argued: deterrence rests on what the other side believes you will do, not on what you will actually do.

### *The evolution of French nuclear doctrine offers an initial answer to this problem*

Starting from the observation that "our competitors have evolved, as have our partners", the French president announced in his speech of 2 March 2026 that France must "strengthen our nuclear deterrent in the face of the combination of threats" and "think of our deterrence strategy in the depth of European territory", thereby setting out two lines of effort.

The first is for France to reinforce the credibility of its own deterrent. This is the "enhancement of the posture", to be carried out in three stages.

In the short term, the aim is to increase the "conventional support" for deterrent forces - in other words, their ability to penetrate Russian air defences and protect European territory. Three types of weapons systems are involved: deep strike, early warning and air defence/anti-drone capabilities. As the president noted, "the last few years have clearly shown the glaring lack of supporting capabilities in Europe".

This conventional backing would be provided to France by its European partners, in the same way that they support American nuclear deterrence within NATO, in exchange for no financial contribution to France's nuclear deterrent, which would remain under the authority of the French president, just as NATO's nuclear deterrent remains under the authority of the American president and the British prime minister.

The value of this step is that it strengthens the only autonomous component of European nuclear deterrence through greater conventional capability, built in synergy among European partners and at controlled cost. France would thus pay little or nothing for the increase in conventional capability, while Europeans would not have to pay for France's deterrent.

In the medium term, France would increase the number of nuclear warheads so as to create new capabilities, such as an additional squadron for the strategic air forces. This increase would be kept opaque in order to avoid speculation.

In the long term, the upgrading of France's nuclear posture would come through new delivery systems such as third-generation ballistic-missile submarines and the Future Combat Air System, as well as new warheads and missiles such as the M51.4 for submarines and the future ASN4G manoeuvring hypersonic missile.

The second strand of France's doctrine is what the president called "advanced deterrence". This is a gradual approach offering partners the possibility of taking part in deterrence exercises, which may "also involve signalling, including beyond our strict borders, or the conventional participation of allied forces in our nuclear activities".

This may include the "deployment, as circumstances require, of strategic forces elements among our allies." In practical terms, French strategic air forces will be able to spread out across the European continent "like an archipelago of forces", thus "complicating our adversaries' calculations".

This evolution in French doctrine is in addition to, not a replacement for, NATO's nuclear mission. However, it does represent a step towards a pan-European nuclear component. The active participation of Europeans in supporting France will give them the assurance that they are no longer merely spectators of a guarantee that, until now, was merely theoretical, but that they can, in practice, become indispensable actors.

A group of eight countries has already expressed interest in discussions with France: Sweden and Denmark, Germany and Poland, Belgium and the Netherlands, Greece and, of course, the United Kingdom. A genuine 'strategic partnership' is thus taking shape among Europeans, a sort of nine-nation defence Eurogroup that could be called the Nuclear Nine (NN).

## Improving Europe's conventional defences necessarily requires greater integration

### *European conventional defence remains too weak*

Operating within a purely national framework, even the best-equipped European armed forces have proved dependent on American support for critical functions such as intelligence and strategic airlift. As a result, they now confine themselves to low-risk missions, or missions with limited risk.

As for the Common Security and Defence Policy, established in an intergovernmental framework within the European Union in 1992, it must be acknowledged that it has failed. It has not enabled Europeans to intervene in major crises such as Syria, Libya, and now Lebanon, all of which directly affect them and in which the Americans do not want to intervene. At best, one can cite the success of European naval operations against piracy or in the Red Sea. Even when reduced to its narrowest meaning as a crisis-management operational capacity, "European strategic autonomy" remains incomplete, and the 5,000-strong Rapid Deployment Capacity declared operational in 2025 will not change that.

As for collective defence, one must sadly admit that without American forces, their command-and-control capability within NATO through SACEUR and all the American officers at SHAPE and, above all, their intelligence and communications capabilities, the armed forces of European states would struggle to resist a Russian armed attack in a Baltic state.

This is because Europe's military weaknesses are numerous and significant.

The first stems from the fact that, with a few rare exceptions, these are peacetime armies that have not seen any major deployment since Afghanistan. This is why large-scale manoeuvres, such as the ORION exercise that has just taken place in France in the spring of 2026, are essential.

The second weakness is qualitative and lies in the lack of strategic enablers. At the top of the list are operational command and control centres. Europe also lacks satellites of all kinds, in-flight refuelling, deep-strike capabilities as well as air and anti-drone defence, among other things.

The third weakness is quantitative. European armies lack mass, in other words ammunition and equipment. This is why the European Commission has proposed programmes to encourage Member States to buy munitions and equipment jointly. Rebuilding strength is under way, but in a scattered way, with each country favouring its own force model, its own industries and, above all, its own financial constraints.

The fourth weakness is the failure to absorb the changes in the art of war since 2022. These include drones, of course, but also long-range missiles, which call into question the relevance of aerial combat and, crucially, the arrival of new technologies such as massive data use combined with artificial intelligence. Europeans have no equivalent of the American software such as Maven Smart from Anthropic, which plays a critical role both in the war in Ukraine and in Iran. This is more than a simple capability gap. European forces are lagging behind a strategic rupture, as if they were fighting with bows against cannons.

Finally, any inventory of Europe's military weaknesses would be incomplete without the necessary reform of procurement processes: "new defence". To manage the different timeframes between major programmes and the production of consumable equipment - the so-called "hi-low mix" - acquisition methods must evolve. Today, a full planning cycle within NATO takes four years to produce capability targets. It then takes many more years for member states to acquire them, if they do so at all. Yet, as Admiral Pierre Vandier, NATO's Supreme Allied Commander Transformation, puts it, "speed has become the very essence of war" and the transatlantic alliance must "transform or perish". It is imperative to shorten the learning loop, but also to test and deploy military capabilities before its enemy.

Awareness of this situation explains the anguish of many European leaders who are clinging desperately to a fading American guarantee and who have agreed to double their defence spending, regardless of their public finances.

***The only way to rapidly strengthen Europe's conventional defence is to continue the integration of forces***

Apart from the fact that they no longer have experience of war, European militaries follow incomplete and inconsistent models because they were built with and around US forces.

For years, European leaders were strongly encouraged not to "duplicate" American strategic enablers. One recalls that, at the turn of the 2000s, the administration of George W Bush tried to oppose the deployment of the Galileo satellite constellation. That is precisely why vast capability gaps appear as soon as American forces are removed from the European defence equation.

Moreover, on the basis of policies driven by strictly national logics, Europeans have duplicated capabilities among themselves instead of buying strategic enablers jointly - something that could have been avoided through specialisation, as foreseen in the Permanent Structured Cooperation mechanism included in the Treaty on European Union.

By addressing the issue of the inadequacy of conventional forces solely from a financial and capability perspective, we are missing the point. As Robert-Henri Berger, a senior French officer, puts it: "This is not merely a quantitative change - investing more to replace US forces - but a qualitative, ontological, comprehensive change at every level of the defence apparatus: replacing a mental and material framework, an American framework of coherence, into which we were accustomed to fitting ourselves."

The question now is under which framework this European force coherence should be achieved.

On paper, NATO is the most attractive framework, because it is the crucible of interoperability and the centre of planning, whether defence planning through the NDPP (NATO Defence Planning Process) or operational planning. In an ideal scenario, the Americans would therefore organise an orderly and rapid withdrawal of their forces, since they are now asking not merely for "burden sharing" but for "burden shifting". That withdrawal would of course include the transfer of supreme command and all command posts to European officers. In a transactional logic dear to the American president, it should also include the withdrawal of American forces from the bases they occupy in Europe, or at the very least their rental for a fee. That would give full meaning to the expression "European pillar of NATO", which, if words have any

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meaning, implies two distinct pillars rather than one and a half under American control. NATO could quite happily survive in its current form: a mutual defence T-reaty. But its O-rganisation would be left to each group's discretion. The Americans would thus be spared any financial contribution and the Europeans would be faced with their responsibilities.

Unfortunately, such a withdrawal, although easy to sketch, is unlikely. The Americans find in NATO both a captive customer base, a means of dominating and containing their industrial rivals and, finally, a network of forward bases essential to their operations. So far, the terms of this exchange were more or less balanced, because in return for their sacrifices Europeans benefited from American protection. Since Donald Trump, however, NATO has been weaponised. In order to maintain that protection, the American president has demanded exorbitant commercial advantages, such as those conceded in the agreement signed by the president of the European Commission on the Turnberry golf course. Europeans are now being asked to pay for a protection guarantee which, by the admission of the man who gives it, is no more than a piece of paper. That is what one calls a rigged deal.

The other option for structuring European forces would have been to give full meaning to the provisions of the Treaty on European Union concerning Permanent Structured Cooperation. Yet this mechanism, activated in 2017, now bears little resemblance to its original intent. And even if it did, it would still remain within the Common Security and Defence Policy, that is to say in a framework distinct from collective defence and limited to crisis management.

There would also be the possibility for the European Council to declare "common defence" in accordance with Article 42.2 of the Treaty on European Union. But this would require unanimity among the Member States, which is unlikely ever to happen.

Finally, there is the third option: coalitions of the willing, whether for Ukraine or for maritime security in the Persian Gulf. Unfortunately, these coalitions are neither structured – and therefore produce no structural effect - nor permanent, since they can be broken at any time. More promising seems the path sketched out by the French and German governments at the Meseberg summit in 2018: a European Security and Defence Council taking decisions by qualified majority. That idea has regained force in recent years thanks to the impetus of the European Commissioner for Defence, Andrius Kubilius. But for the moment it remains only an idea, to which the Member States have given no substance.

That brings us back to the most structurally significant proposal so far: the Nuclear Nine, mentioned in the context of the evolution of the advanced nuclear deterrence doctrine.

## Conclusion: towards a European defence, the European way

For Europe to be protected from nuclear blackmail, it must necessarily include an autonomous nuclear component, even if final decision-making remains in the hands of a single country. But at the same time, European States must strengthen their conventional defence. That cannot be done in isolation. If European defence is to be effective, some degree of specialisation, pooling and therefore integration is indispensable. What remains to be found is the forum in which this integration can be achieved: NATO, the EU, or a Defence Eurogroup?

Beyond these requirements, we must recognise that the problem is no longer merely one of capability. The confrontation spills far beyond the military sphere. It targets systems and infrastructure: factories, refineries, communications, industry, finance and hospitals, all of which are both levers and targets. And beyond systems and infrastructure, it targets the very coherence of our societies, everywhere, all the time. There is no longer war or peace, no front or rear, but "a permanent state of alert". This is the "war without limits" referred to as early as 1999 by two Chinese colonels in a book that left a lasting impression.

In fact, the systematic destruction of enemy infrastructure by overwhelming force has shown its limits against a resilient society, both in Ukraine and in Iran. What predominates is total, constant conflict, and at its core the most insidious component of all: cognitive warfare, where the mind is the battlefield, perceptions are the target, and the national narrative becomes a weapon of mass destruction. Yet it is the very idea Europeans have of their own powerlessness that condemns them to powerlessness.

That is why a rupture is needed - a quantum leap towards a Europe that is a power in its own right. To that end, more important than weapons is the strategy that defines ends, ways and means. It is high time to put it into practice. ●

# THE NEXT GENERATION...

HALL 5A STAND B189

BY SHAUN CONNORS

Probably best-known as manufacturer of the HMMWV, at Eurosatory 2026 AM General is featuring a pair of next-generation vehicles in the Unmanned Ground Vehicle (UGV) and the JLTV A2. In keeping with current themes, both are integrated with advanced counter-UAS systems.

The AM General UGV demonstrates how proven tactical vehicle platforms can be transformed into modular, mission-ready unmanned systems. Developed in collaboration with Textron Systems Corporation and Carnegie Robotics, the platform is based on AM General's 13-series chassis, the current HMMWV chassis. Payload capacity is up to 2,272 kg (6,000 lbs), the UGV designed to support multiple mission sets, including logistics, reconnaissance, casualty evacuation, and armed overwatch. Motive power is provided by AM General's new 6.5-litre, V8 common rail direct injection digitally controllable engine. Developed in cooperation with the University of Alabama, this engine is currently in low rate production

At the show, the vehicle is equipped with the Arquus Hornet Remote Weapon Station (RWS) featuring counter-UAS capabilities. This configuration highlights the platform's modularity and its ability to integrate fielded, combat-relevant systems that increase operational reach, enhance soldier protection, and provide commanders with flexible options on the modern battlefield.

Also on display is a Joint Light Tactical Vehicle (JLTV) M1280A2, the four man variant, featuring the Hornet Lite, which is a lightweight RWS delivering extended detection, recognition, and identification for reconnaissance. In addition to its ability to integrate defensive weaponry, the JLTV A2 has over 1,000 changes/enhancements to the technical data package (TDP) compared to the original JLTV A0. The JLTV A2 is currently being delivered to the US government for testing and evaluation.

# VARJO EXPANDS MULTI-DOMAIN C-UAS TRAINING FOR UKRAINE

BY TIM MAHON

HALL 6 STAND A75


Varjo is highlighting its mission-ready virtual and mixed reality (VR/XR) multi-domain training solutions at Eurosatory 2026, emphasising that it has already expanded its support to the Ukrainian Armed Forces through delivery of an immersive, realistic and interoperable XR simulator designed to train soldiers for counter-drone operations.

Developed in Australia by Applied Virtual Simulation as a direct response to the Ukraine war, the counter-UAS simulator Horizon Guardian is integrated with the Varjo XR-4 Series headset. The system facilitates one trainee flying a first-person-view (FPV) drone, while another attempts to neutralise it. Drones now account for over 70% of casualties in Ukraine, so the simulator is designed to replicate the pressures, sounds, and pace faced by soldiers on the frontline.

The industry-first simulator is currently being trialled in Australia while simultaneously being used in Ukraine to train soldiers in drone warfare. The development of a C-UAS simulator builds on Varjo's ongoing work advancing Ukrainian military training capacity.

Immersive and high-fidelity synthetic environments have proven critical in maintaining training continuity, strengthening readiness, and improving familiarity with complex systems in a situation in which access to equipment and safe training environments have hampered effective training. Addressing this problem, Varjo announced earlier this year that, through its partnership with Fynd Reality and as part of Norway's Nansen programme, 39 XR training systems have been delivered to Ukraine, providing multi-user scenario-based familiarisation, procedural, and maintenance training across a range of land vehicles, including the Leopard 2A4 tank.

Similarly, in 2024, Varjo worked with Czech company Dogfight Boss to deliver a complete F-16 mixed reality cockpit simulator, accompanied by a Varjo XR-4 Series headset, to Ukraine. The simulator enables early-stage pilot training to take place in-country, while also providing a platform for pilots to rehearse complex manoeuvres and operations, and to re-run scenarios as required.

"Varjo's mixed reality technology is solving a real operational challenge in Ukraine, and the latest counter-UAS simulator from Applied Virtual Simulation further demonstrates the need for agility, innovation, and speed in designing military training solutions that bridge the gap between preparation and reality," commented Varjo CEO, Timo Toikkanen.

HALL 5A STAND D371



# GROUNDED...

BY SHAUN CONNORS

At Eurosatory 2026 the UK's Babcock International Group is showcasing two vehicles from its General Logistics Vehicle (GLV) family.

The Medium Wheelbase GLV is a militarised version of the iconic Toyota Land Cruiser LC70 series, extensively modified to support troops in a range of missions. It features four individual crew seats and sufficient storage for a 72-hour patrol. Alongside this, Babcock is introducing its Light Utility GLV, based on the proven Toyota Hilux platform, to the European market.

The GLV family has been developed with a focus on practicality, reliability, safety, and ease of repair, supported by a dependable global parts network - qualities synonymous with the Land Cruiser and Hilux platforms. Drawing on its expertise in vehicle integration and modification, Babcock's Vehicle Engineering team in the UK has transformed these civilian platforms into adaptable personnel carriers capable of supporting a wide range of operational tasks worldwide. The Land Cruiser-based variants are also being positioned as Babcock's proposed solution for the British Army's Light Mobility Vehicle competition, replacing the outgoing Land Rover and Pinzgauer fleets.

Chris Spicer, Managing Director for Babcock's Engineering & Systems Integration business, said: «Armed forces need confidence that their people are equipped with high-quality, dependable equipment. The GLV has been designed to perform in the toughest environments, while providing a safe, practical and comfortable space for its occupants.»

While traditionally associated with the marine segment within defence, Babcock in fact has a long track record of delivering vehicles for military and security customers. In partnership with Supacat, it is currently building the Jackal 3 High Mobility Transporter for the British Army. Its LC300 Civilian Armoured Vehicle is also used globally to protect royalty, government leaders, military personnel and diplomats. As part of its land strategy, in 2015 Babcock acquired vehicle convertor and armourer S. MacNeillie & Sons.

Babcock is also Patria's UK build partner for its 6x6 armoured personnel vehicle.


# SWEDISH SOLUTIONS...

BY SHAUN CONNORS

HALL 6 STAND J244

At Eurosatory 2026, Scania handed over the first of a batch of hybrid electric trucks to Sweden's Defence Materiel Administration (FMV) and unveiled its first ever company-developed armoured truck cab.

Previously, Scania-delivered trucks have been fitted with armoured cab solutions delivered first by Åkers Krutbruk Protection, and later by Essonne Sécurité. To enable complete control over design, development, support and quality, Scania commenced in-house development of the new cab in 2025. Prototypes are currently in testing, pre-series examples should be complete by Q4 2027, and serial production is scheduled from Q1 2028.

The cab will be manufactured in Sweden and installed on existing production lines, without disruption to the assembly process. The cab will share the bulk of its internals and interfaces with comparable standard cab models.

Retaining as much commonality as possible with standard models was a key design aim for Scania, this having numerous advantages during production and for the operator, who will find the driving environment of trucks with or without armoured cabs almost identical. This includes the option of a large single-piece windscreen, with a split screen being another option. Considerable effort was also applied in areas of accessibility and maintenance, both for the cab and to the truck. The cab can technically be swapped in the field if required.

Protection levels range from Level 1 to 3 ballistic, with mine blast protection fixed at Level 3. Weights for the cab have not been revealed, but the company has stated that at protection Level 3 the cab can be fitted to trucks with a single front axle.

Also at the show, Scania handed over the first of three hybrid trucks to the FMV as part of a joint development project that will see the vehicles evaluated by all branches of Sweden's armed forces.

These trucks will be used to better understand any opportunities that electrified powertrains may bring to military applications. These could include fuel-efficient operation, the possibility of silent movement using electric propulsion, and the ability to use the vehicle's battery and generator to supply power to external equipment, such as command posts, sensor equipment or temporary camps.

Scania's hybrid solution is a plug-in parallel hybrid, where the combustion engine and electric motor can power the vehicle either separately or together. The electric motor contributes instant torque and the possibility of silent movement for limited periods. The electric range is approximately 70 to 80 kilometres, depending on use, load and conditions.

The vehicle can also be used as a mobile energy platform, something that is becoming increasingly important in modern defence operations in which command, sensors, communications and other equipment require reliable power supply close to the operational area.

The battery capacity of the current solution is 208 kWh. At around 75% state of charge, this corresponds to approximately 156 kWh of available energy. The vehicle can provide around four hours of continuous AC power supply, and the battery can be charged from 0 to 100% using the combustion engine in approximately 45 to 60 minutes at idle.

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_BLACK WIDOW

# PLUG-AND-PLAY TETHER SOLUTION

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DRONE SOLUTIONS

# PRODUCING SPARES ON THE BATTLEFIELD; BAE SYSTEMS HÄGGLUNDS MICROFACTORY

BY VALERIO DEL GRANDE


How to get a spare part in operational theatre if the supply chain is broken, something that happens more often than we can think? BAE Systems Hägglunds looked for an answer and came up with the Microfactory concept.

Work started 10 years ago when the company begun exploring additive manufacturing, quickly starting cooperating with academia. Alon time the concept evolved towards advanced manufacturing, which goes well beyond the starting point as it no allows producing qualified and certified spare parts.

The aim is not to replace stocks, which will remain both at military and industrial level, but to add a further layer that increases the probability that a certain spare is available in the field in the minimum time possible, increasing fleet availability. The company quickly understood that joining forces with other major players would prove beneficial and teamed up with Saab.

First tested at laboratory level and then moved within the Microfactory, the hardware is made of a wore arc additive manufacturing six-axis machine, fitted with a two-axis turntable, the combination allowing the production of parts with very complex shapes. It can produce 1-metre-long pieces with a mass of 300 kg. This machine was the result of the cooperation between BAE Systems Hägglunds, Saab, and FMV, the Swedish Defence Materiel Administration, core technology being developed in around one year by the University West based in Trollhättan. A five-axis machine is then used in the post-processing phase, which allows to bring the WAAM-produced piece within design tolerances and surface finishing.
BAE Systems Hägglunds developed the right "recipe" for producing qualified and certified spares for its vehicles; known as TDP (Technical Data Package) the software package can be sent quickly to the customer to allow him producing the lacking spare. The company is working together with customers and with NATO to create a database that can be used to prove those recipes to the customers, this database being known as RAPID-e.

In Q1/2026 BAE Systems Hägglunds delivered the first container based Microfactory to the Swedish military, the system being currently tested. ●

# SWISS PRECISION AND RESILIENCE

JEAN-PIERRE HUSSON

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STAND
H115


The Concept One and Dive Pro models represent the new generation of Victorinox watchmaking, combining technological innovation with extreme durability. With the Concept One, Victorinox makes its debut in solar-powered movements, focusing on sustainability and long-term reliability. Concept One features the Swiss Ronda 215 calibre, which converts any light source into electrical energy. The case is crafted from recycled materials or titanium (depending on the version), maintaining a slim yet rugged profile. A fully charged battery provides up to eight years of operation in total darkness.

The Dive Pro is a professional diving watch certified according to the ISO 6425 standard and designed to withstand extreme marine conditions. With certified water resistance to 300 metres (30 ATM), the automatic model uses the Sellita SW220 movement, visible through the sapphire crystal case back (Ronda 715 for the quartz version). The case is available in stainless steel or Grade 2 sandblasted titanium, the latter being ideal for those seeking lightweight comfort and salt-water corrosion resistance. Dive Pro has passed the strictest Swiss durability tests, including a 10-metre drop and lateral pressure resistance, and uses high-intensity Super-LumiNova coating for perfect readability in the total darkness of the deep sea. ●


EDGE

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# GREEN VAN MAN...

BY SHAUN CONNORS

**EXTPE66**
**STAND**
**D127**


Within the security and defence sectors, Mercedes-Benz is generally associated with the G-Class. However, for more than 25 years the company has been actively supplying modified/militarised light commercial vans to armed, security and governmental forces. And for Eurosatory 2026, for the first time, they are displaying examples of these.

The Mercedes-Benz Sprinter van was introduced in 1995 with the third and current generation debuting in 2018. The base Sprinter is readily adaptable, and according to Mercedes-Benz some 75% of all Sprinters worldwide are converted, including for governmental and military applications.

The Sprinter is currently available with four different basic body configurations and with a permissible gross vehicle weight (GVW) of up to 5.5 tonnes. The Sprinter in all-wheel drive configuration is offered with a 2-litre diesel engine developing 140 kW, this coupled to a fully automatic transmission. One key contributor to the popularity of the Sprinter for conversion is the engine power take off, which enables a flexible energy supply for radio, radar, IT systems and similar.

The Sprinter also benefits from Mercedes-Benz's global service and spare parts network that guarantees 24 hour parts supply anywhere in the world.

Here at the show, Mercedes Benz is presenting a vehicle combination that consists of a converted Sprinter alongside a G Class. Developed in cooperation with deep-tech start-up Tytan Technologies and body manufacturer BINZ, the Sprinter is equipped with two operator workstations, secure communication systems and cameras for airspace surveillance, as well as launch boxes for surveillance and interceptor drones. The accompanying G Class is configured to expand the operational spectrum into areas with particularly challenging terrain and features an extendable radar telescopic mast and an additional drone launch module.

Mercedes' G-Class, or G-Wagon/Wagen, has a history that traces back to 1979, with more than 74,000 units produced as of mid-2026. Originally developed as a military vehicle, the G-Class was quickly adapted to address a growing consumer demand for all-wheel drive, all-terrain vehicles. Commercial/civil and military G-Class for many years shared a common base platform, however with the commercial demand for luxury and sophistication growing and the complexity this entailed becoming ever less adaptable to the military environment, in 2018 the commercial and military G-Class become separate products with the introduction of the second-generation 463 commercial/civil models.

The current military and governmental specific 464 Series was announced in 2021, the design remaining true to the types' military roots with coil-sprung rigid axles and an engine capable of prolonged use on military and poor-grade fuels. The base G-Class design has always featured three driver-controlled differential locks and a two-speed transfer case, these contributing on current models to give all-terrain capabilities that include 100% gradeability and a 660 mm fording depth.

With a proven ladder frame chassis and GVW options of up to 4.9 tonnes, more than 60 different equipment packages have been integrated into the G-Class. Examples at the show include a G 350 d Station Wagon with a permissible GVW of 4.5 tonnes (standard G-Class GVW is 3.5 tonnes), this offering a payload of well over one tonne. Special lashing and recovery eyes enable internal or external transport by helicopter. Optional equipment includes a walk-on bonnet for easier loading of the roof rack and run-flat inserts. In addition, the Station Wagon 4.5 is available with infrared and blackout lighting, the innovative EOSys emergency bridging switch, an EMC package against electromagnetic interference pulses, and a 12-/24 volt electrical system. ●

# EODH WILL PRODUCE BOXER MODULES IN GREECE

BY VALERIO DEL GRANDE

HALL 6 STAND G380

On Day 2 at Eurosatory 2026 EODH and KNDS signed a contract that will bring the Greek company into a new era, as it will become part of the land platforms manufacturing sector of the Franco-German group. The contract will see the Thessaloniki-based company manufacturing Boxer modules, which will then be shipped to Munich for final fitting.

The contract, which has a total value of around €200 million, was signed on behalf of KNDS by CEO Florian Hohenwarter, SVP Heinz Oestervoss, SVP Procurement Tanja Heinemann, and Head of Department/ Director of Purchasing & Logistics Jörg Müller. EODH was represented by its President, Andreas Mitsis.

A new 10,000 m² facility is being built, which will host the welding, painting and finishing lines for an expected production of around 100 modules per year. Initially EODH will produce existing modules developed by KNDS, but in due time the company will be called on to develop new modules exploiting its R&D capacity. The new plant will create 120-130 jobs; EODH is currently hiring, training and qualifying personnel, mostly for welding - which is rapidly becoming a perennial challenge for the heavy defence engineering community.

The signing ceremony marked also the 25th anniversary of cooperation between EODS and KNDS, originally Krauss-Maffei Wegmann.

# EM&E GROUP PROMOTES NEW MOBILE LAYERED C-UAS DEFENCE SOLUTION

BY TIM MAHON


**EM&E Group**, the new identity of Escribano Mechanical & Engineering, showcased the ODIN 6x6 for the Eurosatory audience on 16 June, unveiling a comprehensive mobile layered defence solution for counter-UAS use that combines detection, identification, soft-kill and hard-kill capabilities in a single package.

The new system embraces a philosophy of comprehensive and sustainable capability provision, according to Group CEO Fernando Fernández at the launch event. "In the past it was enough to be accurate: today we have to show a sustainable way of [achieving the objective]," he said.

The ODIN 6x6 combines multiple technological capabilities, enabling everything from early threat detection and identification to neutralization, all of which is integrated through a C2 system. It detects threats in real time using four radars capable of three-dimensional precision. It will also inhibit those threats using an EW systems that jams and distorts operator commands. The system also boasts several robust hard-kill options to supplement this soft-kill solution: two optically-guided interceptor drones, the GUARDIAN 2.0 PRO RWS, which mounts a 30mm M230LF autocannon and a turret-mounted micro-missile system that launches laser-guided munitions.

The weapons platform is integrated onto a FEROX armoured vehicle, which itself represents a qualitative leap in tactical mobility, according to the company, combining modular architecture with cutting-edge ballistic protection. The complete counter-UAS solution, the product of industrial collaboration between prominent international companies, strengthens the European defence industrial and technological base.

# PARAMOUNT'S MWARI COUNTER-DRONE PLATFORM

BY DAVID OLIVER


Paramount will present the Mwari Counter-UAS configuration at Eurosatory 2026, offering a credible, affordable and deployable solution to the growing threat posed by Shahed-class one-way attack drones.

The C-UAS-configured turboprop-powered Mwari strike aircraft exploits the aircraft's unique airframe architecture to deliver a fully integrated detect-to-defeat capability without sacrificing weapons payload. A multi-spectral targeting turret is mounted in the dedicated nose-mounted EOS station, providing the weapon systems officer (WSO) with high-definition infrared, day TV and SWIR imaging, combined with a self-contained laser designator, laser spot tracker, and AI-enhanced automatic target tracking. With a designation range of up to 35 km and day/night laser spot confirmation, it functions as a complete targeting system.

Critically, a Ku-band Synthetic Aperture Radar and Moving Target Indicator (SAR/MTI) system is carried in Mwari's removable belly pod, while an internal station leaves all four wing hardpoints free for the weapon load. The SAR provides high-resolution imaging to 27 km and, in MTI mode, can detect and track slow, low-altitude moving targets at greater ranges.
Operating simultaneously with the nose-mounted EOS in a slew-to-cue configuration, the SAR detects the inbound threat at distance and cues the targeting system directly onto the contact. The WSO then identifies and classifies the target before any weapon is released, preserving the human-in-the-loop requirement that responsible engagement demands.

The Mwari C-UAS is offered with configurable effector options suited to the customer's operational and procurement requirements. A combined gun and rocket pod on a single NATO-standard hardpoint provides a layered close-in and standoff engagement capability, while dedicated guided rocket launcher stations on the remaining hardpoints extend the kill envelope further. The 12.7 mm gun element engages targets close in, while the laser-guided 70 mm rockets, designated by the nose-mounted EOS turret, extend standoff engagement range.

# CSG DEFENCE + FNSS = DANUBE DEFENCE SYSTEMS

BY VALERIO DEL GRANDE

CZECH PAVILION

On Day 2 at Eurosatory the foundation for the creation of a new joint venture was signed between the Czech group CSG Defence and the Turkish FNSS Savunma Sistemleri. Witnessing the ceremony was the CFL-120 Karpat medium tank, based on FNSS-designed Kaplan chassis on which CSG integrated the Leonardo HITFACT MkII 120 turret. The vehicle will be produced and marketed by the new JV, Danube Defence Systems aiming not only at the European market but also at export in other geographical areas. Some legal activities have yet to be finalised, the agreement signed in Paris being the first step of a process that should bring the JV to become operational in the coming weeks; it will be owned 51% by CSG Defence and 49% by FNSS. CSG will lead marketing and manufacturing operations, leveraging its existing facilities initially at the MSM Land Systems site in Trenčín, while FNSS will provide technology transfer, know-how and platform licences for local production. Financial and administrative functions will be managed jointly.

The Karpat is the first of a series of armoured vehicles that the JV intends developing in the coming years. The agreement was signed by CSG Defence Systems CEO Jan Marinov and by FNSS CEO & Board Member Selim Baybaş.

# RAYTHEON PROPOSES MALD FOR NATO

BY GILES EBBUTT

Raytheon, an RTX business, is showcasing its Miniature Air-Launched Decoy (MALD) at Eurosatory as NATO looks for an air-launched decoy solution. The MALD is a low-cost, expendable, air-launched craft that deceives enemy integrated air defence systems by replicating the radar signature of high-value aircraft.

The programmable weapon duplicates the combat flight profiles and signatures of US and allied aircraft. Each craft weighs less than 300 pounds and has a range of around 500 nautical miles. The system is built for "stand-in" operations, meaning it flies close to threats so piloted aircraft, unmanned aerial systems and effectors can move through contested airspace with reduced risk.

The MALD-J decoy is the jammer variant of the basic decoy, which Raytheon claims is "the first ever stand-in jammer to enter production". The unmanned system can operate alone or in pairs and can move much closer to the victim radar than conventional electronic warfare when jamming electronics, thus enabling it to degrade or completely deny enemy integrated air defence systems from detecting friendly aircraft and effectors. It is able to loiter in the target area, allowing sufficient time for missions to be completed.

By saturating air defence systems with realistic decoys and providing stand-in jamming, MALD keeps pilots and aircraft out of harm's way while enabling greater freedom of manoeuvre for strike packages.

MALD and MALD-J are compatible with major NATO platforms, including the F-16, and Raytheon says they can be integrated onto new airframes with minimal complexity and no platform modifications. Uniquely, they can also be launched from cargo aircraft via pallet, providing more options for how and where to deploy them.

The system is currently fielded and in operational use. According to Raytheon MALD meets all the requirements NATO has recently published for an air-launched decoy. Raytheon is "in active conversations with partner nations and NATO to fulfill the alliance's air-launched decoy requirements".

Sam Deneke, president, Air and Space Defense Systems, Raytheon, said "Raytheon continues to deliver this important system with the reliability and performance our customers require in contested environments. We are actively investing in our manufacturing of MALD and are ready to rapidly scale production in support of European forces". ●

# MAJOR CONTRACT FOR OUVRY POLYCOMBI® CBRN PROTECTION SUIT

BY MARC CHASSILLAN

**HALL 6 STAND F279**

Founded by Ludovic Ouvry in Lyon in 2003, Ouvry has won a major order for 10,000 POLYCOMBI® suits, intended for soldiers in the French Army, Air Force, and Navy. This solution was designed to meet short missions exposed to an expanded CBRN risk. Originating from a concept launched in 2005 as part of an concept-study programme by the DGA, the POLYCOMBI® was designed as a true 'CBRN wardrobe,' adapted to four system configurations to cover 18 operational situations, from armoured vehicle drivers to medics and bomb disposal experts.

In the Ministry of the Armed Forces' order, this suit is coupled with as many pairs of OG05® butyl gloves produced within Ouvry's joint venture based in the heart of the Plastic Valley in the Ain département. This factory, which opened in 2024, now employs several dozen locally recruited staff.

The POLYCOMBI® meets several key criteria: high interoperability with internal security forces as well as with emergency and healthcare responders, great lightness, and excellent performance for short missions. As a protective suit, it provides 12 hours of protection against chemical warfare agents according to NATO standards.

The first CE-certified CBRN suit, the POLYCOMBI® is also one of the lightest pieces of equipment on the market, weighing less than 1 kg in a medium size. It stands out for its comfort, durability, and thermo-physiological qualities, making it a best-seller in the Ouvry range.

Made over 80% in France and 100% in Europe, the POLYCOMBI® shows Ouvry's ability to rely on a strong, regional, and sovereign supply chain. This order has significant industrial impact on two sites in the Ardèche (where the specialized weaver is located) and Vendée départements.

Active in the CBRN protection systems market for over twenty years, Ouvry already equips French Special Forces, Air Force pilots, many demining and decontamination specialists, as well as Army infantry regiments with FELIN CBRN systems. ●

# THORIS VERSUS THE DRONES

BY GILES EBBUTT

HALL 6 STAND J279


Rohde & Schwarz (R&S) has developed a new multi-sensor, multi-effector C-UAS as a private venture and is showcasing it at Eurosatory.

The Tactical High-Energy Opponent Response and Interception System (THORIS) is a scalable, modular, multi-layered C-UAS framework and is designed to follow an operational chain of "detect, decide, respond". It builds on the previous R&S ARDRONIS C-UAS, which incorporated the RF spectrum capabilities of direction finding and multi-band jamming, now adding radar, acoustic and optical sensor capabilities.

Bernd Nagelrauf, R&S C-UAS product manager, told the Show Daily that "now we're able to detect, for example, the fibre-optic drones and those connected to a GNSS." He said the system is already combat proven in Ukraine, where R&S has been working with Infozahyst.

He added that THORIS's open architecture means it is agnostic to sensors and effectors, which can be chosen by the customer. It is also platform agnostic, so it can be mounted on a vehicle, in a container or on fixed infrastructure.

At the heart of the system is new C2 software from R&S which fuses the data from the various sensors to provide a single coherent air picture that supports faster detection, reliable identification and coordinated threat evaluation. It enables engagement-on-the move.

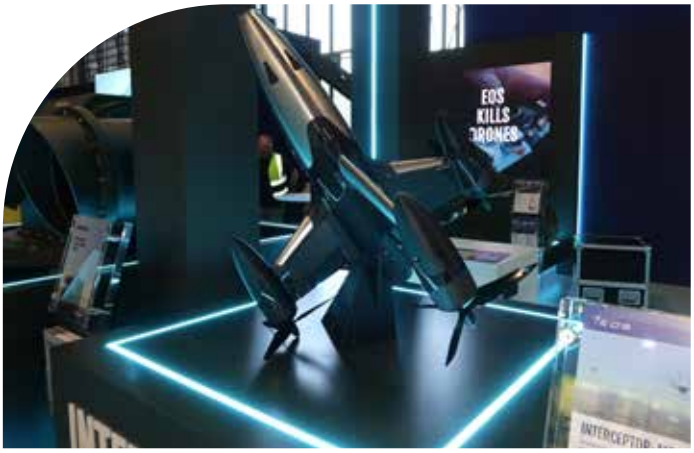
Nagelrauf said the system was designed to have a "man in the loop", but increases in autonomy would be possible in future, according to customer requirements, which would include incorporating detailed rules of engagement.

As well as jamming as an effector, R&S has partnered with Trumpf to integrate "a high energy laser that can take on drones and drone swarms", Nagelrauf said. It is currently in development at about TRL 4, with the aim of having it ready for customers by 2028. Initial testing of the fire control system, which is an element of the new C2 software, and the gimballed weapon station is currently in progress under laboratory conditions.

Nagelrauf said that it would be possible to integrate an RCWS in the same fashion, although it would "take some integration first, but the principle is the same. The system will point the gun instead of the laser". The C2 system could also be integrated with other battle management systems, including via Link 16, in order to share tactical information.

# EOS SHOWCASES ITS INTERCEPTOR-MR C-UAS KILLER DRONE, CLOSE TO PRODUCTION

BY VALERIO DEL GRANDE




Originally developed by MARRS, the C-UAS business of that company was acquired by EOS of Australia in late 2025, and confirmed on the opening day of Eurosatory.

Unveiled in 2022, the Interceptor was one of the first drone-killer based on kinetic energy only. The development led to minor changing, the architecture remaining that of an aerodynamic fuselage with, at the rear, four short wings each carrying at its tip an electric DC brushless motor activating a two-bade pushing propeller. The airframe features titanium reinforced wings leading edges as well as fuselage nose, to increase destructive capacity against Class I and Class II enemy drones, with chances to kill more than one of the smaller UAVs in a single mission. The airframe is 800 mm long and has a 900 mm wingspan, take-off mass being 8 kg. The Interceptor-MR can reach 288 km/h (80 m/s) in horizontal flight. Against Class I targets it can survive and carry out a second kill or being recovered.

The interception range is over 5 km, maximum altitude being more than 2,000 metres. The Interceptor-MR is launched from a container with mechanical thrust and the effector carries out the mission in full autonomy. Initially it is queued by a radar, then the infrared seeker in the nose is activated to guide the terminal engagement, however radar and IIR data are fused to further increase accuracy, AI-based algorithms being used. The first autonomous flight dating back to April 2024. Since then, the company has continued refining the system to maximise performances. In late 2024, early 2025 cold weather testing was performed in Canada, where the Interceptor-MR was also tested in a naval scenario. This led to the addition of a LIDAR sensor in the tail to allow a more accurate measurement of its altitude from the ship flight deck.

Development is nearly completed, and EOS should start soon production. ●

**HALL 5A STAND H335**

# THE BREN-TRONICS 6-PACK

BY VALERIO DEL GRANDE

**HALL 5A STAND C179**

After 15 years of success and thousands of field-proven units, Bren-Tronics has redesigned its 6-PACK, a rugged, water-resistant, man-portable power source that combines between one and six BB-2590 batteries with an integral smart-charging system. It is compatible with a wide range of input power sources, including AC (90–264 VAC, 47–440 Hz), and DC military and civilian vehicles (11–36 VDC). It can also be connected to solar panels, a maximum power point tracking (MPPT) allowing for optimised solar charging. A plug-and-play solution, in the new version up to 16 units can be interconnected - a modular daisy-chain option offering a major advance as it allows for a total capacity exceeding 28 kWh.

The 6-Pack Gen II features an Uninterruptible Power Supply (UPS mode), 12 A at 28 V, ensuring continuity of power in the event of an outage. The output power reaches 120 A (12 Vdc) or 60 A (24 Vdc) per section, allowing adaptation of energy resources to the mission. The 6-Pack Gen II also integrates a charging system for the six isolated BB-2590 batteries, allowing for simultaneous charging. Controller area network communication ensures comprehensive system monitoring, while an integrated USB-C port facilitates device charging and system updates.

Without batteries, the mass of the 6-Pack Gen II is 12.0 kg, which increases to 20.9 kg with six batteries. Dimensions, with bumpers, are 279 x 394 x 343 mm.

Part of EnerSys, Bren-Tronics is a world leader in defence power solutions, and for over 50 years has been a key provider of energy storage solutions for armed forces and government agencies. ●

# HOLOGATE'S HGXR CONTINUES TO DEVELOP

BY GILES EBBUTT


**HALL 5B STAND B175**

Hologate has continued development of its HGXR virtual reality (VR) training system and is demonstrating it at Eurosatory.

Developed in conjunction with the German army but with a wide range of use cases for law enforcement training as well, the system enables individuals and groups of up to eight trainees to operate in an immersive environment with weapon and head tracking, and to conduct individual weapon and marksmanship training as well as tactical training.

Ferdinand Eppensteiner, Hologate head of sales, explained that the system can be set up in an area of up to 1,000 $m^2$, although most users use about 200$m^2$. Trainees wear an HTC Vive headmounted display (HMD) and noise cancelling headphones. The system also includes a variable-response haptic vest and shock belt.

Tracking is provided through sensors on the HMD, weapons and other equipment which link to floor and wall marking, with an initial scan at the start of a training session. Eppensteiner said that these markings are quick and easy to install as floor mats and wall hangings.

He noted that customers have different approaches to weapon use. Some are using airsoft replica weapons with CO2 blowback, with the tracking device mounted. Some use real weapons firing blank ammunition, again with mounted trackers but with small additional sensors to track aspects like trigger pressure and other aspects of weapon handling.

In addition, at the specific request of the German army, Hologate has developed a surrogate version of the G95 assault rifle. This works on compressed air, has all the relevant sensors embedded and includes an instrumented surrogate magazine that requires the correct changing drill once empty. Eppensteiner noted that because this is not a real weapon it significantly reduces security requirements. He added that this is the first of a family of surrogate weapons.

The whole of a training session can be recorded for after action review (AAR), which an instructor can bookmark on the timeline for debrief. Scenarios are user-generated according to the training requirements and an instructor can also take live control of the session if necessary. Eppensteiner said that specific locations can be scanned for mission rehearsal, which could be particularly useful for special forces.

# MORE RANGE FOR MORE PUNCH, THE NEW LU220 FROM KNDS AMMO FRANCE

KNDS OUTDOOR STAND

BY MARC CHASSILLAN


For over three years, KNDS has accumulated tremendous experience from the war in Ukraine with its CAESAR 155 mm self-propelled gun, LU211 HE round and associated modular charges. Backed by a very strong technical background and leveraging all operational lessons directly learned on the frontline, KNDS Ammo France has decided to develop a new round, the LU220. This has an elongated profile and is therefore more aerodynamic than the LU211. The shell benefits from an increased range without modification of the artillery system, in a context in which the operational range of guns becomes predominant. The LU220 can reach 42 km (with base bleed) whereas for the LU211 the limit is about 40 km. The LU220 shell is larger than the LU211, carrying more explosive (about 11 kg versus 8.8 kg) and therefore delivers better terminal effect. The new shell represents the best balance between price, increased range and increased terminal effect.

The ammunition is compatible with all JBMoU (Joint Ballistic Memorandum of Understanding) systems that can accommodate the elongated size of this ammunition, including CAESAR, K9, RCH155 and all 155-52 mm current generation guns.

The LU220 is available in several versions. The basic version is filled with Composition B, the standard filling for artillery shells. The insensitive version is filled with insensitive explosive, which allows the shell to better withstand shocks, fires and explosions during its lifecycle, ensuring secure logistical flows as well as crew and platform safety.

The shell is compatible with all detonation fuses suitable for 155mm (point detonating, proximity, delay). Furthermore, it is ITAR free, containing no American components.

With the LU220, KNDS enlarges its portfolio with a highly capable, cost effective shell that will improve the global efficiency of its own best-seller CAESAR and other 155-52 mm guns. ●

# POWERING AUTONOMOUS SYSTEMS WITH QUAZE TECHNOLOGIES

HALL 5A STAND D338

BY DAVID OLIVER

The Canadian company Quaze Technologies, Inc. delivers game-changing autonomous power access solutions that keep unmanned systems operational in the most demanding environments. Its QU6 wide-surface, platform-agnostic charging technology removes the need for physical connectors or precise alignment, enabling continuous, hands-free recharging for robots, drones and maritime systems - on land, at sea, in the air and beyond.

Quaze's wide-surface charging pads allow devices to recharge anywhere on the ground, eliminating downtime and removing humans from the recharging loop.

For platform-agnostic integration designed for rapid OEM integration, Quaze works with diverse vehicle types and power architectures, reducing development time and complexity. Power transfer through debris such as snow, sand, dirt or water ensures reliable operation in austere, contested, and hostile environments to give field-proven resilience. For operational efficiency, continuous top-up charging extends mission endurance, reduces logistics and lowers lifecycle costs by minimising battery swaps and connector maintenance.

Compatible with multiple power sources, including AC, batteries, solar and generators, Quaze solutions support sustainable, remote, and off-grid deployments.

The company was recently acquired by the Red Cat Holdings family, accelerating its roadmap and scaling its commercial and defence offerings. This acquisition strengthens its resources and market reach while preserving the agility and technical focus that make Quaze a trusted partner for OEMs and operators. Quaze isn't just a charging technology - it is an operational enabler. By delivering reliable, hands-free power where and when it's needed, it frees platforms to operate longer, further and safer. For OEMs seeking a future-proof power solution that simplifies integration and unlocks persistent autonomy, Quaze provides the missing logistics link. ●

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# LEONARDO DETAILS PROGRESS ON VULCANO 155 AMMUNITION

BY VALERIO DEL GRANDE


At Eurosatory 2026 Leonardo, Diehl Defence and General Dynamics Ordnance and Tactical Systems celebrated the Extended Range Artillery Projectile (ERAP) contract, as the Vulcano 155 mm Guided Long Range (GLR)was selected by the US Army.

Launched in 2002 by then Oto Melara, the Vulcano ammunition programme is now up and running, the 155 mm Ballistic Extended Range (BER) and GLR versions being in production. The development is, however, not yet complete, as requirements are changing based on lessons learned from ongoing conflicts.

The BER allows range to be increased from 30 to 50 km using 52-calibre barrels. The GLR, the first iteration of which was an IMU/GPS-guided munition (with both military and commercial GPS data being available), allowed for a further increase in range thanks to the canard wings that guide it. Their lift permits a non-ballistic profile flight which extends the range up to 70 km. To increase accuracy, different seekers were added, including semi-active laser (SAL) and IIR in the far infrared.

Leonardo teamed with Germany's Diehl Defence of Germany, which develops the seeker. The IIR seeker currently available was developed for the naval Vulcano 127 but has a resolution too low to be able to discriminate land targets from background. A GLR version adding it to the IMU/GPS has become a successful product, as many customers required such a capability for coastal defence. A higher resolution IIR seeker is being developed for a land version, but no information is yet available on who is developing it against what requirements or within what timeframe.

Lessons learned from Ukraine and elsewhere have introduced the phrase 'GPS-denied' into the operational lexicon. This has influenced the development of a replacement for trajectory shaping done at altitude, which traditionally exploits lift from the guidance kit but is not feasible anymore. A new mode has been added, a software modification that sees the GLR-SAL fired on a ballistic trajectory, the SAL or IR seeker being activated in the terminal phase of the flight, when the round is over the target area.

Another key issue is volume production, and here Leonardo is currently working on doubling its capacity. ●

# MKS OPHIR LIGHTIR LOW-GERMANIUM LWIR ZOOM LENS FOR SUPPLY CHAIN STABILITY

BY TIM MAHON


At Eurosatory 2026 MKS Inc. launched the Ophir® LightIR 15-75 mm f/1.2 LWIR motorised continuous zoom lens, a re-engineered low-germanium optical solution developed to address growing industry concerns surrounding germanium material availability, supply chain stability, and long-term programme risk. Designed for VGA 10-12 µm uncooled LWIR detectors, the lens delivers high-performance thermal imaging for a wide range of defence, homeland security, surveillance, and industrial applications, while significantly reducing dependence on germanium-based optical materials.

"Germanium has long been a foundational infrared optical material, but increasing global demand, limited raw material availability, export sensitivities, and pricing volatility are creating growing challenges for thermal imaging system manufacturers and long-term defence programmes," explained Dr Kobi Lasri, General Manager of Ophir Optics Products. "MKS' re-engineered optical architecture was developed to mitigate these risks while preserving the high-performance imaging capabilities required for mission-critical applications. The new Ophir low-germanium optical lenses help customers lower supply chain and lifecycle risk while maintaining the high optical performance expected from Ophir infrared imaging products."

The device enables both wide-area situational awareness and long-range target observation in a compact lightweight package weighing only 349g and optimized for airborne, ground, handheld, perimeter security, and unmanned thermal imaging platforms in which size, weight, performance continuity, and long-term availability are critical considerations.

In addition to the unique optical design, the lenses feature advanced hard coatings, based on hard carbon and DLC (Diamond-Like Carbon) coatings, designed to enhance durability for demanding defence and security applications. Available now, the current device is the first to be released from a broader MKS low-germanium LWIR optics portfolio now under expansion, including additional fixed-focus (1-FOV) lenses covering wide (86°) to narrow (6°) field-of-view configurations for complete VGA 12 µm detector H-FOV coverage. ●

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# NO CHALLENGE TOO TOUGH. NO SOLUTION TOO BOLD.

## DEFENCE AI CYBERSECURITY ECOSYSTEM

### Securing AI

Build AI trust at the foundation through continuous model evaluation, safeguarded systems, and mitigated compliance risks.

### Adaptive & Intelligent Cyber Monitoring of OT Systems

Delivers real-time visibility and adaptive threat detection across integrated IT and OT environments.


SECURE WHAT MATTERS™

### Cyber Wargaming Platform

Stress-test people, processes and technology using AI-driven simulations and digital twins to validate scenarios and boost resilience.

### Agentic AI SOC

Acts as a force multiplier for human-led analysts in autonomous detection, investigation, and threat elimination.

## Eurosatory 2026

Paris Nord Villepinte Exhibition Centre
Hall 5a, B344

### The Holistic Cyber Advantage

As AI scales, security must keep pace. Leveraging deep engineering expertise, we provide a robust ecosystem where these capabilities form an adaptive, self-reinforcing defence loop, turning resilience into a sustained strategic advantage.

ST Engineering

MBDA

# AQUILA

## L'INTERCEPTEUR CONTRE-HYPERSONIQUE ET ANTIBALISTIQUE DE DERNIÈRE GÉNÉRATION.

Développé par le consortium HYDIS, dont MBDA est le leader, et avec le soutien de la Commission européenne, de l'OCCAR et de 4 pays participants (France, Italie, Pays-Bas et Allemagne), AQUILA est le premier concept d'intercepteur conçu pour contrer les menaces hypersoniques. Il constitue la couche supérieure de la future défense anti-missiles européenne en interceptant les cibles hypersoniques et balistiques dans la Très Haute Altitude pour défendre de larges espaces. L'intercepteur AQUILA vient en complément des solutions de défense aérienne de MBDA. AQUILA garantira une protection sans précédent des populations, des forces déployées et des emprises stratégiques, face à des menaces toujours plus nombreuses et en constante évolution.