#### AN ARABIAN AEROSPACE PUBLICATION

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As WDS stimulates Saudi business across the sector **SCOPA THINKS BIG** 

copa Defense is the new kid on Saudi's defence business block. As the industry segment of the Vision 2030 takes shape new players have flocked to the World Defense Show.

SMEs from across the Kingdom have met international defence majors to talk about industrial and technology transfer.

Scopa is different. It is already taking action and has clear ambitions to take a place at the top table.

Launched by Ajlan Group last month – claimed to be the largest holding group in Saudi Arabia -Scopa is the lead subsidiary of the defence stream.

CEO Nasr Alghrairi, said: "Within five years we want to be among the biggest platform manufacturers in the region, hopefully in the top five. We have a big appetite and the flexibility and agility to get there – because the decision making is made by the three Ajlan brothers. The vice president of the Ajlan Group is Sheikh Mohammed Al-Ajlan, who is the President of Scopa Defense."

The first step in those lofty ambitions came on Monday, when he signed a Memorandum of Understanding with UK-based UAS Tactical Systems (U-TacS), with British officials amongst the lookers-on.

The agreement will cover the



Scopa CEO Nasr Alghrairi – aiming high with the Watchkeeper deal

localisation, co-production and the transfer of technology, of the Watchkeeper UAV, known as WK-X in Saudi, to create one of the key strategic UAV platforms in Saudi. The Saudi MOD see Watchkeeper as a solution for its needs, with the platform fulfilling the Combat-ISTAR (Intelligence Surveillance Targeting and Reconnaissance) role.

A veteran of 22 years in the US and Iraqi military, Nasr said: "We are pushing for as much local content as possible – we want Saudi to get more than 50%. The requirement is for the same number as the UK acquired, around 52. The first two batches could be built in UK, but we hope to have the first Watchkeeper here in Saudi, procured by the government by the end of the year." ▲

### مجموعة عجلان وأخوانه تطلق شركة سكوبا الدفاعية

المجموعة السعودية الرائدة مصممة مع اطلاق شركتها الدفاعية «سكوبا» على المساهمة في تطبيق أهداف رؤية 2030 من حيث نقل وتوطين التقنية مع خطط طموحة لتصبح ضمن الشركات الخمس الأوائل في قطاع الدفاع بالمملكة. وقد وقعت الشركة مذكرة تفاهم مع مجموعة (UAS Tactical Systems (U-Tacs, البريطانية تشمل نقل التقنية الخاصة بالمسيرات Watchkeeper UAVV لعروفة ب WK-X في المملكة التي تستعمل في الاستكشاف والرصد وصولا الى بناء منصة متكاملة للمسيرات. The future battlespace calls for future-forward solutions. That's why Lockheed Martin aims to connect every system across every domain. With integrated advanced sensors, network connectivity and data analysis, you can gain insights to make critical decisions in a split second. So while the enemy is outpaced and outmaneuvered, you win in every domain. Learn more at lockheedmartin.com





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### **Customers test ride the Oshkosh JLTV**

The Joint Light Tactical Vehicle (JLTV) from | has delivered over 7,500 vehicles in the Oshkosh Defense is both on display (and giving customer rides in the Royal Saudi Land Forces' demonstrations at WDS. The 4-door vehicle provides MRAP

levels of protection to mitigate the most prevalent threats while delivering best in·class off·road mobility. More than 15.000 JLTVs operate in

the US military and allied forces. "Over the years, Oshkosh Defense

region, including thousands to custome in Saudi Arabia," said John Lazar, vice president and general manager of international programmes. "Given existing demand from Saudi military branches, we are committed to Saudi Vision 2030 to enhance national military capabilities and supporting development of the local military and security industries sector."



gypt's Alexandria Shipyard (ASY) is now engaged in building the initial two hull modules for the first MEKO A-200 frigate to be constructed in the Arab nation.

Egypt has ordered four of the 121m, 3,700-ton vessels. Three are being built by ThyssenKrupp Marine Systems in Germany, but ASY has taken on the task of building the final ship of the group Work started in November last year and the ship is scheduled to be built and to have completed her trials by November 2025.

ASY is building the entire hull and superstructure, as well as internal systems such as the vessel's electrical cabling and complex combat system.

"We are the only shipyard in the Middle East that can handle this," said Heba Khalifa, of ASY's project management department. "We've sent around 300 technicians and engineers to Germany for training." The MEKO A-200 follows on



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at WDS

from ASY's success in building three of the four French Naval Group Gowind 2500 corvettes for Egypt's navy. Two have already



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### news headlines





Ali Bedaiwe, guality sector director showing the model of the MEKO

been delivered, with the third scheduled for handover in May this year. The fourth vessel is being built in France.

### شركة ترسانة الاسكندرية تساهم في بناء الفرقاطة Mekö A-200

في عمل هو الأكبر من نوعه في العالم العربي. تساهم شركة عربية في بناء الفرقاطة التي تبنيها أساسا شركة ThyssenKrupp الألماني لمصر التي طلبت 4 من الفرقاطة ذو 112 مترا ووزن 3700 طن. تساهم شركة ترسانة الاسكندرية تبنى الفرقاطة الرابعة حيث تقوم الشركة المصرية بيناء الجسم – الهيكل والأساسيات بالاضافة إلى النظام الداخلي . والكابلات ونظام القتال المعقد. وقالت هبة خليفة، من الشركة: « نحن الجهة الوحيدة في الشرق الأوسط التي تستطيع القيام بِهَذا العمل حيث أرسلُنا 300 خبيرا للتدريب في ألمانيا».

The 2,570-ton vessels can handle a wide range of duties, from sea control and denial to anti-piracy patrols, and can also land special forces.

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بى أيه إى سيستمز السعودية للتطوير والتدريب **BAE Systems Saudi Development and Training** 





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# **Unmanned for all seasons**

The potential of delivery drones is now giving rise to new ideas in how to best facilitate UAV landings. Dynamic Drone Solution has

unveiled an all-terrain landing system-Atlas, usable in different environment and climates as well as uneven settings such as small hills and water.

"Atlas is an all-weather /all terrain drone landing platform, able to sustain a significant amount of weight from a drone or user," the company's head Dewayne Yarborough said.

Yarborough, along with his top engineer Henry Kwan have perfected Atlas, which "fills a much needed space in the drone industry." "Countries deploying drones in a rocky terrain or uneven ground can now deploy units safely efficiently and effectively."

Atlas has multiple components, which include two platforms, two handles, four legs, and four adjustable screws for legs. The handles, legs, and screws are 3-D printed using polyethylene terephthalate glycol material (PETG), a material suitable for waterproofing and outdoor applications.



The platforms are made from acrylic and capable of fabrication such as cutting and drilling.

The platform can be customised according to requirements and can



فى ضوء الاستعمال الموسع للطائرات المسيرة خصوصا الكبيرة منها برزت الحاجة الملحة لوجود منصة خاصة لها تؤمن الهبوط السلس ولا سيما فى التضاريس الصعبة والوعرة وخلال التقلبات الجوية القاسية. نظام أطلس والذي يستعمل مدنيا وعسكريا متعدد المحتويات فيه منصتين و مقبضن و 4 أرجل بتقنبة الطباعة ثلاثية الأبعاد مواد خاصة مضادة للماء والعوامل الخارجية

### news headlines

# **Defence is** on gender Agenda

The growing – and important role – of Women in Defence came under scrutiny as part of a celebration of International Women's Day, at a conference at the World Defense Show with speakers including Her Roval Highness Princess Reema Bandar Al-Saud, Saudi Ambassador to the USA.

Louise Donaghey, Services Programmes Director, Roll-Royce, was on one of the panels. She said: "It is important that this is happening, and in Saudi Arabia. It makes a strong statement to the rest of the world about the importance of diversity in defence."

Louise Donaghey

be used for both defence and civilian purposes.

The company plans to officially launch the platform in the market in June this year.

### شركة Dynamic Drone Solution تعرض منصة أطلس لهبوط المسبرات

#### A NEWS IN BRIEF

### Developing telecom services

King Abdulaziz City for Science and Technology and Saudi Telecom Company have agreed to cooperate in developing telecommunications services and satellite images. The cooperation agreement, seeks to develop satellite products, including remote sensing projects, space science and its applications.

### Hearing aid for small arms threat

**Dutch company Microflown-**Avisa (Stand J29 – Hall 1) offers an ever-growing range of sheer firmware defined capabilities to detect and localise audible threats, like small-arms fire, even when the vehicle is moving. Its ACLOGUS (ACoustic LOcalistion of GUnshotS) can localise the origin of rounds up to a miss distance of around 200 metres.

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# Collins C-130 upgrade bid

C audi Arabia has the second Clargest fleet of Lockheed Martin C-130s in the world, after the United States and is now looking to upgrade its veritable workhorses with a new modernisation programme.

One of the major contenders is Collins Aerospace, part of Raytheon Technologies, which is showing its solutions to bring the latest technology to the Hercules fleet's flight management systems.

The new NP2000 propeller system, is part of that bid, offering C-130 customers up to 50% operational maintenance cost savings per flight hour compared to the legacy system

"In addition, the 20% greater propeller takeoff thrust shortens heavyweight takeoff by approximately 300 meters, while the 55% estimated improvement in system reliability increases overall aircraft availability," said Quinlan Lyte, senior director, propeller systems.

But it is the new avionics development including an enhanced vision system that will be most wel-



innovation for Saudi C-130 pilots

comed by the Saudi pilots.

"The product we're offering is called Flight Two, which has the flight management system at the core, and around the edge of it are many configurable items," said Rich Kerslake, director business development for military avionics and helicopters.

### Yahsat and NIMR collaborate on comms

∧ 1 Yah Satellite Communica-Hions Company (Yahsat) will provide line-fit pre-qualified comms-on-the-move (COTM) solutions on NIMR's vehicular systems.

At the World Defence Show Yahsat and NIMR are showcasing one of Yahsat's terminals fitted onto NIMR's AIBAN 442A vehicle.

By pre-testing and integrating Yahsat's COTM solutions on various connected vehicular systems. Yahsat has been able to remove risks and unwanted costs associated with system integration for its customers.

Through the agreement, Yahsat will leverage NIMR's network and existing relationship with the Government of the Kingdom of Saudi Arabia to extend its reach and increase customer acquisition. An EDGE entity, NIMR will have the opportunity to expand its valuechain and offer connected vehicles to their customer base with a



Yahsat's Eisa Al Shamsi and Abri Du Plessis, CEO of NIMR with the Ajban Mark 2 with its portable comms

secured satcom network-both Kaband and L-band.

Eisa Al Shamsi, General Manager of the Yahsat Government Solutions (YGS) said: "Through this agreement, we look forward to continuing our ongoing support



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### news headlines

Rich Kerslake belives Collins latest EVS technology will be a major

"One of the really innovative offerings that we've got at the moment, is our Enhanced Vision System (EVS), which sits in a small fairing on the nose. It really gives the operators and end users a battle winning advantage.

It uses multiple wavelength cameras to "see-through" poor

to the UAE Government while also effectively expanding our services to the Government of the Kingdom of Saudi Arabia, working towards fulfilling the Kingdom's demand for state-of-the-art satellite connectivity solutions."

### أنظمة متطورة جديدة من كولينز لُطَّائرات النقل Lockheed Martin C-1308

تقدم شركة كولينز للطيران وهى احدى مجموعات ريثيون أنظمة حديثة للطياريي هذه الطائرة العملاقة. نظام NP2000 المروحي الجديد يقلل من تكاليف الصيانة مع قوة دفع أكبر ب%20 مقللا مدى الأقلاع ب 300 متر مع تحسين الاداء للنظام ككل بنسبة %55 أما نظام Flight Two لادارة الطران ففبه نظام الرؤية المحسن (EVS) للمسافات البعيدة والقريبة مع خاصية الرؤية تحت الحمراء. كما يقدم النظام كاميرا للرؤية المتقدمة مما يمنح الطيارين مرونة فائقة ليلا نهارا في الظروف المناخية القاسية.

visibility conditions better than the human eye. The images are shown on head-up displays, allowing pilots to better identify the runway environment in all weather conditions operations.

#### A NEWS IN BRIEF

#### **Smart move** for safe ties

Saudi aerospace companies Indra Defense and GDC Middle East which are both in Hall 2 are competing for a five-year contract. to carry out the MRO of the RSAF's fleet of 15 Beech King Air 350s. GDC has fulfilled the contract for the past five vears - an announcement is expected imminently.

### **Mwari adds drone** hunting capability

Paramount Group, South Africa's global aerospace and technology company, announced that its multimission, Mwari aerial platform has been equipped with advanced anti-drone technologies, enabling the deployment of the aircraft as an effective hunter and killer of Medium Altitude and Long Endurance Drones (MALEs).

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# Any colour, as long as it's black!

Each year for the celebrations of Saudi National Day on 23 September the Royal Saudi Air Force (RSAF) has painted several aircraft in a special colour scheme to commemorate the occasion

The Day commemorates the renaming of the Kingdom of Nejd and Hejaz as the Kingdom of Saudi Arabia in 1932.

In 2018, aircraft were painted predominantly green and white, with just the noses left in grey. In 2019, aircraft received

89th anniversary tail markings representing King Salman and Crown 🕴 by the A330MRTT at the show



**Prince Mohammed Bin Salman on** the port side, and King Abdul Aziz to starboard - this scheme being worn

# Fast jet ditching survival kit for one

ontinuous advances in fighter jet technology and the expansion of the operational envelope mean frontline aircraft can be operating over water, further from base and at higher altitudes, for much longer periods. Therefore, the range of survival equipment in the pilot's personal survival pack (PSP) has also grown, making space and weight key considerations vitally important.

Keeping this in mind, Survitec has unveiled at WDS a smaller and lighter single seat liferaft (SSLR) to better equip military fast jet pilots on more challenging missions or when forced to eject from their aircraft over water.

Designed to form a critical component of a fighter pilot's ejection seat, the micro SSLR is created from the latest generation of advanced lightweight coated fabrics with an inflatable canopy and floor for maximum buoyancy and thermal insulation.



Pilot lands safely in his personal survival pack

David Stelling, category manager, Survitec Defence & Aerospace, said: "The liferaft has zeromaintenance capability delivering improved reliability and signifi-



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An RSAF F-15C in the latest , display at WFDS static.

In 2020, aircraft received a 90th anniversary scheme with a blue grey and white falcon's head design. Last September, the RSAF unveiled the

four aircraft on display here, in their smart gloss black and green scheme, with '91 years' and 'Vision 2030' markings

cantly reducing cost of ownership throughout the product's life. After extensive seakeeping and performance trials, the liferaft is now available for all existing fast jet platforms, as well as new, emerging 6th generation fast jet programmes." During flight the pilot is attached

### سترة النحاة المائية أداة حتمية في الطائرات

مع تزايد العمليات الجوية الحربية فوق الماء، يبرز أهمية وجود نظام نجاة للطيار فى حال الهبوط فوق الماء مرن ودائم وفعال وقليل الصيانة. شركة Survitec عرضت في معرض الدفاع العالمي نظامها الجديد الملتصق بكرسى النجاة الخاص بالطيارين مواصفات جديدة تتسم بخفة الوزن والعزل الحرارى الكامل وملائمته لغالبية نواع كراسي الطائرات مع عدم الحاجة صبانة الدورية.

to the PSP, which is placed in the seat. In the event of an ejection from the aircraft, the ejection seat drops away and the PSP remains attached to the pilot and can be opened after landing in water.

Survitec is demonstrating the Micro SSLR at the show.







# منتجاتنا وخدماتنا: متقدمة رقمياً ذات كفاءة إنتاجية عالية ومدعومة بالذكاء الاصطناعي

boeing.com/f-15ex

### DOK-ING الكرواتية تعرض روبوتها الآالي للمهات الحساسة

روبوت Komodo الآلي مخصص للتعامل مع التحديات شديدة الخطورة والحساسة مثل المواد الكيماوية والبيولوجية والاشعاعية وحتى النووية حيث يعمل في مختلف الظروف القاسية. كما يستطيع هذا الروبوت الآلي الفريد أو غاز أو أي مواد صلبة مع خاصية ازالة التلوث من الاسطح أو الأشخاص الاضافة الى خاصية مكافحة الحرائق. بدأت شركة DOK-ING الكرواتية أعمالها عام 1991 في العمليات الاغاثية وتحديات الألغام مما جعلها تطور أجهزة مكافحة وازالة الألغام حيث تستعمل منتجتيها في 20 دولة.

# **Robotic DOK-ING to beat the hazards**

Zagreb based DOK-ING (Stand H6 – Hall 1) has the slogan, 'Don't send a man to do a machine's job', which denotes the stand-off capability of its equipment. Its latest innovation is the

Komodo unmanned ground system (UGS) designed specifically as a CBRN (chemical, biological, radiological, and nuclear) robotic. It operates in extreme conditions that could be hazardous to intervention teams, such as low oxygen and high temperature environments.

"Komodo is still in development, although we are progressing well to make it suitable for a variety of further mission applications," said chief executive Marijo Grgurinnović. "Combat engineering comes to mind, as well as recon-



DOK-ING's new generation Komodo system

naissance and even medevac." Established in 1991, DOK-ING's focus was humanitarian demining in Croatia, which at the time faced an immense landmine threat. This enabled DOK-ING to design remotely controlled demining systems, which were ultimately sold to 20 countries worldwide. The Komodo undertakes automated sample collection – which could be vapour, liquid, gas and solids – and decontamination of objects, surfaces and personnel, including partial self-decontamination. For this purpose, it is equipped with front and rear exchangeable tools that deal with product control and mitigation. The system also has a firefighting capability.

Importantly, it has full situational awareness through autonomous algorithms, and advanced video and detection systems.

The Komodo has been selected as a partner in the PESCO (permanent structure cooperation) initiative of the Europe Defence Agency (EDA).

# **Breakthrough from Hyundai**

K808

to conducting breaching operations

or preparing defensive positions for

Pearson Engineering says the

general-purpose blade will support

an increase in the K600's capability

and is integrated using the exist-

ing Pearson Engineering Vehicle

Integration Kit. The dozer blade

artillery and combat vehicles.

he K600 Korea Combat Engineer Vehicle (CEV) from South Korea's Hyundai Rotem company (Stand C7 - Hall 1) is a minefield breaching system that can also break through enemy obstacles or erect defensive structures.

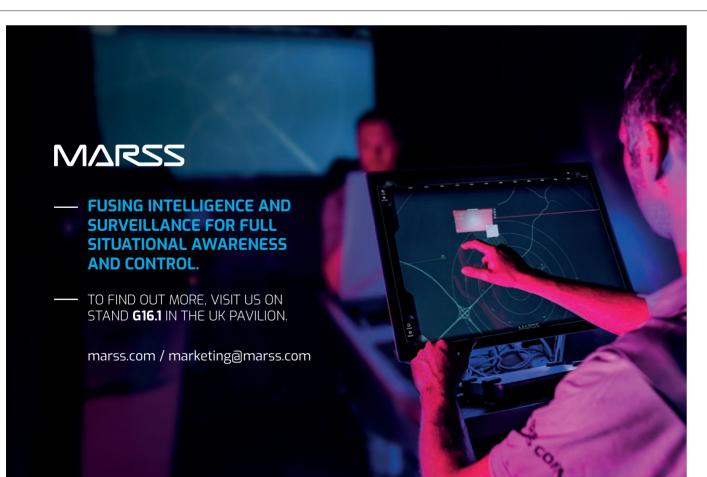
As a heavy industry company comprising several business sectors, Hyundai Rotem is showcasing its defence capabilities. For the past 40 years, its defence division has produced the Republic of Korea's land weapons systems, including the K1 and K2 main battle tanks.

Based on the chassis of the K1 armoured recovery vehicle that supports the K1 and K2 MBTs, the K600 uses the Pearson Engineering full-width mine plough (FWMP) to clear mines up a depth of 0.3 m, whilst also able to mark a safe path for vehicles and friendly forces. It is also equipped with Pearson's magnetic signature duplicator (MSD)



K600 Korean Combat Engineer Vehicle

designed to neutralise anti-tank mines fitted with advanced fuses. Coming in at 62 tons, the K600 is able to perform battlefield construction and demolition tasks, ranging from clearing obstacles and mines





## land forces

### هيونداي روتيم الكورية تعرض كاسحات الألغام K600

يتميز نظامها من Pearson Engineering م. مما يهد بكسح الألغام على عمق 0.3 م. مما يهد الطريق للدبابات وناقلات الجند بشكل آمن بالاضافة الى نظام تحييد الألغام المضادة للدبابات ذو الصواعق المتقدمة. يبلغ وزن كاسحة الألغام 600 المصنعة عام 2018 أكثر من 62 طنا مما يعطيها قدرة كبيرة على تنفيذ العديد من المهام من كسح الألغام و ازالة العوائق أمام قطع الجيش الأخرى.

will allow many of the construction tasks required of the vehicle to be undertaken more quickly.

The K600 was publicly revealed in 2018 and production deliveries to South Korea's army commenced in 2020. ▲

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# زوروا جناح <mark>الميئة العامة للصناعات</mark> العسكرية

# Visit **GAMI's** pavilion at World Defense Show

HALL: 2, STAND: Q6

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# **Gavia's Icelandic mission**

eledyne is bringing light to the darkness and going where no man can, in the depths of the deep blue with its Gavia autonomous underwater vehicle (AUV).

Gavia's main application as a defence tool is for search and rescue and looking for suspicious objects on the seabed such as mines. It can also detect debris such as aircraft wrecks.

The data of its findings are stored in the onboard system and, once surfaced, are transferred to the command centre via GPS and satellite links.

Emad Javaid, director of sales Middle East, tells of a mission last month when Gavia was sent to find the wreckage of an aircraft that had gone down in one of the large frozen lakes of Iceland.

"Because it was so cold and with ice on top of the lakes, obviously divers couldn't go in as easily as they usually might. Gavia was launched and it took about five hours of survey. Gavia was able to find the wreckage and all of the



bodies."

Both Gavia and Teledyne's Z-boat are man-portable and therefore are easy to set up from the back of a pick-up truck or a small boat.

# Navantia offers variable LPD design

Spanish shipbuilder Navantia will be demonstrating its online configurator for its Landing Platform Dock (LPD) vessel. The tool allows potential customers to modify the capabilities of the LPD design, which has sold to both the Spanish and Netherlands navies.

The LPD, which is in service with the Spanish navy as the twoship Galicia class, combines a helicopter deck with a well deck from which landing craft can be floated out, carrying several hundred troops or significant numbers of armoured vehicles. The online configurator allows

navy planners to alter the degrees of emphasis placed on airborne and seaborne assault capabilities of the vessel.

"You can alter the design of the vessel to an extent," said Jose Luis Inoges, Navantia's marketing manager.

The configurator tool was developed after potential customers started to ask for significant

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# maritime defence 🔺

Emad Javaid - Gavia is proven at depth



YouTube Times Aerospace TV

nd e changes to the design, "so our engineering department updated the vessel's design with a modular approach. In design terms, the vessel was divided into large sections, so that design changes to one area would not impinge on other areas throughout the ship."

Alongside that development, the design team aimed to provide as many containerised solutions as possible for specific roles, for example, a towed array sonar system.

### شركة Gavia تسوق مركبتها البحرية الغواصة الغير مأهولة

تغطي مهام عديدة لا يصل اليها الانسان في اعماق البحار من عمليات انقاذ واستكشاف للمواد المشبوهة والخطرة والتصوير واستطلاع البحار من الألغام البحرية بالاضافة الى الكشف عن حطام المائرات وتحليلها وفي مختلف الظروف المناخية الصعبة. مؤخرا، قامت المركبة جهمة معقدة للغاية للكشف عن حطام طائرة في بحيرة متجمدة في ايسلندا لا يستطيع الانسان الوصول اليها بسبب تجمد المياه.

### Speedy Saudis FPB near delivery

The first of a 12-vessel order of fast patrol boats for the Royal Saudi Naval Forces (RSNF) is expected to be delivered from Couach of France within the next 1-2 months, local representatives of the company said at the show.

The 2200FPBs will be based at Jeddah and Jizan on the Kingdom's west coast. The 22m boats are constructed from fibreglass and two 1,200hp diesels give a maximum speed of 30kts, with a maximum range of more than 600nm at 12 kts. They will have a crew of up to eight personnel and endurance of five days.

In RSNF service they will have an armament of one 20mm cannon, a 12.7mm heavy machine gun and a Low-Cost Guided Imaging Rocket (Logir) launcher for projectiles.





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# A game changer for the land engagements



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# John Cockerill

## ▲ land forces

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### A NEWS IN BRIEF

#### **Titan tracking**

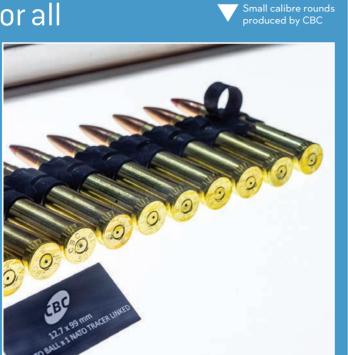
Ottawa-based Nortac Defence (Stand K3 – Hall 1) provides a commercial off-the-shelf satellitebased beyond-line-of-sight (BLOS) Blue Force tracking system to the global defence sector. Given the limitations of radio communication, its Titan by Nortac enables communication vertically and horizontally over great distances by means of Iridium based tracking and messaging.

#### **Data analysis deal**

The Saudi Data & Al Authority (SDAIA) signed an MoU with International Systems Engineering, a BAE Systems Saudi Arabia partner company, at the show. They will work together to establish advanced security operations centres and data management analysis systems.

### Ammunition for all

One of the world's largest ammunition corporations is CBC Global Ammunition (Stand N13 – Hall 1), a holding entity for CBC Brazil, Magtech Ammunition, MEN Germany and Sellier & Bellot of the Czech Republic. The group exports its small and medium calibre ammunition to more than 130 countries to meet the needs of military forces and law enforcement agencies, as well as the commercial market. For the defence market, these manufacturers as a group are among the largest suppliers to NATO and allied forces around the world. CBC Global Ammunition is headquartered in Brazil, where it operates three production facilities, besides two factories in Europe and one subsidiary in North America. Together they annually produce 1.5 billion rounds of ammunition, not counting rimfire cartridges and shotshells.



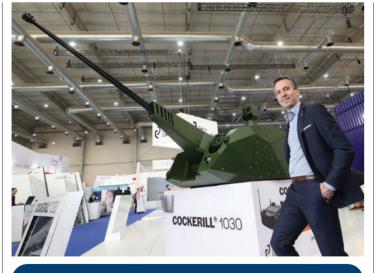
# Sea trials for the tank boat

Belgian company John Cockerill's 'tank boat' has successfully completed sea trials with the Indonesian navy. The service is now evaluating the results.

The tank boat – more formally known as the X 18 ATC (armoured troop carrier) – is an 18m carbonfibre catamaran capable of carrying up to 60 marines or special forces and making 45kts. Development started in 2020 in conjunction with Swedish company PT. Lundin, which trades as North Sea Boats, and the vessel was initially shown at IDEx last year.

Since then, however, Indonesia has expressed interest in the vessel and the first example has spent several weeks undergoing trials there.

The vessel gained the 'tank boat' name after the company initially planned to mount an armoured vehicle's 105mm turret on it. However, "We thought a 30mm Mk44 cannon would be more useful for estuarine and riverine work," John Cockerill's



### شركة |John Cockerill البلجيكية تسوق مركبها الناقل للجنود X 18 ATC

على شكل مركب كاترماران ذو 18 مترا، يستطيع هذا المركب البحري المميز نقل 60 عسكريا بسرعة 45 عقدة مع امكانية تركيب برج لمدفع رشاش 105 مم أو مدفع Mk44 عيار 30 مم وبقدرة ابحار لمسافة 600 ميل بحرى.

وقد طلبت منه البحرية الاندونيسية 25 مركبا علما ان المركب الذي يخضع حاليا لمزيد من التجارب مصنع بالتعاون مع شركة PT السويدية. Cockerill's Xavier Delhaye shows off a 30mm cannon turret that can be deployed on the tank boat

chief marketing officer Simon Haye said at the show.

The Indonesian trials concluded with the 30mm cannon successfully engaging targets out to 1,800m, he said.

The company has identified a requirement in Indonesia and has calculated that placing 25 vessels at strategic points around the country's coastlines would enable the Indonesia navy to cover the vast archipelago. The tank boat has a range of 600nm.

"The next step is that they are now developing their requirements, but we've shown them how that boat could be employed," Haye said. The Indonesian army, which is responsible for riverine security, is also interested. ▲



# RSAF joins sovereign mission data club

he RSAF has joined a small group of air forces able to create and rapidly evolve sovereign mission data. Mission data is a key differentiator for the Eurofighter Typhoon because it 'fine tunes' and optimises the way radar, defensive aids and Attack and Identification Systems work.

"The performance of Typhoon's systems is enhanced by mission data," BAE Systems' Nick Fox, explained. "Mission data allows the user to tailor the performance of these systems to their own requirements."

To be most effective, mission data must be user-specific and sovereign, and optimised for the specific threat environment. And because today's operating environment is congested, contested and rapidly moving, new iterations of mission data need to be generated and uploaded rapidly and frequently – perhaps even between sorties.

BAE Systems flatly refused to talk about their customers, but a 2020 job advertisement revealed that an EWOS (Electronic Warfare Operational Support) team had been established for Saudi Arabia, drawn from BAE Systems, Leonardo, and Qinetiq.

This team is giving the RSAF the knowledge that will eventually allow it to independently and autonomously provide mission data for its own Typhoon fleet.

Though BAE Systems is committed to supporting Saudi Arabia's ambitious Saudisation agenda, providing Saudi Arabia with the means to create and iterate its own sovereign mission data is all about helping to revolutionise the RSAF's operational capabilities. ▲

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## air defence 🔺

# Desert Caravan a winner for Wallan

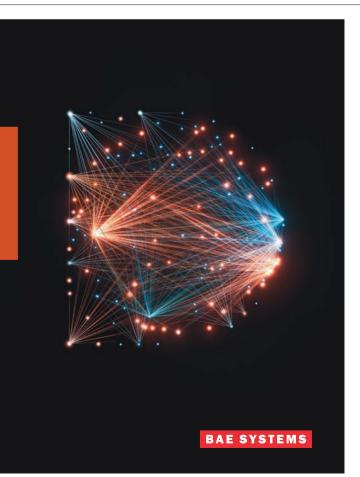
Though Riyadh-based Wallan Aviation is best known as one of the region's leading business aviation companies, catering to the aviation requirements of governments, business leaders and individuals, the company is here at the World Defense Show highlighting some of what it can offer military customers.

Wallan Aviation represents a number of leading business

aviation brands as part of its aviation sales business, and some of these – perhaps most notably Textron Aviation and Bell Helicopter - have important military products.

Wallan is also a Cessna Caravan Authorised Service Facility, and the Caravan is an important platform with the special operations community across the region.

> Cessna Caravans are used by special operations within the region



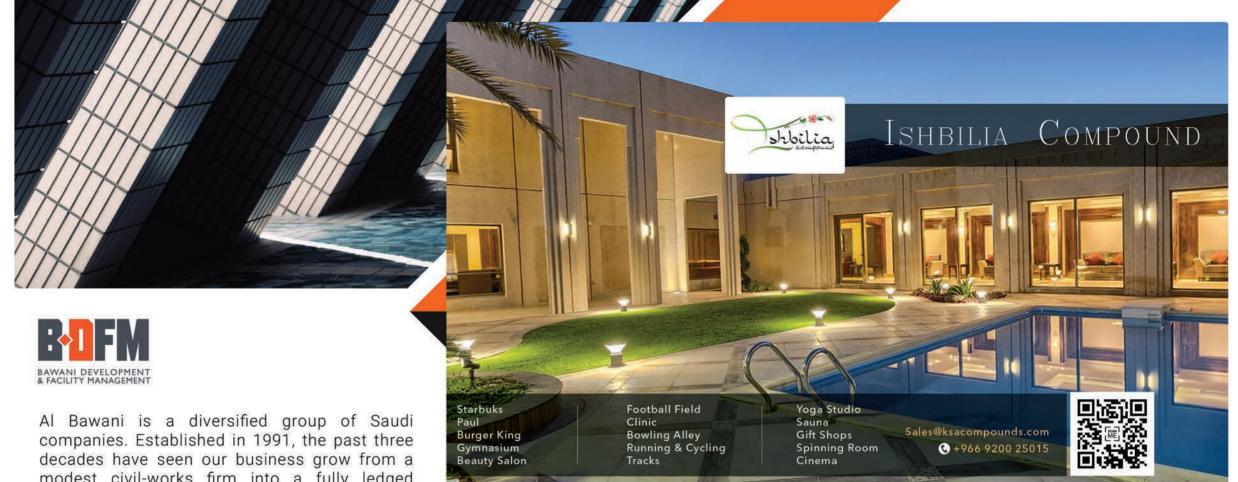


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#### Daily news updates on timesaerospace.aero

Lockheed Martin chief executive for Saudi Arabia and Africa. Briaadier General (rtd) Joseph Rank, argues that building a network of platforms is essential in today's rapidly evolving defence environment

# LOOKING FORWARD TOGETHER

n an age of rapidly changing and unpredictable threats it has never been so important for nations and their security partners to be forward-looking in their strategic outlook and approach to technology in the field of defence. That includes countries in the Middle East, where we have been an enduring partner for more than 55 years.

Today, our partnerships in the region are stronger than ever. Our systems help enhance interoperability between the U.S. military and key allies in the region. And by supplying our technologies to our partners we are helping to strengthen regional security and deter threats.

#### Challenges

Given the evolving nature of challenges across all domains, it is vital we ensure our partners have the tools they need to meet threats. That is why we are committed to developing and supplying the latest fighter jets, rotary-wing aircraft, advanced air, and missile defence technologies, as well as the most advanced command and control systems, and state-of-the-art simulation. training, and sustainment support.

Not only is Lockheed Martin known for building some of the most advanced military aircraft, helicopters, ships, and missile systems - we also sustain aircraft for air forces worldwide, covering combat, air mobility, reconnaissance, and surveillance requirements, as part of our commitment to shaping the future of aviation by providing next generation airpower solutions.

There is no longer a place for solutions with a single focus. Comprehensive strategies are needed to help nations navigate the increas-



### "By creating an advanced network of defence technologies, we can create an interoperable and resilient 'network-ofplatforms' that serve as a flexible, formidable, and decisive force multiplier against threats"

JOSEPH RANK LOCKHEED MARTIN'S CHIEF EXECUTIVE FOR SAUDI

ingly complex defence environment of today. That is why we aim to meet our partners' needs to

# integrated defence

deter threats across land, air, sea, cyber and space.

To enable our partners to operate effectively across all domains we are investing heavily in and shaping the multi-domain operations/joint alldomain operations (MDO/IADO) concept through our various products, programs, and services.

By creating an advanced network of defence technologies, we can create an interoperable and resilient "network-of-platforms" that serve as a flexible, formidable, and decisive force multiplier against threats. Additionally, by synchronizing major systems such as aircraft, ships, submarines, ground vehicles, satellites, and missile systems, across all

domains, we can provide a complete picture of the modern battlespace and empower our partners to make decisions that drive action quickly.

#### Defence ecosystem

We are working to accelerate the connectivity of our platforms with a view to encompassing the greater defence ecosystem. We are also committed to collaborating with other OEMs to tie together our platforms and systems to boost the "network effect" for our partners, which will provide greater returns in capability and efficiency than any individual system could on its own.

But our contribution to the region's security extends far beyond supplying defence systems. We also provide advanced technologies, promote knowledge transfer and train young local engineers to operate our platforms and programs. Through our various initiatives we aim to enhance the performance and capabilities of our partners' armed forces.

Education, training and a pipeline of capable young engineers and scientists is a keystone in the future of any defence industry. By building Science, Technology, Engineering, and Mathematics (STEM) skillsets among local youth we are supporting our partners' defence sectors to harness local talent. We support our partner nations' economic diversification goals by helping them to establish a robust domestic defence industry.

In this way, we are supporting the region to become more secure and prosperous despite the threats. It is this commitment that has seen Lockheed Martin become a valued partner in the region for over halfa-century and which will take these partnerships into the future.

هكذا تُبلور شركة "ARX الجو والفضاء والدفاع" نجاحاتها في معرض الدفاع العالمي



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