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From the outset, the KC-390 Millennium was designed to set a new benchmark in the medium-size military transporter segment. Developed with support from the Brazilian Air Force (FAB) and Brazilian Government, the largest and most complex aircraft ever built in the southern hemisphere has gone through a rigorous and challenging testing program, including 3,500 prototype flight test hours and close to 85,000 hours of lab tests. In March 2023, it received the coveted Full Operational Capability certification from the Brazilian Military Certification Authority (IFI - Institute of Industrial Development and Coordination), with the platform meeting or exceeding all requirements. This seal of approval, which is extremely difficult to attain, confirms the KC-390 Millennium is ready for full operational duties in all missions and showcases to the world its class-leading reliability, flexibility and performance.

#C390UnbeatableCombination c390foc.com/en/





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African market for military Helicopters reaches US\$2.2 billion

The report identifies four key markets in the region: Egypt, Nigeria, Algeria, and Kenya, which together account for more than 90% of the total spending.

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African market for military Helicopters reaches US\$2.2 billion

The report identifies four key markets in the region: Egypt, Nigeria, Algeria, and Kenya, which together account for more than 90% of the total spending. These countries have different operational requirements and procurement priorities, reflecting their strategic interests and security environments.

frica is a continent with diverse security challenges, ranging from terrorism and insurgency to piracy and smuggling. To address these threats, many African countries are investing in modernizing and expanding their military helicopter fleets, which offer mobility, versatility, and firepower. According to a 2023 International Military Helicopter report by Defence IQ, the African market for military helicopters is expected to account for a cumulative spending of US\$2.2 billion through 2023-2028, making it one of the fastest-growing regions in the world.

The report identifies four key markets in the region: Egypt, Nigeria, Algeria, and Kenya, which together account for more than 90% of the total spending. These countries have different operational requirements and procurement priorities, reflecting their strategic interests and security environments.

Egypt: The Largest Market in the Region

gypt is the largest market for military helicopters in Africa, with a cumulative spending of US\$990 million over the period 2023-2028. Egypt has a large and diverse helicopter fleet, comprising

more than 300 platforms of various types and origins, including Russian, American, French, and Chinese models. Egypt's main security challenges are countering terrorism and insurgency in the Sinai Peninsula and securing its borders with Libya and Sudan.

To enhance its capabilities, Egypt has embarked on several procurement and modernization programmes, involving both new and refurbished helicopters. The most significant programme is the acquisition of 23 CH-47 Chinook heavy lift helicopters from the United States for US\$817 million, which will boost Egypt's airlift and humanitarian assistance capabilities. Egypt is also upgrading its existing fleet of AH-64 Apache attack helicopters with new sensors and weapons, and procuring additional Mi-17 utility helicopters from Russia.

Heavy Lift Helicopter/CH-47F Chinook:

In May 2022, the U.S. State Department granted approval for a potential Foreign Military Sale (FMS) of 23 CH-47F Chinook Helicopters and associated equipment to Egypt, with an estimated cost of US\$2.6 billon. Egypt intends to enhance its heavy lift capabilities by replacing its current fleet of CH-47D helicopters with the latest CH-47Fs. In January 2013, Boeing was

File Photo: Egypt sent 2 helicopters to take part in extinguishing Greek forest fire. Photo courtesy of the Egyptian military spokesman



awarded a contract to supply 12 CH-47F Chinooks to the Egyptian Air Force for US\$426 million.

Deliveries are scheduled to commence in 2026 and conclude by 2030. The project is estimated to cost approximately US\$817 million, with US\$651 million

allocated for expenditure between 2023 and 2028.

Nigeria: The Second-Largest Market in the Region

Nigeria is the second-largest market for military helicopters in Africa, with a cumulative spending of US\$920 million over the period 2023-2028. Nigeria faces multiple security threats, including the Boko Haram insurgency in the northeast, the Niger Delta militancy in the south, and the banditry and kidnapping in the northwest. To combat these challenges, Nigeria relies heavily on its helicopter force, which comprises more

than 100 platforms of various types and origins, including Russian, American, Italian, and Turkish models.

Nigeria's main procurement focus is on acquiring new and advanced attack helicopters, which can provide close air support and precision strike capabilities. Nigeria has ordered 12 AH-1Z Viper attack helicopters from the United States for US\$372 million, which are expected to be delivered by 2024. Nigeria has also ordered six T-129 ATAK helicopters from Turkey for US\$280 million, which are expected to be delivered by 2025. These helicopters will complement Nigeria's existing fleet of Mi-35M and Mi-24V attack helicopters, which are also being upgraded with new avionics and weapons.

Cayuse Warrior Plus:

In March 2023, the Nigerian Army awarded MD Helicopters (MDH) a contract to manufacture and supply 12 Cayuse Warrior Plus Scout/At-

FEATURED

tack helicopters. These new heicopters will play a crucial role in supporting Nigerian soldiers in their counterterrorism operations and insurgency missions. Additionally, they will be utilized for regional security, tactical reconnaissance, and convoy escort operations within Nigeria.

As part of the contract, MDH is also responsible for providing integrated logistics support services, a Flight Training Device, spare parts, and pilot and maintainer training support.

In June 2023, MDH announced that production has commenced on the first three Cayuse Warrior heicopters at their facility in Arizona. These aircraft are scheduled to be delivered over the

tems, communication equipment, electronic warfare systems, AN/AVS-9 Aviator's Night Vision Imaging Systems, M197 20mm machine guns, and Target Sight Systems (TSS).

A formal contract for this procurement is expected to be finalized in 2023. Nigeria is expected to spend approximately US\$372 million excusvely for the helicopters' procurement between 2023 and 2028. To be delivered by 2024.

Algeria: The Third-Largest Market in the Region

Algeria is the third-largest market for military helicopters in Africa, with a cumulative spend-



course of the next two years. While the exact cost of the contract has not been disclosed, it is estimated that Nigeria will allocate approximately US\$253 million for the procurement of these helicopters.

Attack Helicopter/AH-1Z Viper:

In April 2022, the U.S. State Department approved a substantial order from Nigeria for Bell AH-1Z attack helicopters, totalling an estimated US\$997 million. As part of this order, Nigeria will receive 12 of these advanced helicopters, along with a range of related equipment and weapons. The package includes 28 General Electric T-700 engines, 2000 Advanced Precision Kill Weapon System (APKWS) guidance kits, Night Vision Cueing Display (NVCD) sys-

ing of US\$240 million over the period 2023-2028. Algeria has a well-equipped and modern helicopter force, comprising more than 200 platforms of mainly Russian origin, including Mi-8/17, Mi-24/35, Mi-26, and Mi-28 models. Algeria's main security challenges are countering terrorism and extremism in the Sahel region and maintaining stability and sovereignty in the face of regional tensions and conflicts.

To maintain its edge, Algeria is pursuing selective procurement and modernization programmes, involving both new and refurbished helicopters. Algeria plans to purchase 42 Mi-28NM Night Hunter attack helicopters from Russia, which are expected to be delivered by 2028. Algeria is also upgrading its existing fleet



of Mi-24/35 attack helicopters with new sensors and weapons, and procuring additional Mi-26T2 heavy lift helicopters from Russia.

Kenya: The Fourth-Largest market

Kenya is the fourth-largest market for military helicopters in Africa, with a cumulative spending of US\$80 million over the period 2023-2028. Kenya has a small and aging helicopter fleet, comprising less than 50 platforms of mainly American and Chinese origin, including UH-1, MD 500, and Z-9 models. Kenya's main security challenges are countering the Al-Shabaab insurgency in Somalia and securing its borders with Ethiopia and South Sudan.

To enhance its capabilities, Kenya is acquiring new and refurbished helicopters, mainly from the United States. Kenya has ordered six MD 530F Cayuse Warrior light attack helicopters from the United States for US\$127 million, which are expected to be delivered by 2024. Kenya has also received 12 UH-1H Huey utility helicopters from the United States, which were refurbished and donated under the Excess Defense Articles programme.

Attack Helicopter/MD 530F:

In May 2017, the Kenya Defence Forces

(KDF) formally requested the procurement of 12 MD 530F helicopters from the U.S. at an estimated cost of US\$253 million.

Following this, MD Helicopters was awarded a contract to supply six MD530Fs to Kenya as part of a larger US\$1.4 bilon agreement, which also includes the provision of up to 150 armed MD530Fs/MD530Gs to the U.S. and allied military forces. In February 2022, the KDF expressed its intention to acquire the remaining six MD 530 helicopters from the U.S. Army. The initial batch of six helicopters was delivered in December 2019 and officially commissioned into service in 2020. The remaning six helicopters are expected to be Attack Helicopter.

Conclusion

The African market for military helicopters is expected to witness significant growth and activity in the coming years, driven by the increasing security challenges and the rising demand for mobility, versatility, and firepower. The region offers opportunities for both new and refurbished helicopters, as well as for maintenance, repair, and overhaul services. The leading suppliers in the region are the United States, Russia, Turkey, and China, which compete for market share and influence. The regional dynamics and developments will have implications for the global military helicopter market and industry.

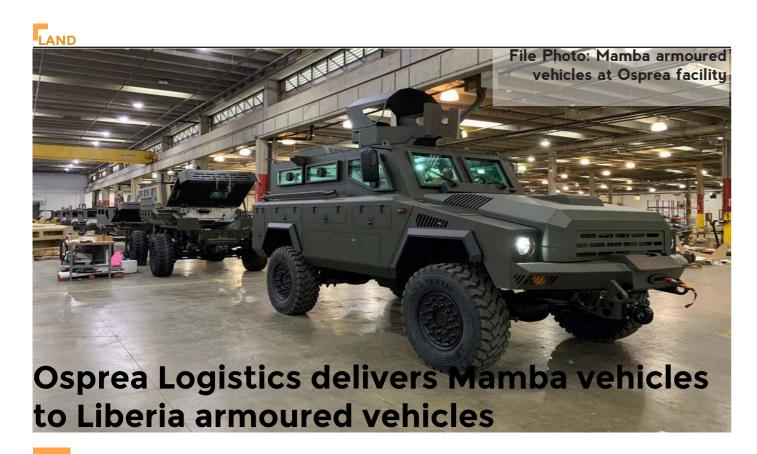


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Ekene Lionel

sprea Logistics, a US-based company that produces the Mamba mine-resistant, ambush-protected (MRAP) vehicle, announced in 8 December 2023, the completion of a delivery of 50 Mambas to an undisclosed client in Africa.

It said "Osprea Logistics is successfully delivering another 50 Mamba armoured vehicles to an African based customer. who will use them for peacekeeping missions."

Although the company did not reveal the identity of the client, a video posted online by Osprea showed the Mamba vehicles being tested by Liberian forces, suggesting that Liberia is the recipient of the delivery.

The Mamba is a South African-designed MRAP vehicle

that has been exclusively manufactured by Osprea Logistics in the US since 2016. The Mamba Mk 7 is the latest version of the vehicle, which offers various configurations to suit different operational needs, such as troop transport, command and control, ambulance, and emergency recovery.

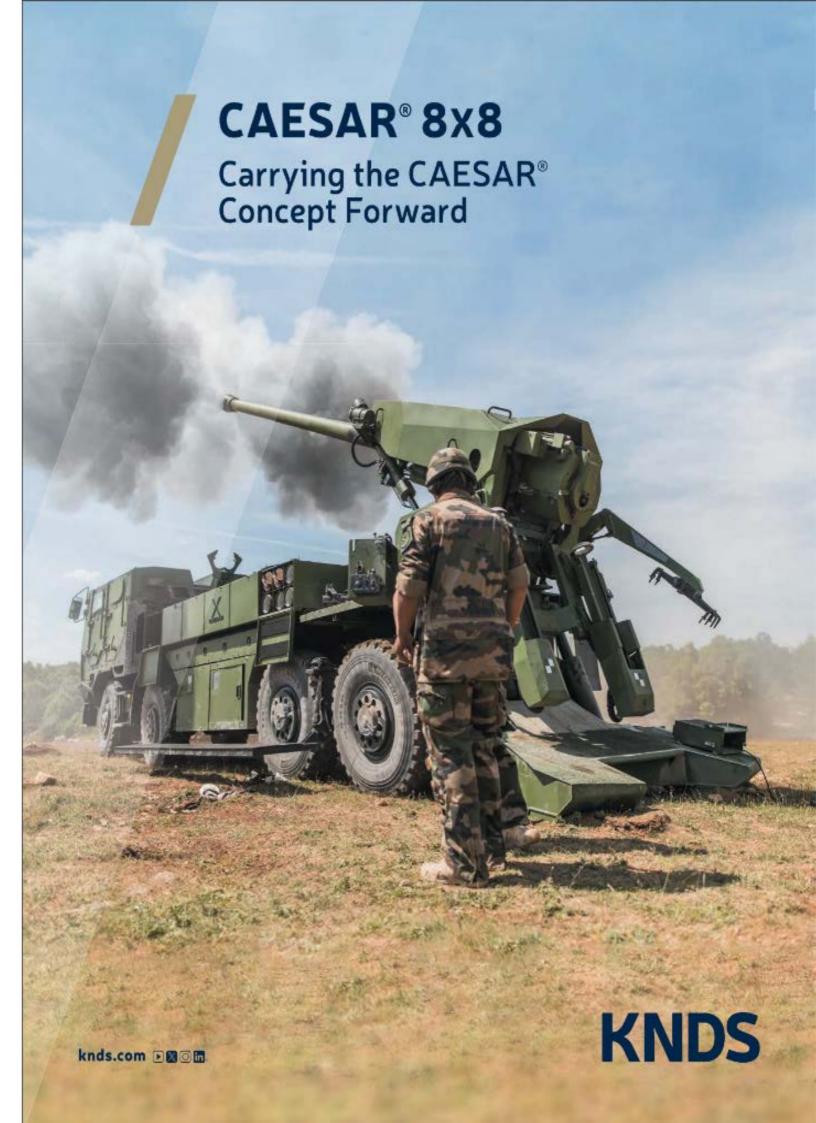
The Mamba Mk 7 is known for its high level of protection against improvised explosive devices (IEDs), ballistic threats, and mines. The vehicle has survived multiple IED blasts ranging from 50 kg to 80 kg and beyond, without any fatalities among its users.

The Mamba Mk 7 is also praised for its versatility and cost-effectiveness, making it an ideal choice for peacekeeping, counter-terrorism, and counter-insurgency missions. The vehicle has been

deployed in high-threat regions like Togo, Somalia, Mali, and Niger, where it has enhanced the operational capabilities of several African nations, including Kenya and Uganda, as part of the AMISOM peacekeeping

16 Mambas were transferred to the G5 Sahel force from the United States Army's African Command (AFRICOM) on March 31, 2021. Togo operates over 100 Mamba Mk 7s which it ordered around 2020. Chad also operates the type.

The Mamba Mk 7 also features a number of improvements over the previous versions, such as a 410 hp engine. independent suspension, rear windows, a sloping bonnet, and an industry-leading turning circle. These enhancements increase the vehicle's performance, mobility, and situational awareness.



SANDF boosts border security with SVI Max 3 armoured vehicles

The SANDF also plans to replace the 'troop pack' vehicles (currently Toyota Land Cruisers) with offthe-shelf vehicles and armoured personnel carriers (APCs) in the next few years.

Sarah Lesedi

The MAX 3 was developed by SVI to give security forces the required equipment to deal with violent crime, terrorism, violent demonstrations and regional conflicts. The multi-role vehicle provides a minimum protection level of EN1063 BR6 (assault rifles) with additional protection against anti-personnel grenades. The MAX 3 is furthermore upgradeable to BR7.

he South African National Defence Force (SANDF) has recently acquired six SVI MAX 3 armoured vehicles and various surveillance equipment to enhance its border security operations. The vehicles and equipment are part of a multi-year plan to upgrade the SANDF's capabilities and resources for border protection.

The six SVI MAX 3 armoured vehicles were delivered to the Joint Operations division of the SANDF earlier this month. Two of them are 4×4 and four are six-wheeled versions. fitted with rear cargo cabins on the loadbed. The six-wheeled version was displayed for the first time at the Africa Aerospace and Defence exhibition in Pretoria in September





nation has initiated the first order for SVI's all- or acquired include tactical radios, surveillance new six-wheeled MAX 3 armored vehicle, mark- equipment for land and sea applications, reliable ing the commencement of what SVI is confident communications systems, unmanned aerial ve-

SVI said these vehicles, intended for non-military applications as general cargo carriers, have just begun production at SVI's factory east of Pretoria. The manufacturing process is scheduled for The SANDF also plans to replace the 'troop completion by February of next year.

The SVI MAX 3 is based on Toyota's proven nel carriers (APCs) in the next few years. The Land Cruiser 79 chassis and powered by a 4.5-litre V8 turbodiesel engine, giving a top speed of 120 km/h and burst speed of 140 km/h. The addition of a third axle on the six-wheeler increases the Gross Vehicle Mass (GVM) to 6 000 kg, allowing for various military and security applications, such as weapon systems, cargo carrying options and field ambulance configurations. The vehicle also provides a minimum protection level of EN1063 BR6 (assault rifles) with additional protection against anti-personnel grenades. The vehicle is upgradeable to BR7.

The SANDF did not disclose any further details about the vehicle and surveillance equipment deliveries, but they are part of a larger budget allocation for border security technology. Joint Operations has been given additional funding to assist the 15 companies doing border pa- management and security.

Last September, SVI announced that an African the high technology equipment to be procured cessing capabilities, upgraded command and control system, radars, observation posts and long range UAVs.

> pack' vehicles (currently Toyota Land Cruisers) with off-the-shelf vehicles and armoured person-APCs would serve with all 15 companies on Operation Corona duty and would have variable ballistic and mine protection, including the ability to defeat an 8 kg mine. The APCs would replace or supplement the existing Mamba and Casspir vehicles.

> The SANDF's border security operations, known as Operation Corona, aim to combat cross-border crimes such as illegal immigration, smuggling, poaching, human trafficking and terrorism. The SANDF has deployed around 2 500 soldiers along the country's borders with Botswana, Lesotho, Mozambique, Namibia, Swaziland and Zimbabwe. The SANDF also cooperates with the South African Police Service (SAPS), the Department of Home Affairs and other law enforcement agencies to ensure effective border

Skiftech unveils tactical engagement simulation systems at the National Guard Conference

Partner Content

n February 7 2024, the global manufacturer of tactical simulators for military training based on laser technologies, SKIFTECH, participated in the National Guard USA Middle Planning Conference Industry Integration Event.

SKIFTECH is a Ukrainian manufacturer of tactical simulators for military training based on laser technologies with an office in Orlando (USA). The equipment produced by SKIFTECH is used for training the Armed Forces, National Guard, State Border Guard Service, Special Operations Forces, and other state military organizations in Ukraine.

At the National Guard USA Middle Planning Conference Industry Integration Event, SKIFTECH presented new developments in tactical simulators, including Stinger MAN-PADS, RPG, AGL (analogue of Mk 19 grenade launcher), SPG (analogue of Pvpj 1110), SPAAG (analogue of Gepard), and the new generation of simulator - Individual Weapon System (IWS).

According to Ukrainian instructors, thanks to the training on SKIFTECH military simulators, the mortality rate of soldiers on the battlefield has been reduced by more than 30%. Currently, SKIFTECH military

simulators are present on every training ground in Ukraine. The presence of SKIFTECH military simulators on every training ground in Ukraine emphasizes their widespread implementation and recognition by the country's armed forces. This technology becomes a key element in enhancing combat readiness and training for military personnel, contributing to improved safety and success in military operations on the battlefield.

These results underscore the importance of innovation in military equipment and indicale a commitment to modern training methods to enhance military efficiency.

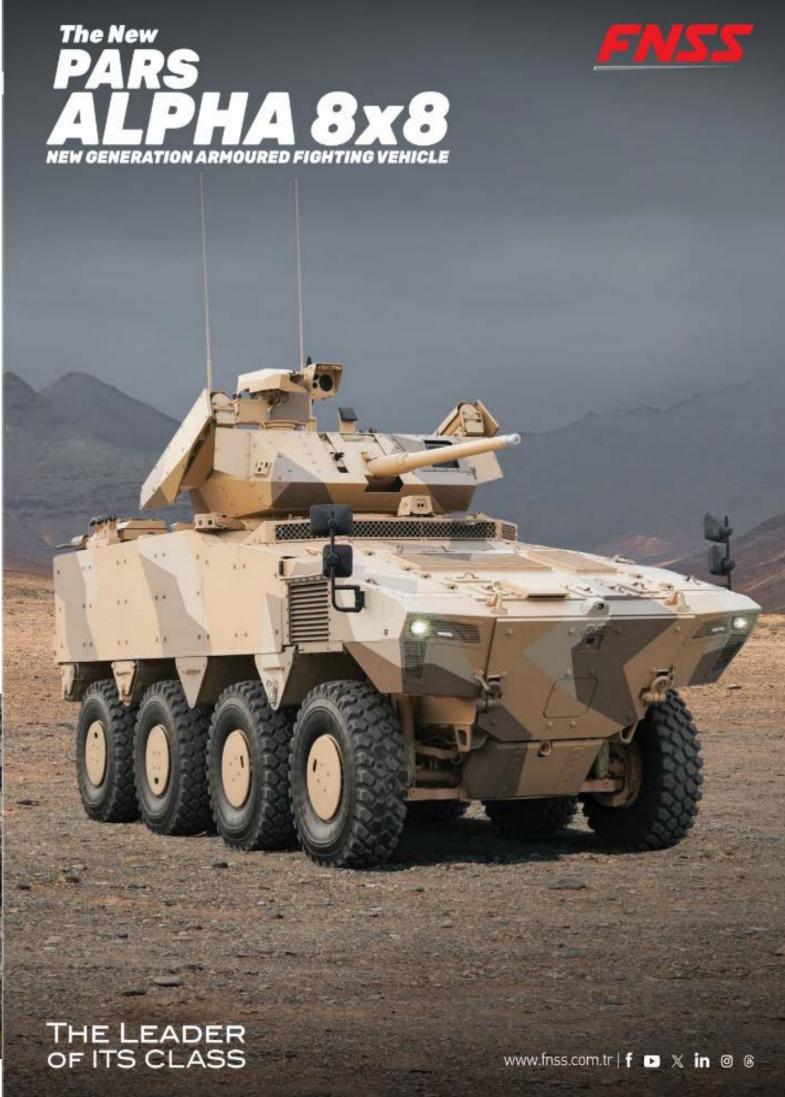
Laser technology enables training sessions that closely replicate actual combat con-

ditions, whether using blank cartridges (dry-fire system) or not.

The company also manufactures simulators for explosive weapons, armored vehicles (including tanks, armored personnel carriers, BMPs, etc.), artillery, mortars, anti-tank guided missiles (ATGMs), MANPADS (Man-Portable Air-Defense Systems), and various other types of military equipment.

This enables infantry, snipers, tank crews, artillery gunners, anti-aircraft personnel, combat engineers, and others to participate in a unified training scenario. SKIFTECH simulators for two-way fire contact create an ecosystem in which exercises can be held at the same training ground at the same time for different types of troops.





Embraer showcases KC-390 to Nigeria amid transport aircraft competition



mbraer has recently conducted a series of demonstrations of ■ its KC-390 Millennium aircraft to the Nigerian Air Force (NAF), hoping to secure a contract for the medium tactical transport aircraft.

The KC-390 is a twin-engine, multi-mission aircraft that can perform various roles, such as troop and cargo transport, aerial refuelling, search-andrescue, and medical evacuation. It can carry up to 26 tons of payload, including vehicles, helicopters, and pallets. It can also operate from short and unpaved runways and has a fly-by-wire system that enhances its flight performance and safety.

Embraer's instructor pilot Marco Aurélio Oliveira announced that the KC-390 was well received by the NAF officials and pilots, who were impressed by its capabilities and versatility. He said that the demonstrations, which took place from

late January to early February, covered the aircraft's tactical air mobility, airdrop, paratrooper, search-and-rescue, and aerial refuelling features, as well as its easy maintenance and low operational cost.

The demonstrations were part of the KC-390's route to the World Defense Show 2024. held in Riyadh from 4 to 8 February, where the aircraft was also displayed to potential customers and partners. Oliveira said that the KC-390 had attracted interest from several countries in the Middle East and Africa, as well as from NATO members.

The NAF is looking for a replacement for its ageing fleet of Lockheed Martin C-130H Hercules, which have been in service since 1975. The NAF launched a procurement programme between 2014 and 2016 to acquire 5–10 medium tactical transport aircraft and invited bids from various manufacturers, including Lockheed

Martin, Airbus, and Shaanxi. The KC-390 was not initially considered for the requirement, but Oliveira said that Embraer had been in contact with the NAF since 2018, and had offered the KC-390 as a viable option. However, the NAF is expected to take delivery of two C295 medium transports from Airbus, NAF is already looking to partner with the Spanish Government in the areas of aircraft acquisition, training, air operations, intelligence sharing and capacity development in imagery analysis, and is in discussions with Airbus.

He said that the KC-390 had several advantages over its competitors, such as the Lockheed Martin C-130J Hercules, the Airbus A400M, and the Shaanxi Y-9. The KC-390 is more modern, more efficient, more flexible, and more affordable than the other platforms and that it could meet the NAF's operational needs and expectations.

AEROSPACE

Tunisia modernizing its C-130 Hercules Transport

Darek Liam

he Tunisian Air Force (TAF) is undergoing a major modernization program for its fleet of C-130J Super Hercules transport aircraft, which are vital for its military and humanitarian operations. The program involves upgrading the cockpit and mechanical components of the aircraft, as well as acquiring two additional C-130H aircraft from the United States.

The TAF has selected Honeywell and ST Engineering Defence Aviation Services (STEDAS) to perform the upgrade work on its two existing C-130J-30 aircraft, which were delivered in 2013 and 2015. The upgrade will be the first integration of a Honeywell Aerospace Technologies solution by STEDAS, a joint venture between ST Engineering and Dassault Aviation.

The upgrade will feature Honeywell's Cockpit Display System Retrofit (CDSR) glass cockpit solution, which provides various high-tech enhancements compared with legacy C-130 systems. The CDSR solution, available in three-display and five-display options with large format LCD displays, flight controls, air data and altitude sensors, has been designed to meet sustainability and modernisation needs.

The CDSR solution will offer major improve-

tional display and an array of peripherals such as the RDR7000 weather radar, a Traffic Collision Avoidance System and advanced flight controls. The retrofits will provide TAF pilots and flight crew with improved safety, better flexibility and efficiency, and easier maintenance. Enhancements will be targeted in enhanced situational awareness, strategic route planning, streamlined crew interactions and reduced workloads.

"We are honoured to work together with ST Engineering Defence Aviation Services to introduce the glass cockpit and mechanical component upgrade solutions for the Tunisian Air Force," said Sathesh Ramiah, Vice President, Defence & Space, Asia Pacific at Honeywell Aerospace Technologies. "Honeywell's glass cockpit represents a leap forward in modern aerospace technology, helping ensure the highest levels of safety and efficiency."

In addition to upgrading its existing C-130J-30 aircraft, the TAF will also receive two C-130H aircraft from the United States, which approved the transfer in June 2020. Tunisia requested for two of the aircraft on 6 June 2019, and the total acquisition value stated by the Defense Security Cooperation Agency is \$60 million. The C-130H aircraft will augment the TAF's transport capabilities and provide interoperability with its allies.





Sarah Lesedi

he South African Air Force (SAAF) is expected to receive the first batch of operational A-Darter air-to-air missiles from Denel Dynamics by the end of this year, after years of delays and challenges.

The A-Darter is a fifth-generation infrared-guided missile that was developed jointly with Brazil under Project Assegai. It is designed to provide high agility and manoeuvrability, as well as resistance to countermeasures, for close-range air combat.

The missile project, which started in 2006, has faced several setbacks due to funding shortfalls, skills shortages, and liquidity problems at Denel Dynamics, the state-owned defence company responsible for its production.

According to Armscor, as reported by Defence-Web, the state-owned defence acquisition agency, the original contract for the industrialisation and production of the A-Darter was signed in March 2015, with a delivery deadline of October 2017. However, the contract execution stalled for more than four years, leading to cost overruns and technical obsolescence.

In 2020, Armscor explored alternative options to revive the programme, and proposed a revised contract with Denel that involved other local defence companies to assist with the industrialisation and manufacturing of the missile. The proposal was accepted by the Air Force Command Council in September 2020, allowing the programme to be 'unlocked.'

Armscor reported that Denel is currently executing the programme with deliverables as agreed with the SAAF. The revised contract calls for the delivery of eight practice missiles, 21 trainer missiles, and 41 operational missiles to the SAAF. The first four operational missiles are expected to be delivered in December 2021, while the final contracted operational missiles are

AEROSPACE

review.

scheduled for January 2028. The SAAF has also received financial and technical support from the Brazilian Air Force. which is a partner in the A-Darter project. The Brazilian Air Force has already integrated the missile into its SAAB JAS 39 Gripen fighter jets, which are also operated by the SAAF. The A-Darter received an A type certification and qualification in 2019, after undergoing formal

The delivery of the A-Darter will enhance the SAAF's air combat capabilities, as it currently relies on the interim IRIS-T missile, which was acquired from Germany in 2009. The SAAF does not have a beyond-visual-range air-to-air missile, which limits its ability to engage in long-range engagements.

Denel, which was struggling financially, received nearly R1 billion from the Denel Medical Benefit Trust (DMBT) and R3.4 billion from Treasury recapitalization in September 2023 to secure its existing customer base and resume key programmes that were previously on hold. This is after receiving funds amounting to R3.4-billion through the Special Appropriation Act of 2022.

The A-Darter is one of the flagship programmes of Denel Dynamics, which also produces other missiles, such as the Umkhonto surface-to-air missile and the Mokopa anti-tank missile. In October 2019, the A-Darter was issued an A type certification and qualification, after undergoing formal review. These, brings the missile development cycle to a close.



Military Africa

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AIR DEFENCE MISSILE SYSTEM

EFFECTIVE AIR DEFENCE OF CRITICAL ASSETS
TARGET INTERCEPTION WITH IIR & RF SEEKER MISSILES
THREAT EVALUATION & WEAPON ASSIGNMENT
MULTIPLE TARGET ENGAGEMENT WITH 360° COVERAGE



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FULLY AUTONOMOUS OPERATION
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REDUNDANCY & RELIABILITY



AIR DEFENCE GUN SYSTEM

STABILIZED AND UNMANNED GUN TURRET
FIRING ON THE MOVE
TOGETHER WITH 35 MM AIRBURST AMMUNITION
HIGHLY IMPROVED EFFECTIVENESS
AUTOMATIC LINKLESS AMMUNITION FEED MECHANISM





Milkor unveils Commander patrol craft at World Defence Show **Patrol Vessel**

The development of the Commander was driven by the increasing demand for high-speed naval response capabilities in the face of growing threats such as piracy, human trafficking, and smuggling along the coastlines of Africa and the Middle East.

Sarah Lesedi

ilkor has unveiled its latest naval product, the Milkor Commander, at the World Defence Show in Saudi Arabia. The 16-metre patrol craft is designed for a variety of maritime security and law enforcement missions, such as anti-piracy, border control, and search and rescue.

The Commander features a hydrodynamic hull that optimises speed, range, and manoeuvrability, according to Milkor. The vessel can reach up to 45 knots and travel 500 nautical miles at 35 knots, making it suitable for rapid deployment and long endurance operations. The vessel also has a spacious deck and a high payload capacity, allowing it to carry up to 10 personnel and various equipment. The vessel

is equipped with waterjet propulsion, bulletproof glass, spall lining, and a remote weapon

James Cottrell, Head of Marine Projects at Milkor UAE, said that the Commander is a versatile and reliable platform that can meet the diverse needs of coastal security and law enforcement agencies. He added that the vessel has a high level of protection and seakeeping ability, ensuring the safety and effectiveness of the crew.

Milkor said that the development of the Commander was driven by the increasing demand for high-speed naval response capabilities in the face of growing threats such as piracy, human trafficking, and smuggling along the coastlines of Africa and the Middle East. The company said that it has

a strong expertise and experience in developing and supporting naval vessels, and that it can produce vessels up to 30 metres in length.

Milkor also showcased its Inshore Patrol Craft (IPC), a 12-metre vessel that uses a hydrofoil supported catamaran design to achieve high cruising speeds. The IPC can operate in both manned and unmanned modes, and can be armed with two lightweight torpedoes. Milkor said that the IPC has successfully completed trials and that it is in talks with a potential customer in the Middle East.

Milkor said that it will reveal more details and capabilities of the Commander and the IPC at the next edition of IDEX, the International Defence Exhibition and Conference, in 2025.



Russia's naval ambitions in Africa thwarted by Sudan's turmoil

Ekene Lionel

ussia's plan to establish a naval base in Sudan, which would have given it access to the strategic Red Sea and the Indian Ocean, has been put on hold indefinitely due to the ongoing political instability in the African country.

The agreement to create the naval facility was signed in 2019 by former Sudanese President Omar al-Bashir and Russian President Vladimir Putin, as part of a broader military cooperation deal that included arms sales and training. The base, which would have hosted up to 300 Russian personnel and four warships, was intended to serve as a logistics hub for the Russian Navy, allowing it to operate large vessels and nuclear submarines in the region.

However, the deal faced several obstacles and delays, as Sudan underwent a series of political upheavals that hampered its ratification. In 2019, al-Bashir was ousted by a military coup, which was followed by a power-sharing agreement between the military and civilian leaders. In 2021, Sudan's Deputy Foreign Minister Mohamed Sharif Abdallah announced that the naval base agreement was not compatible with Sudan's national interests and sovereignty, and that it would not be ratified by the transitional government.

In 2023, the situation worsened, as Sudan witnessed another attempted coup, which sparked violent clashes between pro-government forces and rebels from the Rapid Support Forces (RSF), a paramilitary group that has been accused of human rights violations and war crimes.

The RSF, which is led by General Mohamed Hamdan Dagalo, also known as Hemeti, has been reportedly supported by the Russian Wagner Group, a private military company that has been involved in several conflicts in Africa and the Middle East, allegedly on behalf of the Kremlin.

The naval base agreement, which was supposed to last for 25 years, has been effectively frozen by the political

Russia has not given up on its naval aspirations in Africa...

crisis, as Sudan's ambassador to Russia, Andrei Chernovol, confirmed in February 2024. He said that the agreement could not be implemented until Sudan's political situation stabilizes and a new constitution is adopted.

The failure to establish the naval base in Sudan is a setback for Russia's ambitions to expand its presence and influence in Africa, where it has been competing with other global powers, such as the US, China, and France, for access to natural resources, markets, and strategic locations. The naval base would have also enabled Russia to project its power in the Red Sea, which is a vital maritime route for global trade, and in the Indian Ocean, where it could challenge the US and its allies.

HE HILLSHIP OF THE PARTY OF THE Russia has not given up on its naval aspirations in Africa, however, and has been exploring other options, such as Somalia, Eritrea, and Djibouti, where it could potentially establish a foothold. However, these countries also pose significant challenges and risks, such as piracy, terrorism, and regional rivalries, that could complicate Russia's plans.

DICON resumes arms production after



Ekene Lionel

he Defence Industries Cooperation of Nigeria (DICON) has announced that it has resumed the production of arms and ammunition after years of suspension, following a series of reforms and funding from the government and foreign partners.

DICON, the state-owned corporation responsible for the production and supply of defence equipment to the Nigerian military and other security agencies, had been facing operational and financial challenges that hampered its ability to meet the country's defence needs.

However, according to its Director-General, Maj.-Gen. Aniedi Edet, DICON has undergone a transformation that has enabled it to restart its production and increase its output and quality.

Edet made the declaration in Jos last week when he visited Maj.-Gen. Abdusalam Abubakar. General Officer Commanding 3 Division of the Nigerian Army.

He said that DICON was implementing some reforms

aimed at fulfilling its statutory mandates and satisfying its customers.

"Over the years, DICON has been doing its best to meet these needs, but people feel it should do more. We have resumed the production of ammunition which has been stalled for some time. As we speak, we are churning out a good batch of ammunition," he said.

He added that DICON had supplied about four million rounds of ammunition to the Nigerian Army in January and was assembling some range of weapons that would enhance its operations.

Edet also attributed the revival of DICON to the signing of the DICON Bill into law by President Bola Tinubu in November 2023, which he said would enable the corporation to build a military-industrial complex with DICON as the hub.

"This will enable us to incorporate so many defence-related industries in Nigeria which have the potential and capability to meet the country's defence needs. This simply means that DICON needs to build a robust partnership with relevant government agencies and organisations to achieve its mandate." he said.

The DICON Bill, 2023, which was sponsored by the Chairman of the House of Representatives Committee on Defence. Babajimi Benson, repeals the previous DICON Act and introduces several reforms and innovations to the corporation.

The bill empowers DICON to operate and maintain subsidiaries and ordnance factories, establish a research and development institute, provide a regulatory framework for the defence sector, and attract private capital to facilitate production and innovation.

The bill also aims to make DICON more accountable, transparent, and efficient in its operations and management.

The signing of the bill comes at a time when Nigeria is facing

various security challenges, such as insurgency, banditry, kidnapping, and piracy. The bill is expected to enhance the capacity and capability of the Nigerian military and other security agencies to combat these threats and protect the sovereignty and territorial integrity of the country.

The bill will also enable DI-CON to produce a wider range of defence products, such as weapons, ammunition, vehicles, uniforms, and equipment,

The primary objective of this and

them

to other countries. The bill will also foster the development of local content and technology transfer in the defence sector, creating opportunities for local manufacturers, suppliers, and researchers.

Dicon Ezugwu

MRAP. (File Photo)

The signing of the bill is the latest in a series of initiatives taken by President Tinubu to boost Nigeria's defence industry. In September 2023, the president approved a \$1 billion deal with India to modernize DICON's facilities and increase its local production of defence equipment to 40% by 2027. The deal will also provide DICON with the funding and

expertise it needs to produce more sophisticated and advanced products, such as drones, missiles, and radars.

In addition, DICON has been collaborating with other countries and companies to produce and acquire new defence products. In January this year, leading US military firm, NEANY, agreed to establish advanced weapons production lines at the DICON facility.

collaboration is to create assembly lines dedicated to manufacturing cutting-edge military equipment, such as drones, radars, and biometric systems, that can significantly contribute to Nigeria's fight against insecurity.

DICON's resumption of arms production is a welcome development for the country, as it will not only strengthen its defence capabilities, but also create jobs, generate revenue, and promote innovation.

In 2022, DICON and the Nigerian Army Vehicle Manufacturing Company (NAVMC) created the Alkali MRAP after leveraging on the experiences gathered by troops over the years on the battlefield. Both Nigerian defence companies had earlier designed the battle-proven Ezugwu MRAP which has seen several iterations over time. The company has also signed a Memorandum of Understanding (MOU) with the University of Ilorin to develop Composite materials for Armour plating for use in the production of military vehicles.

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AIO and Thales signed a JV agreement on optronics equipment production

Darek Liam

uring the Egypt Defense Expo (EDEX), Thales signed an agreement with the National Service Products organization to renew the Arab **International Optronics Joint** Venture (AIO).

The joint venture agreement was signed by Gen. Tarek Saad Zaghloul Chairman of **Arab International Optronics** and Pascale Sourisse. President and CEO of Thales International.

This joint venture agreement is in line with Egypt's localization strategy through knowledge transfers for land-based defense optronics equipments. The local production of LUCIE night vision goggle has been launched the frame of the joint venture agreement. LUC-IE is a compact and rugged image intensified night vision bi-ocular.

In 1982, tional Service ization (NSPO) **Products** med a joint and Tha Arab Internaventure s (AIO). AIO is tional O oint stock compaan Egy 9% by Thales and ny, ow 51% b National Service

Products Organization. AIO has been supplying to Egypt optical and optronic equipment for 35 years. Today, AIO employs more than 400 employ-

"The signature of this Joint Venture Agreement is a significant milestone to reinforce the strategic cooperation between AIO and Thales. Through this agreement AIO and Thales will combine their strengths to encourage innovation, enhance technological capabilities, and secure mutual success to the benefit of our esteemed customers." said Major General / Tarek Saad Zaghloul, Chairman of AIO.

"We are honored to renew this significant and important partnership with AIO to localize a wide range of defense products including optronics equipments. Thales is committed to support Egypt military production capabilities in line

with Egypt Vision 2030. This agreement reflects Thales localization strategy in the country." said Pascale Sourisse, President and CEO of Thales International.

Thales (Euronext Paris: HO) is a global leader in advanced technologies within three domains: Defence & Security, Aeronautics & Space, and Digital Identity & Security.

The Group invests close to €4 billion a year in Research & Development, particularly in key areas such as quantum technologies, Edge computing, 6G and cybersecurity.

Thales (Euronext Paris: HO) is a global leader in advanced technologies within three domains Defence & Security, Aeronautics & Space, and Digital Identity & Security. II develops products and solution that help make the world saler, greener and more inclusi

AIO has been establish Today's increasingly frequent one of the key manufac and complex internal security companies, by the Egy threats make it quite difficult for med Forces since 1 the institutions and organizations in collaboration with T in charge of homeland security activities to eradicate the threat using traditional methods and capabilities.

> Therefore, the institutions responsible for homeland security are attempting to increase their efficiency and capabilities by using advanced technologies also strengthening inter-agency coordination and enhancing the credibility of authorities responsi-

omeland Security

air and sea borders, security of

critical facilities and factories,

cyber security issues in every

field, natural disasters and so-

cial security, to the protection of

above-ground and underground

wealth, has become one of the

most prioritized and financially

ernments today.

important issues of all world gov-

encompasses a wide

range of issues such

as the security of land,

ble for homeland security (police, intelligence, coast guard, fire department etc.).

In this context, broadband connections, advanced image collection devices, autonomous systems (UAVs, autonomous vehicles and robots) allow homeland security institutions to see the "big picture", while big data analysis, artificial intelligence, computerized visualization, augmented reality, virtual reality and other support systems aid in the development of quick and accurate decision-making mechanisms.

The homeland security market is fast-paced and dynamic, constantly evolving to answer new threats to a homeland security. The market is expanding rapidly due to security challenges such as terrorism, crossborder disputes, illegal immigration, smuggling and cyber threats. According to Allied Market Research, the global homeland security market is predicted to grow up to \$801 billion by 2028.

For the threats to national security, the Homeland Security sector has become one of the most essential areas where critical and emerging technologies are used. From smart surveillance to cybersecurity, artificial intelligence to the internet of things (IoT), six trends have emerged that are

These trends are:

industry.

1. Cybersecurity as a growing priority

reshaping the market and rev-

olutionizing the structure of the

- 2. Rise of Artificial Intelligence (AI)Internet of Things and **Smart Surveillance**
- 3. Biometric Authentication and Identification
- 4. Drone Technology (Eyes in the Sky)
- The rise of Private Public Partnerships.

As we move forward to the future, these six trends are redefining how we perceive security and reconfiguring the strategies and technologies used to deliver it. In a world where threats are rapidly evolving, innovation, awareness and adaptability will be vital to ensure our collective security and promote a peaceful and secure homeland.



Military Africa

Hensoldt SA introduces Bushbaby 100 electro-optical system at World Defence Show

Sarah Lesedi

ensoldt South Africa, us that a solution a leading provider of like this is the defence and security ideal choice - an solutions, has introduced its latest electro-optical system, the Bushbaby 100, at the World Defence Show (WDS) in Saudi Arabia.

The Bushbaby 100 is a medium-range multi-sensor system that offers stabilised surveillance and target geo-location capabilities for various applications in the defence, security and civil sectors. It is designed The Bushbaby 100 is aimed for day and night observation and can be easily deployed on a range of platforms, including armoured vehicles, unmanned ground vehicles, patrol vehicles companies, military forces and and commercial vehicles.

The system features a field-swappable sensor-module that can be configured according to the user's needs. In standard configuration, it provides a video feed from a 4K electro-optical sensor along ments the company's other surwith a compact MWIR (medium veillance capabilities, including wavelength infrared) sensor and optional laser rangefinder. The system has a continuous 360-degree azimuth and -45° to tical surveillance system is, for +95° elevation range.

The onboard real-time video processor enhances the image quality of all sensors, fuses the daylight and infrared cameras into a single video stream, stabilises the image, steers the scene and tracks the target.

"The modern defence and security landscape has shown

advanced, yet flexible solution that can be easily deployed on a range of platforms for agile use," said Chris Haines, Head of Sales of Hensoldt's Optronics business in South Africa.



Hensoldt Bushbaby 100

family of optronic sensors.

at a variety of industries and organisations, such as security and policing agencies, border control authorities, mining commercial vehicle operators. It can be used in fixed or mobile installations for land-based surveillance.

The system is non-ITAR, like the majority of Hensoldt South Africa's products, and compleradar and electro-optical sensors. Hensoldt South Africa's combined radar and electro-opexample, protecting nearly two thousand rhinos in the world's largest rhino conservancy.

The Bushbaby 100 is the latest addition to the Hensoldt electro-optical portfolio, which also includes the Argos gimbal for aerial surveillance, the Optronics Mast System for naval applications, the Spexer family of security radars, and the SharpEye

"Hensoldt South Africa's expertise in the design, manufacturing and maintenance of defence and security solutions has earned the trust of military and commercial authorities in the Middle East," said Rynier van der Watt, Managing Director of Hensoldt SA, leading the company to establish regional sales and marketing offices in Saudi Arabia and the United Arab Emirates.

"While exporting its solutions to over 45 countries globally, the Middle East holds strategic importance for Hensoldt SA," the company said. "At WDS 2024, collaboration agreements with INTRA Defence Technologies, SCOPA Military Industries and STIRA Strategic Systems solidify Hensoldt SA's role in developing next-generation electro-optic systems and spectrum dominance solutions for the defence, security and civilian market in Saudi Arabia."

HAVELSAN and INTRA Defense **Technologies sign MoU to enhance Military Simulation Technologies**

PARTNER CONTENT

INDUSTRY & BUSINESS

HAVELSAN and INTRA Defense Technologies have entered into a Memorandum of Understanding (MOU) on February 5, 2024. The MOU Ceremony, participated in by Prof. Dr. Haluk Görgün, President of Defense Industries, aims to synergize HAVELSAN's expertise in simulation and pilot training technologies with INTRA's expertise in military design, engineering, development, production, and logistics support.

The MOU outlines a collaboration that brings together HAVELSAN's extensive experience in defense and simulation technologies with INTRA's innovative approaches and technical expertise. This partnership aims to produce advanced military simulation solutions that meet the dynamic requirements of contemporary defense strategies.

The collaboration is described as a significant step towards transforming military simulation technologies, with both companies committed to

creating sophisticated solutions that will enhance operational effectiveness and establish new benchmarks in the defense industry.

The collaboration outlined in the MOU is a proof to both organizations' commitment to enhancing military capabilities through technological innovation. HAVELSAN, with its deep-rooted knowledge in simulation technologies, alongside INTRA's specialized technical and logistics support, aims to develop comprehensive military simulation solutions.

By leveraging HAVELSAN's advanced simulation technologies and INTRA's technical and logistical expertise, the partnership is dedicated to creating an integrated approach to military training and operations. This collaborative effort is expected to lead to the development of innovative simulation technologies that enhance the effectiveness and efficiency of military training and preparedness.



COAPS-L

High-performance, light-weighted day & night panoramic sight



Modular configuration for best-in-class functionality

COAPS-L features advanced sensors and image processing capabilities in a unique add-on system. This modular solution is designed to provide long-range day and night target acquisition in stationary or on-the-move operations. The solution's open architecture supports integration with command and control systems.

Uniquely configured with compact dimensions, the system features a small mechanical interface to the platform and minimal volume inside the turret or vehicle.



Proforce and Kia sign MOU for driveline supply at **World Defence Show 2024**



Ekene Lionel

roforce Limited, a Nigerian company specialized in armoured vehicles and personal protection, has signed a memorandum of understanding (MOU) with Kia Corp., South Korea's second-largest automaker, to supply Proforce with drivelines for its military vehicles.

The MOU was signed at the World Defence Show 2024 in Riyadh Saudi Arabia, where both companies showcased their latest innovations in defense technology.

Some of the products that Proforce has exhibited are the Ara 2 MRAP, a mine-resistant ambush-protected vehicle that can withstand blasts and ballistic threats: the PF-2 Armoured Personnel Carrier, a versatile and modular vehicle that can transport troops and equipment in various terrains; and some of its drones, such as a fixedwing unmanned aerial vehicle that can perform reconnais-

sance, surveillance, and target acquisition missions. According to Proforce's social media channel, the MOU "proves our commitment to quality and performance as this will ensure our armoured vehicles are top class. We are breaking new grounds to ensure that our products and services are unmatched in quality." The details of the agreement have not yet been released, but it is expected that the drivelines will enhance the mobility and durability of Proforce's vehicles, which are designed for various terrains and environments.

Kia. which has been a defense industry company since 1973, unveiled its next-generation military vehicle technologies at the world defence show 2024 for the first time, hoping to make quick inroads into the global defense market with its latest mobility technologies. Kia's medium standard vehicle, which can carry up to 16 people and cross a 1-meter-deep stream, will replace the carmaker's existing 2.5 to 5-ton tactical vehicles. Kia also displayed the medium standard vehicle's bare chassis vehicle, which can be modified into different special vehicles based on customers' diverse needs and purposes. Kia's light tactical vehicle and hydrogen-powered all-terrain vehicle (ATV) concept vehicle were also on display.

The company also makes local productions in foreign countries to support their industrialization, in cooperation with their governments. These situations help securing mutually beneficial military and diplomatic partnerships/relationships with those countries.

The MOU between Proforce and Kia is a sign of the growing collaboration and innovation in the defense industry, as well as the potential for expanding the market for both companies in Africa and beyond.



New anti-drone mini-missiles for Pantsir air defence system

PARTNER CONTENT

for its Pantsir air defense system, designed to and other low-flying targets. The new missiles were showcased at the second edition of standard missiles. the World Defense Show in Riyadh, Saudi Arabia, where Rustem for its partner countries.

"At the High Precision Weapons stand, KBP presented the entire range of missiles for the Pantsir, including a new shortrange interception mini-missile service. for combating UAVs and other similar targets" a representaholding company said.

The new mini-missiles are part cannons and surface-to-air

ussia has developed of the Pantsir-S1M developa new type of close- ment, which aims to increase range mini-missiles the effectiveness of the system against new threats of massive drone engagement. The intercept and destroy of drones mini-missiles can be loaded in 48 units on the Pantsir launcher, compared to 12 units of the

According to High Precision sia also offered to localize the Weapons (KBP), the developer production of the Pantsir sys- of the Pantsir system, mini-missiles have high maneuverability and accuracy and can hit aerial targets at close range and in a confined space. It is expected that the mini-missiles will complete tests in 2024 and enter

The Pantsir-S1M system is tive of High-Precision Weapons a self-propelled anti-aircraft gun-missile (SPAAGM) system that combines a 30 mm

missiles in a single platform. It can engage targets at altitudes from 15 to 18,000 meters and at distances from 200 meters to 30 km. It can also operate in all weather conditions and in complex jamming environments.

The Pantsir system has been praised by its users for its performance in real combat situations, especially in the Middle East, where it has been deployed by Russia, Syria, and the United Arab Emirates. The system has demonstrated its ability to shoot down rockets, artillery shells, and drones, including those launched in large numbers by modern multiple rocket launchers (MRLS) of Western origin.

Rosoboronexport, the Russian defense export agency, has reported a high demand for the Pantsir system from various CEO. regions of the world, especially that traditionally equip their armies with the cutting-edge armament. The agency has also offered a unique cooperation format to friendly countries, which consists of localizing the production of the Pantsir system on the customer's territory, thus creating jobs and enhancing the technological capabilities of the host country.

Naturally, Middle East countries that traditionally equip their armies with the cutting-edge armament are among top import-

Middle East partners of Rosoboronexport are enthusiastic about capabilities of the Pantsir air defense missile and gun system in the special military operation's zone, CEO of the Russian defense export agency Alexander Mikheev told TASS at the World Defense Show 2024.

"We often hear from foreign partners, including from the Middle East countries, enthusiastic reviews of videos of the Russian Ministry of Defense with the footage of Pantsir combat operation in the special military operation's zone. The partners were particularly impressed by the one hundred percent destruction of rocket projectiles launched in a single salvo from modern MLRS of Western manufacturers," Mikheev said.

"The partners were especially impressed by the 100% destruction of projectiles fired in one salvo from modern MRLS produced by Western manufacturer", said Rosoboronexport's Military Africa

from the Middle East countries The Pantsir system has also seen use in Africa, where it has been deployed by both Algeria, Libya, Equatorial Guinea, and Ethiopia. Ethiopia has taken measures to enhance the protection of its Grand Ethiopian Renaissance Dam (GERD) by deploying state-of-the-art Russian-made Pantsir air defense systems.

> This move comes amid rising geopolitical tensions surrounding the dam's filling, which has raised concerns among downstream countries, such as Egypt and Sudan, over the potential impact on their water security.

As of the year 2020, Rega the Pantsir-S system, Valer Slugin, chief designer for a defense systems of KBF strument Design Bureau tsir's developer and proannounced that Pantsin defense systems during t tire period of their comb had shot down about a 1 manned aerial vehicles in ous regions of the world.

> Russia developed a new type of clos mini-missiles for its Pantsir air defense

TerraHaptix opens Africa's Largest Drone **Factory**

PARTNER CONTENT



■erraHaptix. a VCbacked robotics startup opens a 15,000-square-foot drone factory in Abuja to produce autonomous drones for the world's core industries such as defence, energy, logistics, agriculture, and mining.

Founded by 22-year old Maxwell Maduka and 20-year old Nathan Nwachuku in 2023, TerraHaptix is an Nigerian robotics startup that designs, manufactures, and sells autonomous drones. The company develops everything in-house including the airframe, flight computers, firmware, powertrain, and the flight OS. The big mission of TerraHaptix is to transform the world's core industries with drones.

The new factory is capable of producing 10,000 drones annually, essentially making TerraHaptix Africa's largest drone manufacturer. It includes a research and development lab, a 3D printing facility, a machine shop, and a manufacturing line to support production. They plan to start full operations in the factory by April 2024.

Western drone companies lack the manufacturing capacity to compete with China due to fragmented supply chains, expensive labor, and high operating costs.

TerraHaptix faces none of

these issues with its plan to produce locally and sell glob-

Located in Idu Industrial District, Abuja. The company plans to have the full lifecycle of design, development, prototyping, manufacturing and production in the same space which allows TerraHaptix to iterate and develop the technology incredibly fast.

"This factory acquisition shows TerraHaptix's intent as a serious strategic robotics company in Africa, and we can't wait to commence the production of UAVs that will drive the technological revolution for core industries globally"- said Nnamdi Chife. CEO of TerraHaptix.

The company plans to launch two product lines in the next four months: One is a longrange reconnaissance drone for commercial use. The other is a jet-powered attack drone for militaries across the globe. TerraHaptix's family of systems is powered by Artemis OS, its Al-powered operating system that turns thousands of data streams into a realtime. command and control centre. The 6-month old company has already closed major commercial contracts to supply its autonomous drones. With the fast-growing commercial drone market reaching \$34B TerraHaptix aims to produce 100,000 drones annually by 2030.



CREATING NEW REFERENCES FOR INDUSTRIAL COOPERATION



UNMANNED SYSTEMS



Havelsan Sancar Autonomous unmanned surface vehicles

PARTNER CONTENT

s technology has developed, the frequency and diversity of security threats to the world's navies have increased.

Autonomous unmanned surface vehicles integrate advanced technology into military units by sensing the environment using sensor systems and performing important tasks SANCAR AUSV has an uninsuch as ISR (Intelligence, Surveillance. Reconnaissance) and defense.

In the coming period, armed unmanned surface vehicles will become an inevitable force multiplier for modern navies, responding to asymmetric threats. In response to the needs of modern navies, HAVELSAN has developed the SANCAR Armed Unmanned

Surface Vehicle (AUSV) in cooperation with the Yonca Shipyard.

As SANCAR AUSV is manufactured using a modular design, additional payloads can be easily integrated into the platform to fulfill the expected tasks and at the same time perform various tasks that may arise in the future.

terrupted communication infrastructure based on RF/GSM/ SAT systems, all used together. This enables it to carry out operations effectively over long distances.

SANCAR AUSV is the first unmanned system using ADVENT ROTA (ADVENT C4ISR system developed for unmanned systems) as a mission system. SANCAR AUSV can be controlled from a mobile ground control station equipped with an ADVENT C4ISR mission system that complies with NATO interoperability standards. This allows it to be deployed on other naval platforms that use ADVENT.

Thus, SANCAR can transfer tasks between different ships, conduct network-centric operations with manned/unmanned platforms as a team and offers easy adaptability for swarm operations. In this respect, SAN-CAR AUSV has a technological infrastructure that outperforms its global competitors.

SANCAR AUSV was developed to autonomously perform the tasks of harbor and base protection, search and rescue, ISR, patrol, surface warfare and mine countermeasures.

SANCAR AUSV will minimize the risks to human life and enable many tasks to be performed more cost and time efficiently with modular payloads. This makes it one of the most versatile platforms.

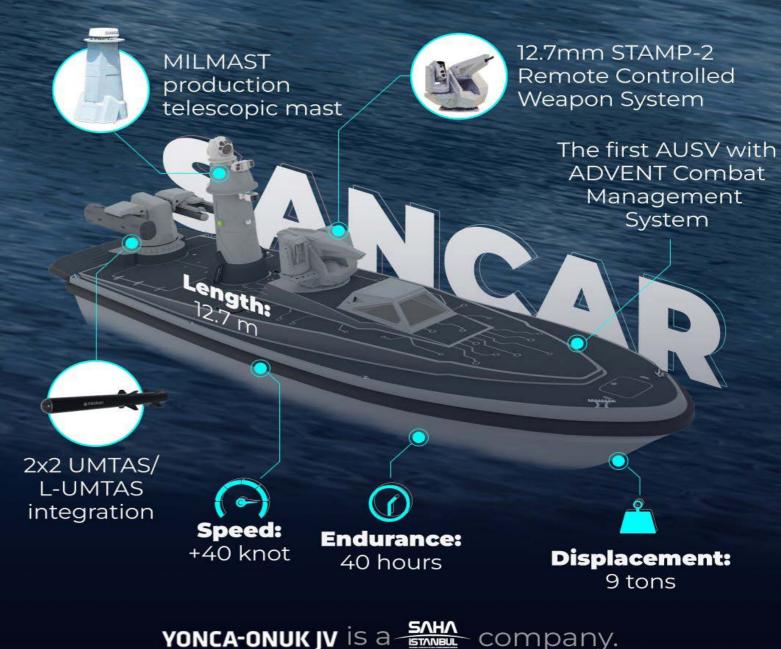
Autonomous systems technologies such as artificial intelligence and data fusion were used in its development. It has a length of 12.73 meters, a width of 3.3 meters and a displacement of 9 tons. The platform can reach a speed of over 40 knots and has a range of over 740 kilometers.

Thanks to its modular design, the platform, which can operate in up to four sea states. also offers the possibility of integrating weapons and electronic systems of different types and uses. In terms of weapon systems, SANCAR AUSV has a stabilized 12.7 mm weapon system and its defensive capabilities can be increased by integrating a tactical missile system.

The Mini Ship Data Distribution ment. System is also integrated into the platform. Another factor

that distinguishes SANCAR AUSV from others is the integration of a telescopic mast with a navigation radar camera and a collision avoidance system. This mast structure further increases the modular design and offers flexibility when using new systems.

SANCAR AUSV, a superior platform with many cutting-edge technologies, will prepare the world's navies for the future operational environ-



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Darek Liam

urkey has agreed to supply Egypt with its renowned drones as both Islamic nations seek to strengthen their diplomatic ties, which have been upgraded from normalisation to strategic. The deal marks a pivotal moment in the normalization of diplomatic relations between the two countries, which had been strained for a decade.

According to Turkey's Minister of Foreign Affairs Hakan Fidan, Turkey will export unmanned aerial vehicles (UAVs) and other cutting-edge technologies to Egypt, as part of a broader cooperation on trade, energy, and security issues. Fidan announced that President Recep Tayyip Erdoğan will visit Egypt on February 14 to meet his counterpart, Abdel Fattah al-Sisi, in a historic trip that signifies the restoration of diplomatic relations.

"Normalization in our relations is important so as to allow

Egypt to have certain technologies. We have an agreement to provide [Egypt] unmanned air vehicles and other technologies," Fidan told pro-government A Haber station.

The relations between Turkey and Egypt had been tense since the 2013 military coup that ousted the late Egyptian President Mohammed Morsi, an ally of Turkey and part of the Muslim Brotherhood movement. At the time, Erdoğan said he would never speak to "anyone" like Sisi, who in 2014 became president of the Arab world's most populous nation.

The first signs of a thaw came in May 2021, when a Turkish delegation visited Egypt to discuss possible normalization. Since then, the two countries have exchanged positive signals and expressed their willingness to improve their ties.

The drone deal is a significant step in this direction, as it shows the mutual trust and respect between the two countries. Turkey is a global leader

in drone technology, with its UAVs (Bayraktar TB2) proving their effectiveness in various conflicts, such as Azerbaijan and Libya, and in Ukraine, where they played a pivotal role in countering Russian forces early into Moscow's invasion.

Egypt had previously planned to buy ten Anka drones from **Turkish Aerospace Industries** (TAI) in 2011, but the deal was stalled due to the diplomatic standoff. Now, with the relations improving, Egypt will be able to access Turkey's drone technology, which could enhance its military capabilities and regional influence.

The drone deal is also expected to pave the way for further collaboration between Turkey and Egypt, beyond defense, contributing to mutual economic and strategic interests. The two countries share common concerns and challenges in the region, such as the Libyan crisis, the Eastern Mediterranean dispute, and the fight against terrorism. 🚽

Rwanda acquires Polish anti-drone systems to boost its defence capabilities

Darek Liam

wanda has become the latest African country to acquire the SKYctrl and FIELDctrl anti-drone systems from the Polish company **Advanced Protection Systems** (APS). The systems are designed to detect, track and neutralize unmanned aerial vehicles (UAVs) that pose a threat to the security and sovereignty of the country.

The SKYctrl system is a comprehensive solution that combines 3D radars, sensors. effectors and a command and control (C2) application to monitor the airspace and counter drones. The system is modular and configurable, allowing the user to select the best components for the specific needs and type of the protected object. The system can operate in all weather conditions and has a fully integrated and automated iammer to disrupt the communication and navigation of the drones.

The FIELDctrl system is a 3D radar that is the core of the SKYctrl system. It is developed from scratch by APS and uses advanced algorithms to detect, track and classify drones. The radar can differentiate between birds and drones, track multiple targets simultaneously, report the exact 3D position of the object in real time, and detect moving single and multiple drones and swarms. The radar also uses artificial intelligence and machine learning to improve its performance and accuracy.

The SKYctrl and FIELDctrl systems have been tested and approved by the British government organization CPNI (Cen-

> ter for the Protection of National nfrastructure) and have been sold to various customers around the world, including Europe. the Middle East, Asia and Africa. The systems are used by

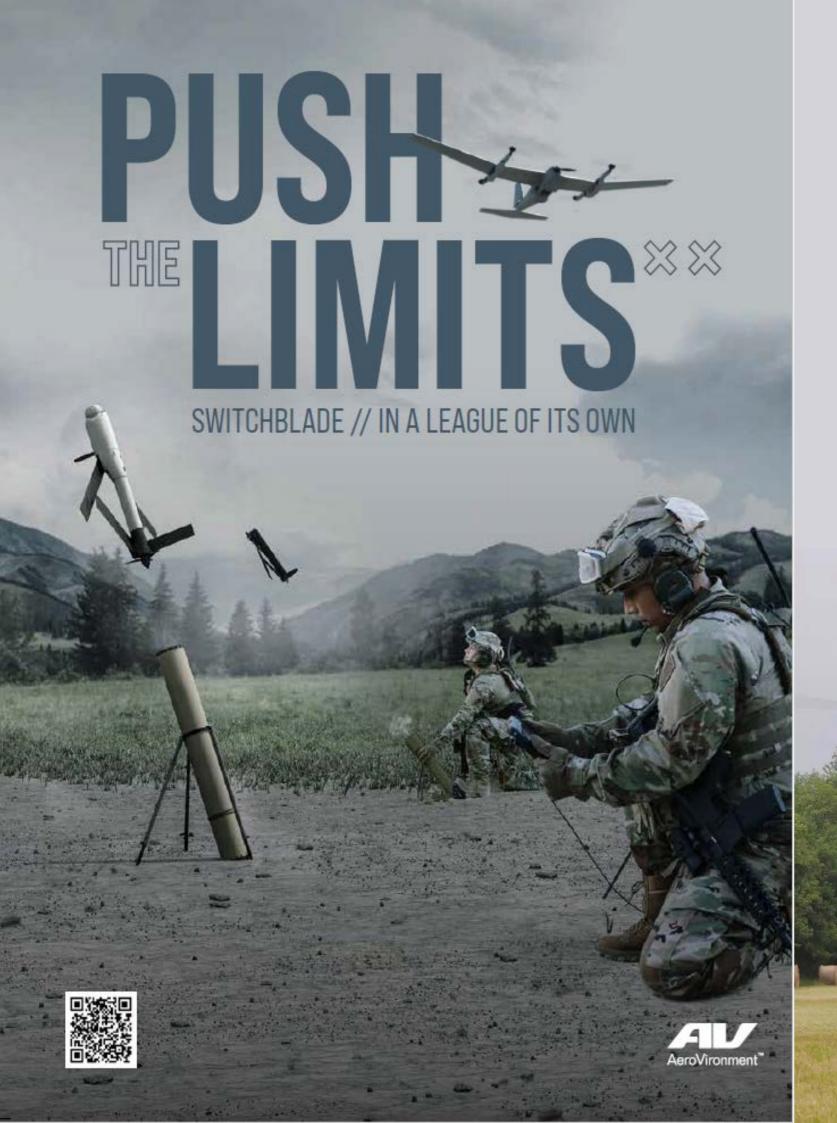
uniformed services, the army and critical infrastructure to protect against drone attacks.

Rwanda is not the first African country to acquire the Polish anti-drone systems. In April 2022, APS partnered with the Ivory Coast Special Forces to supply them with the FIELDctrl 3D MIMO radars. The radars are used to enhance the situational awareness and operational capabilities of the Ivorian forces.

APS is a Polish company that was founded in 2015 and is a world leader in the field of anti-drone systems technology. The company is based in Gdynia and has a research and development center in Warsaw. The company's founder and CEO. Radosław Piesiewicz, said that the reason behind their success is the fact that they own the technology one hundred percent and developed it themselves. He also said that they are a partner of the Polish Armament Agency and are proud to offer a Polish product to the global market.

The acquisition of the SKYctrl and FIELDctrl systems by Rwanda demonstrates the growing demand and recognition of anti-drone systems in the African arena. It also shows the commitment of Rwanda to strengthen its defense capabilities and protect its territory and people from drone threats.







French special forces rescue Polish doctor in Chad in dramatic night ops

Ekene Lionel

A Polish doctor who was kidnapped by armed men in Chad last week has been freed in a daring rescue operation by French and Chadian forces, officials said on Thursday.

Aleksandra Kuligowska, a volunteer at a hospital run by Catholic charity Caritas, was abducted on Friday near the southern town of Dono Manga, along with a Mexican colleague who was later released.

She was held hostage for five days in a dense forest, where her kidnappers fired at a helicopter that tried to rescue her on Wednesday night.

The helicopter, which was part of a joint operation by French and Chadian forces, managed to distract the kidnappers and allow ground troops to advance and rescue the doctor.

"All the kidnapper

There were three of them." local governor Ildjima Abdraman told news agency AFP.

Ms Kuligowska was flown to the capital, N'Djamena, where she was described as "weakened and traumatised" but

Polish Foreign Minister Radoslaw Sikorski thanked the local forces and the French allies for their actions, saying on X, formerly Twitter, that Ms Kuligowska was "safe and healthy".

Poland's Defence Minister Wladyslaw Kosiniak-Kamysz also expressed his gratitude to his French counterpart and Chad", said the military regime the French troops, adding that Sin power in Niamey since the Ms Kuligowska would return to end of July. Poland "soon".

No group has claimed responsibility for the kidnap which was the first of its kind

in Chad, a landlocked country that borders Libya, Sudan and Nigeria.

France has a long-standing military presence in Chad, where it has about 1,000 troops as part of its anti-jihadist operation in the Sahel region.

However, France's role in the region has been challenged by recent coups in Mali, Burkina Faso and Niger, which have expelled French soldiers from their countries.

French military forces have withdrawn from Niger on October in a ground convoy under local escort, "heading for

The withdrawal follows a September announcement by French President Emmanuel Macron that France would recall its ambassador and end all military cooperation with Niger e to a coup.

nvolvement in gion had been part arkhane, which er Islamist ex-



US to build military bases for Somali Army

Kazim Abdul

The United States and Somalia's government on Thursday signed a security pact that they presented as a road map toward building a functional Somali army, capable of taking over security responsibilities and the fight against al-Shabab militants.

In a ceremony presided over by Somalia's President Hassan Sheikh Mohamud in Mogadishu, the two countries signed a memorandum of understanding for the construction of five military bases for Somalia's

National Army.

According to a statement from Somalia's National News Agency, SONNA, the bases will be for the Danab Brigade,

"Within several months we are looking forward to reaching the 3,000 Danab personnel target set in 2017. The Danab also is being prepared to take over many of the essential functions required to sustain and grow the force, and it is already taking on a greater responsibility for recruiting and training," said Molly Phee, U.S. assistant secretary of state for African

the U.S.-trained elite unit of the

army.

Phee, who was at the ceremony, said the U.S. is supporting Somalia so its army can take on al-Shabab.

"We recognize that reliance on temporary and often inadequate camps hamper the Danab's preparedness and could represent an obstacle to the brigade's sustainability and growth," she said. "Our shared goal is to have the [Somali National Army] exercise full control over base operations when the facilities are completed, and the MoU just provides the blueprint to do that," she said.

She said the memorandum of understanding for construction of the bases "reflects our confidence in the future of the Danab and the scale of our investment in Somalia's secu-

Speaking at the ceremony Mohamud thanked the U.S government for its support.

"U.S. investments in the SNA/ Danab have borne fruit, fueling a formidable strike force that es of Somali security against al-Shabab," Mohamud said.

The agreement comes at a time when the African Union peacekeeping mission in Somalia, known as ATMIS, is scaling back its presence in Somalia. Last June, the African Union Transitional Mission in Somalia (ATMIS) officially handed over six stations to the Federal Government of Soma-

The new bases will be associated with the Somali military's Danab Bricade, established in

2017 following an agreement between the U.S. and Somalia to recruit, train, equip and menleads the offensives of the forc- tor 3,000 men and women from across Somalia to build a strong lia and another to reimpose infantry capability within the Somali army.

> The U.S. is among the largest contributors of support to the Somali National Army, especially for its commando wing, the Danab Special Forces, which is trained for close-range fighting with al-Shabab in urban areas. Last January, the US pledged \$9 million in new military aid to help Somalia's ongoing campaign against al-Shabab militants. It's the first such direct military support since U.S. forces returned to Somalia and about the lack of President Hassan Sheikh Moha- tion storage facil mud announced an "all-out war" against the militants.

The brigade has been pivotal as safe a quick-reaction force in efforts to repel the extremist group al-

The U.N. Security Council has authorized the reduction of the peacekeeping force in Somalia, and the Somali government says it is achieving progress in improving security. But al-Shabab continues to carry out sporadic attacks across Somalia, including in public places. The group's latest attack, an incident inside a military base in Mogadishu, killed four Emirati troops and a Bahraini military

Last December, the United Naia's government and its securit orces, ending more than 30 ears of restrictions on weapor eliveries to the Horn of Africa

country. The council adopted two British-drafted resolutions on Friday, one to remove the full arms embargo on Somaan arms embargo on Al Qaeda-linked Al Shabaab militants, who have been fighting the Somali government since 2006.

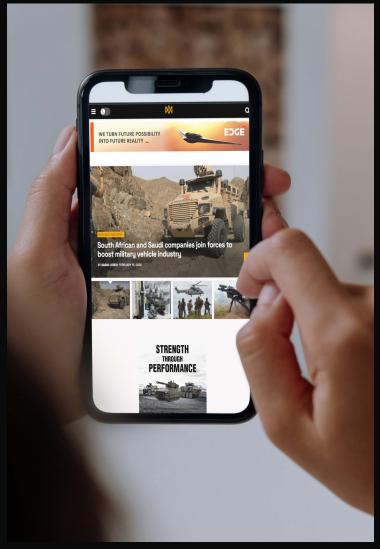
The move is aimed at strengthening the Somali government's ability to combat the Islamist insurgency and re re stability and security in which has been war and chaos throw of dictate Siad Barre in 1 cil also express lia and urged oth to help the Soma construct, refurbish and

Soldiers patrol Sanguuni military base south of Mogadishu, Somalia, on June 13. (Mohamed Abdiwahab/AFP/ Getty Images)

Somali soldiers patrol Sanguuni military base south of Mogadishu, Somalia, on June 13. (Mohamed Abdiwahab) AFP/Getty Images)







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