

African Security

ISSN 2547-9059

AFRICA'S BIMONTHLY DEFENCE, DEFENCE INDUSTRY AND SECURITY MAGAZINE

ISSUE: November - December 2022

VOL 9 No 11-12





20 - 24
FEBRUARY
2023

INTERNATIONAL DEFENCE EXHIBITION & CONFERENCE

30 Years of Connecting the Defence Industry



98%

Exhibitors recommend
IDEX and NAVDEX as the
"must attend" event in
the defence industry



1300+
Exhibitors



60+
Countries

Scan the QR code
to download
Sales Brochure



idexuae.ae

Book your stand today

Strategic Partner



Principal Partner



Gold Sponsor



Official Media
Partner



Organised By



In association with



Co-located with





Cover page photo © Africom – Staff Sgt. Sean Carnes
Editor-in-Chief:

Dimitrios Angelopoulos M. Sc.

Editor: Rear Admiral (rtd)

George Kypriotis

Special Editor's Advisor: Col (rtd) Michael Boampong

Marketing & Sales:

Dionysis Antonopoulos

AFRICAN SECURITY is an international tri-service bimonthly defence magazine, published by DBDC International Defence Publications & Events Ltd, covering security, defence and defence industrial issues in the African Continent. No material may be reproduced without the recent content of the editor.

Annual Subscription rate:

***Print + Digital** \$120 (Air mail surcharge is included)

***Digital** \$60



DBDC INTERNATIONAL DEFENCE PUBLICATIONS & EVENTS UK LTD

27 Old Gloucester Street London WC1N 3AX, UK

E-mail: dbdcukltd@gmail.com

www.dbdcukltd.com

www.dbdcgroup.com

Contents

* **Shipbuilding in Africa**

Pages 4 - 6

* **Royal Moroccan Armed Forces**

Pages 8-12

* **NVL GROUP SUPPORTING AFRICAN SECURITY**

Pages 14-19

* **Egyptian Armed Forces**

Pages 14-19

* **ISRAEL SHIPYARDS LTD UNVEILS MULTI-ROLL CORVETTE, A NEW GENERATION OF THE 'SAAR' CLASS VESSELS**

Pages 20-21

* **Industrial News**

Pages 22-37

Advertisement International Sales POC

• AFRICA

M&D Ghana services Ltd

P.O. BOX CT 4928 CANTOMENTS

ACCRA, GHANA

TEL: +233208115089/+233547473287

mdghanaservices@gmail.com

• EUROPE: Stephen Barnard

CEO, ADJUTANT MTCT: +49 228 3500886

M: +44 7984 033154 F: +44 1252

315324, stephen.barnard@web.de

stephen.adjutant@gmail.com

• RUSSIAN FEDERATION

Laguk Co. Ltd.

Tel. +74959121346

Fax. +74959121260

e-mail: laguk-media@mail.ru

INDEX OF ADVERTISERS

IDEX/NAVDEX 2023

NVL

ISRAEL SHIPYARDS

POF

IDE

MD GHNA SERVICES LTD

AS

Shipbuilding in Africa

• South Africa

Damen aims not only to build high quality ships for its clients, but to provide them with comprehensive maritime security solutions.

The three Multi-Mission Inshore Patrol Vessels (MMIPV) that Damen Shipyards Cape Town (DSCT) is building for Project BIRO play a very important role. The project aims to give the navy increased capability to conduct cost-effective, focused operations against threats and challenges in the maritime domain.



© **Damen - Damen Shipyards Cape Town delivers first of three Multi-Mission Inshore Patrol Vessels to South African Navy**

It's a significant challenge, and not only due to South Africa's vast area of responsibility. The way that Damen, Armscor and the South African Navy have worked together to design the vessels, ensures their capability to fulfil all the roles that the navy requires, as well as their ability to interact with other entities like the South African Police Maritime Wing and customs.

Armscor's process for selection follows a merit system to make sure the successful bidder meets all the criteria in order to be awarded the contract. Damen provided a solution that understood and embraced South Africa's specific requirements; a total solution consisting of the local construction of the three Inshore Patrol Vessels, through which new jobs were created and retained, a solution that ensured the development and maintenance of strategic capabilities, whilst at the same time ensuring the local availability of lifecycle support.

Nautic Patrol Boats offer a complete range of fast and efficient multi-functional vessels, providing a host of solutions to the naval oil & gas industry, security patrol, anti-piracy, etc.

Nautic firmly rests at the vanguard of modern shipbuilding. Through many years of combined experience developed the technology and garnered the knowledge to build world-class vessels specifically tailored to meet our clients' requirements. One such specialization is Aluminum shipbuilding. Nautic Patrol Boats offer a complete range of fast and efficient multi-functional vessels,

providing a host of solutions to the naval oil & gas industry, security patrol, anti-piracy, etc.

Nautic firmly rests at the vanguard of modern shipbuilding. Through many years of combined experience developed the technology and garnered the knowledge to build world-class vessels specifically tailored to meet our clients' requirements. One such specialization is Aluminum shipbuilding.

• Kenya

The Kenya Shipyards Limited (KSL) is a state-owned corporation in Kenya. It is a limited liability parastatal company, under the Kenya Ministry of Defence. The company was established on 14 August 2020. The primary objective of KSL is to build, repair and service water vessels (ships and boats) of the Kenyan Navy. A secondary objective is to carry out the same function for the Kenyan and regional private sector. A tertiary objective is to build, repair and service ships and boats for the regional governments.



© **KSL- Cable dressing in the Bridge for KNS Shupavu of the @KSL- kdfinfo at Mombasa Shipyard. KSL is committed to delivering the vessel within a short time and using minimal resources which will, in the end, go a long way in enhancing safety and security of Kenyans**

The company was incorporated and registered on 29 September 2020 with the Kenya Ministry of Finance as the 100 percent owner and was commissioned to start commercial operations in June 2021. KSL is currently undertaking a mid-Life refit of Kenya Navy MV Shupavu at the Mutongwe Slipway.

• Nigeria

In the 60 years since the inception of the Nigerian Navy, Nigeria has acquired ships from many shipbuilding nations. The Nigerian Navy is now in a position to build some class of ships for protecting the nation's territorial waters since has foresaw the needs to be able to, build, maintain, repair and refit ships in local shipyards.

N·V·L

LÜRSSSEN DEFENCE
**IS NOW
NVL GROUP**

A NEW NAME, THE SAME DNA

YOUR FIRST PORT OF CALL

Trust. Quality. Reliability. Our brand name has changed, but our core values remain the same. Lürssen Defence is now NVL Group. As an independent, privately owned group of shipyards, we continue to support navies worldwide with innovative naval solutions and comprehensive services. Dedicated to our customers' ideas and committed to their individual requirements, we are driven by a fundamental difference: our DNA. The DNA of shipbuilding.

For more information, simply call us on +49 421 6604 344 or visit our website at www.nvl.de

THE DNA OF SHIPBUILDING



© Nigerian Navy - NN has taken delivery of the second batch of ballistic gunboats built locally by Nigeria's Naval Shipyard Limited (NSL).

President Buhari said that the Federal Government is aware of the Navy's dedication towards ensuring the security of the vast oil and gas industry in the nation's maritime environment as well as the nation's sea lanes of communications while Chief of Naval Staff (CNS), Vice Admiral Awwal Gambo has said that the Naval Dockyard Seaward Defence Boat Project which started in 2007 has yielded substantial reward with the completion of the third Seaward Defence Boat (SDB). He further stated that with the experience garnered so far, the Naval Dockyard Limited is adequately poised to take on the challenge in pursuit of the Federal Government of Nigeria's Local Content Development effort.

Naval Shipyard Limited (NSL) is a subsidiary of the Navy Holdings Limited and we specialize in the building and repair of boats, small ships and barges. NSL is an Nigerian Navy owned company and one of the subsidiaries of Naval Holdings Limited (NHL). The Yard was established in 1963 by Messrs Withh and Butch, and later acquired by the Nigerian Navy in 1990. It was commercialized and incorporated as a limited liability company in 2013. NSL services include Ship Building, Ship Repairs, Marine Fabrication, Construction of Houseboats and Barges, Construction and Installation of Gun Mountings, Workshop Services, Jetty Load Out Services etc.

Nigeria's Naval Shipyard Limited (NSL) had in October 2021 delivered the country's first batch of four ballistic gunboats, saving Nigeria millions in foreign currency while in August 2022 NN has taken delivery of the second batch of ballistic gunboats designed and durable compared to most ballistic gunboats produced abroad.

• Egypt

On January 8, 2021, Egyptian Navy took delivery of 1st locally built warship, the corvette Port Said (ENS 976) — the first warship 100% built in Egypt. Port Said is the second Gowind 2500 corvette ordered by the Egyptian Navy and built at Alexandria Shipyard under a transfer of technology agreement with French defense contractor Naval Group. Displacing 2,600 tonnes, the ships are crewed by 65 persons — including the helicopter detachment — and can reach a speed of 25 knots.



© Alexandria Shipyard

With a length of 102 meters, the corvettes are equipped with the SETIS combat system and the Panoramic Sensors and Intelligence Module (PSIM) in addition to a 76mm Oto Melara gun, vertical launch cells for MBDA's MICA missile and torpedo launchers.

In 2021, the Egyptian military-owned Alexandria shipyard announced that the construction process of the fourth and last Egyptian Navy MEKO A200 frigates has started at the company's construction facility in Alexandria, in cooperation with the Germany-based Thyssenkrupp (TKMS).

• Senegal

The new company forms part of Piriou Group's wider strategy to establish a closer connection to its customers and will offer services for naval repair and building, particularly in the arenas of fishing, service vessels and defence. PIRIOU NGOM SENEGAL will meet the challenge of the Senegalese maritime-oriented strategies, as they are described in the Plan for an Emerging Senegal (PES) of the president of the Republic of Senegal.

• Morocco

French shipyards Naval Group is now the only one competing to run the future shipyard in Casablanca after the Italian contestants were disqualified and the Netherlands' Damen Shipyards gave up. It hopes to secure this attractive concession, both military and civilian, before the end of the year. Morocco has already had a French FREMM (Fremm Mohammed VI stealth frigate) in the Royal Moroccan Navy's service since 2014. In this context, Morocco's recent acquisition of two patrol boats for maritime surveillance, worth 260 million euros, attracted the attention of three naval equipment manufacturers, the Spanish Navantia group, the Dutch Damen and the French Kership. In the end, the Dutch subsidiary managed to win the race and is currently working on the remodelling of the infrastructure in the port of Casablanca.

EMPOWERING YOUR NAVAL PERFORMANCE



FORESEEING YOUR NAVAL NEEDS

Royal Moroccan Armed Forces

The Royal Moroccan Armed Forces are the summation of the armed forces of the kingdom of Morocco. It was founded in 1956, except the Royal Navy founded in 1960, after Morocco's independence from France and Spain.

It is today taking part in several peace keeping missions: MONUC, ONUC, EUFOR, KFOR and MINUSTAH. Previous peace-keeping missions included the Somalia operation, in which Moroccan personnel served as part of UNOSOM I, the Unified Task Force, and the follow-on UNOSOM II mission.

Morocco is seeking to modernize its armed forces and further develop its domestic military industry considering regional and international turbulence. King Mohammed VI said last year in a speech marking the 63rd anniversary of the armed forces that "The Royal Armed Forces will focus on scientific, technical and engineering research programs and work to strengthen and develop them in all military and security fields, at the African and international levels, in order to exchange

experiences and keep up with the rapid development in the fields of security and defence." Morocco's steps to develop its domestic military industry has drawn the attention of experts and foreign observers

Morocco's practices a policy of diversifying its sources of defence material supply and carries out a large part of its transactions through government-to-government agreements with France, China and Russia, to a lesser extent with South Africa, Austria and the United Kingdom and marginally with the Spanish defence industry.

But its main supplier is the United States, whose companies supply Rabat with significant quantities of top-quality armaments.

On 2 October 2020, the United States and Morocco on Friday signed an accord that aims to strengthen military cooperation and the North African kingdom's military readiness over the next decade. U.S. Defense Secretary Mark Esper signed the 10-year agreement during a two-day visit to Morocco, his last stop on a tour of three North African nations, which began this week in Tunisia, where a military accord also was signed.



• Recent defense procurement plans

One of the most recent and largest purchase packages made by Morocco involves the expansion and renewal of the Royal Air Force's fleet of fighter planes. Rabat was given the go-ahead in March 2019 for the acquisition of 25 new F-16 C/D Block 72 fighters - the most advanced production version - which includes extensive new capacities and structural improvements.

The second recent major contract is the acquisition of 24 AH-64 Apache attack helicopters, an aircraft that has been extensively tested in the wars of Iraq, Afghanistan, Libya and Yemen and it is considered the best in the world in its class. Configured in version E - the most modern version authorized by the Pentagon for export -, they are fully equipped with radar gunfire control systems, communications, navigation and target control systems, sensors and state-of-the-art night vision equipment.

On 14 April 2020, the State Department has made a determination approving a possible Foreign Military Sale to the Government of Morocco of ten (10) AGM-84L Harpoon Block II Air Launched missiles and related equipment for an estimated cost of \$62 million. The Defense Security Cooperation Agency delivered the required certification notifying Congress of this possible sale today. The Government of Morocco has requested to buy ten (10) AGM-84L Harpoon Block II Air Launched missiles. Also included are containers, spare and repair parts, support and test equipment, publications and technical documentation, personnel training and training equipment, U.S. Government and contractor representatives' technical assistance, engineering and logistics support services, and other related elements of logistics support. The total estimated cost is \$62 million.

On 3 March 2020, the State Department has made a determination approving a possible Foreign Military Sale to Morocco of twenty-five (25) M88A2 Heavy Equipment Recovery Combat Utility Lift and Evacuation System (HERCULES) vehicles and/or M88A1 long supply HERCULES refurbished vehicles and related equipment for an estimated cost of \$239.35 million. The Defense Security Cooperation Agency delivered the required certification notifying Congress of this possible sale today. The Government of Morocco has requested to buy twenty five (25) M88A2 Heavy Equipment Recovery Combat Utility Lift and Evacuation System (HERCULES) vehicles and/or M88A1 long supply HERCULES refurbished vehicles; and twenty-five (25) M2 .50 caliber machine guns. Also included are twenty five (25) export Single Channel Ground and Airborne Radio System (SINCGARS); twenty five (25) AN/PSN-13A Defense Advanced Global Positioning System (GPS) Receiver (DAGR) with Selective-Availability/Anti-Spoofing Module

(SAASM); thirty (30) AN/VAS-5B Driver Vision Enhancer (DVE) kits; twenty five (25) M239 or M250 smoke grenade launchers; one thousand eight hundred (1,800) M76 (G826) or L8A1/L8A3 (G815) smoke grenade rounds; spare parts; support equipment; depot level support; Government-Furnished Equipment (GFE).

On January 2021, the Spanish Minister of Finance, María Jesús Montero, has announced at the San Fernando shipyards (Cádiz) that Navantia has reached a contract with the Royal Moroccan Navy to design and build a high-altitude patrol boat that will involve one million hours of work for the shipyards in the Bay of Cádiz and about 250 jobs over the next three and a half years.

U.S. and Moroccan special operations forces completed a Joint Combined Exchange Training event July 19, 2021, in Tangier, Morocco





In addition, she recalled that the Underwater Intervention Maritime Action Vessel (BAM-IS) for the Spanish Navy will also be built in these same shipyards. Montero has visited the San Fernando shipyard accompanied by the president of Navantia, Belén Gualda.

Thus, she has indicated that the project has had the institutional support of the Government and its success opens the door to the hiring of other similar units, which would imply more hours of work and more employment for the naval industry. Morocco communicated in April the specifications of the contract for the construction of the patrol boat, in which shipyards from several countries were interested. For its part, Navantia presented its offer in August and a team from the company traveled to Morocco to negotiate the technical and commercial aspects. As Navantia has pointed out, since last September, the contacts between Navantia and the Moroccan National Defense Administration have been permanent to adapt all the technical specifications of the ship to the requirements of its

Navy and comply with the roadmap agreed in the negotiation.

The contract announced by the Minister of Finance includes the design of the ship. Thus, once the engineering work is completed, its construction will begin. Navantia already supplied patrol boats and a corvette to the Royal Moroccan Navy in the eighties and this contract takes up that path. The high-altitude patrol boat is part of Navantia's Strategic Plan. She is a highly demanded ship in the international arena, with consequent export opportunities to other countries.

Thales Group has been a long-standing partner of the Royal Armed Forces in Morocco for nearly 30 years. Systems and equipment are widely used in the Royal Air Force, the Army, the Royal Gendarmerie and the Royal Navy. The main areas addressed are highly secure communications, optronics (night vision), radars, combat systems and security.

On April 2021, Morocco's Royal Armed Forces (FAR) has signed a contract to buy 13 Bayraktar TB2 combat drones from Turkey, the service confirmed on social media.

The deal worth 626 million Moroccan dirhams (\$70 million) includes four remote control ground stations, a configurable simulation system for flying the drones, and a digital system for tracking and storing information, Morocco World News reported. On August 2022, the State Department has made a determination approving a possible Foreign Military Sale to the Government of Morocco of Ground Command and Control and related equipment for an estimated cost of \$141.1 million. The Defense Security Cooperation Agency delivered the required certification notifying Congress of this possible sale today.

The Government of Morocco has requested to buy six (6) Multifunctional Information Distribution System Joint Tactical Radio Systems (MIDS-JTRS). Also included are: KY-100M Narrowband/Wideband Terminals; KIV-78 and KIV-77 Cryptographic Appliques; AN/PYQ-10 Simple Key Loader (SKL); additional secure communications, cryptographic devices, and precision navigation equipment; unclassified and classified software, software support and support equipment; spare and repair parts; support and test equipment; publications and technical documentation; personnel training and training equipment; U.S. Government and contractor engineering; technical and logistics support services; and other related elements of logistical and program support. The estimated total cost is \$141.1 million. This proposed sale will support the foreign policy and national

security of the United States by helping to improve the security of a Major Non-NATO Ally that continues to be an important force for political stability and economic progress in North Africa.

U.S. Marine Corps Gen. Michael Langley, the highest-ranking U.S. military official focused on Africa, praised the strength of the U.S.-Morocco security partnership during his first visit to the Kingdom since becoming the head of U.S. Africa Command (AFRICOM) in August. During his two-day visit, Oct. 17-18, Gen. Langley met in Rabat with top Moroccan military officials, including General Belkhir El Farouk, Inspector General of the Moroccan Armed Forces (FAR) and Commander of the Southern Zone; and Abdullatif Loudiyi, Minister Delegate for the National Defense Administration.

"It is a great honor for me to make my first trip to the Kingdom of Morocco in my new role as U.S. AFRICOM commander. It's clear that the U.S.-Morocco commitment to supporting regional peace and security is stronger than ever," Gen. Langley said after meeting with Moroccan officials. "Our military partnership is built on deep, historic ties that date back to the very founding of the United States.

insufficient in light of security threats in the region. This came in a meeting between the Minister Delegate in charge of the National Defence Administration Abdellatif Loudiyi, and parliamentarians, according to a statement issued on Friday by Moroccan Parliament.

Loudiyi urged: "The Moroccan defence budget in 2023 is 5.2 per cent of the GDP. [It is] insufficient, especially during the security threats in the region that require constant vigilance. The social priority of the state in terms of reviving the national economy and the public finance coercions must be considered." "We will allocate an amount of 950 million dirhams (\$88.5 million) to cover the expenses of the military service in 2023," Loudiyi added.

According to the country's draft budget for 2023, the budget of the National Defence Administration is 62.6 billion dirhams (5.83 billion dollars). Earlier, the House of Representatives voted by a majority on the country's draft budget for 2023



FORCE BEHIND THE FORCES

Our vision is peace and stability. Armed deterrence is a powerful policy to preclude the destructive elements from marring peace, bringing stability and reconciliation ultimately.

To combat with valor, we deliver the best defense equipment to support the **armed forces for maintaining peace and stability.**



PAKISTAN ORDNANCE FACTORIES

www.pof.gov.pk | exports@pof.gov.pk



NVL GROUP SUPPORTING AFRICAN SECURITY

Offshore patrol vessel 80

Effectively protecting African values

NVL Group understands the growing importance of the geostrategic aspects of the African continent in respect of natural resources and protecting the sovereignty, integrity, economy and wealth of the various African nations. The company has a strong reputation and expertise in tailor-made concepts and solutions for coastal defence and maritime security.

Maintaining security

Today's navies face a broad spectrum of challenges in maintaining security in a fast-changing maritime environment. These geostrategic aspects mean that nations require affordable, versatile and fast platforms to operate successfully in territorial waters and to protect against traditional threats. Whether the mission is protecting economic resources, countering criminal activity or safeguarding life at sea,



a flexible and effective response is essential. At NVL Group, we recognise the importance of building vessels that are easy and economical to operate yet still deliver superior levels of performance.

Customise platforms for any naval requirement

NVL Group provides state-of-the-art patrolling solutions for every kind of challenge

and threat, such as patrol boats, offshore patrol vessels, corvettes, frigates, mine-hunters or naval support vessels.

Territorial sea (< 12 nm)

- Offering high speeds of over 40 knots, NVL fast patrol boats can quickly respond to challenges. High performing and with excellent seakeeping characteristics, these boats are ideally suited for interception and patrolling territorial waters.

Contiguous zone (< 24 nm)

- No matter how long a coastline is, contiguous zones are best patrolled by NVL patrol boats, which are characterised by their speed, performance and versatility. The proven design guarantees maximum reliability and endurance.

Exclusive economic zone (200 nm)

- The exclusive economic zone (EEZ) is best patrolled by offshore patrol vessels built by NVL Group. Their multirole and multi-mission platforms provide permanent maritime security in the operational area due to their endurance and excellent sea-keeping capabilities.

Strong support for cost-efficient naval vessel operations

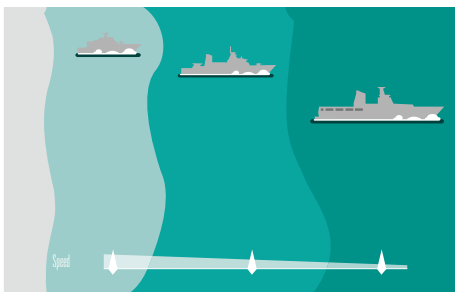
Whatever the requirement, NVL Group works in partnership with its customers to establish the right solutions. We offer the option to build vessels at one of our NVL Group shipyards or we can transfer both

our knowledge and technology, developing our partner's maritime industry. In all cases, we focus on delivering technically advanced, high-quality ships that balance a navy's operational needs with its available budget. NVL Group also provides sustainability support for existing fleet structures in the form of upgrades, spare parts supply, training, technology and knowledge transfer and other services to maximise the potential of any navy vessel.

Your naval solution

NVL Group provides you with feasible and economical solutions to fulfil the tasks of today and overcome the challenges of the

future. We aim to ensure each ship entrusted into our care remains mission ready at every stage of its operational life. NVL Group maritime patrolling solutions offer reliable and versatile multi-mission performance, providing a cost-effective yet comprehensive means of meeting maritime security needs across the seven seas.



The maritime zones (from left to right): territorial sea, contiguous zone, EEZ



NVL Group works closely with the customer to enable local build and the transfer of knowledge and technology



Fast interceptor boat 25

NVL · THE DNA OF SHIPBUILDING



Fast patrol boat 41

NVL Group is a privately owned group of renowned Northern German shipyards and related companies, formerly known as Lürssen Defence. Customers can rely on the company to consistently provide tailored, smart and cost-effective naval solutions that keep navies mission ready around the world. With deep roots in shipbuilding, NVL Group delivers high-quality naval and coast-guard vessels, as well as comprehensive services throughout the entire life cycle of their fleets. Construction at NVL Group's shipyards is supplemented by licensed manufacture at customer facilities worldwide under technology transfer arrangements. As an independent enterprise, the company remains flexible to market changes and operates a dynamic, safe and future-oriented business.

More about NVL Group's naval solutions:

NVL B.V. & Co. KG
Zum Alten Speicher 11
28759 Bremen, Germany
Tel.: +49 421 6604 344
Mail: info@nvl.de



Egyptian Armed Forces

Egypt's armed forces are among the largest in Africa and the Middle East. The Egyptian military is comprised of the army, air force, navy and air defense forces.

As per the constitution of Egypt, the armed forces of the country are under the jurisdiction of the Supreme Court led by the President who is the Supreme Commander of the armed forces. Underneath the President there are 21 senior ranking officers in charge of the different departments and armies of the military. The Egyptian army has proven itself time and again and stood strong in protecting the wellbeing of the people.

The military in Egypt has been involved in the completion of many national infrastructure projects like the construction of sewers, power lines, overpass, bridges, schools, roads, telephone exchanges and more. There have been many reviews about the intervention of the military in such infrastructural developments, but most agree that the development was affordable to the government only due to the military's effective use of their resources.

Industries that the military owns have always been a powerful contributor to the economy of the country, even when profits have not been made public.

The Egyptian military has been strongly supported by Egypt's American ally, receiving \$1.3 billion in military aid annually since 1987, including American-manufactured weapons and equipment. The United States has favored regime stability in Egypt and values a regional ally that maintains peace with Israel; both the United States and Israel are viewed with suspicion and sometimes hostility by many Egyptians.

Copyright © Ministry of Defense General // Mohamed Zaki, Commander-in-Chief of the Armed Forces, Minister of Defense and Military Production witnessed War Inspection Procedures for One of the Western Military Zone Formations after Upgrading it According to the Latest Combat Systems.





Copyright © Ministry of Defense
Egyptian, Hellenic Navy conduct joint drills

The Armed Forces' inventory includes equipment from different countries around the world. Equipment from the Soviet Union is being progressively replaced by more modern U.S., French, and British equipment, a significant portion of which is built under license in Egypt, such as the M1 Abrams tank. Egypt is a participant in NATO's Mediterranean Dialogue forum. Egypt is one of the few countries in the Middle East, and the only Arab state, with a reconnaissance satellite.

The inventory of the Egyptian armed forces includes equipment from the United States, France, Brazil, the United Kingdom, the Soviet Union, and the People's Republic of China. Equipment from the Soviet Union is being progressively replaced by more modern U.S., French, and British equipment, a significant portion of which is built under license in Egypt, such as the M1A1 Abrams tank.

Conscripts for the Egyptian Army and other service branches without a university degree serve three years as enlisted soldiers. Conscripts with a General Secondary School Degree serve two years as enlisted personnel. Conscripts with a university degree serve one year as enlisted personnel or three years as a reserve officer.

Officers for the army are trained at the Egyptian Military Academy. The Egyptian Army remains one of the world's largest. It operates more than 1,360 M1 Abrams main battle tanks which has been produced locally under license since 2005. Cairo will also procure at least 500 units of the highly capable T-90 main battle tanks from Russia.

Egypt also operates more than 300 M60 Patton and 500 T-62 main battle tanks and is acquiring almost 800 Caiman mine-resistant ambush protection (MRAP) vehicles, as well as 800 RG-33 MRAPs from the United States plus more than 5000 various types of Infantry Armored Vehicles and Armored Personnel Carriers.

The Egyptian Air Force (EAF) is the aviation branch of the Egyptian Armed Forces. Currently, the backbone of the EAF is the F-16. The Mirage 2000 is the other modern interceptor used by the EAF.

It has about 579 combat aircraft and 149 armed helicopters as it continues to fly extensively upgraded MiG-21s, F-7 Skybolts, F-4 Phantoms, Dassault Mirage Vs, and the C-130 Hercules among other planes



Copyright © Ministry of Defense
Egyptian, Hellenic Navy conduct joint drills

With 240 F-16 Fighting Falcon fighter aircraft, 46 AH-64D Apache attack helicopters, 30 C-130 Hercules, nine E2C Hawkeye 2000 air-borne early warning and control aircraft, the Egyptian Air Force presents a formidable force with a growing punch. It is acquiring two squadrons of the latest French-made Rafale multirole fighter and will receive 50 MiG-29 fighters from Russia by 2020.

The Egyptian Air Defense Forces or ADF is Egypt's military command responsible for air defense. Egypt patterned its Air Defense Force (ADF) after the Soviet Air Defence Force, which integrated all its air defense capabilities – anti-aircraft guns, rocket and missile units, interceptor planes, and radar and warning installations. It appears to comprise five subordinate divisions, 110 surface-to-air missile battalions, and 12 anti-aircraft artillery brigades. Egypt has in its inventory the Russian S-300 system in service and may procure the more capable Russian-made Antey-2500 ballistic missile defence system.

The Egyptian Navy was established after the Second World War. Some fleet units are stationed in the Red Sea, but the bulk of the force remains in the Mediterranean. Navy headquarters and the main operational and training base are located at Ras el Tin near Alexandria.

The Navy also controls the Egyptian Coast Guard. The Coast Guard is responsible for the onshore protection of public installations near the coast and the patrol of coastal waters to prevent smuggling. It has an inventory consisting of about thirty-five

large patrol craft (each between twenty and thirty meters in length) and twenty smaller Bertram-class coastal patrol craft built in the United States.

The Egyptian Navy has been undergoing significant equipment modernization. In 2014, the Egyptian Navy inducted four US-made Ambassador MK III fast missile craft and ordered four 2,500-tonne French-made Gowind-class corvettes with an option for two more.

In 2015, the Egyptian Army received a Russian-made P-32 Molniya-class missile craft, one French-made FREMM multi-purpose frigate and two Mistral-class amphibious assault ship paid for by Saudi Arabia that will be equipped with Russian-made Ka-52 Alligator helicopters.

The Egyptian Navy has into service two of four German-made diesel-electric attack submarines based on the Type-209 design.

On 14 October 2022, thyssenkrupp Marine Systems handed over the first-of-class MEKO® A-200 EN to the Navy of the Arab Republic of Egypt. A total of four ships were ordered, with the first three units produced in Germany and the fourth vessel built by Alexandria Shipyard in Egypt.

With these acquisitions Egypt has been modernizing its forces with an approach that except the USA has clearly looked to new suppliers, notably Russia, but also France and Germany, to meet future capability requirements

- **General \ Mohamed Zaki
Minister of Defense**



- **Lieutenant General Osama Askar
Chief of Staff of the Armed Forces**



- **Lieutenant General \ Ashraf
Ibrahim Atwa Megahed
Commander of the Navy**



- **Lieutenant General \ Mahmoud
Foad Abd El- Gawad
Air Force Commander**



- **Lieutenant General \ Mohamed
Hegazy Abdul-Mawgoud,
Air Defense Forces Commander**



Egyptian Navy accepts first frigate from thyssenkrupp Marine Systems

On 14 October 2022, thyssenkrupp Marine Systems handed over the first-of-class MEKO® A-200 EN to the Navy of the Arab Republic of Egypt. A total of four ships were ordered, with the first three units produced in Germany and the fourth vessel built by Alexandria Shipyard in Egypt. At the ceremony in Bremerhaven, the frigate “AL-AZIZ” was accepted by the Egyptian Navy after only 38 months of the contract becoming effective.

Besides the handover ceremony, the celebrations included the naming of a second MEKO® A-200 EN frigate for the Egyptian Navy. The Chief of Staff of the Egyptian Navy, Vice Admiral Ashraf Ibrahim Atwa, named the warship “AL-QADEER”.

Vice Admiral Ashraf Ibrahim Atwa: “I am grateful to the friendly Republic of Germany for the constructive relationship which sets the example to be followed by others. Germany always supports Egypt with the up-to-date technology needed to enhance our naval capabilities. We have a longstanding and successful history of cooperation, as reflected in the highly efficient 209 submarines. Our cooperation was not limited to only building new ships but was also extended to cover advanced training for our crews to absorb the new advanced technology.”

After short but intensive negotiations that started in May 2018, the contract for the four frigates was signed in September 2018, with the project work formally starting in August 2019. First steel cutting was already in September 2019 and the launching of the first-of-class took place in April 2021. In July 2021 “AL-AZIZ” was named, and then finally today she was handed over. Oliver Burkhard, CEO of thyssenkrupp Marine Systems: “This record timeline was possible only because the Egyptian Navy and thyssenkrupp Marine Systems have such a long and trustful partnership. The strategic programme is based on an open and collaborative dialogue with our customer, and we are thankful for their tireless efforts in contributing to the success of this project.”

In its class, the MEKO® A-200 EN is one of the most powerful warships in service today. The four ships ordered by the Arab Republic of Egypt are identical in construction. “AL-AZIZ” will start her journey to her homeport in Alexandria in a few days.

@ thyssenkrupp Marine Systems



General Mohamed Zaki, Commander-in-Chief of the Armed Forces, Minister of Defense and Military Production witnessed War Inspection Procedures for One of the Western Military Zone Formations after Upgrading it According to the Latest Combat Systems. Armed Forces

various weapons and equipment to support its capabilities to carry out all the combat missions entrusted to it.

Major General Muhammad Ezz El-Din Jahush, Commander of the Western Military Zone, delivered a speech in which he emphasized the support of the General Command of the Armed Forces and its permanent and continuous follow-up of all actions and activities carried out by the men of the Western Military Zone, stressing that the western strategic direction protectors will always remain in the highest levels of vigilance and readiness to protect the homeland and preserve its sanctities.

The Commander-in-Chief of the Armed Forces inspected the lining up forces to check on their readiness and ability to carry out all tasks and stand on the level of technical and combat efficiency of weapons and equipment as well as a number of officers, non-commissioned officers and soldiers

discussed their method of executing tasks and the extent to which they benefited from the development and modernization process according to the tasks assigned to them.

The Commander-in-Chief of the Armed Forces conveyed the greetings and appreciation of President Abdel Fattah El-Sisi, President of the Republic, Supreme Commander of the Armed Forces, to the men of the Western Military Zone, praising the serious readiness of all the elements participating in the inspection, and asking them to maintain their high morale and the importance of continuous training and maintain weapons and equipment to put The Armed Forces at the highest levels of combat readiness in order to protect the homeland and maintain

its security and stability.

Lieutenant General Osama Askar, Chief of Staff of the Armed Forces, had attended the opening stage of the preliminary procedures prior to the inspection to determine the extent of the forces' combat readiness.

He also inspected a number of the developed weapons which were provided to the formation. He also discussed with a number of officers, non-commissioned officers and soldiers the best way to carry out the tasks assigned to them and the extent of benefiting from the development and modernization system in light of the tasks assigned to them.

General Mohamed Zaki, Commander-in-Chief of the Armed Forces, Minister of Defense and Military Production, witnessed the war inspection procedures for one of the Western Military Zone formations, after upgrading it according to the latest combat systems, in the presence of Lieutenant-General Osama Askar, Chief of Staff of the Armed Forces, commanders of the main services and a number of senior commanders of the Armed Forces.

The procedures began with presenting the report of the combat efficiency of the formation and what it witnessed of modernization and development in



Copyright © 2018 Ministry of Defense

ISRAEL SHIPYARDS LTD UNVEILS MULTI-ROLL CORVETTE, A NEW GENERATION OF THE 'SAAR' CLASS VESSELS

Israel Shipyards unveils a new corvette, SAAR S-80. The S80 vessel joins the company's unique tailor-made solutions, designed and constructed with strict quality assurance and long-term service at the Israel Shipyards facility.

Based on Israel Shipyards Ltd. (ISL) S-72 platform, from which several designs have been evolved, including the Israeli Navy Light Patrol Corvette—the RESHEF Class an advanced multi-roll vessel.

The new generation of the S-80 class features greater versatility and higher payload capacity, with increased weapon suite capacity and wider spread of Electronic Warfare (EW) systems as part of the platform offensive advantages.

The S80 length is 80m, she is powered by 4 diesel engines, two shaft lines, and equipped with controllable pitch propellor system and the top speed exceeds 28 knots. The S80 will be equipped with state-of-the-art ship control system, a health



management system and she will be capable of being equipped with the combat systems made by the Israeli defense industries or and any equivalent systems according to the customer requirements.

The S-80 can be adjusted to accommodate Corvette or as an OPV version, depending on the operational requirements. The S-80 allows longer range and endurance for extended periods with reduced detection risks, making it ideal for diverse applications and missions. Similar to the current Naval vessels of Israel Shipyards, the new Corvette is also supporting unique possibilities of deploying Special Forces units.

"The ship is designed for stealth, agility and ruling the seas with cutting edge capabilities required in future combat scenarios.", says Mr. Eitan Zucker, the company's CEO





“The S80 ship will enable navies to effectively protect their country's sovereignty, maintain their economic waters, and win naval battles in times of war. The S80 has the endurance to operate in the open sea, and also to control the littoral. All this with optimal cost benefit ratio. “

Israel Shipyards provides advanced maritime solutions with One-Stop-Shop capabilities by providing customized vessels to meet the customers' requirements to all needs in the Naval arena with the most complete and cost-effective defense and security solutions.

The S80 will be the flagship of the Israel Shipyards for the next decades and she will serve the Israeli Navy and many other navies around the world.

Israel Shipyards Ltd. is one of the largest privately owned shipbuilding and repair facilities in the Eastern Mediterranean. Israel Shipyards (ISL) has been a part of the commercial and military marine industries for more than 60 years. The shipyard is internationally recognized builder of top-quality Naval vessels for the Israeli Navy and customers around the world, continuously developing its portfolio to offer new designs in response to the challenges of the maritime environment with all the necessary disciplines under one roof, Israel Shipyards is a one-stop shop that embraces delivering top combat-proven solutions for various tasks. The company construction and repair plant is spread over 330,000 sq. meters with 45,000 sq. meters of under-roof facilities and a wharf length of 1000 meters.

The company three main vessel families, all operationally proven, mission-ready and are in service in Naval and law enforcement forces around the world. Including the renowned **SHALDAG Fast Patrol Craft family** e.g., SHALDAG MK V, the **Offshore Patrol Vessel (OPV) family** e.g., OPV-45 and the **Corvette family** e.g., S-72 - based on SA'AR class vessels. In addition to shipbuilding the company provides full design and maintenance services for all types of Naval vessels and offers Transfer of Technology Services (T.O.T.) from shipbuilding, ship maintenance to the construction of customers shipyard facilities. All based on unique and individually designed packages. These services provided by Israel Shipyards' highly-skills experts, which enables our customers to gain a high level of professionalism.



HUMVEE Saber Blade Edition

At AUSA 2022, AM General and Hornet have unveiled a new HUMVEE Saber concept vehicle in a full drone warfare configuration: the HUMVEE SABER BLADE EDITION, specifically designed for drone warfare. Recent conflicts have demonstrated the increasing importance of drones and loitering munition, whether as offensive vectors or as reconnaissance systems. To offer a highly capable, highly mobile platform to carry these drones safely and efficiently on the battlefield, AM General, in collaboration with Hornet and AeroVironment, has developed the HUMVEE Saber Blade Edition. This new HUMVEE Saber version features AeroVironment's Switchblade® loitering missiles, and a Hornet Air Guard Remote Controlled Weapon System with Counter-UAS solution by Hornet.

The loitering munitions on the HUMVEE Saber Blade Edition include the Switchblade 300 and Switchblade 600 that provide rapidly deployable, loitering precision strike missiles for use against non-line-of-sight targets. Switchblade 300 is small and has a quiet motor, making it difficult to detect, recognize, and track even at very close range. Switchblade 600 missiles are also integrated on the truck. The Switchblade 600 represents the next generation of extended-range loitering missiles and features high precision optics and over 40 minutes of endurance. Switchblade 600 provides

unprecedented RSTA (Reconnaissance, Surveillance, and Target Acquisition) and precision strike capabilities against larger, hardened targets via an anti-armor warhead. The HUMVEE Saber Blade Edition was designed to operate close to front line battlefields and launch its drones to engage enemy high-value targets such as HQ, tanks and artillery. Modern battlespaces can also be very easily filled by a large variety of small, short-range drones, both armed and non-armed, some of which originate from the civilian market. Combat areas will thus be more and more subjected to threats of detection, acquisition and/or engagement by smaller drones at very short distances. To answer that emerging problem, the HUMVEE Saber Blade Edition is equipped with a Hornet RCWS by Hornet in an Air Guard configuration, which ensures short-range detection and neutralization of hostile drones around the vehicle. The Hornet Air Guard is a secondary anti-drone capability, first presented in 2022, which complements the Hornet RCWS and its native functions: surveillance, fire, and self-protection thanks to an independent smoke grenade launcher ring. The Hornet Air Guard adds a Gonio RF (Hydra from Cerberus) and a radar which are fitted on the Hornet's independent smoke grenade launcher ring. Both systems constantly scan the area while the RCWS can still be used normally for observation or combat missions. Upon detection of a hostile drone, the operator is automatically warned of the threat and can validate an RCWS rally with identification via optronics. The drone can then be neutralized with the automatic 40mm grenade launcher and an air-burst grenade. Such a feature can also engage and destroy an armed or suicide drone attacking the HUMVEE Saber before it can get too close.



Leonardo provides latest-generation Marlin 40 naval defence system to Indonesia

The Independent Line of Sight (ILOS) variant of the 40mm turret will equip the Indonesian Navy's PC60 fast patrol boats and Tank Landing Ship vessels. Leonardo's Marlin 40 naval remote weapon system has been selected to equip two Indonesian Navy PC60 fast patrol boats currently under construction at PT Caputra Mitra Sejati shipyard. This follows the procurement in 2021 of four Marlin 40 systems for two PC60 vessels and two Teluk Bintuni-class tank landing ships (LSTs). Both PC60 and LST will be equipped with the Marlin 40 Independent Line of Sight (ILOS) variant, the most feature-rich version of the turret. Further PC60 and LST vessels are expected to be built by Indonesian shipyards for the Navy.

The Marlin 40 turret is a fully digitized system. It is lightweight, compact and easy to integrate. This means that the turret can be integrated onto all types of naval platforms as a primary or secondary defence system. Capable of anti-air and anti-surface defence, the Marlin 40 has a range of over four kilometres, is ITAR-free and can integrate with all currently available naval Combat Management Systems (CMS).

The ILOS variant of Marlin 40 chosen by the Indonesian Navy is a highly effective precision-fire system which can operate autonomously via a local control console. This brings together and processes the targeting data received from the turret's own dedicated electro-optical system, external fire control systems and ship's data, ensuring precision while incorporating a level of redundancy. The electro-optical director can rotate independently of the line of fire to deliver panoramic surveillance through a highly accurate sensor suite comprising a daylight camera, an InfraRed (IR) camera and a laser range finder.

This latest contract further develops Leonardo's strong partnership with the Indonesian Navy, which has previously selected the company for its naval gunnery requirements. Today, 38 Indonesian vessels are operating Leonardo weapon systems. The Navy's

inventory includes Leonardo's Marlin 30, Marlin 40 Twin Barrel and 76/62 SuperRapid. The latter is the best-selling medium-caliber naval gun mount available on the market, employed by 60 Navies and already installed on 15 Indonesian Navy vessels.

The Marlin 40 is the latest addition to Leonardo's portfolio of naval defence systems and is in service with 30 naval forces worldwide. In addition to the ILOS variant, Marlin 40 is available as a 40mm Remotely Controlled turret. Leonardo also offers the Marlin 30 in three variants: RC (Remotely Controlled), COAX (Coaxial Electro-Optical Sensor Suite) and ILOS (Independent Line of Sight). The selection of Marlin 40 for the Indonesian Navy strengthens Leonardo's presence in the Indo Pacific naval defence systems market.



© Leonardo

“FIDO” the rebreathing device that revolutionises oxygen delivery on the field and complex environments

For the past seven years, together with the Swedish Armed Forces and the Swedish Civil Contingencies Agency, we have been developing a closed-circuit re-breathing device for oxygen treatment in the field. As of March 2020, we got medically certified with the CE and have since received a lot of interest from the medical industry, Government forces and diverse emergency and rescue units from around the world.

Due to its closed-circuit re-breathing design, our oxygen system FIDO uses O₂ very efficiently, therefore utilizing a significantly smaller oxygen bottle, without compromising quality or output. FIDO is four times smaller, 90% lighter and has double the action time of existing systems on the global market. Mirola Rescue AB is currently developing a unique ventilator that will disrupt the medical world.

Key Points About FIDO:

- Weight only 1.5 kg
- Provides 60 minutes of oxygen treatment with only a 40 centilitres oxygen bottle
- Delivers between 52% and 89% of O₂ (adjustable)
- Generates warm return air to the patient, about 33 degrees Celsius and humid air <95%
- The input pressure level of FIDO is 4.5 bar and 200 bar in the cylinder
- 100% mechanical, no need for electricity or battery to use it
- Medically certified (CE IIa), we operate according to ISO standard 13485
- Approved for national and international air transport according to IATA-DGR
- Developed to withstand all conditions



General Robotics Unveils a Naval RCWS

General Robotics has introduced a new version of its Remote-Controlled Weapon Station optimized for naval applications. The new SHARK naval RCWS addresses the need for SOF to operate their weapons on small boats. These compact boats move at high speed and agility. Yet, the constantly moving platform degrades fire accuracy with conventional weapon mounts, requiring operators to get dangerously close to the enemy to deliver the desired effects. Crews on larger boats often operate stabilized weapon stations to improve fire accuracy, but these systems are much larger and heavier for RHIBs. To meet this challenge, General Robotics has introduced the SHARK, a unique RCWS that applies to naval roles, from special operations to law enforcement interception, including interception, coastal security, counter-terror, and anti-piracy activities.

"We designed SHARK to meet the specific requirements of naval commandos and SEALs," Shahar Gal, General Robotics' CEO, said. Addressing the most demanding needs of Naval Special Warfare (NSW), SHARK was designed and tested with users and experts from the local and international NSW community. SHARK fits on small manned and unmanned naval vessels, NSW boats, and raiding crafts to deliver versatile and accurate firepower. At a net weight of 85 kg (without weapons or ammunition), SHARK is much lighter and smaller than other naval weapon stations. Built as a rugged, robust, seaworthy system, it is versatile enough to operate remotely on a cluttered deck, scoring direct hits at a sea state up to 3, where the platform and targets constantly move.



The new SHARK is based on General Robotics' combat-proven Pitbull RCWS. "We developed the SHARK prototype as a robust yet lightweight system offering seamless remote operation by a single operator with some special adaptations for naval use and NSW concepts of operation," Galsaid, adding that the prototype was further refined based on feedback from our customers and partners following extensive field trials, further maturing SHARK for fielding.

As a veteran of Israel's navy, Gal is accustomed to the marine environment, a knowledge that shaped the system's design optimization to increase operational flexibility, reduce the size and weight saving, and improve reliability. "At the bottom line, the reduced weight and size derive significant benefits," said Gal, "It means SHARK can be mounted on smaller boats and handle the recoil loads with less weight and energy. As a result, SHARK consumes less power and delivers higher accelerations, resulting in better accuracy and agility. It can be used as a stand-alone system with its sensors or integrated with other sensors onboard. In this way, we offer tailor-made combat solutions to meet the unique requirements of our customers."



© General Robotics



More than 600 international and regional defence delegates to gather at the 1st 'International Defence Exhibition and Conference' in Ghana



More than 600 international and regional defence delegates participated in the first **International Defence Exhibition and Conference (IDEC)** that started on October 11th, 2022 in **Accra, Ghana**.

Hosted by the **Ghana Armed Forces**, the two-day international exhibition and conference takes place on **11 - 12 October at the Burma Hall within the General Headquarters of the Ghana Armed Forces in Accra**, with the aim of strengthening international and regional cooperation to combat terrorism and transnational organised crimes.

The first day of the event was attended by several Chiefs of Defence Staff, Ministers and Secretaries of Defence with over 6 Chiefs of Army, Navy and Air Forces, 18 VIP Speakers, 32 Sponsors and Exhibitors also participating.

This conference brought together international defence equipment manufacturers, technology

providers, procurement officials as well as other industry stakeholders who aim to contribute towards the **US\$20 billion annual defence market**. IDEC provides an ideal platform for the global defence suppliers to showcase their latest products and services and to meet the defence buyers to negotiate fresh supplies.

Ministries of Defence, Ministries of Interior, Land Forces, Naval Forces, Air Forces and a large number of defence procurement officials of African countries participated at the event to sample the latest defence equipment, technologies, systems and services – before making a purchase decision as the defence forces are looking at acquiring the latest defence equipment to strengthen their capabilities and reinforce regional security.

Vice Admiral Seth Amoama, Chief of the Defence Staff, Ghana Armed Forces, said, "It is a distinct honour and a unique privilege to welcome all of you to the Maiden Edition of the International Defence Exhibition and Conference 2022 (IDEC) here in Burma Camp, Accra. GAF and indeed Ghana is excited to have you in our midst and we hope that for the period that you will be here, you will make time to explore and savor the attractions of the city of Accra."

"The theme for the maiden edition of the International Defence Exhibition and Conference is 'Strengthening International Collaboration to Combat Terrorism and Transnational Organized Crimes'. To do this requires a multi-dimensional strategy that safeguards citizens, breaks the financial strength of criminals and terrorist networks, disrupts illicit traffic networks, defeats transnational crime organisations, fights corruption, strengthens the rule of law, bolsters judicial systems and improves transparency. These are the major challenges that we face and there is the need for a concerted effort to devise and execute a collective strategy."

"This year's Conference and Exhibition holds special value because it is being hosted by the Ghana Armed Forces. Today we shall focus on terrorism and transnational organized crimes and devote tomorrow to open discussions on initiatives to counter-terrorism and transnational organized crimes at an offsite location which will be hosted separately by the various Service Chiefs of the Ghana Armed Forces."

"The major outcomes that we expect from this conference and exhibition in line with the theme is a common understanding of the problem and to develop a regional and international framework for dealing, in particular, with the challenge of terrorism and transnational organized crime. We hope our industry players would present us with workable and affordable solutions that can be adopted regionally." The two-day event creates a unique

platform to establish and strengthen cross-border cooperation among the regional armed forces – land, navy and air forces.

The highlight of day one included panel discussions on '**Terrorism and counter-terrorism strategies**,' and '**Understanding the nexus between transnational organised crime and security**'. Activities on the day included presentations on '**Terrorism in Africa**', '**Major developments and achievements in land systems**', and '**Transnational organised crime**'. One of the industry sessions was by **Ali Boğaç Cicioğlu**, **Export Manager, Otokar** on '**The latest technologies in counter-terrorism**' and another session was by **Next Coast Guard Commandant, Cape Verde**.

The first day of the conference ended with closing remarks and an exhibition tour. Throughout the day one of the **IDEC conference**, it provided exhibitors and sponsors with direct one-on-one access to the region's leading decision-makers in the defence sectors – land, air and sea. The event facilitated face-to-face interactions throughout a series of networking sessions.

© IDEC 2022

The second and last day of the conference started with a presentation by the **Chief of the Defence Staff (CDS) of Ghana** focusing on Ghana's military efforts in curbing terrorism. Followed by two discussion sessions stressing on the topics '**UK Support to countering terrorism and organised crime in Sub-Saharan Africa**' and '**The current state of the G5 Sahel joint force**'.

There was also an exclusive open discussion on the initiatives to counterterrorism and transnational organised crime. The International Defence Exhibition and Conference (IDEC) will bring the defence and security forces of the African countries closer to each other to strengthen regional security. It is also aimed at bringing defence equipment suppliers to showcase their latest products closer to the defence procurement officials of these countries.



High Precision Weapons at the ARMY-2022 Forum

JSC NPO “High Precision Weapons” (subsidiary of Rostec State Corporation) considers ARMY forum as an opportunity to demonstrate the most demanded by the Armed Forces by Russian forces samples of military equipment and weapons, as well as new developments and solutions of the Holding companies.

Established in 2009 the High Precision Weapons (HPW) holding is developer and manufacturer of the most advanced high-precision weapons which largely determine the key combat capabilities of the modern Russian Army. After managing consolidation of the scientific and technical potential of the specialized enterprises of the defense industry, the Holding carries out systematic work on the development of the brand-new samples of weapons and defense equipment which are in many ways ahead of world analogues and by their creation open new pages of scientific and technological progress in arms production. Enterprises of the Holding in fact form the arsenal of smart weapons of the Russian Armed Forces.

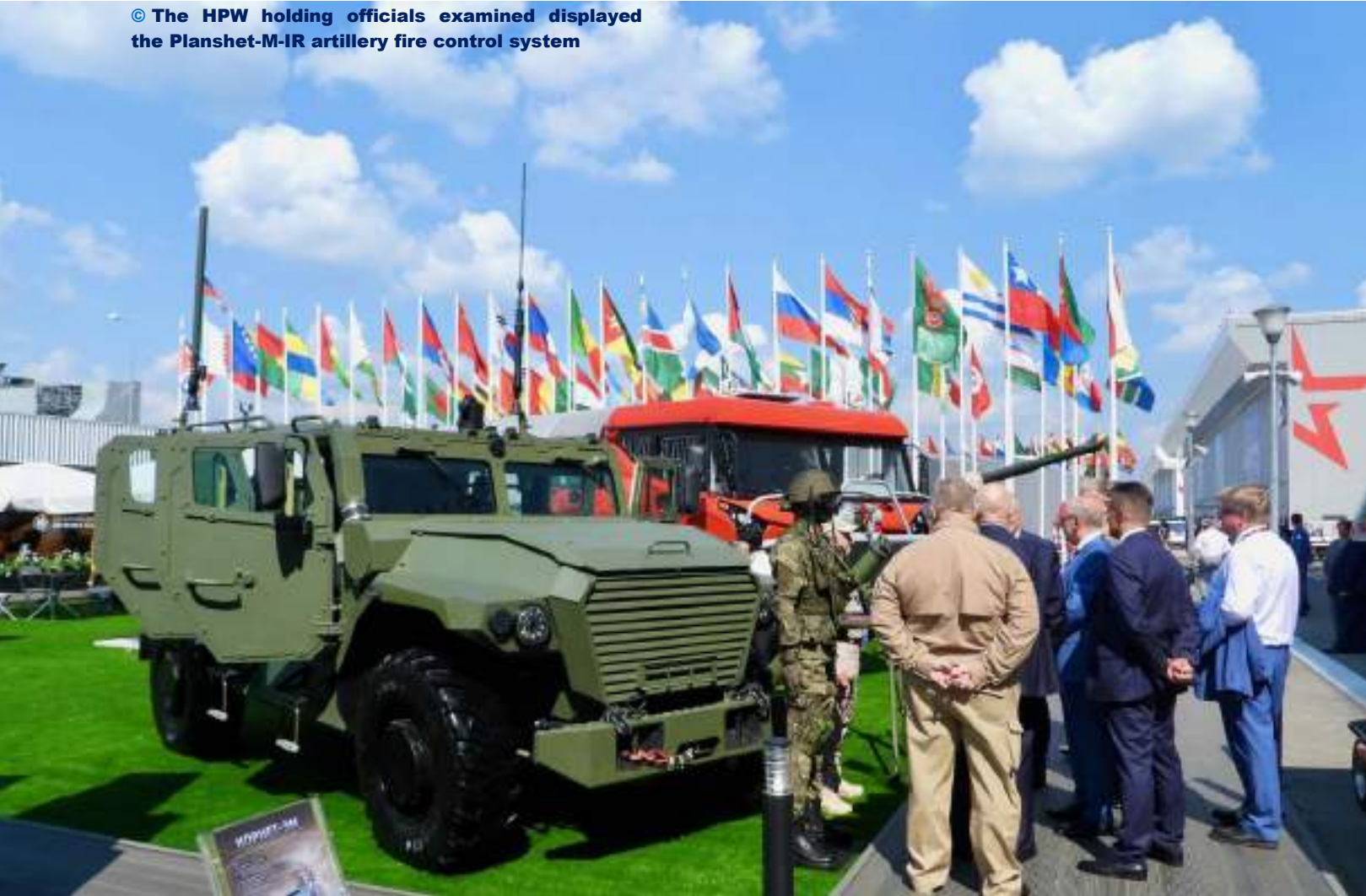
Among the most well-known and internationally acknowledged defense systems developed by the HPW subsidiaries are the Pantsir-S1 AD system, the Kornet-E/EM and Khrizantema-S ATGM systems, the Igla-S MANPAD system, the Iskander-M operational-tactical missile system, the Gibka-S missile system, the BMP-2, BMP-3 and BMP-4M IFVs, the Arena" and Drozd active protection defense complexes, the Krasnopol-M and Kitolov-2/ 2M guided artillery projectiles, as well many others.

The High-Precision Weapons holding has earned reputation of a major newsmaker of the ARMY forum. Not a single edition of the Forum took place without technologically breakthrough novelties of the Holding making the exposition of the Exhibition more innovative. This year the following products exhibited by the High Precision Weapons drew the greatest interest of experts and guests.

Upgraded Pantsir-S1M

Tula-based KBP design bureau presented the Pantsir-S1M new generation short-range air defense missile and gun system. The ADMGS implemented the employment of the advanced high-speed missiles with engagement range of up to 30 km and height of up to 18 km. The missile features improved target engagement capacity. Target detection range has been **improved to 80 km**, the number of tracked targets **increased** up to 40 pieces. Modular design of the Pantsir-S1M enables its employment for the protection of the oil platforms, single important facilities and railway platforms.

© The HPW holding officials examined displayed the Planshet-M-IR artillery fire control system





© Russia's leading smart weapons' design schools have been consolidated with the High Precision Weapons holding

Missile of amazing accuracy

Talking about the most striking novelties of the Forum, specialists mention the so-called "Product 305E" (developed by Kolomna-based KBM), a missile which, according to the designing company, features guaranteed flight range of 14.5 km. It is twice longer of the fire range of modern helicopters' missiles. Missile weight is 105 kg (with 25 kg of the warhead). The main advantage of the "Product 305E" is capacity to be fired from defilade positions. The helicopter can be operated from behind a rock ledge or any other shelter. At the final sector of the trajectory the helicopter can choose the most wanted out of several targets. Besides, the helicopter can direct the missile to the most vulnerable part of the target by setting the aiming mark to selected point. The missile is equipped with strapdown inertial navigation system integrated with satellite navigation system, a communication channel with a helicopter. According to the experts, the "Product 305E" can effectively engage the air defense command posts, after which helicopters can fly closer and fire at the front line of the opposing defense with other weapons. The missile can be also used against buildings and structures, armored vehicles, SAM missile systems and other targets. The missile features specific capacity to be operated in several modes. The missile can lock onto target visible by the operator and detected by helicopter's optical means or get target designation data from the outside source, i.e. from reconnaissance equipment of the army unit.

Fire control automation

Developed by the Research institute (VNII) Signal the Planshet-A automated artillery fire control

system (AFCS) is intended to provide for automated firing preparation and fire control, performance of fire missions by self-propelled, towed artillery and mortar units and MLRS. The AFCS features the following advantages: high mobility, rapid deployment; increased autonomy of operation; flexible architecture, the possibility of reconfiguring the workplaces of officials; the use of advanced means of communication, the application of mesh-network technology; high communication range; a wide range of integrated technical means, data acquisition incl. video stream from the UAV directly to the commander's workplace in real time; interfacing with automated fire control systems of MLRS, implementation of anti-fire maneuver.

Self-propelled 125 mm gun

The Army specialists showed increased interest to the modernized 125-mm self-propelled anti-tank gun 2S25 (SPTP 2S25M) which in fact is a combat armored tracked amphibious vehicle with powerful missile-gun weapon system. The SPTP 2S25M can make marches up to 500 km without refueling, be transported by aircraft and landing ships. The self-propelled gun can be landed by landing and parachute methods with crew inside, conduct combat operations in conditions high mountains and hot climate, overcome water obstacles with waves up to 3 points with simultaneous firing afloat. The SPTP is installed with additional kit on armor increasing resistance to damage from 30-mm ammunition in the frontal projection and from a 12.7 mm bullet inside projection. At the same time, the self-propelled gun features additional buoyancy and water stability. In terms of its firepower, the SPTP 2S25M is not inferior to the T-80, T-90 type MBTs, and in terms of mobility on land and water it matches the level of BMD-4M and BMP-3.



© Range of armored vehicles was presented by the BT-3F amphibious APC and the 2S25 self-propelled anti-tank gun

Robotic combat vehicle

Among the latest developments at the international military-technical forum ARMY-2022 the robotic BMP-3 IFV with the Sinitsa combat module was presented. It's a joint project of the Signal research institute and the Kurganmashzavod. Robot can be used for fire support of the motorized rifle units' actions. The IFV is equipped with advanced high-precision weapon set: 100-mm gun which can also be used as ATGM launcher, 30mm automatic cannon and 7.62-mm machine gun. The Signal specialists installed a set of equipment into the machine body and inside the fighting compartment which made IFV enabled to robotize the functions of the driver and gunner. The IFV is controlled remotely. The BMP-3 with the Sinitsa combat module can be effectively use on the most dangerous directions ensuring the safety of the crew.

Diversification Success

The airspace control system (SKVP) became another special novelty of the Forum. It comprises the airspace surveillance radar (ARS) and automated workplace (AWP). The system developed by the Central Design Bureau of Automation (TsKBA) is designed to provide for control over the use of airspace (in including for unmanned aerial vehicles and small aircraft) and continuous monitoring of airspace over the allocated area.

The SKVP ensures detection and automatic lock-on for chasing aerial targets; simultaneous tracking of all detected targets over a given area; identification of aerial means (airplane, helicopter, UAV, etc.). The system displays general air situation and introduces data on the tracking mode and coordinates of all detected targets. Range of the targets detection by the system is up to 18 km.

Specialists also demonstrated interest to the information and landing system developed by the Central Research Institute of Automation and Hydraulics (TsNIIAG). The system is based on the technology of creating artificial radio navigation fields for high-precision positioning of moving objects even in the conditions of distortion of satellite signals navigation systems. The system enables instrument approach landing of airplanes and helicopters flying between poorly technically equipped airfields and landing sites. The designer also presented navigational landing system for unmanned aerial vehicles.

© The HPW companies occupy leading positions in the world in the MANPADS' design



Allen-Vanguard Fit Vital ECM Equipment to 19 Vehicles Supporting a Peacekeeping Mission in Africa

Allen-Vanguard, a global leader in providing customized solutions for defeating Radio Frequency (RF) based terrorist and extremist threats, has fitted vital life-saving ECM equipment to 19 vehicles for an African nation that is a major contributor to peacekeeping missions in Africa. The Allen-Vanguard Field Service Representative (FSR) team has been deployed in-theatre for over a month to supervise the equipment installation and to provide essential end-user and maintenance support training.

A key component of the protection provided by Allen-Vanguard ECM comes from the hard work of the Threat Management Team (TMT). This is a full-time cell of specialist RF engineers and ECM/EOD SMEs whose sole job is to remain abreast of the RCIED & Drone threats and to ensure Allen-Vanguard's ECM capabilities deliver maximum protection. This team uses world-leading open-source data and operational feedback from deployed assets to monitor regional threat trends for RCIEDs and Drones. Threats are then analysed, characterized and exploited to identify their weaknesses that can be used in the development of waveforms to most effectively defeat that threat.

The 19 Armoured Personnel Carriers (APCs), which have a peacekeeping role, have been fitted with Allen-Vanguard's highly versatile and fully programmable 3XXX ECM suite. This equipment operates Allen-Vanguard's core ECM technology

which has been operationally proven both in the African region and globally and is updated with the latest waveforms produced by the TMT.

Allen-Vanguard has over a decade of experience in providing African Union countries, and those other nations operating in the region, with superior ECM protection using the full range of their RF dominating products. A vital component to the successful deployment and use of this life-saving capability is the Allen-Vanguard FSR team. These are experts in their field who convert the risk profile and mission requirements of the customer into the required ECM capability to be fitted, and then ensure this configuration delivers maximum protection for the deployed troops. The FSRs not only design the protection portfolio and then supervise the installation but also provide the essential end-user training and support the maintenance capability to ensure the ECM is both up to date with the latest threat software but also deployed nations can correctly test and maintain their own equipment.

Allen-Vanguard's Business Director for Africa, Stuart Wilson, said "I am very proud of the hard work and dedication of all our Allen-Vanguard specialists to ensure that the ECM systems we fit for our customers provide the very latest and best possible protection in the region. It is very rewarding to know that our systems help protect our customers from the very real threat of IEDs in the region."



© Example of Allen-Vanguard's ECM protection fitted to a peacekeeping vehicle

Royal Jordanian Air Force Agrees to Purchase Bell 505s to Boost Training Capabilities

Bell Textron Inc., a Textron Inc. company, announced the signed agreement for the sale of 10 Bell 505 helicopters to the Royal Jordanian Air Force (RJAF) today at The Special Operations Forces Exhibition & Conference (SOFEX) in Aqaba, Jordan.

The contract includes the delivery of the aircraft with a flight training device and a comprehensive computer-based training package to enable an enhanced approach to basic and advanced rotorcraft flight training at the King Hussein Air College in Mafraq, Jordan.

"It is with profound gratitude to the Royal Jordanian Air Force that we share news of this agreement to purchase the Bell 505s as the new helicopter trainer for the Air Force," said Patrick Moulay, senior vice president, International Business, Bell.

We are dedicated to the Armed Forces, the Air Force, and the citizens of Jordan and offer our commitment to ensure the best of service. The Bell 505 will serve alongside the men and women of the Air Force by playing a critical role in ensuring the operational readiness of its cadets," commented Sameer Rehman, managing director Africa and Middle East, Bell.

The Bell 505 is a popular aircraft for commercial and military customers alike, offering phenomenal power, optimal visibility, and high-tech Garmin avionics. The company recently celebrated the 400th Bell 505 delivery since its launch in 2017.

"We look forward to adding the Bell 505 aircraft to our fleet and providing our pilots with one of the best possible aircraft for their training. The addition of 10 new aircraft will enable us to further expand our operations in the country, in turn increasing the capabilities of the Royal Jordanian Air Force," said Brig. Gen. Mohammad F. Hiyasat, Commander, Royal Jordanian Air Force.

As the most advanced helicopter in its class on the market, details have been considered in the design of the Bell 505, starting with the fully digitally controlled engine, and advanced avionics that dramatically reduce pilot workload and maximize safety in a multitude of operational scenarios.

© Bell Textron Inc



EURONAVAL 2022: NEXTER AND MBDA PRESENT THE NEW NARWHAL TURRET EQUIPPED WITH THE AKERON MP MISSILE SYSTEM

Nexter and MBDA now offer a configuration of the NARWHAL (NAval Remote Weapon, Highly Accurate, Lightweight) turret that includes two pods of AKERON MP missiles. This configuration allows for easy installation on any version of the NARWHAL turret, including those already in service. This kit, presented for the first time at Euronaval, consists of two AKERON MP missile pods with the associated control electronics and an operator terminal.

The NARWHAL is a remotely operated 20mm naval turret that can be integrated just as easily onto small patrol boats as onto frigates. Equipped with state-of-the-art optronics, including a day/night sight and a laser range finder, it is effective at more than 2,000 metres thanks to its 20M621 gun. The NARWHAL is already a commercial success, in service with six different navies. To meet their needs and those of future customers, our engineers are working to add new capabilities and options that enhance its operational effectiveness.

The NARWHAL turret presented on the Nexter stand is paired with a manual target designator: the Short-Range Pointer (SRP), designed by the German firm Hensoldt. With this easy-to-use tool, an onboard operator can quickly designate a target to the NARWHAL by pointing a laser beam.

The AKERON MP missile (formerly known as the MMP) has been available to French forces since 2017 and has already been selected by five countries, including three in Europe. It is the only latest-generation land combat missile in service to have been successfully engaged in operations on multiple occasions. With more than 150 test and training firings to its credit, the AKERON MP is capable of dealing with all battlefield threats in all types of environment: extreme heat and cold, urban spaces, maritime areas, and mountainous terrain. Finally, a naval capability is being implemented on the AKERON MP missile to facilitate the acquisition of small targets and signatures from naval platforms, including with a mast-mounted configuration, and provide these platforms with an enhanced self-defence capability in coastal environments against sea- or land-based asymmetric threats. AKERON MP offers both “fire-and-forget” and “man-in-the-loop” capability (for engagements where there is a risk of collateral damage).

The integration of MBDA’s anti-missile system on the NARWHAL turret means that the AKERON MP is now available on a new naval platform, as the system also comes in a dismounted version on a light firing post, as well as on a range of other platforms, such as armoured vehicles, light vehicles, ECUME semi-rigid commando boats, fast patrol boats, or larger ships for close protection needs.

© Nexter and MBDA present the new NARWHAL turret equipped with the AKERON MP missile system



HAVELSAN's Participation at Africa Air Force Forum 2022

HAVELSAN took part in Africa Air Force Forum that was held in King Fahd Palace, Dakar, Senegal on 26-27 October 2022. The forum gave us the opportunity to display our innovative technologies, smart products and advanced solutions. Chief of Chad Air Force, Deputy Chief of Nigeria Air Force, Senegalese Ministry of Defense, Inspector General of the Senegalese Armed Forces, Chief of Mauritania Air Force and many other representatives from various African countries participated in the event and they were very interested in the contributions of HAVELSAN.

We presented our products and solutions and showed the visitors the competencies of our company. The products and solutions that were promoted in the event were; Critical Facility Security, ADVENT Marti, TICCS, Border Security Systems, Digital Troops, and Simulator Training Centers. These products and solutions have received immense feedback. The positive outcomes of the event and the interest towards our presentations in the forum motivated and encouraged us to continue to seek every opportunity to develop.

The possible collaborations and arrangements were discussed during the event. It was clear for the parties that we interviewed that we use technology as a tool to be a part of the defense industry and with confidence we make them understand that with our smart technological products and solutions we are prepared to cope with every possible problem they face in the field.

A Senegalese Air Force captain who received KT1 training from HAVELSAN visited our booth during the forum and was very pleased to see us in the Africa Air Force Forum. He interestedly listened our presentations and take a great deal of attention to our products and solutions.

As one of the world's leading simulator companies in the defence and aerospace industry, we showed our African allies that we understand the growing importance of geostrategic aspects and dynamics of African continent and that we are ready to meet their needs about security and armed forces. With the contributions that we made to Africa Air Force Forum we showed our African allies that our aim is to look forward and code the trusted future together.





ADVENT COMBAT MANAGEMENT SYSTEM (CMS) DEVELOPED BY HAVELSAN AND THE TURKISH NAVAL FORCES COMMAND, WILL BE USED IN THE INDONESIAN NAVY.

Combat Management System (CMS) developed by HAVELSAN and the Turkish Naval Forces Command, will be used in the Indonesian Navy.

HAVELSAN, which aims to take the defense power of the Turkish Naval Forces to the next level, has been acting as the strategic partner of the Turkish Naval Forces in the field of Combat Management System for years. For this purpose, by investing in advanced state-of-the-art technology, HAVELSAN developed the New Generation Network Centric Combat Management System-ADVENT together with the Naval Forces Command and installed it many platforms successfully.

As Turkey's one and only, sole source proven combat management system provider, HAVELSAN has not only contributed to the Turkish Navy in improving its deterrence power but also strengthened its competitiveness in global markets. Because of several domestic projects HAVELSAN has successfully completed over the last 15 years, HAVELSAN has gained technological knowledge and experience valued by global players as well.

ADVENT has features that other near peer systems around the globe do not have yet. Such features and their successful use in all platforms of the Turkish Naval Forces attract the attention of friendly and allied countries. Indonesia is one of these countries. ADVENT Combat Management System (CMS) developed by HAVELSAN and the Turkish Naval Forces Command, will also be used in the

Indonesian Navy. The contracts have been signed at Indo Defense 2022 on the provision of combat management system and combat system integration to KCR60 class and OPV class ships built for the Indonesian Navy.

Within the scope of the contract signed by HAVELSAN, PT TESCO and the Indonesian Ministry of Defense; The Combat Management System (CMS) for the construction of 3 KCR 60 Class Ships will be provided by HAVELSAN. Again, within the scope of another contract signed by HAVELSAN, DRU Shipyard and Indonesian Ministry of Defense, ADVENT CMS will be integrated into 2 Offshore Patrol Vessels.

As HAVELSAN, we are not only proposing our products and solutions but also looking forward to seeking ways of sharing HAVELSAN's experience and know-how in a sense of real transfer of technology with Indonesia, too. Encouraged by these strategic contracts, we hope to work hand in hand with our partners in Indonesia for realizing numerous opportunities related to naval defense and maritime security.

ADVENT is a new generation command and control system that responds to the needs of a force-oriented, network-enabled operational approach rather than a single ship. It is possible to access to tactical data link (Link 11, Link 16 and Link 22, SIMPLE, JREAP and VMF) functions fully integrated with ADVENT through all operator consoles. With its decision support systems ADVENT has an architecture that facilitates the speed and correct decision-making process of its user and provides flexible structure in the use of new weapons and sensors. It has been developed in a modular structure that fits in multi-task profiles and other platform types. ADVENT is a platform independent system. With its scalable open architecture structure, ADVENT can be adapt to surface, underwater and air platforms and land facilities.

AAD 2022 closes on a high note

Working against the clock in the wake of the Covid-19 pandemic, the organisers of Africa Aerospace and Defence (AAD) stand proud for having delivered yet another signature event this year.

The 11th edition of this long-standing event took place at Air Force Base Waterkloof (AFBW) in Pretoria from 21 to 25 September, under the theme: “Exploring New Paths, Sharing Solutions, Showcasing Innovation and Capabilities.”

As the executive chairman of the AAD2022 organising committee Sandile Ndlovu, who is also Executive Director of the South African Aerospace, Maritime, and Defence Industry Association (AMD), the lead partner that hosted AAD2022, said in his welcome message:

“We have worked hard to ensure that every participant at this edition of AAD will have value for money; we have adopted a diversification strategy that ensures the continued relevance of AAD in this fast-changing world.”

The partners are AMD, Armscor, the Commercial Aviation Association of South Africa (CAASA), supported by the Department of Defence.

Proven format

Over the intervening 20 years, AAD has firmly established a winning format, which was replicated again. Thus, AAD2022 comprised exhibition stands to showcase capabilities, static aircraft park, air show days, and runway-facing hospitality chalets. This was augmented with mobility demonstrations for land and air technologies, coupled to live screening of demonstrations – now including UAV display flights. In parallel, conferences and seminars were hosted, and significant opportunities for B2B meetings.

In spite of the long hiatus since the last edition of AAD (2018), coupled with the many global uncertainties that prevailed post the outbreak of the Covid-19 pandemic, all efforts paid off: AAD2022 attracted 203 exhibitors from 24 countries of which nine (9) displayed their aerospace and defence products in national pavilions. These included China, the USA, Türkiye (with two pavilions), Italy, Belgium, and India.

Among the 24 nations from around the world, six were from Africa, namely Nigeria, South Africa, Egypt, Uganda, Sudan, and the Democratic Republic of Congo (DRC).

No less than 51 official delegations from 29 countries attended the event, as well as 176 accredited media from around the world. Just over 23 000 trade visitors came in from 76 countries, while 51 228 public visitors were attracted to the show, especially during the public air show on the weekend days of 24 and 25 September.

In her opening address, Minister of Defence and Military Veterans Thandi Modise had this to say about AAD: “Let us never underestimate the critical importance of this event. It is more than a show. It is more than an exhibition. It is an investment.”

Youth Development Programme (YDP)

Though not specifically referencing the youth programme, the Minister’s pronouncement certainly applied to investing in the youth.

With a target of 10 000 learners, this year’s initiative reached 9 100 learners and students from around the country, including from Cape Town and Durban who arrived courtesy of South African Airways (SAA). Whilst at AAD2022, these youth were exposed to career opportunities in the military and civilian defence and Aerospace space, artificial intelligence (AI) drone capabilities and other high-level technologies.



Pilots from the US and South African air forces, as well as scientists from South Africa's CSIR and America's National Aeronautics & Space Administration (NASA) briefed the learners on aviation and space technology and careers, as well as the importance of embracing science, technology, engineering, and mathematics (STEM) subjects at school.

Conferences and seminars

Among the firsts for AAD were flying displays of unmanned aerial vehicles (UAVs), often now referred to as drones or RPAS (remotely piloted aircraft systems). The show organisers succeeded in having the United Nations (UN) as a first-time participant in a UAV conference on 21 September, which was well attended. The Counterterrorism, Technology and Development in Africa conference on 22 September also brought the University of Hungary as a first-time international university participant, along with South Africa's own University of Stellenbosch. In like vein, the American space agency NASA, jointly with the UN and Italy, was a first for AAD through their participation in the General Aviation conference on 23 September.

Other firsts/highlights for AAD included a general aviation hub, full participation by the South African Police Service (SAPS) in both a display and demonstration, a Department of Trade, Industry and Competition (dtic) pavilion dedicated to small and medium enterprises (SMEs), as well as the online DefenceWeb official Show Daily, a new media partner (CNBC Africa), and transport shuttle partner (SANI Rental).

Some highlights noted by South African Air Force (SAAF) officers were the participation of the SAAF Gripens and in-flight refuelling of a US Air Force Sikorsky HH-60 Pave Hawk by a HC-130J Super

Hercules. Affirming support and commitment to the success for AAD2024, scheduled for 18 to 22 September 2024, Armscor Chief Executive Officer Solomzi Mbada said AAD2022 "exceeded all expectations." In the latest Armscor newsletter, Mbada said this was evidenced by "positive participation in both the exhibition and air show across categories, including exhibitors, trade visitors, foreign delegations, air forces and the general public."

With Covid-19 hopefully out of the way, the AAD show organisers – under the guidance of Armscor as lead partner – are now gearing for the next event. With more than 18 months to go, the organisers have sufficient time to build on the success of AAD2022, and once again stage a spectacular event: one that has grown to be a significant game changer in the defence and aerospace ecosystem.



Damen Shipyards Cape Town celebrates blessing ceremony for second MMIPV

On 14 October 2022, the South African Navy (SAN) held a blessing ceremony for the second of three Multi Mission Inshore Patrol Vessels (MMIPV) at Damen Shipyards Cape Town (DSCT). During the event, the vessel was blessed and a bottle of champagne was broken over the bow as is the custom. The South African flag was raised on the vessel and she was cheered by her crew.

Sefale Montsi, Director at DSCT said: "With this ceremony, this vessel will soon join her sister, *SAS King Sekhukhune II* in successfully sailing South African and International waters. The project continues to meet the client's specifications, on time and within budget. Damen Shipyards Cape Town and our growing local supply chain stand ready to deliver more of these much-needed vessels to our navy." "We are pleased with the progress that has been made thus far", said Armscor Group Executive Acquisition and Supply Chain Management, Mr. M.P. Teffo. Armscor is the acquisition agency for the Department of Defence in South Africa. "We are committed to providing the South African National Defence Force with state-of-the-art defence materiel they require to protect the sovereignty of the country. This MMIPV Project demonstrates our capability to deliver on complex acquisition solutions. We are looking forward to the delivery of this second Multi Mission Inshore Patrol Vessel next year."


After today's ceremony, the second MMIPV will be launched into the water and then delivered to SAN in 2023 after extensive acceptance trials. The third vessel will be delivered one year later in 2024. The vessels will all contribute to South Africa's maritime security in strengthening the country's capability to respond effectively, rapidly, and cost-efficiently to threats such as illegal trafficking and fishing. The MMIPV project is also playing an important role in creating skilled new jobs and acting as a catalyst for the development of regional supply chains. On its own, the MMIPV project is expected to generate more than one million man-hours of work during the construction of the three MMIPVs and will support more than 1,000 direct and indirect jobs. Beyond work on the vessel, DSCT benefits from the global reach of Damen Shipyards Group to secure new business for South African industry.

"This project has also allowed the yard to increase the impact of its transformation strategy and we have achieved a level 1 BEE rating. Our strategy to make transformation part of business as usual made it possible to over-deliver on Armscor's requirements for engagement of local businesses and workforce, as well as vessel capabilities," Ms. Montsi said. The 62m by 11m vessels have been designed by Damen to deliver a rapid response capability that is both effective and cost efficient. The vessel is the second Damen Sea Axe vessel to operate in South African waters where, along with her sister ships, her primary role will be to counter piracy, illegal fishing and smuggling operations. The patented design delivers exceptional seakeeping behaviour with the straight-edged bow cutting through the water, thereby improving comfort and safety while reducing emissions and fuel consumption. Many of the components are commercial off-the-shelf, significantly reducing running and maintenance costs.

© Damen



- **YOYR COMPANY'S PARTNER IN GHANA**
- **DEFENCE & SECURITY CONSULTING**
- **PR & EVENT ORGANISER**



**"TOGETHER WE
REACH THE GOAL"**



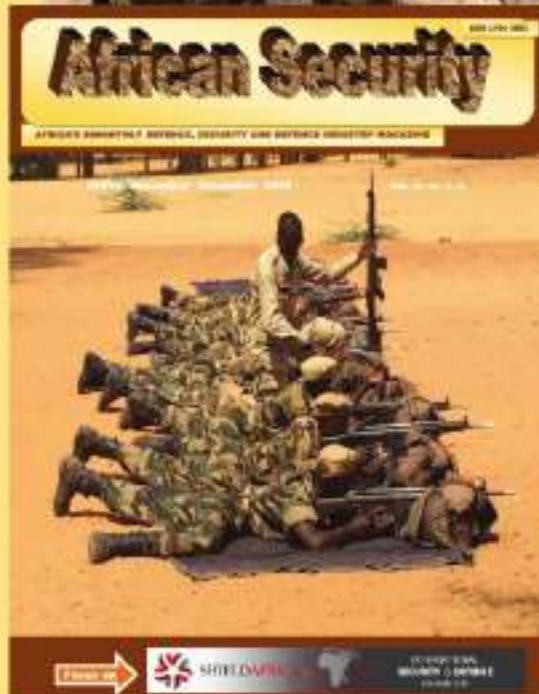
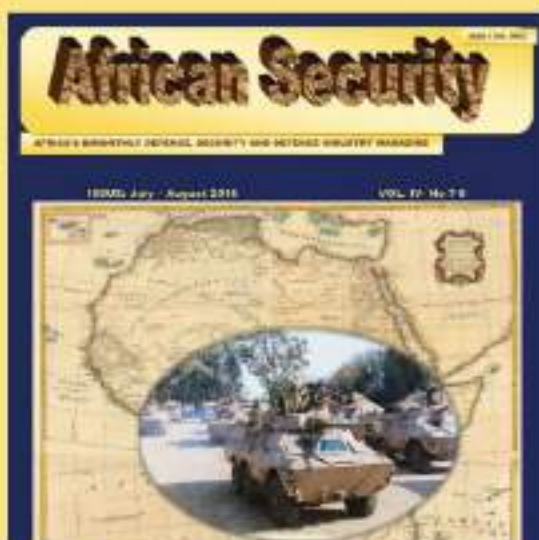
GHANA SERVICES LIMITED

PLOT No 121, KANAWU, TEMA, GREATER
ACCRA, GHANA
Tel: +233208115089
mdghanaservices@gmail.com
www.maghanaservices.com

African Security

ISSN 1792-2962

AFRICA'S BIMONTHLY DEFENCE, DEFENCE INDUSTRY AND SECURITY MAGAZINE



DBDC
International Events
& Special Publications

www.dbdcgroup.com