MS DAILY BRIEF - 19 September 2022

Cupons

The hull of the Ukrainian Navy's future flagship was built in Turkey

In Turkey, the formation of the hull of the ADA corvette for the Ukrainian Navy has actually been completed.

Photos of the future Ukrainian ship have been published by the TurDef publication, writes Militarny.

The photos were taken in Istanbul at the RMK Marine shipyard. The hull of the ship is currently in dry dock. The number F 211 and the name "Hetman Ivan Mazepa" have already been affixed on board.

Hull of the corvette "Hetman Ivan Mazepa". Photo from the military website

Ukraine's Ministry of Defence signed a contract for the construction of two ADA-type corvettes with Turkish companies in December 2020.

The first corvette for the Ukrainian Navy was installed in Turkey in September 2021. At the end of December 2021, the hull of the ship started to be assembled at a shipbuilding enterprise in Istanbul.

Previously, it was planned that by the end of 2022, the partially equipped ship would be towed to Ukraine for completion.

Ada is a MILGEM corvette project created for the Turkish Navy.

Key features:
   Tonnage - 2400 tons
   Length is 99.5 m
   Width is 14.4 m
   Draft - 3,6 m
   Power plant: 1 GTD GE 2500, 30800 hp. + 2 diesel MTU 16V595TE90, 11.580 hp.
   Speed - up to 29 knots
   Sailing range - 3500 miles at 15 knots
   Crew - 93

According to open sources, the issue of weapons for the Ukrainian corvette has finally not been resolved. As anti-ship missile weapons were considered Neptune, Harpoon, NSM, Atmaca anti-ship missiles. The French naval air defence system VL MICA was smoothed to the role of anti-aircraft weapons. The corvette's artillery is expected to consist of the 76mm OTO Melara Super Rapid gun and the 35mm Millennium. The Murene 90 Impact was considered a torpedo.

Source: https://www.blackseanews.net/read/194482

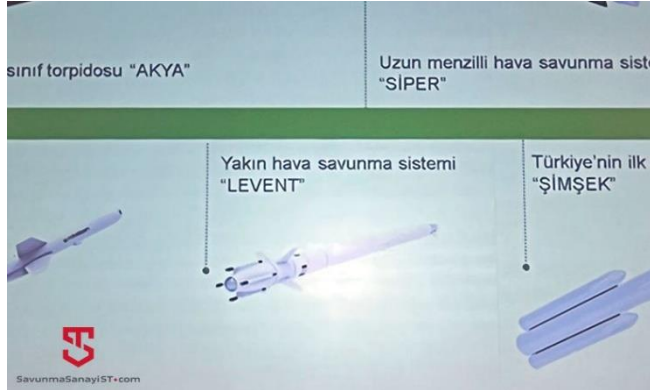Ukraine's MİLGEM corvette is getting ready

The MİLGEM Hetman Ivan Mazepa corvette (F-211), which was produced for the Ukrainian Navy under the prime contractor, is preparing for launch. Turkish and Ukrainian authorities signed an agreement for the supply of MİLGEM ADA class corvettes on 14 December 2020. In this direction; STM A.S. for the Ukrainian Navy. Construction activities of the Hatman Ivan Mazepa (F-211) Corvette, which was produced under the prime contractor, continue according to photos shared by Turdef. It is known that Ukraine has ordered a total of 4 MİLGEM Corvettes, of which 1 final and 3 optional. The corvette, which is under construction, is planned to be launched this year. Moreover, the corvette's construction activities are expected to take place in Turkey and outfitting activities in Ukraine. At the end of this year, the corvette, which has been launched, was planned to be towed and transported to Ukraine and start its outfitting at the Ocean shipyard in Mikolayiv. However, due to the Ukraine-Russia war that started in February, it is very likely that the ship's equipment will be made in Turkey. In the ADA Class Corvette to be produced for Ukraine, the Ukrainian-made NEPTUN missile has been chosen as the anti-ship missile. However, the Ukrainian defence sector was badly damaged during the war. Currently, Roketsan's ATMACA and Boeing's Harpoon anti-ship missiles are under evaluation. Both missiles are NATO standard. There are currently 4 MİLGEM ADA class corvettes in the inventory of the Turkish Naval Forces Command. Turkey has managed to export MİLGEM ADA class corvettes to Pakistan and Ukraine. According to the statement of the Ministry of Defence of Ukraine, the armament of MİLGEM ADA class corvettes in Ukraine will be as

follows: MİLGEM ADA class corvette (Ukraine) 76 mm OTO Melara Super Rapid Sea Gun VL MICA NG medium range CIWS 35 mm ASELSAN STAMP 12 air defence system, 7 mm Stabilised 8x anti-ship missile system NEPTUNE or ATMACA or HARPOON 324 mm MU90 impact torpedo 3D search radar manufactured by ASELSAN or Thales Radar Vision Master FT A total of 8 VLS (4x2) with 4 cells each on port and starboard HAVELSAN ADVENT battle management system

Source: https://www.savunmasanayist.com/ukraynanin-milgem-korveti-denize-inmeye-hazirlaniyor/

LEVENT air defence missile design first released

LEVENT will participate in the close air defence of surface platforms. The LEVENT air defense missile system, developed by Roketsan in accordance with the needs of the Turkish Naval Forces Command, was presented for the first time at the IDEF'21 Fair. After the LEVENT weapon system, the image of the missile was also distributed. It was seen that LEVENT, which was developed on top of the SUNGUR man-portable air defence missile, has both a seeker head and four antennas that allow the RF transmissions of the target to be obtained. The US-made RAM missile, which is currently used by the Turkish Navy as the equivalent of the LEVENT, has two antennas. Roketsan CEO Murat Second, who made a statement to SavunmaSanayiST.com in September 2022 about the LEVENT air defense missile system, used the following statement, "LEVENT's current work continues at its usual pace. Its main munition will be a missile produced by SUNGUR. In addition to SUNGUR, there will be passive search heads and RF search heads. Experiments and development activities continue. LEVENT, when deployed, will have modes that can operate on their own or as radar-guided integrated with the ship's own radars. Our goal is to reach a level that can fire the first shots in a very short time and start trials in the next year. By producing them in a very short time, we are trying to increase the air defence capability of our armed forces, especially with the LEVENT platform." National solution to US embargo

Along with the MİLGEM ADA-class corvettes, Turkey has taken the US-made RIM-116 RAM (Rolling Airframe Missile) Close Air Defense System into inventory for the first time. Currently, four MİLGEM ADA-class corvettes delivered to the Turkish Naval Forces Command are equipped with RAM systems. While the RAM system launchers are supplied from Germany, the missiles are supplied from the US. The US has long embargoed RAM missiles from Turkey. With LEVENT the aim is to lift the embargo in this area with national means. The passive radar seeker required in the second configuration of LEVENT will also be developed by Roketsan.

Source: https://www.savunmasanayist.com/levent-hava-savunma-fuzesinin-tasarimi-paylasildi/

Ukraine's armed forces on the southern front have sunk an enemy barge with military equipment and occupants on board. As reported by the Operational Command "South", the Russians tried to transport their weapons with the help of this ship, Ukrinform reports. "The already damaged 'ship' was sent along the course of the war with loaded military equipment and accompanying personnel," the message said. According to the command, the Armed Forces provided fire control of transport routes, logistic centers, maneuvers and redeployment, base points and control of enemy units. In general, the situation on the southern front is constantly tense, but controlled by the Defence Forces. "The enemy is ceding positions, losing a tactically advantageous position. However, he does not stop trying to test the strength of our units," said Army.ak, the invaders again conducted assault operations with forces up to a platoon with the support of two T-72 tanks and other armored vehicles, but failed. They lost two amphibious assault vehicles and a third of their manpower and withdrew. During the day, the enemy continued active aerial reconnaissance, rocket and artillery fire and launched 12 air strikes on Ukrainian positions and terrorist groups along the front line. At the same time, the Ukrainian air force carried out three strikes on the enemy and destroyed 2 Russian operational-tactical reconnaissance drones, and the missile and artillery units of the Armed Forces of Ukraine carried out more than 320 fire missions per day. According to the report, in total, the Ukrainian army destroyed 62 occupants and 5 armored vehicle units in the south during the day.

Source: https://www.blackseanews.net/read/194483

Romanian state-owned shipyard 2 Mai SA, which controls the Mangalia shipyard alongside Dutch Damen Shipyards, recorded a turnover of 1.3 million lei in the first six months of the year, 25% below the level of the same period in 2021, and losses of 129,000 lei, down from 324,000 lei in H1 2021, ZF reports.

The drop in revenue was driven by lower cargo sales after the suspension of contracts with Damen Shipyards Mangalia, according to the company's financial report. Total revenue fell 17% to 1.6 million lei. The losses were generated by the advance payment of land tax for 2022, increased salary expenses and non-realisation of planned revenues from commercial contracts.

"According to the commitments of the executive management of Damen Shipyards Mangalia, only from 2024 the joint venture's activity will become profitable," Ziarul Financiar quotes.

In the first months of 2022, Damen Shipyards Mangalia SA has suspended the contracts carried out at the Mangalia shipyard, with the management of Shipyard 2 Mai SA stating in the financial report that this collaboration should be resumed or new business opportunities identified. Shipyard 2 Mai SA is 93% owned by the Romanian state through the Ministry of Economy. The company has a capitalisation of 70.7 million lei, and since the beginning of the year the shares have depreciated by 12%, after transactions of only 35,800 lei. Last year, Șantierul Naval 2 Mai SA had a turnover of 3.34 million lei and a profit of 14,325 lei, with seven employees.

The Mangalia shipyard was taken over in mid-2018 by Dutch Damen and rebranded as Damen Shipyards Mangalia. At the time of the takeover, the Dutch stated that they would reach 3,000 employees in Mangalia, but this goal was not achieved.

Source: https://monitorulapararii.ro/santierul-naval-2-mai-sa-cifra-de-afaceri-de-1-3-milioane-de-lei-in-primele-sase-luni-ale-anului-cu-25-sub-nivelul-aceleiasi-perioade-din-anul-trecut-1-45679

UK to award nuclear dismantling contract in 2023

The first phase of the Submarine Scrapping Project will use HMS Swiftsure as a test case before further expansion of the programme. The UK Ministry of Defence (MOD) will hold a market engagement day later this year at Babcock Marine's Rosyth shipyard to determine industrial capabilities ahead of the start of the initial phase of the Submarine Scrapping Project (SDP), a programme to dispose of dozens of nuclear-powered products. In collaboration with the UK Defence Equipment Sales Authority, the event, which will take place on 12 October this year, will focus on plans for the first submarine - the former HMS Swiftsure - to be recycled within the confines of Rosyth Shipyard. The current timeline will see Babcock Marine award a recycling contract on behalf of the Ministry of Defence in Q2 2023 for the HMS Swiftsure phase only. Commissioned in 1972, HMS Swiftsure was the main nuclear-powered submarine (SSN) of the Swiftsure class and operated until her decommissioning in 1992. According to an official Ministry of Defence notification of the intention to hold the market engagement day, the event is intended to "ensure continued market awareness of the opportunity" as well as to "gauge the appetite, capability and capacity of the UK market" in its ability to recycle a nuclear submarine. The majority of submarines stored at Rosyth, Scotland and Devonport, England are believed to have had their fuel removed since decommissioning, although hazardous and classified materials remain on board, requiring specific permits and capabilities for safe disposal. The SDP mandate is to completely dismantle 27 UK nuclear-powered submarines after they have been refuelled, including the ballistic missile submarines (SSBNs) that housed the country's nuclear deterrent. Following a public consultation, the decision was taken to demonstrate how the Ministry of Defence will remove such platforms on a single ship (HMS Swiftsure), with the first dismantling taking place within the Rosyth shipyard to ensure the "technical risks" associated with the programme are limited. Known as Disposal 26, the HMS Swiftsure dismantling and recycling project is planned to start in 2026. Through this initial phase, other options for the dismantling of six additional submarines held at Rosyth plus a further 20 stored at Devonport, Plymouth.

Decision for Devonport

In February this year, the Ministry of Justice revealed that HMS Valiant would be the first nuclear-powered submarine at Devonport to undergo decommissioning. According to a

2019 UK National Audit Office investigation into the removal of fuel and dismantling of submarines. The ministry has spent around £500 million since 1980 on the storage and maintenance of its decommissioned nuclear submarines. HMS Valiant was commissioned in 1966 and served less than 30 years before being decommissioned in 1994. Submarines at Devonport and Rosyth are kept afloat after the nuclear reactors were removed for disposal. However, the complicated nature of scrapping and recycling a nuclear submarine meant the submarines were left hidden in plain sight as the Department determined the best method of disposal. The UK currently has five of the latest Astute-class SSNs in service or commissioned (Astute, Ambush, Artful, Audacious and Anson), along with one remaining Trafalgar-class SSN, HMS Triumph. In addition, the RN operates four Vanguard class SSBNs (Vanguard, Victorious, Vigilant, Vengeance), which will be replaced by Dreadnought class submarines, the first of the class currently being manufactured at the BAE Systems yard in Barrow -in-Furness, UK.

Source: https://www.naval-technology.com/analysis/uk-to-award-contract-for-nuclear-sub-dismantling-in-2023/

A cruise ship broke away from the quay in the port of Ravenna

On Saturday morning, a cruise ship in the port of Ravenna, Italy, broke away from its quay and drifted into the harbour, threatening a possible grounding. The Viking Sea docked in the outer harbour of the port of Ravenna at 03:00 on Saturday. According to the Ravenna Port Authority, an extremely strong bora wind hit the port later that morning. Bora is a strong katabatic wind pattern found in the northern Adriatic. The strong winds caused the cruise ship's lines to break, and she drifted away from the quay. The crew quickly dropped anchor to control her drift, and a harbour tug operated by the Gesmar towing company intervened to slow her movement. Four other tugs joined in and gradually pushed the cruise ship back to the berth. AIS data shows that the Viking Sea's movement was quickly stopped about 60 metres of travel from her berth. By the time she stopped, her AIS record appears to show that she was only 30 metres from the next breakwater to the south. With the help of the tug, she returned safely to her original position by early afternoon and moored with additional lines. Passengers remained on board throughout the development and were not affected, according to the Ravenna Port Authority. "Heartfelt thanks to the harbour master, pilots, tugs and berth operators for their prompt response, allowing us to deal safely and quickly with a totally exceptional situation. Thanks also to the terminal operator and the entire port community who understood the difficulties caused by these exceptional weather conditions," the port authority said in a statement. Viking Sea is a 900-passenger cruise ship built by Fincantieri for Viking in 2016. It is about 750 feet long and has a height above the waterline of about 120 feet (to top deck level).

Source: https://www.maritime-executive.com/article/video-cruise-ship-breaks-away-from-moorings-at-port-of-ravenna

Software starts

It's taken a while, but standardization of new software in the maritime field. "Software is eating the world." This now-famous quote first appeared in a guest post by billionaire tech visionary Marc Andreessen in the Wall Street Journal in 2011. Perhaps best known for his $4.2 billion sale of Netscape to AOL in 1998. Andreessen's joke meant that software companies would disrupt traditional industries to the point where they would no longer be recognized. With software-based companies like Amazon, Apple, Google and Microsoft forming four of the top five most valuable companies in the world, it's clear that his vision has

come true. The shipping industry is one steeped in tradition and historically it changes more slowly than others. While some segments are rapidly embracing new technologies, others still manage operations using the digital equivalent of pen and paper. Part of the problem is that while there is no shortage of sophisticated solutions, many are developed locally due to the global nature of the maritime industry. Standardisation is needed across the value chain - the technological equivalent of the 40-foot container that revolutionised bulk shipping.

But we are getting closer.

Technologies developed for a single purpose are now being bundled into packages like those that can handle an entire fleet or industry segment. Innovations in other industries are moving into marine space faster than ever before. Ships are becoming increasingly advanced and interconnected with ports, offices and other stakeholders. Maritime software is starting to develop.

Breaking Barriers

One of the biggest barriers to managing complex onboard IT solutions is well-known, little understood and often cited as a reason not to increase investment. You already know what it is - lack of bandwidth at sea. A major problem is that software designed for full connectivity using fibre bandwidth delivery is installed on ships and expected to work properly. CEO and founder of Vancouver-based ShipSafe Maritime Technologies, Sahil Andrews Chand, recognized this problem and developed a suite of network operations center (NOC) tools specifically designed to account for bandwidth limitations. Providing IT automation for on-board servers and networks, the software enables monitoring and control of on-board IT infrastructure while automating time-consuming tasks. With the new requirements outlined in the IMO's 2021 Cyber Risk Management Code, compliance and future-proofing are becoming challenges. ShipSafe helps with this compliance while reducing costs by 40-60%. The company recently signed a memorandum of understanding with Danaos Management Consultants S.A. to develop and deploy its AR (Augmented Reality) based remote inspection suite on fleets worldwide. The marine software also generates innovative solutions for ship design, certification and compliance. Anyone familiar with American Bureau of Shipping (ABS) class ships has probably used Freedom Portal. This web-based ERP (enterprise resource planning) system is the digital backbone of the ABS workflow, including design review, tracking and issuing vessel certifications, and managing class approvals. The Portal is undergoing a major upgrade for 2023. The update will add a product lifecycle management (PLM) component, ultimately becoming the basis for a digital class-approved twin. The sophisticated data management system will be used throughout the entire build cycle - from design to delivery. A unique aspect of the ABS philosophy is the "CAD-nostic" approach to design proposals. Instead of prescribing CAD as the standard, it allows any format. The team then turns them into what is needed for its internal workflow. While labor intensive, this allows the industry to continue to innovate and keeps in mind the unique needs of individual clients. In a sign of things to come, ABS has graded the first U.S. commercial vessel designed and verified using a full, end-to-end 3D design process, eliminating traditional production drawings, saving time and cost, and further improving the value chain.

Fleet management and vertical optimization Software packages are not only used onboard, but also for full-spectrum fleet management. MariApps Marine Solutions, a member of the Schulte Group, is a digital solutions provider specialising in customised applications and software for the maritime industry. Together with partner companies Rescompany (Resco) and OnboarD, it offers a broad spectrum of software solutions to the cruise industry to improve operational efficiency, performance and monitoring capabilities - both on board and ashore. Each of the three companies focuses on a specific suite of products, from fleet management and performance to PMS, inventory management and onboard services. The

combined offerings cover all facets of the cruise industry, enabling a one-stop solution. The MariApps SmartOps offering is an on-board maintained and remotely monitored voyage performance solution. It helps meet regulatory requirements for sustainable transport, providing operational optimization, weather routing and carbon reduction. Fleet optimisation is a requirement for ship owners, but how to influence all stakeholders through the value chain? Harbour Lab aims to build trust in the maritime ecosystem through transparency and innovation. Its innovative e-payment platform streamlines the process of analysing accounts payable and managing port costs, resulting in significant efficiencies in time and cost savings, while maintaining control of DAs internally. It also offers DA outsourcing to supplement staffing requirements and to connect through a simple platform to ship owners, management companies and charterers with agents and vendors in ports around the world. The DA tool helps to streamline scheduling, provide port cost analysis and submit requests for vessel services worldwide. It also has a port cost estimator and a fleet tracking tool that handles weather monitoring and operations organisation. The end result is a one-page solution perfect for helping stakeholders in optimizing and automating key cost assessment processes related to a ship's port activities. The Path to Success A common theme in technology news is procurement-driven growth to create a group of offerings that provide a comprehensive package of solutions for a given market. The marine software space is no different. Veson Nautical is considered the largest commercial software provider in the marine space. While other companies have scaled back to focus on a few select offerings, Veson has gone in the other direction. It is also a leader in standardizing software for the maritime industry. Its enterprise-grade solution, the Veson IMOS Platform (VIP), powers maritime trade for more than 300 organizations in over 60 countries. Combining chartering, operations, financials and analytics with big data, the platform reaches all points in the supply chain through a single integrated set of connected workflows. It aims to reduce operational burdens and enable maritime stakeholders to make more informed, data-driven and timely decisions. Building on its stated vision of becoming the standard platform for the global fleet, Veson acquired maritime SaaS provider Q88 LLC earlier this year. Founded in 2001, Q88 has been building shipping solutions for over 20 years. Highly regarded in the tanker and bulk sectors, the company's products are designed to streamline operations, speed communications and improve safety. Both companies see the acquisition as an opportunity to learn and adapt from each other. Veson customers will gain access to the complementary suite of Q88 offerings, while Q88 customers will benefit from rapid iteration and enhancement of their existing product lines. The acquisition is also a case study in market segmentation and industry adaptation. Q88's VMS is a similar software offering to Veson VIP. However, rather than consolidating platforms, it is clear that there is a market for both - creating product diversity and customizing solutions to meet customer requirements. Match the solution to the customer, not the other way around.

Innovators - Apply here

The rate of technology development is staggering. It is estimated that 90% of the world's data has been collected in the last two years alone. Seventy percent of all organizations are either developing a digital transformation strategy or already have one in process. This digital model has been proven to increase operational efficiency, enable faster time to market and better meet customer expectations. But having the technical knowledge doesn't mean you have the business acumen to bring your solution to market. That's where the incubator model, pioneered in Silicon Valley, comes in. Innovative leaps and new ideas are often generated by the new kids on the block. ESG-focused digital shipping platform RightShip last month announced a new collaboration with Plug and Play, one of the world's most successful global innovation platforms. Led from RightShip's Singapore-based Innovation Centre, the collaboration allows each company to focus on its area of expertise

while elevating the shipping industry as a whole. Plug and Play offers accelerator programs across the globe and across industries, providing venture capital to the most promising startups. RightShip, meanwhile, is the world's largest maritime due diligence organization with a focus on safety, sustainability and social responsibility. The partnership will use Plug and Play to see emerging maritime-focused technology startups that complement RightShip's business - with a particular focus on sustainability. RightShip will then work with these startups to expand their solution and increase their reach in the sector. This benefits RightShip by furthering its vision of zero harm in the sector, while giving startups an accelerated path to market. The entire industry benefits as a result. Turning to Blue Water The progress of software in our personal lives is evident and has touched every aspect of our lives, from the way we travel and eat, to shopping and playing. The change now taking place in the maritime industry will also be all-encompassing. Intelligent use of software will enable operational efficiency and collaboration at a level never before seen. Maritime software has taken off, and standardisation is coming. - MarEx

Source: https://www.maritime-executive.com/magazine/software-sets-sail