MS DAILY BRIEF - 17 September 2022

Cupons

Russia's Black Sea Fleet partially solves air defence problems: First Karakurt ship with Pantsir-M complex

In the coming period, the Russian Black Sea Fleet (RNF) will receive the first Karakurt-class ship, Project 22800, equipped with the naval version of the Pantsir-M anti-aircraft missile complex. This is the small missile ship Tsiklon, which is undergoing sea trials.

So far, ships of this type have been equipped with a six-barrelled AK-630 anti-aircraft artillery system with a calibre of 30 millimetres. All ships of the series will now receive the Pantsir-M complex.

Small missile-carrying ships of the Karakurt class are being built at three shipyards in St Petersburg, Zelenodolsk and Amur.

Tsiklon is the first Karakurt-class ship to be built entirely at the Zaliv Shipyard in Kerch, which is a subsidiary of the Zelenodolsk yard. Construction of the vessel began in 2016 and the launch took place last July. The ship is currently undergoing final sea trials and is due to be inducted into the 41st Missile Carrier Brigade of the Sevastopol MNRF by the end of the year.

"We hope to continue building Karakurt-class Project 22800 ships at both Kerch and Zelenodolsk. The series ships will be equipped with Pantsir anti-aircraft missile complexes. This year we will deliver the first ship of this type, Tsiklon," said Renat Mistakhov, general director of the Ak Bars shipbuilding corporation, quoted by RIA Novosti news agency.

The Project 22800 Karakurt-class small missile-carrying ships are 67 metres long, 11 metres wide and four metres draught. The displacement is about 800 tons, the sailing distance up to 2,500 miles, and the range 15 days. The ships' basic armament is the Kalibr universal missile complex, with eight such cruise missiles. They are also equipped with an AK-176MA

artillery installation, with a calibre of 76 millimetres, and two machine guns of 14.5 or 12.7 millimetres.

The Pantsir-M maritime complex is capable of detecting targets at a range of 75 kilometres and destroying them at a distance of 40 kilometres from the ship and 15 kilometres in altitude. It includes anti-aircraft missiles and two six-barrelled rapid-fire guns, designed to organise the ship's protection on two levels, not only against air targets but also naval and land targets.

The Russian Black Sea Fleet's problems were seen in the war in Ukraine

Author's comment: By introducing Karakurt-class ships to the fleet, the NRF will begin to solve its air defence problems, which proved so deficient during the conflict in Ukraine. First and foremost, the Pantsir anti-aircraft complexes specialise in fighting drones as well as cruise missiles.

Current naval plans call for the construction of 18 Karakurt-class ships, six each for the Baltic Sea Fleet, the MNRF and the Pacific Ocean Fleet.

There are currently three ships of this type in service (Mytishchi, Sovetsk and Odintsovo), all in the Baltic Fleet.

Askold, Amur, Tucha and Tayfun are also under construction for the MNRF. The first of these should be delivered to the fleet in 2022 and the next three in 2023. However, these plans may be too optimistic and may not be met. Most likely, the small missile ship Askold will be introduced to the MNRF in 2023.

Source: https://www.defenseromania.ro/flota-rusa-din-marea-neagra-rezolva-partial-problemele-cu-apararea-antiaeriana-prima-nava-karakurt-cu-complexul-pantsir-m_618189.html

Russia conducts military exercises in the Arctic Sea off Alaska

Russian nuclear-powered submarines fired cruise missiles into the Arctic on Friday as part of military exercises aimed at testing Moscow's preparedness for a possible conflict in its icy northern waters, the Russian Defence Ministry said, Reuters reports.

The exercises, dubbed Umka-2022, took place in the Chukchi Sea, an eastern portion of the Arctic Ocean that separates Russia from the US state of Alaska.

Russia regards its vast Arctic territory as a vital strategic interest and has been building up its military capabilities in the region for years, raising alarm bells in the West.

The Russian Defence Ministry said on Friday that two nuclear-powered submarines - Omsk and Novosibirsk - fired anti-ship cruise missiles from the Chukchi Sea, hitting targets up to 400 kilometres away.

The ministry posted a video on social media which it says shows that the missiles were fired from ships located at points along the Northern Sea Route - a commercial shipping channel that Russia is promoting as an alternative option for cargo ships travelling between Europe and Asia.

Moscow has continued a program of high-profile military exercises, even though most of its ground forces are engaged in the war in Ukraine. Earlier this month, it conducted small-scale military exercises in the Russian Far East, involving about 50,000 troops.

These exercises took place just as a lightning-fast Ukrainian counteroffensive was beginning, forcing Russian troops to abandon swathes of territory in Ukraine's eastern Kharkov region.

The defence ministry said this week's exercises in the Arctic were a test of Russia's "ability and readiness to defend the Russian Arctic by military means".

In addition to missile launches from nuclear-powered submarines, Russia's "Bastion" coastal missile system also fired missiles at targets at sea 300 kilometres from the Chukchi Peninsula - Russia's easternmost territory.

Source: https://www.g4media.ro/rusia-efectueaza-exercitii-militare-in-marea-arctica-vizavi-de-alaska.html

Turkey's Dearsan keels the first of two OPVs for Nigeria

Turkish shipyard Dearsan laid the keel of the first of two heavy-duty offshore patrol vessels (HE OPV 76) for the Nigerian Navy during a ceremony held at Dearsan's Istanbul facility on 16 September 2022.

The ceremonial laying of the keel of the first of two 76-metre patrol vessels designed and built by Dearsan Shipyard for the needs of the Nigerian Navy took place today (16 September) in Tuzla, Istanbul, in the presence of distinguished guests.

Nigerian Minister of Defence Bashir Salihi Magashi was the chief guest of the event, the ceremony was attended by Turkish Navy Commander Admiral Ercument Tatlioglu, Turkish Deputy Minister of Defence Muhsin Dere, Vice Admiral Awwal Zubairu GAMBO, Commander of the Nigerian Navy, and the President of Dearsan Shipyard. Turkey's Dearsan lays keel of first of two OPVs for Nigeria Dearsan Shipyard has signed an agreement with Nigeria to build two offshore patrol vessels for the Nigerian Navy on October 3, 2021. The keel-laying ceremony marked the start of construction of the vessels, which are expected to be delivered in 37 months, according to earlier statements by company officials. The acquisition of HE OPV 76 represents an important milestone in the Nigerian Navy's fleet renewal push towards the implementation of its Strategic Plan 2021-2030. According to the Nigerian Navy Chief's October 2021 statements, these OPVs will be capable of conducting maritime interdiction, surveillance and special forces operations, as well as providing naval fire support to land forces, which will help to keep the Nigerian Navy's operational commitments on an upward trajectory.

About HE OPV-76

The HE OPV -76 has an overall length of 76.90 meters, a beam of 11.90 meters and a displacement of 1,100 tons, according to the video released by the company. The vessel will be operated by 47 employees and will have a range of 2,500 nautical miles at economy speed. HE OPV 76 will be able to stay at sea for 16 days. The ship has a flight deck that can accommodate a single helicopter, but no hangar. The main engines are four MAN 18VP185 diesel engines with a top speed of 28 kt. The ship's main gun will be Leonardo's 40-millimetre MARLIN gun and will be armed with Aselsan's 30-millimetre SMASH aft of the ship. The ship will also be equipped with two 12.7mm Aselsan RWS guns. The Turkish company HAVELSAN will supply the ADVENT combat management system for the new OPVs, and the operator consoles will be supplied by another Turkish company, YALTES. The sensor combination of the new OPVs consists of the 2D surface search radar from the Italian company GEM Elettronica and the EO fire control system. HE OPV-76 will carry 2 RHIBs for relevant operations.

Source: https://www.navalnews.com/naval-news/2022/09/turkish-dearsan-lays-keel-of-first-of-two-opvs-for-nigeria/

China's new very large underwater drones unveiled

China's naval expansion may have a key program that has not been previously reported. Secretly deployed in the South China Sea, two unknown underwater vehicles have been spotted at the Sanya naval base. This may be the first hint of a much larger program.

The U.S. Navy and Royal Navy are both pursuing very large unmanned underwater vehicles (XLUUVs). These drone submarines are widely seen as a key part of tomorrow's fleet. And early movers may have a significant advantage.

Not surprisingly, the Chinese Navy (PLAN) also seems to have a corresponding program. However, no details have been available so far.

Satellite images of the Sanya naval base in Hainan in the South China Sea reveal two XLUUVs. The two vehicles have been present since March-April 2021, but have only now come to light. The arrangement indicates trials or tests. Sanya is part of a series of important naval bases in the area and hosts operational submarines. The pier where the new XLUUVs were seen is close to where China previously based the dwarf submarines.

The high-resolution images, taken by Maxar Technologies satellites, are available in Google Earth. Google Earth is one of the oldest Open Source Intelligence (OSINT) tools in the defence space. With the advent of almost daily satellite passes from other sources, it can be overlooked, but checking for the latest updates can reap rewards.

Very large unmanned underwater vehicle

Our preliminary assessment shows that the two black objects are XLUUVs (Extra-Large Uncrewed Underwater Vehicle). They are too small to be regular submarines and too large to be Swimmer Delivery Vehicles (SDVs).

The two submersibles are different sizes and appear to be significantly different models. This suggests a competitive trial of different prototypes or demonstrators.

The first XLUUV is approximately 16 meters (52 feet) long and 2 meters (6.4 feet) long. It has an aerodynamic arch. At its tail, it appears to have two propellers (screws) in a side-by-side arrangement. This is interesting because it may indicate a link to the HSU-001 LDUUV.

(Unmanned Underwater Vehicle with Large Displacement). The HSU-001 was first unveiled to the public in September 2019 and is believed to be in service with PLAN, although few details have emerged since then. However, the new vehicle is more than twice the size.

The size of the new submersible is very similar to the US Navy's Orca XLUUV. Developed by Boeing, that system is seen as the first to move into this space. However, the first Orca was only christened in April, while the PLAN reportedly had their prototypes in the water from 2021 or earlier. The other XLUUV is outwardly simpler in shape. It is much thinner, but also longer, at around 18 metres (59 feet). This design is reminiscent of Lockheed Martin's competitor for the US Navy's Orca XLUUV program. Implications XLUUVs are widely seen as key naval technologies that could shape future conflicts. Like existing medium-sized UUVs, they can perform ISR (intelligence, surveillance and reconnaissance) missions. However, their larger size should translate into much longer ranges. It also opens up other roles such as offensive mine laying, anti-submarine warfare and transport. As is the nature of intelligence, the new vehicles may turn out to be something other than XLUUV. Either way, they are likely to be interesting and relevant to defence analysts. China has been building and modernizing its navy for the past 20 years. This has included a number of advanced underwater vehicles, some of which have not been publicly acknowledged. So while this latest program may come as a surprise, it shouldn't. It is a reminder of China's growing naval power and ambitions. And that it can build new capabilities in relative secrecy.

Source: https://www.navalnews.com/naval-news/2022/09/chinas-secret-extra-large-submarine-drone-program-revealed/

Typhoon Muifa hits Shanghai and destroys new construction at shipyard

Typhoon Mufia left a path of damage and heavy rain as it made landfall four times in China, including passing over key seaports and one of China's major shipyards near Shanghai. Belgium's Jan De Nul Group reported that it was informed that its new building at the COSCO shipyard suffered damage from the storm. The typhoon made its first landfall on the coast near Zhoushan late on Wednesday, 14 September, and a few hours later made its second landfall in Shanghai's Fengxian district. Chinese officials report that it was the strongest tropical storm to ever hit Shanghai. Winds were about 95 mph, with wave heights reported at 16 feet near Shanghai. The storm also brought nearly eight inches of rain to the region. Jan De Nul said he was informed that the eye of the storm passed directly over the COSCO shipyard in Nantong in the early hours of Thursday morning. According to the company, strong winds and waves caused the wind turbine lift vessel, Voltaire, to break away from its moorings. The 21,500 dwt vessel is currently under construction, launching in January 2022 and due for delivery in the second half of this year. The massive 555-foot-long vessel will be the largest in the company's fleet, with the ability to operate in waters up to 262 feet in depth and a lifting load of up to 16,000 tons. It is designed to support the installation of the largest offshore wind farms. They report that the vessel safely anchored back in the shipyard after breaking free during the storm. Initial visual assessments show limited damage to parts of the crane and heliport. Further assessments are ongoing. Shanghai officials said they had warned more than 7,400 ships to take shelter before the storm arrived. Operations at the world's largest container port have been suspended along with all bunkering operations. Flights to and from the international airport have also been suspended. The storm, although weakened, continued northward along the Chinese coast. The typhoon made two landfalls on Friday, the first in the coastal city of Dalian. It later reached Qingdao in Shandong province, reports Xinhua news agency. Although it continued to be a strong storm, it was downgraded, with winds slowing to about a maximum speed of 50 mph. The Chinese have not released further damage assessments. There are reports of flooding and power outages with services and businesses suspended throughout the storm.

Source: https://www.maritime-executive.com/article/typhoon-mufia-hits-shanghai-and-damages-newbuild-at-shipyard

Concept automates ship recycling in a green, circular process

Disposing of retired ships in an environmentally friendly and safe way remains one of the biggest challenges for the maritime industry. Despite government initiatives and watchdog groups, shipbreaking remains a messy, labor-intensive operation with an overall poor safety record, according to groups such as the NGO Shipbreaking.

A Dutch start-up company reports that it has designed a new process that is fully automated and quickly extracts steel from ships, creating a circular economy that is also environmentally sensitive. Circular Maritime Technologies International (CMT) says that with the support of partners such as Aseco Europe, Damen Shipyards, Enviu, Fluor, Grimbergen Industrial Systems, Huisman Equipment, Jansen Recycling Group, KCI, Sea2Cradle, Sojitz Corporation and Stork, it will soon launch the proof-of-concept prototype in the Netherlands. CMT plans to set up yards with international partners and attract business from shipowners by matching the price paid by South Asian competitors.

Nearly 150 commercial ships were sold to destroyers in the second quarter of 2022, reports NGO Shipbreaking. Most of the ships are going to the Far East, with India, Pakistan and Bangladesh being the biggest breakers. Shipyards in Turkey are among the few with EU certification.

CMT says there have been no major developments in the shipbreaking industry over the past 50 years. Despite EU requirements, most ships are scrapped using torches and human

labour. One major concession that has been won is the removal of suitable materials for recycling and the use of concrete pads in some locations so that waste does not enter the ground. However, in many locations, such as Asia, ships are simply run up on the beach and deployed. "CMT will revolutionize ship recycling by providing clean steel due to an automated, low-carbon, contained and circular process that does not harm people or the environment," the company reports. In a schematic of the operation, they show, after preparation, a ship would be lifted from the water and placed on a transfer system where automated cutting begins with hydro cutters. The ship would initially be cut into 300 MT slices, with a slice taking about two hours and each piece placed on a frame. The slice would be cut into six pieces in about two hours, and then with wire cutters taken into 10 blocks in another two hours. The blocks are then moved into a pickling operation that separates items such as pipes and cables before the block is hydro blasted. Laser cutting then reduces the remaining parts into steel plates.

According to the company, the site runs on its own power and produces clean steel, closely linked to green steel production. In addition to steel, each ship will be separated into ordinary scrap, assorted clean non-ferrous materials, assorted clean inert materials, and liquid and solid waste materials and processed at the CMT yard and converted into base gas to produce electricity, LNG and or H2. The process will be fully circular and they believe it can be developed at scale to become cost competitive with scrapers in Southeast Asia.

Source: https://www.maritime-executive.com/article/concept-automates-ship-recycling-in-a-green-circular-process

In the Russian Federation they want to launch a "direct logistics channel" through the ports of the Ulyanovsk region and Iran

The Ulyanovsk region of the Russian Federation, with the support of Iranian business and authorities, will organize a "direct logistics channel" that will allow "direct delivery of goods to the Islamic Republic". This was announced on 16 September by the head of the regional centre "My Business" Ruslan Gainetdinov, who is working in Iran as part of the Ulyanovsk delegation of 12 enterprises, Russian TASS reports. "Governor Alexei Russkikh has set the task of developing a direct logistics channel from the ports of the Ulyanovsk region to the ports of Iran. A direct logistics channel from Ulyanovsk ports to Iran (along the Volga to the Caspian Sea), to the port of Anzali and customs, warehouse terminals in Qazvin, will allow entrepreneurs to make deliveries without unnecessary intermediaries, use all the advantages of free ports and specialized customs terminals for storing products manufactured in Russian regions," the source said. Gainetdinov stressed that the project will become a significant addition and will be integrated into the North-South transport corridor project. "In the context of difficult trade relations with unfriendly countries, the canal becomes one of the main transport channels and reduces delivery time from the Indian Ocean basin directly to the shores of the Volga," he explained. According to Gainetdinov, a delegation of entrepreneurs from Ulyanovsk visited several Iranian companies. "The purpose of the visit was to study the possibility of purchasing the necessary goods and forming a return cargo. This will significantly reduce the cost of logistics," the source said.

Source: https://www.blackseanews.net/read/194427

Since the start of the war, the Ukrainian Danube shipping fleet has transported more than 3,000 TEUs

3,298 TEU were transported in the container convoys that PJSC "Ukrainian Danube Shipping" (UDP) started to form and transport on the Danube in connection with the Romanian Black Sea port of Constanta after the start of the Russian military invasion. This was reported by Dmytro Moskalenko, general director of the UDP, writes Porta Ukrainy. Among the export goods: metals, flour and sunflower oil, alcoholic products, milk, wood processing products, peas, bulk grain. It imports electronics, pipes, spare parts for agricultural machinery, car tyres, rice and other food products. In addition, some 600 TEUs of humanitarian goods have been transported under the UN World Food Programme. Currently, 12 vessels - open barges and pushers - are used in the container direction. The UDP started transporting containers almost six months ago. At first it was an experiment, exclusively the initiative of a new team. We have seen that, following the blockade of the Odessa seaports, the transport of containers was stopped. At the same time, demand must remain. The only question was: will we be able to create a functional logistics chain on the Danube, how justified will the economics of the project be, will we be able to find a balance between cargo flows to and from the country? But we did it! The transport of containers has started," Moskalenko wrote on Facebook. The UDP head recalled that the first container caravan consisting of the self-propelled vessel "Captain Shirkov" and five barges was formed at the end of May. Since then, container transport by the UDP fleet has become regular. A group of charterers has been formed, the required volume of both export and import cargo is steadily ensured. Since August, the shipping industry has switched completely to container transport by trailer. At the same time, there are still problems to be solved. First of all, there is the overload of container transhipment in Ukrainian ports, where sea vessels are processed first, and the limited possibilities of container accumulation. Secondly, there is a long transit declaration processing period at Galata and delays in processing barges at the DP World container terminal in Constanta, where loading and unloading operations are often carried out without proper planning," Moskalenko said. However, he expressed confidence that despite the temporary difficulties, the direction of container transport on the Danube will continue to develop. In June, UDP carried out the first container roll on the Izmail-Konstanza-Izmail route, consisting of the self-propelled vessel "Captain Shirkov" and five barges with a total capacity of 300 TEU. PJSC "UDP" carries out river cargo transport on the Danube and sea cargo transport. The river cargo fleet includes 75 self-propelled and 245 non-self-propelled vessels. The sea cargo fleet consists of seven vessels with an own weight of 3.3-4 thousand tons (six dry cargo vessels of the type "Izmail" and one "Desna" tanker). The basis of the cargo is metallurgical raw materials supplied to the Danube countries. The company's river passenger fleet is represented by vessels "Moldova", "Ukraine", "Dnipro" and "Volga". In 2021, the UDP fleet increased cargo transport by 3.8% compared to 2020 - to 1.37 million tons. In particular, transport by the UDP river fleet decreased last year by 0.9% to 1.08 million tonnes.

Source: https://www.blackseanews.net/read/194395

Turkey has developed the first unmanned military boat with electronic warfare functions

The Turkish defence industry has developed the world's first unmanned maritime boat with an electronic warfare system. The head of Turkey's Defence Industry Department, Ismail Demir, wrote about this on social media, reports Anadolu. In the wake of attack drones changing warfare tactics, Turkey has implemented an ambitious new project to create the world's first unmanned aerial surface attack vehicle, Demir wrote. "MARLIN SİDA is the world's only unmanned military craft with electronic warfare capability. Turkey is a power that is not lagging behind, but ahead," Demir stressed. The project was implemented by the

flagship of the Turkish defense industry - ASELSAN and the Sefine Shipyard Defense Shipyard (SEFİNE Shipyard) in Yalova province. MARLIN is planned to be used for military purposes both offshore and on the high seas.

Source: https://www.blackseanews.net/read/194419