

MS Daily Brief -17 August 2022

The Maritime Security Forum is pleased to provide you with a product, in the form of a newsletter, through which we present the relevant events and information on naval issues, especially those related to maritime security and other related areas. It aims to provide a clear and concise assessment of the most recent and relevant news in this area, with references to sources of information. We hope this newsletter will prove to be a useful resource for you, providing a comprehensive insight into the complicated context of the field for specialists and anyone interested in the dynamics of events in the field of maritime security.

Tables of contents

ROMANIA

Ukrainian Minister of Infrastructure: Sulina canal shipping halfway

UKRAINE

Largest bulk carrier convoy since start of operation moved through grain corridor

RUSSIA

Russian Black Sea fleet continues to support land offensive with cruise missiles

New commander of the Black Sea Fleet

Russia has almost blocked the market for coal supplies at sea

Crimean shipbuilding factory to launch production of military marine equipment

Black Sea Fleet is 'cramped' in Crimea and has no effective control of the sea – British intelligence

Russia unveils new stealth missile submarine

INTERNATIONAL

Iranian navy chief: Our fleet is preparing for a large-scale naval mission this year

LM2500 engines to power India's first indigenous aircraft carrier

UN resumes work on the high seas protection treaty

Battery power surplus: ESS grows in the maritime sector

Veteran Barge Company warns that shipments on the Upper Rhine River are at risk

ROMANIA

Ukrainian Minister of Infrastructure: Sulina canal shipping at half

At a press conference in Kiev, Ukrainian Infrastructure Minister Olexandr Kubrakov explained the difficulties his country is facing in exporting products on the Danube.

“The Sulina Canal is the most important route for us if we talk about exporting our agricultural products from the ports we have on the Danube. We depend essentially on this canal.

The problem is that in the bilateral agreement with Romania we have specified that we will pass at least 8 ships a day through the Sulina Canal to the Black

Sea. Unfortunately, we have only achieved this level of traffic once so far. As a rule, almost every day, we have less than 4 shipments passing through. About two, three a day, and this is a big problem for us.

We understand the Romanian side. We understand that there is a problem with hiring new workers to help speed up shipments. I hope this problem will be solved. It is an important one for us. Particularly until the opening of our Black Sea ports, this was our most important export route, and our only option in this region. I hope that Romania will help us, but at the same time it is also advantageous for Romania, because, let's be honest, increased transit brings higher revenues to your country as well," the minister said at a press conference in Kiev.

Olexandr Kubrakov: Yes, we talk almost every week, in some periods even daily we are in contact with the Romanian side. We are trying to help, and we have even proposed to temporarily offer qualified staff to speed up shipments on the Sulina canal while Romania is trying to hire Romanian staff. We have offered different options, but I hope that Romania will be able to make those hires.

Source: <https://newsweek.ro/economie/exclusiv-ministrul-ucrainean-al-infrastructurii-transportul-naval-prin-canalul-sulina-la-jumatate>

UKRAINE

Largest bulk carrier convoy since start of operation moved through grain corridor

On Tuesday, 16 August, five merchant vessels departed from the Chornomorsk and "Pivdenny" seaports, sailing through the grain corridor in accordance with the "Initiative for the Safe Transport of Grain and Food Products from Ukrainian Ports". This was reported by the press service of the SE "Administration of Sea Ports of Ukraine", writes the publication Porta Ukrainy.

Two ships left the port "South". Brave Commander (Liberian flag) is carrying 23,300 tons of wheat for Africa. The ship is chartered by the United Nations World Food Programme. The ship has left for the port of Djibouti. The second vessel is the panamax Bonita (Liberia flag), which is bound for South Korea with a cargo of 60,000 tonnes of maize.

A further 27.3 thousand tonnes of wheat and maize have been sent through the grain corridor from the port of Chornomorsk. In particular, the bulk carrier Osprey S (flag Liberia) – one of the first ships to enter Ukrainian ports after the signing of the Istanbul Initiative – is heading for the Bosphorus, as well as the bulk carriers Propus (flag Panama) and Ramus (flag Cook Islands).

"The new week starts very rhythmically. The 7th convoy of 5 ships is the largest in terms of number of bulk carriers, with a total volume of 110,000 tonnes, bound for 4 countries of the world. A total of 21 ships left Ukrainian ports during the 16 days of the grain corridor operation. We are working hard to increase the intensity of the corridor at the entrance to the ports of Greater Odessa", said Acting Director Oleksiy Vostrikov, President of the State Enterprise "AMPU". On 22 July, representatives of Ukraine, Turkey and the

United Nations signed the “Initiative for the Safe Transport of Grain and Food Products from Ukrainian Ports” in Istanbul, which aims to partially unblock the Ukrainian seaports of Odessa, Chornomorsk and Pivdenny. for grain and fertiliser exports. In addition to those today, as part of the implementation of the agreements, 16 ships left the ports of Odessa, Chornomorsk and “Pivdenny” in August, exporting more than 450 thousand tonnes of agricultural products to 9 countries of the world.

Source: <https://www.blackseanews.net/read/193174>

RUSSIA

Russia’s Black Sea fleet continues to support land offensive with cruise missiles

Russia’s Black Sea fleet continues to use long-range cruise missiles to support its ground offensive in Ukraine, the British Ministry of Defence said on Tuesday, Reuters reports.

According to the ministry, the Russian fleet is currently making efforts to exercise effective control at sea.

Patrol operations are generally limited to the waters around the Crimean peninsula, which Russia annexed in 2014, and Russian surface ships continue to hold highly defensive positions, the London-based Ministry of Defence’s Twitter feed said.

The current limited effectiveness of the Russian fleet undermines Moscow’s invasion strategy, partly because the threat to the Ukrainian port of Odessa from amphibious vehicles is now largely neutralised, the UK ministry adds.

On 24 February, Russia unleashed unprovoked and unjustified military aggression against Ukraine. Moscow claims it is a “special military operation to denazify” the neighbouring country and protect the Russian-speaking community in eastern Ukraine.

Ukraine currently relies mainly on heavy arms supplies from the West to defend itself.

Source: https://www.defenseromania.ro/ucraina-flota-rusa-din-marea-neagra-sprijina-in-continuare-ofensiva-terestra-cu-rachete-de-croaziera_617732.html

New commander of the Black Sea Fleet



Viktor Nikolayevich Sokolov (born 4 April 1962) is an officer in the Russian Navy. He currently holds the rank of vice-admiral and is head of the N. G.

Kuznetsov Naval Academy as of 2020.

Sokolov began his naval service after graduating from M.V. Frunze Higher Naval School in 1985 and was commissioned to serve in the Pacific Fleet. He began his career as a torpedo department commander aboard the frigate SKR-61 (Riga class) and later commanded a minesweeper. After further studies he returned to the Pacific Fleet as chief of staff of a minesweeper division and was soon appointed to command the division.

After graduating from the N. G. Kuznetsov Naval Academy in 1998, Sokolov became head of the Pacific Fleet's operations section, chief of staff and then commander of a surface ship brigade.

He attended further training at the Military Academy of the General Staff of the Armed Forces, and upon graduation in 2006, he became deputy commander, then commander of the Primorsky Flotilla. In 2012 he moved to the Northern Fleet and took command of the Kola Flotilla.

In August 2013 he was appointed Deputy Commander of the Northern Fleet. In 2016, as deputy commander, Sokolov was in charge of a Northern Fleet detachment sent to participate in operations off the coast of Syria during the Russian intervention there. After several months of operations, Sokolov returned with the task force to fleet bases in northern Russia.

In January 2020, he left his post as deputy commander of the Northern Fleet to take up his new role as head of the N. G. Kuznetsov Naval Academy.

Russia has almost blocked the market for coal supplies at sea

After the embargo on the supply of Russian coal came into force, a ban was also introduced on European companies providing insurance and other financial services relating to the transport of coal around the world. This explanation was given by European Union authorities, reports ghall.com with reference to Bloomberg.

Mike Salthouse, head of the International Group of P&I Clubs, explained that any transport of Russian coal by European companies is considered illegal. Even if the shipowner has loaded coal in the Russian Federation and wants to send it to a third country outside the European Union, the transaction will still be considered illegal. The European Commission added that transactions of purchase, transport and shipment in any form would be in breach of the sanctions imposed. The ban applies to any final destination of the goods. For insurance companies, this came as a surprise. Included in the International

The Group of P&I Clubs (IG) organisations which provide insurance services to 90% of the world's shipping said the latest explanation from the European Commission changes the picture of the sanctions previously imposed. Now, the participation of any EU company in the transport of Russian coal, fertiliser and other minerals anywhere in the world will be a violation of the sanctions

regime.

The ban also applies to all insurance and reinsurance services, on which many global companies depend heavily. As a reminder, it was reported earlier that the UK government has published a document that plans to introduce an embargo on the import of coal, oil and gold from Russia. In addition, we previously reported that Indian cement company Ultratech began buying Russian coal in June.

Source: <https://www.blackseanews.net/read/193172>

Crimean shipbuilding plant to launch production of military marine equipment

The Russian-captured “More” shipyard in Feodosia (Crimea) is to become one of the leading producers of marine structures made of steel, aluminium and composite alloys. This was stated by the general director of SA “United Shipbuilding Corporation” Rakhmanov, reports Korabel.ru.

“Of course, More shipyard will be, first of all, the main producer of marine solutions – [alloy structures] steel, aluminum, composite,” Rakhmanov said. Also, according to the USC chief, it is planned to launch production of military marine equipment at the More plant.

In March 2022, Rostec State Corporation transferred the More shipyard in Feodosia to USC. It should be recalled that the More shipyard (Feodosia, occupied Crimea) is on the sanctions lists of Ukraine and the United States.

Detailed information on sanctions can be found in the Database of legal entities against which Ukraine, the EU and the US have imposed sanctions in connection with Russia’s aggression against Ukraine.

More Shipyard specialises in the construction of high-speed vessels and vessels with dynamic lifting principles: hydrofoils, hovercraft, air cavity, gliders, pleasure yachts and aluminium-magnesium alloy hulls.

Source: <https://www.blackseanews.net/read/193161>

Black Sea Fleet is ‘crammed’ into Crimea and has no effective control of the sea – British intelligence

Russia’s Black Sea Fleet ships continue to take an extremely defensive posture, with patrols usually limited to the area of water within sight of the Crimean coast. This is stated in the British intelligence daily report, writes European Truth.

“This contrasts with the increased activity of Russian naval forces in other seas typical for this time of year,” the message points out. It is also reported

that the Russian Black Sea Fleet continues to use long-range cruise missiles to support land-based offensives, but is currently experiencing difficulties in effectively controlling the sea.

“It has lost its flagship Moskva, a significant number of naval aviation combat aircraft and control of Snake Island,” the report said. British intelligence indicates that the limited effectiveness of the Russian Black Sea Fleet undermines Russia’s overall invasion strategy, in part because the naval threat to Odessa is now largely neutralised. “This means Ukraine can redirect resources to put pressure on Russian ground forces elsewhere,” the report says.

Russia unveils new stealth missile submarine



Nuclear weapons are Russia’s ultimate insurance policy against NATO intervention in Ukraine. As their importance is emphasised, details of a new ballistic missile submarine have been revealed.

The design, with hints of the latest Western thinking, represents the next generation after the Borei class.

Russia’s Rubin submarine design bureau unveiled the latest design of a ballistic missile submarine (SSBN) at the 2022 Army Defence Exhibition. The new submarine, named “Arcturus” (Арктур) after the brightest star in the northern celestial hemisphere, has a radical design. The most striking design element is that it has a sloping outer hull with angled sides and blended lines. It has a side profile, similar to a modern stealth aircraft. However, the Arcturus design takes this further than most by adding a sloping outer hull. This matches similar ideas in other countries for deflecting active sonar. This is

reminiscent of the German-designed Type 212CD, which is built for Germany and Norway, and the British Dreadnought-class ballistic missile submarine.

The angled outer casing, designed against active sonar, would be accompanied by traditional stealth against passive sonar. This involves fitting anti-phononic insulation material to isolate noise sources. There would also be anechoic coatings outside the pressure housing. Russian anechoic coatings are complex and are widely used on their submarines.

The submarine has 12 missile silos. These are large enough for nuclear-armed ballistic missiles, which seems to be the primary mission. But one of the tubes has a launch and recovery mechanism for a medium-sized AUV (autonomous underwater vehicle). This implies a multi-role capability.

With 12 tubes it is smaller than current SSBNs, but other submarine builders are going in the same direction. As missiles become more powerful, the number needed to ensure unacceptable losses to an enemy becomes smaller. In addition, missiles are incredibly expensive to manufacture and maintain.

Surrogate-V underwater drone



A new feature, not seen on previous models, is that two (possibly 3) specialized AUVs are carried.

Aft are seen 3 large free-floating hangars for the Surrogat-V (Cypporat-B) AUVs. These companion AUVs are designed to operate in conjunction with the Arcturus submarine. Previous AUV models for the Rubin using the Surrogat name were designed as decoys and training devices. It is claimed that they can replicate the signatures of other submarines. However, the Surrogat-V appears to be an anti-submarine warfare drone. It has a relatively large conformal sonar array and a pumpjet thruster, suggesting high underwater speeds.

It is also equipped with SOKS (System Obnarujenia Kilvaternovo Sleda), a non-acoustic submarine detection system. This detects chemicals and

radiation left behind by a submarine to help track it. Russia and the UK are both deploying similar systems for this. The inclusion of SOKs implies that the AUV is intended for anti-submarine warfare.

Another new model on display was the E-Amur (E-Amyp) design. This is a very small submarine. The side sonar antennas are located on the outside, implying a single hull construction, similar to existing Lada/Amur class designs. Four torpedo tubes are carried. Perspectives for the Arcturus submarine Rubin has a long tradition of building impressive submarines. They designed the Typhoon class, still the largest submarine ever built. And the Borei class, which replaces all the older ballistic missile submarines (SSBNs), is too. So it's not surprising that their design concepts are ambitious and represent cutting-edge thinking. But the chances of Arcturus being built seem slim. The design is more of a company proposal than a selected project, otherwise it would have a project number. And Russia's current economic situation and extensive delays in current submarine construction do not bode well for it. But the design is interesting in itself. And it shows the direction of thinking among Russian submarine designers. There may be hints of future designs that could actually end up in the water. Russian submarine designers will do their best to keep up with the West, on paper if not in achievements.

Source: <https://www.navalnews.com/naval-news/2022/08/russia-reveals-radical-new-stealth-missile-submarine/>

INTERNATIONAL

Iranian navy chief: Our fleet is preparing for a full-scale naval mission this year

Iranian Navy Commander-in-Chief Vice Admiral Shahram Irani said the Iranian navy should be present in all the planet's oceans. To this end, according to Irani, new ships of different classes are being built in the Navy.

Shahram Irani said at the Sea Day ceremony: We are doing this to defend Iran's interests because we clearly see that our interests are increasingly being violated. According to the admiral, among other things, large ships will be built, which will become real floating naval bases.

The Commander-in-Chief of the Iranian Navy also said that Iran is preparing for a major naval mission. He did not specify what this mission would be, but added that it would be implemented by the end of this year.

Irani stressed that Tehran does not want war, but if Iran's opponents are doing everything they can to trigger it, then the Iranian Navy can only react to it. It was noted that, among other things, Iran will develop a fleet of unmanned vehicles, which will include promising marine drones, including underwater vehicles.

The experts, commenting on the statement about the "Iranian naval mission to be carried out in 2022", express various hypotheses, including the assumption that Iranian ships could be heading to one of the US naval bases "to display the flag" and we could be talking about a base that is not located in the Middle

East region. However, so far all this is nothing more than wishful thinking.
Source: <https://topwar.ru/200354-glavkom-vms-irana-nash-flot-gotovitsja-k-masshtabnoj-voenno-morskoj-missii-v-jetom-godu.html>

LM2500 engines to power India's first indigenous aircraft carrier

The Indian Navy's newest aircraft carrier, Vikrant, has been commissioned with four LM2500 engines powering the ship with 88 MW, giving it a top speed of 28 knots.

The addition of Vikrant to the Indian Navy's fleet is a significant achievement for the government's 'Made In India' initiative, as 76% of the content is indigenous, adding India to an elite group of Indigenous Aircraft Carrier (IAC) nations. With the commissioning of Vikrant, the Indian Navy has 18 GE Marine engines in service, with additional engines in production to support the ongoing construction of the Project 17A vessel. The IAC project began in 2007, and when it was selected, GE Marine announced that the LM2500 marine gas turbines would power the vessel and be built by Indian partner Hindustan Aeronautics Limited (HAL). The 262-metre long carrier has 14 decks, can accommodate a crew of 1,700 and is capable of operating 30 aircraft.

Vikrant has undergone four phases of sea trials of major equipment and systems between August 2021 and July 2022. "On this monumental day for the Indian Navy, having commissioned their first indigenous aircraft carrier, GE Marine is proud to be the power behind its propulsion. We are committed to supporting India's indigenous military programs through our long-standing relationships in the country." Kris Shepherd, Vice President and General Manager, GE Marine For more than 30 years, GE has partnered with HAL, which assembles, inspects and tests all LM2500 gas turbines built for the Indian Navy.

The LM2500 gas turbines were manufactured by GE Evendale, Ohio, and assembled and tested by HAL's industrial and marine gas turbine division in Bangalore, India. HAL is one of the world's leading aerospace companies involved in the manufacture and maintenance of aircraft, helicopters, avionics and aerospace defense equipment.

With the world's most dominant gas turbine is from GE Indian Navy and 39 other navies around the world benefit from worldwide support, either on land or at sea, and interoperability benefits with other allied ships. GE has delivered gas turbines aboard 633 naval vessels worldwide and supplies 95% of the propulsion gas turbines commissioned in the US Navy fleet. With the LM2500's outstanding track record of operation, coupled with its ease of maintenance and global support, the LM2500 continues to be the gas turbine of choice for the world's navies.

Source: <https://www.navalnews.com/naval-news/2022/08/lm2500-engines-to-power-indias-first-indigenous-aircraft-carrier/>

UN resumes work on the high seas protection treaty

The United Nations this week resumes negotiations on the decade-long Treaty of the High Seas. The talks will follow on from progress made in March, when delegates met for the fourth time at UN headquarters in New York to finalise the legally binding treaty. The March meeting featured elaborate joint proposals and serious negotiations, both of which had been permanently lacking in previous rounds, indicating the UN's commitment to having an operational Free Sea Treaty in the near future.

The High Seas, also known as international waters, comprise the most important part of the ocean. In fact, two-thirds of the world's oceans are now considered international waters, which means that all countries have the right to fish, transport and research there.

Negotiations recognise international waters as being more than 320 kilometres (200 miles) from any shore. Yet despite being teeming with life and supporting diverse ecosystems essential to life on earth, only 1.2% of these open seas are currently protected. In addition, the ecosystems of the high seas are poorly documented, raising concerns among ecologists that some creatures could disappear before they are discovered. Marine life on the high seas is also increasingly exposed to threats from climate change, overfishing and maritime traffic. "This treaty is of major importance because it will provide a framework – a compass – for the principles and rules that guide the entire international community in managing this common space," said Julien Rochette, researcher at the Institute for Sustainable and International Development. Related links (IDDRI). During this round of negotiations, which runs until 26 August, delegates will perform a difficult balancing act. On the one hand, a compromise must be made on protecting the ocean and regulating human activities, while preserving the freedoms on the high seas guaranteed by the Law of the Sea.

Some of the notable texts in the proposed high seas treaty that will be tabled for final agreement include the creation of area-based management tools and marine protected areas. However, delegates will need to agree on how the Free Sea Treaty will interact with other regional organisations already managing specific activities in the high seas to provide holistic protection of the oceans. In addition, delegates aim to finalise the strategy for sharing the benefits derived from the exploitation of marine resources – i.e. ocean plant, animal and other organisms that may be commercially or scientifically valuable.

The Law of the Sea states that all nations must benefit equitably from marine genetic resources.

Source: <https://www.maritime-executive.com/editorials/un-resumes-work-on-treaty-to-protect-the-high-seas>

Surplus battery power: ESS grows in the maritime sector

Ask the right government department in any G7 country and you'll find funding to put powerful batteries on your ship. Beyond funding, new battery manufacturers and system integrators are solving safety issues, and a growing number of giga-sized cell factories offer hope of lowering the cost of maritime energy storage as ESS choice grows. Efforts are also underway to recycle rare earth elements and to increase or green the astonishingly high power consumption of plants.

In addition to funding, drivers for change include transport constraints in emission-free areas such as Norway's fjords, German ports, the EU Climate Agenda, UN climate protocols and IMO rules! Into this ambiguity lie the grid operators of wind farms who insist on clean shipping for service vessels, including fuel cell to convert hydrogen to propulsion and station power to recharge batteries. Also in the mix is a brand new ESS supply chain.

When this writer wrote about Siemens robots assembling marine batteries in Norway (three years ago), the battery management software (BMS); cells and module stacks, units and electrical switches seemed separate from each other. Today, cell manufacturers either have their own BMS or that of a supplier, and integrators can choose ESS.

Heat" issues

BMS is essential because the whole developing sector behind the marine ESS is still struggling with the causes of unexplained battery fires or thermal runaway (TR). The battery's own electromagnetic interference, or EMI, could be a cause, and if so, then BMS offers a hope of total control, while itself having to be immune to EMI.

Continued: <https://www.marinelink.com/news/batteryelectric-surge-ess-scales-maritime-498754>

Veteran Barge Company warns that shipments on the Upper Rhine River are at risk

A shipping company on the Rhine has said its business on the Upper Rhine is at risk as water levels drop. Of the approximately 150 tank barges that Jaegers Group has on the river, no more than about 10% could carry cargo through the key Kaub waypoint, with the water mark at 30 centimeters (11.8 inches).

Currently, the figure at that point on the river is 32 centimeters.

A further drop below 20 centimetres at the Kaub – south of Cologne – could completely destroy company operations passing through that point.

“Neither our ships, nor any ship that I know of, can go below Kaub 20,” said Gunther Jaegers, managing director of Reederei Jaegers GmbH, referring to cargo ships.

Low water on the Rhine is threatening Germany’s economic growth and the Kaub is being closely watched because it is narrow and shallow and barges need to pass that point to access parts of southern Germany and Switzerland. At least one shipping company uses trucks to transport goods inland. The water mark at Kaub, which is used by operators to calculate fishing, is expected to remain in a range of 31-34 inches until early Saturday morning local time, according to the latest government data.

“Even under difficult shipping conditions, inland waterway transport does its utmost to ensure the supply of goods and raw materials to businesses and industry,” Martin Staats, president of the Federal Association of German Inland Transport, said in a statement.

“Dangers are taken to the limit of what is physically possible – and as long as safety is guaranteed.”

Source: <https://gcaptain.com/veteran-barge-company-warns-upper-rhine-river-shipment-at-risk/>