NAVY NEWS WEEK 33-5

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USS Kennedy Ford-Class Aircraft Carrier Hits New Construction Milestone

The USS Kennedy will replace the USS Nimitz, which is due to retire by 2027. by Kris Osborn

July 2, 2022



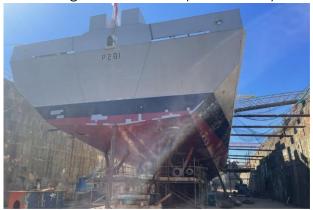
Image: Wikipedia.

The U.S. Navy's second Ford-class aircraft carrier, the USS Kennedy (CVN 79), has reached a new milestone and is surging toward operational status alongside the USS Gerald R. Ford (CVN 78). According to a recent statement from Huntington Ingalls Industries (HII) shipbuilders, after many years of construction, workers have now installed

more than 9.8 million feet of cable (over 1,800 miles) on the **Kennedy** and have turned over the 1,000th compartment to the crew. This will permit the **Kennedy**'s sailors to access the ship for training purposes while construction and testing are ongoing elsewhere on board the ship. HII ship developers have been employing a new construction strategy for the Kennedy, including a handful of techniques intended to lower costs and incorporate lessons learned from the building of the first Ford-class carrier, the USS Gerald R. Ford. With so much of the ship built, hundreds of structural units have been completed on items such as pipe assemblies, cabling, shafts, rudders, and struts for the ship. The USS Kennedy will replace the USS Nimitz, which is due to retire by 2027; the Ford-class carriers are slated to incrementally replace the existing Nimitz-class carriers on a one-to-one basis over the next fifty vears or so. One of the techniques used for the Kennedy's construction has included efforts to assemble compartments and parts of the ship together before moving them to the dock, greatly expediting construction by allowing builders to integrate larger parts of the ship more quickly. This technique, referred to by HII developers as "modular construction," was also used when building the **Ford**; the process welds smaller sections of the ship together into larger structural "superlift" units before being lifted into the dry dock, HII statements explained. Construction begins on the bottom of the ship and works up with inner-bottoms and side shells before moving to box units, HII explains. Also, some of the design methods now used for the Kennedy include efforts to fabricate or forge some parts of the ship—instead of casting them—because it makes the process less expensive. As for the design, the **Kennedy** will be largely similar to the **Ford**'s design, with a few minor alterations. The **Kennedy** will receive a new radar and its aircraft elevators will use electric motors instead of a hydraulic system to reduce costs. The Navy plans to test and operate a new, highlysensitive ship-defence radar technology for its second Ford-class aircraft carrier—to detect incoming enemy fire, anti-ship cruise missiles, and airborne threats such as attacking drones, fixed-wing aircraft, and helicopters. The new radar, called the Enterprise Air Surveillance Radar, or EASR, is slated to be installed on the now-underconstruction **Kennedy**, as well as several of the service's amphibious ships, such as the LX(R) amphibious warfare ship and its third big-deck America-class amphibious Source: https://nationalinterest.org assault ship, LHA 8.

UK: Repairs of the Royal Navy's River class OPV Tyne are progressing

<u>Naval News August 2022 Navy Forces Maritime Defense Industry</u> Posted On Thursday, 11 August 2022 17:17 According to information published by the UK MoD on August 11, 2022, the refit



period of the Royal Navy's River class Offshore Patrol Vessel **HMS Tyne** is progressing.

River class offshore patrol vessel **HMS Tyne** (Picture source: UK MoD)

HMS Tyne is a River-class offshore patrol vessel built by Vosper Thornycroft in Southampton for the Royal Navy to serve as a fishery protection unit within the United Kingdom's waters along with

her two sister ships Mersey and Severn. All three were commissioned into service in 2003 to replace the five older Island-class patrol vessels. The River class is a class of offshore patrol vessels built primarily for the Royal Navy of the United Kingdom. A total of nine were built for the Royal Navy (RN), four Batch 1 and five Batch 2. The River class are significantly larger than the Island-class vessels and have a large open deck aft allowing them to be fitted with equipment for a specific role, which can include fire-fighting, disaster relief, and anti-pollution work. For this purpose, a 25tonne (25-long-ton; 28-short-ton) capacity crane is fitted. In addition, the deck is strong enough for the transport of various tracked and wheeled light vehicles or an LCVP. The class is primarily used with the Fishery Protection Squadron and EEZ patrol. **Source: https://www.navyrecognition.com**

Russia Reveals Radical New Stealth Missile Submarine

Nuclear weapons are Russia's ultimate insurance policy against NATO intervention in Ukraine. As their importance is emphasised, an ambitious new ballistic missile submarine has been revealed. The design, with hints of the latest Western thinking,



represents the next generation after the Borei class.

The Russian ship design bureau Rubin has revealed its latest advanced submarine concept, the '*Arctic*'. Original illustration based on analysis of official models, for NavalNews.com

Russian submarine design bureau Rubin has unveiled its latest design for a ballistic missile submarine (SSBN) at

the Army 2022 defence expo. The new boat, named '**Arcturus'** (Apktyp) after the brightest star in the northern celestial hemisphere, is a radical design. Most striking about the design is that it has an angled outer hull with sloping sides and blended lines. It has a chine running all the way along the side, resembling a modern low-observable aircraft. Submarines are, by their nature, stealthy. The Arcturus design takes this further than most however, adding an angled outer hull. This matches similar ideas in other countries for deflecting incoming active sonar. This is

reminiscent of the German-designed Type-212CD which is being built for Germany and Norway. And the British Dreadnought Class ballistic missile submarine. The angled outer hull, designed against active sonar, would be accompanied by traditional passive-sonar stealth. This involves mounting the machinery on rafts, to isolate sources of noise. There would also be anechoic coatings outside the pressure hull. Russian anechoic coatings are complex and are used extensively on their submarines. The submarine has 12 missile silos. These are large enough for nucleararmed ballistic missiles, which appears to be the primary mission. But one of the tubes is displayed with a launch and retrieval mechanism for a medium-sized AUV (autonomous underwater vehicle). This implies a multi-role capability. 12 tubes is fewer than current SSBNs but other submarine builders are going in the same direction. As the missiles get more potent, the number required to ensure unacceptable losses for an enemy gets fewer. Additionally the missiles are incredibly expensive to manufacture and maintain. **Source: Naval Today**

UN Resumes Work on Treaty to Protect the High Seas

The United Nations is resuming negotiations this week on the High Seas Treaty that has been dragging on for a decade. The discussion will be a continuation of the progress made in March when delegates met for the fourth time at UN headquarters in New York to finalize the legally binding treaty. The meeting held in March featured elaborate joint proposals and earnest negotiations, both of which have been perennially missing in the previous rounds, pointing to a commitment by the UN to have an operational High Seas Treaty in the near future. The high seas, also commonly referred to as international waters, comprises the most significant part of the ocean. In fact, two-thirds of the world's oceans are currently considered international waters, which means all countries have a right to fish, ship, and do research there. The negotiations recognize international waters as being more than 320 kilometres (200 miles) from any shore. Yet, despite teeming with life, and supporting diverse ecosystems critical to life on earth, only 1.2 percent of these high seas are currently protected. In addition, ecosystems in the high seas are poorly documented, raising concerns among conservationists that some creatures could become extinct before they are discovered. Marine life in the high seas is also increasingly being exposed to threats of climate change, overfishing, and shipping traffic. "This treaty is of major importance because it is going to provide a framework a compass – for the principles and rules guiding the entire international community in managing this common space," said Julien Rochette, a researcher with the Institute for Sustainable Development and International Relations (IDDRI). During this round of negotiations, which runs through to August 26, delegates will be performing a tricky balancing act. On one hand, a compromise has to be made on protecting the ocean and regulating human activities, while also guarding freedoms on the high seas guaranteed in the Law of the Sea. Some of the notable texts in the proposed High Seas Treaty that will be tabled for the final agreement include the creation of area-based management tools and marine protected areas. However, delegates will have to agree on how the Treaty of the High Seas will interact with other regional organizations already managing some specific activities on the high seas to offer holistic ocean protection. Further, the delegates' goal is to finalize the strategy to share benefits derived from the exploitation of marine genetic resources - namely materials from ocean plants, animals, and other organisms that may be commercially or scientifically valuable. The Law of the Sea provides that all nations must fairly benefit from marine genetic resources. Source: Maritime Executive

HII hits significant milestone in construction of new Virginia class sub

Naval News August 2022 Navy Forces Maritime Defense Industry

Posted On Thursday, 11 August 2022 15:07

According to information published by Huntington Ingalls Industries on August 11, 2022, the company shared that its Newport News Shipbuilding division has achieved a significant milestone in the construction of the Virginia-class submarine



About the Virginia class submarines

Massachusetts (SSN 798).

Future Virginia class submarine **USS Massachusetts** (Picture source: HII)

Shipbuilders working on Massachusetts recently reached pressure hull complete, meaning that all of the hull sections were joined to form a single, watertight unit. This is the last major construction milestone before the submarine is launched.

The Virginia class, also known as the SSN-774 class, is a class of nuclear-powered cruise missile fast-attack submarines, in service in the United States Navy. Designed by General Dynamics Electric Boat (EB) and Huntington Ingalls Industries. Virginiaclass submarines incorporate dozens of new technologies and innovations that increase firepower, manoeuvrability and stealth to significantly enhance their warfighting capabilities. These submarines are capable of supporting multiple mission areas and can operate at speeds of more than 25 knots for months at a time. The Virginia-class submarine has a length of 114.8 m, and a beam of 10.36 m. The submarine can reach a top speed of 28 miles per hour (45 km/h). She has a crew of 132 people including 15 officers and 117 enlisted. The Virginia Class is equipped with twelve Vertical Launch System (VLS) tubes and four torpedo tubes (starting with SSN 784 North Dakota [Block II], the 12 VLS tubes are replaced by 2 large-diameter payload tubes). The submarines also carry Mk 48 ADCAP Torpedoes, UGM-109 Tomahawk cruise missiles, Mk 60 CAPTOR mines, advanced mobile mines, and unmanned underwater vehicles. Source: https://www.navyrecognition.com

Russian Buyan class M corvette Grad to begin sea trials

Naval News August 2022 Navy Forces Maritime Defense Industry

Posted On Thursday, 11 August 2022 15:35

According to information published by Top War on August 11, 2022, the tenth Project 21631 (Buyan-M) **Grad** corvette will soon join the Baltic Fleet. The ship has begun its



transition to the delivery base of the Baltic Fleet.

Russian Buyan class M corvette **Grad** (Picture source: Top War)

According to the report, on August 10, 2022, the Buyan class M corvette Grad left the preconstruction wall of the Zelenodolsk Shipyard and went in tow to Kronstadt, where the delivery base of the Baltic Fleet is located. Soon the 11th corvette of this project which is under construction in Zelenodolsk will be delivered to the delivery base. To date, the Russian Navy has nine Project 21631 (Buyan-M class) corvettes, two of which are being completed in Zelenodolsk and one has left for testing. In more detail, the tenth Grad went to the Baltic, the eleventh "Naro-Fominsk" and the twelfth "Stavropol" are being completed in Zelenodolsk. "Naro-Fominsk" the fleet will receive in 2022, "Stavropol" - in 2023. This will conclude the series of small missile ships of this project. The **Grad** is a Buyan-M-class guided missile corvette Russian designation 21631. Laid down in April 2015. She was launched in April 2020 and commissioned in January 2021. The ship is primarily designed for operations within littoral zones to protect Russia's vast coastal areas. The Buyan-Mclass corvette is powered by CODAD (Combined diesel and diesel) propulsion system that includes four Zvezda M520 developing 14,584 shp (10,880 kW) and Kolomna Diesel, Pumpjet. She can reach a top speed of 26 knots (48 km/h) with a maximum cruising range of 2,300 nmi (4,300 km) at 12 knots. She has a length of 75 m, a beam of 11 m, and a displacement of 949 tons. The corvette has a crew of 52 sailors and an endurance of 10 days. The corvette is armed with 100 mm A-190-01 naval gun, two 30 mm AK-630-M2 CIWS (Close-In Weapon System), Pantsir-M CIWS (Stavropol) air defence missile system, height UKSK VLS (Vertical Launching System) cells for Kalibr or Oniks anti-ship cruise missiles, eight Komar surface-to-air missiles, one DP-65 anti-saboteur grenade launcher and two 14.5 mm KPV type anti-aircraft fourbarrel machine guns. Source: https://www.navyrecognition.com

Finland, Estonia Talk Joint Coastal, Air Defense, Plans to Turn Baltic into 'Internal NATO Sea'

Helsinki formally completed NATO accession talks last month, with alliance leaders agreeing to invite the Nordic nation and its neighbour Sweden into the bloc. The matter is now up for ratification by alliance countries' parliaments, with lawmakers from 23 of the alliance's 30 members approving the applications to date. Estonia joined NATO in 2004.

Estonia and Finland are discussing the possibility of joint coastal and air defences, with the Baltic Sea to become the 'internal' waters of NATO once Helsinki and



Stockholm join the bloc, Estonian Defense Minister Hanno Peykur has said.

The minehunter **EML Ugandi (M315)** from Estonia, part of the NATO mine countermeasures group SNMCMG 1, sails through the sea channel to the naval base. **Photo: Bernd Wüstneck**

"We need to integrate our coastal defences. The flight range of Estonian and Finnish missiles is greater than the

width of the Gulf of Finland. This means that we can connect our missile defences and share all our information with each other," Pevkur said, speaking to Finnish media on Friday during a working visit to the country. Estonia ordered Blue Spear sea-skimming anti-ship missiles from Israel last year. Manufactured by Israel Aerospace Industries, the missiles have a 290 km range. Finland, for its part, uses Swedish-made MTO 85M anti-ship missiles with a range of over 150 km as the backbone of its coastal defences. Pevkur also hinted at the need for a joint air defence between the Gulf neighbours. "Finnish airspace cannot be protected if Estonian airspace is not protected at the same time, and vice versa. Fighter jets cross the 80-kilometer-wide Gulf of Finland in minutes," he said. On this point, Pevkur congratulated his Finnish hosts over Helsinki's recent decision to purchase Lockheed Martin F-35s. "We are acquiring anti-tank missiles, new coastal defence missiles, HIMARS rocket launchers from the United States, and so on. Next week, the government will discuss the acquisition of a new medium-range missile system and new anti-aircraft missiles. There must be equipment for the troops," Pevkur said, referring to Estonia's own defence spending activities. The minister expressed confidence that ultimately, once Finland and Sweden join the Western alliance, the Baltic Sea "will be NATO's internal sea." Finland and Sweden moved to apply for NATO membership in May on the heels of the escalating of the crisis in Russia-West relations over Ukraine. The matter is now before the parliaments of the alliance's 30 members. Lawmakers from 23 countries have rubberstamped the motion, with Turkey, Greece, Spain, Portugal, the Czech Republic, Slovakia, and Hungary yet to do so. Last week, the Atlantic Council indicated that Turkey could postpone ratifying Finland and Sweden's bids for NATO membership until after elections in June 2023, plus proof from Helsinki and Stockholm of substantive steps by the countries to halt cooperation with the Kurdistan Workers' Party and other organizations deemed "terrorist" by Ankara. Russian officials have indicated repeatedly that Moscow has no gualms with Finland or Sweden. However, in late June, President Putin warned that if NATO infrastructure is deployed in the Nordic nations, Russia will respond in kind "and create the same threats in the territories from which they threaten us." Russia shares a 1,340 land border with Finland, and its commercial and military ship traverse international waters in the Gulf of Finland to get to and from the exclave of Kaliningrad, as well as the exit into the Atlantic Ocean via the Danish straits.

Source: GlobalSecurity.org

PLA patrols, missile launches 'new normal' for Taiwan

"In the future, Chinese missiles may well REGULARLY overfly Taiwan," says China expert Dean Cheng. "Thereby increasing tension, increasing pressure on the island.



All of which, in the CCP's estimation, will make Taipei knuckle under."

Combined arms amphibious training by PLA on June 16, 2022. **Photo: Lin Jiayu**

SYDNEY —

The unprecedented live fire exercises by China, designed to pressure Taiwan and overawe

China's neighbours in the wake of US Speaker Nancy Pelosi's visit to the island, are likely to become the "new normal," a top expert on China's military says. After Pelosi landed in Taiwan, China began six days of exercises, with military ships and more than 100 aircraft. The Chinese launched barrages of at least nine ballistic and a host of other shorter-range missiles. Some ships and planes passed close to what would be Taiwanese territorial waters and airspace. Beyond that, few details about specific ships or aircraft formations were available. Should the exercises continue, one remaining important question to answer may be: Will China fly military aircraft directly over Taiwan? While the barrages of missiles, some of which flew over Taiwan, were threatening — and landed in Japan's Exclusive Economic Zone, prompting condemnation by Japan's prime minister — they were not the direct military threat to Taiwan that fighters would be. "Do missile tests which violate Taiwan sovereignty mean that China might overfly AIRCRAFT?" ponders Dean Cheng, one of the premier Western experts on the Chinese military, in an email. "Much riskier, but forcing Taiwan to either intercept or let them fly through. Neither helps Taipei." On the missile tests, the Heritage Foundation expert notes this is the first operational test of the relatively new PLA Rocket Forces, which were created in 2015 from the vaunted Second Artillery. "The Chinese are now trying out their new service. Remember that the Second Artillery was a 'super-branch,' a branch (within the ground forces) that had near-service level protocol effects. But it was not a service," he said. "The missile tests over Taiwan establish a new normal. In the future, Chinese missiles may well REGULARLY overfly Taiwan. Thereby increasing tension, increasing pressure on the island. All of which, in the CCP's estimation, will make Taipei knuckle under." The last few days have also marked the first widespread test of China's new joint operations doctrine under President Xi Jinpeng. However, since there doesn't seem to have been deployment of the so-called carrier-killer supersonic missiles the DF-21/26 — during the exercises, analysts haven't got much strategic level insights into the command and control the PLA relied on. "If there had been, it might have simulated a multi-approach attack on a carrier battlegroup or surface action group," Cheng notes. He said it's especially hard to come to many conclusions about C2 and joint operations because there's been surprisingly little coverage in the open press about what the aircraft and ships were doing. While the Chinese issued a statement today suggesting the drills were coming to an end, it's unclear at press time whether they have. "The Eastern Theatre Command of the Chinese People's Liberation Army (PLA) has recently carried out a series of joint military operations involving troops of multiple services and arms in the waters and airspace off the Taiwan Island, with all tasks accomplished and the troops' combat capabilities in integrated joint operations effectively verified," said Senior Colonel Shi Yi, spokesperson for the Eastern Theatre Command of the Chinese People's Liberation Army (PLA), in a written statement released on Wednesday.

A Chinese Ambassador's Message: 'No Room for Compromise'

On the political frontlines, the new Chinese ambassador to Australia, Xigo Qian, made it clear during a speech at the **National Press Club** in Canberra that Beijing expects his host country to bend to China's will before lifting punishing sanctions (he calls them tariffs) imposed after Australia had the audacity to press for an investigation into the source of the COVID-19 virus. "The positive progress in our bilateral relations is encouraging. It's [an] encouraging start. And, of course, there's a lot of work to be done," he said. Everything was on Australia to fix, he clearly implied. And in a clear attempt to try and drive a wedge between the United States and Australia, he said the Lucky Country should not be influenced by other countries. It should, he said, make its decision and policies "free from interference from a third party". The ambassador told the audience that, on the subject of Taiwan, "there's no room for compromise." The solution is simple: "If every country put their 'One China' policy into practice with sincerity, with no compromise, it is going to guarantee the peace and stability across the Taiwan Strait." The ambassador did say many of the problems between China and Australia stemmed from policies of the previous Australian government, and said the 50th anniversary of diplomatic relations between the two countries might offer a chance to reset relations. But when asked what China would do in return, he offered no examples or areas where the Asian giant might bend. During his speech, China released an English language version of a new White Paper on Taiwan, "The Taiwan Question and China's Reunification in the New Era." It's the first White Paper on the topic in 22 years. Most of it comprises detailed historical data trying to demonstrate that Taiwan has pretty much always been part of China. A particularly charming section offers this view of what the Chinese Communist Party must do to help encourage

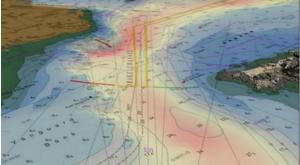
unification: "Third, we must follow the principles of freeing the mind, seeking truth from facts, maintaining the right political orientation, and breaking new ground, and defend the fundamental interests of the nation and the core interests of the state in formulating principles and policies on work related to Taiwan." During his speech the ambassador to Australia said that some Taiwanese would need educating after reunification to ensure "the people in Taiwan have a correct understanding of China." While it could be a simple reference to China's propaganda efforts in the region, such phrasing is likely to ring alarm bells, given the large-scale "re-education" efforts underway against the Uihgurs and other Muslim people in China. The White Paper offers Hong Kong and Macao as an example of how China and Taiwan could work together: "It is a fact that since Hong Kong and Macao returned to the motherland and were reincorporated into national governance, they have embarked on a broad path of shared development together with the mainland, and each complements the others' strengths. The practice of One Country, Two Systems has been a resounding success." That is, of course, a lie. China has violated the agreement with Britain that was supposed to guarantee legal, press and other freedoms for Hong Kong citizens. China didn't like the enormous demonstrations in the former colony against China's increasingly oppressive rule, so it pushed through laws and took other actions to stop them. Today, Hong Kong has endured two years of unprecedented negative population growth as people flee the repression.

Source: Breaking Defence

<u>New maritime security strategy to target latest physical and cyber threats</u> 5-year strategy launched to enhance maritime technology, innovation and security and reduce environmental damage.

From: Department for Transport, Department for Environment, Food & Rural Affairs, Foreign, Commonwealth & Development Office, Home Office, Ministry of Defence, and The Rt Hon Grant Shapps MP

Published: 15 August 2022



Seabed mapping – "hydrography, building a more integrated understanding of the ocean and how we use it". Credit: UK Hydrographic Office

• new maritime security strategy sets out how the UK will enhance its capabilities in technology, innovation and cyber security

• the 5-year strategy will officially

maritime security concern to address modern issues such as illegal fishing and

polluting practices
improving the quantity and quality of seabed mapping data available to expand our knowledge and help to identify emerging threats

The UK's position as a world-leading maritime nation is secured by a new strategy that will enhance capabilities in technology, innovation and cyber security. Unveiling <u>the 5-year strategy</u>, the Secretary of State for Transport has today (Monday 15 August 2022) set out the guiding principles for the UK government's approach to managing threats and risks at home and around the world, including leveraging the UK's world-leading seabed mapping community and tackling illegal fishing and polluting activities at sea. The new strategy redefines maritime security as upholding laws, regulations and norms to deliver a free, fair and open maritime domain. With

this new approach, the government rightly recognises any illegal, unreported and unregulated (IUU) fishing and environmental damage to our seas as a maritime security concern. In addition, to enhance the UK's maritime security knowledge, the government has established the UK Centre for Seabed Mapping (UK CSM), which seeks to enable the UK's world-leading seabed mapping sector to collaborate to collect more and better data. Seabed mapping provides the foundation dataset that underpins almost every sector in the maritime domain, including maritime trade, environmental and resource management, shipping operations and national security and infrastructure within the industry. The UK CSM has also been registered as a UK government voluntary commitment to the UN Decade of Ocean Science for Sustainable Development. By working with the newly established UK CSM, administered by the UK Hydrographic Office, government will have better quantity, quality and availability of seabed mapping data, which as a key component of our infrastructure, underpins the UK's maritime security, prosperity and environment objectives. Secretary of State for Transport Grant Shapps said: Mankind has better maps of the surface of the moon and Mars than of our own ocean. To ensure the UK's maritime security is based on informed and evidence-based decisions, we must build our knowledge of this dynamic ocean frontier. Our new maritime security strategy paves the way for both government and industry to provide the support needed to tackle new and emerging threats and further cement the UK's position as a world leader in maritime security. Working with industry and academia, Secretaries of State from the Department for Environment, Food and Rural Affairs (Defra), the Department for Transport (DfT), the Foreign, Commonwealth and Development Office (FCDO), the Home Office and the Ministry of Defence (MOD) will focus on 5 strategic objectives:

- Protecting our homeland: delivering the world's most effective maritime security framework for our borders, ports and infrastructure.
- Responding to threats: taking a whole system approach to bring worldleading capabilities and expertise to bear to respond to new, emerging threats.
- Ensuring prosperity: ensuring the security of international shipping, the unimpeded transmission of goods, information and energy to support continued global development and our economic prosperity.
- Championing values: championing global maritime security underpinned by freedom of navigation and the international order.
- Supporting a secure, resilient ocean: tackling security threats and breaches of regulations that impact on a clean, healthy, safe, productive and biologically-diverse maritime environment.

UK Chamber of Shipping CEO, Sarah Treseder said: A proactive maritime security strategy is essential to keeping trade routes and energy supplies secure, especially for an island nation. Today's welcome commitments to improve collaboration, both with industry and governments across the world, will help deliver a more secure maritime environment and help provide confidence to the shipping community. Tim Edmunds, co-Director of the SafeSeas Network and Professor of International Security at the University of Bristol said: The new national strategy for maritime security (NSMS) comes at a critical time for the UK maritime sector. Maritime security is key to delivering the UK's ambitions in foreign, security and defence policy, as well as for blue economic growth and environmental sustainability. SafeSeas and the University of Bristol were privileged to be part of this effort. We are delighted that our research was able to inform the strategy process. We look forward to engaging with

UK maritime security actors and assisting with the strategy implementation process in future.

Mark Simmonds, Director of Policy and External Affairs, British Ports Association said: UK ports work closely with government and law enforcement to facilitate nearly half a billion tonnes of trade and tens of millions of passengers every year, whilst at the same time bearing down on threats to our collective safety and security. We look forward to strengthening that relationship as we help to deliver on these strategic objectives. The new Centre for Seabed Mapping is a huge step forward for the maritime sector. It will help everyone better understand the UK seabed and be the foundation for numerous benefits, including more informed management of the marine environment. The UK will continue to engage heavily with industry, academia, international partners and allies in the delivery of this outward-focussed strategy through increased information sharing partnerships, to increase visibility of threats to the global maritime domain. **Source: https://www.gov.uk**

Cyber security becoming integral to maritime security

Guy Martin -17th Aug 2022



Maritime security is increasingly becoming impossible to achieve without ensuring cyber security, and the ability of states to protect their maritime assets and critical infrastructure against cyberattacks. This was one of the conclusions from a recent workshop on developing a maritime security strategy for South Africa. The workshop was organised by Stellenbosch University, the Institute for Security Studies Africa, and United Nations Office on Drugs and Crime

(UNODC). Denys Reva, maritime researcher at the Institute for Security Studies Pretoria, highlighted the fact that 80% of South Africa's trade is seaborne, and for all intents and purposes, South Africa can be seen as an island. "We are dependent on well-functioning maritime infrastructure, which needs to be protected, including from cyber threats," he said. The maritime sector is becoming increasingly vulnerable to cyber threats, as it digitalises. For example, ships are using Electronic Chart Display and Information System (ECDIS), GPS and remote engine and cargo control systems, while ports are going paperless, becoming automated and removing humans from the equation. The container terminal at China's Qingdao Port is fully automated, while South Korea's Busan Port is using block chain for logistics innovation, for example. While only 53 of the world's container terminals are automated (4%), the maritime sector is going digital and is on an upward trend in this regard. "What if someone tries to disrupt the technology, purposefully or accidentally?" Reva asked, as new cyber security risks and vulnerabilities are exposed. In Africa, a cyber-attack was only a matter of time, he said, citing the 2021 attack on Transnet, which disrupted not only local but regional trade. "It's inevitable another attack will take place," Reva believes. "In 2020 alone there was an alleged 400% increase in incidents targeting the maritime sector around the world. We don't know the real scope of the problem. Some cyber security reports suggest hundreds of thousands or millions of attacks." One of the largest cyber-attacks to affect the maritime sector was the June 2017 NotPetya cyber-attack. NotPetya was developed as a diskwiping cyber weapon, disguised as ransomware, by the Russian military to destabilise Ukraine, but thousands of companies around the world were also hit. It took Maersk more than 90 days to recover from the attack, which cost an estimated \$350 million in damages. Maersk still being sued by some companies. "We will all be victims of a cyber-attack at some point," Reva cautioned, and cited other examples, including the port of San Diego going offline for several days in 2018 due to a ransomware attack, and Israel's disruptive cyber-attack on Iran's Shahid Rajaee port terminal in May 2020. Cyber offers new opportunities for bad actors, Reva said, but Africa is in a privileged position as it is a lesser target at present and can learn from the experiences of other countries, but time is running out for this.

Source: https://www.defenceweb.co.za

New delivery dates for SAN patrol vessels

defenceWeb -16th Aug 2022



SAS Sekhukhune, the SA Navy's first multi-mission inshore patrol vessel (MMIPV).

The first new multi-mission inshore patrol vessel (MMIPV) is flying the fleet ensign as she undergoes operational testing and evaluation but it's going to be months before number two – **SAS Adam Kok (P1572)** – is delivered to the SA Navy (SAN). Indications the second new hull in the embryonic SAN patrol squadron would be handed to

the SAN this year were dispelled by Armscor, the SA National Defence Force (SANDF) acquisition agency which handles project management, among other tasks. Chief executive Solomzi Mbada, writing in the latest Armscor newsletter, has it construction of the two remaining vessels as part of Project Biro is underway with delivery expected in April 2023 and April 2024 respectively". Armscor in February said Damen Shipyards Cape Town (DSCT) was contracted in January 2018 to deliver three Biro vessels, with the first (P1571) to be handed over to the Navy in March this year, followed by P1572 in June 2023 and P1573 in September 2024. Deliveries were originally scheduled to start from mid-2021 – the first keel was laid in February 2019, and the second in September 2020. P1571, SAS Sekhukhune, was handed to the SA Navy on 18 May. At the time of handover, delivery of the second vessel was reported as scheduled for September 2022, but this will not be the case. Mbada said the overall shipbuilding contract awarded to Damen Shipyards Cape Town "demonstrates Armscor's capability to provide the SANDF with state-of-the-art defence materiel required to provide safety and security for South Africa, its citizens and the continent at large." In February it was reported MMIPV number two had reached 75% completion of hull construction with 33 of 46 main equipment factory acceptance tests also done. At that time Armscor noted initial delivery dates were amended to cater for delays due to COVID-19 and a request from the SAN to conduct final crew training at the contractor's premises rather than Navy facilities as initially contracted. Armscor "expects" the second and third vessels will be delivered ahead of the revised schedule. "Risk of further delays is considered low and are not foreseen," the defence and security acquisition agency said, adding sufficient funding was available to complete the project. Hull number three is named SAS King **Shaka** and will carry pennant number P1573 continuing the Warrior Class. Her delivery date, according to Mbada, is April 2024, rather than September 2024 as earlier envisioned. **Sekhukhune** is, as far as can be ascertained, still undergoing operational testing and evaluation ahead of her first mission deployment. It will cost an estimated R80 million a year to operate and maintain the three MMIPVs. Project Biro was for six inshore patrol vessels and six offshore patrol vessels, but due to budget constraints, the SAN had to settle for three inshore patrol vessels. An appreciation review to exercise an option for a fourth MMIPV has been done with formal approval not yet received. All three MMIPVs are DSCT Stan Patrol 6211 design platforms. The 62m long, 750 ton vessels have a 20 knot economical speed and a range of 2 000 nautical miles. Besides a 9 and 7 m RHIB (rigid hull inflatable boat) for boarding operations, each vessel is fitted with a Reutech 20 mm Super Sea Rogue marine gun and Reutech FORT (Frequency Modulated Optical Radar Tracker) Low Probability of Intercept (LPI) optronics radar tracking system.

Source: <u>https://www.defenceweb.co.za</u>

Hurworth joins NATO for minehunting operations

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Weeks of intensive training has seen HMS *Hurworth* prove her readiness to support NATO on minehunting operations around Europe.

The ship's company took her around the UK to prepare for the deployment, undergoing tests on their equipment, gunnery drills and emergency scenarios. The minehunter has joined NATO Standing Mine Countermeasures Group 1 and will support on historic ordnance clearance and other minehunting exercises. But to ensure she was ready, **Hurworth**'s Crew 3 were put through their paces starting with a visit from the Fleet Operational Sea Training (FOST) team before a difficult transit north through the Pentland Firth. They had to battle bad weather, high sea states and strong tides, finally getting to Lamlash Harbour on the Isle of Arran. Within the harbour, they tested their remotely-piloted underwater vessel Seafox which is used to locate mines while the Officers of the Watch practised manoeuvring the ship. **Hurworth** then headed to **HMNB Clyde** for two weeks of assessments to ensure they can deploy with NATO. During the fortnight, they tested navigating without GPS and with defects to the bridge, firefighting, damage control and live firing of their weapons. They also completed a winching exercise with the Coastguard and practised against attacks from fast boats with **P2000 HMS Raider** acting as the



enemy. Next they turned to the diving aspect of their operations. They deployed Seafox and autonomous underwater vehicle Remus while divers embarked on **Hurworth** carried out mine laying and recovery drills and diving in emergencies. With their preparation complete, the minehunter headed through the Irish Sea, past Lands' End and into Portsmouth where she raised

the NATO flag. Commanding officer Lieutenant Commander Simon Reeves said: "The ship's company have had a busy period at sea preparing **HMS Hurworth** for NATO and contingent tasking, undertaking complex navigation serials, internal damage control and tailored warfare scenarios. "I am very proud of my team who have displayed grit and determination to ensure **Hurworth** is ready to deploy once again on operations overseas, protecting our nation's interests and upholding the reputation of the Royal Navy. "They have shown commitment and drive needed to continue to deliver our operations. "We stand united with NATO delivering security and prosperity to our area of operations, by ensuring trade routes remain open and removing historical ordnance from the ocean seabed." Lieutenant Joe Hobday, navigator on **Hurworth**, added: "The crew are very proud to be flying the flag for NATO as part of Standing NATO Mine Countermeasures Group 1. As we conduct our operation we will be providing security and reassurance to our partner nations." **Source:** https://www.royalnavy.mod.uk