NAVY NEWS WEEK 17-4

25 April 2018

RMS St. Helena to Return as Anti-Piracy Armory in Gulf of Oman

April 17, 2018 by Reuters

The Royal Mail Ship ***St Helena*** lies berthed in Cape Town harbour, South Africa April 17, 2018. REUTERS/Mike Hutchings

By Joe Brock JOHANNESBURG, April 17 (Reuters) – The **RMS *St. Helena***, Britain's last working postal ship, was for nearly three decades the main source of contact between one of humanity's remotest islands and the outside world. Now the ship, cherished by the 4,500 residents of British-ruled St. Helena, will start a new life as a floating armory, packed with automatic weapons, bullet-proof jackets and night vision goggles, all stored for maritime security operatives. Renamed the **MNG *Tahiti***, the 340-foot ship will undergo some tweaks before sailing to the Gulf of Oman where it will be used to ferry guns and guards to passing vessels navigating stretches of water lurking with pirates, its new operator said on Tuesday. "*The ship is good to go with a few adjustments*," said Mark Gray, a former British Royal Marine and founder of floating armory firm MNG Maritime. *"By the middle of the year we hope to have her operating*." Tahiti Shipping, a subsidiary of MNG Maritime, bought the ship for an undisclosed fee on Tuesday, the St. Helena government said in a statement. The construction last year of a commercial airport on the isolated island in the middle of the South Atlantic rendered the 156-passenger ship obsolete, prompting St. Helena authorities to put it up for sale and begin planning a gala farewell. Before weekly flights to South Africa began in October, a five-night voyage to Cape Town on the **RMS *St. Helena*** was the only major transport route off an island made famous as the windswept outpost where French emperor Napoleon Bonaparte died. The yellow-funneled ship was purpose-built by the British government in 1989 to service the island and is the last of a royal mail fleet that once connected the far-flung tentacles of the old British Empire. Its final voyage was marked with a public holiday on St. Helena, with flag-waving crowds gathering on the rocky coastline to catch one last glimpse of the ship that had delivered them everything from car parts to Christmas turkeys. A flotilla of fishing vessels and yachts flanked the ship with those on board popping champagne corks as plumes of balloons were released into the sky to cheers from St. Helena residents, known locally as "*Saints*." "*I fully appreciate the role this vessel has played in all Saints' lives*," MNG Maritime's Gray said. "*It is not a responsibility we take on lightly. We will continue to treat her in the manner to which she has become accustomed*." (Writing by Joe Brock Editing by Mark Heinrich)

Source: http://gcaptain.com

USS *John Warner* is First Virginia-Class Attack Sub to Fire Missiles in Anger

THE PENTAGON — Saturday's pre-dawn joint air strike against three Syrian chemical weapons facilities was notable not just for its success, but for also being the first time a Virginia-class submarine fired missiles in combat and the first time Joint Air-to-Surface Standoff Missiles-Extended Range (JASSM-ER) were used tactically, USNI News has learned.

A Tomahawk land attack missile launched from **USS *John Warner* (SSN-785)** as part of the April 13, 2018 strike against Syrian chemical weapon strikes. US Navy Image

When attack boat **USS *John Warner* (SSN-785)** launched six Tomahawk land-attack missiles from the Eastern Mediterranean, it was the first time a Virginia-class submarine fired shots "*in anger*," or at an enemy target rather than for testing or training

purposes, according to a Navy spokesperson. ***John Warner*** not only hit its assigned target but did so during its first deployment and while successfully evading a Russian sub-hunter, which was reportedly tracking a British Astute-class submarine also operating in the region, according to Bryan Clark, a senior fellow at the Center for Strategic and Budgetary Assessments. "*Using these new systems in this particular operation can provide U.S. leaders and planners information regarding the ability of a high-end competitor like Russia to counter them*," Clark told USNI News. "*These real-world operations provide valuable feedback on tactics and employment concepts*." The JASSM-ER strikes were noteworthy for their effectiveness reaching targets and also because of the platform firing these missiles. These missiles were fired from two U.S. Air Force B-1B bombers that remained about 200 miles outside of Syrian airspace. All JASSMs were able to evade Syrian air defense systems. B-1B bombers don't have the same level of stealth as the Air Force F-22 Raptor or the B-2 Spirit stealth bomber and could be more easily detected by Syrian air-defense systems, Jerry Hendrix, a senior fellow at the Center for a New American Security, told USNI News. But the Russian-made systems reportedly never detected the B-1B bombers because they remained safely out of range. Lockheed Martin, the JASSM-ER manufacturer, is currently developing a Navy version – the Long Range Anti-Ship Missile (LRASM) – to be fired from F/A-18E/F warplanes. The company and Navy officials have previously stated they expect the LRASM will be ready for use in 2019. During a December test, a B-1B bomber simultaneously launched two production-configuration LRASMs against multiple maritime targets, marking an important step toward meeting early capability milestones, according to a statement released by Lockheed Martin. "*What we saw here is the JASSM, or LRASM, is going to be able to give legacy aircraft the ability to use these stand-off missiles outside their (air defense) range*," Hendrix said. In addition to ***Warner*** and the B-1B strikes, the operation was also the combat debut of the French Missile de Croisiere Naval land attack missile, according to the news site Navy Recognition. "*Designed and produced by MBDA, the naval cruise missile (French designation Missile de Croisiere Naval or MdCN) provides deep strike capabilities within enemy territory. With a range of several hundred kilometers, the naval cruise missile is capable of destroying infrastructure targets of high strategic value*," reported the site. The French frigate ***Languedoc*** **(D-653)** fired three MdCN missiles, which is the naval variant of the air-launched SCALP land-attack cruise missile, as part of the operation. **Source: USNI News**

Australian destroyers demonstrate Cooperative Engagement Capability

Royal Australian Navy's second destroyer NUSHIP ***Brisbane*** was joined by sister ship **HMAS *Hobart*** as she departed the Osborne wharf April 5, 2018, during the second phase of sea trials. **Photo: AWD Alliance**

Royal Australian Navy air warfare destroyers recently became the first non-US assets to successfully demonstrate the new Cooperative Engagement Capability (CEC) which expands the ships' battlespace awareness by sharing sensor data among a network of CEC-equipped ships and aircraft. Over the past few weeks off the coast of South Australia, recently-commissioned destroyer **HMAS *Hobart*** and future **HMAS *Brisbane*** (the ship is still on trials), tested the CEC, combining radar and fire control data into a common picture and allowing one ship to engage an adversary based on the other ship's data. The announcement came after US defense contractor Raytheon announced in December 2017 that the CEC systems were completed and ready for their first international installation. In the US, the CEC is currently deployed on ships and land-based test sites, E-2C/D aircraft, and US Marine Corps network systems. Cooperative Engagement Capability is one technology that will form a part of the Australian Joint Integrated Fires Capability being implemented in the Australian Defence Force. Australian defense minister Marise Payne, congratulated the Royal Australian Navy and the Air Warfare Destroyer Alliance on reaching this important milestone. "*The new Cooperative Engagement Capability is a significant step-change for Australia as we face increasing threats from cruise missiles and advanced aircraft*," Minister Payne said. "*Together **Hobart** and **Brisbane** bring revolutionary air defense capabilities – not by adding new radars or weapon systems, but by utilising existing sensors and weapons in a more effective manner. "In the coming years, the Australian Joint Integrated Fires capability will link our ships, aircraft and land-based assets to create an increasingly sophisticated air defence network that can see over the horizon*." "*This new capability will provide Australian and United States warships the ability to share targeting data in real time. This means a combat system can engage a target that it otherwise could not see, by using data from another warship's sensors*," Minister Payne said. The Australian government is planning to integrate the CEC into other ADF capabilities, including the E-7A Wedgetail aircraft and the Integrated Air and Missile Defence program. The CEC will also be integrated into the Future Frigate's Aegis combat management system

together with the Saab Australia developed interface and the CEAFAR phased array radar. "*When NUSHIP **Brisbane** joins her sister ship, **HMAS Hobart**, in the fleet later this year, it will mark the beginning of a new era for air defense in Australia and our partners*," minister Payne said. **Source: Naval Today**

I saw the *Hobart* in Sydney harbour while visiting family. She looks very impressive indeed, but my efforts to go onboard proved fruitless at the time. Will try again next time.

Indian Navy's Malacca deployment spots Chinese ships in Indian Ocean

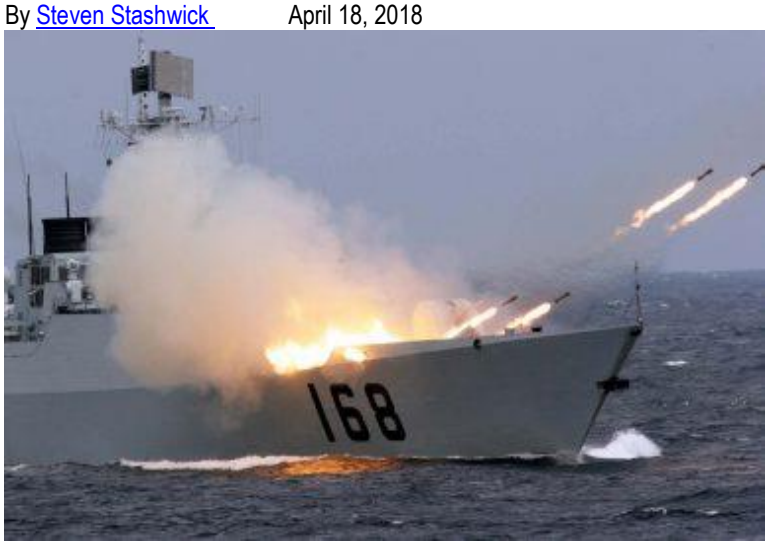
By Shaurya Karanbir Gurung Apr 17, 2018

NEW DELHI: Indian Navy's Malacca Strait deployment which started in June last year has spotted three Chinese naval ships entering the Indian Ocean Region from Ombai Wetar in Indonesia, officials said today. The Chinese ships are on an anti-piracy duty and were heading to the Gulf of Aden. The spotting of the Chinese ships has been due to the Indian Navy's '**Mission Based Deployment'** wherein currently 50 of its ships are deployed in the Indian Ocean Region, including the Malacca Strait, that allow it to keep watch across the ocean. In addition, network centric operations that allow every ship to receive and examine feed on what is happening in each other's area of responsibility also contribute to the maritime domain awareness system of the Indian Navy. "*It was due to this maritime domain awareness that we came to know of the presence of the 29th Anti-Piracy Escort Force of the PLA Navy, consisting of two frigates and a tanker,*" explained officials privy to the matter. The tweet actually underlines that the Indian Navy's awareness of the presence and movement of Chinese naval ships in the Indian Ocean Region. Chinese naval ships use the four straits of Malacca, Sunda, Lombuk and Ombai Wetar to cross between their bases in the South China Sea and the Indian Ocean. Its Anti-Piracy Escort Force starts from China and moves towards the Horn of Africa, which lies along the southern side of the Gulf of Aden, and then moves towards Djibouti where there is a Chinese military base and goes to Karachi. Officials explained that in the past the usual way of knowing about Chinese naval ships in the Indian Ocean was by information shared by merchant ships and friendly nations. Now the navy's maritime domain awareness has improved with the mission based deployment, a concept which was unveiled at the naval commanders' conference in May, 2017. The concept involves deploying mission-ready ships and aircraft along critical sea lanes of communication and choke points. These ships are deployed across the Indian Ocean, including at the centre of it, Maldives, Seychelles, north Bay of Bengal and Malacca Strait 24x7 to meet any eventuality, ranging from maritime terrorism and piracy. In addition, a naval air station called Baaz (hawk) located at Campbell Bay on Greater Nicobar Island which was commissioned on July 31, 2012, is a strategic location because it overlooks the Malacca Strait. China is particularly reliant on unimpeded sea lines of communication like the South China Sea and Strait of Malacca. In 2016, about 80 per cent of China's oil imports and 11 per cent of natural gas imports transited the South China Sea and Strait of Malacca, a 2017 US Department of Defence report stated. **Source: http//economictimes.indiatimes.com**

Chinese Navy to Hold Live-Fire Exercise in Taiwan Strait

Limited drills seem intended to garner headlines more than provoke Taiwan.

By Steven Stashwick April 18, 2018



A PLA Navy vessel launches anti-submarine missiles in an offshore blockade exercise during a Sino-Russian joint military exercise, held on the sea to the southeast of China's Shandong Peninsula on Aug. 23, 2005.
Image Credit: AP Photo /Xinhua, Li Gang

Last week, Chinese state media announced that the PLA Navy would be conducting live-fire drill in the Taiwan Strait on Wednesday, April 18. Despite hype by Chinese media outlets and some threat-

inflation by western reporting, the drills will take place in a geographically limited area within Chinese territory, suggesting that China desires to only appear provocative without actually risking a crisis or cross-strait escalation. The announcement came at the close of a major fleet review in the South China Sea overseen by Chinese President Xi Jinping and involving thousands of personnel, over 40 ships and submarines, and dozens of aircraft. A massive Chinese naval exercise revealed by satellite photographs in late March now appears to have been a rehearsal for the parade of ships, submarines, and aircraft on display last week. Many non-Chinese news outlets and analysts called the announced drill a "*show of force*," a warning to Taiwan and the United States, and highlighted rising Sino-U.S. and cross-strait tensions. Chinese media encouraged the impression that China was acting out of strength and disregarding cross-strait risks. The *Global Times*, an official tabloid, stoked rhetoric around the drills, claiming they were a *"a check"* against Taiwan pursuing independence, and designed to highlight China's strength to deter the island and warn the United States. Editorials and reporting in the *South China Morning Post* echoed the warnings against Taiwan (though also Taiwan's dismissal of those threats). By contrast, media and officials in Taiwan, the target of the drills and Chinese media hype, have been muted and dismissive of the drills. *Taiwan News* called China's announcement "*bluster and bravado*," explaining that the drill's size and location made it relatively innocuous. Multiple Taiwanese security officials downplayed the significance of China's drills to the *Taipei Times*, saying they would involve only a battalion of troops, didn't appear to be targeting a particular Taiwanese city or party, and that the Taiwanese military was not going on any kind of alert. One former official said the Chinese media was trying to play-up the drills as a form of "*psychological warfare*" to mask the drill's relative innocuousness compared to the extensive drills and demonstrations China undertook during the Taiwan Strait crisis. Chinese media released few concrete details on the drills, but a marine safety notification from the Fujian district of China's Maritime Safety Administration laid out the geographic limits of the exercise. The notice announced an exclusion zone for all vessels to keep out of for the duration of the exercise, between eight a.m. and midnight on Wednesday April 18th. The coordinates provided place the exclusion zone just outside the mouth of Quanzhou Bay, with dimensions about 5 miles wide and 10 miles long, and importantly, is entirely within China's territorial waters, which extend twelve nautical miles from its coastline.

Source: Google Maps

The exclusion zone also abuts a long stretch of protected beach, which along with its size, suggests that the scale of the exercise will be limited, and is consistent with reports from the *Global Times* that the drills would include a battalion-sized amphibious landing and some strikes. The zone's location outside the international waters of the Taiwan Strait proper indicates that China wanted to avoid any appearance that it was threatening or infringing on the strait, media impressions to the contrary. At that latitude, the Taiwan Strait is more than 90 nautical miles wide. It will be significant whether the amphibious portion of the drill is conducted by the PLA Navy Marines or by PLA Army troops. The U.S. Department of Defense, in its most recent report on China's military advances, assesses that China's Marines are more likely to be tasked with small-island operations in the South or East China Seas, while the PLA Army's amphibious capabilities are likely targeted at a potential operation against Taiwan. If Wednesday's drill is conducted by PLA Navy Marines, it would be an additional sign that China was being careful to minimize the risk of actual military provocation. Even if it is conducted by the PLA Army, the limited scale poses little operational concern. The disparity between the reality of China's live fire drill and the public impression it has cultivated suggests China has significant risk aversion that is at-odds with its desire to coerce and intimidate its regional neighbors. Taiwan will conduct its own military exercises this week, including live-fire artillery drills on Kinmen, a Taiwanese-occupied island only 5 or 6 nautical miles off the Chinese mainland, and about thirty miles southwest of the site of China's drills in Quanzhou bay. Kinmen is home to batteries of massive 240-millimeter coastal artillery capable of shelling the surrounding Chinese city of Xiamen. **Source: https://thediplomat.com**

The Dutch missile frigate ***De Ruyter*** is in Devonport working up to warzone certification. **Photo : Raymond Wergan, Newton Ferrers ©**
Confirmation of FOST extremely good reputation

Moroccan frigates departed from Amsterdam

The Moroccan frigates **614** ***Sultan Moulay Ismail*** (top) and ***612 Hassan II*** (below) departed from Amsterdam

Photo : Cor van Niekerken ©

Cutting-Edge Nazi WWII Submarine Found Off Danish Coast

A rare submarine, which is a precursor to modern-day underwater warfare and is rumored to have been used for a mysterious getaway operation involving high-ranking Nazis, has been located close to Denmark. The remains of a rare German submarine, which spearheaded the marine technology of its time, has been found in the Skagerrak area off Denmark's coast as part of the Sea War Museum Jutland's work to map and eventually salvage wreckages in the North Sea, Danish TV2 reported. The German ***U-3523*** submarine, was sunk by a British B-24 Liberator bomber on May 6, 1945, the very day the Allied Forces liberated Denmark from the Nazi German occupation. All 58 crew members died. The ***U-3523*** wreckage was found close to the Horn of Skagerrak, nine nautical miles away from where it was previously thought to have been sunk, the Sea War Museum Jutland explained. "*This was a very special U-boat. It was the most advanced submarine the Germans built during the [Second World] war. It was highly modern and far ahead of its time*," Sea War Museum Jutland director Gert Normann Andersen told TV2. According to Andersen, 118 of the cutting-edge submarines were ordered, but only two actually made it to the navy and entered service. Only one preserved example of this submarine class exists, currently on display at the German Maritime Museum at Bremerhaven, Lower Saxony, which was one of Nazi Germany's main submarine bases during WWII and remains one of the nation's pivotal trade ports today. According to Andersen, the submarine had previously been used as a training vessel off Wilhelmshaven, another crucial Nazi naval base, but is believed to have also been used in a secret mission, ultimately prevented by the British bombing. The disappearance of the ***U-3523*** has been connected with rumors about some of the leading Nazi bigwigs attempting an escape to South America with fortunes consisting of gold and precious works of art. These rumors keep circulating even these days for lack of conclusive evidence. "*Why they were fleeing, and where they were going, no one knows. So it's exciting in a way*," Andersen said. Despite the fact that the ***U-3523*** may shed some light to this Nazi escape enigma, the Sea War Museum Jutland has no plans to salvage the sunken submarine currently safely sitting at a depth of 123 meters, its fore buried in the seabed. The diesel-electric ***U-3523*** was ordered in November 1943, completed in December 1944 and entered service in January 1945. It had a maximum surface speed about 30 kilometers per hour and could operate on silent motors due to innovative engineering techniques. With a crew of five officers and about 50 men, it could travel about 28,000 kilometers. Although produced prematurely and having significant defects, the series contained some revolutionary solutions, being the first submarine to operate primarily submerged. Although never used in real combat due to flaws, the series could potentially spend several days underwater, being a precursor to modern-day submarine warfare. Sea War Museum Jutland in the coastal town of Thyborøn is currently in the process of a major scan of the seabed for shipwrecks in the North Sea and the

Skagerrak Straight. So far 450 wrecks have been located, of them 12 submarines, three British and nine German.

Source: Sputnik

Royal Canadian Navy ships returned Tuesday from African deployment

By : David Pugliese

Her Majesty's Canadian Ships ***Kingston*** and ***Summerside*** returned to Halifax yesterday from their overseas deployment. The vessels are returning from **Op Projection**, following engagements with West African nations to build partner capacity, promote maritime security, and foster relationships in the Gulf of Guinea region, according to the Royal Canadian Navy.

Source: Ottawa citizen

GE offers its LM2500 gas turbines for US Navy's FFG(X) frigates

GE Marine has offered to supply its LM2500 range of gas turbines for 20 new FFG(X) frigates that are currently planned for procurement by the US Navy. The LM2500 line of marine gas turbines includes the base 25MW LM2500, the 30MW LM2500+ and the 35MW LM2500+G4 units The systems are expected to meet the speed and power requirements of the newest US Navy frigates. GE Marine's turbines are noted to possess superior power density and are grade A shock-tested. The use of gas turbines on-board naval ships is said to enable a higher level of availability, while ensuring lower weight and volume and minimising maintenance requirements. "*The LM2500 marine gas turbine is a simple-cycle, two-shaft, high-performance engine that has been developed based on the company's CF6-6 aircraft engines*." The average top speed of a frigate, excluding the littoral combat ship (LCS), is typically between 28k and 30k. According to the company, the vessels can easily attain such as speed using GE's 35MW LM2500+G4 or a smaller gas turbine. GE Marine already currently provides 97% of the commissioned propulsion gas turbines in the US Navy fleet, thereby demonstrating its experience at sea across a number of considered FFG(X) frigate platforms. The LM2500 marine gas turbine is a simple-cycle, two-shaft, high-performance engine that has been developed based on the company's CF6-6 aircraft engines. It comprises a gas generator, power turbine, attached fuel and lube oil pumps, and a fuel control and speed governing system, as well as associated inlet and exhaust sections. The turbine also features lube and scavenge systems, in addition to a number of controls and devices for starting and monitoring engine operation. GE Marine has supplied and installed 1,450 gas turbines on-board 646 naval vessels to date, which have been deployed by a total of 35 navies worldwide.

Source: naval-technology

UkrOboronProm offers to maintain Indian Navy's new Kiev-class vessel

17 April 2018 News

INS *Vikramaditya*

Ukrainian company UkrOboronProm has shown readiness to provide maintenance services for the Indian Navy's latest Kiev-class aircraft carrier, **INS *Vikramaditya***. The offer was made during the DefExpo 2018 event, which was held in India. UkrOboronProm director general Pavlo Bukin and India Naval Staff chief admiral Sunil Lanba discussed the possible participation of Ukrainian defence industry enterprises in the modernisation and upgrade of the Indian Navy's vessels as part of the development. Furthermore, Bukin emphasised the country's interest in the joint development of navy vessel and coastal radar systems and sea buoys, as well as engaging in the supply of spare parts for Indian Navy ships and submarines. UkrOboronProm noted that the company could facilitate the continued delivery and joint production of gas turbine engines as part of the offer, in addition to providing maintenance services for **INS *Vikramaditya***. The 284m-long aircraft carrier features a displacement of 44,500t and can sail at a maximum of speed more than 30k. The warship has been constructed by Ukrainian specialists based at the Mykolaiv shipbuilding plant. **INS *Vikramaditya*** represents the Indian Navy's newest and largest vessel and was originally commissioned on 16 November 2013. The Kiev-class vessel is equipped with four propellers and powered by eight latest and advanced boilers featuring steam capacities of 100 tonnes per hour (tph) at a very high pressure of 64bar, thereby producing a total power output of 180,000 shaft horsepower (shp). The Indian Navy vessel has maximum beam of approximately 60m and is able to accommodate the MiG 29K, Kamov 31, Kamov 28, Seaking, ALH and Chetak aircraft.

Source: https://www.naval-technology.com

North Korea blasts British government for deploying navy ships to the region

DEPLOYING Royal Navy ships off the Korean Peninsula has been branded an 'act of war' by North Korea. Pyongyang blasted the UK's decision to send a third warship to the area to enforce international trade sanctions in the region, with North Korean officials saying it was an 'extremely provocative act'. Quoting a spokesman for the Korea-Europe Association, the Korea Central News Agency said that intercepting vessels believed to be breaking sanctions is 'nothing short of an act of a naval blockade and an act of war that undermines peace and stability on the Korean Peninsula', The Telegraph reported. The paper said the spokesman added: '*The UK would be well advised to deal with its domestic issues properly, instead of ingratiating itself with others and poking into affairs that are none of their business*.' Type 23 frigate **HMS *Sutherland*** is being deployed to the region this month, with two more navy warships, **HMS *Argyll*** and **HMS *Albion***, arriving later in the year. ***Argyll*** will be taking part in an international training exercise while ***Albion*** will support the trade sanctions preventing the import of banned goods into North Korea, including components for the nation's nuclear programme. A North Korean spokesman said: '*This cannot be construed otherwise than a foolish action completely ignorant of the situation on the Korean Peninsula, an action that encourages confrontation and tension*.' **Source : the news /portsmouth**

US Navy establishes forward-deployed readiness command in Japan

The US Navy announced it has officially established the Commander, Naval Surface Group Western Pacific (CNSG WP), which will be in charge of overseeing the Forward Deployed Naval Force Japan (FDNF-J) surface ship maintenance, training, and certification. In October 2017, US Pacific Fleet established a Detachment, Naval Surface Group Western Pacific as an interim organization to protect the balance between operations, maintenance, and training requirements. Now a permanent command, the name of this organization has changed to CNSG WP. It will serve as Commander, Naval Surface Force, US Pacific Fleet's (CNSP) executive agent responsible to oversee surface ship maintenance and training.

Destroyers **USS *Stethem* (DDG 63)** and **USS *Barry* (DDG 52)** in the Philippine Sea. **Photo: US Navy**

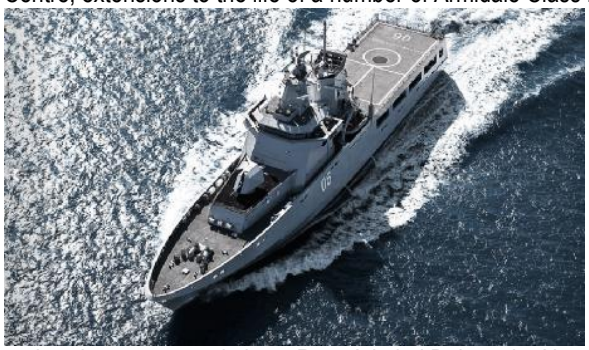
This new command will manage ship activities in the maintenance and basic phase, enforce the readiness assessment and certification process within those phases and closely coordinate with the ship's operational commander until a ship is certified Basic Phase Complete (BPC) by CNSP. Initially established under US Pacific Fleet, the command led by Capt. Rich Dromerhauser now reports to CNSP, Vice Adm. Rich Brown. "*Rebuilding readiness is my top priority*," said Brown. "*CNSG WP is one critical step in the process." As executive agent for CNSP, Dromerhauser will ensure every FDNF-J ship receives the necessary maintenance, and training before recommending to CNSP whether a ship is ready or requires additional training. CNSP will submit a message to C7F that the ship is certified BPC and ready for operational tasking. "My team will be focused on enabling ships to achieve certified levels of readiness and a demonstrated ability to safely conduct operations at sea after extended periods of maintenance and modernization efforts*," said Dromerhauser, inaugural commander of CNSG WP. "*We owe it to our Sailors to provide them the focused training, system maintenance, and modernization that builds competence and confidence in themselves, their Shipmates, and their equipment*." One of the goals of establishing CNSG WP is to provide a standard, predictable path for every FDNF-J ship to accomplish, protect, and synchronize maintenance and training to meet operational commitments. Since the initial announcement of CNSG WP, Dromerhauser has worked diligently to improve the efficacy and on time completion of maintenance and training. "*What Captain Dromerhauser and his team have been doing these past few months has greatly helped us assess and address readiness challenges in FDNF-J*," said Brown. "*He and the CNSG WP team will play a critical role in building readiness – ensuring our ships are fully certified – today, and well into the future*." In addition to the stand-up of CNSG WP, CNSP is implementing several other actions to improve safety and readiness of the surface fleet and addressing uses identified in the Comprehensive Review. These actions include: increased ship handling simulator training during the Basic and Advanced Division Officer Courses, mariner assessments during the Prospective Commanding Officer Course, a Junior Officer of the Deck Course, Bridge Resource Management Workshops, and additional OOD classroom and simulator training. **Source: Naval Today**

Australian Minister rejects OPV cost blowout claims

Claims of a $900 million cost blowout on the government's SEA 1180 Offshore Patrol Vessel (OPV) project have been rejected by Defence Industry Minister Christopher Pyne.

Centre Alliance Senator and former submariner Rex Patrick has warned that costs have already gone up before construction of the first two vessels has even started. A document released to Senator Patrick under Freedom of Information laws shows

the price offered by German shipbuilder Lürssen to build 12 Offshore Patrol Vessels (OPVs) for the Royal Australian Navy was $1.96 billion. However, in the three months between when the federal government announced Lürssen as the winning tenderer and when they went to contract, the price went from $1.96 billion to $2.83 billion, an $870 million increase. "*The government needs to provide a detailed explanation of the variation in price," said Senator Patrick. "$870 million is a lot of taxpayer money*." However, Minister Pyne has rejected the claims, arguing the $3.6 billion in program cost is in out-turn dollars, which includes inflation and exchange rate variations, and includes not only the acquisition cost of the contract with Lürssen but also government furnished equipment, training equipment required for the Offshore Patrol Vessel Capability Centre, extensions to the life of a number of Armidale Class Patrol Boats and Project Office costs. "*The government said the 12 OPVs would cost up to $4 billion and the current budgeted amount is well within this figure*," Minister Pyne told Defence Connect. "*Senator Patrick's attempt to suggest the OPVs are anything but within budget is wrong and desperate*." The tender requirements of the project were rewritten when the government announced Lürssen, which had teamed with ASC Shipbuilding and Civmec (Forgacs), as the successful bidder last November, telling the German company to include Austal in the project. While government sources have suggested that the $2.8 billion contract with Lürssen is an out-turn dollar price, which includes inflation and exchange rate variations, Rear Admiral Dalton, the Navy's General Manager, Ships Division, testified to the Senate that the out-turn price is actually $3.6 billion. "*The out-turn contract value is $3.6 billion*," RAdm Dalton told Labor Senator Kim Carr at Senate Estimates in February this year, adding the cost includes the "*acquisition of 12 offshore patrol vessels constructed in two sites in Australia, the first two in Osborne — the first one commencing construction on the contracted date of 15 November 2018 — and the construction of 10 ships in Henderson from 2020*." RAdm Dalton said at the time the through-life support costs were not at "*tender quality data*" yet. offer when the German company was only partnered with ASC and Civmec. "*The final agreed contract value with Lürssen Australia matches Lürssen's tendered offer*," a spokesperson for the department told Defence Connect in February. While Lürssen has now signed a contract with Civmec, Austal's role in the project still remains unclear after months of negotiations. Senator Patrick said the eleventh hour intervention by the government to include Austal in the project has created unnecessary cost increases to the project. "*Last minute political intervention can cause serious trouble in major contracts. In this case, we've seen a forced marriage between Lürssen and Austal that remains unresolved and is now subject to mediation*," the former submariner and defence contractor said. "*The federal government has managed to turn a relatively straightforward and inexpensive program into a complex and costly one*." Senator Patrick will be pursuing the cost variation at Senate Estimates next month. The first two OPVs will be built at the Osborne Naval Shipyard in South Australia by ASC, with construction starting this year. The remaining 10 will be constructed at the Henderson Maritime Precinct in Western Australia from 2020. The OPVs will have an important role protecting Australia's borders and will provide greater range and endurance for the Navy than the existing patrol boat fleet. **Source: Defence Connect**



Technology and the sea: Autonomous ships and digital captains

Imagine a future with self-navigating ships. As they ply the ocean autonomously their "*digital captains*" are far away on dry land, keeping watch remotely with mixed reality (MR) and artificial intelligence (AI) technologies. JRCS – a major Japanese maritime services company – believes it can make this a reality within the next 12 years. With the help of Microsoft, it has just launched an ambitious plan to digitally transform the global shipping industry. In a series of initial steps, JRCS is deploying MR, the Internet of Things (IoT), and AI to change how shipping crews are trained, how ships are maintained, and how navigational safety and standards are promoted and enforced. It sees digital transformation as the key to a safer and more efficient maritime industry, which is facing economic and demographic challenges on the horizon. As an island nation, Japan depends on marine transport for 99.7% of its overseas trade. And, it is no exaggeration to say merchant shipping underpins the world's third-largest economy. The problem is Japan's seafaring population is ageing and, consequently, its merchant fleet faces a chronic shortage of mariners In response, JRCS has partnered with Microsoft Japan to push digitally led workstyle innovation across the world's shipping and marine sectors. They are now jointly testing a arrange of new systems powered by Microsoft's Azure cloud. All are designed to meet provisions under the 1978 International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers to keep the shipping environment safe and the oceans clean. JRCS says Microsoft HoloLens – which blends the real and virtual worlds to create a mixed reality for users – will be a prime tool. HoloLens is a first-ever self-contained holographic computer that can be used wirelessly without the need to connect external devices such as mobile phones and personal computers. It provides a new means of deploying holograms in real-world physical environments to view the resulting mixed reality and manipulate digital contents within that world. "*We want to reform the workplace, especially for maritime employees at JRCS. I am convinced that HoloLens is the device that will enable us to make that change*," said Koichiro Kondo, JRCS Managing Director. "*As a result, we should be able to digitally transform the entire industry."* A major step will be in training programs, which until recently were limited by the capacity of its physical facilities at its headquarters in the city of Shimonoseki in the prefecture of Yamaguchi. Among

other things, foreign customers often found it difficult to send their staff to Japan for courses. One of the key attributes of HoloLens is its ability to allow multiple users in different locations to see the same mixed reality scenarios simultaneously. And, Atsushi Sora, the Chief Digital Officer at JRCS, immediately saw an opportunity. "*When I first saw HoloLens, I was both impressed and moved*," JRCS hopes to have the new system, which it calls INFINITY Training, up and running next year. It will use MR and AI to train both seafarers and land-based supervisors. It will enable seafarers throughout the world to participate in equipment and systems courses at any time, irrespective of their location. The problem of language differences will also be addressed by Microsoft Translator, which can interpret in real time. "*By using HoloLens everyone can share the space*," Sora said. "*Conducting training sessions remotely removes many obstacles such as distance, time, and costs. I believe that technology needs to be easy for everyone to use. HoloLens can make training faster, more accessible, essentially removing all the barriers. I believe it will play a big role in the future of the maritime industry*." There are also major gains to be made in the use of HoloLens in remote maintenance. JRCS's INFINITY Assist program will use MR, IoT, AI and other emerging technologies to lighten seafarer workloads. It will also reduce the risks of injury and human error. By donning HoloLens headsets, engineers will be able to reference maintenance procedures displayed over their visors as they work. JRCS plans to commercialize a maintenance application for its high voltage switchboards by the end of 2019 and will add further services from 2020 onward "*When it comes to vessel operations, safety and peace of mind are very important. This has to do with people's lives. By using a HoloLens digital interface, engineers can access important information from anywhere aboard the vessel*," said Sora. But perhaps the most far-reaching change has yet to come. JRCS is aiming to introduce and operate self-navigating vessels by 2030 through its planned INFINITY Command Service that will leverage Microsoft technologies – such as the Internet of Things (IoT), AI and big data – to enable "*digital captains*" to undertake the duties of ship captains. They will control multiple vessels from land, using HoloLens to share 3D charts with other digital captains in remote locations and check sea routes, weather, submarine topography and other information. "*AI will enable a digital captain at the holographic command center to conduct vessel operations with higher accuracy, safety, and efficiency." "With HoloLens, JRCS will change the way maritime distribution is done by interfacing with autonomous vessels,*" Sora said. "*What we envision is a holographic command center where digital captains can operate vessels with safety and efficiency. AI will enable a digital captain at the holographic command center to conduct vessel operations with higher accuracy, safety, and efficiency*." While innovative technology is being used to overcome a dwindling pool of maritime specialists, managing director Kondo also believes it will revitalize the industry as a career option for young people. "*We hope that the advancement of digital technology will encourage and entice the next generation to become interested in the maritime industry. HoloLens will bring everyone, not only our employees, a new and happier work experience*."

Source: Microsoft

Having kept a bridge watch at night in an area of high density, I am not yet convinced that this process will be safe.

Durban port collision under investigation

Apr 16, 2018 | News, Transport

The South African Maritime Safety Authority (SAMSA) is investigating a collision between a car carrier vessel and an inactive tugboat which took place at the end of last week.

According to SAMSA the vessel **CSCC *Asia***, operated by Hoegh Autoliners, collided with the inactive tug ***Inyalazi*** at about 9am on Friday, 13 April 2018 at R shed at the Port of Durban. Captain Saroor Ali, SAMSA Regional Manager (Eastern Region) says SAMSA is conducting an investigation to ascertain the factors contributing to the accident. "*Once completed recommendations will be provided to avoid any further reoccurrences. The process is guided by the South African Merchant Shipping Act*," Ali explained. No injuries were reported as there were no employees on board the tug ***Inyalazi***. Damage occurred to the quayside and the tug sustained a hole on its starboard side which resulted in ingress of water into the tug. Tug ***Umbilo*** was deployed to the site with a salvage pump to remove the water from ***Inyalazi***.

No severe damage

SAMSA surveyors were on site to closely assess the extent of the damage. Divers were deployed for the purposes of plugging water from entering the tug. The car carrier vessel was able to commence operation and the tug Inyalazi was moved to the dry dock for repairs. Ali said the 200-metre long Bahama registered vessel did not suffer severe damage and left the harbour on Saturday April 14. "*There were some abrasions on its starboard side, but no breach of the hull*," he concluded.

Source: http://www.infrastructurene.ws

'*Devastating*' ocean heatwaves are alarmingly on the rise

Research shows some worrying trends for ocean heatwaves over the last few years. They aren't going away and the environment is taking strain.

By AFP - 2018-04-10

Ocean heatwaves which can have "*devastating and long-term impacts*" on ecosystems have become longer and more frequent over the past century, according to an international study published Tuesday. From 1925 to 2016, the number of annual marine heatwave days globally jumped by 54 percent, with a noticeable acceleration over the last three decades, a paper in the journal Nature Communications said. Similar to an atmospheric heatwave, a marine heatwave is a prolonged period of unusually warm water. "*While some of us may enjoy the warmer waters when we go swimming, these heatwaves have significant impacts on ecosystems, biodiversity, fisheries, tourism and aquaculture*," said the study's lead author Eric

Oliver from Dalhousie University, Canada. "*There are often profound economic consequences that go hand in hand with these events*." The heatwaves are linked to an overall rise in average sea surface temperatures consistent with climate change effects, the study found. "*With more than 90 percent of the heat from human-caused global warming going into our oceans, it is likely that marine heatwaves will continue to increase*," co-author Neil Holbrook from the University of Tasmania said.

Economic tension

Just as atmospheric heatwaves can cause widespread ecological damage, marine heatwaves can harm ocean eco-systems and the plants and animals they house. They can also spark economic stresses for humans, by shrinking fish stocks, for example. In Tasmania in 2016, an intense marine heatwave led to disease outbreaks in farmed shellfish. In Western Australia in 2011, a month-long heatwave caused a shift in the ecosystem after part of the coastal kelp forest was wiped out. The following year in the Gulf of Maine, a surge in water temperature led to a boost in lobster numbers which crashed prices and industry profits. "*We're only just starting to piece together what the impact is of climate change and warming waters on our marine ecosystems*," said Oliver.

Hotter and longer

The research team combined daily data from satellites, going back about 35 years, with records from ship-based measuring stations and six coastal stations since 1925. They took into account the influence of natural variability caused by phenomena such as the El Nino weather cycle. The team found that from 1925 to 2016, the frequency of marine heatwaves increased by 34 percent on average, and the length of each heatwave by 17 percent — resulting in a 54-percent jump in marine heatwave days globally every year. The authors said it was the first time trends in extreme marine temperatures have been examined on a global scale, and links to climate change need further investigation.

Source: https://www.thesouthafrican.com

Climate change is a fact of life, as the natural history of the world shows a repeat of previous cycles.

Workhorses of the sea

Stena Icemax leaving Las Palmas as seen from the bridge of ***Stena Drillmax*** **Photo : Bridge team Stena Drillmax ©**