NAVY NEWS WEEK 22-6

1 June 2018

Protection Vessels International: Weekly Maritime Security Report

in Piracy and Security News 17/05/2018

East Africa and Indian Ocean

Eritrea: Merchant vessel reports attack in southern Red Sea: 10 May

A merchant vessel reported that it came under attack 28 nm off the Eritrean coast in the southern Red Sea at 2315 hrs local time, although further details of the incident remain unconfirmed. The report coincided with unconfirmed reports that a bulk carrier sustained damage after coming under fire from a rocket-propelled grenade (RPG) off Hodeidah.

PGI Analysis: The unconfirmed report comes weeks after the Yemeni Houthi militant group claimed an RPG attack in international waters off Hodeidah on 3 April against the Saudi-flagged oil tanker ***Abqaiq***. The reports indicate that Houthi militants are increasingly targeting commercial vessels perceived to be linked to the Saudi-led coalition currently fighting Houthi militants in Yemen. The reports came days before the coalition launched military renewed operations to retake Hodeidah from Houthi control on 14 May.

West Africa

Nigeria: Pirates attempt to board underway bulk carrier off the coast of Brass: 8 May

Six pirates on board a speed boat approached an underway bulk carrier at 1020 hrs local time 41 nm off the coast of Brass. The pirates attempted to board the vessel, but the captain took evasive manoeuvres, mustered crew, activated SSAS and increased speed. The pirates aborted the boarding attempt.

PGI Analysis: Niger Delta-based pirates frequently target commercial vessels in kidnap for ransom attacks off the coast of Brass. Pirates in the region are typically armed and are highly persistent during such attacks, often only aborting a boarding attempt when they have been shot. Even when crew barricade themselves in a citadel pirates will often stay on board the vessel for hours, stealing any items available.

Select Maritime News

Jordan: Controlled explosion injures 10 in Aqaba's old port: 14 May

Ten people were moderately injured by a controlled explosion to demolish silos in the old port of Aqaba. The explosion also caused a fire by igniting an oxygen cylinder used for iron cutting. Initial reports of the explosion suggested rockets had been fired towards Israel but had landed in Aqaba, although these remain unconfirmed.

Libya: Coastguard intercepts over 500 migrants: 7 May

The coastguard said it intercepted over 500 migrants in two separate operations off the country's northwestern coast. Over 400 migrants were intercepted off Garabulli while another 100 were stopped near Sabratha, the naval coastguard spokesman said. The migrants were taken to a detention centre in Tripoli. Libya remains an important transit country for migrants trying to reach European shores, although departures have dropped significantly in recent months due to anti-human smuggling measures.

Pakistan: Government orders two oil firms to suspend operations in Karachi Port: 13 May

The Ministry of Energy's petroleum division requested the Oil and Gas Regulatory Authority (Ogra) to suspend unauthorised operations by two oil marketing firms, Al-Noor terminal and Hascol Petroleum, at Keamari terminal, Karachi Port, over security concerns. The Ministry of Defence (MOD) had written to government agencies in February and June 2017 to express concern at suspected unauthorised operations without prior security clearance taking place at two key oil installations at the terminal. Any future storage terminals operated by the two firms require a No Objection Certificate from the MOD.

Pakistan: PM opens deep-water container terminal at Karachi port: 12 May

Prime Minister Shahid Khaqan Abbasi opened an advanced deep-water container terminal at Karachi port. The new terminal cost USD 1.4 bn, with Abbasi stating the terminal would connect Pakistan globally and make the port a major regional hub. The terminal will be run by a public-private partnership of the Karachi Port Trust (KPT) and Hong Kong based Hutchinson Ports.

PGI Risk Portal

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Source: Protection Vessels International Ltd via **https://www.hellenicshippingnews.com**

Taiwan again donates to Piracy Survivor Family Fund

On 15 May 2018, the International Seafarers' Welfare and Assistance Network (ISWAN) and the Taipei Representative Office in the EU and Belgium signed a Memorandum of Understanding, under which Taiwan will donate another USD 30,000 to the Piracy Survivor Family Fund (PSFF), administered by ISWAN, on behalf of the UN Contact Group for Piracy off the Coast of Somalia (CGPCS). The Memorandum was signed by Representative Harry Tseng at the European Parliament in Brussels and Roger Harris, Executive Director of ISWAN. Taiwan granted USD 30,000 to PSFF in 2015 and this is the second time that they have given a donation. Roger Harris of ISWAN said: '*ISWAN deeply appreciates this generous donation from the Government of Taiwan. We are delighted to receive another large grant from Taiwan to the Piracy Survivor Family Fund. The Fund supports seafarers and their families who have been the innocent victims of Somali piracy and who have received no or only very limited support since their attack.*' The PSFF was established by the CGPCS under the EU Presidency in 2014 to provide financial assistance to seafarers affected by Somali piracy and to their families. It fulfils a crucial role in the rehabilitation of piracy victims. Since 2006, it is estimated that more than 4,000 seafarers have been held hostage by Somali pirates and that as many as 80,000 have been subjected to an attack. Although ships are not being hijacked off the coast of Somalia, the threat of piracy still remains. The donation to the Fund will enable it to respond quickly should there be a resurgence of piracy off the coast of Somalia.

Source: International Seafarers' Welfare and Assistance Network (ISWAN)

Operation Three Arrows, a counterpiracy exercise that brought together warships and patrol aircraft from the United States and six other nations, has concluded in the Gulf of Aden after 12 days of naval drills. The U.S.-led Combined Maritime Forces, based in Bahrain, combined with the European Union Naval Force to coordinate the event, which began May 1. Warships from Japan, Spain and Italy and maritime aircraft from Germany, Spain, Japan and the United Kingdom practiced interacting with fishing vessels and dhows in the region. The small Djiboutian navy also assisted by informing local vessels of the warships in the region and collecting information on suspicious activity. The CMF forces handed out water and first-aid kits to the fishermen. This engagement is designed to build communication with the community and help CMF "*gain valuable knowledge about local maritime activity (and) identify suspicious activity early*," Rear Adm. Daisuke Kajimoto, commander of Combined Task Force 151, said in a statement. As one of three commands that fall under the U.S.-led combined force, CTF 151 patrols parts of the Indian Ocean, Gulf of Aden and the eastern coast of Somalia performing counterpiracy operations and engaging with regional partners to protect shipping lanes. Piracy in the Gulf of Aden has significantly declined since the launch of the EU's Operation Atalanta and the formation of CTF 151 in 2009, Navy officials said. There were more than 45 attacks by Somali pirates in the Gulf of Aden and surrounding waters in 2011. So far this year, only one attack was reported off the coast of Somalia. In February, a Singapore-flagged tanker was fired upon by three skiffs about 160 nautical miles off the Somali coast. After the onboard security team fired back, the pirates retreated. "*We work 24/7/365 in our baseline counterpiracy role*," said Lt. Col. Dave Fielder, EU Naval Force spokesman, in a statement. Fielder said the focus on the Somalian coast complements work done by CTF 151 partners. "*We've been doing this together for many years and we are comfortable partners. Our recent work together is part of the ongoing commitment to the region to address piracy and wider maritime security issues.*"

Source : stars & stripes

Refuelling barge for Indian Navy warship INS *Vikramaditya* launched; ship to deliver fuel to aircraft mid-sea

India IANS May 18, 2018 14:19:47 IST

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Kolkata: A 1,000 tonne barge, specially designed for carrying fuel mid-sea to the Indian Navy's flagship aircraft carrier **INS *Vikramaditya***, was launched on Thursday. The ship, manufactured by city-based Titagarh Wagons will depart for Mumbai dockyard of the Indian Navy for delivery after various trials including machinery and speed trials. The vessel will be formally handed over to the navy at Mumbai in September, followed by the another vessel three months thereafter. "*This 68 meter*

long ship has a displacement of 2,000 tonnes and is vital for enhancing naval operations at sea by replenishing strategic assets like the aircraft carrier in the anchorage," a statement said.

File image of **INS *Vikramaditya***. PTI

With a maximum speed of 12 knots, this ship is capable of sustaining at sea for seven days, it said. In May last year, the company commenced the construction of two 1,000-tonne fuel barges for the Indian Navy and two coastal research vessels for the National Institute of Ocean Technology under the Union Ministry of Earth Sciences at its shipyard near here. The construction work for the other three vessels is in process, according to the statement. The company has also obtained new orders from the West Bengal government for building small boats and has participated in various tenders where the results should come out in the next six-eight months. "*These orders are likely to be from the Indian Navy, Indian Coast Guard, Inland Waterways Authority of India, Shipping Corporation of India*," it said. The manufacturing firm had signed contracts of Rs 100 crore and Rs 75 crore with the National Institute of Ocean Technology under the Ministry of Earth Sciences and the Ministry of Defence (Navy), Directorate of Ship Production respectively. It is drawing up the layouts and planning the facilities of the next phase of ship building at Kulpi, the company said. **Source: https://www.firstpost.com**

Navy well-prepared as net security provider in Indian Ocean: Vice Admiral Pawar

PTI| May 18, 2018, 12.56 PM IST

"The Indian Navy is well-prepared to live up to its role as the net security provider in the Indian Ocean and is capable of meeting any security needs and contingency," Vice Admiral M S Pawar said.

KOLKATA: The Indian Navy is well prepared to live up to its role as the net security provider in the Indian Ocean, Vice Admiral M S Pawar, Chief of Staff, Eastern Naval Command, said here yesterday. Many countries in the region look up to the Indian Navy for support and training, Vice Admiral Pawar said on the sidelines of the launch of a fuel barge for the **INS *Vikramaditya***, the Navy's flagship aircraft carrier. The **INS *Vikrant***, the first indigenous aircraft carrier to be built in India, will soon join the Naval force and will be based in the eastern sea-board, he said. "*The Indian Navy is well-prepared to live up to its role as the net security provider in the Indian Ocean and is capable of meeting any security needs and contingency*," the Vice Admiral said. Pawar said more than 40 warships are being built for the Navy, almost all being manufactured in India. Admitting that manufacturing of submarines have been delayed, he said "*subs have been on a building line for long*". He, however, hastened to add the second Kalvari class submarine will soon join the Naval forces, while four more are being built at Mazagaon Dock in Mumbai. He said many countries in the region, including Bangladesh, Myanmar, Sri Lanka and Maldives look up to India for support and training. Pawar said the Navy shipped 400 tonnes of relief to Bangladesh last week. He said the **INS *Sumedha***, a patrol vessel of the Indian Navy, is engaged in patrolling the Exclusive Economic Zone (EEZ) in Maldives jointly with the Maldives National Defence Force. "*Last week, an outside fishing vessel was intercepted in the Maldives waters by the INS Sumedha and MNDF personnel and was told to stay away from its territory*," Pawar said. Regarding the withdrawal of Maldives from 'Milan 2018', a joint exercise of navies of various countries held in March, he said, "*Changes are constant which we have to reckon with. There may be some ups and downs but overall we share bonds of friendship.*" Many people come from the island nation to India for education and other purposes, the Vice Admiral said, adding that MNDF personnel are also trained at the Indian Navy's Cochin facility. **Source: https://economictimes.indiatimes.com**

The ***Cezayirli Gazi Hasan Pasa*** leaving Malta 15/5/2018 **Photo : Michael Cassar ©**

More propulsion problems for new Navy ships

The Australian Navy's helicopter landing dock **HMAS *Adelaide*** moored in Sydney
Photo : Piet Sinke
www.maasmondmaritime.com (c)

Propulsion problems have again plagued the navy's landing helicopter ships, with one of the 230m vessels up for repairs to fix leaking seals. The emergence of a propulsion issue, the second in less than a year, comes at an awkward time for the vessels' makers, foreign companies Navantia and BAE Sytems, both short-listed as contenders for the soon-to-be-announced $35 billion Future Frigates deal. But while the companies collaborated on building the landing helicopter docks at a cost of about $1.5bn each, the problem is thought to be isolated to the ship's 11 megawatt propulsion pods supplied by German firm Siemens The Australian understands the issue is being investigated to see if it was a material failure or was caused by something like an object in the water. A Senate committee highlighted the propulsion problem this month, as well as probing potential issues with the F-35 Joint Strike Fighter, the Spartan military transport aircraft, training on the Growler electronic warfare aircraft and the expansion of the Williamtown air base to cater for the strike fighters. Last year the two landing helicopter docks, **HMAS *Adelaide*** and **HMAS *Canberra*,** were in Sydney for months because of issues with propulsion pods. At the time, Defence said the problems had involved oil migrating across a seal in one ship's pod and wear in the bearings in a pod on another ship. The problems were reported to be resolved last year.

HMAS *Canberra* moored at Garden Island-Sydney –Australia **Photo : Piet Sinke www.maasmondmaritime.com (c)**

But the Senate joint standing committee on foreign affairs,defence and trade heard another problem with pods had emerged this year. "*We started to have a small amount of leakage into one of the pods because one of the seals was leaking*,'' Rear Admiral Peter Quinn, the head of Navy Capability, said in response to questions from committee chair David Fawcett. "*That was able to be managed by the bilge pumps fitted to the pods, but we have actually just taken the opportunity, before Adelaide deploys to Indo-Pacific Endeavour 18 and then on to* ***RIMPAC*** *(Rim of the Pacific Exercise), to replace that seal during her docking*." Rear Admiral Quinn denied any issue with the way the navy had been operating the ship. "*We've looked at all those issues, we're operating the vessels correctly*,'' he said. He said "*fixes were needed to be put into the pods to address these issues*" and a discussion about warranty was under way. "*There are still discussions, both with Siemens (the supplier of the pods) and Navantia (the shipbuilder) and others with respect to the pods, particularly in response to warranty issues and those sorts of things*." Senator Fawcett, a former military pilot, also probed potential issues with aircraft. One related to the intellectual property rights associated with Defence's program to establish and operate its new Joint Strike Fighters. Another was the requirement for a longer runway in order for the fighter to take off. BAE Systems, Navantia and Siemens were unable comment on the LHD situation on the grounds any comment on the issue should come from the Defence Department. But The Australian understands that the propulsion problem had involved normal repairs under warranty and that it was considered an "*isolated maintenance item*". And that two additional layers of redundancy had been built in to the pod with additional seals which mean there was no urgent need for repair. However it was agreed with Navy that the timing was suitable to do the repair work. The LHD's were built as part of a collaboration between Navantia and BAE Systems. Construction of the hull was undertaken at Navantia's Ferrol-Fene shipyard in north-west Spain. The hull was then shipped to BAE's Williamtown shipyard in Victoria for the installation of the island structure which had been constructed at various sites around Australia, according to Navy. BAE Systems' website says as well as being involved in supplying and fitting the superstructure blocks it was also supposed to undertake sea trials, acceptance tests and handover.

Source : The Australian

Exercise Komodo 2018 concludes offshore Indonesia

The third iteration of the Multilateral Naval **Exercise Komodo** (MNEK) has successfully concluded off the coast of Lombok, Indonesia. Warships from the participating nations joined for a two-day period of practical sea-based exercises following the completion of the event, which was hosted by the Indonesian Navy. The practical exercises saw the Royal Australian Navy's (RAN) **HMAS *Anzac*** sail in formation with 33 other vessels that were bound for the designated exercise area before performing a sail past on the final day of MNEK 2018. "*The practical exercises saw the Royal Australian Navy's (RAN)* ***HMAS Anzac*** *sail in formation with 33 other vessels that were bound for the designated exercise area.* This year's **Komodo** exercise focused on the nations' ability to cooperate in response to disaster and humanitarian issues. Personnel from the participating ships cooperated to conduct a series of exercises in order to ensure an effective response in the event of a future humanitarian or disaster relief situation. The RAN's **HMAS *Anzac*** participated in **MNEK 2018** as part of its South East Asia deployment. Other Australian Navy assets involved in this year's **Komodo** exercise included **HMAS *Toowoomba*** and **HMAS *Success***. All three RAN vessels were deployed for an approximately three-month period, which saw the ships visit several ports with the aim of developing partner capacity and interoperability within the region. **MNEK 2018** initially commenced on 5 May in Lombok, Indonesia. The exercise involved the dispatch of a multinational naval combined fleet to carry out humanitarian aid in accordance with United Nations (UN) resolutions. **Source : naval-technology**

U.S. Aims at Russia With Navy's Resurrected Second Fleet -Stavridis

The aircraft carrier **USS George H.W. Bush (CVN 77)** transits the Atlantic Ocean, May 10, 2018. **U.S. Navy Photo**

By James Stavridis (Bloomberg Opinion) — In yet another indication of the return of great power politics and the cratering U.S.-Russian relationship, the Defense Department announced last week the return of the historic and venerable Second Fleet, which has traditionally guarded the Atlantic approaches to the continental U.S. The fleet was disestablished in 2011 in an attempt to save money and free up funding for new ship construction. That decision proved shortsighted. The revamped command will have nearly 300 officers and enlisted men and women, and will take on responsibility for training the Atlantic Fleet and, more importantly, conducting real-world operations to track potentially hostile vessels approaching the U.S. coasts. What does the return of the Second Fleet say about America's maritime strategy and relations with a resurgent Russia? **First** and foremost, it shows a needed response to new to geographic imperatives. For three centuries, the U.S. has enjoyed the

benefits of the vast ocean buffer between it and the querulous states of Europe. During World Wars I and II, the U.S. and its allies had to fight hard to gain full "*sea control*" over the North Atlantic — Germany used undersea warfare very effectively to try and cut off the vital "*sea lanes of communication*" (i.e. shipping routes) that enabled the free movement of troops and supplies to beleaguered European allies. During the Cold War, the two vast fleets — U.S. and Soviet — played extended games of cat and mouse. They tested each other, tracking the other side's submarines and preparing for a full battle of the north Atlantic — which fortunately never materialized. The most strategic terrain was in the waters around Greenland, Iceland and the western approaches to the U.K.: the so-called GIUK gap. After the fall of the Berlin Wall, the U.S. drew down the overall size of the Atlantic Fleet, correctly believing that the Russian Federation did not pose the kind of threat represented by the old Soviet Union. Fast forward to rule of Vladimir Putin, who has rebuilt the Russian Fleet — especially its undersea forces. In his recent "*weapons video*," he showed many new weapons that could be launched from the Atlantic against the American mainland and sea defenses, including hypersonic cruise missiles and nuclear-powered undersea torpedoes. Whether those are actually operational weapons is still unclear, but the malign intent is hard to overlook. As the recent National Security Strategy and the follow-on National Defense Strategy point out, "*great power politics*" is back. **Second**, the return of Second Fleet helps re-energize NATO as a maritime force in the Atlantic. While I was supreme allied commander at NATO, the former NATO Atlantic Command, or Saclant, had atrophied into a test bed for innovation and training and was a shadow of its former self. Alongside the return of Second Fleet, NATO has announced a new Atlantic Command as well, which will be embedded within the larger Second Fleet. Both will be based in Norfolk, Virginia, and the efficiencies of combining them will allow far better allied participation in U.S. military efforts in the Atlantic Ocean. Look for British, French, German, Italian, Spanish and other advanced warships from Europe to be calling in U.S. ports and operating extensively with our forces from the Arctic down to the Caribbean and well into the deep Atlantic. Both commands will be headed up by a single 3-star vice admiral, with staff officers from across the 29 nations of the NATO alliance. **Third**, the new Second Fleet/NATO command will be responsible for specific operations to thwart Russian attempts to dominate the northern portions of the Atlantic. This means conducting broad area surveillance, including the use of oversea long-dwell drones; deploying manned maritime patrol aircraft such as Boeing's new P-8 Poseidon to track Russian submarines; using undersea monitoring systems, which are essentially listening posts on the deep seabed; undertaking at-sea combat training exercises with destroyers, cruisers and aircraft carriers; and integrating land-based air on both sides of the Atlantic from their homes in the U.S., U.K. and Iceland. There will also be extensive operations under the surface of the sea by nuclear and diesel submarines, especially in the Arctic Ocean. All of this means more tension closer to U.S. shores. Alongside the dangerous military operations in Syria, where U.S. and Russian forces are literally within rifle shot of each other, the waters of the North Atlantic will become a zone of serious potential conflict. For example, when opposing submarines operate in close proximity to each other, they can literally hear the torpedo doors of the other boat opening. This can be construed as a "*hostile act*," and possibly lead to a defensive overreaction. Such situations can escalate quickly. While there are some protocols in place between the U.S. and Russia (the 1972 Incidents at Sea agreements), they are increasingly ignored — witness the series of close encounters at sea and in the air in the Baltic and Black Seas between the U.S. and Russian fleets. It is high time we dusted off those agreements and opened a serious conversation with Russia about better observance of them from both sides. The real danger here is twofold. **First** is the very real possibility of an inadvertent incident caused by young officers in high-performance aircraft or driving advanced submarines and destroyers misinterpreting their leaders' intent and acting too aggressively. The U.S. is on a hair-trigger already with Russia given profound disagreements over Syria, Ukraine and intrusion into the 2016 election. Accidents can lead to profoundly dangerous outcomes. But there is a **second**, deeper danger: the natural tendency of military planners and operators to "*train the way we will fight*." This means deliberate detailed planning of how to conduct a "*fourth battle of the Atlantic*" as one 4-star admiral called it. Once those war plans are developed, the Navy — led by the newly resurrected Second Fleet — will conduct training, secure resources, and generally become a significant fighting force. While this is necessary given the geopolitics of the moment, the return of the Second Fleet should be accompanied by an effort to reduce the chances of tactical conflict with Russia wherever possible. And at the broadest strategic level, the U.S. and its allies need to continue to search for meaningful ways to reduce tensions with the Russian Federation across the range of disagreements they face. Otherwise, the chances of the Second Fleet going into combat will continue to rise.

***James Stavridis**, a retired U.S. Navy admiral and former military commander of NATO, is dean of the Fletcher School of Law and Diplomacy at Tufts University. His most recent book is "**Sea Power: The History and Geopolitics of the World's Oceans.**"*

Source: http://gcaptain.com

French Aircraft Carrier Out of Dry Dock - Refit Work Continues Afloat

May 2018 Naval News

Posted On Thursday, 17 May 2018 10:59

The French Navy (Marine Nationale) aircraft carrier ***Charles de Gaulle*** was taken out of its dry dock on Wednesday, May 16, 2018. The vessel was berthed at Toulon naval base where the refit work will now continue afloat. ***Charles de Gaulle*** entered the dry dock on February 8, 2017 for its mid-life refit. According to the French Navy, refit work will now continue afloat "*for a few more months*". From propulsion to the combat system, to the aircraft maintenance workshops, all facilities are being serviced to make the aircraft carrier operational again for the next two decades. During this mid-life refit, the

combat management system, air wing facilities (with a transition to a "*100% Rafale*" fighter air wing), ship management systems and more have been (or are still being) overhaul or modernized.

Aircraft carrier **Charles de Gaulle** was taken out of its dry dock on Wednesday, May 16, 2018. French Navy picture.

Charles de Gaulle mid-life refit key figures (provided by Naval Group):
- Over 4 million hours of work including 2.5 million for the construction site and 1.8 million engineering design;
- 2.5 million hours of work including 1 million for the Toulon site, 500,000 hours for other Naval Group sites and 1 million for subcontractors;
- More than 2,000 people work daily on the site: 1,000 contractors (Naval Group and subcontractors) and 1,100 crew members;
- 160 subcontractors;
- 200,000 tasks;
- 2,000 tests and trials;
- 1.3 billion euros;
- 1 basin of 14 m height, 275 m length and 46 m width
- 177 000m³ of water, about 47 Olympic swimming pools.

Source: https://www.navyrecognition.com

In Details : French Navy Aircraft Carrier Charles de Gaulle Mid-Life Refit

Posted On Thursday, 20 April 2017 12:07

The French Navy (Marine Nationale) sole aircraft carrier ***Charles de Gaulle*** is in dry dock since February 2017 for its mid-life refit following 15 years of operational deployments during which it was involved in most of the international conflicts in which France took part (Afghanistan, Libya, Levant) and in particular three times since January 2015. This major overhaul focuses on three main elements: The combat management system of the vessel, the carrier air wing facilities and the ship management systems.

Aircraft Carrier ***Charles de Gaulle*** during its mid-life refit in the Vauban dry dock at Toulon naval base.

Our video report on *Charles de Gaulle*'s mid-life refit.
https://www.youtube.com/watch?v=jEbQFMFDpCY

Combat System Modernization

Thanks to the upgrade of its combat system (and associated sensors), ***Charles de Gaulle*** is set to retain top of the line sensor and processing capabilities for the next 25 years. The combat system modernization includes:

1/ Modernization of the SENIT 8 combat direction system (CDS) by DCNS which is the heart of the CMS and fuses the ship' sensors with effectors (weapon systems).

2/ New multifunction workstations in the combat information center (CIC): There will be 25 new workstations plus a cooperative (touch screen) tactical table in the middle.

3/ Installation of new digital networks, computer racks and data servers as well as the new "*cybersecurity*" solution by DCNS which was recently unveiled at Euronaval. The digital systems on DCNS's future combat vessels will be protected by design. DCNS, as project management leader and integrator of the armed vessel, integrates cybersecurity over the entire lifecycle of its products and services, which are designed to be cyber-resilient. ***Charles de Gaulle*** is set to be the very first vessel to

benefit from this technology.
4/ Replacement of the old DRBJ-11B surveillance radar with a SMART-S Mk2 multifunction 3D radar by Thales. According to Thales, SMART-S Mk2 is the latest 3D multibeam radar. It operates in S-band and is optimised for medium-to-long-range surveillance and target designation in littoral environments.
5/ Replacement of the old DRBN-34 navigation radar with a SCANTER 6002 by Terma. According to Terma, the SCANTER 6002 naval surveillance radar is a fully coherent solid state radar with software-defined functionality. Advanced techniques such as Frequency Diversity and Time Diversity provide superior performance.
6/ Installation of a new IRST (infra red search and track) system: The ARTEMIS by Thales. According to Thales, ARTEMIS is the most advanced cooled IRST and provides high performance short and long range IRST, against asymmetric and conventional threats.
7/ Installation of a new electro-optical system: the EOMS NG by Sagem (Safran): Two systems will be installed. According to Sagem, EOMS NG provides automatic 360° detection, identification, and gun/short range missile engagement of all surface and air targets, from anti-ship sea-skimming missiles to Fast Incoming Attack Craft (FIAC).
The above systems are currently being tested by the DGA (French defense procurement agency) at the SESDA (site d'experimentation des systemes de défense aérienne) Shore Integration Facility (SIF). The SIF is similar to a "*ship on land*". It is used to integrate and test all the future combat systems and sensors of the aircraft carrier on land before their installation aboard the vessel. This significantly reduces the development and integration time aboard the vessel. Thanks to the SIF, many tests can be conducted on land in a short time and at a fraction of the cost (compared to deploying a vessel and its crew). It helps identify and correct potential conflicts or issues with the new systems before their installation aboard the vessel. DGA teams are in charge of the development of the new combat system and in charge of organizing its test campaigns while DCNS is in charge of conducting the tests at the SIF. DCNS also uses the SIF to train French Navy sailors with their future equipments.

Elements of one of the two aircraft catapults under maintenance.

Air Wing Facilities Upgrade
With the Super Etendard Modernisé SEM now retired from service, aircraft carrier Charles de Gaulle is transitioning to a "*100% Rafale*" fighter air wing. With this transition all the equipment devoted to the SEM are taken off board. The on board installations are being adapted to acommodate about 30 Rafale figther aircraft (in addition to the E-2C Hawkeyes and helicopters). The air wing facilities upgrade includes:
1/ Removal of engine test benches and workshops dedicated to the SEM (the space released will now be used to increase the maintenance capacity for the Rafale).
2/ Installation of 400 Hz converters to accommodate NH90 NFH "*Caiman*" helicopters.
3/ Renovation of the Landing Signal Officers (LSO) platform
4/ Installation of the new DALAS-NG (Dispositif d'aide à l'Appontage LASer Nouvelle Génération) laser landing assistance device in place of the old one.
5/ Replacement of the IFLOLS (Improved Fresnel Lens Optical Landing System) with one of the latest technology, similar to the one currently fitted aboard the U.S. Navy future class of aicraft carriers (Ford-class / CVN 78).

Ship Management Systems Modernization
Among other things, it is necessary to modernize the platform's automatic controllers, the centralized ship management system and the damage control systems.
1/ Replacement of the programmable logic controllers (PLCs) for the electrical plant, propulsion, hoists...
2/ Renovation of the SATRAP computerised, integrated stabilisation system allowing aircraft to be operated up to sea state 5/6.
3/ A new network for the RSPN ship platform, which will integrate equipment monitoring systems.
4/ Modernization of production plants for cold water, air conditioning, refrigeration of computer racks...

Other Support and Overhaul Operations
In addition to the modernization of the aircraft carrier under DGA contracting authority, this mid-life refit is used to conduct both preventive and corrective actions in terms of general maintenance of the vessel. These "through life support" operations are conducted under the control of the French Navy "*fleet support service*" (service de soutien de la flotte) and relate to nuclear installations, aviation, platform, combat system.
1/ Mid-life overhaul of the bow catapult (with US Navy assistance).

2/ Renovation of the two boiler rooms and nuclear fuel replacement.
3/ Flight deck resurfacing with a new nanotechnology-based material
4/ Removal, maintenance and re-installation of the propellers, shafts, rudders and stabilizers.
5 / New paint coat above and below the water line. **Source: https://www.navyrecognition.com**

Portsmouth-based Royal Navy team takes control of unmanned minesweeper which will clear fishing lanes of bombs

A ROBOT designed to identify and destroy deadly underwater mines has been handed over to a Royal Navy team based in Portsmouth.

An autonomous minesweeper system that can safely clear sea lanes of mines has been handed over to the Royal Navy

By Tom Cotterill
Published: 18:14 Thursday 17 May 2018
Bosses at the Royal Navy have accepted a new hi-tech minehunter that will one day be used to keep vital fishing lanes clear of lethal ordnance. The £13m search-and-destroy vessel has been handed over Maritime Autonomous Systems Trials Team (MASTT), based at the Portsmouth Naval Base, who will put the system through its paces. Defence minister Guto Bebb said the new tech will be a vital addition to the future arsenal of the Royal Navy's fleet. He said: '*This autonomous minesweeper takes us a step closer to taking our crews out of danger and allowing us to safely clear sea lanes of explosives, whether that's supporting trade in global waters and around the British coastline, or protecting our ships and shores. 'Easily transported by road, sea and air, the hi-tech design means a small team could put the system to use within hours of it arriving in theatre. We are investing millions in innovative technology now, to support our military of the future*.' The system has the ability to defeat the most modern, digital sea mines which can detect and target military ships passing overhead. It features a '*sense and avoid*' capability, with the Ministry of Defence hinting it could work together with other similar autonomous systems. Over the last four months, the system has been put through its paces by the vessel's developer Atlas Elektronik, the Defence Equipment and Support team members and the MASTT. Brigadier Jim Morris Royal Marines – assistant chief of the naval staff in maritime capability, and senior responsible officer for the mine counter measures and hydrographic capability programme – said the new system was a 'critical component' of the navy's mine countermeasure capability. He said: '*This autonomous sweep system represents a fundamental step in the navy's transition to autonomous offboard systems to counter the threat posed to international shipping by the sea mine; we look forward to commencing demonstration of the associated minehunting system in 2019*.' Although MASTT and the Royal Navy's minehunting fleet are based in Portsmouth, a spokeswoman from the Senior Service said no decision had been made on where the autonomous system would be permanently located. Neal Lawson, director ships support at the MoD's procurement organisation, Defence Equipment and Support, said: '*The autonomous minesweeper offers a commander the ability to defeat mines that cannot be countered by current hunting techniques and significantly reduces the risk to crew members in pressured and time-constrained operations. 'The system can offer greater flexibility and upgradability, allowing the Royal Navy to respond better to the sea-mine threat in the long-term and operate more effectively around the world*.' The system is due to tackle further tests and trials with the navy in Scotland. **Source: https://www.portsmouth.co.uk**

Two Down, Four to Go? Chinese Media Suggest Beijing Planning Six-Carrier Navy

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Just as China's first homemade aircraft carrier, currently known as Type 001A, was sent out for full-scale sea trials this week, Chinese media began tossing around the idea that the People's Liberation Army (PLA) needs four more. At the moment, China only has one fully operational aircraft carrier: the ***Liaoning***, which was rebuilt using an unfinished Russian Soviet-era aircraft carrier named Varyag. China built a second aircraft carrier, the Type 001A, on their own, and it is now undergoing tests. The new carrier might be delivered to the PLA-Navy by the end of the year and commissioned sometime within the next two years, the Asia Times reported. According to the Times, Chinese media outlets are suggesting that the PLA needs a total of six carriers in order to form convoys and strike groups to advance China's interests in the region. The

outlet also indicated that additional carriers would help China to get a handle on "*emergencies on several fronts*" in a "*worst-case scenario*."

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A third carrier, the outlet speculated, could be built sometime in the next decade. However, officials have not officially spoken on the matter. But not every Chinese outlet is pushing the same story — state media publications report that Beijing has no intention of kicking off a "*carrier arms race*" with the mighty United States, which has a total of 20 carriers. Wang Yunfei, a Beijing-based naval expert and retired naval admiral, says China doesn't intend to build as many carriers as has been suggested, stressing that China's goal isn't to mirror the US. "*The PLA Navy's mission is to safeguard China's sovereignty, territorial integrity and national interests, rather than play 'world police*,'" he said. Whether or not Chinese military leaders decide to build more carriers, its team of shipbuilders are ready for the challenge, Hu Wenming, chairman of the China Shipbuilding Industry Corporation, said on state television. "*We have already developed a team of experts in the research, design and construction [of aircraft carriers], and their average age is just 36*," Hu said, according to a South China Morning Post report. "*In the future, if the country wants to develop any type of aircraft carrier, we have the capability to do it*." China's Type 001A carrier took some four years to build. It's unclear when the country may start creating another. **Source: https://sputniknews.com**

Spotlight: pointing to blue on the African map

ISS has become a vital resource for Africans and international partners seeking to build the marine economy.
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The economic potential and security risk from Africa's oceans is moving into the mainstream of continental policy and planning, with technical support and guidance from the ISS. Africa's 30 500 km coastline and enormous maritime domain are abundant with the food and energy resources countries need to develop. The coast is ripe for infrastructure and tourism development. But it all needs protecting as a sustainable source of future prosperity. '*For years the blue on African maps was the preserve of foreign navies, ignored by African leaders and exploited illegally by foreign vessels*,' says ISS maritime security senior researcher Tim Walker. What happens at sea is not visible to voters or to policy makers on land, so was not an African priority. That is changing, says Walker. The ISS now helps to coordinate the technical expertise and planning focus of the African Union (AU) to implement Africa's Integrated Maritime Strategy (AIMS 2050). The strategy is an innovative document that has to date lacked leadership backing and capacity to take the next steps. '*Great economies are built on healthy trading relationships, and at least 90% of African imports and exports move by sea*,' Walker says. '*The ISS is showing how a secure and prosperous marine economy can enable the continent to achieve its social and development aims*.' Maritime growth which is well integrated with land infrastructure provides multiple spin-off benefits in jobs, logistics and skills development. And because neither fish nor pirates respect international boundaries, maritime policies are by their nature cooperative and transnational. '*Harnessing Africa's maritime potential requires international cooperation, development of navies and port infrastructure, dedicated research and new skills*,' Walker says. The ISS has become a vital resource for Africans and international partners seeking to build the blue economy. Its authoritative research is framing the maritime debate, and the ISS is consulted by the UN, AU and regional bodies at the highest level. The International Maritime Organisation (IMO) sees the ISS as a vital partner on the continent, and this is one of the ways the ISS is bringing Africa's once-marginalised voice into international maritime discussions. Walker is also guiding defence attaches in Addis Ababa on their engagement with the AU, and is setting up a collaborative AU maritime working group to help officials tasked with implementing AIMS 2050 and other maritime codes and charters. Diplomats and AU officials welcome Walker's briefings on maritime law and IMO regulations. '*We've become well known for our maritime security research and are well positioned to give policy advice*,' he says. The ISS is also working closely with South Africa's transport, environment and international relations departments. With South Africa as current chair of the Indian Ocean Rim Association (IORA), Walker is seizing the moment to put the African maritime agenda on the global stage. '*Maritime security is key to maritime prosperity*,' says Walker, who is familiar with most of Africa's 38 coastal states and attends senior leadership seminars by the US Naval War College. He was a presenter at recent US-funded naval exercises off Africa's east coast, where African sailors worked with international crews to build the continent's seaborne strategy and defences. The aim is to see greater African control and governance over African waters and the sustainable development of ocean resources. Walker is working with East Africa's Intergovernmental Authority on Development (IGAD) to implement a regional maritime security strategy. The initiative is part of a formal ISS-IGAD collaboration to develop African maritime security governance. The ISS also runs events to build maritime awareness and capacity among IGAD member states. **Source: https://issafrica.org**