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Paramilitary: Chinese Combat Fishermen

June 2, 2016: Intelligence analysts have concluded that many of the Chinese fishing ships involved in confrontations with non-Chinese fishing ships and local coast guard or naval police never seem to catch any fish. It turns out that these fish-free fishing ships are being paid by the Chinese government to be pests and professional victims of oppression by other nations with claims on the South China Sea. These fishing boats do fish, but not while being paid by their government for what amounts to paramilitary duties. Since 2010 China has increasingly used a growing fleet of civilian fishing vessels to assert their claims on much of the South China Seas. These unarmed ships are used, usually in groups, to block the moment of unwelcome foreign commercial or military ships. Sometimes these fishing ships are seized by the coast guards of other nations and the crews held for months until the Chinese government can arrange a release. This usually happens after China agrees to pay a large "fine" and threatening violent retaliation if the Chinese fishermen were not released. It turns out that China has been building and expanding this naval militia for over a decade. This began with an older program that provided adventurous fishing captains with subsidies for building new fishing boats and assurances that the navy would assist Chinese fishermen in gaining access to foreign fishing areas and exclusive use of fishing grounds in international waters. There appear to be over a hundred civilian ships (mostly ocean going fishing trawlers) associated with this militia program, which openly functions as a government supported organization back in China and has headquarters in southern China. This arrangement evolved into some of these high-seas fishing ships being paid (about \$10,000 a month) to go on vovages, usually to the South China Sea, to act as muscle to establish Chinese claims to areas long acknowledged as non-Chinese. A growing number (nearly 30) of these fishing ships are now spending a third to half their time on militia duties. It was eventually noted that the same fishing ships, often with the same crews, were showing up in these confrontations. Now these paramilitary fishing ships are being tracked more diligently and that was how their lack of fishing activity was detected. Most Chinese commercial ships, particularly freighters and ocean-going fishing ships, are considered part of a military maritime reserve force and are expected to follow orders from navy or coast guard ships whenever called upon. This arrangement is not unusual as it is an ancient practice still used in many parts of the world. But the Chinese commercial naval militia ships are expected to collect intelligence and sometimes even risk damage and injuries by using their ships to block the movement of foreign ships (including warships). In return the Chinese navy and coast guard will come to the assistance if Chinese commercial ships get in trouble with foreign navies or coast guards. But this arrangement does not always work out as it should An example of this occurred in March 2016 when an Argentinian coast guard ship sank a Chinese trawler that was illegally fishing in Argentinian waters. The coast guard rescued five of the crew, including the captain and arrested them. China complained but did nothing else. In fact, within weeks China publicly reaffirmed its growing economic and diplomatic ties with Argentina. Meanwhile the owners of the lost fishing trawler will be quietly compensated. This sort of illegal fishing is a worldwide problem and Chinese trawlers are probably the biggest offenders. In waters closer to China there will often be Chinese warships near areas where Chinese trawlers fish illegally. This sometimes becomes a problem as Chinese warships will often try to rescue Chinese trawlers seized for illegal fishing. This doesn't always work but it sets a scary precedent. This has happened several times in Indonesian waters, even in areas where China does not dispute ownership. China justifies their armed intervention because the Chinese trawlers were in "traditional Chinese fishing grounds." Source: https://www.strategypage.com

Will Turkey Modernize Pakistan's Attack Submarine Fleet?

Istanbul and Islamabad are in talks over upgrading three Pakistan Navy diesel-electric attack submarines. By Franz-Stefan Gady

Turkish Defense Minister Fikri Işık met his Pakistani counterpart, Khawaja Muhammad Asif, on June 3 in Islamabad to discuss bilateral defense relations including a contract to modernize the Pakistan Navy's three Agosta 90B-class (aka Khalid-class) diesel-electric attack submarines equipped with air-independent propulsion systems, Hurriyet Daily News reports. According to the Turkish daily Milliyet, Turkey's defense minister expects a deal to be signed by the end of this month. No additional details about the Turkey-Pakistan defense deal have so far been revealed. Some Pakistani defense analysts have speculated that the upgrade could entail the modernization of the Khalid-class submarines' combat management system, by, for example, Turkish defense contractor Havelsan, who has successfully developed a combat management system for the Turkish Navy's submarine fleet — primarily consisting of variants of German Type 209 boats. While in Pakistan, Turkey's defense minister also discussed the possible sale of four Ada-class stealth corvettes and T-129 multi-role attack helicopters. "One of the most important issues between [the two countries] is a deal for T129 attack helicopters," Işık said during a press conference. The T-129 is a multi-role, all-weather attack helicopter co-developed by Turkish Aerospace Industries and AgustaWestland. The aircraft is currently operated by the Turkish Army and is being offered for export to a number of other countries, besides Pakistan. Islamabad considered purchasing the helicopter a few years back, but ultimately opted for the Bell Helicopters AH-1Z Viper due to the United States' unwillingness to clear the export of the T-129's U.S.-made turboshaft engines (LHTEC CTS-800-4A, an engine primarily developed for the cancelled

Boeing-Sikorsky RAH-66 Comanche helicopter). The four Ada-class corvettes would be built in Pakistan, according to the minister, although previous press reports indicated that only three ships would be constructed in Karachi over a ten-year period. The Ada-class vessels are littoral combat warships, primarily designed for offshore and high-sea patrolling, but can also be used for anti-submarine and anti-surface warfare missions during wartime. Pakistan has allegedly also expressed interest in Turkey's first indigenously-designed, third generation+ main battle tank (MBT) Altay. However, "[r]eports that Pakistan is interested in the Altay have to take into account that Turkey's new MBT will be an expensive acquisition for the Pakistan Army since the Altay is based on Western tank designs and will be a NATO-standard MBT," as I reported previously. Discussions over the Altay MBT apparently did not take place during last week's visit During his stay, Işık also met Pakistan Army Chief, General Raheel Sharif, in Rawalpindi. "During the meeting, matters of mutual interest including regional security and defense collaboration came under discussion. Turkish Defense Minister appreciated Pakistan Army's accomplishments in Op ZeA [Operation Zarb-e-Azb] and contributions towards regional peace and stability." according to a Pakistan Army press release. Source : the Diplomat



SOUDA BAY, Greece (June 5, 2016) USS Porter (DDG 78) departs Souda Bay, Greece following a brief port visit June 5, 2016. Porter, an Arleigh Burke-class guided-missile destroyer, forward-deployed to Rota, Spain, is conducting a routine patrol in the U.S. 6th Fleet area of operations in support of U.S. national security interests in Europe. (U.S. Navy Photo by Heather Judkins/Released)

Philippine Navy commissions first SSV, three landing craft on 118th anniversary Ridzwan Rahmat, Singapore - IHS Jane's Defence Weekly 03 June 2016



BRP Tarlac during its commissioning ceremony on 1 June 2016, on the occasion of the Philippine Navy's 118th anniversary. Source: Philippine Navy

Key Points

- The Philippine Navy has officially inducted its largest vessel to-date
- Platform will significantly improve the service's transportation and HADR capabilities

The Philippine Navy (PN) has commissioned its first 123 m strategic sealift vessel (SSV), the PN's naval public affairs office told IHS Jane's on 2 June. BRP Tarlac, with pennant number 601, was commissioned in Manila on 1 June in a ceremony marking the occasion of the PN's 188th anniversary. Tarlac is the first of two landing platform dock (LPD)-like ships acquired under a contract worth USD92 million signed in June 2014 between Indonesian shipbuilder PT PAL and the Philippine government. According to IHS Jane's Fighting Ships, Tarlac features a full-load displacement of 11,583 tonnes, can accommodate a crew of 126, has a lift capacity for 500 troops, and can accommodate up to two medium helicopters on its flight deck. The platform has a top speed of 15 kt and an endurance of up to 30 days. The second SSV is currently under construction in Surabaya and is scheduled for delivery in mid-2017. Also inducted on the same day were three former Royal Australian Navy (RAN) Balikpapan-class landing craft that were retired from RAN service in December 2012, and received by the Philippine government in March 2016. Formerly known as HMAS *Wewak* (L 130), HMAS *Betano* (L 133), and HMAS *Balikpapan* (L 126), the vessels have been commissioned as BRP *Waray* (288), BRP *Iwak* (289), and BRP *Agta* (290) respectively, said the PN. Each landing craft has a military lift capacity for three medium tanks or equivalent, and a range of 3,000 n miles (5,556 km) at 10 kt. "*All of these new acquisitions give the PN a significant boost on its capability of transporting personnel, equipment, and aid during humanitarian assistance and disaster response [HADR] operations,"* said the service in its statement on the inductions.

First Mistral amphib handed over to Egypt

Jeremy Binnie, London - IHS Jane's Defence Weekly 02 June 2016



A still from a video released by the Egyptian Ministry of Defence on 2 June shows *Gamal Abdel Nasser* at Saint-Nazaire. Source: Egyptian MoD

The first of Egypt's two Mistral-class amphibious assault ships was formally handed over on 2 June in a ceremony held at Saint-Nazaire and attended by Minister

of Defence General Sedki Sobhi. French shipbuilder DCNS said **ENS** *Gamal Abdel Nasser* (1010) would leave Saint-Nazaire in the next few days and participate in an exercise with the French Navy before reaching its home port at Alexandria. It said 180 Egyptian sailors have been trained on the vessel since February by DCNS instructors supported by STX France and the Défense Conseil International (DCI), a government body that supports French defence exports. DCNS added that *Gamal Abdel Nasser* will sail with its two new-generation landing craft (CTM NG) and one EDAR catamaran landing craft. The two Mistrals were built for the Russian Navy, but could not be delivered due to the imposition of EU sanctions on Russia after its annexation of Crimea. France announced in September 2015 that Egypt would take the two vessels. The Mistral acquisition is part of a wider Egyptian naval modernisation programme that has already seen France transfer its FREMM frigate *Normandie* to Egypt in June 2015 and Cairo order four Gowind corvettes from DCNS, three of which will be built in Alexandria. Egypt has also ordered four Type 209 submarines from the German company TKMS.

Russia launches sixth and final improved Kilo-class submarine

Nicholas de Larrinaga, London - IHS Jane's Defence Weekly 02 June 2016



Kolpino, the sixth and final Project 636.3 Improved Kilo-class diesel-electric submarine currently on order for the Russian Navy, was launched on 31 May. Source: Admiralty Shipyards

Russia launched its sixth and final Project 636.3 (Improved Kilo-class) diesel-electric submarine on order for the Black Sea Fleet on 31 May, the Russian Ministry of Defence (MoD) announced.

Kolpino was launched at the Admiralty Shipyard in St Petersburg in a ceremony attended by Vice Admiral Alexander Fedotenkov, deputy chief of the Russian Navy.

At the ceremony, Vice Adm Fedotenkov revealed that Russia is now planning to order Project 636.3 submarines for the Pacific Fleet, and will later build more Improved Kilo-class boats for Russia's Northern and Baltic Fleets.

Russia currently has four Project 636.3 vessels commissioned into service with the Black Sea Fleet (*Novorossiysk*, *Rostov-Na-Donu*, *Stary Oskol*, and *Krasnodar*) and launched a fifth (*Veliky Novgorod*) in March that is due to soon begin sea trials. While in the eastern Mediterranean *Rostov-Na-Donu* notably fired 3M14 Kalibr land attack cruise missiles at targets in Syria on 8 December 2015. The Project 636 family are an improvement on the original Project 877 (Kilo-class) design, 24 of which were built for Russia between 1979 and 1994. The new submarines are slightly longer than their predecessors and feature uprated engines, improved onboard systems and armament, and noise reduction features. They can be armed with both torpedoes and torpedo tube-launched cruise missiles (like the Kalibr). The Russian MoD describes the Project 636.3 as having a submerged speed of 20 kt, and endurance of 45 days, a crew of 50, and a submerged displacement of around 4,000 tonnes. The 636 design has also been exported to China (which now operates 10; two Project 636 submarines and two Project 636M submarines). Algeria also operates two Project 636M submarines, while Vietnam has four Project 636M boats in service and two more en route/in construction. **Source:** www.janes.com

UDT 2016: FMV seeks improved availability in Sweden's A 26 submarine

Dr Lee Willett, Oslo - IHS Jane's Defence Weekly 02 June 2016

Key Points

- A 26 programme focuses on greater availability
- New logistics, maintenance, and manning approaches will help generate this improved sea time

Sweden is seeking to have its two A 26-class diesel-electric submarines (SSKs) available for more than 80% of the time across the service life of the new boats, according to a programme official. Dr Frederick Hellstrom, the A 26 programme manager at FMV (Sweden's defence materiel administration), told the audience at the UDT 2016 underwater defence and security exposition in Oslo on 1 June that this figure was "*pretty high for a submarine*." Augmenting availability is a key area for the programme, said Dr Hellstrom. **Source:** www.janes.com

USS Frank Cable departs Guam

The 38-year-old submarine tender, **USS** *FRANK CABLE*, left Guam Monday on a deployment to the U.S. 7th and 5th Fleet area of responsibilities, according to the Navy. Maj. Jeff Landis, director of public affairs and communications at Naval Base Guam, said the ship's departure Monday marks the first "*traditional-style deployment*" for the *Frank Cable* in 14 years. For years, the *FRANK CABLE* was the only submarine tender in Guam, and therefore serviced Guam-based submarines, Landis said. Late last year, another submarine tender, the USS *EMORY S.LAND*, made Guam its homeport. With another submarine tender that can service Guam-based ships, the USS *FRANK CABLE* has been allowed to leave on a traditional deployment, he said. The *FRANK CABLE* conducts maintenance and support of both submarines and surface vessels, according to a Navy statement. Capt. Drew St. John commands the USS *FRANK CABLE*. According to the Navy, the submarine tender in 1997 helped with rescue and recovery efforts following the Korean Airline Flight 801 crash in Guam. The ship also received a Humanitarian Service Medal for its assistance after Super Typhoon Pongsona struck the island in 2002.

HMCS Windsor's supercharger repair may delay its arrival to NATO exercise

By Brett Ruskin, CBC News



HMCS WINDSOR passes the lighthouse on McNabs Island as it arrives Monday in Halifax for repairs. The submarine may be late for a NATO event because of an issue with a supercharger, which increases air density in the engine. (Brett Ruskin / CBC News)

The Canadian submarine is scheduled to be one of the highlights for international media outlets covering a NATO exercise in Norway this month. The exercise called **Dynamic Mongoose** starts June 20 with a tour of French and Norwegian frigates, alongside **HMCS** *WINDSOR*, according to information from NATO officials. The international event's focus is anti-submarine warfare. It will bring together naval forces from Norway, Germany, Turkey, Canada, the United States, France, the United Kingdom and Spain to train for "*future collective defence and crisis response operations*," said Barbora Maronkova, a NATO official. But **HMCS** *WINDSOR* is nearly 5,000 kilometres from the exercise, in Halifax with a broken supercharger. The sub arrived in Halifax Monday morning, after the crew noticed the problem last week while near St. John's. They were on their way to the NATO exercise, but had to turn back. One supercharger is connected to each of the submarine's two diesel generators. They are similar to superchargers found in some cars and trucks, increasing the air density in an engine. This allows the engine to run more efficiently and generate more power. **HMCS** *WINDSOR* has a redundant system with two generators, each with its own supercharger. When one of them failed, the submarine was still able to recharge its batteries

using the other generator. The broken piece is important, but not critical. Capt. Jamie Clarke, commander of Canada's submarine force, stressed nobody was injured and there was no danger posed to the crew. He confirmed there was no smoke or fire caused by the defective supercharger. The sub is now racing the clock. The initial plan was to take approximately two weeks to cross the Atlantic to Norway. At its quickest **HMCS** *WINDSOR* could get there in six to 10 days. That leaves only a few days for submarine maintenance crews to diagnose the problem with the supercharger, fix or replace the part, test the system and prepare for departure Navy officials said Saturday they did not have an update yet on the exact cause of the problem, how long it would take to fix or how the submarine's performance was affected. Each of the four submarines in Canada's fleet has had issues since they were purchased from the British Navy a decade ago. Halifax-based **HMCS** *WINDSOR* is Canada's only fully operational vessel in the four-sub fleet. On the west coast, **HMCS** *VICTORIA* is being used for training. **HMCS CORNER BROOK** ran aground in 2011 and will be in an extended maintenance period until 2018. **HMCS CHICOUTIMI** may return to service next year, navy officials say. It is out of service because of a problem with some of the welding discovered late last year.

Indian, South Korean coast guards to jointly hold naval exercise

The coast guards of India and South Korea will hold a joint exercise 'Sshyog-Hyeoblyeog-2016' in Bay of Bengal off Chennai from June 8 to 11, said an official statement on Monday. In a statement issued here, the Indian defence ministry said: "The aim of the exercise is to strengthen the working level relationship between the two coast guards and further refine the joint operating procedures."Korea Coast Guard ship 3009 will participate in the exercise, whose highlights encompass an anti piracy scenario wherein the hijacked vessel is subsequently rescued in a combined operation of both coast guards, the interdiction of the pirate vessel, a joint boarding operation and other exercises. In addition, the Indian Coast Guard ships and aircraft will be demonstrating their prowess before the Korean delegation. The exercise would be jointly witnessed by the Indian Coast Guard's Director General Rajendra Singh, and his counterpart, Korea Coast Guard's Commissioner General Hong Ik-tae. During their stay, the South Korean delegation would be calling on important dignitaries in Chennai. In addition, a friendly volleyball match between the coast guards will be organised on June 9. Consequent upon the Indian government's approval to conduct combined exercises between the coast guards of the two nations, an MoU was signed between the coastal security agencies in 2004. Last year Indian Coast Guard Ship **Sarang** visited South Korea and now Korean Coast Guard Ship **3009** is visiting India.

US Navy Deploys Most Carrier Strike Groups Since 2012

By: Christopher P. Cavas

For the first time in nearly four years, the US Navy has four aircraft carrier strike groups deployed at the same time. Two more carriers are carrying out local operations, making for six of the fleet's ten active carriers underway - an unusually high percentage. And another is preparing to go. The departure June 4 of the RONALD REAGAN from Yokosuka, Japan, coupled with the June 1 deployment of the DWIGHT D.EISENHOWER group from the US East Coast, doubled the number of deployed groups. The HARRY S.TRUMAN is in the eastern Mediterranean conducting combat strikes against ISIS targets in Syria and Iraq, and the JOHN C.STENNIS group is continuing operations in the South China Sea. Closer to home, the CARL VINSON and GEORGE WSHINGTON are cruising off the West and East coasts, respectively, undergoing qualifications and training. A seventh carrier, the Norfolk-based GEORGE H.W.BUSH, is expected to be underway for training operations in June, preparing to deploy later this year. The last time four strike groups were deployed simultaneously was over a nine-week period from late August 2012 to early November 2012, a Navy spokesman said. It's not clear when the last time six or more carriers were underway. The moves are not in response to a specific crisis. "It's all been in the works for months as part of the Global Force Management program," a Navy official said, referring to a joint Pentagon plan that guides major deployments of US military forces. The level of flattop activity is noteworthy on two counts. Deployments were noticeably cut back starting in late 2012 and early 2013 in response to spending restrictions caused by mandated budget cuts under sequestration rules. The services are still struggling to build up operating funds - just last month, the Navy informed Congress of an \$848 million shortfall in fleet-wide readiness accounts, \$91 million of which was directly attributable to extending the Truman's deployment an extra 30 days to operate in the Mediterranean.But despite the cost, few military displays carry more symbolism than a carrier deployment. Navy officials have said since last year that carriers would spend more time in the Mediterranean Sixth Fleet region rather than simply passing through en route to Fifth Fleet operating areas in Central Command — an effort to counter the growth in Russian operations in the eastern Med off Syria. Truman, after leaving Norfolk in November, spent the bulk of her deployment in the Persian Gulf and Arabian Sea, but passed through the Suez Canal on June 2 to enter the Mediterranean. In the Pacific, the Stennis has operated exclusively in the western Pacific since beginning its deployment in mid-January, a distinct change from recent WestPac tours that generally saw the carrier spend more operating time in the Indian Ocean/Arabian Sea/Persian Gulf region. But Stennis has spent far more time in the South China Sea, re-establishing a continuing presence as a counter to China's extensive growth there. Stennis and her escorts generally have not directly challenged Chinese territorial claims around artificial islands built up in the South China Sea, even as the warships' presence sends a clear message of interest. "We're trying to not be too provocative," acknowledged a US Navy official. "But we're working to get used to operating in close proximity to a close competitor navy. It was an important learning experience for us to get used to operating in a competitive environment. The last time we did this was in the 1990s. "We've learned a lot — what can you do and not do in this

environment — and that goes into the planning factors. The entire strike group — carrier, air wing and escort ships – have all done very well. And by all anecdotes the Chinese have done well also. The communications have been professional. It's been a learning experience for both navies."Both dual-carrier operations will provide prime photo opportunities for the US to display the kind of naval power it can still wield in the face of Chinese and Russian military buildups. In each theater, the carriers are expected to double up and operate together. The **STENNIS** and **REAGAN** likely will cruise the South China Sea together for a time, before **Stennis** heads for Hawaii and the Rim of the Pacific (**RIMPAC**) exercises that get under way in early July. Similarly, **EISENHOWER** and **TRUMAN** will probably cruise together at least for a time, before Truman heads home to Norfolk and Ike carries on to the Persian Gulf region.Of the remaining carriers, the **NIMITZ** is in overhaul at Bremerton, Washington; **THEODORE ROOSEVELT** is in lower readiness at San Diego, having returned from deployment in November; and **ABRAHAM LINCOLN** is at Newport News, Virginia, in the later stages of a 3-year refueling overhaul. Another carrier, the **GERALD R. FORD**, is completing at Newport News. When she joins the fleet later this year, the carrier force will be restored to its mandated 11-ship level. **Source; defensenews**

Australia marks first operational deployment of upgraded ANZAC-class frigate

Ridzwan Rahmat, Singapore - IHS Jane's Defence Weekly 07 June 2016



A file image of **HMAS** *Perth*, which was the first ship to receive the ASMD upgrade under Project SEA 1448 Phase 2. The ship departed for its first operational deployment after the upgrade on 7 June. Source: Australian Department of Defence

The Royal Australian Navy (RAN) marked the first operational deployment of an upgraded ANZAC (MEKO 200)-class frigate when **HMAS** *Perth* (157) departed the naval base at Rockigham, Western Australia, on 7 June for

the Middle East. The vessel will support multinational counter-piracy and -smuggling efforts in the Gulf, the Gulf of Aden, the Red Sea, and the Indian Ocean Region on a mission that the Australian government refers to as **Operation 'Manitou**'. "*HMAS Perth* was the first anti-ship missile defence [ASMD] upgraded ANZAC frigate and so we are extremely proud and excited to be the first upgraded ship to deploy operationally," said Captain Ivan Ingham, Perth 's commanding officer, in a statement released by the Australian Department of Defence on 7 June. **Perth** in 2010 received a package of combat system upgrades that have been designed to enhance the platform's defence capabilities against modern anti-ship missiles. It was the first ANZAC-class ship to receive the package under Australia's Project SEA 1448 Phase 2. "While we take great satisfaction in knowing we will deploy with the world's leading missile defence capability, we also realise that our highly capable surveillance sensors and new mission combat helicopter will also make a significant additional contribution to our mission," Capt Ingham said in reference to the MH-60R helicopter that will be embarked on **Perth** for the mission. **Perth** is scheduled to be deployed for about six months until late December.

DSME launches South Korea's first FFX-II frigate

Ridzwan Rahmat, Singapore - IHS Jane's Defence Weekly 07 June 2016



The RoKN's first FFX-II frigate, *Daegu* (818), was launched on 2 June. Source: DSME

Key Points

- South Korea has launched its first FFX-II guided-missile frigate
- Platform is on track to be commissioned by the end of 2018

South Korea's Daewoo Shipbuilding and Marine Engineering (DSME) has launched the country's first FFX-II platform, the company confirmed with *IHS Jane's* on 7 June. The ship, which has been named **Daegu** with pennant number 818, was launched on 2 June at the company's shipyard in Okpo. The FFX-II platform is a larger variant of the Incheon (FFX-I)-class ships that are in service with the Republic of Korea Navy (RoKN). According to specifications provided by DSME, the platform features an overall length of 122 m and an overall beam of 14 m. The ship has a standard displacement of 2,800 tonnes and a full load displacement of 3,600 tonnes. Powered by one Rolls-Royce MT30 turbine engine and four diesel generators in a combined diesel-electric or gas configuration, the ship can attain a maximum speed of 30 kt, the company said. The FFX-II platform is armed with one 127 mm Mk 45 Mod 4 naval gun and one aft-facing, six-barrelled, 20 mm Raytheon Phalanx close-in weapon system. The ship has also been equipped with a 16-cell Korean vertical launching system for defence against aerial threats and six 324 mm torpedo tubes for submarine prosecution. The ship can accommodate a crew of 120 and one medium helicopter on its flight deck. **Daegu** is scheduled for delivery to the RoKN in late 2017 and expected to be commissioned in late 2018, DSME said. A contract for a second vessel in the class is expected to be issued by the South Korean government this year.

America, China, India and Japan: Headed Towards a South China Sea Showdown?



Sam Bateman June 7, 2016

Recent months have seen a continuing increase in military activities in the South China Sea, particularly by the United States and China, but also by '*bit players*' like India and Japan. These activities only serve to heighten tensions in the region at a time when the priority should be to demilitarize the area. In the most recent serious incident, on May 17, two Chinese fighter jets <u>intercepted a US Navy EP-3</u> <u>intelligence and surveillance aircraft</u> about 50 nautical miles east of Hainan Island. This incident could have violated agreed

upon procedures between the United States and China to manage such encounters. It follows earlier incidents when Chinese jet fighters intercepted US P-8 Poseidon surveillance aircraft over the South China and Yellow seas. The United States recently conducted its third freedom of navigation operation (FONOP) in the South China Sea since China started its extensive land reclamation and building of airfields and support facilities on reclaimed land in the Spratly Islands. The latest FONOP involved a US warship sailing close by the disputed Fiery Cross Reef. In March, the United States sent a small fleet of warships - comprising aircraft carrier John C. Stennis, two destroyers, two cruisers and a Japan-based US Seventh Fleet flagship — into contested waters to counter the presence of China. During his recent visit to Vietnam, President Barack Obama announced that the United States would be lifting its longstanding ban on sales of lethal military equipment to Vietnam. This has been construed as part of a strategy to help Vietnam defend itself against an increasing threat from China in the South China Sea. In return, Vietnam might grant the United States access to the strategic Cam Ranh Bay military base. Along with access to bases in Palawan in the Philippines, this would markedly enhance America's ability to project military power into the South China Sea. Lyle Goldstein from the US Naval War College suggests in his recent book Meeting China Halfway that rather than enhancing US military engagement with Vietnam, Washington should be ending it, arguing that "recent overtures toward military cooperation between Hanoi and Washington have violated reasonable principles of geopolitical moderation." Unfortunately, moderation has not been evident in any recent developments in the South China Sea. Source: http://nationalinterest.org

Pakistan Navy Chief asks for more information on Umkhonto missile

Written by defenceWeb, Wednesday, 08 June 2016

The Chief of the Pakistan Navy, Admiral Muhammad Zakaullah, has requested more information on the Denel Dynamics Umkhonto surface-to-air missile (SAM). He made the request while on a recent visit to Simon's Town. During the course of the visit, from 26 May, Zakaullah and his delegation met with Flag Officer Fleet, Rear Admiral Bubele Mhlana, for a courtesy call, and visited the vessels **SAS** *Isandlwana* and **SAS** *Manthatisi*. The delegation was also given a tour of the Institute of Maritime Technology in Simon's Town. The South African Navy said Zakaullar was given a presentation covering SA Navy structure and the strategic guidance given to the Fleet by Navy Headquarters, amongst others. The Pakistan delegation

requested more information about the Ukhonto missile system, which is installed aboard the SA Navy's four Valour class



frigates. The vertically launched Umkhonto is also in service with the Finnish navy aboard its Hamina fast attack craft and Hameenmaaa class minelayers. It has also been ordered by Algeria for its Meko A200 class frigates. The missile was originally developed with a 12 km range but this was increased to 15 km and Denel has demonstrated it can reach out to 20 km, with a ceiling of 8 000 metres. Denel Dynamics is currently working on a longer range version as part of an integrated air defence system as well as a radar quided version. Once deployed, the missile has a reaction time of 2.5 seconds and half-second intervals between missile launches. Umkhonto uses inertial navigation and mid-course guidance from the launch ship or from a land based radar and then switches to its dual-band thermal imaging seekers. Although it is primarily an anti-missile and anti-aircraft system, its 23 kg pre-fragmented warhead

makes it effective against surface targets like ships as well. During the Pakistan Navy visit, Zakaullar asked SA Navy Chief Vice Admiral Mosiwa Hlongwane to consider the possibility of deploying vessels to Pakistan to participate in the multinational exercise AMAN-17 which will take place in February 2017. However, as this coincides with South Africa's Armed Forces Day this may not be possible. Source: www.defenceweb.co.za

Naval Applications for Slack: The Collaboration Tool

June 8, 2016 Guest Author

The following article is the first in CIMSEC's newest column: *Naval Applications of Tech*. Written by Terence Bennett, *Naval Applications of Tech* will discuss how emerging and disruptive technologies can be used to make the U.S. Navy more effective. It will examine potential and evolving developments in the tech industry, communication platforms, computer software and hardware, mechanical systems, power generation, and other areas.

"The most damaging phrase in the language is 'We've always done it this way!'" — Rear Admiral Grace Murray Hopper in an interview in Information Week, March 9, 1987, p. 52

By Terence Bennett

The Navy has spent many years looking at how to bring the newest information technology to operating forces. A U.S. Naval



Institute Proceedings article from 1998 criticized the Navy's resistance to change and recommended setting up local area networks (LAN) using the builtin capabilities of Win95.[1] Technology has come a long way since then, but the use of floppy disks aboard this author's ship in 2012 indicates that the Navy still has some progress to make. An application, Slack, may be just what the Navy needs. Microsoft gave us Outlook and PowerPoint and the Navy has not

questioned their dominance for 20 years. This author argues that traditional email services are no longer helping a ship's crew effectively communicate. Leaders may be familiar with sitting in their stateroom or office to send and receive emails, but it is no longer an effective or efficient form of communication. Many organizations, the Navy included, have outgrown this tool for much of its internal communication, though they may not be aware of this. McKinsey, a consultancy, <u>estimated</u> that high-skill knowledge workers (including managers) spend 28 percent of the workweek managing email and 20 percent of the day looking for internal information or tracking down individuals who can help with a specific task (*doesn't that sound familiar...at least we have the 1MC.*)[2] Navy leadership takes pride in the autonomy and independence of a Commanding Officer at sea. But the autonomy of leadership is challenged by the business of meeting the bureaucratic operational and training standards of today's navy. Leaders are so burdened by relentless requirements and tasks, they are forced to '*fight the closest fire*.' This is not only a Navy problem. Many civilian companies struggle under the burden of hundreds of emails a day and the reactionary mindset such an environment creates. The McKinsey report finds, *"when companies use social media internally, messages become content; a searchable record of knowledge can reduce, by as much as 35 percent, the time employees spend searching for company information.*"[3] Slack, an application already available on the open market,



facilitates this.

Sample Slack window. Image: The Verge.

Slack is a communication tool set designed by software engineers to streamline their own team's communication. In that spirit, it is very deliberately built, intuitive to use, and efficiently designed. More relevant to any commander or unit leader looking to streamline their team's communication, Slack works without the need for any installation or system integration. Users log in and build a team through the Slack website. That's it. Time magazine enthusiastically uses Slack in its office, stating: "Venture-capital darlings Airbnb, BuzzFeed and Blue Bottle Coffee use it. So do Fortune 500 firms like Comcast and Walmart. Teams at NASA and the State Department are on Slack. (More than 2,000 people use Slack at Time Inc., which publishes this magazine and many others.) Not in a generation has a new tool been adopted more quickly by a wider variety of businesses or with such joy. [4] Email messages are often hard to follow, thus making tracing decision-making logic more difficult. Email can become especially cumbersome when checking in with teammates, getting updates, or when trying to get a quick 'RGR.' Slack is literally changing the way companies operate. It allows all communication to be controlled in one place, integrated cheaply and easily over commercial web browsers on existing architecture. Imagine if all of a ship's internal email communication was immediately pre-categorized into channels that were searchable. Companies that have successfully integrated Slack now use traditional email only for external communication. As with chat software, organizations use big public channels, private groups, and one-on-one channels. Although many of the embedding features for mobile users and coders may not be useful for the Navy, there are exciting ways to integrate cloud storage, like Dropbox, in the future. The enterprise pricing options start at \$8 per month and scale upward. One big impetus for a shift to Slack is its mobile integration. With the Navy's move towards the eSailors program and making ships wireless, leaders will have opportunities to stay mobile and work on the move. Putting a tablet in the hands of every Sailor will likely change some of our operations and maintenance procedures. Such connectivity will undoubtedly change the way we communicate and organize. Slack can be the first controlled step towards bringing the Navy into this new and empowering world. Leadership challenges in the Navy may become increasingly difficult under budget constraints and operational requirements, but the new Sailors enlisting in the Navy today have the technological skills to face those challenges. Leadership has an obligation to give them the tools and opportunities to do just that.

LT Bennett is a former Surface Warfare Officer and current Intelligence Officer. The views express herein are solely those of the author and are presented in his personal capacity on his own initiative. They do not reflect the official positions of the Department of Defense, or any other U.S. Government agency.

[1] Michael Junge, "Paperless Navy ... Pshaw!", 124 Proceedings Magazine, Jul. 1998.

[2] Michael Chui, James Manyika, Jacques Bughin, Richard Dobbs, Charles Roxburgh, Hugo Sarrazin, Geoffrey Sands, and Magdalena Westergren; <u>The Social Economy: Unlocking Value and Productivity Through Social Technologies</u>, McKinsey Gloval Institute, July 2012.
[3] Ibid.

[4] Samuel Jacobs, "How E-mail killer Slack Will Change the Future of Work", Time Magazine, Oct. 29, 2015.

Source: http://cimsec.org

Global reach for local shipyard

Written by Guy Martin, Wednesday, 08 June 2016



Being part of an international shipbuilding group has given Damen Shipyards Cape Town (DSCT) the leverage to work in markets not only in Africa but other continents as well, to the benefit of the local shipbuilding sector. This is according to Sam Montsi, Chairman of DSCT, which has exported vessels to Tanzania, Nigeria, Kenya, Angola, Djibouti and Venezuela, amongst others. "*This is made possible by our relationship with the Damen group*," Montsi told defenceWeb. The South African shipyard mostly exports civil vessels and is focussing mainly on infrastructure support vessels. DSCT has just delivered a second Shoalbuster 3009 to Smit Amandla Marine, which will carry out supply and support work for the De Beers Group's offshore diamond mining activities out of Port Nolloth in the Northern Cape. The first vessel, named

Aukwatowa, was delivered last year and the second was named **Aogatoa** during a formal ceremony on 6 June. It is the first time Shoalbusters have been built in South Africa - Damen Shipyards Cape Town entered into an agreement with Damen Shipyards Hardinxveld Shipyard to provide the designs, the technologies and the training support. DSCT earlier said the R150 million two-vessel new build programme stimulated skills transfer, enterprise development and job creation, and supports the priorities of **Operation Phakisa** with respect to stimulating the South African maritime economy. The shipyard has delivered a number of different vessels over the years, including tugs, dredgers pilot boats and research vessels. It was awarded a contract by the Transnet National Ports Authority (TNPA) to build two 27 metre Pilot Cutters for the Port of Cape Town, as well as a 27 metre pilot vessel (Pilot Cutter 2706) and its fifth Stan Tug 2006 for operations in the Port of Saldan ha (the latter was delivered in March 2013). DSCT in partnership with the Damen Group built a number of in-demand vessels to keep on stock, which significantly shortens delivery times. The company several years ago sold three Stan Tug 2208 stock vessels and delivered a second Multi Cat 1908, to a customer in South America. In 2012 DSCT built tugs for the Nigerian Ports Authority and in May 2013 delivered the fisheries research vessel Pensador to Angola. To date, DSCT has

delivered over 40 vessels to African countries, from offshore patrol vessels to supply vessels, dredgers and tugs. DSCT has leveraged on the reputation of its predecessor, Farocean Marine, which built three inshore patrol vessels for the Department of Environment and Tourism and two Damen Stan tugs for the SA Navy. Two new ATD 2909 tugs were delivered to the SA Navy in July 2015 and February 2016 and DSCT is bidding for the Navy's Projects Hotel and Biro, which are seeking a new hydrographic survey vessel to replace the SAS Protea, as well as three inshore and three offshore patrol vessels. Montsi said that local procurement is important and is something DSCT ties to maximise wherever possible. For instance, on the ATD 2909 tugs for the SA Navy, DSCT subcontracted and acquired parts from South African companies, although the engines, propulsion systems and some other items were imported. Montsi told defenceWeb it was not always possible to add a lot of local content due to constraints regarding components suppliers and sub-contractors who need to be accredited by entities like Lloyds or Bureau Veritas. However, he told defenceWeb that DSCT has started an initiative to proactively identify local suppliers with a focus on SMMEs and establish issues that need to be addressed to facilitate their achieving accredited status. DSCT will then engage the likes of the Department of Trade and Industry and others to help the process. Montsi said that being part of the Damen group, which owns shipyards in almost every continent, means DSCT has the potential to expose gualifying local companies to the entire group. At the moment DSCT partners with and sources services from companies around Cape Town. DSCT would like to broaden this to other provinces. To facilitate this, DSCT is talking to other big shipbuilders in South Africa, such as Southern African Shipyards, to join hands in helping the development and growth of local suppliers. As part of its efforts to develop local skills, DSCT nearly five years ago started an apprenticeship programme, training youth in various shipbuilding and related activities, with an emphasis on recruiting women. Montsi told defenceWeb that DSCT has trained over 52 youth, most of whom have been absorbed into the shipyard, in an effort that "we are very very proud of." Eleven new apprentices were taken on in 2015. An important policy initiative by Government that Montsi believes offers a turning point in the development of the shipbuilding industry is Operation Phakisa with its focus on the development and growth of the blue economy sector. Without this initiative "the shipbuilding and repair industry, which is already challenged, would die." In Phakisa Government commits to ensuring that all vessels requirements by the state and state owned entities will be built in South Africa. This means Government will stop exporting its business in the process creating jobs in foreign countries. "As the private sector we need to join in that lead and see how we can all work together and make Phakisa a reality." One of the core components of Phakisa is ship repair and services, something DSCT is active in across Africa. For instance, the company has serviced and repaired vessels for clients in Namibia, Angola, Nigeria, Tanzania, Kenya, Mauritius, Democratic Republic of Congo, Madagascar, Djibouti and Ghana. The Damen Group has also realised that it's a lot more cost effective for people to come from South Africa to service Damen supplied vessels on the continent. Montsi said a lot of this work is related to the oil and gas sector. This is one of three Phakisa main focus areas, along with marine transport and manufacturing and aquaculture. Minister in the Presidency: Planning, Monitoring and Evaluation Jeff Radebe in April this year said that since its introduction in 2014, the Ocean Economy component of Operation Phakisa has unlocked R17 billion in both public sector and private sector investments and created 4 500 new jobs. This includes the building of nine tugs for the Transnet National Ports Authority, two of which are destined for Port Elizabeth. They are being built by Southern African Shipyards in Durban under a R1.4 billion contract. Chairman of Southern African Shipyards, Dr Donald Mkhawanazi, said the tugboats project has created at least 500 direct and 3 500 indirect jobs. Transnet has allocated more than R7 billion to improve South Africa's ports. "South Africa's location and the expertise demonstrated by projects like this are key to us increasing our share of the global marine manufacturing market, including ship-building and repair, rig repair and refurbishment or boat-building," Chair of Transnet SOC Limited Linda Mabaso said last month. Last month Rural Development and Land Reform Minister Gugile Nkwinti, chairing an Economic Sectors, Employment and Infrastructure Development cluster media briefing, said through marine transport and manufacturing, the contribution to GDP will increase from R7 billion to between R14 billion and R23 billion by 2019, creating between 40 000 and 50 000 jobs. "With regard to off-shore oil and gas exploration, we will promote exploration in order to drill 30 exploration wells in the next two years. With regard to aqua culture, we envisage that the GDP contribution will jump from R0.7 billion to R3 billion and jobs created will increase from 2 227 to 15 000," he said. He said the country's potential in terms of ocean economy ranges between R129 and R127 billion with between 800 000 and one million jobs potential by 2030, as compared to the current R54 billion and 316 000 jobs. The Economic Sectors, Employment and Infrastructure Development cluster said that 14 licenses have been issued for oil and gas exploration, with drilling of two exploration wells scheduled to take place along the South African coast. "An amount of R353 million over the next three years has already been unlocked in the ports of Durban and Cape Town for boatbuilding infrastructure through incentives provided by government," the cluster said. "Further investments in boat building - catamaran production, workboat ferries for the navy, two offshore mining vessels and tugboats for the ports authority - and a fuel storage facility amount to approximately R3.6 billion." DSCT recently expanded its facilities in Cape Town, giving the company the capability to build bigger vessels, increasing capacity of the shipyard. In the new Shed 6 DSCT can build a vessel with a maximum length of 83 metres, beam of 15 metres and draught of 5.5 metres. Between four and five steel hull and aluminium vessels can be built annually. Apart from building new vessels, DSCT is positioned to provide repairs and refit capabilities. Montsi said. DSCT Services & Repairs is using the strengths of the Group to build that capacity in South Africa. Source: www.defenceweb.co.za