

## **MARITIME NEWS – 27 NOVEMBER 2016**

### **China Warns That U.S. Naval Patrols Threaten Sovereignty**



The guide-missile frigates **Bengbu** (L), **Zhuzhou** (C) and **Sanmenxia** (R) steam in formation during a realistic training exercise. Three Type 056 frigates assigned to a maritime garrison command with the East China Sea Fleet of the PLA Navy conducted a 5-day training exercise in the sea area off the east coast of Zhejiang Province in late March, 2016. The training subjects include chaff rounds launching, visit, board, search and seizure (VBSS), live-fire shooting at night and so forth. **Photo : Via Xinhua (Bloomberg)**

American military vessels and aircraft carried out more than 700 patrols in the South China Sea region during 2015, making China the U.S.'s No. 1 surveillance target, according to a report by China's only state-backed institution dedicated to research of the waters. The patrols pose a threat to China's sovereignty and security interests, said the report by the National Institute for South China Sea Studies, which is headquartered in Hainan island. The document, the first of its kind released by China, warned that continued targeted operations by U.S. patrols would lead to militarization of the waters.

China could possibly set up an Air Defense Identification Zone in the South China Sea if the U.S. continues to intensify patrols and low-altitude spying in the region," Wu Shicun, president of the think tank, told reporters in Beijing. Tensions in the region have risen after China built a web of artificial islands with runways and lighthouses on reefs that it claims are its sovereign territory. Donald Trump, who is preparing to take over the U.S. presidency in January, has accused Beijing of building a military fortress on reefs, saying in March that China's leaders "do that at will because they have no respect for our president and they have no respect for our country."

"It's very possible for President-elect Donald Trump to deploy more vessels in the South China Sea," Wu said, adding that there's only a "very small chance" of military conflict in the region.

#### **Obviously Target at China**

A spokesman for the Pacific Fleet in Honolulu was unable to immediately comment on the report. The document, titled "Report on the Military of the United States of America in the Asia-Pacific Region," also said that Japan "provides strong support to the U.S. in the South China Sea." Japan has clashed with China over disputed territory in the East China Sea. Maritime drills carried out by the U.S., Japan and Australia were "obviously targeted at China," the report said. The three countries carried out their first drills in July 2015 at various locations around Australia and another in April in the Java Sea.

The proposed deployment of the U.S. missile system known as the Terminal High-Altitude Area Defense in South Korea will directly undermine the strategic security interests of China and the region, the report said. "With the Obama administration advancing its strategic pivot and rebalancing toward the Asia Pacific, increased military spending, strengthened alliances and partnerships, and expanded scope of military activity are attestations of the apparent expansion and fast track bolstering of American military presence in the region," the report said.

## 'Energetic' Activity

"This is especially so in the adjacent areas of the South China Sea, where U.S. military activity has never been more energetic," it said. China's claims to more than 80 percent of the South China Sea, an international waterway that hosts more than \$5 trillion of trade a year, clash with five others including Vietnam and the Philippines. China's claims were rejected by an international court in July, which found they had no legal basis. Beijing has ignored the ruling.

The U.S. carries out so-called "freedom of navigation" operations by sending Navy ships and aircraft near disputed waters to demonstrate the right to fly and sail through what it considers to be international waters and airspace.

**Source : Bloomberg News**

## Romania to pay EUR 1.6 bn for four corvettes from Damen

Romania wants to acquire four last generation multirole corvettes directly from Dutch producer Damen. They would be built at Damen's shipyard in Galati, Eastern Romania. The program would run for a period of seven years and the total cost would amount to EUR 1.6 billion, reports local Hotnews.ro. The Government's initial draft put into public debate presented the project's value but only for four years, namely EUR 800 million. In reality, the estimated cost for the seven years reaches EUR 1.6 billion. The Defense Ministry has confirmed the information.

The Ministry told Hotnews.ro that the value also includes the acquisition of ammunition, the initial logistics support, the crew's training, as well as collaboration with the Damen shipyard in modernizing other ships of the Romanian Navy. Romania wants to acquire four new multirole corvettes to replace the current corvettes that are outdated operationally and technically. The Defense Ministry is preparing a government draft so that the state can acquire the corvettes directly from the Dutch group Damen, without a public tender. **Source : Romania Insider**

*Good choice as their Type 22s are getting long in the teeth!*

## Russian destroyer helps Ukrainian fisherman adrift in Mediterranean



**Photo: Russian Navy**

The crew of the Russian Navy's anti-submarine warfare destroyer **Vice-Admiral Kulakov** rendered assistance to an Ukrainian fishing boat in the Mediterranean Sea on November 24. According to the Russian ministry of defense, the Northern Fleet warship towed the distressed Ukrainian fishing boat to an anchorage in the area of the Greek Gavdos Island.

**Vice Admiral Kulakov** received a mayday call from the fishing boat on November 24 after it had been adrift for two days. After reaching the boat, medical personnel aboard the destroyer provided medical assistance to an injured Ukrainian seaman. According to the ministry of defense, the Vice Admiral Kulakov will continue its mission with the Russian naval task group in the Mediterranean Sea led by the aircraft carrier Admiral Kuznetsov. **Source : Naval Today**

*I can imagine a certain amount of nervousness when the destroyer hove into view*

## Pakistan Navy considering buying warships from China, Turkey

KARACHI: Pakistan Navy is considering buying super-fast ships from China and Turkey for its special squadron to be deployed at the Gwadar Seaport for the security purpose, officials said on Thursday. "A squadron may have four to six warships," an official of Pakistan Navy told The Express Tribune on the sidelines of the on-going defence exhibition, IDEAS 2016, at the Karachi Expo Centre. Turkey opts to buy 52 Super Mushshak aircraft from Pakistan. The ships would be bought soon keeping in view their immediate need in the fleet, he said, adding two defence ships have already been deployed at Gwadar.

The official said the role of maritime forces has increased in Pakistan since the country has made the Gwadar Seaport operational and speeded up economic activities under the China-Pakistan Economic Corridor (CPEC). He said China would also deploy its naval ships in coordination with Pakistan Navy to safeguard the port and trade under the CPEC. Another official of the naval force added that Pakistan has kicked off the process of establishing the largest shipyard of the region in Gwadar.

A similar ship-building project is being deliberated at the Port Qasim in Karachi. The two advanced shipyards would design and develop ships and other security equipment for Pakistan Navy. "The existing shipyard, the Pakistan National Shipping Corporation, lacks capacity to meet new requirements of the force. Its [PNSC] performance, however, would improve in competition with the two under consideration," he said. He added the PNSC would hand over a large fleet tanker to Pakistan Navy by June 2016 which is being constructed in collaboration with Turkey.

While paying a visit to IDEAS, Chief of the Naval Staff Admiral Muhammad Zakaullah said Pakistan Navy is having four dimensional capabilities to face any situation. "It is capable of giving the best performance on surface, submarine, naval aviation and special services," he said. PM, Army chief attend 9th IDEAS exhibition in Karachi. Meanwhile, an official of the Pakistan Air Force said it would soon start the process of manufacturing the next generation fighter aircraft at the Pakistan Aeronautical Complex, Kamra.

At present, they are engaged in increasing the number of JF-17 Thunder aircraft into the air force fleet to 250 from the current 70. "Intensive technology is being used to make JF-17 Thunder, Super Mushshak and other military hardware," he said. Rana Tanveer Hussain, Federal Minister for Defence Production, said defence exports have increased by \$75 million to \$100 million during the current tenure of Prime Minister Nawaz Sharif government. "When PML-N established its government in 2013, defence exporters were worth only \$25 million," he said. **source: The Express Tribune**

## The U.S. Army Wants to Become a 'Navy-Killer'



The Pentagon wants air-and-sea-based fighter jets to acquire and pass targeting information to land-based artillery and rockets - allowing for land weapons to destroy enemy ships at greater distances. An emerging Pentagon concept for warfighting is aimed at vigorously increasing "cross-domain" fires wherein air assets provide fires for ground attack weapons fire support in real time. This concept also includes Army rockets and artillery to destroy maritime targets such as ships off the coastline, just as sea and air force assets attack targets on land.

Pentagon leaders, including leading Army weapons developers speaking last month at the Association of the United States Army annual convention, regularly now refer to the fast-increasing emphasis upon using air, land and sea weapons and technology through faster, more lethal networking and coordination. "The Army does surface to surface fires. The fact that one end of the surface is wet is not the most significant thing. We have to use all the joint assets of

a cross domain effort," Rickey Smith, Deputy Chief of Staff, G-9, Training and Doctrine Command, told Scout Warrior in an interview. "We can use land forces to open gaps in air defenses and then hold it. Then use the Air Force."

Cross-domain tactics are far more impactful than merely sustaining information sharing; the idea includes leveraging quickly-networking for information, targeting and location of friendlies and adversaries. The concept, for example, is to enable a Paladin or HIMARS to kill that enemy ship from the land, weapons developers and senior service leaders have said.

Also, Smith elaborated that electronic and satellite communications technologies such as GPS are increasingly themselves vulnerable to enemy attack. For this reason, Army developers continue to work on communications technologies which can function in a degraded mode as well as in what's called a "denied" environment. Given the pace of global technological change, cross-domain operations will increasingly involve cyberspace and the electromagnetic spectrum. While posited at a theoretical prospect, senior Pentagon leaders have explained that this kind of "cross-domain" fires has already been demonstrated and is now gaining momentum within senior Pentagon circles.

A 6,000-personnel strong joint-training exercise last year called Northern Edge, hosted by Alaskan Command above mountain ranges and the Gulf of Alaska, used networking technology to quickly send targeting coordinates from a fighter jet to land-based weapons. Major participating units include U.S. Pacific Command, Alaskan Command, U.S. Pacific Fleet, Pacific Air Forces, Marine Corps Forces Pacific, U.S. Army Pacific, Air Combat Command, Air Mobility Command, Air Force Materiel Command, Air National Guard, Air Force Reserve Command and U.S. Naval Reserve.

When it comes to networking technology, one example involves the use of something called Joint Range Extension Applications Protocol, or "JREAP." JREAP enables tactical data messages to be transmitted long distances, over the internet, effectively extending the range of the Link-16. Due to the internet, JREAP-C tracking data can then be passed, developers have explained. The JREAP-C "cloud" is necessary because Link-16 is already over-subscribed, senior Navy leaders and weapons developers have explained earlier this year.

The Navy is now closely coordinating the strategy, tactics and approaches of cross-domain fires with the Army and Air Force, senior officials explained. "If the network is your greatest advantage, it can become your greatest vulnerability so you have to have many options. The notion of cross-domain operations should not be limited to single fires," Smith said. "We need to improve how we project power from land into the other domains – air, sea, space and cyberspace. All domains are becoming more congested and contested," he added.

If you want to stop a cyber-attack, put a 120mm tank round through the server and the operator of the cyber attack will stop," he explained. An increased use of cross-domain fires would bring a commensurate need to de-conflict frequencies, communications and fires between different domains, protecting things like space, land and air assets. At the same time, integrating fire-control technology is essential to these operations, as geographical, tactical and targeting information needs to be processed, integrated and coordinated with land-based firing assets such as artillery, HIMARS rockets or Guided Multiple Launch Rocket Systems, or GMLRS.

"Just because you can send me information does not mean I know how to process the information in time to strike a target," Smith elaborated. "There is much work to be done." In some instances, the U.S. military may need to give up warhead capability to gain additional range for weapons attacking maritime targets with a small, longer-range explosive as a necessary trade, Smith added. Air-Ground-Sea interoperability designed to facilitate "cross-domain" fires is not new, but this modern warfare phenomenon is growing. The Army Operating Concept in 2014 highlighted future warfighting as Joint Combined Arms Maneuver where U.S. forces, operating in multiple domains, cause multiple dilemmas for the enemy and offer options to U.S. Commanders. The emphasis for expanding the approach is rapidly gaining traction amid fast-moving global technological trends.

### **Historic Precedent**

During the first Barbary War in the early 1800s, American President Thomas Jefferson sent land and sea forces to project power from one domain to another, Smith said. Smith also offered another historic example where Israelis defeated the Egyptians in 1973 by using ground assault as a way to destroy Egyptian air defenses before launching a successful counter offensive supported by air. Land-based tanks attacked and destroyed Egyptian air defenses on the ground to facilitate air operations, he explained.

"The air defense units did not stand a chance against the tanks; they knocked holes in their air defenses, giving the Israeli Air Force freedom of maneuver," Smith explained. This instance demonstrates a significant example of the inverse scenario from the Gulf War wherein stealth bombers and fighter aircraft were used to destroy Iraqi Air defenses, clearing the way for a ground invasion. Although the first shots were fired by ground force helicopters in an

effort which would be characterized as a ground attack, the full-scale initial attacks in a broad scale involved air-attacks which immediately followed. The first helicopter strikes knocked out Iraqi early warning radar as a way to open the door for the larger air-attacks. The combination of these efforts set the stage for a subsequent successful ground invasion.

During his remarks, Harris added yet another example, citing an instance during the Civil War when Army coastal artillery was used to engage ships. "In the early 1900s, the batteries at Fort Kamehameha here in Hawaii were built to defend against the maritime threat. The Army's Coast Artillery Corps took on this mission, as well as some mine warfare missions, and later anti-aircraft, too," he added as another example. "But as time passed and the need for longer range and more mobile defenses increased, we developed maritime and air capabilities that allowed the Army to divest itself from the coastal defense business."

Harris emphasized that, in the 21st Century, the Army should consider getting back into the business of coastal maritime attack. Yet another example cited by Smith included the recent Russian use of ground-based air defenses to dominate air in Eastern Ukraine. Russian built air defenses, such as the S-300 and S-400, among the best in the world. "The only thing flying in this airspace was what they allowed to fly," Smith said.

### **Strategic Implications:**

A strategy of this kind seems particularly relevant in light of global technological weapons trends creating the existence of longer range sensors, missiles and communications systems. If surface ships are increasingly vulnerable to land-based precision fires – then having air assets assist with offensive and defensive operations could drastically improve protection and alter the tactical equation in favor of the U.S.

One such instance of this approach could be evidenced by the recent deployment of an emerging technology referred to as Naval Integrated Fire Control – Counter Air, or NIFCA. The technology uses ship-based sensors, an aerial reconnaissance and targeting platform and an SM-6 missile to detect and destroy approaching enemy fire from distances beyond-the-horizon.

While initially conceived of as a defensive technology able to destroy incoming anti-ship missiles, Navy strategists are now stepping-up consideration of NIFC-CA as an offensive weapon able to extend the reach of attacks upon enemies. The sensors and increased reach of NIFC-CA seem to represent a technology which could coordinate with fixed or mobile land-based fires in a cross-domain effort. Its ability to detect attacking land-fired weapons, it seems, could also enable it to launch attacks against land-based enemy targets. This creates the inverse equation to firing from the land into surface targets and better enabling surface ships to attack land with greater precision from farther ranges.

NIFC-CA is an extremely significant current example of cross-domain fires, as it involves the use of an air-asset, maritime surface vessel and, quite possibly, land-targets as well. The Navy previously talked about developing longer-range precision rounds to fire from the 5-inch guns on surface ships, further enhancing its ability to destroy enemy targets on land; one such possibility under consideration is a maritime variant of the GPS-guided 155m round known as Excalibur, however in recent days the Navy has not specified which, if any, precision round the service may be considering for deck-mounted guns.

While seemingly geared at the vast geographical expanse and land-sea island terrain of the Pacific, "cross-domain" fires are also of great relevance in other strategically vital areas such as the Middle East, Eastern Europe and Africa, Smith said. The Pentagon plans to increasingly conduct wargames emphasizing "cross-domain" fires against high-end adversaries. **Source : The National Interest**

***My initial thought was that this was all about the annual Army-Navy Football game! But reading it is very fascinating as the Zumwalts were built to support the Army using their very accurate but hellishly expensive 155mm super rounds. Now that the rounds have been deemed too expensive, the Army wants to sink ships – which begs the question – why not use their own bloody guns at shore targets and stop trying to do each others job!***

## **De Beers Tests New Subsea Diamond Exploration Vessel**

De Beers has announced the first sea trials of its latest marine diamond mining vessel, the **Nujoma**, which is designed for exploration and sampling. The **Nujoma** was built by Kleven Verft in Ulsteinvik and fitted out with a 2,200 ton sampling equipment package upon her arrival in South Africa. She will operate in Namibian waters beginning next month, prospecting for the next profitable areas of diamond mining. **Nujoma** is the product of a joint venture between De Beers and the Namibian government, called Debmarine Namibia. She is 75 percent financed by Namibian banks, and De Beers anticipates that her operations will create 140 jobs for local residents.



### **What she will look like at sea BUT without the wake!**

"The **Nujoma** makes Debmarine Namibia operations independent as it is the first sampling vessel owned by the company," said Debmarine Namibia CEO Otto Shikongo. Until this point, "Debmarine Namibia has been chartering sampling services from De Beers Marine South Africa and a Namibian service provider." Debmarine is one of only a handful of companies with a successful marine mining operation. Its five diamond mining ships use underwater crawlers fitted with suction hoses to pull up tens of thousands of carats per year from the seafloor. De Beers says that the largest of the five, the **Mafuta**, can produce tens of thousands of carats per month.

### **Subsea mining for metals may be the next frontier**

Other types of subsea mining have become a source of controversy, and unlike De Beers' subsea diamond mining, they have not always proved economical: the harsh offshore environment and the difficulty of working at depth impose additional costs on an ore mining operation. Australian-Canadian venture Nautilus Minerals is preparing to mine copper and gold deposits off Papua New Guinea, targeting hydrothermal vents one mile below the surface.

The firm is taking delivery of its subsea equipment and tooling, and its surface vessel is under construction at Fujian Mawei Shipyard. Nautilus predicts that operations will begin in 2018-2019, subject to the firm's ability to secure additional funding. NGOs are concerned that waste plumes from Nautilus' project will damage the environment. Regulators in New Zealand have halted similar proposals on the grounds that subsea mining for metals could harm life on the seafloor, **Source : The Maritime Executive**

***As she did initial sea trials before her delivery I assume this is now trials with the first SA supplied mining structure down aft.***

## **Rickmers denies Reports it Sold 7-Year-Old Containership for Scrap**

Troubled non-operating container shipowner Rickmers Maritime Trust today denied it had scrapped a seven-year-old panamax containership. Reports yesterday claimed it had sold the India Rickmers to shipbreakers, setting a new record for the youngest ever box ship scrapped. In an announcement to the Singapore Stock Exchange, RMT said that, in connection with a potential debt settlement agreement, "the trust is considering, amongst other things, the sale of the vessel". But it added: "The negotiations in relation to the potential debt settlement agreement are ongoing and no sale of the vessel has been concluded."

Yesterday vesselvalues.com claimed the 4,250 teu vessel, launched in 2009 at China's Jiangsu New Yangzijiang yard, had a market value of \$5.87m and demolition value of \$5.62m, after losing some 62% of its value this year alone, indicating the parlous state of the panamax charter market for owners. This has been exacerbated by the bankruptcy of Hanjin Shipping – the India Rickmers was previously known as the Hanjin Newport, but has been at anchor in the Persian Gulf for the past two weeks.

The weak market has hit Rickmers Maritime Trust hard. Trading in its shares was suspended by the Singapore Stock Exchange on 16 November after the company defaulted on the interest payment on a S\$100m bond issue. The company, which owns a fleet of 16 panamax box ships, posted a loss of US\$74.m in the third quarter this year, compared with a \$9m profit in the same period last year. Charter revenue plunged 43%, year-on-year, to just \$15.6m. RMT posted a nine-month loss of \$131.7m, after breaking even in the same period last year and there is little chance it will be able to return to the black this year.

According to the Hamburg Ship Brokers & Ship Agents Association, which produces the weekly ConTex charter rate index, the market continued to track down this week, with vessels in that 4,250 teu size attracting a daily rate of \$4,237 over a 12-month charter.

Today in its weekly commentary, the association said: "As usual these days the majority of fixtures reported are extensions, [and] thus we are still lacking new requirements. Since the year-end is approaching it will be interesting to note if the start of the new alliances with new services and trades for 2017 will eventually have a positive influence on the demand side. "Unfortunately the fact that so far this year more than 180 vessels with a total [capacity] of roughly 650,000 teu went for demolition has no impact on the charter market at all, since the oversupply of tonnage still persists." **Source : gCaptain**

***Well it was a good story at the time!***

## **READER COMMENT**

1. *An interesting concept, Canadians trialling innovations. They are serious operators in my book earning their keep in the roughest part of the oceans. The CH 148 program is moving ahead and I am looking forward to seeing how the mentioned rough weather embarked trial of the helicopter goes. **HMCS Montreal** has a helicopter restraint and traversing system called C-RAST (Retrieve Assist Secure and Traverse) which like RAST provides for a high degree of securing of the helicopter immediately it lands on the ship because the securing cable of RAST is attached to the aircraft before it lands. The C-RAST as I understand it was developed specifically for the heavier (than Sea King) CH 148 Immediate security is a vital feature in rough weather and other conditions causing severe ship's motion.*

*The Canadians have long operated RAST having been responsible for its design in the form of the earlier "Bear-Trap" system. Our FFG and ANZACs operate their embarked helicopter(s) with RAST as do the USN with the exception of **USS Zumwalt**. The **Zumwalt** and our Air Warfare Destroyers (AWD) are fitted with a securing and traversing system called ASIST (Aircraft Ship Integrated Secure and Traverse). ASIST secures the aircraft after it has landed with an automatic claw which locates the helicopter and mechanically secures it. The operations take a little time. The ASIST system provides for less people on the flight deck during landing operations. Perhaps there is also a weight saving when compared with RAST/ C-RAST. Interestingly Japan's navy operates a hybrid system of the ASIST system's securing and traversing features but with the haul down and immediate securing features of RAST. So far USN is keeping RAST in their Arleigh-Burke and similar aviation capable ships.*

***A very interesting input - thanks***

2. *Perhaps that Adm/Gen's medal ribbons came with the rations in the Rice Krispie box? Except the yellow one which he was awarded. An unfortunate colour, I'd suggest.*

*And regarding **HMS Example**, it's fascinating to read that the Archer class URNU (University Royal Navy Unit) ships are now being re-armed and actually sent to sea, on a mission. Clearly the shrinkage in the number of ships in HM's navy has led to their being assigned to other duties, at least for some of the time. Previously they were used simply to show the flag to well-motivated students and to give them some idea of life in the Senior Service. Those of us fortunate enough to work at one of those 14 universities that had an URNU, an army OTC and a RAF air squadron received invitations to go to sea with the navy, the fly with the air force and to drink lots of beer with the army. We usually declined invitations from the latter to crawl around in the mud.*

***Nothing wrong with mud – it includes water!***

**AGS**