



MAKING WAVES

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Pacific Commanders discuss how to advance Indo-Asia-Pacific Maritime Security

- Lt. Timothy Gorman

Twenty-five commanding officers from throughout the U.S. Pacific Fleet convened Aug. 14-15, during the second annual Pacific Warfighter Symposium (PWS) held at Commander, U.S. Pacific Fleet Headquarters. Originally called the Far East Commanders' Conference, this by-commanders, for-commanders forum provides an opportunity to discuss how best to advance Indo-Asia-Pacific regional maritime security while broadening operational perspectives across aviation, surface, submarine and SEAL leadership. "The expansive Pacific theater and the dynamic growth of technologies makes this face-to-face gathering as important as ever," said Symposium Director, Cmdr. Guy Snodgrass. "Other navies aren't standing still and our combat unit leadership needs to understand winning battles in an increasingly competitive maritime environment demands our best." Top fleet staff officers provided leaders with an enhanced understanding of the operating environment so their commands can more effectively plan, train and execute operations. Attendees of the symposium were selected specifically to provide a breadth of community, location and platform experience, as interactions across communities help to illuminate shared challenges and encourage tactics development. "(PWS) charges me up to go back to my team and back to my squadron to share what I've learned. This symposium really helps translate strategy into tactics," said Cmdr. Emily Bassett, commanding officer of the Pre-commissioning Unit Manchester (LCS 14). "I feel lucky to have been invited because not everyone who wanted to come could make it."

U.S. Pacific Fleet is the world's largest fleet command, encompassing 100 million square miles, nearly half the Earth's surface, from Antarctica to the Arctic Circle and from the West Coast of the United States into the Indian Ocean. The U.S. Pacific Fleet consists of approximately 200 ships and submarines, nearly 1,100 aircraft and more than 130,000 Sailors and civilians.

Source: www.navy.mil, 16 August 2017

Pakistan inaugurates construction of Maritime Counter Terrorism Centre

The Pakistan Navy has inaugurated the construction of a new Maritime Counter Terrorism Centre (MCTC) in Karachi on Wednesday, August 15.

According to a report by the state-owned Associated Press of Pakistan, the MCTC will provide training to “special operations forces (SOF) and special wings of [local and foreign] law enforcement agencies (LEA) in (sic) Maritime Counter Terrorism (MCT) domain.” The MCTC will comprise of various training facilities including, among others: “Fire Shoot Houses, Sniper Ranges, Military Training in Urban Terrain, Close Quarter Combat Ranges and simulators.”

The Pakistan Navy has also raised the 2nd Force Protection Battalion in Karachi, which will be responsible for guarding harbour and offshore infrastructure, undertaking humanitarian assistance and disaster relief (HADR) operations, and countering amphibious operations.

Source: www.hellenicshippingnews.com, 17 August 2017

Vietnam, Philippines need mechanism for antipiracy cooperation

Vietnam and the Philippines should develop a mechanism for anti-piracy cooperation in the future to ensure maritime security and safety, said Deputy Chief of the General Staff of the Vietnam People’s Army Senior Lieutenant General Pham Ngoc Minh. Minh made the statement at a reception on August 16 for Commander of the Philippine Navy Vice Admiral Ronald Joseph S.Mercado who was on a visit to Vietnam to strengthen bilateral ties between Vietnam and the Philippines in defence and navy and discuss collaboration between the two navies.

Speaking at the meeting, Senior Lieutenant General Minh expressed his delight at the development of the two countries’ relations in many areas, particularly defence. The bilateral ties between their naval forces have been deepened as they had established a hotline for better communications and effectively worked together in search and rescue at the sea, he added. Vice Admiral Ronald Joseph S.Mercado, for his part, stated the bilateral relations have seen good progress since as the two nations shared

common interests and both pursued goals towards peace, stability, and security. He took the occasion to thank Vietnam for supporting fishermen in distress at sea.-VNA

Source: en.vietnamplus.vn, 17 August 2017

SEACAT enhances cooperative maritime security in South and Southeast Asia

The 16th annual Southeast Asia Cooperation and Training (SEACAT) exercise commenced Aug. 21 in Singapore, Brunei, and the Philippines, focusing on shared maritime security challenges of the region. The goal of the exercise is to increase multilateral cooperation and information sharing among navies and coast guards across South and Southeast Asia. The exercise will continue through Sept 1.

"SEACAT brings nations together for meaningful dialogue, knowledge sharing, and practical training to address common challenges of piracy, sea smuggling, and other illegal activities at sea," said Rear Adm. Don Gabrielson, commander, Logistics Group Western Pacific (COMLOGWESTPAC). "We appreciate that regional nations see the value in working together, evidenced by a growing number of participants. This year's exercise includes eleven nations, with multiple agencies in each country. SEACAT helps increase trust, builds the ability to share information, refines collaborative skills, and deepens friendships. Modern threats ignore borders; these practical exercises respect national rights to decide when to share information, and they refine our military, coast guard, and law enforcement partners abilities, improving how to collaborate, both inside their government and with partner government agencies whenever needed." SEACAT features a series of tailored workshops, information exchanges, and boarding operations at sea that rehearse scenarios relating to piracy, sea smuggling, and maritime domain awareness.

This year's exercise will feature liaison officers from Sri Lanka, Myanmar, Bangladesh, Thailand, Malaysia, Singapore, and the United States who will operate from Singapore's Multinational Operations and Exercises Centre (MOEC). Additional personnel from the Philippines, Brunei, Indonesia, and the United States will operate from Brunei's Multinational Coordination Center (MNCC) and U.S. Coast Guard personnel will conduct a comprehensive boarding workshop in Manila with the Philippine Coast Guard, alongside boarding teams from Sri Lanka, Thailand, Vietnam, Malaysia, Philippines, and Indonesia. "What is most important is that our partner

nations are processing the same information we have and vice versa, so that when any of us or all of us are called to action, we do so in unison with common and accurate knowledge of the environment into which we are sailing," said Capt. Lex Walker, commander of the exercise maritime staff element. "Our partner nations work even closer through more sophisticated evolutions during SEACAT." The sea phase of the exercise will include seven boarding operations across three vessels including the expeditionary fast transport USNS Millinocket (T-EPF 3). Boarding teams from multiple nations will train in real-world at-sea environments as a way to understand and develop each other's boarding tactics, techniques and procedures. "There are always challenges when practicing maritime domain awareness with regional allies and partners because everyone has a different way of operating," said Walker. "However, over the course of sixteen iterations of SEACAT, we remain fully committed to developing the mutual trust and proficiency required from each other to increase safety and security in the maritime environment. That is what SEACAT is all about."

SEACAT, which began in 2002 under the name "Southeast Asia Cooperation Against Terrorism," was renamed in 2012 to expand the scope of training among regional navies and coast guards. COMLOGWESTPAC and staff conduct advanced planning, organize resources and directly support the execution of maritime exercises such as SEACAT, Pacific Partnership, Maritime Training Activities (MTA) in the Philippines and Malaysia, the Cooperation Afloat Readiness and Training (CARAT) exercise series, and the Naval Engagement Activity (NEA) with Vietnam.

Source: www.navy.mil, 21 August 2017

James Mattis visit: Maritime security, drone deal on top of agenda

- Huma Siddiqui

Common security threats, maritime security and fast-tracking of the acquisition of \$2-bn 'Guardian' drone deal for the Indian Navy – the first for a non-NATO country – are on top of the agenda for discussions when US defence secretary James Mattis comes to India next month. Confirming the visit of Mattis, highly-placed sources told FE that, "Since Chinese assets have started to dominate the Indian Ocean region, the Trump administration along with India is keen on fast-tracking the drone's deal, which is

manufactured by the US-based General Atomics, as well as addressing other major issues of mutual concern.” “The Predator deal operationalises the US-India major defence partner tag as passed by the US Congress last year,” the source said. Earlier this month, two-by-two ministerial dialogue was launched by US President Donald Trump and Prime Minister Narendra Modi during their phone conversation, which will enhance quicker coordination and defence collaboration against common threats.

Raveesh Kumar, official spokesperson of MEA, said “The dates for the first two-by-two ministerial dialogue have not been decided yet. This is a reflection of growing and deepening of our partnership. According to sources, India has been requesting Predator technology for several years, and it was only the combination of Trump and Modi that they were able to move the decision to this point. US aerospace leader Vivek Lall, chief executive of US and International Strategic Development at General Atomics, said, “We are pleased that both governments are in discussions to pursue the sale of the Sea Guardian platform and look forward to supporting the discussions”. Lall has also been spearheading the aircraft carrier launch and recovery technology for the next Indian aircraft carrier, which will again provide much-needed dominance in the Indian Ocean region. Recently, this revolutionary new EMALS system was successfully deployed on the \$14-bn US aircraft carrier Gerald Ford that was commissioned by President Trump. The high-level Joint Working Group between US and India deliberating on this carrier will meet in early November in Delhi, said sources.

As reported by FE, Indian Air Force early this year has also requested the US administration for General Atomics ‘Avenger’ 100 units, which is under consideration by the White House. It is estimated that deal could be to the tune of \$8 billion, making it larger than the fighter competition that Lockheed and Boeing have been putting up for the past few years. As military aviation transforms globally to autonomous systems, US and India have a great opportunity to collaborate at the highest levels of technology and innovation. Overall Indian requirement for UAVs is approximately 650 units. Commenting on the two-by-two ministerial dialogue, according to reports, Ashley Tellis, a top American expert on the Indo-US relationship said, “This is a very welcome development. Having a joint State-Defence conversation with India makes much more sense than having a State-Commerce dialogue”.

Source: www.financialexpress.com, 22 August 2017

South China Sea dispute undermines Maritime Security in Southeast Asia

- Lynn Kuok

Regional security in Southeast Asia, to a large extent, means maritime security. All but one of the 10 Association of Southeast Asian Nations (ASEAN) member states are coastal states; two of these are the world's largest archipelagic nations. The joint communiqué of the recent 50th ASEAN foreign ministers' meeting in Manila, Philippines, highlighted the importance of "strengthening linkages in maritime cooperation to further promote mutual trust and confidence." Maritime tensions in the region reached a high a little over a year ago when the United Nations tribunal ruled largely in favor of the Philippines in a case it brought against China over the latter's claims in the South China Sea.

There is no set definition of "maritime security." In its 2008 Oceans and the Law of the Sea report, the UN General Assembly noted how it encompasses a wide range of threats: At its narrowest conception, maritime security involves protection from direct threats to the territorial integrity of a State, such as an armed attack from a military vessel. Most definitions also usually include security from crimes at sea, such as piracy, armed robbery against ships, and terrorist acts. However, intentional and unlawful damage to the marine environment, including from illegal dumping and the discharge of pollutants from vessels, and depletion of natural resources, such as from IUU (Illegal, Unreported, and Unregulated) fishing, can also threaten the interests of States, particularly coastal States.

In this vein, the ASEAN Regional Forum Work Plan for Maritime Security (2015–2017) divides threats relating to maritime security into two broad categories: conventional security issues, such as "military threats and state sovereignty concerns," and non-traditional security threats. The Work Plan regards the latter as "useful early building blocks" to cultivate "mutual trust and consensus in the region." Still, there are two significant challenges to addressing non-traditional security threats: first, getting countries to ratify relevant conventions and to then implement them in national legislation; and, second, building enforcement capacity, including the capacity to police waters. The focus on non-traditional security threats has meant that for many working in this realm in Southeast Asia, "maritime security" has largely become synonymous with ensuring that the seas are safe and secure from *non-traditional* threats.

The South China Sea dispute, however, is the elephant in the room, posing challenges to maritime security in several ways. First, competing territorial and maritime claims can lead to incidents at sea as states seek to assert or defend sovereignty or resource interests.

Second, the lack of clarity over the status and maritime entitlement of features negatively impacts user states and their security interests. This issue has caused considerable tension between the United States and China, most obviously manifested in U.S. assertions of maritime rights in the South China Sea under its Freedom of Navigation Program as well as China's objections to them.

Third, the dispute poisons and destabilizes the overall security environment given its impact on intra-ASEAN relations, ASEAN's relations with China and the United States, and the relationship between the two superpowers. It also undermines attempts to widen or deepen cooperation on non-traditional security threats. When Singapore set up its Information Fusion Centre in 2009 to facilitate information-sharing and collaboration between partners to enhance maritime security, it was careful to emphasize the sharing of less-sensitive commercial shipping information (as opposed to intelligence) and collaboration on non-traditional security issues like piracy and terrorism. The South China Sea dispute must be carefully managed if it is not to undermine maritime security. The tribunal's award in the Philippines case against China is arguably an important building block to fostering maritime security insofar as it brings legal clarity to various contested issues.

First, while the tribunal did not rule on competing claims to territory, it made clear that China cannot claim historic rights to resources in the waters within the nine-dash line if those waters are within the exclusive economic zones of other coastal states. Such rights were extinguished when China ratified the UN Convention on the Law of the Sea in 1996. The tribunal also ruled that none of the features in the Spratlys, in the southern part of the South China Sea, is entitled to a 200-nautical-mile exclusive economic zone. The ruling thus dramatically reduced the areas of overlap in the Spratlys to a 12-nautical-mile ring around rock features.

Second, the award clarified applicable passage regimes by ruling on the status and maritime entitlement of features in the Spratlys occupied by China. In the 12-nautical-mile territorial sea around features the tribunal identified as rocks, user states are entitled to exercise innocent passage. Around features identified as low-tide elevations or submerged features not entitled to a territorial sea, user states can exercise high sea

freedoms. Yet, the effect of the ruling in this respect should not be overstated: there are still hundreds of features in the South China Sea that were not the subject of the tribunal's decision.

Third, the arbitral case demonstrated that disputes can be resolved without recourse to force and in accordance with international law. Thus, if China attempts to exercise rights over resources within the exclusive economic zone of littoral states of the South China Sea, these states can pursue proceedings against China. The award's reasoning applies equally to the exclusive economic zone claims of these states.

Recently, Vietnam blinked first when it stopped drilling in its exclusive economic zone after Beijing reportedly threatened war. Hanoi, however, is not bereft of options short of force: it can bring China before an international court or arbitral tribunal. Any judgment, while not enforceable, could help to further bring the weight of international opinion to bear against China. Beijing has maintained the position that the tribunal's decision in the Philippines case against it is "null and void" and of "no binding force." It did not participate in proceedings, but the UN Convention on the Law of the Sea makes clear that absence of a party shall not constitute a bar to proceedings or a tribunal making its award. The arbitral award has also arguably helped to improve maritime security by creating momentum toward agreement between ASEAN member states and China on the application of the Code for Unplanned Encounters at Sea (Cues) in the South China Sea. Cues is a non-binding agreement concluded by 21 Western Pacific Naval Symposium countries in 2014.

Further, after 15 years of glacial progress toward a code of conduct meant to manage tensions in the South China Sea, the foreign ministers of ASEAN and China finally endorsed a framework for the code on Aug. 6, 2017. Negotiations begun in earnest a month after the award. ASEAN diplomats describe the framework as akin to little more than the "contents page" of a book. But if Cues is applied and a meaningful code of conduct eventually reached and adhered to, this will help in managing an intractable dispute and to bolstering maritime security in Southeast Asia.

Source: asiafoundation.org, 23 August 2017

Expert wants security operatives to check sea robbery on Nigeria's waters

A maritime security expert, Mr Britus Bulama, has advised agencies and security operatives in the security arm of the Nigeria's waters to check sea robbery in order to aid international trade. Bulama, the Chief Executive Officer (CEO) of Giant Stride Security Limited, made this disclosure to the News Agency of Nigeria on Wednesday in Lagos. He was reacting to the robbery attacks on board a tanker vessel anchored at the Lagos General Purpose Anchorage on August 19.

Bulama said that the Nigeria's waters had witnessed cargo traffic in recent times because of a peaceful environment. According to him, the progress the country is making in the area of maritime security should not be allowed to fade away through the evil deeds of a few people. "If we are serious to make the non-oil sector the hub of the economy, there is the need for the operatives to redouble their efforts in ensuring that the Nigeria's waters remain attractive to investors. "As stakeholders, the operatives should know that the country is relying on their ability to widen its revenue earnings," Bulama said. He said that such incident should be nipped in the bud through prior intelligence gathering, which would further send shivers into the spines of the would be perpetrators. Bulama urged the security operatives to arm themselves with up-to-date information on the schemings of the sea marauders in order to foil their plans.

Source: www.vanguardngr.com, 30 August 2017



Larsen delivers 2 interceptor ships to Indian Coast Guard

Larsen & Toubro (L&T) today said it has delivered two high-speed interceptor ships to Indian Coast Guard at the Kattupalli Shipyard near Chennai. This delivery is part of the two contracts being executed by the company for design and construction of 54 interceptors to Indian Coast Guard, valued at Rs 1,424 crore, Larsen & Toubro said in a statement. "Larsen & Toubro has delivered two more high-speed interceptor ships (C-433 and C-434) to Indian Coast Guard at the companys Kattupalli Shipyard, near Chennai, seven months ahead of contractual schedule," it said.

With these two, 34 Interceptors have been delivered by the company so far. L&T had won the order against global competition, it added. Made of aluminium alloy hull with waterjet propulsion, these ships have a speed of over 45 knots (a unit of speed equal to one nautical mile/per hour) with excellent manoeuvrability and are ideally suited for high interception. S N Subrahmanyam, CEO and Managing Director, Larsen & Toubro, said: "We appreciate the urgent need of Indian Coast Guard to augment coastal security in these turbulent times. Our production is over one year ahead of schedule and we are ready to deliver the remaining 20 vessels to Coast Guard anytime suiting their operational requirements." J D Patil, Senior Executive Vice President (Defence) & Whole-time Director, Larsen & Toubro, said: "Besides Interceptor Vessels Programme, L&T has also been mandated by the Coast Guard to design and build seven Offshore Patrol Vessels (OPVs). The construction of OPVs is on schedule and the launch of first OPV is slated for next month."

On June 20, 2017, L&T launched the floating dock for the Indian Navy, a giant platform, and currently trials are in progress for on-time delivery to Indian Navy before November 2017. L&T has till date completed repairs and refits of naval and coast guard ships and delivered six refit ships (including the largest logistics tanker ship) from its shipyard at Kattupalli, dedicated to defence shipbuilding. The company was licenced for warship and submarine building in 2002 and has shipbuilding yards at Hazira near Surat on the west coast and at Kattupalli near Chennai on the east coast.

Source: indiatoday.intoday.in, 17 August 2017

China's new Ballistic Missile marks new chapter in global nuclear deterrence

The development of the JL-3 missile was initially reported on several years ago. It's expected that the new missile will be part of the advanced nuclear-powered submarine project 096.

Earlier this month, Chinese websites published pictures showing the project 032 submarine, the world's largest conventionally powered submarine, undergoing tests. The submarine underwent re-fitting work at a shipyard in Dalian. In Dalian, the submarine received new silos capable of housing a larger missile.

Currently, the Navy of the Chinese People's Liberation Army (PLA) has four 094/094G project nuclear-powered missile submarines. They carry the JL-2 missile. This is the first fully operational maritime component of the Chinese nuclear triad.

Vasily Kashin, a military expert and senior research fellow at the Institute for Far Eastern Studies of the Russian Academy of Sciences, spoke to Sputnik about the possible role of the JL-3 missile for China's strategic interests. Kashin underscored that the development of the new ICBM is dictated by the fact that current Chinese potential for nuclear deterrence is insufficient.

"Despite the fact that the JL-2 has a relatively decent operational range (7,400-8,000 km, according to different sources), its capability to deter the United States is limited. China's nuclear submarines operate in the South China Sea. At the same time, they are likely to face problems while leaving China's territorial waters due to the activities of the US and Japanese naval forces," Kashin told Sputnik China.

According to Kashin, the JL-2 missile would be unable to reach the continental US in the event of a military conflict.

"They could be used against US allies and American bases in Asia, but their role in deterrence is minor. In order to boost its sea-based strategic nuclear forces, China needs a missile with a range of 11,000-13,000 kilometers, preferably with a multiple independently targetable reentry vehicle," Kashin pointed out.

At the time, the JL-2 underwent a long and challenging series of tests, with a number of failures and delays. One of the failures nearly resulted in the destruction of the testing submarine. The problem was resolved only in 2012. At the same time, Kashin suggested that the development of the JL-3 missile will be much less troubled. "The difference between the JL-3 and JL-2 are not as major as that between the JL-2 and the JL-1, China's first submarine-based ballistic missile. China will use its experience in missile development to avoid repeating its previous mistakes and speed up the creation of a new missile," Kashin concluded.

Source: sputniknews.com, 19 August 2017

India Seals deal with China's arch-rival Vietnam for supply of Brahmos Missiles: Report

Even as India and China continue to reinforce their positions in Doklam militarily, New Delhi and Hanoi have reportedly struck a deal for the supply of Indo-Russian BrahMos supersonic anti-ship and land-attack cruise missiles to Vietnam, one of Beijing's arch-rivals in the region, *Livefist Defence* has reported.

A report in *VN Express*, an English-language Vietnamese daily, appeared to confirm the purchase today. However, according to *Livefist*, the newspaper later altered its headline to play down the report. No official word has been released by the Indian government on this issue. "The arms purchase is in line with Vietnam's peaceful national defense policies aimed at protecting the country," the daily had quoted Vietnam's Foreign ministry spokeswoman Le Thi Thu Hang as saying. Security cooperation between India and Vietnam is not a new development. The two countries have been discussing the deal for the past few years. India has already supplied patrol vessels to Vietnam and has been providing military training to the country's submarine crews and pilots as both New Delhi and Hanoi operate equipment of Russian and Soviet origin. India and Vietnam are also known to be in discussion for the supply of Defence Research and Development Organisation's Akash missile systems.

Source: swarajyamag.com, 18 August 2017

India to acquire ukrainian engines for russia-made frigates

India's defense acquisition council has sanctioned \$75 million for acquiring M7N.1E gas turbine engines from Ukraine for powering two Grigorovich class frigates. The Ukrainian engines are expected to soon arrive in India from Russia, Sputnik news reported Friday. India had agreed to purchase the two frigates Admiral Butakov and Admiral Istomin as part of a \$4billion order for four Russian frigates.

As per the deal signed in 2016, two other Grigorovich class frigates would be constructed at the facility of Goa Shipyard Limited in India. Admiral Butakov and Admiral Istomin almost fully built at Russia's Yantar Shipyard at Kaliningrad were originally designed to be fitted with Ukraine built gas turbine engines. However following the Crimean fallout, Russia stopped importing the engines from Ukraine, leaving the fleet of little use for the Russian Navy. Though it was decided that the Russian made frigates will be re-engined with Russian alternative, it is expected to be ready only by 2020. Russia and India then agreed to utilize the frigates for the Indian Navy which was already operating its predecessor, the Talwar class frigates. India struck a separate agreement with Ukraine which offered to directly export the M7N.1E gas turbine plant to India after much discussion in 2016. It has also been agreed upon that a subsequent deal would be struck for acquiring similar engines for the other two frigates that are to be built at the Goa shipyard.

Source: defence.pk, 18 August 2017

China's second Aircraft Carrier to undergo trial soon: Report

China's second aircraft carrier is likely to start its first sea trials soon with the development to be presented as a key achievement of President Xi Jinping at the ruling Communist Party's Congress expected to take place in October. The "key project" team has completed tasks ahead of schedule, Hu Wenming, the head and Party chief of the China Shipbuilding Industry Corporation (CSIC), the manufacturer of the Type 001A said. China has one aircraft carrier in operation now -- the 'Liaoning', which went into commission in 2012. The Type 001A is the country's first home-grown aircraft carrier. The Dalian Shipbuilding Industry Corp (DSIC) where it was built will greet the 19th CPC National Congress by delivering key achievements on a special product in this special time," DSIC Chairman Liu Zheng was quoted as saying by state-run

Global Times today. The Congress which is held every five years is expected to be held in October here. Xi, 64, who is completing his five year tenure as party general secretary, President and head of the Army, is widely believed to get a second term.

As per the practice of the CPC, top leaders will have a ten year tenure. Liu said all personnel working on the key project led by the CSIC will stick to the directions of Xi to provide world- class naval equipment for a world-leading navy. The "special time" refers to the 19th Congress, which marks the opening of a new phase of China's reforms. And the enhancement of the People's Liberation Army (PLA) navy's combat capabilities is an important part of the country's military reforms," Li Jie, a Beijing-based naval expert, told the Daily. Zhang said he believed part of the mooring test has already started even during the power test, so the mooring test period could be shorter than expected. The schedule for the sea trials will depend on how long the mooring test takes, Zhang noted. The sea trials will include an even more comprehensive performance test, which would cover the propelling and communications systems under different maritime conditions, which would usually take two years, Zhang said. He added the . the trials would not be limited to a specific weather condition. "The Type 001A is an improved version of the Type 001 Liaoning, so the similarity and experience can largely speed things up," Song Zhongping, a military expert who served in the Rocket (Missile Force) said. China's 'Liaoning' is a refurbished aircraft carrier built from the hull of a Soviet ship bought from Ukraine in 1998. Regarded as an experimental vessel, it is taking part in battle group exercises in different seas. The second ship, Type 001A weighs about 70,000 tonnes, is 315 metres long, 75 metres wide and has a cruising speed of 31 knots.

Source: [The Economist Times](#), 23 August 2017

US boeing fa-18 super hornet offered under made in India initiative; will Indian Navy get this jet?

US aerospace major Boeing Company made a push for Boeing F/A-18 Super Hornet to meet Indian Naval Carrier platform requirement, and said they could be produced in India under Make in India initiative. Briefing media persons in New Delhi, ahead of a meeting between the company executives and the Indian Navy on Tuesday, Dan Gillian, vice president of F/A-18 and EA Programmes, Boeing, said “ a platform like the “Super Hornet” under the Make in India programme will help the Indian industry

to position itself for the manufacture of Advanced Medium Combat Aircraft (AMCA).” “Boeing can provide the capability needed for the Indian Navy to build its next generation carrier air wing. It can also provide the industrial base right here behind that capability,” Gillian said. “When we look across the globe at quality, capability and cost – India is an obvious partner. We have been building F/A-18 aero structures and assemblies in India because it makes good business sense to do so.”

Boeing is one of the four vendors which have responded to India Navy’s Multi-role carrier-borne fighters (MRCBF) Tender to Supply 57 carrier-borne fighter jets to equip its aircraft carriers. The company’s top executive said that Boeing F/A-18 Super Hornet is the most advanced tactical fighter, an ideal fit for Indian Navy next gen carriers, adding that Indian Navy needs aircraft to operate off carriers that are networked & survivable with growth potential and Boeing F/A-18 is the best fit. Gillian also said that Boeing F/A-18 Super Hornet is an evolving platform which will outpace future threats and will be on US Navy carriers into the 2040s. The company officials also made a pitch for Scan Eagle unmanned air systems (UAS) which already has been offered to Indian Navy.

The Indian Navy initiated the bid and issued a Request for Information (RfI) for Procurement of Multi-Role Carrier Borne Fighter for The Indian Navy earlier this year. “The Analytical and (computer) simulations have shown that the F/A-18 is compatible with the current carrier fleet of the Indian Navy. The results of the test have been submitted in response to a global RFI issued by the Navy,” said Pratyush Kumar, president, Boeing India. Responding to queries, Kumar said that the aircraft comes with an overall life cycle cost which is more reasonable than other contenders in the bid. “The overall life cycle cost is far lower than others,” Kumar said. “The Super Hornet has the lowest cost per flight hour which is even lower than Lockheed Martin’s F-16.” According to Gillian the Super Hornet is ahead of its competitors because of its affordability, survivability, built-in stealth, smarter weapons and being combat proven. Presently, the Indian Navy’s aircraft carriers’ utilise “ski-jump ramps” for fighter aircraft to take-off. Indian Navy is seeking a twin-engine fighter for its future aircraft carriers and the chosen strike-fighter aircraft must be capable of operating from both the INS Vikrant, the ski jump equipped short take-off but arrested recovery (STOVAR) carrier currently being built in Kochi.

Source:www.financialexpress.com, 29 August 2017

Navy to add Special Ops helicopters to its fleet

With expanding profile in the Indian Ocean Region (IOR), Indian Navy is looking to add dedicated helicopters for Special Operations in its fleet. Some of the Naval Multi-Role Helicopters (NMRH) for which the tender was issued last week will be in this configuration. "Of the 123 NMRH to be procured, 33 will be dedicated variants for Special Operations," a senior officer told The Hindu. Last week the Navy had issued the Request for Information (RFI) to global Original Equipment Manufacturers (OEM) for the procurement of 123 NMRH and 111 Naval Utility Helicopters (NUH). The procurement would be under the recently approved Strategic Partnership (SP) model of the Defence Procurement Procedure (DPP).

Some of the 33 helicopters would be used for training Marine Commandoes (MARCOS) and the rest would be based on shore as well as on frontline warships, the officer added. The helicopters would be twin-engine and weigh at least 12.5 tonnes. According to the RFI, the requirements include the ability to carry 12 fully equipped troops along with 400 Kg of equipment or eight fully equipped troops and one auto inflatable craft in a stowed configuration.

In addition to special ops and commando role, the helicopters will also perform other roles like troop carriage, maritime interdiction including anti-piracy operations, Combat Search and Rescue (CSAR), external cargo carriage, limited casualty evacuation (CASEVAC) and Humanitarian Assistance and Disaster Relief (HADR). The Navy currently has a few variants of Sea King helicopters in service in a commando role. But they are of 1970s vintage and technologically obsolete. Several attempts to replace them have repeatedly failed. The SP model was approved in May in an attempt to develop domestic defence manufacturing and promote the private sector. The model forms the Chapter 7 of the DPP. Helicopters play a crucial role in clearing the path for the warships and battle groups as they move on the high seas and they are also the first responders to a distress call.

Source: www.thehindu.com, 30 August 2017

New shipping company to enter U.S.-Mainland-Hawaii trade route

TOTE, a transportation and logistics company, is entering the Hawaii market. The company said on Thursday that it is working with Philly Shipyard to construct four new containerships that will service the Mainland to Hawaii route. The company said it has also begun conversations to secure the Kapalama Container Terminal in Honolulu. “TOTE is excited to bring our best-in-class service to the people of Hawaii,” Anthony Chiarello, president and CEO of TOTE, said in a statement. “TOTE’s presence on the islands will provide market stability and introduce new environmentally advanced vessels that will greatly benefit the islands.” TOTE is a subsidiary of Salchuck, whose companies serving Hawaii include Aloha Air Cargo, Aloha Tech Ops, Foss Maritime, Young Brothers, Hawaii Petroleum, Minit Stop and Ohana Fuels. Philly Shipyard announced in June that it will construct four new container vessels to service the U.S. Mainland-Hawaii trade route, but did not reveal the new operator. The route is currently dominated by Pasha Hawaii and Matson, both based in Honolulu.

Shortly after the April announcement, Matson released a statement emphasizing its stance as a “market leader.” “Matson is the market leader and has been the primary carrier to Hawaii for more than 135 years,” the company said. “Matson has a fleet renewal program already in place including four new ships that will allow it to continue its leadership position in the market. Matson’s mission – to move freight better than anyone – will not change.”

In order to comply with new environmental regulations taking effect in 2020, shipping companies are beginning to phase out their container ships in order to meet the International Maritime Organization’s design efficiency standards. Philly Shipyard says the new vessels will enter service in early 2020 and 2021, “just in time to meet the deadline and maintain trade capacity.” TOTE currently provides twice-weekly routes to Alaska, Puerto Rico and the U.S. Virgin Islands.

Source: www.bizjournals.com, 17 August 2017

Hyundai Merchant Marine says in talks with BlackRock about potential investment

- Joyce Lee

South Korean shipper Hyundai Merchant Marine Co Ltd (HMM) (011200.KS) is in talks with BlackRock Inc (BLK.N) about a potential investment but details have yet to be discussed, a HMM spokesman said on Monday. BlackRock is in talks with HMM to invest up to 1 trillion won (\$880 million) in the nation's largest shipper, the Korea Economic Daily reported on Monday, citing unidentified investment banking and shipping industry sources. A BlackRock spokeswoman could not be immediately reached for comment. The government of export-driven South Korea has injected 1.5 trillion won in HMM, including via a rights issue, to bolster the firm since last year, when the country's former largest shipper, Hanjin Shipping, applied for court receivership.

But HMM, the world's 14th largest shipper, still needs support to survive in an industry where mergers and acquisitions between large competitors and the need to join alliances with powerful players increasingly make it difficult for shippers of HMM's size. HMM late last year said to become a global shipping company, it needed over 10 trillion won in funds, including 5.6 trillion won for new container ships and 3.3 trillion won to buy containers, citing data from consultancy A.T. Kearney, some of which it said it can source via shipping finance. HMM shares were up 1.2 percent in morning trade, compared with a 0.2 percent fall for the wider market .KS11.

Source: www.reuters.com, 21 August 2017

Korean Shipbuilders lose large 9 ultra large container ship deal to China

According to shipbuilding industry sources on August 20, France's CMA CGM recently signed a letter of intent (LOI) with two Chinese shipyards – Hudong-Zhonghua Shipyard and Shanghai Waigaoqiao Shipbuilding – to build nine 22,000 TEU container ships. South Korea's big three shipbuilders – Hyundai Heavy Industries, Samsung Heavy Industries and Daewoo Shipbuilding & Marine Engineering – participated in the bid. Hyundai Heavy competed for the deal until the last minute but Chinese shipbuilders won the contract.

The deal for nine ships total US\$1.44 billion (1.6 trillion won). An official from the shipbuilding industry said, *"South Korean companies had swept large container ship deals in the global market but they now feel embarrassment that not only the market of low-end ships but also ultra large and high value added ships are being eaten into by China."* The deal is to build nine ultra large container ships which have dual-fuel propulsion systems that can operate on either liquefied natural gas or fuel oil. With stricter international regulations on the emission from ships, including sulfur oxides, domestic shipbuilders expected to win new orders of ultra large and eco-friendly high value added ships. However, they unexpectedly lost to Chinese companies. The shipbuilding industry, which is already suffering from a lack of business, raises concerns that they can keep falling behind Chinese firms in the future. A LOI is a document outlining an agreement between two or more parties before the agreement is finalized. However, South Korean companies has a very small chance of winning a partial order out of the nine. Domestic shipbuilders won the deal of 2.83 million CGT in the first half of this year but fell behind China with 133 ships or 2.9 million CGT. An official from the shipbuilding industry said, *"In short, even foreign container shippers have admitted that Chinese shipyards' technology and price competitiveness have caught up with Korea. South Korean shipbuilders used to rank first to seventh in the top 10 list. However, only big three made the top 10 list now with many Chinese and Japanese firms included."*

Source: www.portfinanceinternational.com, 22 August 2017

China could pay high price for pursuing CPEC ambitions in Pakistan, says editorial

Recent kidnappings, drive-by shootings and bomb attacks in Balochistan and in other parts of Pakistan have led a concerned China into believing that it might have to pay a high price for prioritizing the development of the Gwadar deep-sea port, located 300 miles west of Karachi, as part of its ambitious desire to gain commercial and naval influence further west.

An editorial published in the web site www.politico.eu, while acknowledging China's strategic ambition to extend its maritime power across the Indian Ocean through its so-called string of pearls, a ring of ports around the Indian Ocean, including in Sri Lanka, Djibouti, the Seychelles and Pakistan, has cautioned Beijing about the

challenges it faces in pursuing its commercial objectives in Balochistan such as terrorism, a separatist rebellion and the region being a focal point for the smuggling of guns, fuel and drugs. Acts of violence over the past few months, including the murder of two Chinese teachers, has left Beijing in no doubt about these risks. Pakistan has sought to cast the murder of these teachers as a one-off, saying they were targeted because they were missionaries, not because they were Chinese. The Chinese foreign ministry has vowed to support Islamabad's battle against terrorism and Chinese Ambassador Sun Weidong insists the relationship with Pakistan has "attained new heights, which will be further strengthened in days to come."

For Pakistan, the nation-wide investments in the China-Pakistan Economic Corridor (CPEC) project are a vital component of national regeneration. According to the editorial, "The scale of the Chinese investment, however, means Pakistan has to negotiate a domestic political minefield. Many in Balochistan feel aggrieved that they will never see any of the cash from Beijing, which would either be seized by the other provinces or would turn into profit back in China. It is these discontented Baloch who pose the most stubborn threat to China's plans." Balochistan forms 45 percent of Pakistan's landmass, but has only six percent of the population: some 13 million people. It is Pakistan's least educated, least connected, and most deprived. It is also plagued by political violence. Chronic neglect and discrimination have also fueled a violent separatist insurgency that has targeted military bases, railway lines, school teachers, and migrants, whom many believe threaten the livelihood of the native Baloch. As far as Gwadar is concerned, much of the Chinese investment is centered around it, and Baloch fishermen have been barred from entering the port area, and told to do something else to earn a livelihood. Anwaar-ul-Haq Kakar, the Baloch government's spokesperson, was quoted by Politico, as saying that the administration will not be callous towards these fishermen, and adds that it could take six months to a year for the situation to be a win win for both Pakistan and China. The Baloch government has projected that Gwadar will soon emerge as a modern trade and tourist hub, but residents and politicians counter this claim by saying that when there is a lack of drinking water and electricity, how can one visualize the port as becoming the next Dubai, Singapore or Hong Kong. Baloch separatists accuse the country's military, and particularly the paramilitary Frontier Corps, of conducting extrajudicial killings and "disappearing" opponents. Official statistics indicate that more than 4,500 bodies of forcibly disappeared people were recovered between 2010 and 2015.

For China, a strengthened Pakistan helps muscle out India, which has long been Beijing's main foe across the Himalayas. The two countries fought a war in 1962 and

soldiers again clashed along the Himalayan border this week. According to the German Marshall Fund, a strong Pakistan would ?distract India on its western border and keep it tied down in South Asia.? The Pakistan state is trying to meet the security challenge. In addition to its regular and paramilitary forces of some 650,000, Pakistan assembled a 15,000-strong force called the Special Security Division specifically instructed to protect the Chinese-backed projects and the people working on them. The size of this special security force could be doubled as work on the projects intensifies.

Pakistan?s Prime Minister Shahid Khaqan Abbasi has reassured the Chinese ambassador that Beijing has no reason to worry about its USD 62 billion CPEC spending plans, and committed that he would ?personally supervise the speedy completion of all the projects under CPEC.?

Source: www.dnaindia.com, 21 August 2017

India to put Chabahar rail link on fast track

Questioning the seriousness of India’s intent, Iran has sought a firm commitment from New Delhi that the construction of the \$1.6 billion rail link from Chabahar port will be taken up expeditiously, two people aware of the development said. India has promised to remove hurdles to fast track the project, which will connect the port on the southern coast of the Gulf nation to the eastern city of Zahedan on the border with Afghanistan. The issue came up for discussion during the visit of minister for road transport and highways and shipping Nitin Gadkari to Iran for the swearing-in ceremony of Iranian President Hassan Rouhani, the two people said, requesting anonymity. “The minister has ordered to take up the matter with IRCON (IRCON International Ltd, the state-run company to which the contact was given) on priority and sort out the matter,” an Indian government official, one of the two cited above said.

India plans to develop the Chabahar port, which would give it access to landlocked Afghanistan and energy-rich Central Asia through its Jawaharlal Nehru and Kandla ports on the west coast, circumventing Pakistan. But the agreement to build the 500-km rail link lapsed in April. “During deliberations, the Iranian government asked the Indian delegation if it was serious about building the railway link as no efforts seem to have come up,” said the second person, also an Indian government official.

In May 2016, India and Iran inked 12 agreements including one for India's IRCON to build the 500-km railway line as part of a transit corridor to Afghanistan. The agreements were signed in presence of Prime Minister Narendra Modi during his visit to Iran. "They complained that the agreement had lapsed and IRCON hasn't informed if it has managed to arrange for the funds for the rail project. The Indian delegation sought time and assured the Iranian government about India's commitment," the second official cited above said. India has already built a 218-km road link connecting Delaram with Zaranj in Afghanistan, which is adjacent to the border with Iran. The Chabahar port, located in Sistan-Baluchestan province on Iran's south-eastern coast, will also promote India's strategic interests in the Gulf and Strait of Hormuz. Experts say procedural issues should be resolved fast by India to leverage the opportunity that Iran offers. "There is a positive movement. The Indian government is very focussed on its intent to move forward on Chabahar port which is a strategic project and forms an integral part of the International North-South Transport Corridor (INSTC). We will have to sort out the procedural issues and sustain the momentum," said Meena Singh Roy, a research fellow at New Delhi-based Institute for Defence Studies and Analyses (IDSA).

Chabahar can be leveraged by India for the INSTC which will connect the Indian Ocean and the Persian Gulf with the Caspian Sea through Iran and then onwards to St. Petersburg in Russia and northern Europe. China on its part is pushing for its ambitious "One Belt One Road" initiative aimed at connecting around 60 countries across Asia, Africa and Europe. "There has to be fast movement on the commitments made. This time there is push from the top. If we don't sustain the momentum, the opportunity will not wait for us," Roy added. Indian projects in Iran have been facing inordinate delays. An Indian consortium comprising ONGC Videsh Ltd (OVL), Indian Oil Corp. Ltd (IOC) and Oil India Ltd (OIL) that won a bid for the Farsi block in 2002 from National Iranian Oil Co. (NIOC) is yet to secure the development rights. Queries emailed to the spokespersons of Iranian embassy in New Delhi, IRCON and India's ministries of shipping and external affairs on 11 August remained unanswered.

Interestingly, China's ZPMC has won a contract to supply cranes to the Chabahar port, *The Hindu Business Line* reported on 11 August. The Chabahar port, located in the Gulf of Oman near Iran's border with Pakistan, is less than 100km from Pakistan's Chinese-constructed port of Gwadar, part of a project to open up an energy and trade corridor from the Gulf to western China.

Source: www.livemint.com, 22 August 2017

New trade ties can fortify Indo-Thai cultural bond

As the year marks the 70th anniversary of India-Thailand diplomatic relations, it is an honour to be able to pen a few thoughts about this great moment in our bilateral relationship. In fact, both countries have shared historical and cultural roots that go back much beyond our 70 years of diplomatic relations. Hinduism in Thai society is a good example to show our common cultural roots. Since ancient times, Thai people have believed their kings are avatars of Lord Vishnu. That's why the word 'Rama' is always a part of the names of Thai kings. Our former capital, Ayutthaya, too got its name from Lord Rama's city Ayodhya. South Indians would be happy to know that the Thai version of the Ramayana, closely resembles the Tamil version of the epic, attesting to interactions across the ocean since the Chola era. Around 1 lakh Thai buddhist pilgrims visit Bodh Gaya every year.

The similarity in our cuisines is marked. The use of coconut milk and spices like tamarind, turmeric and long pepper (pippali) in Thai dishes is influenced by Indian, especially south Indian cuisine. While I am proud of our historical and cultural links, I am also keen on economic ties between Thailand and India improving. With both countries undergoing comprehensive reforms, we can share our experiences and complement each other for a mutually reinforcing and beneficial partnership, Thailand 4.0 for a 'new India' by 2022. Being well established in global value chains, Thailand holds great opportunities for India, especially in manufacturing and services. Initiatives such as the Eastern Economic Corridor offer Thailand opportunities in the areas of next generation automotive, aviation, smart electronics, robotics, digital economy, healthcare, biotech, biofuel and bio-chemicals. These can help Thailand transform into a high-income economy. For instance, Thailand, with Southeast Asia's largest automotive hub, should do more with the automotive industry in Chennai.

As the ASEAN-India Dialogue Partnership turns 25 this year, Thailand is working hard with India to link these two markets via India's northeast, Cambodia, Lao PDR and Myanmar. The ASEAN community of 625 million people is a worthy counterpart of the Indian market of 1.3 billion people. Maritime connectivity is also a vital area of cooperation. Last July a seminar on 'New trade opportunities between India and Thailand through maritime connectivity in Bay of Bengal' organised in Bangkok was a success. It was attended by Chennai Port Trust chairman P Raveendran and Visakhapatnam Port Trust chairman M T Krishna Babu. Its objectives were to enhance trade and promote more business activities through maritime connectivity by presenting India's port facilities and logistics services to Thai exporters, and by

creating business networks between both countries. Cruise tourism, for instance between Phuket and Puducherry, is an untapped area with great business potential. Connectivity is the key that will help expand trade, tourism, investment and education between India and Thailand. I want to see more Thai presence in India and more Indian presence in Thailand. Let us work together and utilise the full potential of what India and Thailand have to offer.

Source: blogs.timesofindia.indiatimes.com, 31 August 2017

More cruise liners likely to drop anchor at Cochin Port this year

- Babu K Peter

It's the apt season to welcome tourists to Kerala. The Cochin port realises this, too. This year, the port is gearing up to play host to more luxury cruise ships which will dock here carrying tourists from across the globe. The port is expecting a call from nearly 50 ships this year against last year's 46. For international cruise liners, Kochi has always been a hot spot thanks to its proximity to the international sea route and a scenic harbour.

Since each cruise ship sailing into the port from international waters brings with it thousands of tourists whose spending capability is much higher than their Indian counterparts, tourism entrepreneurs in and around the city and in nearby districts also reap benefits of the ships' short stay at the port as the passengers visit various places during the period.

As for the Cochin Port, there has been a rise in the number of visiting vessels. In the last five years, 193 ships dropped anchors at the port. The annual figures, however, rose and dipped like waves since 2012-13. In that year, 40 ships docked at the port. This reduced to 34 in 2013-14, only to rise to 39 in 2014-15. The following year, that is 2015-16, it nosedived to 34 before achieving its highest ever number of ships – 46 – in 2016-17. The vessel traffic at the port is followed by the traffic at Mumbai, Panaji, and Mangalore ports. The number of ships docking at the port is likely to increase once the proposed international cruise terminal becomes operational by late next year.

Being built by the Cochin Port Trust, the international cruise terminal will come up at the Ernakulam Wharf and have modern passenger amenities. This will be in addition to the existing cruise passenger facilitation centre, Samudrika, adjacent to BTP Berth. The Cochin Port has a dedicated cruise cell comprising officers specifically deployed for cruise operations. Among their duties is arranging the pre-arrival planning meeting and providing single window facility for issuing passes to coaches, guides and other associated persons. To make matters more lucrative, the port is offering 65 per cent concession on vessel-related charges for cruise ships and 30 per cent discount on berth hire and pilot services, besides 24-hour security for ships.

Source: www.newindianexpress.com, 31 August 2017



MARINE ENVIRONMENT



Climate change enhances Arctic mosquito population

- The Cordova Times

A new report from National Geographic magazine notes that blood-sucking mosquitos, the legendary bane of Arctic travelers, from caribou and reindeer to humans, are emerging earlier, growing faster and surviving longer. For lack of a lot of animals to eat in the Arctic, “when they finally find one, they are ferocious, they are relentless. They do not stop,” writes Lauren Culler, a postdoctoral researcher who studies insects in Greenland for Dartmouth College’s Institute of Arctic Studies. “If Arctic temperatures rise 2 degrees Celsius, the study predicts, the probability of juvenile mosquitoes surviving to adulthood could increase 53 percent,” Welch notes. “Unlike tropical mosquitoes, Arctic species don’t carry human diseases. But the change could spell trouble for caribou and upend the ecology of the tundra, where mosquitoes pollinate plants and provide food for birds and other insects.”

In her recent field seasons in Greenland, Culler found that with the Arctic warming twice as fast as the rest of the globe, ponds and lakes on the tundra are melting up to several weeks sooner, and when that happens mosquitoes take wing earlier. Culler also found that warming allowed the insects to develop faster, which had a huge impact on survival. Mosquitoes are most vulnerable in their early life stages, when diving pond beetles easily gobble them up. Even with these beetles also growing faster and eating more, mosquitoes are still managing to make it to their adult stage in greater numbers, Culler said. Arctic mosquitoes typically emerge all at once in massive swarms, and can quickly launch an assault on people, but their swarm attacks also threaten entire populations of other animals. When the mosquitoes attack caribou or reindeer en masse, these animals run to snowy or icy areas or a windy ridge to escape the attack. The more time they spend running to avoid the swarms, the less time they spent eating, which can contribute to population declines.

Source: www.thecordovaitimes.com, 17 August 2017

Marine microplastics detected in bottom-dweller bellies for the first time

Around half of marine creatures living at depths of more than 2,000 metres in the North Atlantic could be eating microplastic material, marine scientists have discovered. Researchers at the Scottish Association for Marine Science (SAMS) in Oban, Scotland sampled deep-sea starfish and sea snails from the Rockall Trough and found microscopic traces of plastic in 48 per cent of those sampled. The levels of plastic ingestion were comparable to those found in species living in shallower coastal waters. Microplastics are small pieces of plastic less than 5 millimetres in size and, when ingested by sea creatures, may be passed up the food chain.

Although scientists have previously found traces of microplastics in the deep sea, this research, published in the journal *Environmental Pollution*, is the first time microplastic ingestion in deep-sea invertebrates has been quantified. A range of plastics were identified; the paper shows how even naturally buoyant substances, such as polyethylene used to make plastic shopping bags, could be found inside brittle stars, sea stars and sea snails. Polyester was the most abundant plastic identified, mainly in the form of microscopic fibres, and while it is not possible to definitively know its origin, this substance is used widely in clothing and can reach the sea in waste water from washing machines. Lead author on the paper 'Microplastic pollution identified in deep-sea water and ingested by benthic invertebrates in the Rockall Trough, North Atlantic Ocean' is Winnie Courtene-Jones, a University of the Highlands and Islands PhD researcher based at SAMS. She said: "Microplastics are widespread in the natural environment and present numerous ecological threats, such as reducing reproductive success, blocking digestive tracts and transferring organic pollutants to organisms which eat them. More than 660 marine species worldwide are documented to be affected by plastics. "There is much evidence of microplastics around coastal waters but little is known about the extent of plastic pollution in the deeper ocean. "The deep sea is the largest, but also the least explored part of the planet and may be the final sink for plastics. More work is needed on the wider ocean environment to understand the long term fate of marine plastics."

The study found the quantity of ingested microplastics differed between species but did not relate to the size or feeding habits of the species. Winnie's supervisor, SAMS deep sea ecologist Dr Bhavani Narayanaswamy, said: "No longer 'out of sight, out of mind', research into microplastics is rapidly increasing in importance. We are attempting to establish not only how widespread they are, but also how and where they accumulate in animals, and ultimately the impact that they may have on the health of

humans. "SAMS is increasing its research into microplastics, with two new PhD students joining the team in October; one to look at microplastics in the Scottish marine environment, comparing urban and rural locations, whilst the second student will be attempting to develop airborne sensors that will detect microplastics." The sampling was done in June 2016 during the annual Extended Ellett Line research cruise on board the RRS Discovery.

Source: phys.org, 22 August 2017

New plastic dump in Pacific Ocean

Researchers who travel the globe documenting the presence and impact of plastics on the world's oceans and all their marine life have discovered a new ocean "garbage patch" in the South Pacific which they say covers millions of square kilometres. Led by veteran Captain Charles Moore, the Algalita Marine Research Foundation team is mapping the dimensions of the plastic dump, and analysing samples to work out just how harmful its contents are – and how it works its way through the marine food chain. Moore was part of the team which discovered the first ocean "garbage patch" in the North Pacific gyre (a kind of circulating ocean current) in 1997 and has now turned his attention to the South Pacific.

For more than 30 years, he has transported scientists to remote debris patches aboard his research ship. The phenomenon of oceanic garbage patches was originally documented in the North Pacific, but plastic has now been found in the South Pacific, Arctic and Mediterranean, the BBC reported. Algalita's current expedition to monitor plastic pollution in the Southern Hemisphere's oceans started in November last year. The gyres that drive water around the globe, channel plastics together – both domestic and industrial – form solid chunks in some places. These marine rubbish dumps are a threat to the world's fish species, and an indirect threat to humans who ingest fish as food. Algalita, as it says on its website: "The world is awash in plastic. It's in our cars and our carpets, we wrap it around the food we eat and virtually every other product we consume; it's choking our future in ways that most of us are barely aware." It noted the extremely slow speed at which plastics biodegrade, breaking into tiny fragments in a centuries-long process.

“While at sea, plastic acts as a sponge for toxic chemicals, which are ubiquitous in our oceans as a result of human activity. These contaminated plastic pieces are ingested by a broad range of marine organisms, from microscopic plankton and fish to marine mammals and birds. The entire food chain is impacted by contaminated plastic. Plastics are known to concentrate pollutants adsorbed from seawater, and transport these pollutants to seabirds, and other marine life, through ingestion.”

Source: www.iol.co.za, 22 August 2017

Nigeria: Climate Change - Nimasa to bar carbon emitting ships from Nigerian Ports

- Yusuf babalola

The Nigerian Maritime Administration and Safety Agency (NIMASA) has said it will stop vessels with high amount of sulphur in fuel that allow for emission of carbon monoxide into the air from calling at the nation’s seaports. The director-general of the agency, Dr. Dakuku Peterside, who disclosed this, said the International Maritime Organisation (IMO) through Annex VI has put a cap to amount of sulphur and nitrogen dioxide emitted into the air and the amount of sulphur that is contained in the fuel ship used and emitted into the air. Peterside spoke at a one day national stakeholders’ forum on Marine Pollution (Marpol) Annex VI and other emerging issues on climate change in the Nigerian Maritime Sector held in Lagos, yesterday.

According to him, penalty for vessels that violate the latest convention is to bar them from calling at the nation’s seaports. He said, “When vessels berth at our various ports, we take sample of fuel and so many other things we do to check the quality of fuels and emissions there off. But, the penalty for violation of Marpol Annex VI would be not allowing such vessels to call in our territorial waters. “The principal reason is to raise awareness on impacts of climate change, especially the negative impacts of gas emissions from ships to climate change and the IMO has ratified Marpol Annex VI that deals with emissions of gas from ships”. The DG also noted that Nigeria must address the threat of climate change in other to effectively and efficiently maximise the abundant resources in the nation’s oceans and seas. According to statistics, Nigeria, Libya, Egypt and Morocco contributed a total of 46 per cent of greenhouse gasses in Africa, while South Africa unilaterally contributed 38 per cent.

Ships contribute to emissions of carbon monoxide to the atmosphere, which contributes to climate change and if not checked overtime, it will have negative effect on the atmosphere and the environment. The United Nations target is to reduce, per Gross Domestic Product (GDP), emission from 0.873kg carbon dioxide in 2015 to 0.493kg by 2030.

Source: leadership.ng, 22 August 2017

Plastic packaging forms the coffin of marine life

An international study published in July broke new ground by presenting the first global analysis of all mass-produced plastic ever manufactured. It is estimated that 8,300 million metric tons (Mt) of virgin plastics have been produced to date worldwide, and the vast majority has ended up in our environment. The first synthetic plastics appeared in the early 20th century. Widespread use of plastics started after 1945. The ensuing rapid growth in plastics production is extraordinary, surpassing most other man-made materials. Plastics' largest market is packaging, an application whose growth was accelerated by a global shift from reusable to single-use packaging or containers.

The vast majority of monomers that are used to make plastics, such as ethylene and propylene, are derived from fossil petroleum hydrocarbons. Plastic takes 400 years to degrade. As a result, it accumulates, rather than decomposes, in landfills or the natural environment. The only way to permanently eliminate plastic waste is by destructive thermal treatment, such as combustion or pyrolysis (burning or exposure to very high temperatures). The near-permanent contamination of the natural environment with plastic waste is a growing concern. Contamination of freshwater systems and terrestrial habitats is also increasingly reported. Of all the virgin plastics produced to date, 2,500 Mt (30 per cent) are currently in use. Between 1950 and 2015, cumulative waste generation of primary and secondary (recycled) plastic waste amounted to 6,300 Mt, around nine per cent of which has been recycled, 12 per cent was incinerated, and 79 per cent was accumulated in landfills or the natural environment. If current production and waste management trends continue, roughly 12,000 Mt of plastic waste will be in landfills or in the land and marine natural environment by 2050.

Plastic production in the 13 years between 2002 and 2015 is double the entire production for the 52 years before that. At current trends it is estimated that plastic waste to be generated for the 35 years between 2015 and 2050 will be 5.4 times more than the waste generated in the previous 65. Notwithstanding that recycling and incineration activity is expected to increase 15-fold in the coming 35 years, the waste that will end up in landfills and in the natural environment is still expected to increase by 2.5 times from 2015 levels. Plastic waste is increasing exponentially. It is out of control. Plastic poisons our groundwater. There are tens of thousands of landfills across the globe, and buried beneath each one of them, plastic leachate, full of toxic chemicals, is seeping into groundwater and flowing downstream into lakes and rivers and ultimately into the seas and oceans.

Plastic affects human health. Chemicals leached by plastics are in the blood and tissue of nearly all of us. Exposure to them is said to be linked to cancers, birth defects, impaired immunity, endocrine disruption and other ailments. Plastic waste that finds its way to the ocean tends to accumulate in gyres (areas of slow spiralling water and low winds) and along coastlines. Gyres are clockwise currents that trap the plastic within, while the exposure to sun and sea breaks up the plastic into smaller and smaller pieces. There are five such garbage patches. These are located in the north and south Pacific Ocean, in the north and south Atlantic Ocean and in the Indian Ocean.

The garbage gyres are each millions of square kilometres in area and contain chemical sludge, plastic debris, such as bottles, crates and so on, all the way to micro and microscopic plastic particles. The North Pacific Gyre is home to the 'Great Pacific Garbage Patch', a large area that is approximately the size of Texas, with debris extending six metres down into the water column. It is estimated that this 'plastic island' contains 3.5 million tons of trash and could double in size in the next five years. Seabirds are picking up plastic from ocean and sea garbage patches, mistaking plastic for food and plastic granules for fish eggs. The parent birds are taking this toxic garbage mix and feeding it to their chicks until their chicks' stomachs are so full of plastic that there is no space for actual food. The chicks then die of starvation. The record for pieces of plastic found inside the stomach of a bird is 276 pieces found in a dead 90-day-old chick. Hundreds of thousands of turtles, whales and other marine mammals and more than a million seabirds die each year from ocean pollution and ingestion or entanglement in marine debris. Common marine debris includes things like fishing lines and nets, cigarette butts, cans, plastic bags and bottles, styrofoam, balloons, lighters, and toothbrushes.

Billions of one-celled organisms, called phytoplankton, saturate the sunlit upper-ocean waters worldwide. These tiny plants and bacteria capture the sun's energy and, through photosynthesis, convert nutrients and carbon dioxide into organic compounds.

On the coast, sea weed and sea grasses do the same thing. Together, these plants are the primary producers of the organic carbon that all animals in the ocean food chain need to survive. They have also produced no less than 70 per cent of the oxygen present in our atmosphere and continue to do so. When plankton feed on plastic debris they absorb the toxins. This ultimately kills the plankton or passes toxins, instead of nutritive algae, up the food chain. A survey carried out in 2015 in relation to the Mediterranean Sea established that it contains 1,000 Mt of plastic waste, translating into 500 billion pieces of plastic that are mostly microscopic. There are more than 892,000 pieces of plastic marine litter per square kilometre in the most polluted areas. The Med has one of the highest concentrations of plastic in the world, ranking third after the two Atlantic Ocean Garbage Patches. There is no technology today that can be used to clean the oceans and seas of micro and microscopic plastic. This is a ticking time bomb. Plastic must be stopped from reaching the oceans and seas. The visible plastic pieces must be collected in order to stop it from breaking down to irretrievable dimensions. Unless we do something now, there will come a point, in the not too distant future, when the oceans, seas, rivers, lakes and underground water will be saturated with toxic microscopic plastic particles running into millions of trillions. Our children will witness an irreversible mass extinction of marine life. We should be alarmed by plastic pollution because the oceans and seas and the lakes and rivers produce the water we drink, the food we eat and the air we breathe; because nature does not need people; because this is the only Earth our children and grandchildren have to live on in any foreseeable future; because plastic leaches toxic chemicals; because marine life and birds are dying in the hundreds of thousands annually from it; because you are eating it.

Source: www.timesofmalta.com, 20 August 2017

Indonesia battling the plastic tide

- Ana Salvá

Every year, eight million tonnes of plastic enter the ocean. About 90 per cent of coral reefs will have disappeared by 2050. It is estimated that by the same year toxic waste will outweigh total fish stocks on the planet, according to a 2016 report by the Ellen MacArthur Foundation and the World Economic Forum. Indonesia is one of the principal contributors to the problem. This vast country, of more than 17,000 islands, has the dubious honour of being responsible for much of the plastic in our seas, the world's second biggest polluter after China. About 3.2 million tonnes of plastic polluted Indonesia's seas in 2010, according to [research by Jenna Jambeck, published in *Science* magazine in 2015.

Against this background, at the beginning of June this year, a lunch was held at the office of the Permanent Mission of Indonesia to the UN with representatives of ten countries from the Association of South East Asian Nations (ASEAN) in New York to discuss the issue. The Minister for the Coordination of Maritime Affairs, Luhut Pandjaitan, asked for cooperation to help reduce waste which, he explained, "has caused losses of 1,200 million dollars (about 1,072 million euros) in the fishing, maritime and tourism sectors, and the insurance industry." Indonesia is unusual in that, as a country made up of thousands of islands, much of the population lives along the banks of major rivers or close to the ocean. Nicholas Mallos, director of the organisation Ocean Conservancy's *Trash Free Seas* programme, explains to *Equal Times* that Indonesia is also prone to very heavy rains, typhoons and floods. Mallos explains that the seas are being choked by a tide of plastic which is also an "undesired consequence of rapid development". With 250 million inhabitants, Indonesia is furthermore the fourth most populated country on the planet, and just like consumers in other parts of the world, as Indonesians see their income rise their use of products that come in plastic boxes, bottles and other containers rises, but they don't yet have appropriate infrastructure to manage all that waste. Large pieces of plastic are turned by the effects of the sun into tiny pieces of less than five millimetres, "micro plastics" which are now present at virtually every level of the marine ecosystem. This waste is harmful not only for birds and fish, but also for ourselves, as the food chain becomes contaminated.

In the meeting with the ASEAN representatives, Pandjaitan concludes that the problem could become a "disaster" if immediate action is not taken. Part of the picture

that was sketched out is: unemployment, a direct cause of the losses due to pollution, “can lead to poverty, and the social problems arising from this may, eventually, lead to radicalism and terrorism”. To tackle the situation, he said, Indonesia is cooperating with the World Bank and Denmark to carry out research in 15 locations in Indonesia to find out where all the waste comes from. The Asian country is also working with the United States on research into fish populations which, it is suspected, are consuming the plastic. The badly managed waste of this synthetic material is a fundamental concern, not only for governments but also for civil society which is working actively to solve this problem in Indonesia and beyond, says Mallos. In 2016, for example, the government imposed payment for plastic bags for a trial period of six months in 23 Indonesian cities, following social pressure arising from the *Bye bye plastic bags* initiative led by two school girls, Melati, 16, and Isabel, 14.

These activists from the Green School on the island of Bali, inspired by people such as Mahatma Gandhi, wondered how they could help while they were still just school girls, and they focused their attention on the banning of polyethylene bags in Ruanda in 2008. The girls explained to *Equal Times* that in some cases, after the government’s campaign to impose payment for plastic bags, their use was reduced “by nearly 40 per cent”, and they continue to press for their complete elimination. Tuti Hendrawati, director of the Ministry for the Environment and Forestry’s Dangerous Waste programme, has promised that the government will repeat the measure, but there is no definite date yet. Giving up using plastic completely is not easy. In Indonesia there is a serious lack of awareness about waste, despite the introduction of an education programme in the curriculum. The biologist Kevin Kumala is another Indonesian who has decided to take measures to care for the environment. Kumala has found a possible solution in the starch from yucca, a plant endemic to Indonesia that is easy to find in large quantities and does not cost a lot to produce. In 2014 he and his business associate Daniel Rosenqvist created the company Avani ECO. This produces, amongst others, disposable containers made from sugar cane and drinking straws made from maize starch that do not leave any toxic waste. The price of each yucca bag is 0.5 dollar cents (0.4 euro cents, more than double the cost of a normal plastic bag, but the difference is that they convert to compost in less than 100 days, in contrast to the hundreds of years it would take for a plastic bag. If they accidentally end up in the sea, says Kumala, not only will they not be harmful to fish, but they will turn into “food for them”. After the meeting with the ASEAN leaders, minister Pandjaitan said that efforts to reduce the negative effects of marine pollution on the environment could contribute to economic growth and serve as a concrete example of sustainable development.

He also said that he hoped for “increased cooperation” at the regional level “to tackle this critical issue”. Much remains to be done to achieve Indonesia’s ambitious target of reducing marine pollution by 70 per cent by 2025.

Source: www.equaltimes.org, 28 August 2017

East bay oil terminal expansion stokes fears of air and water pollution

Environmentalists say the Phillips 66 marine terminal plan also could lead to the refining of dirty tar sands oil in the region. When Vallejo homeowner B. Todi heard that the Phillips 66 oil refinery wanted to start bringing in more oil by ship — more than double the current amount — her mind immediately went back to a warm night last September. "All my windows were open," she recalled. "I woke up in the middle of the night very sick — nausea, headache, sore throat." Todi didn't sleep that night and was too sick to go to work the following day. More than 1,000 Vallejo and Benicia residents called in complaints about the odor, and more than 100 went to emergency rooms. They later discovered that the toxic air was blowing over the bay from an oil spill at the Phillips 66 Marine Terminal in Rodeo in Contra Costa County.

So at recent community meetings about the proposed expansion of that marine terminal, Vallejo and Benicia residents, along with East Bay environmental activists, had a lot to say — about oil spills, increased diesel pollution from ships, the possibility of an influx of dirty tar sands oil from Canada, the lack of air quality monitoring, and inadequate emergency response. "More than doubling the tanker traffic could significantly increase the risk of oil spills in the bay," said Erica Maharg of Baykeeper, in an interview. "It could be one catastrophic spill. But also it could be the oil spills that happen in daily operation, like the one last September. These things just happen at a marine terminal." Authorities still don't know exactly what caused last September's spill. The U.S. Coast Guard report, issued months later, said investigators couldn't tell whether the spill came from the ship or the terminal. The spill also raised concerns about emergency services. "Vallejo is downwind from the refineries. We get their dirty air but we are not included in emergency plans because we're not in the same county," said Vallejo resident Ken Szutu. More ships entering the bay and idling at the dock would also mean a big increase in diesel pollution, said Benicia resident Andres Soto, who works for Communities for a Better Environment (CBE).

In its permit application, Phillips 66 acknowledged that more ship traffic would increase air pollution and might require "mitigation in the form of offsets." Pollution offsets allow a company to pay for clean-air projects elsewhere to make up for increased pollution from its facility. Solano County Supervisor Monica Brown, who hosted the meeting in Benicia, said she has asthma. "They can put in solar panels somewhere, but that doesn't help me breathe." Several residents at that meeting also said they were upset about the lack of monitoring and public information about air pollution. Vallejo resident Liat Meitzenheimer said that when the toxic air settled on her city last September, residents "went for hours without knowing what it was."

Jaime Williams of the Bay Area Air Quality District responded, "We're looking at additional monitoring. We did pass a new fee schedule to have the largest sources of pollution in the Bay Area pay for more monitoring." Concerns about air pollution are also fueling a years-long campaign by Vallejo residents to prevent the construction of a cement plant and deep-water port on Vallejo's south shore. Vallejo's 94590 ZIP code already has one of the highest asthma rates in the state, noted Meitzenheimer (a 2013 Kaiser report backs up her assertion). Fellow Vallejo resident Don Osborne pointed out that many of the city's residents are low-income people of color. "This is an environmental justice issue," he said. Williams said the air district is working on "a new set of risk-reduction plans" that will include environmental justice considerations.

The elephant in the room, according to environmentalists, is what they see as the likelihood that the project would mean a major increase in oil coming to the Bay Area from Canadian tar sands. Oil-industry watchers like Greg Karras, senior scientist at CBE, don't believe Phillips 66's assurances that the project will not change the composition of the crude oil processed in its refinery. Tar sands crude is "the cheapest oil available at the closest distance by water," noted Karras. "And the Phillips 66 CEO has told investors they're targeting Canadian heavy crude." Refining and burning tar sands oil releases more toxic pollution and more greenhouse gases than conventional crude. In addition, spills of tar sands oil are especially destructive. Because tar sands crude is so heavy, said Karras, "spilled tar sands oil sinks into the water — you can't skim it off like a regular oil spill, so it ends up staying in the environment." Over time, the thick oil gradually vaporizes, so it becomes a continual source of water and air pollution.

Paul Adler, a spokesperson for Phillips 66, declined to be interviewed for this story. Karras also doesn't believe Phillips 66's claim that the project won't increase the amount of oil refined in its plant. Refinery officials say oil from tankers will replace oil

now coming by pipeline. But Karras pointed out that most of the oil coming by pipeline is from the Phillips 66 refinery in San Luis Obispo and is an integral part of the Rodeo plant's operation. The Rodeo plant now processes, on average, fewer than 130,000 barrels a day — the amount it proposes to bring in by ship. Adding that to oil coming in from San Luis Obispo, Karras said, shows that "this is a refinery expansion project. Saying that it isn't doesn't pass the laugh test." The air district will take public comments on the proposed project until Aug. 28. Paul Adler, a spokesperson for Phillips 66, declined to be interviewed for this story because, he said, public comment is still going on and the company wants to "respect the process."

Source: www.eastbayexpress.com, 23 August 2017

We're never going to solve plastic pollution if all we do is clean up beaches

At first glance, Chilli Beach in Cape York looks like your quintessential tropical coastline. Fringed by coconut trees and bordered by turquoise water, it's the kind of place you'd see slapped on a postcard. That is until you look down. Strewn along the 6.7 kilometers of sand is a vast expanse of plastic confetti, brought in to shore by ocean currents. Hundreds of thousands of brightly colored plastic fragments, meters and meters of rope, fishing nets, rubber thongs (5,547 to be precise), and thousands of other man-made items dot the beach, transforming the tropical paradise into the kind of beachside view that's becoming more and more common around the world.

Every year, marine conservation group Tangaroa Blue and a crew of enthusiastic volunteers head to some of Australia's most remote beaches to pick up other people's rubbish. This year, I joined them for their annual clean up of Chilli Beach in Kutini-Payamu National Park, Cape York as part of environmental organization Clean Coast Collective's Trash Tribe; a group of ten people passionate about using their skills to help keep plastic out of our oceans.

Six years ago, Tangaroa Blue cleaned Chilli Beach for the first time, collecting more than five tons of rubbish in just five days. Each year after that, the annual rubbish haul began to decline, averaging at around three tons a year. So last week, when the team of 40 volunteers and I hit the beach, we did so with an optimistic outlook. We were going to get this done and dusted in four days, with a day left over to spend lounging on the beach like normal holiday-goers. Instead, we spent eight hours a

day removing trash from the shoreline and logging every individual item in the organization's online database. Over the five days, we picked up a record-breaking seven tons of rubbish, filling more than eight hundred bags with trash that had accumulated along the beach since last year's clean up. Founding CEO of Tangaroa Blue, Heidi Taylor, believes "if all we do is clean up, that's all we'll ever do." This mantra is the foundation of Tangaroa Blue. Rather than simply disposing of all the garbage we collected every day, we sorted it into detailed categories. Tangaroa Blue is the ocean's own team of private investigators. The data this organization collects on marine debris allows them to piece together where these items are originating from and how to stop them at their source by driving business or policy change.

There's one thing that's immediately evident from our data collection efforts – we use a lot of single-use plastic. Fifty percent of plastic created is used just once and then tossed away, and every piece of plastic ever created still exists somewhere. Eight million tons of different plastics make their way to the ocean on an annual basis. And in just over thirty years, every seabird on the planet will have ingested plastic. Our own use of plastic is killing our oceans year by year. 90 percent of the rubbish we collected on Chilli Beach originated outside of Australia. It would be easy to throw our hands in the air with a dismissive "not our problem," but when it comes to over consumption and plastic pollution, we're in no position to point the finger at anybody else. Walk down any supermarket aisle and it's clear we're addicted to plastic as much as the rest of the world. Every year, Australians use more than one billion plastic coffee cups and consume around thirty liters of bottled water each. Protecting our oceans is a global responsibility that needs far more attention from industries and government, and just as importantly, from individuals. During this year's clean up, we counted more than 2,000 toothbrushes, combs, razors, and more than 3,000 plastic drink bottles. There are plenty of reusable alternatives available to these single-use items like bamboo toothbrushes and stainless steel water bottles. How we spend our money matters, and seemingly simple actions have a huge collective impact on our oceans. While Heidi and the rest of the team at Tangaroa Blue continue their work as ocean detectives, driving policy change with their collected data, we all have the power to stop our own plastic pollution at its source. We don't need to wait for policy to change. We can be the change (as cliché as that sounds), and we must. Otherwise, year after year, tons of rubbish will continue to wash up on coastlines all over the globe just the same as it does at Chilli Beach. Like Heidi says, if all we do is clean up, that's all we'll ever do.

Source: www.theinertia.com, 30 August 2017

Groups call on Japan not to dump radioactive water into Pacific Ocean

Beyond Nuclear has signed onto a new letter from marine wildlife, environmental and conservation groups calling on authorities in Japan to avoid at all cost the dumping of hundreds and thousands of tons of radioactively contaminated water into the Pacific Ocean.

Currently, Japanese utility, TEPCO, is planning to release 777,000 tons of waste containing radioactive tritium into the Pacific Ocean from its stricken Fukushima-Daiichi nuclear site. The contaminated water, used to cool the destroyed reactors to avoid further catastrophe, has been stored in tanks on site, but the facility is running out of space. The groups urge TEPCO and the Japanese nuclear regulator to find alternatives to once again using our oceans as an irresponsible dumping ground for man-made garbage. Environmental and anti-nuclear groups, along with local Japanese fishermen, have also been calling for TEPCO not to dump the radioactive water into the ocean. "The time for using world oceans as a dump is over," reads the letter. To date, the groups include: Turtle Island Restoration Network; WildEarth Guardians; Beyond Nuclear; Endangered Species Coalition; Klamath Forest Alliance; Environmental Protection Information Center; WILD Coast; Ocean Defenders Alliance; Kurmalliance; Pacific Marine Mammal Center; World Ocean Observatory; Ocean Institute; and Elders Climate Action. The groups are encouraging other organizations to sign on before the letter is submitted on Sept. 3. "In the past, communities around the world used the ocean for waste disposal, including the disposal of chemical and industrial wastes, radioactive wastes, trash, munitions, sewage sludge, and contaminated dredged material. Little attention was given to the negative impacts of waste disposal on the marine environment," the letter continues. "Wastes were frequently dumped in coastal and ocean waters based on the assumption that marine waters had an unlimited capacity to mix and disperse wastes."

Anti-nuclear campaigner, Aileen Mioko Smith of Green Action Japan, pointed out in July that the decision to dump the radioactive water "sets a precedent that can be copied, essentially permitting anyone to dump nuclear waste into our seas." In the six years since the accident, authorities should have figured out an alternative, she said. Already, "hundreds of thousands of sea turtles, whales, and other marine mammals, and more than 1 million seabirds die each year from ocean pollution and ingestion or entanglement in marine debris," according to the non-profit, SEE Turtles. In a landmark 2001 report, authors Linda Pentz Gunter and Paul Gunter, now with Beyond Nuclear, studied the impact of just the routine operation of coastal nuclear

power plants on marine life. The report — Licensed to Kill; how the nuclear power industry destroys endangered marine wildlife and ocean habitat to save money — found that hundreds of endangered sea turtles, among many other animals, were drawn into nuclear plant systems, and often injured or killed. Hot water discharges from nuclear plants had severely damaged marine life and ecosystems. “We can no longer bury our industrial crimes at sea,” said Linda Pentz Gunter, the international specialist at Beyond Nuclear. “We already know too much about the harm radiation exposure does to humans and wildlife. We continue to view the oceans and their important marine life as ‘out of sight and out of mind’ at our peril.” Marine wildlife is already under siege from horrific accumulations of dangerous debris in the world’s oceans, including the notorious “Great Pacific Garbage Patch” — a 3-5 million ton accumulation of trash that covers an area approximately the size of Texas and which could double in size in the next 5 years.

Source: www.ladailypost.com, 30 August 2017



GEOPOLITICS



Doklam and Beyond: India must brace for China's land-Maritime 'Salami Slicing'

Among watchers of its international behaviour, China has been known for its "salami slicing" tactics—its gradual accumulation of small, deceitfully innocuous actions, none of which individually pose an existential threat to another nation, but when seen in unison add up to significant changes in the economic, political and strategic dimensions. Within the larger "salami slicing" strategy of China is encapsulated another popularly known as the "cabbage strategy", which refers to the simultaneous evocation of multi-layered security-contestation dynamics around a disputed area that not only lays claim to the area but also blocks access to that region/entity for all other countries. The latter strategy also falls within what is broadly understood as China's anti-access/area denial (A2/AD) regional strategy to keep warring parties out of its claimed areas in the Asia-Pacific.

These strategies have come together to substantially alter Chinese claimed geography and sovereignty through historical-cum-territorial assertions in the Asia-Pacific region. The evocation of history has allowed two regionally unsettling transformations for other countries that are at a crossroads with Beijing. Firstly, it has allowed China to venture out of its traditional maritime circumference defined by the nine-dash-line, and secondly, it has made the probability of Beijing's renunciation of any of these claims further remote. In the past few years, China has claimed more than 80% of the SCS, and more apprehensively, continues to advance westward in Asia.

Beijing's advance to its west, particularly in the maritime regions of the Indo-Pacific and the Indian Ocean, has caused tremendous concerns in New Delhi. More recently, its attempt to cage much of Asia within the peripheries of its land-maritime-combined revival of old trade routes in Asia smacks of a new form of imperialism. Both the "Belt" and the "Road" in its One Belt One Road have been estimated to include more than 60 countries and 4.4 billion people, passing through Asia, Europe, Africa and the Middle East and will cover up to 40% of global GDP.

Furthermore, China's recent agreement on a 99-year lease to operate a strategically located deep-water port at the southern tip of Sri Lanka, its de facto control of Pakistan's Gwadar port, the phenomenal increase in the frequency of Chinese submarines plying in the Indian Ocean waters and, to top it all, its first international naval base at the strategic Indian Ocean node Djibouti, are all instances of ostensibly innocuous yet cumulatively calamitous changes in geopolitical realities of the Indian Ocean particularly and the larger Asian domain more broadly— a quintessential component of "salami slicing." The seemingly benign salami slicing strategy of China, essentially associated with its sovereignty assertion in the Asia-Pacific, is spreading over the rest of Asia and carries the potential to go beyond in the near future. Given the nature of Chinese advance, sovereignty assertions and rhetoric, it would not be a false assessment to see Beijing's salami slicing tactics beyond the Asia-Pacific in Asia with the same strategic lens as in that region. Beijing's advance to its west, particularly in the maritime regions of the Indo-Pacific and the Indian Ocean, has caused tremendous concerns in New Delhi. More recently, its attempt to cage much of Asia within the peripheries of its land-maritime-combined revival of old trade routes in Asia smacks of a new form of imperialism. Both the "Belt" and the "Road" in its One Belt One Road have been estimated to include more than 60 countries and 4.4 billion people, passing through Asia, Europe, Africa and the Middle East and will cover up to 40% of global GDP.

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At Doklam, China's attempt to extend a motorable road and change the status quo blends perfectly into its salami slicing strategy which is fast packing a continental pack in the Asian domain, adding to its already existing robust maritime component. India's

ongoing explicit military stand on behalf of Bhutan, where China attempted yet again to change regional geography and hence status quo, depicts a resolve in New Delhi not to let China change regional realities and most of all resist its attempt to anneal such changes. While holding China off temporarily at Doklam, India's larger strategy should focus on preventing regional realities on the ground from changing.

As such, India should brace for a combined land-maritime juggernaut of Chinese salami slicing tactics—one that is surreptitiously headed towards the Himalayas in the north and the Indian Ocean in the south.

Source: www.huffingtonpost.in, 18 August 2017

Doklam face-off a turning point in Sino-Indian relationship

India has been intensifying its military presence in the Doklam area since it trespassed into Chinese territory on June 18. The aggressiveness demonstrated in the move shows that the Modi government is strengthening its intention for a comprehensive strategic confrontation with China. By challenging China's sovereignty in the Doklam region, India aims to maintain and showcase its hegemonic status in South Asia. Before Modi took office, India's economy and thus its national strength had maintained years of relatively high growth. However, during the same period, China's national strength was growing even faster, and therefore the gap between the two countries was getting bigger. Beijing's influence has been expanding quickly in South Asia in recent years as it is dedicated to developing friendly cooperation with all countries in the region. The construction of the China-Pakistan Economic Corridor (CPEC) has further deepened Beijing-Islamabad friendship. Border negotiations with the Bhutan government have made periodic achievements. China has improved its ties with Nepal, Sri Lanka, Maldives and other South Asian countries.

Traditionally, India's elites have insisted on the country's military and diplomatic dominance in South Asia. But they have now realized that India is not capable of maintaining its absolute advantage over other South Asian countries, and its dominant status in the region is being weakened and challenged. India's hard-line leadership is attempting to take advantage of structural conflicts between Beijing and Washington. New Delhi's growing national strength encourages itself to push the Beijing-New Delhi bilateral relationship into conflict and confrontation and therefore to contain China's

growing influence in the region. That's why we see after a short period of sounding out the Chinese government, Modi is actively leading the two nations into the direction of confrontation. India's political environment makes it easier for politicians to confront China than improve ties with it. Modi has opted for confrontation with China, with the consideration that by challenging China, the Modi government can maintain India's influence and hegemony in South Asia. The standoff in the Doklam area has already triggered strong confrontational sentiments in both Chinese and Indian society. No matter how it ends, the Beijing-New Delhi bilateral relationship is highly likely to enter into a confrontational stage. India's current domestic political environment is favorable for Modi to remain in office for a long period, and thus it is highly likely that the Doklam face-off symbolizes a long-term confrontation between Beijing and New Delhi.

Hence it is safe to predict that even if the standoff is peacefully addressed, it will only temporarily suspend the Sino-Indian strategic confrontation, and the Modi administration will take provocative actions against Beijing on other issues. Modi's handling of China affairs has shown such a tendency. India has taken an aggressive attitude against China on the Belt and Road initiative, the CPEC, the South China Sea disputes, the bid for the Nuclear Suppliers Group, the reform of the UN Security Council and other issues. The strength gap between China and India determines that New Delhi cannot contain China by itself and has to enlist the help of Washington and Tokyo. The timing of the Doklam face-off coming shortly after Modi's visit to the US is not a coincidence. Taking advantage of Washington's strategic aspiration of using New Delhi to contain and confront Beijing, Modi is attempting to strengthen political and military cooperation with the US. Meanwhile, India-Japan collaborations in the Malabar drill and cooperation in the nuclear and military fields will give New Delhi more bargaining chips to counter China. Modi is hoping such engagement will help maintain and strengthen its hegemony in South Asia.

India's economic gap with China means that India cannot prevent China from deepening economic cooperation with South Asian countries. At this point, China's Belt and Road initiative has a strong basis of support among the public and governments in South Asia. However, New Delhi believes that it could utilize Beijing's structural conflicts with Washington and Tokyo to obtain some political support from the international community, and thus it would be feasible to confront Beijing politically and militarily. With nuclear weapons, India is also confident of its military capabilities.

Given the above, India's provocation this time is not a simple border dispute, but a turning point of the Sino-Indian relationship. No matter how the standoff ends, Beijing and New Delhi will enter into a stage of long-term strategic confrontation and the confrontation will be mainly reflected in political and military matters.

Source: www.globaltimes.cn, 15 August 2017

China's Military base in Djibouti: Strategic Implications for India

- Abhijit singh

The early morning hours of July 11, 2017, marked a watershed moment for the People's Republic of China. In an official ceremony at the port of Zhanjiang, the commander of the People's Liberation Army Navy (PLAN), Shen Jinlong, "read an order for the construction of China's first replenishment base in Djibouti, and conferred military flag on the fleets." With a salute and a wave of his hand, Shen then ordered the ships carrying Chinese military personnel to set sail on their mission.

Since early 2016, there has been speculation and much concern about a potential Chinese military base in Djibouti. At first, Chinese commentators denied the development, but later admitted that Beijing was indeed considering setting up a logistical facility in the Western Indian Ocean. As the first contingent of Chinese military personnel sailed out of Zhanjiang last month, China insisted the facility was merely for logistical and support purposes. An official release from Beijing said the facility was meant to assist the PLAN in the discharge of its "international obligations" by facilitating Chinese escort missions in the Gulf of Aden and humanitarian rescue missions in Africa and West Asia.

Whatever its purported justification, China's new base in Djibouti has stirred consternation in India, where commentators regard the development as a statement of strategic intent in the Indian Ocean. With an estimated area of nearly 250,000 square feet, the facility includes a large underground complex and is capable of hosting an estimated 10,000 troops. Over the past decade, New Delhi's view of Beijing's Indian Ocean ambitions has evolved significantly. Previously, a section of India's strategic elite saw China's forays in the region as largely commercial, and believed the Indian Navy, which dominated the South Asian littorals, could effectively counter PLAN aggression there. That consensus appears to have shifted. Many Indian

observers now believe China's military outpost in East Africa is aimed at regularizing a PLAN presence in the Indian Ocean, underscoring Beijing's strategic ambition across the arc of the Indo-Pacific Region.

China's Indian Ocean Power Play

Indeed, there seems to be more to China's play in Djibouti than its benign claims about escort and humanitarian missions. It was in 2008 that Beijing first considered Djibouti as a prospective logistical base for its naval flotilla, providing security to Chinese shipping convoys in the Horn of Africa and the Gulf of Aden. But after 2013, when China began investing heavily in infrastructure projects — including a new port, two new airports, and the Ethiopia-Djibouti railway — the outreach seemed clearly political, intended to bolster China's military and diplomatic presence in the western Indian Ocean. The strategic nature of China's investments in Djibouti was confirmed in 2014, when Beijing signed a Defense and Security Agreement with the Horn of Africa state — already home to military facilities of the United States, France, and Japan. In exchange for the PLAN's use of its port, Djibouti's government requested that China assist in the development of military capabilities, including patrol boats and airplanes, as well as the establishment of a civilian maritime complex. Soon, Beijing arranged for the delivery of a MA-60 plane and a Norinco WZ 551 APC to the Djiboutian Air Force.

To be sure, China's Djibouti strategy still seeks to promote Beijing's commercial interests. Given China's economic penetration of Africa and Central Asia, Beijing is giving high priority to its commercial investments in the Indian Ocean. As China's "One Belt, One Road" initiative gathers momentum, however, the focus is also increasingly on developing political influence in Indian Ocean rim states. Beijing needs the cooperation of the regional political elites to allow the PLAN access to critical Indian Ocean littorals for the protection of Chinese investments. A military base in Djibouti is a useful asset for China, as it denotes both geopolitical heft and economic stakeholderhood in the Indian Ocean. Its location, next to the new port terminal at Obock, ensures Chinese military forces can be rapidly mobilized to protect China's commercial investments and efficiently deliver military assistance.

Notably, Beijing's quest for a military footprint in Djibouti is a significant departure from China's traditional role as a resource extractor in Africa, with primarily commercial interests. Although China has long had a presence on the continent, Beijing's security interests in East African states have been rapidly expanding.

Regardless of its utility in facilitating anti-piracy operations and non-combatant evacuation operations from troubled regional states, Beijing's new base in Djibouti marks the start of a longer-term enterprise aimed at embedding China into the geopolitics of the Indian Ocean.

The View from New Delhi

Until about 2005, many Indian analysts believed China's maritime security interests were confined primarily to the Eastern Asia littorals. The PLAN's forays in the Indian Ocean, in this view, were mainly driven by the need to protect China's trading interests. The Indian Navy saw itself as a powerful security player in the Indian Ocean region, second only to the U.S. Navy, with whom it shared a warm and collaborative relationship. India's maritime planners were confident their navy could fend off any aggression by a hostile power, particularly the PLAN, which many analysts believed to be vulnerable in Southern Asia's littorals.

However, since 2008, when China first began deploying warships off the coast of Somalia for antipiracy duties, there has been a sea change in Indian thinking about Chinese maritime presence in the Indian Ocean. Indian analysts now view the PLAN's rapidly expanding military activities in the Indian Ocean — in particular its submarine visits to Sri Lanka and Pakistan, and its attempts to establish logistics bases like the one in Djibouti — as part of a broader Chinese effort to establish geopolitical influence in the wider Asian littorals. PLAN submarine missions in the subcontinental waters have grown in complexity and scope, analysts say, indicating a keenness to master the operational environment of the Indian Ocean. Notably, Chinese submarines are spending unusually long periods exploring the Southern Asian littorals — gaining familiarity with the regional operating environment, fine-tuning standard operating procedures, and gathering vital hydrological and bathymetric data — signifying a desire to dominate the Indian Ocean's critical maritime spaces and lines of communication. India's political leadership also worries about Beijing's leveraging of PLAN warship deployments for diplomatic purposes. Not only is China maintaining a regular naval presence in the Indian Ocean, it is using anti-piracy forays to secure geopolitical leverage with states in the region. In April this year, when China sent its 26th naval escort taskforce to the Gulf of Aden for anti-piracy duties, it spent considerable time visiting Indian Ocean coastal nations. Sri Lanka, Pakistan, Bangladesh and the Maldives — all India's maritime neighbors — have each, at some point, played host to visiting PLAN warships.

Strategic Implications and Policy Options for India

While China's military activity in the Indian Ocean isn't inherently provocative, the geopolitical implications for India are substantial. The PLAN's expanding presence in maritime Southern Asia challenges the Indian Navy's preeminent regional status and feeds fears of strategic encirclement. As India and China move closer to each other in the waters of the subcontinent, it is but a matter of time before the two entities come into conflict. The danger lies not only in inadvertent escalation (a commonly held fear among maritime analysts), but also in a deliberate ratcheting up of tensions by both sides through greater naval posturing in a bid to underscore their dominance of the South Asian littorals. Each side realizes that in order to prevent an incremental takeover of its strategic space by the other, it must be prepared to up the operational ante in areas of overlapping influence. The situation is worrisome for New Delhi because in the absence of critical combat capability — in particular, conventional submarines, anti-submarine helicopters, and minesweepers — the Indian Navy's ability to push back against the PLAN might lack vigor, drawing a stronger response from Beijing in India's near seas than would be normally expected.

Policymakers in New Delhi know India needs to expand defensive maritime capabilities in the Indian Ocean to counter the PLAN's assertive power projection. The Indian navy has been developing the Andaman and Nicobar Islands as strategic outposts to monitor rival naval activity in the regional commons. In recent years, India has also beefed up its military capacities on the strategic Bay of Bengal island territory through a graded expansion of existing facilities and assets. This includes the refurbishment of naval air stations and operational turn around facilities. To counter increasing Chinese surveillance activities close to the Andaman Islands, New Delhi has been investing in the development of an integrated surveillance network in the Bay of Bengal and Arabian Sea with radar stations in Sri Lanka, the Maldives, and other littoral locales to keep track of Chinese naval activity.

India's most critical challenge is the emerging Pakistan-China maritime nexus in the western Indian Ocean — in particular, the prospect of Chinese warships being permanently positioned at Karachi or Gwadar, where China has helped construct a port. Nothing disquiets India's maritime managers more than the prospect of a combined China-Pakistan maritime front in the Arabian Sea. Not only does the PLAN's ready access to Pakistani bases facilitate Chinese power projection in the Indian Ocean, it also inhibits the Indian Navy's coercive options during a crisis. Meanwhile, Beijing's assistance to Pakistan's naval modernization program — the

proposed sale of eight Yuan-class submarines, a program for construction of patrol boats for the Pakistani Navy, the upgrade of four Pakistani F-22P frigates and the supply of high-end weapons and sensors — has convinced many Indian watchers that China is nurturing a proxy power in South Asia. New Delhi is aware that China's maritime aspirations in the Indian Ocean extend well beyond Djibouti and East Africa. As Sri Lanka, Bangladesh, Myanmar, and Maldives grow progressively welcoming of Chinese investment in the form of the Maritime Silk Road — a geopolitical project involving the creation of connectivity and huge maritime infrastructure — New Delhi suspects China's military is bound to follow. In Gwadar, for instance, Indian analysts believe the PLAN will move to establish a military base in the not-so-distant future. Combined with its presence in Djibouti, China could then establish a strategic stranglehold over the Northern Arabian Sea.

Responding to China's challenge in the Indian Ocean will require more than a strategy for robust defense. Contrary to popular belief, India is unlikely to be able to keep Chinese warships out of the Indian Ocean. Many Indian Ocean rim states have welcomed Beijing's maritime initiatives and investments in the area, meaning India's efforts to constrain China there are bound to meet with regional opposition. The navy may be able to curtail the PLAN's presence in maritime Southern Asia, but it is unlikely to be able to stop Chinese submarine deployments completely. Beyond denying the Chinese navy strategic space in the Arabian Sea and Bay of Bengal, the Indian Navy will need to project naval power in the Western Pacific. As China's maritime footprint in the Indian Ocean grows, New Delhi will need a corresponding strategy to expand its own presence in the Southeast Asian littorals, an area that China has traditionally dominated.

To be sure, applying counter-pressure to Chinese maritime domains will not be easy. India will need institutionalized access to refueling and resupply facilities in the Pacific, and deeper strategic engagement with the United States, Japan, and Australia. To shape the security dynamics of East and Southeast Asia, the Indian Navy will have to develop the operational wherewithal and strategic capacities to undertake long-duration naval missions in the broader Pacific sphere of China's influence. There will be occasional bouts of posturing and counter-posturing vis-à-vis the PLAN, but Indian commanders will need to be firm about their right to operate in the Western Pacific, keeping Chinese naval forces off-balance in a region Beijing considers a core interest. Diplomatically, a strategy of counter-presence will allow New Delhi to play an aggressive hand as well, putting Chinese interlocutors on the defensive. In many ways, then, New Delhi will need to walk the strategic talk on its "Act East" policy. By

emphasizing its Pacific stakes, India might be far more effective in tackling China's naval assertiveness than by defending its strategic space in the Indian Ocean.

As China institutionalizes its power and normalizes its military presence in the Indian Ocean region, India needs an innovative response. Nothing will be more effective in signaling Indian resolve to Beijing than New Delhi's own little "Djibouti" in China's perceived sphere of maritime influence.

Source: warontherocks.com/, 21 August 2017

India seeking stronger alliance with US, Japan as tension with China escalates

New Delhi is reportedly holding back-channel consultations with the US and Japan to schedule a trilateral meeting on the sidelines of the United Nations General Assembly in New York next month. India expects that the trilateral meeting between Foreign Minister Sushma Swaraj, US Secretary of State Rex Tillerson and Japanese Foreign Minister Taro Kono, if held, will serve as a precursor to a formidable India-US-Japan axis that would help perforate China's ambitions in the Indo-Pacific region. India's ambition stems from its long-standing rivalry with China which has intensified in the recent months with both sides refusing to budge from their respective positions in Doklam. The Indian Army and the Chinese People's Liberation Army(PLA) are locked in a standoff at the Doklam Plateau in western Bhutan since the last two months. PLA soldiers had started building a road at Doklam — a tri-junction and a disputed area between Bhutan and China on June 16. Indian border forces swooped down on the area to thwart the Chinese attempt to build a road. India says it is not only preventing China's unilateral attempt to disrupt the status-quo over a disputed territory but also protecting its own security interests — a claim strongly despised by China. During its most recent media briefing, China's Foreign Ministry described India's objection to its road building activity in Doklam as ridiculous.

Japan has been one among the few countries publicly siding with India and Bhutan on the issue. Tokyo's envoy to New Delhi, Kenji Hiramatsu, last week, asked China to stop trying to unilaterally change the status quo in Doklam Plateau. Beijing slammed Japan by saying that Tokyo did not have the facts of Doklam right. India is hoping that Japan will reassert its support during Prime Minister Shinzo Abe's

expected visit to New Delhi next month. Japan's support to India was not unforeseen as Tokyo is already keen to foster closer ties with India in order to create a new "arc of freedom and prosperity" along with Australia, US and other countries of the region. This move is seen by Beijing as Japan's overt strategy to garner international backing to its claims over the Diaoyu or Senkaku islets in East China Sea, which China identifies as its own Air Defense Identification Zone (ADIZ).

Meanwhile, Washington has not formally backed India on the Doklam standoff but the US President Donald Trump called up Prime Minister Narendra Modi last week and the two leaders "resolved to enhance peace and stability across the Indo-Pacific region by establishing a new "two-by-two ministerial dialogue." The "two-by-two ministerial dialogue" that is to be held between Swaraj, Tillerson, and India's Defence Minister Arun Jaitley and American Secretary of Defence James Mattis. US' keenness in elevating strategic consultations with India comes in the backdrop of the country's plan to start a quadrilateral security dialogue with India, Japan and Australia to offset China's maritime assertiveness in the Indian Ocean. India, Japan and the US are already holding regular naval exercises since 2015 in the Indian Ocean which Australia is also keen to join.

Source: sputniknews.com, 23 August 2017

The India-Vietnam Relationship: Beyond the BrahMos connection

- Harsh V. Pant

At a time when India and China are facing each other in a precarious standoff on the Doklam Plateau, Vietnam gave an indication last week that that it has acquired BrahMos anti-ship cruise missiles from India, a weapon system that has been a priority for Hanoi for some time now. Without going into the specifics, Vietnamese Foreign Ministry suggested that "The procurement of defense equipment (BrahMos) by Vietnam is consistent with the policy of peace and self-defense and is the normal practice in national defence." The Indian Ministry of External Affairs response was to term these reports as "incorrect." But there is no doubt that Hanoi is increasingly at the center of India's 'Act East' policy.

Prime Minister Narendra Modi visited Vietnam last year, rather pointedly, on his way to China to attend the G-20 summit. Modi's visit made it clear that New Delhi was no longer hesitant to expand its presence in China's periphery. It was the first visit by an Indian prime minister to Vietnam in the last 15 years, ostensibly to celebrate 10 years of a strategic partnership between the two nations.

India under the Modi government has made no secret of its desire to play a more assertive role in the larger Indo-Pacific region. Modi himself has argued that India can be an anchor for peace, prosperity, and stability from Asia to Africa and from Indian Ocean to the Pacific. Therefore, a more ambitious outreach to Vietnam should not be surprising. The Modi government has also indicated that it remains willing to sell the supersonic BrahMos missile, made by an Indo-Russian joint venture, to Vietnam after dilly dallying on Hanoi's request for this sale since 2011. Though India's ties with Vietnam have been growing in the last few years, this sale was seen as a step too far that would antagonize China.

But the Modi government last year directed BrahMos Aerospace, which produces the missiles, to expedite this sale to Vietnam along with four other countries including Indonesia, South Africa, Chile, and Brazil. India is already providing a concessional line of credit of \$100 million for the procurement of defense equipment and in a first of its kind has sold four offshore patrol vessels to Vietnam, which are likely to be used to strengthen the nation's defenses in the energy-rich South China Sea. India's outreach comes at a time when the U.S. has also lifted its longstanding ban on sales of lethal military equipment to Vietnam. New Delhi's abiding interest in Vietnam too remains in the defense realm. India wants to build relations with states like Vietnam that can act as pressure points against China. With this in mind, New Delhi has been helping Hanoi beef up its naval and air capabilities. The two nations also have stakes in ensuring sea-lane security, as well as shared concerns about Chinese access to the Indian Ocean and the South China Sea. Hence, India is helping Vietnam to build capacity for repair and maintenance of its defense platforms. At the same time, the armed forces of the two states have started cooperation in areas like information technology and the English-language training of Vietnamese Army personnel. The two countries potentially share a common friend too in the United States. New Delhi has a burgeoning relationship with Washington with the two signing a logistical support agreement this week, while Vietnam has been courting America as the South China Sea becomes an increasingly tense flash point. As these three countries ponder how to manage China's rise, they have been drawn closer together.

It is instructive that India entered the fraught region of the South China Sea via Vietnam. India signed an agreement with Vietnam in October 2011 to expand and promote oil exploration in South China Sea and then reconfirmed its decision to carry on despite the Chinese challenge to the legality of India's presence. Beijing told New Delhi that its permission was needed for India's state-owned oil and gas firm to explore for energy in the two Vietnamese blocks in those waters. But Vietnam quickly cited the 1982 United Nations Convention on the Law of the Sea to claim its sovereign rights over the two blocks in question. Hanoi has been publicly sparring with Beijing over the South China Sea for the last few years, so such a response was expected. What was new, however, was New Delhi's new-found aggression in taking on China. It immediately decided to support Hanoi's claims. By accepting the Vietnamese invitation to explore oil and gas in Blocks 127 and 128, India's state-owned oil company ONGC Videsh Ltd (OVL), not only expressed New Delhi's desire to deepen its friendship with Vietnam, but ignored China's warning to stay away. This display of backbone helped India strengthen its relationship with Vietnam.

Hanoi is gradually becoming the linchpin of this eastward move by New Delhi. Hanoi fought a brief war with Beijing in 1979 and has grown wary of the Middle Kingdom's increasing economic and military weight. That's why in some quarters of New Delhi, Vietnam is already seen as a counterweight in the same way Pakistan has been for China. If China wants to expand its presence in South Asia and the Indian Ocean region, New Delhi's thinking goes, India can do the same thing in East Asia. And if China can have a strategic partnership with Pakistan ignoring Indian concerns, India can develop robust ties with states like Vietnam on China's periphery without giving China a veto on such relationships. With its outreach to Hanoi, Delhi seems to ready to challenge Beijing on its own turf. And for the moment at least, this stance is being welcomed by states like Vietnam who fear the growing aggression of China. A more engaged India will also lead to a more stable balance of power in the region. While India may want to downplay the BrahMos connect at this particular point in its engagement with Vietnam, a final decision on this will have to be made soon. The Doklam crisis cannot be the determining variable. India's decision will have to be based on the nation's long term foreign and security priorities.

Source: thediplomat.com, 22 August 2017

Steps taken to strengthen economic ties with South East Asia: Nirmala Sitharaman

Union Commerce and Industries Minister Nirmala Sitharaman on Sunday said that steps have been taken to strengthen economic ties with several South East Asian countries especially neighbouring Myanmar. The Centre will be working together with Manipur government to pursue this course to improve international trade relations, Sitharaman told reporters at Imphal airport.

She said India has been trying to expand trade relations with SE Asian countries in association with the state government. The union minister said efforts are on to establish border haats at the Indo-Myanmar border town of Moreh. Sitharaman is on a day-long visit to the state to attend a party programme.

Source: indianexpress.com, 20 August 2017

How China is helping Malaysia's military narrow the gap with Singapore, Indonesia

- Bhavan jaipragas

From new surveillance aircraft to a revamp of the naval fleet, the hardware wish list drawn up by Malaysia's military to keep up with amply funded regional peers like Singapore and Indonesia is no small ask – especially for Prime Minister Najib Razak's cash-strapped government. With no signs of the country's current fiscal strains going away – Najib last year slashed defence spending by 13 per cent – some industry experts are predicting a possible low-cost workaround could be increased procurement from Chinese weapon suppliers. Such a prospect would mark a major step up in the already deepening diplomatic ties between the two countries, which have seen Malaysia become among the top destinations for Chinese foreign direct investment.

For state-linked Chinese weapon companies, the prospect of a surge in Malaysian business is likely to be welcomed with open arms, military observers say, as they hanker for major export deals with countries that have traditionally turned to the West or Russia for their military needs. Speculation about Malaysian procurement of Chinese weapons went into overdrive last week after two reports suggested Chinese

officials visiting Kuala Lumpur had mooted the sale of advanced rocket launchers and a radar system for deployment in the country's southern tip bordering Singapore. Malaysia's defence ministry refuted the reports, but some observers say the deal may eventually materialise in some form, even though the scale and purpose of the possible purchase remains unclear. Malaysia last year signed a 1.17 billion ringgit (HK\$2.1 billion) deal for four littoral mission ships – used for coastal patrols – to be jointly built by the state-linked China Shipbuilding and Offshore Company (CSOC) and the local Boustead Naval Shipyard. It was the first major defence contract between the two countries. Collin Koh, a Singapore-based military researcher, said there were “reasons to surmise some kind of discussions on the [rocket launchers] purchase have taken place ... as part of a wider range of weapons offerings from China”. Chinese weapon suppliers have previously inked deals with the likes of Thailand, Cambodia and Laos, but a fresh pact with Malaysia barely a year after the CSOC deal would be seen as a major coup. “If China wants to showcase itself as an emerging, credible global arms supplier, it'll need to start sealing successful arms deals especially with countries that have been buying Western. Malaysia fits the bill,” said Koh, a research fellow with the S. Rajaratnam School of International Studies in Singapore.

Li Jie, a senior researcher at the Naval Military Studies Research Institute in Beijing, said China's key purpose was “to ensure regional security”. “Since smaller countries have no or limited ability to develop weapons on their own, they need help in order to defend against terrorist attacks and other threats,” said Li. “Just like helping Pakistan, China is also willing to help Southeast Asian countries – especially those with good relations with China – to improve their defence power. And these countries are purchasing weapons from abroad anyway. If China doesn't sell to them, someone else will.” China's weapon exports lag the United States and Russia, but surged 74 per cent from 2012 to 2016 compared with the preceding five years. The Stockholm International Peace Research Institute in February said China had sold US\$2.1 billion in weapons in 2016, compared with US\$9.9 billion worth sold by the US. increased Chinese military exports to Malaysia would add a new dimension to the fast-growing economic links between the countries, experts say.

New dimension

China's vested interests in Malaysia significantly deepened in 2015 after state-linked firms came into the picture to buy assets off the troubled 1MDB state fund months after its swirling debt levels and alleged involvement in wide-ranging graft was publicised. 1MDB and Najib – singled out for his supposed involvement in the fund's corruption

– deny any wrongdoing. Bilateral ties further strengthened after Najib returned from a bilateral summit in Beijing last November with about US\$34 billion worth of agreements for Chinese investment in his country. Citi Research now estimates that Chinese funds sunk into Malaysian rail and port projects will reach some 400 billion ringgit in the next two decades. “Naturally, therefore, Beijing will seek to peddle a wider array of arms to Malaysia, couching it within a broader ambit of promoting defence and security ties with the country,” said Koh. He added: “Facilitating any Chinese weapons sales to Malaysia, just like the case of the littoral mission ships deal, are the defence funding woes faced by Kuala Lumpur”. Austerity measures imposed by Najib, who is also finance minister, saw the defence budget come down to 15.1 billion ringgit (US\$3.6 billion) for the current financial year, from 17.7 billion ringgit a year ago. That was just over a third of the US\$10 billion spent by Southeast Asia’s top defence spender Singapore, and the US\$8.2 billion spent by Indonesia.

Despite being Southeast Asia’s third biggest economy, Malaysia is behind Singapore, Indonesia, Thailand and Vietnam in terms of defence spending. Jon Grevatt, a Bangkok-based defence analyst with IHS Jane’s, said apart from cost savings, strategic considerations would also be at play in any Malaysian decision to procure Chinese weaponry. With countries like Malaysia, potential procurement of Chinese arms would be a way to “balance strategic relations with major powers”, Grevatt said. He said Kuala Lumpur was unlikely to abandon defence procurement from the West any time soon. Among Malaysia’s biggest defence buys are its two Scorpene class submarines built by the French naval supplier DCNS in the 2000s. Even with the country’s languid economic state – seen as a symptom of investor jitters over the 1MDB graft scandal and depressed pump prices – the Malaysian military has not shied away from publicising its modernisation ambitions. Naval officers are pressing ahead with a “15-5” plan that would see the country’s naval fleet restructured from having 15 different classes of vessels to just five classes by 2030. The plan involves the introduction of a completely new fleet and the retirement of all 50 Malaysian vessels currently in service. The air force has said it wants to boost aerial surveillance capabilities to meet a rising threat from Islamic State militants seeking safe havens in Southeast Asia. Defence Minister Hishammuddin Hussein last week said the military was considering buying second-hand P-3 Orion surveillance aircraft from Japan.

And the rocket launchers?

The Malaysian military wish list – at least the assets publicly identified by officials like Hishammuddin – do not include the Chinese AR3 multi-range rocket launch system

(MRLS) and the radar system mentioned in the news reports this month. The reports in the Singaporean daily *The Straits Times* and the Malaysian online news website *The Malaysian Insight* quoted unnamed Malaysian officials. They were written by journalists known for their deep connections in the Malaysian government. Koh, the Singaporean researcher, said “even if the deal does take place, it’s nothing bombastic”. He said Malaysia’s two immediate neighbours, Singapore and Thailand, were fitted with US and Chinese-made MRLS.

What’s causing Malaysia’s ethnic Chinese brain drain?

Malaysia’s Brazil-made Astros II MRLS has a longer firing range compared with the AR3 system mentioned in the reports. “So, the introduction of this rocket won’t alter the strategic military power balance in Southeast Asia,” Koh said. Shahrman Lockman, a Malaysian military watcher at Kuala Lumpur’s Institute of Strategic and International Studies, suggested the reports were deliberately planted to spook the Lion City ahead of August 9, the 52nd anniversary of its acrimonious split from Malaysia. “This was either the work of a defence contractor or someone who wanted to send Singapore a message. That it was reported on Singapore’s National Day may not have been a coincidence.”

Source: www.scmp.com, 20 August 2017

PF-NMF India MoU to enhance Indian Ocean maritime cooperation

The Centre for Indo-Lanka Initiatives at the Pathfinder Foundation (PF) and National Maritime Foundation (NMF) based in New Delhi, India, signed a memorandum of understanding (MoU) to enhance bilateral cooperation between the two think-tank organisations engaged in academic research. The scope of this MoU is to embark on research activities on subject areas of maritime strategy and security studies. The two research institutes will collaborate in conducting joint seminars, conferences, symposia and workshops to enhance knowledge, sharing experiences and best practices of relevant stakeholders in both countries. The PF and NMF will also jointly publish journal articles and research papers on mutually agreed subjects and have reciprocal exchange of visits by officials and researchers for discussions, seminars and conferences. PF Centre for Indo-Lanka Initiatives Director Admiral Dr. Jayanath Colombage (Retd.) and NMF Director Vice Admiral Pradeep Chauhan (Retd.) signed the MoU on behalf of their respective organisations.

The Indian Ocean has become the key ocean for energy, trade and food security in the 21st century. There is a major world economic shift taking place upon the waters of this ocean as 'Asian Powers' are emerging as new economic powers. The rise of China to the number two position and India to the number seven position in the world economic order in gross domestic product terms is a clear example of this economic shift. The Indian subcontinent is positioned at the centre of this most important ocean in this century. India, with a nearly 7,500 kilometres of coastline, the fastest developing economy and the strongest military power in the region, and Sri Lanka, with its geostrategic location, both need to play a mutually-supporting role in maintaining freedom of navigation and ensuring the sustainable exploitation of resources in accordance with the concept of the blue economy. There is a rationale to engage in academic discussion on maritime security in the Indian Ocean with a view to develop a policy framework for the attention of policymakers in India and Sri Lanka. The PF and NMF have planned to conduct their first bilateral conference in February 2018 focusing on developing a platform for analytical and innovative discussion on maritime security in the Indian Ocean. This conference will lay emphasis on non-traditional maritime security cooperation, including with regard to capacity building and capability enhancement. Special emphasis will be paid on an assessment of the maritime security and safety risks from prevailing and projected threats, cooperative maritime security endeavours at the political, operational and local levels including Maritime Domain Awareness (MDA) and coordinated national positions at regional, multilateral forums such as the Indian Ocean Rim Association (IORA), Indian Ocean Naval Symposium (IONS) and Galle Dialogue.

The NMF, New Delhi was established in 2005 as the nation's first maritime think-tank for conducting independent and policy-relevant research on 'matters maritime'. Since its inception, the NMF has grown from a fledging organisation into an established intellectual institution with robust academic linkages within the country and overseas.

Source: www.dailymirror.lk, 01 September 2017