National Maritime Foundation

MAKING WAVES

A maritime news brief covering:

- MARITIME SECURITY
- MARITIME FORCES
- SHIPPING, PORTS AND OCEAN ECONOMY
- MARINE ENVIRONMENT
- GEOPOLITICS

EDITED BY:

Capt Sarabjeet S Parmar

execdir.nmf@gmail.com

Dr Oliver N Gonsalves

associatefellow1.nmf@gmail.com

CONTENTS

MARITIME SECURITY 3

SOUTH CHINA SEA: UK SENDS 'POWERFUL STATEMENT' TO BEIJING WITH NEW 'PERSISTENT PRESENCE' 3
MALAYSIA WILL LODGE DIPLOMATIC PROTEST WITH CHINA OVER MARITIME AIRSPACE 'INTRUSION' 4
TROUBLED WATERS? AUSTRALIA-INDONESIA MARITIME BOUNDARY IN THE NEWS 5
ARF WORKSHOP HIGHLIGHTS SIGNIFICANCE OF 1982 UNCLOS 7
TN POLICE ON 'HIGH ALERT' AFTER SRI LANKA PASSES LAW ON CHINA-BACKED COLOMBO PORT CITY 8

MARITIME FORCES 10

ROYAL NAVY TEST ARTIFICIAL INTELLIGENCE AGAINST SUPERSONIC MISSILE THREATS OFF SCOTS COAST 10
NATO CONDUCTS MASSIVE WAR GAMES 11
WHEN THE NAVY ROSE TO THE CYCLONIC CHALLENGE 12
NAVY SAYS IT'S CHARTING A NEW COURSE AFTER RASH OF PROBLEMS 14
PH ARBITRAL WIN: WHAT IS TO BE DONE? 15
THE NAVY SUB COMMANDED BY ARTIFICIAL INTELLIGENCE 17

SHIPPING, PORTS AND OCEAN ECONOMY 19

TYPHOON RESISTANT: CHINA'S FIRST FLOATING WIND TURBINE SET TO RIDE WAVES IN SOUTH CHINA SEA 19
CSSC DELIVERS LNG CRYOGENIC BUNKER FUEL TANKS FOR WORLD'S FIRST DUAL FUEL ULCC 19
AN ALTERNATIVE WAY TO FINANCE THE DECARBONIZATION OF SHIPPING THAT ACTUALLY WORKS 20
AUSTRALIA ISSUES ITS LONGEST SHIP BAN EVER FOR "SYSTEMIC" VIOLATIONS 22
MARITIME TRAFFIC HALTED IN BOSPHORUS STRAIT AFTER MASSIVE OIL TANKER NARROWLY AVERTS DISASTER 23

MARINE ENVIRONMENT 25

MASSIVE ANTARCTIC ICEBERG COULD DRIFT THROUGH OCEAN FOR YEARS 25

WITH FIRE CONTAINED, SRI LANKA FACES PLASTIC PELLET PROBLEM FROM STRICKEN SHIP 26
CRITICALLY ENDANGERED SEA CREATURES FALL VICTIM TO DRIFT NETS 28
PLASTIC IN GALAPAGOS SEAWATER, BEACHES AND ANIMALS 29
MAYFLOWER AUTONOMOUS SHIP PICKS PARTNERS FOR TRANSATLANTIC RESEARCH DATA SHARING..... 30
GEOPOLITICS 32
IRAN OIL CARGO LANDED ON US SHORES ONE MONTH AFTER SHIP SEIZURE, RECORDS SHOW 32
PAKISTAN REALISES IT CAN'T ABANDON US FOR CHINA YET. BUT HOW FAR WILL BAJWA & CO GO? 32
SAUDI ARABIA COMMITTED TO MEET INDIA'S CRUDE OIL REQUIREMENT: ENVOY 35
US, RUSSIA AT ODDS OVER MILITARY ACTIVITY IN THE ARCTIC.....37
SAUDI-LED COALITION THWARTS 'IMMINENT HOUTHI ATTACK' IN RED SEA 39
ACKNOWLEDGEMENTS.....40

MARITIME SECURITY

SOUTH CHINA SEA: UK SENDS 'POWERFUL STATEMENT' TO BEIJING WITH NEW 'PERSISTENT PRESENCE'

- Claire Anderson

The maiden voyage of a new British aircraft carrier will seek to show allies that post-Brexit Britain is ready to defend Western interests and eager to see China respect international rules, the vessel's commander said. HMS Queen Elizabeth took part in NATO exercises in the Mediterranean this week, ahead of the eight-month voyage that will cross through the South China Sea in a signal to Beijing that sea lanes must remain open. The carrier is "a hugely powerful statement," Commodore Steve Moorhouse, the ship's commanding officer and captain told Reuters on deck off the Portuguese coast as F-35B fighter jets took off around him. He said: "It shows that we are a global navy and wanting to be back out there. "The aim for us is that this deployment will be part of a more persistent presence for the United Kingdom in that region."

Britain was the main battlefield ally of the United States in Iraq and Afghanistan and, alongside France, the principal military power in the European Union. But its 2016 vote to leave the EU had raised questions about its global role. Partly in response to those concerns, London announced its biggest military spending increase since the Cold War late last year and has been touting the clout of the carrier, built at a cost of more than three billion pounds ($4.26 billion). HMS Queen Elizabeth will exercise with naval vessels from the United States, Singapore, Japan, and South Korea, along the route, Moorhouse said on Thursday. Britain, like China, now has two aircraft carriers, both countries dwarfed by the United States' 11. The new 65,000-tonne vessel carries eight British F-35Bs and 10 U.S. F-35s as well as 250 U.S. marines as part of its 1,700-strong crew. It will lead two destroyers, two frigates, a submarine and two support ships on its journey of 26,000 nautical miles, joined by a US destroyer and a frigate from the Dutch navy. Asked about British efforts to step up influence in the Indo-Pacific region to counter China's rising power - a strategy also followed by the European Union and supported by NATO - Moorhouse said: "We want to uphold international norms, our presence out there is absolutely key."

China claims 90 percent of the potentially energy-rich South China Sea, but Brunei, Malaysia, the Philippines, Taiwan and Vietnam also lay claim to parts of it. The United States has long opposed China's expansive territorial claims there, sending warships regularly through the waterway to demonstrate freedom of navigation. About $3 trillion worth of trade passes through it each year. The United States has long opposed China's expansive territorial claims there, sending warships regularly through the waterway to demonstrate freedom of navigation. About $3 trillion worth of trade

passes through it each year. In the Mediterranean, the British carrier group is part of NATO's biggest drills of the year, Steadfast Defender, that includes a maritime live exercise with around 5,000 forces and 18 ships. "It sends a message of NATO's resolve," NATO Secretary-General Jens Stoltenberg said onboard the aircraft carrier. "We face global threats and challenges, including the shifting balance of power with the rise of China," he said, adding that although China had the world's biggest navy, it was not considered an adversary by NATO.

Source: Express UK; 28 May 2021

MALAYSIA WILL LODGE DIPLOMATIC PROTEST WITH CHINA OVER MARITIME AIRSPACE 'INTRUSION'

- Hadi Azmi and Ken Chang

Malaysia said Tuesday it would issue a diplomatic protest to Beijing after 16 Chinese military planes intruded into its maritime airspace over disputed South China Sea waters near Borneo Island a day earlier. Malaysian officials said that the Chinese aircraft flew to as close as 60 nautical miles from Kuala Lumpur-administered Beting Patinggi Ali – also known as Luconia Shoals – which Beijing, too, claims as part of its territories in the maritime region.

The Royal Malaysian Air Force (RMAF) said it scrambled fighter jets to intercept the Chinese aircraft off the coast of Sarawak state after they refused to communicate with local air-traffic controllers. The incident Monday represented "a threat to national sovereignty and aviation safety," Malaysia's foreign ministry said. "Based on the report received from the Royal Malaysian Air Force, the Ministry will issue a diplomatic note of protest against the intrusion to the Government of the People's Republic of China," the foreign ministry said.

The ministry also said it would summon China's ambassador to Malaysia to explain the incursion. "Malaysia's stand is clear – having friendly diplomatic relations with any countries does not mean that we will compromise our national security. Malaysia remains steadfast in defending our dignity and our sovereignty," Foreign Minister Hishammuddin Hussein said in a statement. Earlier on Tuesday, the RMAF said that the Chinese planes came close to violating national territorial airspace. The Royal Malaysian Air Force "detected suspicious movement of 16 Chinese Air Force aircraft in Malaysia's Maritime Zone airspace in Kota Kinabalu Flight Information Region and were approaching the country's airspace on May 31, 2021," it said in a statement.

Maritime Zone airspace is a nation's airspace over its territorial seas. Under customary international law, coastal states have complete sovereignty over this airspace. According to the Malaysian air force, the Chinese planes that entered its Maritime Zone airspace were identified as Russian-made Ilyushin Il-76 and Chinese-made Xian Y-20 – transport aircraft capable of conducting multiple missions.

The Chinese embassy in Malaysia said its planes were doing "routine flight training," during which they "strictly abided by the relevant international law." "According to relevant international law, Chinese military aircraft enjoy the freedom of overflight in the relevant airspace," an embassy spokesperson said. Last year, the United States military said it was closely watching reports that Beijing was planning to declare a so-called Air Defense Identification Zone (ADIZ) in the skies above the South China Sea, where China, Brunei, Malaysia, the Philippines, Vietnam and Taiwan have overlapping territorial claims. Meanwhile during a visit to Jakarta on Monday, U.S. Deputy Secretary of State Wendy Sherman said that Washington was committed to "a free and open Indo-Pacific region, including a commitment to freedom of navigation and overflight, and other lawful uses of the sea."

'Blatant intimidation against Malaysia'

The action by the Chinese air force was intended to intimidate Malaysia amid a huge domestic increase in COVID-19 infections and as the Southeast Asian nation started a near-total lockdown on Tuesday, according to Collin Koh, a Singapore-based maritime security analyst. "Such a move is not only a blatant intimidation against Malaysia, but also predatory and opportunistic," he said via Twitter. A retired Malaysian air force officer said Beijing sent the planes as a test. "China's action is actually to test the RMAF's response to the invasion of their aircraft," Abdul Rahmat Omar told BenarNews. In 2016, Malaysia said around 100 China-registered boats and ships were detected in Luconia Shoals. A report by Malaysia's Auditor-General last year revealed that China Coast Guard ships had encroached into Malaysian waters 89 times between 2016 and 2019.

"A similar report by the Asia Maritime Transparency Initiative in 2019 revealed that Chinese coast guard vessels spent 70 percent (of 2018), or 258 days, patrolling the area of the South China Sea claimed by Malaysia," Ramli Dollah, a regional security expert and professor the University Malaysia Sabah, told BenarNews.

Source: benarnews.org; 01 June 2021

TROUBLED WATERS? AUSTRALIA-INDONESIA MARITIME BOUNDARY IN THE NEWS

- Bec Strating

Recent media reports suggest that different perspectives on maritime boundaries are creating tensions between Australia and Indonesia. An Indonesian border negotiator told The Australian Financial Review last month that talks between Australia and Indonesia on maritime boundaries had restarted in December 2019 but stalled due to the Covid-19 pandemic. Yet Australia's Department of Foreign Affairs and Trade insists the discussions amount to "technical amendments" and that maritime boundaries are not on the negotiating table. The issue has featured in the news off and on in recent years. Australia and Indonesia's maritime boundaries are complex, as various treaties establish the limits of maritime zones. But it is not surprising that the issue of Australia and Indonesia's maritime boundaries have re-emerged following the

signing of the 2018 Timor Sea Maritime Boundary Treaty between Australia and Timor-Leste. The 1997 Perth Treaty, known formally by the title Treaty between the Government of Australia and the Government of the Republic of Indonesia establishing an Exclusive Economic Zone Boundary and Certain Seabed Boundaries, established the line between the Exclusive Economic Zones (EEZ) of Australia and Indonesia in accordance with equidistance principles. Under the United Nations Convention on the Law of the Sea (UNCLOS), an EEZ provides coastal states with rights to resources in the water column, most notably fish. While the provisions in the Perth Treaty are observed, it was never ratified by Indonesia. Any movement to this line would affect the outer limits of the Australian Fishing Zone and its jurisdictional rights within it.

Australia and Indonesia agree that the Perth Treaty will require some technical amendments following the Timor Sea Treaty, as this affects the junction points where EEZ boundaries meet. It may also be affected by any EEZ boundary treaty that may be negotiated between Timor-Leste and Indonesia. However, such negotiations are unlikely to have any significant material consequences for Australia. This is because both parties agreed upon the use of "median line" principles in delimiting EEZ boundaries, an approach to delimitation favoured by Indonesia and contemporary international law more generally. The Perth Treaty is less relevant when it comes to the question of who owns hydrocarbons in the seabed, such as oil and gas. The seabed and its resources are instead governed by the continental shelf regime under international law. In 1971 and 1972, Australia and Indonesia agreed to maritime boundaries establishing the limits of their respective continental shelves.

But what is significant is in the 50 years since, Australia and Indonesia have developed different perspectives on what principles should be applied in drawing seabed boundaries. The reasons are varied, but there are two relevant but competing principles:

- The equidistance or "median line" approach favours a horizontal line drawn halfway between the baselines of the two states.
- In contrast, a "natural prolongation" approach views seabed boundaries as extending to the edge of a geomorphic continental shelf.

In the 1970s, Indonesia's relatively new Suharto regime was keen to consolidate its international legitimacy, including through boundary negotiations with Australia, and negotiations were primarily governed by the 1958 continental shelf treaty, as UNCLOS was not signed until 1982. With the introduction of UNCLOS, new approaches to continental shelf delimitation were adopted. While UNCLOS provides for the natural prolongation principle under Article 76, this is qualified by Article 83, which mandates the achievement of "an equitable solution". What this means, in practical terms, is were Indonesia seeking to reopen the matter of seabed boundaries, such a move would likely be more consequential than mere technical amendments to the Perth Treaty. This is because a substantially bigger gap exists between Australia and Indonesia's preferred seabed boundary compared with the EEZ line. The seabed boundaries were favourable to Australia, as its "natural prolongation" arguments push them considerably closer to Indonesia's coastlines, in contrast with the median line approach used in the Perth Treaty. There have been long-standing concerns that any compromise on the Timor Sea boundaries by Australia would reinvigorate differences

in perspectives on continental shelf delimitation. Former Foreign Minister Alexander Downer neatly captured the fears of Australian policymakers by arguing that Indonesia would seek to "unscramble the omelette" by pursuing new maritime boundaries using the equidistant principle if this was employed in the Timor Sea. Any move in the seabed boundary would likely affect ongoing commercial activities. The Financial Review report described the maritime negotiations as "fractious" and suggests that Australia's seabed boundary is "forecast" to move south, which would affect oil and gas entitlements and ongoing investments.

But there are brakes that may allay concerns. Unlike the Perth Treaty, the seabed treaties have been ratified, and the pathway to renegotiating is less assured, particularly if one country is unwilling to talk. The 1969 Vienna Convention on the Law of Treaties excludes boundary treaties from the rule that "a fundamental change in circumstances" may be grounds for terminating a treaty. The current regional environment with a rising China, the South China Sea dispute and illegal fishing have provoked a rise in maritime nationalism in Indonesia, with politicians emphasising Indonesia's sovereignty in the face of security challenges. So there is plenty of impetus to enhance Australian-Indonesian bilateral defence engagement. The question is whether a maritime boundary dispute might become an issue that hinders efforts at improving this security cooperation. Upholding a maritime law-based order in the neighbourhood is a paramount challenge. There are benefits for Australia and Indonesia in working towards a fully ratified Perth Treaty, not only to ensure the stability of maritime boundaries, but also to provide a positive model for the region on how to cooperate on maritime boundary issues as partners in the Indo-Pacific.

Source: theinterpreter; 02 June 2021

ARF WORKSHOP HIGHLIGHTS SIGNIFICANCE OF 1982 UNCLOS

- VNA

Speaking at the third ASEAN Regional Forum (ARF) workshop on implementing UNCLOS and other international instruments to address emerging maritime issues on June 1, the official stressed that all disputes in the East Sea must be addressed by peaceful measures in accordance with international law, including the 1982 United Nations Convention on the Law of the Sea (1982 UNCLOS). Cooperation with goodwill and on the basis of the convention would contribute to enhancing trust between parties and promoting peace, security and prosperity in the region, he continued. The event was jointly held by the Vietnamese Ministry of Foreign Affairs and its Indian, Australian, and Canadian counterparts, and the EU. The two-day workshop, in both online and in-person forms, formed part of activities implementing the Hanoi Plan of Action II for the 2020-2025 period, and the ARF Ministerial Statement on Enhancing Cooperation among Maritime Law Enforcement Agencies, initiated by Vietnam and adopted in 2016. It brought together about 200 delegates from 27 ARF countries, and representatives from regional and international organisations, diplomatic missions, ministries and agencies.

The participants mulled over cooperation orientations to address challenges to maritime management in the region, on the basis of the UNCLOS and relevant international documents. As co-chairs of the workshop, the Canadian and Australian ambassadors to Vietnam also shared the view on the role and value of the convention. Canadian Ambassador Deborah Paul expressed support for efforts by countries in managing and handling disputes by peaceful measures and in line with international law. The delegates called on countries to join hands in protecting the marine environment and life, managing fisheries sustainably as well as in search and rescue operations. In the present context, it is necessary to study the possibility of a regional document on humanitarian treatment towards fishermen in accordance with international law and regional characteristics, the workshop heard. It brought together about 200 delegates from 27 ARF countries, and representatives from regional and international organisations, diplomatic missions, ministries and agencies. The participants mulled over cooperation orientations to address challenges to maritime management in the region, on the basis of the UNCLOS and relevant international documents.

As co-chairs of the workshop, the Canadian and Australian ambassadors to Vietnam also shared the view on the role and value of the convention. Canadian Ambassador Deborah Paul expressed support for efforts by countries in managing and handling disputes by peaceful measures and in line with international law. The delegates called on countries to join hands in protecting the marine environment and life, managing fisheries sustainably as well as in search and rescue operations. In the present context, it is necessary to study the possibility of a regional document on humanitarian treatment towards fishermen in accordance with international law and regional characteristics, the workshop heard.

Source: vov.vn; 01 June 2021

TN POLICE ON 'HIGH ALERT' AFTER SRI LANKA PASSES LAW ON CHINA-BACKED COLOMBO PORT CITY

- S Vijay Kumar

The Tamil Nadu police have been put on high alert after Sri Lanka passed the Colombo Port City Economic Commission Bill giving "complete control" of the Port City, coming up in the capital, to China, authorities said.

On May 20, Sri Lanka passed a controversial legislation governing the China-funded $1.4 billion Colombo Port City, being constructed on reclaimed land by Colombo's sea front. While opposition and critics have raised concern that the law cedes much control to China, threatening the island nation's sovereignty, the Rajapaksa administration has denied it, saying it strengthens prospects of foreign investment in the country. In 2017, Sri Lanka leased a Port in Hambantota district, some 250 km south of Colombo, to China for 99 years.

Stating that passing of the Colombo Port City Economic Commission Bill was a major diplomatic and strategic concern for India as China's footprint would increase in the neighbouring countries, the sources said the move evoked instant protests from not only Opposition parties in Sri Lanka but other organisations like the Transnational Government of Tamil Eelam. Acting on intelligence inputs, Director-General of Police J.K. Tripathy instructed senior police officers across Tamil Nadu to intensify vigil to thwart any attempt to stage protests in front of Sri Lankan or Chinese establishments in the State. Referring to statements of a Tamil nationalist group leader that the silence of the international community on the issues in Sri Lanka had caused "great unrest and outrage among Tamils", the police chief said there were possibilities that members of the pro-Tamil organisations or sympathisers of the Liberation Tigers of Tamil Eelam may condemn the Sri Lankan government for approving the Colombo Port City Economic Commission Bill and attempt agitations targeting Sri Lankan and Chinese establishments.

Source: The Hindu; 31 May 2021

MARITIME FORCES

ROYAL NAVY TEST ARTIFICIAL INTELLIGENCE AGAINST SUPERSONIC MISSILE THREATS OFF SCOTS COAST

- Anna Savva

THE NAVY has tested artificial intelligence against supersonic missile threats for the first time at sea as it ushers in a new age of autonomous defence. The live-fire drill test of the state-of-the-art fleet's naval air and AI missile defence capabilities has been playing out off Scotland's Outer Hebrides and Norway's Arctic coast this week. The Ministry of Defence (MoD) say the Royal Navy trial is part of Nato's Exercise Formidable Shield, which runs until June 3. HMS Dragon leads the group equipped as a dedicated air defence destroyer designed to shield other vessels with her Sea Viper missile system. Using her Sampson radar – the spinning 'spiked egg' atop her main mast – the Portsmouth-based warship has the ability to detect and follow a missile's progress from launch to 'splash' when it is destroyed. The research is being led by Defence Science and Technology Laboratory (DSTL) scientists - with the AI also being tested on frigate HMS Lancaster and Argyll. The ships all have capability to destroy missile threats travelling an mindblowing 12,000mph – 16 times the speed of sound. They can also knock out sea-skimming drones simulating missiles, weaving at high sub-sonic speeds in a bid to outfox the radars tracking them.

The MoD said the AI improves the early detection of lethal threats and gives Commanders rapid assessments. The trial is testing two AI systems, Startle and Sycoiea. The first provides live alerts to sailors monitoring the air for threats and latter identifies the threat to advise on the best weaponry and manoeuvres. HMS Lancaster's Weapon Engineer Officer, Lieutenant Commander Adam Leveridge said: "Observing Startle and Sycoiea augment the human warfighter in real time against a live supersonic missile threat was truly impressive - a glimpse into our highly-autonomous future." In one crucial test HMS Dragon's Sea Viper missiles are tested to intercept a Firejet target drone, racing over the Atlantic at more than 400mph but just 20ft above the waves. Scottish Secretary Alister Jack said: "It's vital that our brave and highly skilled armed forces stay ahead of the game for the security of the United Kingdom and our allies. "The Royal Navy's use of AI for the first time at sea is an important development in ensuring readiness to tackle threats we may face.

Source: The Scottish Sun; 29 May 2021

NATO CONDUCTS MASSIVE WAR GAMES

- Lorne Cook

As tensions with Russia simmer, thousands of NATO troops, several warships and dozens of aircraft are taking part in military exercises stretching across the Atlantic, through Europe and into the Black Sea region. The war games, dubbed Steadfast Defender 21, are aimed at simulating the 30-nation military organisation's response to an attack on any one of its members. It will test NATO's ability to deploy troops from America and keep supply lines open. Already in recent years, the US and its allies have deployed troops and equipment in Estonia, Latvia, Lithuania and Poland to try to reassure those members neighbouring Russia that their partners will ride to the rescue should they come under attack. Russia's decision last month to send thousands of troops to the border area with Ukraine has raised concern at the military alliance, which launched one of its biggest ever defence spending initiatives after Russian troops annexed Ukraine's Crimean Peninsula in 2014.

Top NATO brass insist that the military exercises, involving some 9000 troops from 20 nations, are not aimed at Russia specifically, but they focus on the Black Sea region, where Russia stands accused of blocking the free navigation of ships. NATO Secretary-General Jens Stoltenberg says the exercises send an important message to any potential adversary: "NATO is ready." "NATO is there to defend all our allies, and this exercise sends a message about our ability to transport a large number of troops, equipment across the Atlantic, across Europe and also to project maritime power," Stoltenberg told The Associated Press aboard a British aircraft carrier off the coast of Portugal. The ship, the HMS Queen Elizabeth, is the pride of the British Navy. It's making its maiden voyage and carrying 18 F-35 jets: the first ever deployment of so many of the 5th generation planes aboard an aircraft carrier. The ship's presence, part of a 6-7 month deployment that will take it south past India, through Southeast Asia to the Philippines Sea, is aimed in part at restoring Britain's tarnished image as a major global power since it left the European Union.

Adorned with high-tech US jets and flanked by warships from other NATO countries, the carrier strike force also stands as an important symbol of unity as the world's biggest security organisation tries to recover from four tumultuous years under the Trump administration. Stoltenberg will chair a NATO summit in Brussels on June 14 with current US President Joe Biden and his counterparts keen to usher in a new era of trans-Atlantic cooperation, as troops leave its longest-ever mission in Afghanistan while tensions with Russia, and increasingly China, mount. The war games tie in two new NATO command centres, one in Norfolk, Virginia; the other in Ulm, Germany. Part of the focus of its first phase was to protect the undersea cables that carry masses of commercial and communications data between the US and Europe.

NATO says Russia is mapping the cables' routing and might have darker intentions. NATO says its policy toward Russia is based on two pillars: strong military deterrence and dialogue. But high-level meetings between the two historic foes are rare, and European officials insist that President Vladimir Putin is turning increasingly authoritarian and distancing himself from the West. "We're ready to sit down with Russia, because we think it's important to talk, especially when times are difficult,"

Stoltenberg said. "The main challenge now is that Russia has not responded positively to our invitation, or our initiative, for a meeting of the NATO-Russia Council," their top consultative forum.

Source: Australian Associated Press; 28 May 2021

WHEN THE NAVY ROSE TO THE CYCLONIC CHALLENGE

- Commodore G Prakash (retd)

The dance of death unleashed by cyclone Tauktae had hardly begun to sink in when cyclone Yaas crashed into our east coast. As we braced for the fury of Yaas, of great inspiration was the incredible rescue the Indian Navy had pulled off from the very heart of Tauktae off Mumbai. The weather and sea conditions that prevailed would make the hardiest seafarer disbelieve even a fraction of the final success achieved. Despite my 35 years in the Navy, with time on board ships, Sea King helicopters, command and control centres and various headquarters, I too find the success stupendous.

For the record, the Navy rode right into the raging cyclone, rescued 188 people, retrieved 70 bodies, gave logistic support to stricken craft and provided professional advice. By sheer chance, I had a ringside view of Tauktae from a 10th-floor flat near Land's End, Colaba, Mumbai. With howling wind and blinding rain all around, I watched big naval ships and Sea King helicopters with awe, as TV showed glimpses of their deployment. As the winds subsided and the last of our ships got back to harbour, there were accounts from the warriors of the sea in person. Warriors who had risked their lives, warriors who had led their flock literally into a storm. As Tauktae had swept up the west coast, steadily gathering strength, Indian Navy helicopters had already rescued people off Mangalore and Goa. Prudently, the Western Naval Command prepared for what was to come. They absorbed the copious information that flowed from Naval Headquarters, New Delhi, through the Navy's Information Management and Analysis Centre (IMAC) at Gurugram. They ensured that ships, aircraft, personnel, equipment and special stores were ready and took care to see that their assets on land and in harbour remained safe. The formidable Western Fleet, the strongest force any Two Star Admiral has in this world, was to be at the core of the oncoming effort. In support were the venerable Sea King helicopters with a glorious past in amazing rescues and the powerful P8I aircraft for prolonged surveillance of large sea areas. It was providence that this strong force was available, for no one else in India could have faced what was coming. Hundreds of people working offshore were about to face mortal danger very soon. The first responder was the 8,000-tonne destroyer, INS Kochi, which sailed out of Mumbai harbour around 11.30 am on May 17. Safely getting out of the harbour itself was a near impossibility. As she let go her ropes that kept her safely tied to the jetty, four strong naval tugs struggled to handle the heavy ship in the 80 to 100 kmph winds that randomly kept changing directions. Her Captain had to choose a burst of high engine power, normally used in open waters,

to break out of the confines of the naval dockyard. In the blinding rain that reduced the visibility to night-like conditions, the Captain probably would have laid faith in fervent prayer too. The long channel leading out to sea was littered with civil craft dragging their anchors and getting in the way. INS Kochi weaved through this chaos. An iconic photograph of INS Kolkata, setting out from Mumbai harbour about two hours after Kochi, captures the conditions for posterity. Little would these ships have known that this was probably the easiest thing they and those that followed them were to endure in the next 72 hours. While the exact events of the following days in the entire area must be chronicled, analysed and investigated, I must pay tribute to the sheer human spirit and some robust systems that held out in the face of extreme adversity.

There was great competence of the ships. INS Kochi, which reached a sinking accommodation barge P305 in the afternoon, had to pick up hundreds of survivors from the churning waters a few hours later. This was in night-like conditions from blinding rain. Real night too closed in soon. INS Kolkata, which too reached the area, chipped in. It was madness. The ships had to work their propellers with utmost care in a sea littered with desperate humans. They would spot a group of survivors, manoeuvre their ship windward of them, and slowly drift in their direction. Getting people on board wasn't easy. Everything was tried. Experienced marine commandos, professional divers and even non-divers jumped into the mad sea. Nets were used to virtually fish people out of the sea. Through an unreal night in which floating survivors and ships rose and fell many tens of feet and strong wind played with fates, more than a hundred came on board by morning. The first Sea King helicopter, a multirole 42B, took off from INS Shikra early morning on May 18 in dangerous operating conditions which lay beyond what the manufacturer advices. The Sea King picked up three survivors from near INS Kolkata, supplied the ships with body bags and returned to Mumbai. Two Sea Kings will ultimately go on to save 39 people.

There were also other relief activities going on elsewhere. All this was managed by the 4,000-tonne Indian Navy ships — Talwar, Betwa and Teg — and Beas. Captains of ships struggle for words to express the enormity of the fortitude they saw around them. Hygienist sailors packed decomposing bodies! Medical officers and staff diligently recorded cues that could help identify bodies later, engineers and their crew who remained below decks in murderous conditions to keep the machinery going, seamen risked their life, chefs cooked in hellish conditions, quartermasters who steered the ships delicately among floating humans, and sailors and officers of every hue, who made the Navy proud with their courage and selflessness. Similarly, it was the collective effort of hundreds of professionals on ground that enabled every Sea King to take to the sky. Senior Operational Staff Officers who lived next to their office phones for four days and senior leadership who gave the most important gift to those on the field, autonomy borne of trust, completed the matrix.

Everything couldn't have been perfect. While the Navy will assiduously find lessons for future use, the country must plug the holes that exposed hundreds to unnecessary danger. Even with all that, no one can be sure of a disaster-free future. But what we can be sure of is a strong Navy that will deliver, under any circumstance, like nobody else can. Well done, Shano Varuna!

Source: The Tribune; 29 May 2021

NAVY SAYS IT'S CHARTING A NEW COURSE AFTER RASH OF PROBLEMS

- David Sharp

BATH, Maine (AP) — The Navy's speedy littoral combat ships had propulsion failures. The gun on its stealthy destroyer is a dud because of expensive ammo. Its newest aircraft carrier had problems with the system that launches aircraft.

On top of that, embarrassing photos of rusty ships online have underscored delays in maintaining warships, made worse by the pandemic. The Navy's troubles have caused delays and cost billions of dollars. They come as tensions are growing in the South China Sea, Russia's navy is emboldened, and Iranian speedboats are harassing vessels in the Persian Gulf. “Are we ready to meet the threat from China? No,” said Loren Thompson, a defense analyst at the Lexington Institute. Adm. Mike Gilday, chief of naval operations, insists the Navy is now on a “positive trajectory” but the Navy will have to rebuild confidence under congressional scrutiny as it prepares a new strategic plan that’ll include another long-term investment: unmanned vehicles and hypersonic missiles. The Biden administration is readying a Navy budget proposal this week to send to lawmakers. The Navy fleet currently falls shy of 300 ships, despite a stated goal of 355 ships. The Chinese fleet now outnumbers the U.S. Navy. “The Chinese are closer to our goal than we are,” said Republican Sen. Susan Collins of Maine, who sits on the Appropriation Committee and wants to boost Navy spending.

Democratic Sen. Jack Reed and Republican Sen. Jim Inhofe, chairman and ranking member of the Armed Services Committee, have criticized delays and cost overruns on lead ships, and urged the Navy to ensure technology is ready before putting it aboard. Members of Congress, who control the purse strings, say the Navy must also spend billions of dollars more in its public shipyards that maintain the ships. “The Navy has got to get their derriere in gear,” said Rep. Rob Wittman, a Republican from Virginia, who described the Navy as “at one of those crossroads.” The Navy's problem, as Thompson sees it, is that leaders rushed ambitious new ship classes to production and started construction before designs were finalized and technology fully tested. “It tried too hard to leap ahead technologically at the beginning of the last decade,” Thompson said. “As a result, every vessel that it started had severe problems.” For example, the electric-drive Zumwalt, commissioned in 2016, was designed to get close to shore to bombard land targets. But its 155mm advanced gun system is being scrapped because each rocket-propelled, GPS-guided shell costs nearly as much as a cruise missile.

Meanwhile, two versions of the speedy littoral combat ship were envisioned as chasing down pirate ships. One version had class-wide propulsion problems, and both were criticized as too lightly armored for open ocean combat. The Navy is already scrapping the first four of them. The most expensive ship in Navy history, meanwhile, is the newest aircraft carrier, the USS Gerald Ford, which has had problems with the system that launches jets and the elevators that move weapons. It was supposed to cost $10.5 billion but the price tag has risen to $13.3 billion, “and the reliability of key systems is low," said Inhofe, a Republican from Oklahoma. Together, the costs on the first ships in each of those classes were 23% to 155% — or about $5 billion – higher than original estimates, according to the Congressional Budget Office. “Congress has mandated the

Navy not put the cart before the proverbial horse by requiring system integration between platforms and new technologies and fully testing prior to rolling out new programs," said Sen. Mazie Hirono, a Hawaii Democrat and chair of the Armed Services seapower subcommittee.

Lawmakers have scrutinized the Navy's readiness and overextended crews since 17 sailors were killed in two separate collisions involving Navy destroyers in 2017.

The Navy's unceasing tempo continues to cause stress on ships and crew. Photos of the USS Stout, an Arleigh Burke-class destroyer, showed plentiful rust as it returned from a 210-day deployment last fall to Norfolk Naval Station in Virginia. The rust was cosmetic but underscored the toll of deferred maintenance and long deployments on ships and sailors, who made no port calls during the pandemic. "It's wearing out the Navy, the crews, their personnel, their families," said Matt Caris, a defense analyst at Avascent, a consulting firm in Washington, who said investments are needed in sailors, maintenance and new ships. The Navy has acknowledged problems in the shipbuilding programs, while having success in others, including submarines.

But aging ships — 60% of today's fleet was commissioned in 2001 or before — has caused maintenance and operation costs to grow at a time when the Navy wants to spend on new ships and research. It would take 4.1% in annual funding growth to boost the fleet to 355 ships within about a decade while meeting other obligations including investments in shipyards, Gilday said. Speaking at Navy shipbuilder Bath Iron Works on a recent afternoon, Gilday insisted things are getting better. The length of time that ships were delayed has declined by 80% at public shipyards and 60% at private yards compared to where things were 18 months ago, Gilday said. And even those ships that suffered delays and cost overruns hold potential. The stealthy Zumwalt destroyer built at Bath Iron Works will be the first naval vessel equipped with hypersonic missiles, he said. "I'm not saying that we're satisfied with where we are," Gilday said. "What I will say is that I think that certainly the trends are headed in the right direction."

Source: newstimes.com; 24 May 2021

PH ARBITRAL WIN: WHAT IS TO BE DONE?

- Melissa Loja, Romel Bagares

We borrow a famous question asked in 1902 by Vladimir Ilyich Ulyanov in a work of classic Marxist polemics to consider how to make the most out of the gains we won in our South China Sea (SCS) arbitral proceedings against China. Weeks before the fifth anniversary of our triumph against China in the 2016 SCS arbitral proceedings, we remain lost at sea. Even the Supreme Court appears confused about the status of the Kalayaan Island Group (KIG) under the Arbitral Award. In Republic v. Palawan (January 2020), it reinstated the straight lines enclosing the KIG as an archipelago under the 1978 Presidential Decree No. 1596, despite the Arbitral Award saying such archipelago contradicts the UN Convention on the Law of the Sea (Unclos).

With the Arbitral Award eviscerating PD 1596, we are left with Republic Act No. 9522 enclaving the KIG as a regime of islands. Unfortunately, neither law named the

features in the KIG. RA 9522 did not identify which of the three regimes under Article 121 of Unclos applies to which of the features in the KIG. Yet, it is basic international law that a territorial claim must pertain to a defined piece of land (or rock) and that a maritime claim must emanate from such territory. The Arbitral Award said as much when it reduced the claims of the competing states to the granular size of individual rocks and their individual territorial seas (TS). So, where Lenin (Ulyanov) argued for a vanguard party to advance the revolution, we say that it is imperative that we pass a law naming and defining the baselines of each rock, reiterating our claim to all of them and their respective TS, and developing those that we already occupy. We can use normal baselines to delineate the TS of each rock, and even straight baselines drawn from low-tide elevations (LTEs) inside the TS (Nicaragua v. Columbia, 1986; and Qatar v Bahrain, 1995). The National Mapping and Resource Information Authority should immediately do the technical groundwork.

There are four urgent reasons for this.

Firstly, figure 4.2 attached by our lawyers to the Philippine Memorial in the SCS arbitral proceedings shows in stark details the national security implications of the SCS Arbitral Award. It depicts the various rocks and LTEs found inside our exclusive economic zone (EEZ) and the TS of each rock. The TS pushes against our EEZ (thus, the Julian Felipe Reef problem). Pockets of rocks with their respective TS now mark our EEZ, projecting their own airspace over which full sovereignty is also exercised. This is an aspect of our KIG claims that we have ignored for far too long, thereby giving China the opportunity to dictate the air defense identification zone in the area.

Secondly, amending RA 9522 to reflect our victory in the Arbitral Award is a peaceful and sovereign act to enforce our claims (Island of Palmas arbitration, 1928). This is particularly urgent in Bajo de Masinloc, because the Arbitral Award declared its TS as subject to common fishing among Chinese, Vietnamese, and Filipino fishermen. Such common fishing regime should not be allowed to spill over into our EEZ.

Thirdly, baselines are a precondition for our unhampered enjoyment of sovereign rights in the waters within our EEZ but beyond the TS of contested rocks. China benefits from our procrastination over the definition of new baselines pursuant to the Arbitral Award, because the TS of these contested rocks have remained indistinguishable from our uncontested EEZ.

Finally, the new baselines will enable our Coast Guard and Navy to designate zones of maritime law enforcement and security, and calibrate the appropriate level of force to use in each zone. In other words, we must draw a line under PD 1596 and move on with a new law memorializing our real gains in the Arbitral Award.

Melissa Loja has a Ph.D. in international law. Romel Bagares teaches international law at two Manila law schools. They may be reached at treatyofparis1898@gmail.com

Source: inquirer.net; 29 May 2021

THE NAVY SUB COMMANDED BY ARTIFICIAL INTELLIGENCE

- Michael Dempsey

On 20 April, the Royal Navy's latest nuclear-powered hunter-killer submarine, HMS Anson, emerged from a vast construction hall at Barrow-in-Furness, and was hoisted into the water. All 7,400 tonnes of it. Around 260 miles away in Plymouth, another submarine made its debut that same day. A minnow compared to HMS Anson, this secretive nine-tonne craft may have greater implications for the future of the navy than the £1.3bn nuclear boat. MSubs of Plymouth, a specialist in autonomous underwater vehicles, won a £2.5m Ministry of Defence contract to build and test an Extra-Large Unmanned Underwater Vehicle (XLUUV) that should be able to operate up to 3,000 miles from home for three months. The big innovation here is the autonomy. The submarine's movements and actions will be governed entirely by Artificial Intelligence (AI). Ollie Thompson is a recent graduate who is studying for a master's degree in robotics at Plymouth University. He also works for MarineAI, the MSubs arm that is fitting out the XLUUV's brain.

Mr Thompson has no doubts about the challenge he and his colleagues face: "We know a lot of people don't have confidence in AI. So we work with elements we can test, we separate things into boxes." He divides the AI problem into components - and mission management is the toughest. This attempts to simulate the presence of a trained captain in the little submarine's programming. This is AI working in total isolation from human contact, not least because maintaining strict radio silence is critical to a submarine's covert role. The technical principle here is machine learning, showing an AI program examples of how a task should be performed until it has embedded the right actions in its own repertoire. To do this, MarineAI is using a huge IBM AC922 supercomputer, "a monster, one of the biggest in the South-West of England" Mr Thompson boasts. In contrast the on-board brain of the submarine resides in a 15cm square box and relies on an Nvidia chip often found driving computer games.

"We built it off the back of the Nvidia chip because it's highly energy efficient," says Mr Thompson. Just like a tiny but powerful Raspberry Pi device used to teach schoolchildren basic programming tasks this approach takes up very little power. And keeping power consumption to the bare minimum is critical to making the submarine's battery last. It's clear that the Ministry of Defence is paying very close attention to battery technology for this project. So far MarineAI is relying on existing technology derived from car batteries. But it notes that research in this field is leaping forward. The AI content of the computer should prioritise tasks. The project envisages a boat that can travel to an area of the sea-bed to search for mines or plant a sophisticated electronic intelligence-gathering package or stay in place and scour its environment for information on a hostile navy. So MarineAI is creating a decision-making capacity for the submarine's brain. It will know how much battery life is left and how to weigh that against prevailing weather conditions and sea states, reaching a logical decision on whether to sail on or return home in the face of strong tides. The project has oceans left to cross. For instance, how can the submarine detect small objects on the surface such as jet-skis?

All of these dilemmas are small beer for human submarine captains. Commander Ryan Ramsey captained the hunter-killer HMS Turbulent and taught on the Perisher, a five-month-long course the navy uses to push prospective submarine skippers to the limit. This decides if they are fit to command 100 or more submariners working punishing watches consisting of six hours on, six hours off for the duration of a long patrol.

Cdr Ramsey worked in AI after leaving the navy and can see where smart software and human instinct might not produce the same response. "AI will struggle to match human decision-making skills. There are lots of submariners skills you can transfer to it, but you have to accept that the first generation will not be perfect." He cites how he would study opposing Nato submarine commanders he went up against in exercises, learning how far each individual was prepared to push a vessel. "The reality is that if you don't know how a guy operates he will find your submarine before you find him. You can't replicate that emotional input in AI." If the XLUUV is ever to be armed that might create serious problems. The decision to fire a torpedo rests on a huge reserve of each officer's instincts and experience. "If you leave that to a rules-based system you might escalate things. There is just so much to learn about the underwater battlespace."

In the future Cdr Ramsey believes submarines will be equipped with the ability to launch their own autonomous vessels. The next generation of surface warships entering service are already planned to feature mission-bays for launching uncrewed vessels. And autonomous submarines can be deployed by transport aircraft, giving the batteries a rest and the XLUUV a global reach. The longer-term prospect for AI-controlled submarines is rosy, says Cdr Ramsey. "I can see a way to do a Perisher for AI. Get the right people to recreate their experiences in a simulator and let the AI learn from that, including human decisions that might be wrong. Give it ten years' worth of data and it will be able to build its own rules."

This simulator-based course for computer code promises another big benefit. "The AI can test out its own rules without any risk. My worry with autonomous submarines is the political impact if the vessel does something wrong or gets caught in hostile waters," he says. Plymouth's trial submarine is based on an MSubs design known as the S201. And across the Atlantic, Boeing is building a series of large uncrewed submersibles as the US Navy works out how these vessels can be used. Former submariners talk about the degree of teamwork and close comradeship required to perform their missions. AI cannot replicate this, but it does not need to if all it is doing is saving sailors from exhausting and repetitive tasks better allocated to a drone. The Royal Navy is coy about its plans for this technology and is committed to a next generation of crewed nuclear submarines. Yet the work of Plymouth's AI pioneers may see their most perilous missions delegated to an AI program that never goes off watch.

Source: bbc.com; 21 May 2021

SHIPPING, PORTS AND OCEAN ECONOMY

TYPHOON RESISTANT: CHINA'S FIRST FLOATING WIND TURBINE SET TO RIDE WAVES IN SOUTH CHINA SEA

- Xu Yihe

China's offshore wind giant China Three Gorges (CTG) will soon start operating the country's maiden floating wind project, with the completion of what is claimed to be the world's first typhoon-resistant facility. The company is pioneering this technology at its 400-megawatt Yangxi Shapa III wind farm off the coast of Yangjiang City in Guangdong Province, with installation due to start as early as June.

CTG said this is the world's first floating wind turbine able to operate in rough weather conditions such as typhoons. On Thursday, CTG completed the installation and commissioning of a floating turbine with capacity of 5.5 MW, able to produce 5500 kilowatts of electricity per hour. The turbine has been jointly developed by CTG and Ming Yang Smart Energy. The turbine's wind wheel has a diameter of 158 metres, with the turbine to be mounted on a semi-submersible floating structure for deployment period of at least 25 years. The semisub structure, built by Chinese yard Wison Offshore and Marine, will be linked to the seabed by multiple mooring lines and anchors. Contracting sources said that Wison's sub-structure will be towed to site in Yangjiang in early June to interface with the turbine. CTG's Yangxi Shapa III wind complex will also comprise 31 turbines — of the MySE6.45-180 design — mounted on fixed-bottom foundations.

Source: upstreamonline.com; 28 May 2021

CSSC DELIVERS LNG CRYOGENIC BUNKER FUEL TANKS FOR WORLD'S FIRST DUAL FUEL ULCC

The China State Shipbuilding Corporation (CSSC) on Friday (28 May) said it had delivered liquefied natural gas (LNG) type 'C' cryogenic bunker fuel storage tanks for the world's first dual fuel ultra large crude carrier (ULCC). The two units of 3,500

cbm3 capacity LNG marine fuel storage tanks are independently developed and designed by China Shipbuilding Group. The LNG bunker fuel storage tanks are made of 9Ni steel, which can operate safely under the combined action of -163℃ ultra-low temperature environment, on-deck waves and ship motion loads.

The vessel is able to travel from China to the Middle East and back when fully loaded with LNG marine fuel. The storage tanks can effectively resist the corrosion of the harsh maritime environment; its loading limit is 98%, the design temperature is -164℃, the pressure is 0.45Mpa, and the evaporation rate is ≤0.3 % . Zhao Jinwen, Deputy General Manager of COSCO Shipping Energy Transportation Co., Ltd., Wang Baochun, Deputy General Manager of CCS Dalian Branch, Deng Changlian, Deputy General Manager of Shipbuilding Group, and relevant persons in charge attended the handover ceremony.

Source: manifoldtimes.com; 31 May 2021

AN ALTERNATIVE WAY TO FINANCE THE DECARBONIZATION OF SHIPPING THAT ACTUALLY WORKS

We are pleased to see that "insetting" is slowly but surely gaining recognition as an alternative to offsetting. By focusing on projects that reduce GHG emissions within shipping, insetting supports the green transition in the sector. It also enables all the participants in the supply chains to collaborate on reducing the overall carbon footprint from ocean freight. ZeroLab by Klaveness is certain that insetting will be an important tool to speed up decarbonization and is pleased to announce its first collaboration in this area. Earlier this month, it was announced that MIT and the Smart Freight Centre are developing GHG Accounting Guidelines for the use of sustainable aviation fuel (SAF). This will facilitate the use of insetting in aviation and help finance the development of sustainable fuel. ZeroLab by Klaveness is encouraged to see that insetting is taking hold as an innovative way to finance the decarbonization of hard-to-abate sectors like shipping and aviation.

Regular offsets blur the real cost of decarbonizing shipping

"Insetting refers to the purchase of emission reduction credits within a company's relevant value chain. It differs from offsetting in that it drives funding towards the technology we need to develop for shipping to decarbonize by 2050", says Martin Prokosch, VP and Head of ZeroLab by Klaveness. He adds: "Regular offsets blur the real cost of decarbonizing shipping and are not at all contributing to making zero-emission shipping a reality"

Shipping is a hard-to-abate sector and the abatement cost per ton CO2-equivalents reduced or avoided is significantly higher than for many other industries. It is likely to be around USD 100 per ton CO2e or higher, even in the medium- to long-term. This is in line with the estimates of USD 1-2 trillion cost of decarbonizing the shipping industry. The IMO's target of reducing absolute emissions from shipping with 50% by

2050 compared to 2008 implies a reduction in GHG emissions from shipping of ~15 billion tons over the period from 2021 to 2050 compared to the business-as-usual scenario. If around 20% of the 15 billion tons CO2e are realized through insetting, the total market turnover for these credits would be USD 300 billion in total over the next 30 years (using USD 100 per ton CO2e), or on average USD 10 billion per year. "To achieve a similar impact on CO2e through regular offsets, for example through carbon sequestration, you would have to plant 50 billion tree seedlings and grow each of them for 10 years. Not a bad word about tree seedlings but as a shipping company, we need to focus on accelerating the transition in shipping. Shipping cannot wait until all other sectors have decarbonized; we need to get to grips with our own emissions immediately", says Martin Prokosch, Head of ZeroLab by Klaveness.

Insets will encourage actual emissions reduction initiatives

Like for regular offsets, insets allow for the emission reductions to happen anywhere in the world, and not just within the physical supply chain of the charterer that wants to contribute. "This mechanism will allow for cost-effective emission reduction initiatives to be realized, irrespective of where they are located, and hence reduce the overall cost of decarbonizing the shipping sector" says Martin Prokosch, Head of ZeroLab by Klaveness. Through a partnership with Dutch company GoodShipping, Klaveness plans to offer all charterers the opportunity to compensate for their shipping-related emissions through insetting. "Cargo owners have an important role to play by increasing demand for climate-friendly shipping, and we are confident that our new offering will be well-received by the front-runners", says Ingrid Kylstad, Sustainability Lead in ZeroLab by Klaveness. "No chain is stronger than its weakest link. That also goes for supply chains: all participants must come together to demand, deliver, finance and support decarbonization", she adds.

Several inset options for charterers to choose from

The partnership with GoodShipping is a first step towards offering a comprehensive suite of inset options based on the various ways to decarbonize shipping. "Biofuels decarbonize seaborne supply chains in a cost-effective manner. Our solution is based on the principle of mass-balance, meaning that we facilitate a fuel switch, and the volume of sustainable biofuel that reduces charterers' emissions will be fueled into a preselected vessel that would have normally run on fossil fuel", says Janne Erxleben, Business Development Manager at GoodShipping.

"Today's announcement is another important step in accelerating the energy transition within shipping", Janne adds. "We applaud Klaveness for its commitment to sustainable shipping and our initiative, which demonstrates to the industry that together we can reduce shipping's impact on the world." "This solution ticks all the right boxes and is available today. Our ambition is to bunker the biofuel on board Klaveness' owned or operated vessels. Focusing on projects that support actual emissions reductions within shipping is key to speed up the transition the industry needs to go through", says Head of ZeroLab in Klaveness, Martin Prokosch. Prokosch adds, "Klaveness Combination Carriers ASA has already bunkered biofuels on the CLEANBU MV Baru. We look forward to expanding the use to other owned and operated vessels by Klaveness."

Decarbonizing ocean freight requires collaboration between all stakeholders in the chain. Now it's up to the charterers to make use of this opportunity. "The transition to zero-emission shipping is happening right now, and we see that our customers are curious to explore how they can be a partner in the transition. We are excited to launch the cooperation with GoodShipping as it fits well with our ambition to be a provider of resilient, cost-effective and decarbonized ocean freight", says Michael Jørgensen, Senior Vice President, Head of Dry Bulk. "We are pleased that we now able to offer all our customers the opportunity to significantly reduce their Scope 3 emissions", he adds.

Source: Klaveness; 29 May 2021

AUSTRALIA ISSUES ITS LONGEST SHIP BAN EVER FOR "SYSTEMIC" VIOLATIONS

After one of the longest detentions of a foreign ship in Australian waters, the Australian Maritime Safety Authority (AMSA) issued a 36-month ban from Australia for the Panama-flagged bulk carrier, Maryam due to what it called the "unprecedented" circumstances of the situation. It is the longest ban ever issued by AMSA, twice the length of a ban placed on the other vessel owned by the same Qatari company, reflecting the serious deficiencies relating to vessel maintenance and working and living conditions for seafarers. "The length of the banning reflects the seriousness of the operator's failures to manage the welfare of its seafarers and the standard of maintenance of its ships," said AMSA Executive Director, Operations Allan Schwartz. "Over the last few months AMSA and other parties involved in this situation, have had to drag Aswan Shipping to the table to resolve the systemic failures on its ships. Aswan Shipping has been conspicuous in its absence throughout the detention of Maryam and Movers 3. This has been beyond disappointing." The 17-year-old dry bulk carrier, Maryam was detained in Port Kembla, Australia on February 19, 2021, after AMSA inspected identified numerous deficiencies. AMSA reported a total of 36 deficiencies aboard the 97,045 dwt vessel. They said there were problems with its engines and that it had defective generators that resulted in a lack of power, no electricity, or air conditioning onboard. Living conditions aboard the vessel were reported to be in breach of the Maritime Labor Convention. Other issues included lifeboat steering and the public announcement system speakers. By the end of March, AMSA reported that only a third of the deficiencies had been rectified, including the issues with the lifeboats and ventilation, while the ship was awaiting parts to complete repairs on its generators.

Schwartz said the detention of the Maryam was protracted because subsequent issues arose with the ship as the months dragged by. The classification society also conducted an inspection focused on crew welfare on behalf of the flag state and in mid-April reported that it had identified inconsistencies with crew contracts. Similar issues were also found aboard the company's other ship under detention in Australia. While the owners continued to make progress on the repairs aboard the Maryam, in late April 12 of the 23 crew requested to be repatriated. AMSA permitted the ship to be relocated from a berth to an anchorage at Port Kembla after the deficiencies with the generators

were resolved and while the ship's owners completed the repatriation while providing a replacement crew. "Disenfranchised with the operator's continued reluctance to meet its most basic obligations to maintain its ships and provide decent working and living conditions for crew, roughly half of Maryam's original crew demanded repatriation," said Schwartz. "On May 28, that finally happened off Brisbane, with 10 of the original crew being replaced with fresh crew who had recently completed quarantine in Queensland." AIS appears to show that the vessel has departed Australia, which would be consistent with AMSA issuing the ban concurrent with clearing the deficiencies and departing.

Not only did Australia deemed this vessel to be unseaworthy, but just days later on March 4, a second ship, the Movers 3, owned by the same Qatari company, was also detained in Weipa, Queensland for unacceptable conditions. That vessel remained under detention until its issues were rectified. The Movers 3 was released on April 29, 2021, and AMSA immediately issued an 18-month ban for that vessel.

Schwartz said AMSA bans vessels as a last resort, only using bans when other actions are not delivering the required deterrent or behavioral changes. According to AMSA, bans "send an unambiguous message to the industry that AMSA does not accept sub-standard ships in Australian waters. The consequences for bringing sub-standard ships like Movers 3 and Maryam to Australia are both financially and reputationally costly," said Schwartz. AMSA said that if any of Aswan Shipping's vessels enter Australian waters they will be closely monitored and subjected to more frequent inspections as a result of the systemic failures AMSA found on these two vessels.

Source: manifoldtimes.com; 31 May 2021

MARITIME TRAFFIC HALTED IN BOSPHORUS STRAIT AFTER MASSIVE OIL TANKER NARROWLY AVERTS DISASTER

- Mary Ellen Cagnassola

Turkey's Directorate General of Coastal Safety (KEGM) suspended maritime traffic in the Bosphorus Strait on Friday when a large oil vessel veered off course, triggering a rescue operation. The tanker called RAVA was carrying 249 meters of crude oil when a mechanical failure caused it to get dragged as it made its way back to the Yenikoy district of Istanbul, according to the Directorate General. KEGM sent two tugboats and successfully intervened. "Our rescue 8 tugboat and KEGM 5 fast rescue boat were also urgently directed to the tanker, which was stopped 300 meters before the beach. Istanbul Strait traffic has been suspended," KEGM tweeted Friday afternoon. The state-owned shipping authority provided updates on its rescue mission throughout the day. No damage was reported. The incident sparked concerns that the shipping world would see a sequel to March's Suez Canal blockage, a major disaster that stopped global trade along the route for six days and disrupted the economy on an international

scale. The waterway is responsible for the transportation of about 12 percent of global trade, roughly one million barrels of oil and about 8 percent of liquefied natural gas each day, according to the World Economic Forum.

The accident has resulted in millions in legal repercussions for the multinational conglomerate responsible for the Ever Given, the container ship that became wedged between the banks of the Suez Canal. The ship is currently being held, with support from an Egyptian court, by the Suez Canal Authority until it receives the $916 million it says it is owed for salvage costs and damages. The Bosphorus Strait, or the Strait of Istanbul, is one of the most internationally significant maritime passages in the world, particularly for oil transportation. The 19-mile waterway links the Black Sea to the world's oceans and is also essential to the local fishing industry. KEGM's rescue operation took eight tugboats and five smaller vessels to prevent another global shipping standstill. Traffic was still suspended as of 3 p.m. Friday as the tanker was brought to safety. "The tanker named RAVA is being pulled to the anchorage area by taking its anchor as of 20.46, accompanied by our SALVAGE 8 and SALT 11 tugboats," KEGM said on Twitter. RAVA, built in 2017, is registered in Croatia and was bound for Cartagena, Spain, according to global ship tracking intelligence. It's part of a fleet belonging to the company Tankerska Plovidba, which provides marine and coastal freight transportation services worldwide.

Newsweek attempted to contact Tankerska Plovidba and the state-owned KEGM on Friday but did not receive comment from either in time for publication.

Source: Newsweek; 28 May 2021

MARINE ENVIRONMENT

MASSIVE ANTARCTIC ICEBERG COULD DRIFT THROUGH OCEAN FOR YEARS

- Associated Press

PARIS (AP) — A vast iceberg that broke off Antarctica earlier this month could drift through the ocean for several years before it breaks up and melts away, a scientist from the European Space Agency said Friday. The iceberg, dubbed A-76, is more than 40 times the size of Paris, or about 73 times as big as Manhattan, making it the largest currently afloat. It was first spotted by scientists at the British Antarctic Survey and confirmed by the U.S. National Ice Center using images taken by the European Space Agency's Sentinel 1A satellite. Mark Drinkwater, a senior scientist at the space agency, said that while icebergs regularly calve from Antarctic ice shelfs, the region where A-76 broke off had seen relatively little change in recent decades. "It's become a poster child, obviously, and there'll be a lot of attention on it," he said of the 4,320 square-kilometer (1,668 square-mile) floating island of ice.

A-76 will eventually escape from the Weddel Sea around Antarctica and drift into the South Atlantic, but that journey could take years, Drinkwater said. "We've seen icebergs that can last up to 18 years that have been tracked around Antarctica if they remain in relatively cold waters," he said. "But it's likely that once this thing gets ejected from the Weddel Sea out into the South Atlantic, it'll disintegrate fairly quickly." The even larger iceberg A-68 that calved from Antarctica's Larsen C ice shelf in 2017 disappeared by early this year

Drinkwater said satellites have helped scientists keep track of the changes happening on the vast but largely uninhabited continent that would otherwise go unnoticed. "The continent that everybody thinks of as a benign, frozen part of the world that never changes is actually very dynamic," he said, adding that increasing calving activity in parts of Antarctica monitored from space over the past 30 years can be attributed to climate change. Antarctic ice shelves regularly lose large chunks to the sea even as fresh ice forms inland, a process that Drinkwater compared to a bank account that's continually being paid into and withdrawn from. "Parts of Antarctica are in arrears, and that's largely a consequence of increase in temperature or large calving events that have removed ice and destabilized the ice shelves themselves," he said. "Climate is responsible for these changes. And over the longer term, of course, it will have wide-ranging impacts in different locations around Antarctica."

Source: cbs4indy.com; 23 May 2021

WITH FIRE CONTAINED, SRI LANKA FACES PLASTIC PELLET PROBLEM FROM STRICKEN SHIP

- Malaka Rodrigo

COLOMBO — Authorities in Sri Lanka say they have largely contained a fire on board a cargo ship off the island's west coast, but now face the task of cleaning up the tons of plastic granules it was carrying that have washed up along a wide swath of the coast. Compounding the scale of the environmental hazard is the possibility that the pellets, known as nurdles, are contaminated with chemicals from the ship, the Singapore-flagged X-Press Pearl. The ship, newly commissioned in March this year, caught fire on May 21 shortly after leaving western India bound for Singapore. The fire broke out as it was anchored off Colombo, awaiting permission to unload Sri Lanka-bound cargo, but was brought under significant control by May 30 with help from India, authorities said.

Darshani Lahandapura, chair of Sri Lanka's Marine Environment Protection Authority (MEPA), told Mongabay that while it was too soon to pin down the cause of the fire, "we believe it was due to a chemical reaction due to leakage of nitric acid." The ship was carrying 25 metric tons of nitric acid (HNO3), generally used in manufacturing fertilizers as well as explosives. The ship was also carrying three containers of plastic pellets, each weighing 26 metric tons; some of the 25-kilogram (55-pound) bags from the containers fell overboard, and the beads have now carpeted beaches all the way down to the south coast of Sri Lanka. "We swiftly mobilized our staff and together with military personnel to start removing nurdles from long expanses of our western coast," Lahandapura told Mongabay. "Particular instructions were given to prevent pellets from getting washed back to the sea as that could make cleaning operations much harder." She added that the recovered nurdles would be dumped in the MEPA's hazardous waste yard until they are analyzed and the legal process is concluded, after which the nurdles will be destroyed. Authorities have also warned people not to touch the plastic pellets, which may be contaminated with chemicals as beaches are awash with black-coated tiny plastic pellets.

Nurdle hazard

Nurdles are the raw material used in creating other plastic items. They're also a chief source of the microplastic pollution in the oceans. Due to their small, round shape, they're often mistaken for food by marine species, which either die from ingesting the pellets, or pass the plastic up the food chain. Nurdles can also absorb other chemicals over time, and once swallowed, can contaminate the food chain with high concentrations of these chemicals. In Sri Lanka, where fish is the main source of protein, this problem poses an immediate health concern for humans. The MEPA has set up an expert committee comprising officials from various government agencies and experts to assess the damage. Authorities have already banned fishing in affected areas, and while no mass deaths of marine species have been recorded so far, the National Aquatic Resources Research and Development Agency (NARA) has taken samples of dead fish and turtles found along the western coast for study.

The collection and cleanup of the grain-sized pellets will prove a serious challenge, said Muditha Katuwawala, coordinator of the Pearl Protectors, a local NGO focusing on Sri Lanka's marine environment. The group regularly sends out volunteers to clean beaches and address environmental impacts caused by oil spills and other pollutants. But it hasn't been able to mobilize a similar response to the X-Press Pearl nurdle spill because of a strict nationwide lockdown in effect across Sri Lanka to deal with the latest wave of COVID-19 infections "We foresee that the cleaning process will be a lengthy operation, so we started creating tools that can assist the cleaning operations and to create awareness around beach pollution of such magnitude," Katuwawala told Mongabay.

'Sad and frustrating'

With the onset of the southwestern monsoons, the western seas off Sri Lanka are rough at the moment, which means the nurdles can quickly be distributed across a much larger area, said Charitha Pattiaratchi, a professor of coastal oceanography at the University of Western Australia who studies wave patterns around Sri Lanka. The currents are shifting south, which means more accumulation of debris toward Colombo and other areas along the southern coastline can be expected, Pattiaratchi told Mongabay. A similar accident in 2012 in Hong Kong resulted in container-loads of plastic pellets washing out to sea. Analyzing the 2012 images, Gary Stokes, director of operations at Oceans Asia, says the Sri Lankan situation is similar to the Hong Kong incident.

"It took about 7000 volunteers to clean up Hong Kong beaches, but our pellets were not contaminated with chemicals and there were no COVID-19 restricting gathering of the people," Stokes told Mongabay, adding that the situation would be more challenging in Sri Lanka. After the Hong Kong spill, Oceans Asia lobbied for the introduction of more robust material to pack the plastic pellets, as the 25-kilo poly sacks currently used are easily torn, even in minor incidents. Stokes said metal containers would be more durable and able to withstand a fire. "It is both sad and frustrating that the manufacturing companies haven't heeded this warning, creating the space for similar disasters to happen," Stokes said.

Increase in maritime accidents

Sri Lanka sits along a busy international shipping lane, which makes it critically important that the country is prepared for contingencies like the X-Press Pearl fire, said Dan Malika Gunasekera, a maritime lawyer and scholar with the International Max Planck Research School for Maritime Affairs. He said the country has an obligation to provide assistance to any ship in distress, so it's important that Sri Lanka strengthens the Indian Ocean Memorandum of Understanding on Port State Control to ensure quicker actions. In a recent report of maritime incidents in Sri Lankan waters since 1994, the Pearl Protectors identified 20 major incidents. More than half of them occurred in the last five years, indicating an increase in maritime activities around the island. Of the 20 major incidents, 12 involved an oil spill of some sort, underscoring Sri Lanka's vulnerability to extensive marine pollution. In September last year, the MV New Diamond, carrying 270,000 tons of crude oil, caught fire off eastern Sri Lanka. A joint fire-fighting operation by the Sri Lankan and Indian navies managed to put out

the fire and limit the scale of the disaster. Sri Lanka lodged a claim of $2.3 million in damages, which the ship's owner paid in full.

Source: Mongabay; 31 May 2021

CRITICALLY ENDANGERED SEA CREATURES FALL VICTIM TO DRIFT NETS

- Audrey Tan

The hawksbill turtle found dead in waters off Pulau Hantu earlier this month had been so tightly bound by a drift net that the man who freed the carcass found the animal's head severed from its body. It shell also came apart once released from the confines of the net, recounted Mr Wade Pearce, who was preparing to cruise out to the Southern Islands when he was alerted to the trapped turtle. Mr Pearce, who founded the Singapore Marine Guide platform for the leisure marine and boating community, told The Straits Times: "When I saw it, my first thought was: How many more drift nets are there out there now?" It was a tragic end for the hawksbill turtle, a critically endangered species native to Singapore. But it will likely not be the last casualty of such indiscriminate fishing practices. Imagine a gigantic spider web suspended in water. That is, in essence, how drift nets work.

They are kept vertical by floats at the top and weights at the bottom, and they trap everything in their path. "Nets are likely to indiscriminately kill anything that gets trapped in it, including bycatch such as sharks or turtles," said a spokesman for Marine Stewards, a volunteer group which promotes sustainable fishing practices and marine conservation. "And if the nets get lost or abandoned, they potentially become ghost nets that continue to kill marine life and coral." Mr Pearce said he had tried to retrieve the drift net from the water to prevent it from ensnaring more victims. But it was a futile effort - the net was heavy and seemed to be stuck to the seabed. Reinforcements had to be called in. The Our Singapore Reefs volunteer group sought the help of the Maritime and Port Authority of Singapore (MPA) to remove and dispose of the 100m gill net that was 15m underwater around Pulau Hantu. "In view of the concerns from the marine community and to ensure the safety of recreational divers and navigational safety in the Port of Singapore, MPA worked with Our Singapore Reefs to retrieve the net on May 21," said an MPA spokesman, who added that a commercial diving boat, floating crane barge and professional divers were deployed. "As such fishing nets pose risk to the safety of navigation, their use is prohibited in the navigational channels and anchorages of our port waters," the MPA spokesman added.

The net that likely took the life of the turtle was not the first. Two marine biologists from Our Singapore Reefs last Monday spent about an hour retrieving another net found draped over corals that had grown naturally on a seawall off Lazarus Island, one of Singapore's Southern Islands. The casualties included two native red egg crabs, which are poisonous and cannot be eaten. One of them was still alive even after losing at least four of its legs in its struggle to be free from the net. The divers also saw dead and dying coral, some bearing whip-like marks where the net filaments had cut into

its tissue. Dr Toh Tai Chong, one of two marine biologists behind the effort, said the net spanned at least 30m long and was about 1m wide. It also looked like it was handmade, with cruder floats. The Marine Stewards spokesman noted that netting is mainly carried out by local commercial or subsistence fishermen, or by fisherman in foreign sampans (small vessels).

Most recreational fishermen here usually use more sustainable methods, such as hook and line fishing, she added. Dr Karenne Tun, director of the National Parks Board's (NParks) National Biodiversity Centre, urged people to fish responsibly at designated fishing spots, using more sustainable fishing methods. Because of the harm they do to marine life, net fishing and the use of wire mesh traps are not allowed in areas managed by NParks, she added. "We also encourage the practice of catch-and-release fishing, where fish that are not going to be eaten are released back into the sea," she said. "Responsible fishing practices will help us maintain our rich biodiversity."

Source: The Straits Times; 31 May 2021

PLASTIC IN GALAPAGOS SEAWATER, BEACHES AND ANIMALS

- University of Exeter

A new study -- by the University of Exeter, Galapagos Conservation Trust (GCT) and the Galapagos Science Center -- found plastic in all marine habitats at the island of San Cristobal, where Charles Darwin first landed in Galapagos. At the worst "hotspots" -- including a beach used by the rare "Godzilla" marine iguana -- more than 400 plastic particles were found per square metre of beach. Plastic was also found inside more than half of the marine invertebrates (such as barnacles and urchins) studied, and on the seabed. The findings suggest most plastic pollution in Galapagos -- a world-famous biodiversity haven -- arrives on ocean currents. The study also identifies Galapagos marine vertebrates most at risk from swallowing plastic or getting entangled -- including scalloped hammerheads, whale sharks, sea lions and sea turtles. "The pristine image of Galapagos might give the impression that the islands are somehow protected from plastic pollution, but our study clearly shows that's not the case," said Dr Ceri Lewis, of Exeter's Global Systems Institute. "The highest levels of plastic we found were on east-facing beaches, which are exposed to pollution carried across the eastern Pacific on the Humboldt Current. "These east-facing beaches include Punta Pitt, a highly polluted site that is home to Godzilla marine iguanas which -- like so much Galapagos wildlife -- are found nowhere else in the world. "There are less than 500 Godzilla marine iguanas in existence, and it's concerning that they are living alongside this high level of plastic pollution."

Speaking about microplastic particles found inside marine invertebrates, lead author Dr Jen Jones, of GCT, said: "These animals are a crucial part of food webs that support the larger species that famously live on and around the Galapagos Islands. "The potential health effects of plastic ingestion on marine animals are largely unknown, and more research is needed." The study's findings include:

- Just 2% of "macroplastic" (items and fragments larger than 5mm) was identified as coming from the islands. The true figure could be higher, but the findings strongly suggest most plastic arrives on ocean currents.
- These macroplastics were found at 13 of 14 sandy beaches studied, with 4,610 items collected in total. Large microplastics (1-5mm) sieved from the surface 50mm of sand were found at 11 of 15 sites tested.
- Significant accumulations of plastic were found in key habitats including rocky lava shores and mangroves.
- Microplastics were found in low concentrations in all seabed and seawater samples, with higher concentrations at the harbour suggesting some local input.
- All seven marine invertebrate species examined were found to contain microplastics. 52% of the 123 individuals tested contained plastic.

To analyse the possible impact of plastic on Galapagos marine vertebrates such as sea lions and turtles, the researchers reviewed 138 studies of plastic ingestion and entanglement among such species worldwide. They also considered where in Galapagos each species is known to be found, and considered their conservation status on the IUCN Red List of Threatened Species. Based on this, the study identifies 27 species in need of urgent monitoring and mitigation.

Dr Jones, who led the study as part of her PhD at Exeter, said: "Our study highlights how far plastic pollution travels, and how it contaminates every part of marine ecosystems. "Given the level of pollution we have found in this remote location, it's clear that plastic pollution needs to stop at source. "You can't fix the problem just by cleaning beaches." Dr David Santillo, of the Greenpeace Research Laboratories at the University of Exeter, said: "This situation is only going to get worse if we don't dramatically change our use of plastics." Last year, the research team won a £3.3 million grant from the UK government to investigate and address plastic pollution in the Eastern Pacific. However, the grant has been reduced by 64% and may be cancelled after the first year due to Official Development Assistance (ODA) cuts announced in March.

Source: sciencedaily.com; 28 May 2021

MAYFLOWER AUTONOMOUS SHIP PICKS PARTNERS FOR TRANSATLANTIC RESEARCH DATA SHARING

Mayflower Autonomous Ship (MAS) has selected Iridium and Thales Group as its official communications partner, providing critical real-time communications for the fully autonomous transatlantic research vessel. In addition to its scientific mission, the crewless voyage will deliver insights for the autonomous shipping movement underway in the maritime industry. Iridium will provide Iridium Certus weather-resilient broadband connectivity which can help remotely manage vessel operations including command and control, tracking, propulsion system diagnostics and more.

The Mayflower is an autonomous ship led by marine research non-profit ProMare and IBM, which will travel the same route as the original 17th century Mayflower. It will collect environmental data regarding climate change, ocean acidity, plastic pollution, marine mammal conservation, and more. The Mayflower is set to leave on its journey this June.

Speaking about the partnership, Brett Phaneuf, Founding Board Member, ProMare, and Managing Director, Mayflower Autonomous Ship, said: "The Thales VesseLINK 700 powered by Iridium Certus onboard the Mayflower Autonomous Ship provides essential connectivity to backhaul vital science data in real-time from MAS to our team of ocean and climate experts onshore. Equally important, it lets us check in with the AI Captain to see how it's coping at sea and making myriad decisions every day to safely navigate the trip across the Atlantic. While the AI Captain won't need the development team's help on the crossing, and while the Mayflower won't miss us one bit, the team in the UK that developed the ship and software is deeply attached and will worry incessantly as the voyage unfolds. Thankfully, we don't have to worry as much with the superlative comms from Iridium that helps allay our concerns about the vessel as it makes the historic crossing." Don Scott, Chief Technical Officer, Mayflower Autonomous Ship, added: "The Mayflower Autonomous Ship is ultimately a research platform, not just for the science projects onboard, but for long-range autonomous vehicles as well. We don't assume we already have all of the answers so there is much that we can learn from this crossing. The connection provided by the Iridium system gives us the ability to monitor the AI systems in real-time while underway and helps us prepare for the next steps in their development. Having the high availability communications on the vehicle provides us with much-appreciated telepresence onboard."

Matt Desch, CEO of Iridium, stated: "When the original Mayflower crew set sail on their pilgrimage, they took a risk inspired by hope for a better future. The Mayflower Autonomous Ship serves as a modern inspiration, showing how new technologies can make a long-term positive impact on both the global economy and our environment. Iridium is proud to be the official communications partner for this ambitious expedition, ensuring the ProMare team onshore can keep track of MAS and receive the data they need."

Source: satelliteprome.com; 29 May 2021

GEOPOLITICS

IRAN OIL CARGO LANDED ON US SHORES ONE MONTH AFTER SHIP SEIZURE, RECORDS SHOW

- Reuters

A cargo of 1.033 million barrels of Iranian crude oil landed on US shores in March, data from the US Energy Information Administration (EIA) showed, the second shipment of Iranian oil to be imported into the United States since 1991. The cargo was registered in EIA data released late last week for the month following the seizure by US authorities of the Liberian-flagged tanker Achilleas, which was transporting Iranian crude. The EIA gave no other details on the Iranian cargo, and the agency could not be reached for comment outside of US office hours. Monday is a holiday in the United States. The United States last recorded Iranian crude and petroleum imports of 3,000 barrels per day for October 2020, EIA data showed, also oil Washington had seized under its sanctions program. Refinitiv Eikon shipping data showed that the Achilleas discharged its cargo at the US Gulf port of Galveston in March. The seizure was in line with tough economic sanctions imposed by Washington on Tehran over its nuclear program and the US designation of a number of Iranian groups as terrorist organisations, continuing decades of rancor between the two nations.

Iran rejects US accusations of wrongdoing.

Iran has been in talks with world powers since April, working on steps that Tehran and Washington must take on sanctions and nuclear activities to return to full compliance with the 2015 nuclear pact.

Source: Al Arabiya News; 31 May 2021

PAKISTAN REALISES IT CAN'T ABANDON US FOR CHINA YET. BUT HOW FAR WILL BAJWA & CO GO?

- Ayesha Siddiqa

Pakistan's security establishment may be excited about finding the right person to do an important job – help restart its conversation with Washington. Moeed Yusuf, the newly sworn National Security Advisor who was recently elevated from the position of

Special Assistant to the Prime Minister, was dispatched to Geneva to meet his American counterpart Jake Sullivan. Although one can only speculate if Yusuf is up for the job, he is expected to deploy his perceived advantage of having spent a decade or more in the think tank and security policy circle in the US capital to start a conversation with the Americans that the Pakistan Army Chief General Qamar Javed Bajwa and his cabal currently need.

The General Headquarters in Rawalpindi wants two friends instead of just one, which means that it earnestly wants to hold on to the US that seems to be disengaging strategically. A generational shift in strategic relationship is at play here, and is worth watching in the coming years. Pakistan military's dependency on the Chinese for technology has grown consistently. General Bajwa is perhaps of the generation that continues to want a military-technological relationship with the US despite its possibility turning increasingly dimmer. The Pakistan Army chief is still reminded of his meeting with former US President Donald Trump, who had promised him the moon. The Biden administration with its strategic priorities, however, is a different ball game. General Bajwa and his team belong to a generation of military commanders that represent hybrid Pakistani-American trained generals. Their career is marked by a long engagement with Washington and by Pakistan's significance for the US in fulfilling the latter's goals in Afghanistan. While the US may still be interested in Afghanistan and what happens in Central Asia, its traditional military engagement with Afghanistan, especially via Pakistan, is coming to an end. As Pakistan gets used to the shift, it still wants to hang on to the old relationship.

Pakistan knows what it can get and cannot

Although Islamabad has never confessed to its ties with the US being strategic, a title that is only kept for China (and lately Saudi Arabia), it is a significant set of relations that the military echelons do not want to abandon. The message delivered to the American NSA, Jack Sullivan, was that Pakistan wants an engagement beyond the US withdrawal from Afghanistan. It is, however, not known how far Pakistan is willing to go to engage with American security interests. Though observers suspect that a military base was offered, the idea sounds remote. There is far more at stake and the situation is much different from 2001 when Pakistan had allowed the US to use its airspace and bases. Pakistan cannot afford to annoy the Taliban, which has already warned "Afghanistan's neighbours" against giving the Americans access to their bases. In any case, Islamabad is not yet ready to disengage from its main set of friends in Afghanistan, especially at the time of American withdrawal. Furthermore, with the recent flare-up in Palestine, Islamabad would have to be doubly cautious about what it offers to the US.

Not to forget the Chinese, who have infrastructure investment in Pakistan and do not appreciate sharing space with the Americans. There is a lot of speculation about Islamabad wanting to swap ties with China for the US, which is also not likely. The China-Pakistan Economic Corridor (CPEC) has its problems, but the project is not abandoned. With the US only marginally interested in Pakistan, Beijing remains the only country with an interest in investing in the much-needed infrastructure investment. Islamabad is not willing to let go of the relationship with the US and continues to talk about a reset in its priorities without necessarily undertaking a major reset. A significant transformation is required to shift the relationship goal from

military to economic. Islamabad badly needs to change its institutional infrastructure to be able to make its economy vibrant and attractive to the outside world. There is also a huge gap between American and Pakistani view of Chinese power, particularly the CPEC. Needless to say, there is an underlying understanding that the F-16s or any other major technology is not on the table for any bilateral conversation.

Such technology transfer is now impossible because American priorities are different, and that a technology handout to Pakistan will go against the grain of Washington's newly developing ties with India. Moreover, the US will not be inclined to transfer technology to Pakistan that tends to share it with China. Rawalpindi will probably have to work more to understand the complexity of Quad and that it does not fit into America's Indo-Pacific plans, the goals of which are very different and contrary to Pakistan's own strategic objectives and relationships. It certainly cannot become party to a plan that focuses on 'othering' China, and certainly does not want to be included in the list of the 'other'. There is a certain belief that Washington could be convinced to abandon the Indo-Pacific project or at least tone it down. Proverbially speaking, if Indo-Pacific was a room, Pakistan would want to stand inside — even if it doesn't get a seat at the table and can't give any input that could impact the strategic future of the region. It wants to keep a close watch over how America's relations with India develop, or how the quad evolves into a force that can counter China. This way, it could also be useful to Beijing. It is not inclined to be relegated to the Chinese camp where it found itself in 2015. The foreign policy circle made an effort to bring the clarity that while it is believed that the future belongs to China, Pakistan would remain engaged with the US as well and not entirely abandon the bilateral relation to India. If Pakistan could run its two-friends policy during the critical decades of the 1960s and 1970s when China was a lesser power and America the bigger, then why cannot it do it now? The one issue is that this is quite different from the Cold War competition.

US will remain engaged but tradeoff is over

The US also seems inclined to keep some level of ties with Pakistan. This year in February, the American Navy participated in the Aman-21 naval exercise. Sources spoke about the two countries planning to hold another naval exercise this year. There are certain benefits of keeping Pakistan inside the room especially from the counter-terrorism perspective, an area in which persistent pressure seems to have paid off. Rawalpindi may not have abandoned its jihadi proxies, but it now, more than ever, sees the benefit of disengaging from violent non-State actors as a policy tool, at least as far as external operations are concerned. It may take a while before the country's deep state abandons the option of engaging with militants entirely even for domestic purposes, for which a constant reminder is necessary. Not to forget that there is a strategic advantage for the US to keep a relationship in which it has invested for decades. The US is certainly not strategically popular in Pakistan but continued tactical engagement with the military echelons can have its payoffs. Pakistan military's top brass continues to consider itself as part of the Western strategic constellation. The country's power elite, including the military top brass, is a beneficiary of American soft power. The personal future of some of the most significant players and their families are tied with the West, especially the US. The American military training programme, which is set to start again after Covid-19 restrictions ease, has been critical in providing Washington with links inside Pakistan's armed forces. Restarting the International

Military Education and Training (IMET) student exchange programme will at least fill the gap in the absence of a major purpose to enhance military-to-military contact. Naturally, this is likely to change in the next decade or so, especially after the US withdraws its troops from Afghanistan. The two militaries will be less intensely engaged as they were in the past couple of decades. Furthermore, the US is no longer a source of major weapons procurement for Pakistan, which is why, increasingly, the new generation of military commanders will have Chinese training on their resume. The current naval and air chiefs, for example, have significant Chinese training. The dependency on the US, however, will continue as long as China does not improve the quality of its basic training for which Pakistan will keep looking at Washington. But for all weapons-related training, it will have no option but to look at China. A shift can already be foreseen.

For now, Islamabad will continue to remain in the twilight zone imagining, as Foreign Minister Shah Mehmood Qureshi said recently in reference to the US: "They will need us down the line so it's better to remain engaged with Pakistan." But while the generals wait for their NSA to pull some trick out of his hat, it will be worthwhile for them to think carefully about reimagining Pakistan and picking itself from the ashes of Covid that will leave the entire South Asian region in a mess.

Ayesha Siddiqa is research associate at SOAS, London and author of Military Inc; Inside Pakistan's Military Economy. She tweets @iamthedrifter. Views are personal.

Source: The Print; 28 May 2021

SAUDI ARABIA COMMITTED TO MEET INDIA'S CRUDE OIL REQUIREMENT: ENVOY

- PTI

Saudi Arabia, the world's largest oil exporter, on Sunday said it is committed to meet India's requirements of petroleum products, an affirmation that came in the wake of the country pitching for easing global output cuts to rein in surging oil prices. In an interview to PTI, Saudi ambassador Dr Saud bin Mohammed Al Sati also said that Saudi Arabia made investments worth $ 2.81 billion in India in 2020 and is looking at a greater momentum in bilateral economic ties in areas like petroleum, renewable energy, IT and artificial intelligence.

"Saudi Arabia has remained committed to meeting the requirements of India from oil and petroleum products and our energy cooperation has been going very well. It has been further reinforced during the recent and ongoing communications between Prince Abdulaziz bin Salman Minister of Energy and his counterpart Minister Dharmendra Pradhan," Al Sati said. His comments came in response to a question on Saudi Arabia's position on India pressing for easing cuts in crude oil production by OPEC and OPEC Plus as high oil prices are hurting the consumption-led recovery of several countries like itself. The OPEC (Organisation of the Petroleum Exporting Countries) is an influential entity that plays a key role in policy formulations relating to crude production. The OPEC Plus comprises the OPEC countries, Russia and several

other crude producers. Talking about his country's Vision 2030, an ambitious programme aimed at moving the country's economy away from its dependence on oil profits, Al Sati said it provides for expansion of economic engagement with India and other strategic partners. "The number of Indian companies investing and operating in the kingdom has been growing. In 2020, 44 new licences were issued for Indian investments. "Saudi Arabia also had the highest FDI increase to India in 2020 with investments worth $ 2.81 billion," he said. "As we move to resume normal life and fully opening our economy in all sectors, we will be building on the progress achieved so far and there will be a greater momentum for our economic cooperation and mutual investments especially in the sector of renewables, IT, and artificial intelligence," he said. The envoy said Saudi Arabia's strategic partnership with India expands over diverse areas and health cooperation stands out as one of the most important aspects of the ties.

"Health cooperation will continue as an important area of focus in our bilateral cooperation. In the wake of the pandemic and its economic, social and health impact, our cooperation has continued to grow," he said. Al Sati said Saudi Arabia maintained the supply chains of goods and medical-related products uninterrupted notwithstanding the coronavirus pandemic, adding his country facilitated the supply of medical oxygen to various entities in India. "We will continue to extend all forms of possible support to India and its friendly people to overcome the current COVID-9 challenge. I am confident that India has the resolve and capacity to deal with the current challenge of COVID-19 and this crisis shall wane out shortly," he said. Referring to the Vision 2030, Al Sati said Saudi Arabia has been diversifying its oil-driven economy under the programme as envisioned by its architect Crown Prince Salman. "During the State visit of Crown prince to India in 2019, Saudi Arabia agreed to align Vision 2030 and its 13 Vision Realisation Programmes with India's initiatives of 'Make in India', 'Start-Up India', 'Smart Cities', and 'Digital India'," he said. In February 2019, Saudi Crown Prince Mohammed bin Salman announced that Saudi Arabia would invest over $ 100 billion in India in petrochemicals, refining, infrastructure, mining and manufacturing, agriculture and several other sectors. "In our endeavour to reform and achieve our Vision 2030 strategic goals, we have created immense opportunities and a conducive business environment for our strategic partners" he added. In the last five years, he said, Saudi Arabia's non-oil revenues have increased by 222 percent while the maturity rate of digital government services increased from 60 percent to 81.3 percent and Saudi women's participation in the workforce increased from 19.4 percent to 33.2 percent. He said the IMF's projections painted a positive picture, estimating Saudi Arabia's real GDP growth at 4.8 percent, the real non-oil GDP growth recovery at 3.6 percent, and the real oil GDP growth to reach 6.8 percent in 2022. As part of the commitment to combat climate change, he said, the kingdom has encouraged the concept of a circular carbon economy, adopted by the G20, and expanded its solar, hydrogen and ammonia projects.

"Saudi Arabia hopes to obtain 50 percent of its electricity from renewables by 2030. This comes alongside the Saudi Green and Middle East Green initiatives, designed to boost vegetation, reduce carbon emissions, and combat pollution and land degradation," Al Sati said. He said the last five years have witnessed tremendous changes in Saudi Arabia as the country has been going through a historic transformation. "Diverse reforms have been introduced in laws, regulations, and

procedures, in cooperation with more than 50 government entities, and coordination with the private sector," he said. “Saudi Arabia has streamlined and automated administrative procedures and data sharing among various entities, making it possible for investors and entrepreneurs to start their businesses electronically," he added.

Source: News18.com; 30 May 2021

US, Russia at Odds Over Military Activity in the Arctic

- Matthew Lee

The Biden administration is leading a campaign against Russian attempts to assert authority over Arctic shipping and reintroduce a military dimension to discussions over international activity in the area. As Russia assumed the rotating chairmanship of the Arctic Council on Thursday, the U.S. rallied other members to oppose Moscow’s plans to set maritime rules in the Northern Sea Route, which runs from Norway to Alaska, and its desire to resume high-level military talks within the eight-nation bloc. Those talks were suspended in 2014 over Russia's actions in Ukraine.

The effort reflects growing concerns in Washington and among some NATO allies about a surge in Russian military and commercial activity in the region that is rapidly opening up due to the effects of climate change. Russia has expressed similar suspicion about NATO's motives. At a meeting of Arctic Council foreign ministers in Reykjavik, the capital of Iceland, U.S. Secretary of State Antony Blinken said the group should maintain its focus on peaceful cooperation on environmental issues, maritime safety and the well-being of indigenous people in the region.

Blinken left Iceland after the meeting to deliver the same message in Greenland, which attracted international attention when former President Donald Trump expressed interest in buying the world's largest island from Denmark and later cancelled a state visit to Copenhagen when his interest was widely mocked and rejected by the Danes and Greenlanders alike. Asked whether the Biden administration had dropped Trump's interest in the purchase of Greenland, Blinken replied: “I can confirm that is correct." At the same time, Blinken lauded the re-establishment of a U.S. consulate in the Greenlandic capital of Nuuk and said the administration hoped to boost cooperation with island on a variety of fronts starting with climate change. Earlier Thursday in Iceland, Blinken told his counterparts that “the Arctic is a region for strategic competition that has seized the world’s attention. But the Arctic is more than a strategically or economically significant region. It’s home to our people, its hallmark has been and must remain peaceful cooperation. It’s our responsibility to protect that peaceful cooperation and to build on it.”

Blinken stressed the importance of upholding “effective governance and the rule of law” to ensure that the “Arctic remains a region free of conflict where countries act responsibly.” He had previously questioned the legality of the proposed Russian maritime rules and expressed deep reservations about Russia's military activity in the far North. Several other foreign ministers, including those from Canada, Iceland,

Finland, Norway and Sweden, echoed Blinken's call to keep the Arctic peaceful and free of conflict under the authority of international, rather than that of individual countries. Representatives of indigenous Arctic populations urged that their voices be heard. “We are concerned over the level of recent angry and provocative rhetoric,” said James Stotts of the Inuit Circumpolar Council. “We do not want to see our homeland turned into a region of competition and conflict.”

Russian Foreign Minister Sergey Lavrov, who had earlier this week dismissed the U.S. criticism because the Arctic “is our territory, our land," questioned NATO's motives in deployments of bombers and submarines to the area. On Thursday, he said resumption of an Arctic Council military dialogue would contribute to stability. “It is therefore important to extend the positive relations we have within the Arctic Council to encompass the military sphere as well, first of all by revitalizing multilateral dialogue on military issues between the general staffs of the Arctic states," Lavrov said. He said later at a new conference that resuming that dialogue would be a priority for Russia while it heads the council.

“We have not received any ‘no’s’ so far but we have not received any positive reaction, either,” Lavrov said. “So we have decided that within the next three years we will create the proper conditions so that this particular aspect of common security will once again be part of the work of the Arctic Council.” The outgoing council chair, Foreign Minister Gudlaugur Thor Thordarson, of Iceland, did not appear enthusiastic. “Everything that we can do as nations to lower tension and see stability is something that, of course, should be looked into very positively, but I think it’s important to keep the council as it is,” he said. Lavrov also cast aspersions on NATO and the U.S., which he accused of acting with arrogance toward Russia and its security concerns. He took particular aim at Norway, which he said was amending its laws on foreign military presence to allow for the constant rotation of military equipment and personnel.

“We’re especially concerned about what is going on close to our borders and Norway is indeed a very close neighbor of ours," he said. "We have very good relations with Norway. Nevertheless, the issues related to heightened military tensions due to military deployments in Norway and in the Baltics are still very present.” He called the rotational presence a “play on words” to describe what is actually a permanent presence. “This is not the first demonstration of this highbrow approach that our Western colleagues are now taking in the international arena," he said. “We are going to undertake necessary measures in order to ensure our security, but our priority and our preference really is dialogue.” Lavrov also proposed a summit of Arctic Council leaders to be held at some point during Russia's two-year chairmanship and said Moscow is keen to foster cooperation. “We encourage you to maintain and seek consensus in the council to continue constructive cooperation,” Swedish Foreign Minister Ann Linde told Lavrov.

Source: nbcwashington.com; 20 May 2021

SAUDI-LED COALITION THWARTS 'IMMINENT HOUTHI ATTACK' IN RED SEA

- Zara Muradyan

On Friday, the Saudi-led coalition said it intercepted and destroyed an explosive-laden drone launched by the Yemen-based Houthis towards the city of Khamis Mushait. The Saudi-led coalition has announced that it foiled an "imminent" Houthi attack in the Red Sea, just a day after it intercepted an explosive-laden drone fired in the direction of a Saudi city, Khamis Mushait. According to the coalition, the Yemeni militia intended to use two explosive-laden boats in the Red Sea. They were destroyed off the port of Salif.

Earlier this week, the coalition reportedly said it had established a presence on a strategic island at the entrance to the Red Sea to counter perceived threats to maritime trade from the Houthis. "All equipment currently present on Mayun Island is under the control of the Coalition Command, and is situated there to... counter the Houthi militia, secure maritime navigation and support West Coast forces", said a statement on Saudi state news agency SPA, citing an unnamed official in the coalition. The statement was made in response to an Associated Press report citing Yemeni officials claiming the United Arab Emirates (UAE) was behind an air base that has emerged on Perim Island, also known as Mayun, in the strategically important Bab al-Mandab strait. The unnamed official dismissed as "baseless" reports that Emirati forces were present on the Perim and Socotra islands. According to the insider, current UAE efforts were centered around providing air support for coalition operations in Marib, which the Houthi forces are trying to seize.

The Red Sea incident comes just days after the Houthis threatened "unexpected" attacks against “aggressor countries”. The warning was made shortly after the US imposed sanctions on two Houthi military leaders involved in the militia's ongoing offensive in Yemen's Marib Province. "Sanctions do not scare the mujahideen. If they continue the blockade and aggression, then perhaps there will be strikes on unexpected sites in some aggressor countries", Mohammed Ali al-Houthi, head of the Houthi supreme revolutionary committee, said last week.

In 2020, the Houthis launched an offensive on the province of Marib, an oil-rich part of Yemen, and the last government stronghold in the north of the country. Houthi drone and missile attacks have intensified over the past few months, with the Yemeni militia targeting military infrastructure and bases, airports, oil infrastructure, missile defences, and cities in Saudi Arabia. The Saudi-led coalition of Arab states has been involved in the Yemeni civil war since 2015 in a bid to restore the ousted government of President Abdrabbuh Mansur Hadi, who fled to Riyadh after a Houthi-led popular uprising in Sanaa in late 2014.

Source: Sputnik News; 29 May 2021

ACKNOWLEDGEMENTS

‘Making Waves’ is a compilation of maritime news and news analyses drawn from national and international online sources. Drawn directly from original sources, minor editorial amendments are made by specialists on maritime affairs. It is intended for academic research, and not for commercial use. NMF expresses its gratitude to all sources of information, which are cited in this publication.

Cover Designed by Gayathri Rajesh, NMF Intern.