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Editorial: Japan Maritime Self-Defense Force deployment to Mideast raises questions

A plan to dispatch Maritime Self-Defense Force (MSDF) personnel to the Middle East has been passed by Cabinet decision. If Japan were to participate in a United States-led coalition to guard ships passing through the Strait of Hormuz, its friendly relationship with Iran would be no longer. Thus, Tokyo took the tack of a unilateral dispatch.

However, it was back in June that a tanker operated by a Japanese shipping company was attacked near the Strait of Hormuz. The situation has been calm ever since. Why dispatch the Self-Defense Forces (SDF) now? It's hard to shake the feeling that deployment of the MSDF wasn't so much deliberated as it was decided without any debate; it was merely a show of deference to the U.S.

What remains in question is the Japanese government's use of a provision about survey and research missions in the Act for Establishment of the Ministry of Defense as the basis for the deployment. The provision is usually the grounds for early warning and surveillance operations that the SDF conducts in the waters and airspace surrounding Japan.

If the MSDF is in the Middle East to gather information for the purpose of survey and research, it is easy to explain that there is no intent of applying military pressure on Iran. However, it is rather weak as legal grounds for a serious political decision to send troops abroad. It is far too imbalanced.

It was out of consideration for Iran that Tokyo set the operational range of MSDF destroyers in the region from the northern part of the Arabian Sea to the Gulf of Oman, excluding the Strait of Hormuz and the Persian Gulf. There is probably a secondary reason: to stay away from dangerous waters and assess the changing situation.

Still, it is a great big ocean out there. The Japanese government says that if a Japan-related ship were to be attacked, the MSDF would take maritime security action. But there is only so much a single destroyer can do. And even that destroyer is not due to arrive in the region until February 2020.

Even if Tokyo presents itself as being neutral, in effect, the MSDF's activities will primarily be those of a U.S. ally. Information that the MSDF gathers will be shared with the U.S. Navy, and it seems that in effect, the Japanese forces will collaborate with

the U.S.-led coalition. P-3C patrol planes that have been posted in the Gulf of Aden for anti-piracy operations will be given additional duties.

While the administration of Prime Minister Shinzo Abe may think it has kept its moves to the minimum necessary to keep a good relationship with the U.S., adversaries may see Japan as being "one with Washington," putting Japan at risk of becoming a central player in a conflict.

This is precisely why rigorous rule of law and civilian control are called for when deploying forces. The administration's attitude -- barely deliberating the issue in the Diet and simply passing the resolution in the Cabinet -- is problematic. We seek continued verification of this case in the Diet.

It was the U.S.'s withdrawal from the Iran nuclear deal that made safety in the Strait of Hormuz a problem to begin with. Peaceful diplomatic efforts should be continued to alleviate tensions in the area.

Source: mainichi.jp; 28 December 2019

More Piracy Incidents in the Singapore Strait

ReCAAP ISC has again issued a warning about piracy incidents involving ships underway in the eastbound lane of Singapore Strait.

On 20 December 2019, three incidents were reported, two involving bulk carriers and one involving a tanker. ReCAAP ISC says it's possible the attacks were all made by the same group. Two more attacks occurred on December 23 and another one on December 25.

The agency has already issued two Incident Alerts regarding the area (IA 05/2019 on October 23, 2019 and IA 06/2019 on November 29, 2019).

On December 20:

At about 0532 hrs, the bulk carrier Jian Fa was underway in the Singapore Strait bound for China when an unknown number of perpetrators boarded. A later search showed that nothing was stolen. All crew are safe and the ship resumed her voyage.

At about 2325 hrs, the tanker Jag Lalit was underway in the Singapore Strait bound for Kaoshiung, Taiwan, when six perpetrators armed with knives boarded the ship. The fourth Engineer was punched in the face, and the chief engineer sustained bruises on the neck and had a gold chain stolen from him. The master reported the incident to Singapore VTIS and deviated the ship to Singapore to ensure the safety of crew, before proceed on her voyage.

At about 2338 hrs, the bulk carrier Akij Globe was underway in the Singapore Strait when five armed perpetrators were sighted in the engine room. The alarm was raised

and the perpetrators confronted three crew in the engine room. They then escaped with stolen engine and generator spares in a white small boat. The master reported the incident to the Singapore VTIS and the vessel resumed her passage to Singapore.

On December 23:

At about 0012 hrs, the tanker Bamzi was underway in the Singapore Strait and en route from Nipa anchorage, Indonesia to Qing Dao, China, when the chief engineer and duty engineer sighted three perpetrators in the engine room. One was armed with a knife. The alarm was raised, and the three perpetrators escaped immediately. Two motormen were later found tied up. Nothing was stolen and the ship resumed her voyage.

At about 0154 hrs, the bulk carrier Trust Star was underway in the Singapore Strait when the crew spotted six perpetrators on board the ship and raised the alarm. Upon hearing the alarm, the perpetrators escaped. They had confronted and tied up two crew in the engine room, who later managed to untie themselves. Nothing was stolen.

At about 0028 hrs, the tanker Stena Immortal was underway in the eastbound for the port of Singapore when six unarmed perpetrators were sighted in the engine room. The ship's alarm system was activated and the six escaped empty-handed at the stern of the ship in an unidentified small boat.

With these incidents, there have now been 30 incidents reported in the Singapore Strait in 2019. Of these, 15 occurred to ships while underway in the westbound lane of the Singapore Strait and 15 incidents in the eastbound lane of the Strait.

The ReCAAP ISC advises all ships to exercise enhanced vigilance.

Source: maritimeexecutive.com; 22 December 2019

Tanker Thwarts Pirate Attack off Brass, Nigeria

- World Maritime News

Turkish Suezmax tanker Istanbul has foiled a pirate attack on Tuesday, December 24, while sailing some 180 nautical miles southwest of Brass, Nigeria.

The ship was approached by a high-speed craft with 9 armed men aboard trying to board the vessel, Dryad Global informed.

The tanker conducted evasive maneuvers and following two failed attempts the pirates were seen to withdraw to a mothership vessel.

The tanker and crew are unharmed and have continued on their way, the security consultancy said.

"The Istanbul appears to have taken a south-western track from the Odudu terminal. This inadvertently tracked her vessel through the concentration of 2019 incidents," Dryad pointed out.

"Trends within 2019 have shown a shift in the concentration of incidents from 2017 and 2018 from an area south of Port Harcourt, between the Bonny and Brass terminals, to a linear spread of incidents along the Eastern fringe of the Nigerian EEZ."

As explained, the Eastern fringe of the Nigerian EEZ seems to be particularly vulnerable due to the density of energy infrastructure and density of traffic transiting northbound to conduct operations within the Niger Delta region.

"With this confluence of factors and the significant geographic limitation imposed upon Nigerian security forces, pirates operating with both capability and intent are afforded the opportunity to act freely without significant risk of being interdicted," the maritime security company added.

According to Dryad's data, this is the 7th MARSEC incident occurring beyond the eastern fringe of the Nigerian EEZ within 2019. Thus far, five of the seven incidents have occurred within 20nm of the eastern fringe of the Nigerian EEZ. Four incidents have involved kidnappings with one hijacking and two failed attacks.

Only two incidents were recorded in 2017 and two in 2018 respectively..

Source: offshoreenergy.biz; 25 December 2019

Duterte's Coast Guard Diplomacy

- Jay Tristan Tarriela

Recently, the Philippine budget secretary approved an increase of Philippine Coast Guard (PCG) personnel to 4,000 for this year. This increase is only intended for 2019, while the funds for an additional 6,000 personnel are also anticipated by the PCG to be appropriated in 2020.

The increase of the PCG's human resources to almost 23,000 surpasses the 14,000 active sailors of the Philippine Navy (PN) despite the rise of the Armed Forces of the Philippines' (AFP) troop ceiling. Most maritime scholars find it puzzling why President Rodrigo Duterte has favored the PCG more than the PN in terms of personnel increase and even in the acquisition of additional floating assets.

Even during his first year as president, it was evident that Duterte has a fondness for the PCG. In 2016, during the 115th PCG anniversary, he highlighted that the

Philippines, with more than 7,000 islands, needs more PCG ships for maritime safety, search and rescue, marine environmental protection, and drug interdiction. Unlike his predecessor, Duterte looks at the coast guard as a tool of the state in dealing with domestic concerns and not as an apparatus of maritime strategy in promoting the Philippine claim in the South China Sea (SCS).

Duterte's appreciation of the PCG as a civilian maritime force that primarily deals with constabulary roles at sea perfectly fits his approach on how to deal not only with China but even with the United States and its allies concerning the SCS. He has understood that the unique identity of the PCG – being not a military force but a law enforcer — allows it to be tacitly accepted by other claimant states as it patrols the contested waters. Further, Duterte appreciated that this particular institution could offer more avenues of cooperation in the region. It has to be noted that this is not something new; Japan had been relying on its coast guard not as part of its security strategy but in propagating "coast guard diplomacy."

The PCG: Dealing With China

Learning from the 2012 Scarborough Shoal standoff, former President Benigno Aquino began to utilize the coast guard as part of his white ship strategy in the SCS. Since China criticized him for militarizing the maritime dispute in 2012 when the refitted USCG Hamilton-class PF-15 attempted to arrest Chinese fishermen, Aquino turned to relying on coast guard vessels to maintain the Philippines' presence in the SCS. In the case of Duterte, he understood that if he aggressively employed the coast guard in his maritime strategy to deal with China, it will negatively affect his closer ties with Beijing. Instead, he decided to take advantage of the functions of the PCG that could spark cooperation with the Chinese.

When Duterte first visited China, one of the first memoranda of understanding (MOU) that he signed with Xi Jinping established a joint coast guard committee on maritime cooperation. Through this MOU, the senior ranking officers of both the PCG and China Coast Guard (CCG) participated in Joint Coast Guard Committee meetings in 2017 and 2018 held in Manila and Guangzhou province, respectively. Interestingly, the most relevant outcome of these committee meetings has been the training given to PCG officers on law enforcement capacity building at China Maritime Police Academy. Further, there were also scholarships given to some PCG personnel to study in China. The next high-level meeting will be held in Manila this December, which is expected to be attended by high ranking CCG officials and to be hosted by the newly installed PCG Commandant, Admiral Joel Garcia.

The other notable result of softening the role of the PCG in the South China Sea is that the bigger China Coast Guard vessels are no longer hostile and intimidating toward the smaller PCG vessels as both parties patrol the South China Sea. Though one can argue that Duterte's foreign policy has caused that change in behavior, it is still worth

noting that the annual meetings between the PCG and CCG have set the tone for their mutual respect.

Surprisingly, the PCG was put in the limelight when it was tasked by Duterte to conduct a maritime casualty investigation on the ramming incident involving a Chinese fishing vessel and the capsized F/B Gimver 1, owned by Filipino fishermen, in Reed Bank early this year. The public criticized the PCG since its investigation report highlighted the violations committed as well by the Filipino fishermen. Such criticism was even exacerbated when Duterte's spokesperson stressed that the PCG only cited the violations of the Filipino fishermen. What is surprising in this incident is that the PN had been expected to lead the investigation since PN vessels received the rescued fishermen.
Before Duterte came to power, these white hulls were considered to be contenders in the maritime spaces of the SCS. While both the PCG and CCG still are used by the states in their sea row, Duterte has employed coast guard diplomacy to ensure that these vessels will not be ramming one another, which could trigger a much bigger conflict.

Dealing With the United States

In 2016, Duterte mentioned that the war games between the United States and the Philippines should soon be halted. However, since he came into power, it is evident that the PCG has had an unusual increase in maritime exercises together with foreign coast guards. Since Duterte assumed office, the Southeast Asian Cooperation and Training (SEACAT) has been hosted annually by the PCG, and was held for the fourth time this year. This weeklong activity has brought together foreign maritime law enforcers and navy officials from seven nations across the region. Though the United States Coast Guard spearheaded this, it is worth noting that the training is related to the capacity building of these maritime agencies in addressing nontraditional security threats, where all parties have common interest in preventing illegal fishing, smuggling, and drug trafficking among others.

Furthermore, this year alone, the dedicated two USCG ships for the Indo-Pacific Command participated in two different maritime exercises with the Philippines. Intriguingly, Duterte did not condemn the last maritime exercise, which included participation by the USCG Bertholf near the vicinity of Scarborough Shoal last May. And in October, the USCGC Stratton took part in the Maritime Training Activity Sama Sama with the maritime forces of Japan, the United States, and the Philippines, which was held near the contested waters of Palawan Island. However, since the objective of these exercises is to develop the capability of the PCG in dealing with non-state actors, Duterte never criticized the presence of the USCG cutters within the six-month duration of their stay.

Since Duterte came into power, the United States government has tremendously increased the number of PCG personnel who go to the United States for various trainings in different U.S. coast guard facilities. Before, only senior PCG officers were

allowed to attend training and seminars in the United States, but now even the low-ranking nonofficers are trained to enhance skills that are required on-board their vessels, like training for a machinery technician, electrician's mate, and boatswain's mate, among others.

Despite the apparent bid of Duterte to move away from the Americans, he has still allowed Washington to engage the PCG – albeit with the understanding that the capacity building is not intended to purely apply to the troublesome waters of SCS. Duterte has employed the PCG as a cushion to show that he is moving away from the U.S. influence in maritime security, but on the one hand, he is continuously engaging the Americans for maritime cooperation. He knew that this balance is necessary as he engages Beijing as a great power challenger.

Dealing With Japan

Though Duterte benefited from the ODA loans initiated by Aquino for the acquisition of the 10 44-meter patrol boats from Japan, it is necessary to highlight that he secured an additional two 92-meter offshore patrol vessels from Japan during his first meeting with Prime Minister Shinzo Abe in 2016. Since Duterte recognizes not just the importance of the sea trade routes of Japan but also its inclination to curtail the vast territorial claims of China, he was able to use these interests of Japan to the Philippines' own advantage.

To address the problems of armed robbery at sea and the movement of terrorists in the porous waters of Sulu and Sulawesi, Duterte was able to seek help from the Japanese government in providing 11 pieces of monitoring radar equipment for the PCG, which are to be installed strategically along the coastlines of Zambasulta area. Besides, Tokyo has also given the PCG a total of 13 high-speed boats, which can be used by the PCG's elite force in patrolling the treacherous waters in Mindanao.

Japan Coast Guard (JCG) vessels, since Duterte was elected, have been actively conducting maritime exercises with the PCG. As a matter of fact, the total number of sea drills that the JCG has had with the PCG in the past three years is equivalent to the total number of exercises that it had for the entire six-year incumbency of then-President Aquino. Remarkably, the JCG is actively engaging its Philippine counterparts not just for maritime exercises but even in bringing PCG officers to Japan for various trainings, from maritime pollution to maritime law enforcement and even disaster response.

Accordingly, Duterte takes care that his closeness with Japan and its steadfast support in developing the PCG could not be deduced as an alliance to restrain the creeping territorial claim of China. He has clearly stated from the very beginning of his presidency that the Philippine white hulls are badly needed in addressing domestic issues and nontraditional actors that have an impact in the region.

Dealing With the EU

Despite the threat of Duterte to expel the EU ambassadors from the Philippines, it has to be noted that the PCG's first offshore patrol vessel, delivered this year, was funded

by the French government. Moreover, four 24-meter patrol boats, also part of the loan agreement, were already delivered last year and are currently being utilized in patrolling the southern Philippines. Though this loan agreement was realized during the Aquino administration, it is essential to note that it was Duterte who approved the construction and acquisition of these vessels.

It is also worth emphasizing that most of the PCG's senior officers completed a master's degree through a scholarship at the World Maritime University in Malmo, Sweden. Notably, the number of students that the PCG has been sending there is gradually increasing. Further, PCG lawyers also have a funded scholarship to study at the International Maritime Law Institute in Malta.

This goes to show that the support that the EU had been extending to the PCG is still steady, despite the rhetorical narrative of Duterte in other issues. Duterte's recognition of the importance of the PCG in his maritime governance domestically gives the EU room to maintain cooperation that serves their interest in protecting and securing sea lines of communication.

Dealing With Southeast Asia

It is essential to understand that the coast guard development in the region is thriving across the board, especially for those claimant states in the South China Sea. These countries like Malaysia and Vietnam, in particular, have also learned that the deployment of gray ships in the disputed waters could be interpreted as a militarization of the South China Sea. These countries also recognized that the aggressive projection of power in these waters might also affect economic ties with China.

Though security cooperation is undoubtedly elusive in the region because of sovereign sensitivities and lack of trust due to territorial disputes, collaboration between their respective coast guards is easier to foster. Duterte understood that the maritime problems inherent in the porous region of Southeast Asia could better be addressed by coast guard organizations and not navies. More importantly, Duterte knows that coast guards perform complicated tasks that require technical skills, like oil spill response. This year, Duterte has allowed the PCG to conduct a multilateral maritime pollution exercise with the vessels of Japan Coast Guard and their Indonesian counterparts in Davao Gulf.

Further, the PCG was also given the green light by the Department of Foreign Affairs to engage Indonesia's Bakamla. Recently, a bilateral meeting between Bakamla and the PCG was held in Cebu City for the drafting of a memorandum of understanding on maritime law enforcement and maritime security. For the Philippine side, this is a welcome development to regulate the movement of people and cargo nearing the border of Indonesia. Remarkably, since the Gulf of Thailand Initiative (GOTI) was upgraded to the Southeast Asian Maritime Law Enforcement Initiative (SEAMLI) this year, the Philippines became one of its focal members. SEAMLI had its inaugural meeting in Bali, Indonesia, wherein the best practices for combatting illegal fishing and drug trafficking were discussed.

Due to the region's handicaps in building security cooperation, Southeast Asian countries have been innovative in utilizing white ships to foster collaboration. Since Duterte is aware of these idiosyncrasies, he positively relied on the PCG in engaging neighbor states to build cooperation. Moreover, he understood that the nontraditional security threats that the coast guards are addressing are of mutual interest in the region and will not disrupt economic development.

Conclusion

The reappointment of Admiral Joel Garcia to lead the coast guard indicates how Duterte wants the PCG to engage countries, not just for the purpose of strengthening the capability of the PCG but as a diplomatic instrument in managing the tension in the South China Sea. Notably, Garcia has the support of the Japanese government since he was elected as the chairperson of the Governing Council of the Regional Cooperation Against Armed Robbery and Piracy at Sea (RECAAP). At the same time, since he is the director of the U.S.-funded National Coast Watch Center (NCWC), it is also apparent that he has already entrenched his connections with the U.S. government. Lastly, his legal acumen in understanding the Law of the Sea reduces the risk that the military will inflate issues with regard to the territorial dispute not just with China but even with Southeast Asian countries.

The idea that the PCG will be placed under the proposed Department of Homeland Security is another significant indication as to how Duterte values the PCG. It is important to note that this idea originated from a bill filed by Senator Manny Pacquiao, who is also known to be a strong ally and supporter of Duterte. Relatedly, Duterte's trusted Interior Secretary Eduardo Año in September emphasized the importance of creating the DHS, which would oversee various law enforcement bodies, to include the PCG. Arguably, the transfer of the PCG to another department hints that Duterte plans to pole-vault its relevance and development in the next coming years.

In conclusion, Duterte is continuously recalibrating his use of the coast guard to a different level. However, in contrast to what other maritime security scholars argue, this is not aimed toward using the PCG in gray zone tactics; instead, it hinges on the interest of the state to negate armed conflict. On the one hand, Duterte uses the PCG to consolidate support for cooperation in addressing nontraditional security threats inclusively, but on the other hand, his objective is to support his own interests in addressing domestic issues and for the Philippines not to be entangled in a great power rivalry.

Source: thediplomat.com; 23 December 2019

Work on U.S. base at Henoko in Okinawa to cost nearly triple initial estimate

Building the replacement facility for the relocation of a U.S. military base in Okinawa Prefecture is now expected to cost ¥930 billion, far exceeding its initial ¥350 billion estimate, and be delayed several years, the Defense Ministry said Wednesday.

The ministry has now estimated the land reclamation work will take nine years and three months, nearly twice as long as originally expected.

It will now take 12 years to complete the project of relocating the operations of U.S. Marine Corps Air Station Futenma from a crowded residential area of Ginowan to the less populated coastal zone of Henoko.

That means the return of the land in the city of Ginowan is likely to be delayed until some point in the 2030s or later, compared with fiscal 2022 or later as set out under an agreement between Japan and the United States in 2013.

The new estimate was presented at a meeting of experts on Wednesday. Chief Cabinet Secretary Yoshihide Suga told reporters Thursday that steadily carrying out the relocation work would lead to the earliest full return of Futenma and removal of danger.

The delay is expected to be met with strong local opposition.

“This kind of public works project should be suspended immediately,” Okinawa Gov. Denny Tamaki, a vocal opponent of the relocation plan, told reporters Thursday at the Okinawa Prefectural Government’s headquarters in Naha. “We have reiterated previously that the works at Henoko would take at least 13 years and cost ¥2 trillion or more.”

According to the current plan, the construction for the replacement facility was supposed to take five years to finish and cost ¥350 billion. But additional work is necessary to reinforce the weak seafloor in an area where the land reclamation work is due to be carried out off the coast of Henoko in the city of Nago. After the construction is completed, more preparations such as moving and procuring equipment will be necessary before the relocated base can begin operations, according to the ministry.

The ministry began soil placement work off Henoko in December last year. However, it later found some of the ground in the area to be too soft.

The ministry now wants to install 71,000 support piles to bolster the weak ground. It plans to file an application to change its construction plan with the Okinawa Prefectural Government in the new year.

"We will aim to move ahead with the (additional) work smoothly," Defense Minister Taro Kono told reporters Wednesday.

But Tamaki is unlikely to approve the change. Deputy Gov. Kiichiro Jahana told reporters Wednesday that this is a good opportunity for the central government to re-examine the base relocation plan.

The plan was delayed in 2015 when Takeshi Onaga, the governor of Okinawa at the time, revoked his predecessor's permission for the land reclamation. The decision led to court disputes between the central and Okinawa governments.

The project to move the Futenma base originated in an agreement reached between Tokyo and Washington in 1996. But local residents have long hoped for the base to be moved outside of the island prefecture, which is home to about 70 percent of the total area of land exclusively used by U.S. military forces in Japan.

Still, the central government has maintained that the current relocation plan is "the only solution" for removing the dangers posed by the Futenma base without undermining the deterrence provided by the Japan-U.S. security alliance.

Japan and the United States plan to reclaim about 160 hectares, including the sea area with soft ground, for the replacement facility and build two runways in a V configuration.

A prefectural referendum on the transfer plan was held in February, with more than 70 percent voting against it.

Tamaki said in an interview with Kyodo News in March that it was impossible to conduct such seafloor reinforcement work and he has no plan to approve the additional work.
Source: japantimes.o.jp; 26 December 2019

Bangladesh Navy Acquires Two Ex-Plan Frigates

The Bangladesh Navy recently took delivery of two decommissioned vessels formerly operated by China's People's Liberation Army Navy (PLAN).

The 112- by 12-metre Type 053H3 or Jiangwei II-class frigates Jiaxing (pictured) and Lianyungang will be recommissioned into Bangladeshi service as BNS Umer Farooq and BNS Abu Ubaidah, respectively.

Each vessel's armament includes a 100-millimetre naval gun, anti-ship missiles, surface-to-air missiles (SAMs), and 37-millimetre autocannons.

Source: bairdmaritime.com; 27 December 2019

China just added a second aircraft carrier to its rapidly growing navy

- Ryan Pickrell

China's navy is growing at a rapid rate. On Dec. 17, 2019, China commissioned its first homegrown aircraft carrier, the Shandong, into service as part of the People's Liberation Army Navy, Chinese state media reported.

The new carrier entered service at the naval port in Sanya on the South China Sea island of Hainan. The ship bears the hull number 17.

China joins only a handful of countries that maintain multiple aircraft carriers, but its combat power is still limited compared with the UK's F-35B stealth-fighter carriers and especially the 11 more advanced carriers fielded by the US.

The Shandong is the Chinese navy's second carrier after the Liaoning, previously a rusty, unfinished Soviet heavy aircraft-carrying cruiser that was purchased in the mid-1990s, refitted, and commissioned in 2012 to serve as the flagship of the Chinese navy.

The Shandong is an indigenously produced variation of its predecessor. It features improvements like an upgraded radar and the ability to carry 36 Shenyang J-15 fighters, 12 more than the Liaoning can carry.

Construction of a third aircraft carrier is believed to be underway at China's Jiangnan Shipyard, satellite photos revealed earlier this year.

China's first and second carriers are conventionally powered ships with ski-jump-assisted short-take-off-barrier-arrested-recovery launch systems, which are less effective than the catapults the US Navy uses on its Nimitz- and Ford-class carriers.

The third aircraft carrier is expected to be a true modern flattop with a larger flight deck and catapult launchers.

"This design will enable it to support additional fighter aircraft, fixed-wing early-warning aircraft, and more rapid flight operations," the US Department of Defense wrote in its most recent report on China's military power.

The US Navy has 10 Nimitz-class carriers in service, and it is developing a new class of carrier. The USS Gerald R. Ford is undergoing postdelivery tests and trials, and the future USS John F. Kennedy, the second of the new Ford-class carriers, was recently christened at Newport News Shipyard in Virginia.

This article originally appeared on Business Insider. Follow @BusinessInsider on Twitter.

Source: wearethemighty.com; 18 December 2019

Myanmar Navy commissions its first LPD amphibious assault ship

The Myanmar Navy (MN) has commissioned its first-ever landing platform dock (LPD) amphibious assault ship.Named UMS Mottama (with pennant number 1501), the 122 m-long South Korean-built ship entered service in a high-profile ceremony held on 24 December at a Yangon naval wharf to mark the 72nd anniversary of the MN.

Presided over by Myanmar Armed Forces' (Tatmadaw's) commander-in-chief, Senior General Min Aung Hlaing, and MN commander Admiral Tin Aung San, the ceremony also involved the induction of a new coastal transport ship, UMS Myitkyina , along with two 27 m-long fast patrol boats, two seagoing tugs, and two 20 m-long riverine patrol vessels, according to the Office of the Commander-in-Chief of Defence Services.

Source: janes.com; 26 December 2019

Mexican Navy's POLA-class ARM Reformador Aces Sea Trials

Mexican Navy's POLA-class ARM Reformador, the Mexican equivalent of Damen's SIGMA Frigate 10514, has completed sea trials, Dutch shipbuilding group Damen said.The program of sea trials included testing of platform and combat systems in addition to training of Mexican Navy crews.

Damen said that the completion of these sea trials indicates how the project as a whole is progressing: on budget and actually a few weeks ahead of the contracted schedule.

ARM Reformador started modular construction in August 2017 following a contract signing between Mexico and Dutch shipbuilder Damen. The OPV was built in six modules, two at Damen Schelde Naval Shipbuilding (DSNS) in Vlissingen, the Netherlands, and four in Mexico.

Reformador will carry Harpoon Block II anti-ship missiles, Rolling Airframe Missile (RAM) surface-to-air missiles, MK 54 Mod 0 lightweight torpedoes and an 8-cell MK56 VLS launcher along with Evolved Seasparrow Missiles (ESSM). The vessel will also be equipped with Indra's RIGEL electronic defense system which will provide simultaneous jamming and deception countermeasures for multiple active threats in addition to detecting and analyzing radar signals in the vessel's mission environment.

Damen has built up a strong relationship with the Mexican Navy over the last decade. This has resulted in the construction and delivery of more than ten naval vessels of various designs.

Damen has also worked closely with yards like the ASTIMAR 20 naval shipyard in Salina Cruz, Mexico, where the ARM Reformador has been built."This project is having a very positive impact on the local economy. More than 70% of the labour is being realised in Mexico – creating jobs and enabling local companies to develop their skills," notes Horacio Delgado, Damen's commercial manager for Mexico. "Thanks to

our excellent cooperation with the Mexican Navy, we are ensuring that this vessel is being built in Mexico, by Mexicans, and for Mexicans."

Source: turkishmaritime.com; 30 December 2019

Global shipping bodies propose $5bn decarbonisation R&D fund

- Jason Jiang

Attempting to keep the general public and regulators at bay, the world's top shipowning bodies today preempted the growing environmental focus on shipping by coming up with their own concept for a multi-billion dollar research and development fund to cut emissions.

The global maritime transport industry, via eight lobby groups, has submitted a proposal to form the world's first collaborative shipping R&D programme to help eliminate CO_2 emissions from international shipping.

The proposal includes the setup of a new non-governmental R&D organisation called the International Maritime Research and Development Board (IMRB) to pave the way for the decarbonisation of shipping.

The IMRB will be financed by shipping companies worldwide via a mandatory R&D contribution of $2 per tonne of marine fuel purchased, which will generate a reported approximate $5bn in core funding over a 10-year period.

The proposal will be discussed by governments in London at the headquarters of the International Maritime Organization (IMO)at the next meeting of the Marine Environment Protection Committee (MEPC) in March 2020 .

“The coalition of industry associations behind this proposal are showing true leadership. The shipping industry must reduce its CO2 emissions to meet the ambitious challenge that the International Maritime Organization has set. Innovation is therefore vital if we are to develop the technologies that will power the 4th Propulsion Revolution. This proposal is simple, accountable and deliverable and we hope governments will support this bold move,” said Esben Poulsson, chairman of the International Chamber of Shipping (ICS).

Guy Platten, secretary general of ICS, cited the teenage Swedish environmental campaigner, Greta Thunberg, in stressing the importance of today’s announcement and why global shipping ought to sign up to the proposal with haste.

“We must not leave it to others to carry the burden of addressing the climate crisis. Nor will we ask others to decide the future of maritime. We embrace our responsibility, and we ask the world’s governments to support our efforts,” Platten said. “Greta Thunberg is right to say that creative accounting and clever PR often lie behind supposed commitments to sustainability, but our plans are transparent, and our regulator has teeth. Now we ask the wider shipping community for their blessing. Change on this scale is difficult and often daunting. But in this case, it could not be more necessary.” As well as ICS, the proposal has been submitted by BIMCO, Cruise Lines International Association, Intercargo, Interferry, Intertanko, the International Parcel Tankers Association and the World Shipping Council.

Today’s announcement has not received universal acclaim with a host of NGOs arguing that the $5bn figure is still too small. Transport & Environment, a Brussels-based NGO, claimed the $2 per tonne of fuel proposed figure is 42 times less than current CO2 prices in Europe.

Source: splash247.com; 18 December 2019

Today's Logistics Report: Scrubbing Ship Emissions: Oversupplied with Scrap; Manufacturing Customers

- Paul Page

The maritime industry's impending new anti-pollution rule will echo across shipping competition over the next few years. The requirement to slash sulfur emissions will open a steep divide in operating costs for ship operators, the WSJ Logistics Report's Costas Paris writes, with companies that have chosen "scrubber" exhaust systems likely to face far lower fuel costs. That's because analysts estimate the new low-sulfur fuel aimed at meeting the environmental mandate will cost around 30% more than conventional fuel. Vessels that are outfitted with scrubbers can continue using that heavy bunker fuel, potentially changing financial calculations for shipping customers in some markets. The gap is part of the broader economic impact operators across transportation networks are wrestling with as regulators address heavy pollution in freight operations. The maritime world's scrubber option is a rare instance where costs may be sharply different across the competitive field.

ECONOMY & TRADE

The global trash export trade is crashing and the results are piling up around the world. China's decision to heavily restrict scrap imports has prompted countries including India, Vietnam and Indonesia to erect their own barriers, the WSJ's Saabira Chaudhuri reports, triggering a seismic shift in how the world deals with its waste. The recycling industry is in tatters amid crumbling scrap prices, and local governments that manage the flow into recycling's reverse supply chain haven't caught up. The heaps of trash are growing: U.S. scrap exports of plastic to China are down 89% from 2017 levels, while mixed paper exports are off 96%. U.S. plastic scrap exports to all countries are down 64%. It has become an international issue. Japan has stockpiled 500,000 tons of plastic waste while waiting for a new market to develop, while European countries are burning as much waste as they recycle.

SUPPLY CHAIN STRATEGIES

Pittsburgh International Airport is getting more closely involved in manufacturing after struggling to build up its shipping volumes. The airport is developing a manufacturing hub near its passenger terminal, the WSJ's Keiko Morris reports, part of a $1.1 billion modernization plan that officials hope can boost a facility that's been shunted to the side of the country's transportation and distribution maps. In the first phase, airport officials are planning a campus for manufacturers that use 3-D printing. The airport is offering resources including shared storage facilities and proximity to air shipping, which could cut shipping costs. The airport has been looking for tenants since US Airways scaled back its Pittsburgh hub before the airline was merged into American Airlines Group Inc. Pittsburgh has fallen short in luring new air operators since then, but bringing in manufacturers that use air services could make the site more attractive.

FIRST LIQUID HYDROGEN CARRIER SETS SAIL IN JAPAN

If liquid hydrogen one day becomes a commodity on par with petroleum gasoline, Kawasaki Heavy Industries will be leagues ahead of the competition with its new carrier ship meant to transport the liquified gas—the first of its kind. Kawasaki launched the ship on December 11 at Kobe Works, one of its shipbuilding yards in Japan.

The ship, called the Suiso Frontier, is owned by CO2-free Hydrogen Energy Supply-chain Technology Research Association (HySTRA). The Tokyo-based association is working to establish and demonstrate technologies necessary for commercializing the liquid hydrogen supply chain by 2030.

At about 380 feet in length, the Suiso Frontier is quite literally HySTRA's largest investment toward that mission yet. The irony, though, is that the ship runs on diesel fuel.

HOW DOES LIQUID HYDROGEN WORK?

Liquid hydrogen is pretty much what it sounds like: the element hydrogen in a liquid form. To change the gas—which occurs naturally as H2—into a liquid, hydrogen must first be cooled to cryogenic temperatures.

Naturally occurring gaseous hydrogen must be cooled to below −253°C (−423°F) to liquify it. Then, it can be stored at a plant in large, insulated tanks like the one pictured below, built by Linde Kryotechnik AG in Switzerland, which runs a liquid hydrogen production plant.

LINDE KRYOTECHNIK AG, SWITZERLAND

Liquid hydrogen is desirable because it doesn't emit carbon dioxide or other greenhouse gases when used as an energy source. Experts believe it will be used in power generation, fuel cell vehicles, and more.

But the liquefaction process is expensive using today's technology. The production of liquid hydrogen actually consumes 30 percent of the hydrogen's own energy content. Plus, some hydrogen will be lost each time through evaporation, also known as "boil-off." That's due to the use of small storage tanks with significant surface-to-volume ratios. These economy-of-scale issues are the sorts of problems HySTRA wants to solve.

Since Kawasaki is planning to install a 1,250 m3 vacuum-insulated, double-shell-structure liquefied hydrogen storage tank (which is currently under production), it should be able to reduce the surface-to-volume relationship, leading to less boil-off. The expected installation of the storage tank is late 2020.

MORE HYDROGEN POWER

Once complete, the ship will be used as a tech demonstration in Japan to usher in the liquid hydrogen economy. Currently, Kawasaki has a pilot program in place with Iwatani Corporation, Shell Japan, and J-Power to ship liquid hydrogen nearly 5,600 miles between the south coast of Australia and an unloading terminal in Kobe, Japan that is still under construction.

The liquid hydrogen will be produced in Latrobe Valley, Victoria through a brown coal gasification process. About 160 tons of coal will be turned into three tons of hydrogen, which will then be transported by truck some 93 miles to a port, where the Suiso Frontier will pick up the liquid hydrogen and transport it to Japan.

Source: wsj.com; 20 December, 2019

First Liquid Hydrogen Carrier Sets Sail in Japan

- Courtney Linder

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Ship Specs

The following ship specifications are approximates, as the figures have been converted from the metric system to the nearest whole number.

- Overall length: 381 feet

- Length between perpendiculars (the length of the ship along the waterline from the surface of the main bow to the surface of the main stern): 358 feet

- Molded breadth (the max breadth of the ship measured to the molded line of the frame in a metal ship): 62 feet

- Molded depth (the vertical distance from the top of the keel to the top of the upper deck beams amidships at the gunwale, or the upper edge of the side of a boat): 35 feet

- Molded draft (measured from the base line to the summer load line at the midship section): 15 feet

- Gross tonnage: 8,000 tonnes

- Tank cargo capacity: 44,140 cubic feet

- Propulsion system: Diesel electric

- Sea speed: 13 knots

- Capacity: 25 people

Source: popularmechanics.com; 17 December 2019

Oman, India sign deal on enhancing maritime cooperation

-Xinhua

Oman and India signed an agreement on enhancing cooperation in the field of maritime transport and ports.

The agreement was signed by Omani Undersecretary of the Ministry of Transport Said bin Hamdoon Al-Harthy and Indian Ambassador to Oman Munu Mahawar, the Omani Ministry of Transport said in a statement.

The deal aims to stimulate growth in maritime navigation between the two countries, and promote the relations between their companies and institutions on shipping and maritime transport, the statement said.

It will facilitate the establishment of joint projects in the areas of maritime transport, ship building, repair and recycling, and marine information technology applications including simulation development, port facilities and related marine activities, it said.

The deal comes within the framework of enhancing Oman-India cooperation to strengthen the existing economic ties and create the foundation for increasing maritime cooperation to achieve common development that serves the benefits of the two countries, the statement added.

Source: hellenicshippingnews.com; 27 December 2019

NY/NJ Port Stakeholders Form Coalition Against Cyber Threat

- World Maritime News

The Area Maritime Security Committee (AMSC) for the Port of New York and New Jersey has formed a new partnership to address the growing cybersecurity challenges.

The US Coast Guard and AMSC for the Port of New York and New Jersey have collaborated to implement a framework to enhance maritime cybersecurity and port resilience – one of the most challenging security issues facing the global marine transportation system (MTS).

The coalition is bringing together leaders across industry sectors to lend their expertise to the problem. Specifically, membership includes representatives from Rutgers University, Stevens Institute, and major segments of the maritime industry.

The end result of their work is an agreement by all members of the AMSC to share cyber threat information and participate in routine cyber exercises. The plan also establishes a Cyber Advisory Committee, comprised of cyber and industry experts ready to assist in a cyber-incident response, and creates an awards program to recognize port partners who have taken proactive steps to make cybersecurity a top priority.

"The fact that port partners across different industry sectors came together to develop this plan speaks to the serious nature of the cyber threat and is a testament to the shared equities at stake," Capt. Jason Tama, Coast Guard Captain of the Port and Federal Maritime Security Coordinator, said.

Recent cyber attacks have significantly impacted the maritime industry. Incidents including the NotPetya attack of 2017 which wiped out the global network of A.P. Moeller-Maersk, the 2018 targeted ransomware attack at the Port of San Diego, and the February 2019 disabling of a cargo vessel's computer network while inbound to the Port of New York and New Jersey each highlighted some of the cyber threats and vulnerabilities facing the maritime sector.

These incidents, along with the industry's rapidly increasing reliance on automation and information and operational technology, have made cybersecurity a top priority for the AMSC, the USCG said in a statement.

"Cyberattacks are a 21st century reality and an ever-present operational risk that we must be ready for," Jeff Milstein, of Vitol vessel operations, one of the world's largest energy traders, and former chair of the AMSC, commented.

"We have witnessed first-hand the disruption that a cyber-incident can cause in our nation's ports, and we're committed to taking action to minimize those risks."

"The financial sector has a vested interest in the maritime industry's ability to deliver goods and services to the U.S. ports," Frank Vesce, vice president of cybersecurity for Goldman Sachs and a member of the AMSC's Executive Steering Committee, noted.

"A disruption to cargo, oil and gas, or passenger ferries could potentially impact the markets, especially commodities. Raising awareness and helping prepare the port partners to stay ahead of cyber threats benefits everyone, globally."

The AMSC for the Port of New York and New Jersey plans to recognize inaugural award recipients and conduct its next port-wide cyber exercise in 2020.

Source: offshore-energy.biz; 20 December 2019

BLUE ECONOMY AND MARINE ENVIRONMENT

Seafood trade at risk as Californian coast acidifies much faster than rest of oceans

- Kendra Pierre-Louis

California's coastal waters are acidifying twice as fast as the rest of the oceans, a new study has shown. And some of California's most important seafood — the spiny lobster, the market squid and the Dungeness crab — are becoming increasingly vulnerable.

The carbon dioxide emissions that contribute to the planet's rapidly warming climate are also changing the chemistry of the world's oceans, which have absorbed roughly 27 per cent of the carbon dioxide emitted worldwide.

Ocean water is ordinarily slightly basic, or alkaline, but is becoming more acidic as it absorbs carbon dioxide. This can harm marine life, especially shellfish, because they struggle to make their shells in acidic waters.

Emily Osborne, a scientist in the National Oceanic and Atmospheric Administration's ocean acidification program, and her colleagues studied the fossil record of planktonic foraminifera — tiny simple organisms, which, like shellfish, build their shells from calcium carbonate. They have been around for millions of years, but each individual organism only lives for roughly a month.

"They are creating this super-tight snapshot of what the ocean looks like for a month period of time," said Ms Osborne, a lead researcher on the study, published in Nature Geosciences.

California's fisheries account for slightly more than 10 per cent of the nation's seafood production.

An earlier study compared the effect of carbon dioxide emissions on immature shellfish in waters with carbon dioxide at preindustrial levels versus water with carbon

dioxide at levels with concentrations expected by 2100. It found that the latter had shells that were “malformed and eroded”.

There are a few reasons shellfish struggle in a more acidic ocean. The first involves calcium, which, in the form of calcium carbonate, is a building block that helps create their protective shells. But in order to make calcium carbonate, shellfish need access to a kind of carbon known as carbonate ion. As the oceans absorb more carbon dioxide, there is more carbon than ever — but more of it is bicarbonate, not carbonate ion.

“It’s a shift in what is usable by the organisms,” Ms Osborne said. “So that they have fewer of those building blocks that they can actually utilise.”

Another reason is that “it could also be that they make a shell that’s weaker or that can be more easily corroded by the ocean chemistry or even weaker so it can be more easily drilled or crushed by a predator,” said Gretchen Hofmann, a marine biologist at the University of California, Santa Barbara, who was not involved in this study.

By analysing the shell weights of almost 2,000 fossil shells from over the past century, the researchers found a 20 per cent reduction in calcification among surface-dwelling foraminifera.

“I could just watch the shells literally getting thinner as I moved up through the record and got closer to the present day,” Ms Osborne said.

The ocean currents off California tend to recirculate colder, more acidic water from deeper in the ocean to the surface, a process known as upwelling. As a result, California’s waters were already more acidic than many other areas of the oceans. Climate change is exacerbating the effect, raising the question of how marine life will fare over the long term.

“We know that evolution works, and every creature has some degree of plasticity in them,” Ms Hofmann said. But, she added, “the environment is changing so fast that we’re probably outstripping the role that it can play”.

Source: independent.co.uk; 27 December 2019

Marine pollution: thousands of serious offences exposed in global operation

A global operation led by INTERPOL involving 61 countries and regional law enforcement partners has identified thousands of illicit activities behind severe marine pollution.Codenamed 30 Days at Sea 2.0, the month-long (1-31 October) operation gathered more than 200 enforcement authorities worldwide for concerted action across all continents.

Illustrating the severe global extent of marine pollution crime, preliminary operational results have already revealed more than 3,000 offences detected during 17,000 inspections. The offences - such as illegal discharges at sea, in rivers, or in coastal areas

- were found to have been committed primarily to avoid the cost of compliance with environmental legislation.

Through boat patrols and helicopter surveillance, Nigerian authorities identified several oil leakages polluting the country waterways. Through boat patrols and helicopter surveillance, Nigerian authorities identified several oil leakages polluting the country waterways.

Safeguarding sustainable development and public health

As part of Operation 30 Days at Sea 2.0, INTERPOL hosted an Operational Command Centre (OCC) in Singapore to focus on the illegal trade in plastic waste, a key threat to marine environment security.The OCC brought key countries together to trigger investigations into cases of illegal export or import of plastic waste.The operation revealed widespread illegal marine pollution activities, including here in Bosnia Herzegovina where officers remove an illegal fishing net from local watersThe operation revealed widespread illegal marine pollution activities, including here in Bosnia Herzegovina where officers remove an illegal fishing net from local waters "INTERPOL has a powerful role in coordinating effective global multi-agency action to help countries tackle this serious form of pollution crime."We have already seen significant results from the action days but the work will and must continue to identify those behind these crimes who are making a profit at the cost of our environment," added the head of INTERPOL.

The operation focused on illegal discharges at sea, in rivers, or in coastal areas, such as here in Spain where the Guardia Civil takes samples from local waterways. The operation focused on illegal discharges at sea, in rivers, or in coastal areas, such as here in Spain where the Guardia Civil takes samples from local waterways.

Transnational and interagency cooperation: a stronger response

The European leg of 30 Days at Sea 2.0 was coordinated in cooperation with Europol and Frontex - the European Border and Coast Guard Agency."With incidents of maritime pollution increasing significantly over the last decade, and as Europol considers maritime pollution to be a priority environmental crime area, we are proud to coordinate this operation within the EU Member States in active cooperation with our colleagues from INTERPOL and Frontex," said Europol Executive Director Catherine De Bolle."The nature of maritime pollution requires a coordinated and multi-agency approach on a global scale : the impressive results of the second edition of 'Operation 30 Days at Sea' illustrate once more what can be achieved when law enforcement agencies work together with the support of the EU and global organisations," added the Europol Chief.

Preliminary operational results have already revealed more than 3,000 offences detected during 17,000 inspections, such as here in Germany.Preliminary operational results have already revealed more than 3,000 offences detected during 17,000 inspections, such as here in Germany."We are proud that we helped track down severe maritime pollution as part of Operation 30 Days at Sea 2.0 because we take the protection of our seas very seriously," said Frontex Executive Director Fabrice Leggeri."Frontex helped monitor and patrol the Mediterranean with its various services and planes and ships taking part in Frontex maritime joint operations," added Mr Leggeri.The operation also served to trigger new and stronger working partnerships between national agencies in some countries, which in turn boosted operational results and sustainable cooperation mechanisms.The operation gathered more than 200 enforcement authorities worldwide, such as here in Bosnia and Herzegovina where officers inspect a company suspected of illegal discharge into local rivers. The operation gathered more than 200 enforcement authorities worldwide, such as here in Bosnia and Herzegovina where officers inspect a company suspected of illegal discharge into local rivers.

In Nigeria, INTERPOL's National Central Bureau in Abuja coordinated the action of 18 authorities through a task force created to conduct inspections into illegal oil refineries, found responsible for severe oil leakages polluting the country's waterways. Information exchanged between Malaysia and The Netherlands permitted authorities to identify the source country of seven containers of plastic waste being illegally shipped into Malaysia from Belgium via Hong Kong, and to initiate their repatriation.As part of the operation, some countries increased collective commitment to tackling plastic pollution crime through awareness campaigns in addition to enforcement actions.

Ecuador conducted a plastic waste collection campaign in the World Heritage site of the Galapagos Islands, resulting in the removal of more than 600 kg of refuse.Ecuador conducted a plastic waste collection campaign in the World Heritage site of the Galapagos Islands, resulting in the removal of more than 600 kg of refuse.Ecuador conducted a plastic waste collection campaign in the World Heritage site of the Galapagos Islands, resulting in the removal of more than 600 kg of refuse.
Indonesian authorities launched a public awareness campaign on national law enforcement's newly strengthened approach to tackling marine pollution.INTERPOL is now working with more than 100 enforcement agencies worldwide on investigations triggered by Operation 30 Days at Sea 2.0.

Source: Interpol.int; 16 December 2019

Consider Marine Life When Implementing Offshore Renewable Power

With countries such as Iceland, Costa Rica, New Zealand, and Norway adopting green energy practices, renewable energy now accounts for a third of the world's power.As this trend continues, more and more countries are looking to offshore energy sources to produce this renewable energy. In an Opinion publishing December 17 in the journal Trends in Ecology and Evolution, researchers identify situations where green technology such as wind turbines, wave energy converters, and other marine renewable energy devices (MREDs) have had negative consequences on marine life.

While the researchers don't want to slow down active responses to climate change, they do encourage those making the decision to implement MREDs into marine habitats to consider the impact of this technology, such as head trauma and hearing loss, on marine animals before beginning construction."When people put a wind farm in their back yard, neighbors might complain that it's ugly and want it moved," says first author Andrew Wright, an ocean and ecosystem scientist at the Natural Sciences and Engineering Research Council of Canada. "So, they think, why not put it offshore where we can't see it and then there's no problems? The assumption there is that it's just an aesthetic problem. But there's a lot more to it."

Green technology used on land, such as the wind farms mentioned by Wright, has had negative impacts on birds and bats, who collide into the massive spinning blades during migration or while on their night flights. Similarly, when spinning objects like wave energy converters are built under water, marine animals like dolphins and porpoises can be hit by the turning blades, causing blunt-force trauma.MREDs are not only physically dangerous. They're also noisy to construct, which can disrupt the echolocation some marine mammals use for hunting and navigating.

For example, the Taiwanese white dolphin, an endangered species that makes its home in a densely populated and heavily industrialized region, is facing extensive windfarm developments in its range. Unable to escape the construction noise in their increasingly shrinking habitat, the dolphins will likely suffer from hearing loss and chronic stress."Installing renewable energy sources in the ocean is a loud operation. I would compare building MREDs to living next to a construction site. Think about what it'd be like to live next to all those jackhammers and power drills," says Wright. "I don't think a lot of people appreciate that when it's offshore, it may be silent for humans, but if they stick their head under water where the animals live, it's much, much louder."
Even after construction is finished, the noise produced by MREDs can still be harmful. While some technologies are relatively quiet, others can cause low-frequency (i.e., pitch) sounds that echo through the water, obscuring the sounds of animals such as the critically endangered North Atlantic right whales, who, like dolphins, rely on their ears to explore their world."Renewable energy doesn't run out like fossil fuels, so it's easy to be convinced that it's free energy," Wright says. "But it can come at the cost of marine mammals and other marine life if we don't consider them when implementing new technologies."

Wright hopes this paper will lead to just that: consideration. He and his co-authors do support the implementation of MREDs, as long as the lives of both humans and animals are considered first. For instance, building MREDs in a location that's home to species with large populations or species that can evacuate when needed is likely

going to have only a minor impact. When dealing in isolated locations with smaller populations of marine mammals, it becomes a lot more complicated. "We don't want to slow anything down. We just want everyone to be a bit more strategic in their efforts," says Wright. "We all agree that climate change is a big problem that needs solutions, but it's important to make sure that the solutions we implement don't have too much collateral damage along the way."

Source: ecomagazine.com; 17 December 2019

Huge amounts of greenhouse gases lurk in the oceans, and could make warming far worse

- Todd Woody

Scientists are finding hidden climate time bombs—vast reservoirs of carbon dioxide and methane—scattered under the seafloor across the planet.Caps of frozen CO_2 or methane, called hydrates, contain the potent greenhouse gases, keeping them from escaping into the ocean and atmosphere. But the ocean is warming as carbon emissions continue to rise, and scientists say the temperature of the seawater surrounding some hydrate caps is within a few degrees of dissolving them.That could be very, very bad. Carbon dioxide is the most common greenhouse gas, responsible for about three-quarters of emissions. It can remain in the atmosphere for thousands of years. Methane, the main component of natural gas, doesn't stay in the atmosphere as long as CO_2—about 12 years—but it is at least 84 times more potent over two decades.

The oceans absorb a third of humanity's carbon dioxide emissions and 90 percent of the excess heat generated by increased greenhouse gas emissions; it's the largest carbon sink on the planet. If warming seas melt hydrate caps, there's a danger that the oceans will become big carbon emitters instead, with grave consequences for climate change and sea level rise."If that hydrate becomes unstable, in fact melts, that enormous volume of CO_2 will be released to the ocean and eventually the atmosphere," says Lowell Stott, a paleoceanographer at the University of Southern California.

The discovery of these deep ocean CO_2 reservoirs, as well as methane seeps closer to shore, comes as leading scientists warned this month that the world is now surpassing a number of climate tipping points, with ocean temperatures at record highs.The few CO_2 reservoirs that have been found so far are located adjacent to hydrothermal vent fields in the deep ocean. But the global extent of such reservoirs remains unknown."It's a harbinger, if you will, of an area of research that is really important for us to investigate, to find out how many of these kinds of reservoirs are out there, how big they are, and how susceptible they are to releasing CO_2 to the ocean," Stott says. "We have totally underestimated the world's total carbon budget, which has profound implications."

Jeffrey Seewald, a senior scientist at Woods Hole Oceanographic Institution who studies the geochemistry of hydrothermal systems, questioned the magnitude of hydrate-capped reservoirs."I don't know how globally significant they are as most hydrothermal systems that we know of are not associated with large accumulations of carbon, though there's still a lot to be explored," he says. "So I would be a little careful

about suggesting that there are significant accumulations of CO2 that are just waiting to be released."

Hydrothermal vent scientist Verena Tunnicliffe of the University of Victoria in Canada notes that data has been collected at just 45 percent of known hydrothermal sites and most are not well surveyed.Other scientists are far more concerned about potential climate time bombs much closer to home—methane hydrates that form on the shallower seafloor at the margins of continents.

For one thing, there apparently are a lot of them. Between 2016 and 2018, for instance, researchers at Oregon State University and the National Oceanic and Atmospheric Administration (NOAA) deployed a new sonar technique to discover 1,000 methane seeps off the Pacific Northwest coast of the United States.In contrast, just 100 had been identified between 2015 and the late 1980s, when scientists first stumbled across methane deposits. There are likely many more to be located, given that as of 2018, researchers only had mapped 38 percent of the seafloor between Washington State and Northern California.

"Because a lot of methane is stored on the continental margins in relatively shallow water, the effects of ocean warming will get to it sooner and potentially destabilize the methane hydrates that are present in the sediment," says Dave Butterfield, a senior research scientist and hydrothermal vent expert at NOAA's Pacific Marine Environmental Laboratory in Seattle.He noted that these methane seeps likely constitute a far larger global reservoir of greenhouse gases than pools of carbon dioxide under the deep ocean floor.

"This idea is that if you destabilize the methane hydrates, that methane would be injected into the atmosphere and cause more extreme global warming," says Butterfield, who in 2003 was part of an expedition that discovered a hydrate-capped reservoir of liquid CO2 at a hydrothermal system on the Mariana Arc in the Pacific.Stott and colleagues earlier this year published a paper presenting evidence that the release of carbon dioxide from hydrothermal seafloor reservoirs in the eastern equatorial Pacific some 20,000 years ago helped trigger the end of the last glacial era. And in a new paper, Stott finds geological indications that during the end of Pleistocene glaciations, carbon dioxide was released from seafloor reservoirs near New Zealand.

The spike of atmospheric temperatures during previous periods when ice ages were ending mirrors today's rapid rise as a result of greenhouse gas emissions. While the oceans have long been suspected as significant contributors to ancient global warming, the prevailing consensuswas that the CO2 was released from a layer of water resting deep in the ocean. But research from Stott and other oceanographers over the past decade points to a geological culprit."Even if only a small percentage of the unsampled hydrothermal systems contain separate gas or liquid CO2 phases it could change the global marine carbon budget substantially," Stott and his co-authors write of present-day carbon reservoirs.

Take the hydrate-capped liquid CO2 reservoir found by Butterfield and his colleagues on a volcano in the Pacific. They calculated that the rate that liquid CO2 bubbles were escaping the seafloor equalled 0.1 percent of the carbon dioxide emitted on the entire Mid-Ocean Ridge. That may seem like a small amount, but consider that the CO2 is

escaping from a single, small site along a 40,390 mile-long system of submerged volcanoes that rings the planet.“That's an astonishing number,” says Stott.

Scientists believe such reservoirs can be formed when volcanic magma deep beneath the ocean floor interacts with seawater to produce superheated fluids rich in carbon or methane that rise toward the surface. When that plume collides with cooler water, an ice-like hydrate forms that traps the carbon or methane in subsurface sediments.The risk the reservoirs pose depends on their location and depth. For example, rising ocean temperatures could in coming years melt a hydrate capping a lake of liquid CO_2 in the Okinawa Trough west of Japan, according to Stott. But the absence of upwelling currents there means a mass release of carbon dioxide at a depth of 4,600 feet would likely acidify the surrounding waters but not enter the atmosphere for an extremely long time.

Stott notes that finding CO_2 and methane reservoirs in the deep ocean is a “needle and haystack situation.”But in a paper published in August, scientists from Japan and Indonesia revealed that they had detected five large and previously unknown CO_2 or methane gas reservoirs under the seafloor in the Okinawa Trough by analyzing seismic pressure waves generated by an acoustical device. Since those waves travel more slowly through gas than solids under the seafloor, the researchers were able to locate the reservoirs. The data indicates that hydrates are trapping the gas.

“Our survey area is not broad, so there could be more reservoirs outside of our survey area,” Takeshi Tsuji, a professor of exploration geophysics at Kyushu University in Japan and a co-author of the paper, says in an email.“Methane or CO_2 in this environment is not stable, because of intensive hydrothermal activities in the axis of the Okinawa Trough. Therefore, the CO_2 or methane could be leaked to seafloor (and atmosphere).”

Source: nationalgeographic.com; 17 December 2019

Why Japan’s Radioactive Water May End Up In the Ocean

- Aaron Clark and Stephen Stapczynski

The Japanese utility giant Tepco is considering a plan to dump roughly 1 million cubic meters of treated radioactive water -- enough to fill 400 Olympic-size swimming pools -- from the wrecked Fukushima Dai-Ichi nuclear power plant into the Pacific Ocean, part of its nearly $200 billion effort to clean up the worst atomic accident since Chernobyl. Storage tanks at the site are forecast to be full by mid-2022, and space for building more is scarce. Scary as it sounds, discharges are common practice in the industry and would likely meet global guidelines. That hasn’t assuaged angry locals or neighboring South Korea.

1. Where does the water come from?

A 2011 earthquake, the strongest ever recorded in Japan, and ensuing tsunami caused structural damage to Fukushima’s reactor buildings, about 220 kilometers (135 miles)

north of Tokyo. While Tepco cycles in water to keep fuel and debris cool, about 100 cubic meters of groundwater flows in daily and becomes contaminated. The tainted water is pumped out and run through something called the Advanced Liquid Processing System, or ALPS, then stored in one of roughly 1,000 tanks at the site. The processing removes most of the radioactive elements except for tritium. Before being released, the so-called tritiated water would be reprocessed to ensure all of it meets safety standards, according to the Ministry of Economy, Trade and Industry.

2. What is tritium?

A form of hydrogen that has two extra neutrons, making it weakly radioactive. It is naturally produced in the upper atmosphere and also is a common byproduct of nuclear power generation. It has various applications including in making nuclear weapons, in medicine as a biological tracer, and in producing such glow-in-the-dark items as exit signs and watch dials.

3. Is it dangerous?

It can be carcinogenic at high levels. While tritium's beta particles (those emitted during radioactive decay) are too low-energy to penetrate the skin, they can build up in the body if inhaled or consumed (usually via tainted water). Yet according to the Canadian Nuclear Safety Commission, a human would need to ingest billions of units of becquerels (a measure for radioactivity) before seeing any health effects. The Tepco tank with the highest concentration has 2.5 million becquerels per liter, according to data from March 31. For comparison, a banana has 15 becquerels and 1 kilogram (2.2 pounds) of uranium has 25 million.

4. How is it handled?

Most nuclear power plants discharge small amounts of tritium and other radioactive material into rivers and oceans, according to David Hess, a policy analyst at the World Nuclear Association, an industry group. In the U.S., such "authorized releases" of so-called tritiated water are done "routinely and safely" and are fully disclosed, according to the U.S. Nuclear Regulatory Commission. The International Commission on Radiological Protection's recommendations, which form the basis for rules globally, limit liquid radioactive waste so that public radiation doses annually are less than 1 millisievert (a unit for measuring radiation exposure, abbreviated as mSv). For comparison, the World Nuclear Association says background radiation in the natural environment typically exposes people to an average 2.4 mSv a year, while a CT scan of the pelvis results in an effective dose of 10 mSv.

5. Why not build more tanks?

Tepco, or Tokyo Electric Power Company Holdings Inc., is essentially out of room on the facility grounds. It has already felled 500 square meters (5,400 square feet) of trees next to a bird sanctuary to make room for about 1,000 tanks.

6. Who's against a release? For it?

Fishing groups in Fukushima prefecture are strongly opposed, fearing it could further taint the reputation of their catch and affect their livelihoods. (More than 20 countries still have import restrictions imposed after the disaster on some Japanese food products.) South Korean officials also have expressed concern about the possible release, though ocean currents are unlikely to bring any contaminated water near its shores. Tepco Chairman Takashi Kawamura and former Nuclear Regulation Authority Chairman Shinichi Tanaka have both voiced support for releasing the water into the ocean. Prime Minister Shinzo Abe's government has yet to announce its position.

7. How will the decision be made?

A draft report in December by a panel under the Ministry of Economy, Trade and Industry proposes releasing the water into the sea, decreasing the volume through evaporation, or a combination of the two. (Earlier ideas included injecting the water into the ground or mixing it with concrete and burying it.) After the panel submits its final report, likely in early 2020, Abe's governments will choose an option to pursue, which Tepco will then implement. The final plan also has to be cleared by the nation's nuclear watchdog. The International Atomic Energy Agency said in a September report that a decision should be made urgently and engage all stakeholders.

8. How's the cleanup going otherwise?

The March 11, 2011, quake off Japan's northeast coast and ensuing tsunami caused about 16,000 confirmed deaths and extensive damage, including the meltdowns at Fukushima. Eight years on, there's been steady progress in the cleanup at the plant, which Tepco estimates will take 30 to 40 years more. In early 2019 the utility sent a robot to touch melted fuel at the bottom of one of the reactors for the first time -- a necessary step toward developing a device to remove and dispose of it. An underground ice wall and drainage system was installed to reduce the amount of groundwater flowing into the wrecked reactors by more than half. The life of clean-up workers has improved as well. A thin surgical-style mask is all that's needed to walk around most of the grounds, as opposed to a full body suit with a hard plastic mask covering the entire face. Radiation levels on the grounds have dropped, allowing for more work around the plant. A convenience store opened in 2016 on the grounds, while a new cafeteria offers hot meals.

Source: washingtonpost.com; 25 December 2019

GEOPOLITICS

What will Beijing do now that Malaysia has discovered the art of the deal in the South China Sea?

- Richard Heydarian

"I'm always moving. I'm moving in both directions," US President Donald Trump once said, boasting about his "art of the deal" unpredictability strategy. But if there is any world leader who truly embodies multidirectional dynamism, it's Malaysian Prime Minister Mahathir Mohamad.

Having seemingly resolved differences with China on its Belt and Road Initiative,

Malaysia has immediately shifted to a new front, openly challenging Beijing's expansive claims in the South China Sea.

In a year-end move, which seemingly caught everyone off guard, the Southeast Asian state formally submitted its claims to the extended continental shelf in the northern portions of the disputed waters to the United Nations.

The move predictably met a furious response from China, which has grappled with legal challenges from the Philippines and Vietnam in the past decade. But just as South China Sea claimant states enter a next phase of confrontation, an environmental time bomb is counting down to apocalyptic results, underscoring the urgent need for regional cooperation.

Malaysia's Foreign Minister says South China Sea still a major unresolved issue

The Malaysian submission at the United Nations Commission on the Limits of the Continental Shelf aims to push the limits of its sovereign rights claims northward and deep into the heart of the South China Sea.

It builds on a joint submission with Vietnam, about a decade ago, which sought to extend Malaysia's claims into the southwestern portions of the highly strategic and resource-rich basin.

In fact, it was that joint submission, in 2009, which prompted China to adopt a tougher stance in the area, including its first formal, multilateral reiteration of its "nine-dash line" claims which cover much of the South China Sea.

Four years later, the Philippines upped the ante by filing a compulsory arbitration case against China before a tribunal at The Hague. Emboldened by Manila's unexpected legal success, Vietnam has threatened a similar move ahead of its assumption of chairmanship of the Association of Southeast Asian Nations (Asean) next year.

Indonesia, the first country to seek to extend its continental shelf claims as early as 2008, has pressured Beijing to clarify the legal basis and exact extent of its claims, while fortifying its own claims in the Natuna Sea amid concerns of Chinese incursions.

Opposed to any third-party arbitration, China has lashed out at Malaysia's legal move, saying it "seriously infringes on China's sovereignty, sovereign rights and jurisdiction in the South China Sea", since "China has historic rights in the South China Sea".

Malaysian Foreign Minister Saifuddin Abdullah says his country will defend its claims in the South China Sea. Photo: EPA-EFE

But Malaysian Foreign Minister Saifuddin Abdullah held his ground, criticising China's claims as "ridiculous", maintaining that "we will defend our claim" as a "sovereign right".

More ominously, Saifuddin said that "anyone can challenge and dispute [competing claims], which is not something unusual". The submission has multiple implications for China and the South China Sea disputes.

First, it shows that China's rivals are hardening their positions. In particular, Malaysia, through two submissions to the UN in the past decade, is consolidating its legal claims to the western portions of the South China Sea basin.

Moreover, it portends potentially similar moves by other Southeast Asian claimant states, since the submission acknowledges "there are areas of possible overlapping entitlements" in the area, particularly with the Philippines and Vietnam.

Crucially, it's also an indirect endorsement of the Philippines' arbitration case against China, which reaffirmed extensive sovereign rights of smaller claimant states and rejected Beijing's wholesale claim to resources and islands in the South China Sea basin.

There are also implications for the code of conduct negotiations between China and Asean, where Malaysia is likely to block any provision that limits its extensive sovereign rights claims.

Earlier this year, Malaysia made the relevance of the code of conduct negotiations clear, when it rejected dealing with China "on a one-on-one basis", since "Asean

centrality is a premium and because all of us are small countries" that will be out manoeuvred on a bilateral basis.

Curiously, the submission is dated 2017, and was likely to have been prepared not long after the ruling in the Philippine-initiated tribunal on the South China Sea. Less beholden to Beijing than his disgraced predecessor Najib Razak, steeped in Chinese debt, Mahathir has given the go-ahead for the legal move in the contested waters.

The South China Sea dispute explained

Following a year of openly criticising China's infrastructure investments, he successfully secured major concessions. Now, the Malaysian leader is intent on securing claims in adjacent waters, while simultaneously sweet-talking China as a "friend".

"When we come against a very powerful [force] we need to find other ways of dealing with the problem rather than just open confrontation," Mahathir told me earlier this year, portending a dynamic and multidirectional response to China's rising influence and claims in the South China Sea. "It is important for China to take notice of other views and perceptions."

Surely, China has now taken notice of Malaysia's new foreign policy assertiveness. The greatest challenge, however, is an impending environmental disaster in the South China Sea. Amid much degradation of coral reefs because of illegal overfishing, marine life is reportedly down to between five and 30 per cent of 1950 levels, promoting China to consider a 10-year emergency ecological preservation scheme. The solution, however, should ultimately be multilateral, involving all claimant states and concerned parties.The code of conduct negotiations under Asean provide an ideal opportunity for such cooperation, especially if backed by confidence-building measures that dampen territorial tensions. Otherwise, the time bomb will outrun the dangerously snail's pace negotiations over contested claims.

Source: scmp.com; 29 December 2019

China's patrols around Japan-held Senkakus planned years earlier, ex-coast guard chief says

China's attempt to challenge Japan's control of islands in the East China Sea by sending patrol ships to nearby waters was planned since 2006, much earlier than had previously been believed by the Japanese government, a former commanding officer of the China coast guard has said.

A Chinese coast guard vessel first entered Japanese territorial waters around the Senkaku Islands, which China calls Diaoyu, in December 2008. The Japanese

government has since assumed that the commander of the vessel acted on his own initiative.

But according to Yu Zhirong, an officer on the vessel when it entered Japanese waters on Dec. 8, 2008, an order came directly from the central government based on a plan devised in 2006 to regularly send patrol ships to the area.

China decided to step up its maritime activity around the Senkakus after a Japanese patrol vessel and a Taiwanese ship collided near one of the uninhabited islets in June 2008, Yu told Kyodo News.

Taiwan also claims the islands, which it calls Tiaoyutai. Japan pressed El Salvador to prevent Chinese influence over port

Then, as tensions between the countries grew following the collision of a Japan Coast Guard ship and a Chinese trawler in September 2010, China began sending patrol vessels to the Japanese territorial waters more frequently.

Tensions continued to escalate after Tokyo brought the Senkakus under state control in September 2012, which prompted the most prominent flare-up of Chinese public anger toward Japan seen in years.

Source: japantimes.com; 30 December 2019

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20 Years of Russia's Institutionalism in Eurasia: What is Russia trying to accomplish with the CSTO, SCO, and EAEU?

- Janko Šćepanović

Over the past two decades, the Russian Federation sponsored and promoted several influential integrative organizations in Eurasia. These diverse bodies developed different foci, ranging from the hard security oriented Collective Security Treaty Organization (CSTO), to the economics driven Eurasian Economic Union (EAEU), to the politico-security centered Shanghai Cooperation Organization (SCO), which Moscow established together with China. While sometimes its efforts were dismissed as nothing more than attempts to "re-Sovietize" the Eurasian space, or were questioned for their intergovernmental character centered on the protection of the region's entrenched governments, Russia's true motivations were grounded in some practical needs. Among these, the most palpable were various security challenges that affected the post-Soviet space, a necessity of addressing globalization's negative impact on the local economies, and a desire to settle a tense frontier with erstwhile Cold War rival China. Therefore, these institutions became essential vessels in Russia's drive to deal with Central Asia's complex environment, and also help it restore its formerly enjoyed status of a true global power.

What also needs to be noted is how, 20 years later, all of these institutions have significantly evolved from their modest beginning. This naturally followed Moscow's changing view of their utility to its practical needs. While not being flawless by any stretch of imagination, the CSTO and EAEU made some noticeable achievements in improving regional military and economic cooperation and coordination. On the other hand, the SCO moved beyond its practical mandate and became a relevant international forum that brings together world's largest non-Western nations. While Russia's intentions toward it remain unclear, and its lobbying for SCO enlargement were criticized, Moscow generally sees a purpose behind every integrative mechanism it established or co-founded in the past 20 years.

Russia's institutional push in Eurasia was always driven in part by its regional and global agendas. Regionally, Moscow was concerned by what it saw as an "erosion" of the post-Soviet space, which was particularly visible in a deteriorating security situation stemming from instability in Afghanistan, the civil war in Tajikistan, and the clashes between its former Soviet Republics. Particularly worrying was the rise of the nonconventional threats like terrorism and drug smuggling. Part of this erosion included also a loss of influence over the post-Soviet space, in particular following the pro-democracy "color revolutions" in several former Soviet Republics like Georgia, Ukraine, and Kyrgyzstan, which many in Russia saw as nothing short of West-sponsored plots. Hence, the CSTO is actually sometimes seen as an anti-NATO.

Columbia University scholar Alexander Cooley argues that the CSTO, and the Eurasian Economic Community or EurAsEC (a precursor to EAEU), are Russia's attempts to emulate Western models like the NATO and the European Union. In many ways these institutions were organizationally modeled on the Western counterparts, although they come up short in their achievements. Nonetheless, the true motives for their creation are actually found in the declining security and economic situation of the former Soviet bloc, and the failure of the early post-Cold War integration, especially as embodied in the Commonwealth of Independent States (CIS).

Moreover, Richard Sakwa points out to Moscow's feeling of rejection and a missed opportunity of forming a more inclusive pan-European security community following the end of the Cold War. After that episode, Russia then undertook its own integrative efforts, which coincided with a gradual restoration of its power, as well as its desire to reassume what it saw as its rightful place among the great powers of the world. Hence, we see a global agenda of Moscow's institutional policy. Russia kept arguing for democratization of the international relations, and in its official documents it emphasized the centrality of the UN and the "polycentric" world order, as opposed to a U.S.-led unipolar one. At the same time, Moscow recognized that its best chance of remaining significant in such a world was to take leadership over a regional integration body given that conglomerations of states were better suited for participating in global governance.

To this end, we see three key institutional bodies. On the hard security end, Moscow sponsored the establishment of two institutions that appear to have overlapping

responsibilities: the CSTO and SCO. The former evolved from the 1992 Collective Security Treaty, a basic agreement that envisioned mutual support among its members in case of an imminent external threat. This, however, proved to be inadequate and was eventually transformed into a real military alliance in October 2002 with a secretariat and a secretary general, a developed bureaucracy, and functions similar to those of NATO, including crisis time consultations. Perhaps the biggest accomplishment of the CSTO was the formation of a capable joint rapid reaction force in 2009 between its six member states. Since then, Moscow and its partners held numerous and diverse military drills and exercises that simulated peace-keeping, anti-drug smuggling, and anti-terror activities. In spite of these are tangible achievements, the organization's clout over Central Asia is hampered by the lack of membership of strategically important Uzbekistan, and the continued refusal of NATO to deal with the CSTO as a relevant security provider.

On the other hand, the Shanghai Cooperation Organization is often considered as mainly a Chinese project, given that it was the first noneconomic body that the People's Republic founded and led from its inception. It emerged at a time when Russia was still very weak and realized that if it stayed on the sidelines it would let China have its way. Hence, Moscow opted to join and partner with the new grouping and thus become an equal decisionmaker. The SCO proved to be a good platform for defusing tensions between these erstwhile Cold War rivals by settling border disputes and troop deployments. It also provided support to Moscow's and Beijing's smaller partners, some of which were not just challenged not just domestic and regional threats, but were often criticized by (mainly) Western states for their human rights record. As its relations with the West deteriorated, Russia envisioned the SCO as an alternative organization to the America-led order, and a place for "great power posturing."

Nonetheless, Moscow seems to be undecided, and perhaps even dishonest, about the SCO. It does not wish for the CSTO to be displaced by the SCO as the region's exclusive security provider. On the other hand, in spite of a formal endorsement of the developmental function of the SCO, Moscow did not support it. Russia recognizes the limitations of its ability to restrict China's expanding influence in the Central Asia. Some scholars noted that Russia's support for the enlargement, and in particular the admission of India, was done to try and offset China's preponderant position inside of the SCO, but it effectively weakened the SCO's ability to do much given the intraorganizational rivalries. Hence, it would appear that Russia prefers to keep the SCO as a prestigious club for non-Western states with a limited practical role.

Finally, the third of Russia's Eurasian institutions, the EAEU, emerged from a collection of economic integrative efforts that go back to the mid-1990s, and really took speed in the early 2000s when EurAsEC was founded. Years later it was bolstered by a customs union and a single economic space. These were ultimately transformed into the Eurasian Economic Union starting from January 2015. EAEU had more supranational functions than either the CSTO or SCO, and its Commission (much like the EU's) can make decision by a majority vote, and thus (theoretically) overrule even

the largest member (Russia). Moreover, Moscow learned from the limitations of going for a high membership organization like the CIS. Therefore, the initial members were Russia, Kazakhstan, and Belarus, with Armenia and Kyrgyzstan subsequently joining the club, all of which seemed more committed to the project. They were motivated in no small part by the collapse of the GDP in the post-Soviet countries during the 1990s.

The initial economic integration with Kazakhstan and Belarus sought to restore some of the earlier economic activity and re-industrialize the region, and prepare it for joining globalization as a bloc. Later when the EAEU was established, another goal was added — building an intraregional capacity to better deal with the negative side of global capitalism. In spite of the fact that Eurasian integration is rightly viewed as the most serious attempt at integration since the collapse of the USSR, some considerable challenges remain. There are problems with implementation of various, sometimes easily given, pledges. Also, the economic results are still not there, and the intraregional trade seems to disproportionately favor Russia. Moreover, while the union seeks to promote free trade between members, there are still issues with nontariff barriers.

Overall, certain criticisms of the Russian institutional initiative are valid and point out genuine problems such as the competition and overlapping responsibilities between the CSTO and SCO, and the persistence of nontariff obstacles in what is supposed to be a free trade zone of the Eurasian Economic Union. No less relevant is the apparent lack of a strong unifying ideology behind what is supposed be a Russia-led regional bloc. Nonetheless, an argument in support of Eurasian institutionalism can be found in international relations theory. Most of the regimes in other parts of the world were built upon the existing ones. In the post-Soviet space, integration is essentially an effort to reintegrate states that were once part of the same state and whose level of economic interdependence is already high. If anything, this makes the process easier and the participants more familiar with each other.

Ultimately, as one eminent scholar of Russia noted, Eurasian institutionalism is a contested project. Moscow has shown remarkable persistence in funding and sponsoring these processes, and it also has displayed a willingness to evolve them and move onto other projects with more favorable and suitable arrangements that fulfilled its geopolitical or geoeconomic needs. However, its ultimate success will depend on factors that escape Russia's full control, such as great power relations and domestic calculations among its smaller partners.

Source: thediplomat.com; 26 December 2019

In strategic Djibouti, a microcosm of China's growing foothold in Africa

- Max Bearak

DJIBOUTI — Above ground in this tiny but strategically located country, signs of China's presence are everywhere.

Chinese entities have financed and built Africa's biggest port, a railway to Ethiopia and the country's first overseas naval base here. Under the sea, they are building a cable that will transmit data across a region that spans from Kenya to Yemen. The cable will connect to an Internet hub housing servers mostly run by China's state-owned telecom companies.

Beijing's extensive investments in Djibouti are a microcosm of how China has rapidly gained a strategic foothold across the continent. Western countries, including Africa's former colonizers, for decades have used hefty aid packages to leverage trade and security deals, but Chinese-financed projects have brought huge infrastructural development in less than a generation.

The construction is fueled mostly by lending from China's state-run banks. Spindles of Chinese-paved roads have unfurled across the continent, along with huge bridges, new airports, dams and power plants as part of Chinese President Xi Jinping's 152-country Belt and Road Initiative.

Overall, Chinese companies have invested twice as much money between 2014 and 2018 in African countries as American companies, spending $72.2 billion, according to an analysis by Ernst & Young.

"The Chinese are thinking far into the long-term in Djibouti and Africa in general," said David Shinn, a former U.S. ambassador to Ethiopia who was also the State Department's desk officer for Djibouti as far back as the late 1960s. "Djibouti is one node in an economic chain that stretches across the northern rim of the Indian Ocean, from ports in Cambodia to Sri Lanka to Pakistan. They have a grand, strategic plan. We don't."

In Djibouti, that strategic plan is all the more evident because of the country's location at the entrance to the Red Sea, where about 10 percent of oil exports and 20 percent of commercial goods pass through the narrow strait right off Djibouti's coast on their way to and from the Suez Canal.

That location has made it a crucial waypoint for undersea cables, which transmit data between continents. China's investment in Internet infrastructure here comes as the region surrounding Djibouti is just starting to come online, including some places that are entirely reliant on Djibouti as a transit point for data transmission.

Opening the door to a small room with three servers, Habib Daoud Omar, an engineer who manages the site, said, "You are looking at all of Somaliland's Internet," referring to the autonomous region of northern Somalia. In another room, all of Yemen's Internet. Ninety percent of powerful-but-landlocked Ethiopia's Internet passes through the main chamber.

The transformative presence of China on so many fronts has loosened many African countries' dependence on Western governments for development.

Chinese loans come without the demands for improvements on human rights that often accompany American aid. China's inroads have helped it gain access to vital mineral resources, a vast market looking for its cheap goods located at the center of the world map, and reliable backing at global institutions such as the United Nations.

But critics of Chinese loans allege that they catch vulnerable, developing countries in "debt traps," depleting government coffers and sticking generations of taxpayers with gigantic bills, or else China's banks take ownership of the key strategic assets they built. Beijing now holds over 70 percent of Djibouti's gross domestic product in debt.

African governments have fiercely denied that such takeovers could happen, despite recent precedent in Sri Lanka, where a port in the president's strategically located but commercially unviable hometown was handed back to the Chinese company that financed its construction.

The Trump administration has sought to counter China's growing influence with a push for private investment, called Prosper Africa, though the investments envisioned would pale in comparison to Chinese loans. In Djibouti, even the commander of U.S. armed forces in Africa has appealed — if obliquely — for greater caution in dealing with China.

"We look to build enduring relationships, not short term, nor transactional ones," Gen. Stephen J. Townsend said on a visit to Djibouti this summer. "We lead with our values, hard work and a desire to strengthen partnerships on the African continent."

The U.S. military's main base in Africa, home to 4,000 personnel and a fleet of drones, has been in Djibouti for two decades. The United States has essentially paid hundreds of millions of dollars in rent for its base, where it stages fitful attempts to degrade al-Shabab in neighboring Somalia, but has done little else to develop the country.

While many African governments, including Djibouti's, have expressed hope for greater American investment, Beijing puts its money where its mouth is, and cash-strapped African governments have turned east almost in unison. The Chinese leader now hosts an annual Forum on China-Africa Cooperation, attended by nearly all of Africa's 54 heads of state. At the launch of Prosper Africa in Mozambique this year, the United States failed to send even a Cabinet secretary.

"Yes, our debt to China is 71% of our GDP, but we needed that infrastructure," Mahamoud Ali Youssouf, Djibouti's foreign affairs minister, said in a phone interview on the sidelines of a meeting in New York earlier this month, where Djibouti was pushing to gain a nonpermanent seat on the United Nations Security Council.

"It was quite natural that we raise our partnership with China. Neither Europe nor America were ready to build the infrastructure we needed. We're projecting our

country into the future and looking after the well-being of our people. Even the United States has trillions of dollars in debt to China, you know," Youssouf said.

The most significant investment China has made in Djibouti is Doraleh Port, Africa's biggest and deepest. As with Internet through the data center, a full 90 percent of landlocked Ethiopia's imports now transit Djibouti, giving the minuscule country, with a population of less than a million, leverage over its gigantic, 100-million-strong neighbor.

And it isn't just that Chinese banks control Africa's largest port. Chinese companies are its main users.

"The majority of our shipping is coming from China," said Aboubaker Omar Hadi, chairman of the Djibouti Ports and Free Zones Authority.

The paradox for many in the United States is that it is precisely the authoritarian political system in China, much maligned in Washington, that gives it an upper hand in economic competition. An added local irony for American policymakers is that the United States initially welcomed China's presence in Djibouti as part of an international force to defeat rampant piracy in the region. Almost all of China's investments in Djibouti have come after that mission ended.

"Trade, investment, politics, military are all closely linked in China's foreign policy — that's the way it is under the Communist Party," said Joshua Eisenmann, an expert on China at the University of Notre Dame.

American banks are too risk-averse to make the large loans in Africa that China's state-operated banks do, Eisenmann said. Especially under an administration that has been hawkish toward countering China on the global stage, there's a fear that China could even one day use its leverage to hamper American access in places like Djibouti to its own bases.

"China has tools that the American government doesn't — namely government-backed financing of loans," said Shinn, the former U.S. ambassador. "I don't care what Trump says — American trade in Africa is falling off a cliff. The whole Africa policy has that central flaw."

Source: washigtonpost.com; 30 December 2019

Leaders of China, Japan and South Korea gather with eye on threat from North Korea

- KYODO

CHENGDU, CHINA – Japanese, Chinese and South Korean leaders agreed Tuesday to strengthen trilateral coordination to achieve the denuclearization of North Korea,

with Pyongyang stepping up provocative rhetoric against the United States and their nuclear talks remaining at a standstill.

China, the chair of this year's trilateral gathering, hopes issues on the Korean Peninsula will be resolved "through dialogue," said the country's premier, Li Keqiang, at a joint press conference following his summit with his Japanese and South Korean counterparts.

Prime Minister Shinzo Abe said it was important to "keep up the momentum" of talks between the United States and North Korea, adding that U.N. Security Council resolutions against Pyongyang should be "fully" implemented.

Meeting in the southwestern Chinese city of Chengdu, Abe, Li and South Korean President Moon Jae-in also discussed closer economic cooperation.

Li said China, Japan and South Korea had agreed to accelerate negotiations on a three-way free trade agreement and the wider Regional Comprehensive Economic Partnership, which includes 13 other nations.

The North Korea issue was high on their agenda ahead of an approaching year-end deadline set by Pyongyang for the United States to make progress in stalled denuclearization talks.

Pyongyang has overseen a spate of launches of what appeared to be short-range ballistic missiles this year in defiance of U.N. Security Council resolutions, putting its neighbors on high alert. Concerns have grown that it may test an intercontinental ballistic missile if negotiations with Washington fail to achieve a breakthrough by the end of the year.

The United States, which favors maintaining international economic sanctions against Pyongyang, has been calling on North Korea to continue to abide by its commitments to denuclearize and refrain from testing long-range ballistic missiles.

In an attempt to prevent the situation on the divided peninsula from escalating, China — North Korea's closest and most influential ally — has expressed readiness to ease international economic sanctions against Pyongyang.

Together with Russia, it submitted to the U.N. Security Council earlier this month a draft resolution aimed at loosening sanctions against North Korea.

Abe also sought cooperation from the other leaders on resolving the long-standing issue of Japanese nationals abducted by Pyongyang in the 1970s and 1980s, according to Japanese officials. The issue has long been a top priority for Abe. Ahead of the summit, Moon expressed vigilance about increasing strains on the Korean Peninsula during his meeting with Chinese President Xi Jinping on Monday.

"The recent situations, in which dialogue between North Korea and the United States has been suspended and tensions on the Korean Peninsula are being heightened, are

not beneficial to both of our countries and North Korea," Moon told Xi, according to South Korea's Yonhap News Agency.

The tripartite framework is not limited to security and economic issues. The Asian neighbors have been seeking to deepen cooperation in a range of areas that include tourism, health care and disaster prevention. China is hosting the latest round of the leaders' meeting, first held in 1999. The framework has been sensitive to changes in the political climate among the three nations.

Japan's ties with China have been improving markedly in recent years after issues related to wartime history and territory had cooled them.In contrast, ties between Japan and South Korea are now at the lowest point in years due to a spat over compensation for wartime labor that has also affected trade and security issues.

Source: japantimes.co.jp; 24 December 2019