



MARITIME REVIEW

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CYBERSECURITY ESSENTIALS



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ABOUT THE COVER

With the digitization of industrial control systems, vessels and ports are left exposed to cyber security risks. According to MISSION SECURE, a cyber security industry expert, maritime cybersecurity is the collection of tools, policies, security concepts, security safeguards, guidelines, risk management approaches, actions, training, best practices, assurance, and technologies used to protect maritime organizations, their vessels, and their cyber environment. When one ship is cyber attacked, it can often spread malware to sister vessels via the corporate network. Some attacks can cripple a vessel's operations by endangering its GPS navigation, critical valves, propulsion and rudder control, ballast control, and gain administrative privileges, all through ransomware or malware. A fleet-wide attack would be a maximum impact on strategic risks which can run up to about \$10-\$100 million. Cyber attacks can inflict physical vessel damage. Disruptive cyber attacks can also cripple port facilities. In Photo is the DNV Cybersecurity honeycomb superimposed over the Philippine Navy's BRP Antonio Luna (FF-151). BRP Antonio Luna is the second ship of the PN's Jose Rizal-class of missile-guided frigates. She is capable of conducting multi-role operations including anti-surface warfare (ASUW), anti-submarine warfare (ASW), and anti-air warfare (AAW).



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WPS: TESTING OUR NATIONAL WILL

by VAdm Emilio C Marayag Jr AFP(Ret)

PH COAST GUARD SPOTS 135 CHINESE MARITIME MILITIA SHIPS IN JULIAN FELIPE REEF

In his book "The New Rules of War" Professor Sean McFate describes the post-WWII era as a period of "durable disorder." He cites the following evidence to support his finding: increasing challenges on the "rules-based" world order; rising number of "fragile" or "failed" states; half of the countries in the world are experiencing some form of conflict; armed conflicts today do not end but are continuing to burn without flame; rise of mercenaries and privatization of war; most of the "Fortune 500" companies are more powerful than most states; and half of peace agreements fail in 5 years. The West Philippine Sea (WPS) dispute is an example of a "durable disorder" that began way back in April 2012 but continues to test the will of the Philippine nation, and incessantly in the years to come.

The Philippines has always supported the United Nations Charter that aims for a peaceful, just and prosperous world community being one of the original signatories during its inception in June 1945. The nation has participated in numerous international peacekeeping and humanitarian efforts in conflict-laden and disaster-affected countries in Africa, Asia, and Central America. It also signed the UN Convention on the Law of the Sea (UNCLOS III) in December 1982 in spite of the reduction of its "historic waters" as provided for by the Treaty of Paris in favor of equitable sharing of the "common heritage of mankind." Furthermore, the country dutifully followed the procedures in resolving the West Philippines Sea issue with China before the Arbitral Court as it fully subscribes to a "rules-based" international order.

The recent aggressive actions of China in the WPS show the systematic application of ancient Chinese **36 stratagems** used in politics, war and civil interaction believed to have been written by 6th Century Chinese general Wang Jingze. These stratagems, published by the Communist Party of China in 1961, have been used extensively in crafting narratives and operational/tactical movements of China coast guard and maritime militia units. Most of these stratagems are basically deceptive in nature, far from the chivalrous nature of soldiery, and intended to achieve political objectives.

The writings of famous Prussian General Carl Philipp Gottfried

von Clausewitz the "war is not an end unto itself, but instead a means to achieve political objectives" tend to support the aim of Wang's stratagems. Clausewitz also enumerated the 3 elements of war necessary to attain those objectives –people, military, and the government. Many of China's **36 stratagems** are used both in conventional and unconventional wars. But China Communist Party concentrates more on the utility of those stratagems in unconventional war that comes in different names –unrestricted, irregular, guerrilla, gray zone, hybrid, low intensity, non-kinetic, insurgency and others. In case of the WPS, the term "gray zone warfare" using "cabbage strategy" (creeping invasion) is commonly mentioned to seize and expand control over the features and water areas therein and the adjacent maritime zones. China's 3 artificial islands inside and along the fringes of WPS serve as air, naval, and logistics forward operating bases that host the Chinese seagoing and air forces, frequently harassing and threatening Philippine supply vessels. China's open aggression in WPS is matched by equally, if not more, devastating efforts to subvert the Philippine society and government institutions.

At the political level, the PDP-Laban party in 2017 enlisted the help of the Communist Party of China (CPC) officials based in Fujian province for "party building" to find the ways and ideology of the CPC. PDP-Laban entered into an agreement to undergo "policy training" for its members in Fujian provincial party school. In the same year the party established ties with Russian ruling party. In September 2019, former President Duterte and fellow members of the party met CPC members Chen Min'er, Guo Yezhou, and Wang Fu who later met then Mayor Sarah Duterte in Davao City. In December, PDP-Laban members Koko Pimentel, Dong Gonzales Jr. and Raul Lambino met in Shangrila Makati with CPC Member Wang Ning, accompanied by Chinese Ambassador Huang Xilian to "further develop their countries and improve the capacity for governance." During the meeting, Ambassador Huang gave a thematic briefing on the Fourth Plenary Session of the Central Committee of the CPC. There was a time when some senior officials mentioned that the country could become a province of China.

At the local government level, 24 provinces and cities have

established, some as early as 2005, "sister city" relationships with Chinese counterparts to "gain an international perspective, exchange ideas, and increase their understanding of global issues." Nothing appears anomalous at a glance but the Chinese exchange representatives visiting the country are mostly members of CPC and what they gain here, especially freedom of the press and assembly, do not reach the bulk of the Chinese people. Our representatives visiting China, on the other hand, are only allowed to see what their counterparts want. The language barrier is so wide that China learns more than us. Of note how China has influenced some of our political leaders is the announcement Cagayan provincial governor Manuel Mamba against the establishment of 2 EDCA sites in his province and by allowing the proliferation of thousands of Chinese students therein.

Apart from sister city arrangements, there are 4 Confucius Institutes in the country that aim to develop and facilitate the teaching of the Chinese language overseas and promote educational and cultural exchange and cooperation. These are situated in Ateneo de Manila University, Angeles University Foundation, Bulacan State University, and University of the Philippines in Diliman. In addition, some Filipino educators recently visited Beijing and Xiamen Universities in accordance to an earlier Philippines' CHED and China's Ministry of Education MOU signed in 2019 to fast-track bilateral cooperation in higher education. Due to strict security laws of China all of its citizens are mandated to report all their activities. In the U.S., nearly all of such institutes have closed down due to funding concerns as the U.S. government stopped sending students after finding that the "exchange and cooperation" are lopsided in favor of China. The educational exchanges will benefit China more than us given its compelling security laws. Moreover, there are 10 universities and colleges nationwide that have bilateral partnership agreements with China counterpart institutions. Indeed, the prevalence of engagements involving our third-level educational institutions initiated by the past administrations marks the sustained efforts of China to penetrate the "thinking class" of the Philippine society.

But China's growing interference does not stop in political and educational fields. In September 2018 the Presidential Communications Operations Office (PCOO), represented by Ruperto Andanan, and China National Radio and Television

Administration (NRTA), represented by NRTA Vice Minister Fan Wei Peng agreed to enhance media cooperation through an MOU and China donation of Php 180 million for radio equipment and establishment of government centers for the purpose. That many Filipinos in media and the academe now echoing Chinese narratives to abolish RP-US alliance and discredit Philippine positions aligned with the U.S. and the international law is an indication of success of such agreement and the support of many government servants, politicians and bureaucrats, who knowingly or unknowingly undermine our society and institutions.

The increase of Philippine Offshore Gaming Operators (POGO), licensed by PAGCOR starting 2016, have expanded their activities over the years. Only 17% of the nearly 150,000 employees in 2019 are Filipinos. Most employees are Chinese. Many adverse reports on POGOs, including their high vulnerability in money laundering, have come out in the papers prompting a legislator to enjoin the Anti-Money Laundering Council to investigate this gambling business and other on-line gaming and gaming schemes. The large number of mainland Chinese visiting or residing in the country, including those engaged in infrastructure labor and merchant shipping, pose challenges to the Immigration and law enforcement officials.

Apart from money laundering, which is a cybersecurity crime, crimes attributed to the POGO industry have expanded exponentially over the past several years and by end of 2023 include human trafficking, forcible abduction, homicide, illegal detention, kidnapping-for-ransom, theft, robbery-extortion, serious physical injuries, swindling, grave coercion, investment scams, cryptocurrency scams, and love scams. Data from the Philippine National Police show that from 01-January-2017 to 30-June-2023, there were 103 POGO-related crimes.

Their infiltration into our social fabric and government weakens our nationalistic fervor and corrupts our values. According to a radio commentator one Chinese averred that everything in the Philippines can be bought including land, personal protection, government agents and officials, and even justice. Such a remark does not speak well for the country.

The subversion of China cannot be taken lightly. The Chinese subversive actions reflect one of the 36 ancient strategems: **Remove the fire under the cauldron**. This means that in order to prevail one has to eliminate the source of your enemy's strength. The **fire** (government) is the source of strength of both our people and the military under the **cauldron**. As Professor McFate's 4th Rule of War states, the **"hearts and minds do not matter at the tactical and operational levels"** represented by the people and the military. What matters is the government, the nerve center of the state, that employs top officials who formulate policy and strategy to ensure the independence, identity, and ideals of democratic way of life of the Filipino.

The incumbent President has repeatedly declared that the government will not allow losing any square inch of WPS and, by inference, the entire archipelago. This challenge is best addressed along the lines of an old African proverb: "when there is no enemy within, the enemy outside can do you no harm."



SHAPE UP YOUR VESSEL'S MARITIME CYBERSECURITY WITH THESE 8 CLEVER TIPS

by Wärtsilä

Could your vessel be a potential target for a cyber-attack? If you've got equipment with network connections on board, then the short answer is yes. Here are 8 clever tips you can follow to help protect your vessel and your business from hackers.

Maritime cyber security is something you need to take seriously whether you're operating a small fishing craft with a single navigation screen or a super tanker or cruise liner with a vast array of electronics on the bridge. With maritime technology advancing at a rate of knots, the cyber security risks will only continue to grow as more and more equipment onboard ships is connected to a data network.

Here are 8 clever tips that will shore up your maritime cyber security defenses and protect your business.

1. Make sure you know what equipment you have on board. If your vessel has been sailing for several years, it's probably had new connected equipment installed, or you might have upgraded, or replaced some systems. These new or upgraded equipment and systems likely use some sort of software or data connection. A good starting point for assessing your cyber security risk level is to make and maintain a list of what was installed on your vessel and when. This is a good starting point to build an accurate picture of where you stand and what action you might need to take to protect your vessel. For example, is there some equipment with a specific version of software that hasn't been updated recently? If you don't know what software version you're using you won't know if you need to take action or not to address potential security vulnerabilities.

2. Understand your vessel's connectivity. It's essential to know how connected your vessels are because the more connections you have, the greater the risk. Think of a house with multiple doors and windows: the more you leave them open or unlocked, the greater the chance of gaining entry. You might have data connections to OEM vendors for remote monitoring or troubleshooting, or to maintenance partners for data-driven maintenance planning. Or perhaps your vessels are connected to your own shore networks for fleet management purposes. You need to know how these connections are set up and maintained to build an accurate picture of your level of cyber security risk. You'll know how many doors and windows you have and how good the locks are at keeping the unwanted out.

3. Read up on the regulations. The International Association of Classification Societies (IACS) has adopted two new Unified Requirements (UR) on maritime cyber security. If you contract a newbuild vessel on or after 01-January-2024, it will need to comply with these requirements. Some of the responsibility lies with you and the shipyard, and some with the equipment vendors who supply the equipment for your vessel. UR E26 sets out maintenance requirements for vessel owners and requires yards to work with vendors to make sure they select compliant equipment and can pass the necessary inspections. Meanwhile, UR E27 impacts component manufacturers like Wärtsilä, who must provide certification to prove that their products and solutions comply with the requirement.

4. Know what you're buying. It's important to account for cyber

security in the procurement phase when building vessels or purchasing equipment. This means specifying the cyber requirements for what you're buying – essentially how secure you need it to be. You need to know your responsibilities – simply buying the most affordable option won't suffice.

5. Put a cyber security management system in place. A cyber security management system (CMMS) is a set of systems and processes that tells everyone in your organization – right down to the very last employee – what they need to do, how to do it and when they need to do it. A CMMS covers everything a vessel owner needs to do, from updating equipment to tracking what's onboard. Having such a CMMS has been an industry requirement for a couple of years now and will help to clarify your approach and better protect your business.

6. Perform a vessel-specific risk analysis. No two vessels, markets or use cases are the same. Factors like the challenges of your operating environment, the age and connectivity level of your fleet, and the sizes of your crews can create unique risks for your vessels. For this reason, you need to understand your own situation so that you can stay cyber secure. Perform a risk analysis for each of your vessels so you can see where you stand. You can then plan what changes you need to make to beef up your cyber security.

7. Learn from the IT and power-generation industries. According to statistics from Verizon 80% of hacking incidents are caused by stolen and reused login information. The power generation industry got an unpleasant wake-up call way back in 2012 when the Stuxnet malware attack devastated Iran's nuclear facilities. No-one wants an event like that. Adopting best practices like network monitoring and password and user account tracking and management is therefore a must. These practices have been commonplace in the IT and power generation industries for years.

8. Pick partners you can trust. When working with OEMs and yards, you need to know that they're aware of and understand the risks and are designing their equipment and services accordingly. A great tip to help you to ensure you're buying from reputable vendors is to look for third-party recognition in the form of certifications or awards as these demonstrate how potential suppliers measure up in cyber security credibility.

Get on the right track with Wärtsilä. As a vessel owner, you bear the ultimate responsibility for following the required standards and continuously updating your vessel systems to make sure you comply with the regulations. Following these 8 tips will put you on the right track towards more cyber secure operations. For full peace of mind, partnering with an OEM like Wärtsilä could be the best option. Our equipment both meets and exceeds the current regulatory requirements, and as a larger OEM our specialized team has an in-depth combination of maritime and cyber security knowledge. This means we are well placed to advise you on what you need to do to stay compliant and safe over the long term. Wärtsilä is co-located in Cabuyao, Laguna

Source: <https://www.wartsila.com/insights/article/shape-up-your-vessels-maritime-cyber-security-with-these-8-clever-tips>



IMO REGULATIONS FOR CYBER SECURITY RISK MANAGEMENT

by Bureau Veritas

UNDERSTANDING INTERNATIONAL REQUIREMENTS FOR MARITIME CYBER SECURITY RISK MANAGEMENT

In response to the growing threat of cyber-crime, the International Maritime Organization (IMO) has issued Resolution MSC.428(98). This regulation has since been complemented by other guidelines, notably those developed by the Baltic and International Maritime Council (BIMCO) for cyber risk management.

These guidelines lay out high-level recommendations for incorporating cyber risk management into existing safety management system (SMS) processes, enabling ship owners to protect their vessels. As of 1-January-2021, all ship owners must comply with IMO Resolution MSC.428(98) in order to continue sailing worldwide.

KEY BENEFITS

- Understanding IMO's regulatory requirements for cyber security and safety for all ships
- Benefiting from expert guidance on the development and implementation of a cyber risk management plan
- Achieving compliance with international regulations for cyber security and safety

SURVEY AND ASSESS YOUR SHIP CYBER SECURITY RESILIENCE

Digital advances happen quickly. Propelled by the needs of global decarbonization, reliable and useful data is in ever-higher demand.

To address this need, ship systems increasingly exchange data with the shore, meaning that vessels are more connected and the potential surface of vulnerable to cyber-attack is wider. This has

Source: <https://marine-offshore.bureauveritas.com/marine/cybersecurity>

made malicious actors more interested in the maritime industry, thus increasing the likelihood of cyber incidents.

Bureau Veritas has developed a tool to help owners clearly assess their technical ship cyber security ecosystem at any point in its lifecycle. Cyber Health Assessment Report Tool (CHART) by Bureau Veritas is perfect for inspecting the current state of compliance and taking steps toward implementing regulation.

COMPLY WITH IMO RESOLUTION MSC.428(98) FOR SHIP CYBER SECURITY

On 1-January-2021, IMO Resolution MSC.428(98) came into force. This regulation is applicable to all vessels, requiring ships to include cyber risk management in their safety management systems, in accordance with the International Safety Management (ISM) Code. This resolution further encourages flag administrations to ensure that ship owners and managers are properly addressing cyber risks.

To help ship owners achieve compliance, BIMCO and other organizations have developed general guidelines, offering a blueprint for creating a cyber risk management plan. Though IMO's existing guidelines are not marine-specific, vessel owners can use them to help identify and assess risks, protect their assets, and respond to and recover from cyber-attacks.

Bureau Veritas helps ship owners and managers implement customized, effective cyber risk management strategies onboard. To do this, we have developed a comprehensive framework for cyber security based on our NR 659 Rules. This framework enables Bureau Veritas to identify critical equipment on board and propose organizational, technical and procedural mitigation measures to reduce residual cyber risk to an acceptable level.

FIVE TOP TIPS FOR SOURCING PORT CYBER-ATTACK INSURANCE COVER

by Edward McNamara



Photo Credit: Tumisu from Pixabay

Port cyber-attacks are now one of the biggest and most sophisticated threats facing port operators, notes Ed McNamara, President & CEO, Armada Risk Partners, and a port insurance broker in Cleveland, Ohio. Nagoya,

Japan has become the latest in a long line of global ports to be targeted by a ransomware attack. The incident in early July had severe consequences disrupting cargo packing procedures, deleting large amounts of data and forcing the suspension of operations at the container terminal. With criminal gangs and nation states now pumping resource into cyber warfare, how can ports get the best possible cyber-attack insurance in place?

1) Undertake a thorough cyber review before sourcing insurance.

As Ports are now painfully aware the nature of their set up makes them vulnerable to attack. Hosting large numbers of vessels operated by a wide variety of companies employing a range of different IT systems provides a perfect environment for network intrusions, hacks and ever more sophisticated ransomware attacks.

When looking at cyber insurance, evaluating your organization's overall cybersecurity capabilities across all areas and the exposure to risk is a good starting point for port and terminal operators.

It is important to undertake this review as part of a strategic approach to sourcing port cyber insurance. It is now more vital than ever to get your systems and processes as secure and up-to-date as possible before engaging with insurance companies.

At Armada, we advise ports to present the strongest picture to would-be insurers in order to secure the best coverage and reduce premiums.

Insurers are looking for hard evidence of robust risk management policies and protocols, including well-prepared cybersecurity policies, along with regular assessments and continuous employee training.

This should include identifying potential threats, assessing the value and sensitivity of the data that you handle, and evaluating your current security measures.

2) Commit to continuous cybersecurity improvement. Cyber insurance is a vital consideration in any cyber risk mitigation strategy. Insurance can play a key role in helping pay for recovery costs if you suffer a ransomware attack, data breach and any business interruption. It can also cover third-party liabilities. Moreover, there are policies that provide incident response support, giving access to expert teams to provide guidance and support in the event of an attack, again helping mitigate the damage caused.

However, it is important to stress that cyber insurance cover doesn't release any organization from the responsibility of managing its cyber risks. It requires ports and terminal operators to sustain a cybersecurity program with continuous improvement

3) Be aware as cyber insurance market is changing. The insurance marketplace is responding sharply to the increased threat of cyberattacks on ports.

The result is a fluid and constantly changing market. Cyber premiums are rising, driven by the increasing activity and claims, while coverage is, in many cases, diminishing.

We advise searching for policies that cover a wide range of cyber risks, including data breaches, ransomware attacks, business interruption, and third-party liabilities. Consider the policy limits and deductibles that best suit your port's risk profile. Ensure that the policy's limits adequately cover potential financial losses, including costs associated with breach response, recovery, and legal expenses.

4) Stay alert to new threats. Be aware cyber risks are evolving rapidly. And it is vital that port operators keep up to speed. That means being thoroughly informed and acting when it comes to emerging threats, regulatory changes and industry best practices. Even after your insurance is in place ensure you should regularly review that insurance coverage to ensure it is still adequate. Be aware your current policy may not be addressing the latest threats.

5) Work with a port specialist. It is good practice to work with a broker who is well-versed in understanding the nuances of cybersecurity and is keeping abreast of the changing port insurance landscape.

It is wise for CEOs themselves to examine the fine print of any insurance renewal and work with the broker who should go the extra mile and source a wide variety of quotes. Do not automatically renew with your existing provider, check the coverage itself as this could have changed significantly. And do not base the renewal on cost, as this could result in you being dangerously exposed and under insured.

Your broker needs to fully understand your business and research the policies best suited to your port's set up, risk profile and type of operations. They can also provide advice on specific compliance standards that your port may have to follow.

About the Author



Edward X. McNamara is the President & CEO of Armada Risk Partners, a Cleveland-based insurance broker. Previous to Armada, Ed was Senior Vice President at Aon, where he led the sales team for the Ohio, Indiana and Kentucky region. Before that, Ed served as "Rainmaker" at Oswald Companies, an insurance brokerage. Prior to joining the insurance world, Ed ran his own technology and software company. He is co-founder

of the Prayers From Maria Foundation, and is married with four sons.

IMO CONSIDERS STCW TRAINING PROVISIONS ON BULLYING AND HARASSMENT

by IMO

The world economy is heavily dependent on maritime transport, as most of the international trade is carried out by sea. Delay in shipping can result in severe financial loss, especially for the management team in the distribution channel. This heavy dependency makes the shipping industry an attractive target for cyber criminals.

The COVID-19 pandemic accelerated the digitization of the world, which was already taking place, due to guidelines that made it mandatory for people to work from home via the internet. Therefore, the maritime industry was more dependent than ever on the Internet. You may not think of ships and fleets closely related to technology, but ships are constantly connected to the internet.

Here lies the real problem: some of the systems and computers on these ships often use incredibly complicated or old systems. This makes it much more difficult to protect them from cyber-attacks. The systems these ships use are so complicatedly intertwined that there are many blind spots that are virtually undetectable.

Since ships are increasingly dependent on digitization, integration and automation systems today, cyber risk management onboard has top priority. As technology advances, the convergence of information technology (IT) and operational technology (OT) onboard ships and their connection to the Internet creates a larger target that needs to be addressed.

A Cyber-attack is likely to compromise the safety of crew, ship, cargo, and even ports.

Cyber security should be in place to address the security issues and risks posed by new technologies. And to ensure that ship operation, as well as crew and passengers, are safe.

Cyber security deals with the protection of IT systems, onboard hardware, and sensors as well as data leaks from unauthorized access, manipulation, and disruption.

Cyber security policies and plans cover various types of risks such as information integrity, system, and hardware availability onboard and in the shipping company's office.

The IMO has identified the systems onboard ships that are particularly vulnerable

- Bridge systems
- Cargo handling and management systems
- Propulsion, machinery management, power control systems
- Access control systems
- Passenger servicing and management systems
- Passenger facing public networks
- Administrative and crew welfare systems
- Communication systems

In its guidelines on cyber security onboard ships, BIMCO identifies cyber safety incidents that arise as a result of:

- a cyber security incident which can affect the availability and

integrity of OT, for example, corruption of chart data held in an Electronic Chart Display and Information System (ECDIS)

- failure occurring during software maintenance and patching
- loss of or manipulation of external sensor data which is critical for the operation of a ship and includes but is not limited to Global Navigation Satellite Systems (GNSS).

Whilst the causes of a cyber safety incident may be different from a cyber security incident, the effective response to both is based upon training and awareness.

Cyber security is becoming increasingly important in the shipping industry

Regulations and laws are introduced that oblige owners, operators and managers to consider cyber risks. With the aim to support safe and secure shipping, which is operationally resilient to cyber risks, IMO has issued MSC-FAL.1/Circ.3 Guidelines on maritime cyber risk management. The guidelines contain high-level recommendations on maritime cyber risk management to protect shipping from current and emerging cyber threats and vulnerabilities and contain functional elements that support effective cyber risk management. The Maritime Safety Committee, on its 98th session in June 2017, also adopted Resolution MSC.428(98) – Maritime Cyber Risk Management in Safety Management Systems.

Different Cyber security Risks

The frequency and severity of cybercrime are on the rise and there is a significant need for improved cyber security risk management as part of every organization's enterprise risk profile.



Management Plan

A comprehensive cyber risk management plan should include the following elements:



Source: <https://varunamarine.eu/wp-content/uploads/2023/03/Maritime-Cyber-Security-Infographic-01.pdf>

CREW WELFARE EXECUTIVE ROUNDTABLE INDUSTRY REPORT

by Mission To Seafarers



As we celebrate **International Day of the Seafarer**, we are pleased to present a review of the outcomes from the recent June 2023 Mission to Seafarers *Executive Roundtable on Crew Welfare* held in Singapore. The event focused on identifying solutions to the challenges faced by seafarers.

The Roundtable explored 5 key areas that significantly impact the lives of seafarers: (1) access to shore leave and connection with loved ones; (2) mental health and wellbeing; (3) package, security, diversity, career progression; (4) living & working conditions; and (5) support & management onboard & ashore. We are now assessing how best to potentially attack the issues. There are follow-up meetings planned, perhaps as part of London International Shipping Week (LISW) in September, and a return to Singapore in 2024 to see what we have managed to achieve thus far, and try and build up on the project successes. That gives us a year to try and really drive the changes that seafarers want, need, and may even begin demanding.

Participants exchanged insights and proposed potential solutions in a collaborative space, highlighting the urgent need for proactiveness and solutions.

1. ACCESS TO SHORE LEAVE AND CONNECTION WITH LOVE ONES

- Reach out to flag States on key/essential worker status
- Reach out, engage with industry bodies, IMO and UN
- IMO/ILO number for seafarers
- Coding of seafarer issues –abandonment, stowaways, piracy, terrorism, smuggling, shore leave
- Cross reference coding #, seafarer #, ship #, and DOC
- Declare connectivity options in a commercial neutral manner
- Options to better understand and manage pressures on seafarers, and standards that impact them
- Work with port/terminal operators on shore leave and rest days. Encourage discounted rest time in port or anchorage

- Work with small owners. Engage with them on issues, advocate for seafarers, and foster better relations
- Treat crew as adults! Foster higher respect, recognition, and empathy towards seafarers
- Form of SIRE approach to seafarer wellbeing
- Spread the importance of seafarers. Advocate their skills, and the things they do. Make people know and understand, so they can appreciate seafarers
- Get owners, managers, charterers aligned on costs and issues
- Port Metrics on seafarers, use of facilities, shore leave
- Port city approach to local community beyond industry to engage so they know and understand seafarers, and develop means of supporting and welcoming.

2. MENTAL HEALTH AND WELLBEING

- Encourage awareness of the tools currently available
- Use data to develop the tools to address real issues
- Ensure industry champions help if anyone is missing
- Innovate in apps to ensure max sharing from seafarers
- Understand barriers to engagement –address survey lag
- Find ways to encourage seafarers to talk – give tokens to spend at airports to help them open up about their trip
- Remove social barriers and stigma around mental health
- Get industry leaders to speak of their own mental issues
- Physical condition monitoring
- Hydroponic fruit and vegetables grown onboard
- Mandatory training on mental health –how to manage their own to recognize issues and help others
- Manage connectivity –have safeguards and alternatives for a better life without retreating into cabin mentality
- Share industry best practices –have a roster of champions who are proud of their results

- Mental health check –similar to ENG1 status but ongoing basis
- Mentorship program –senior leaders and across, to ensure everyone understands the problems, and the fixes
- Leadership management training –mandatory to consider seafarer welfare
- Ask seafarers for solutions to make life better –prizes and competitions for best ideas
- Use ships as test beds for solutions –learn from “maritime culture labs” launched by shipping companies.

3. PACKAGE, SECURITY, DIVERSITY, CAREER PROGRESSION

- Mechanisms to enhance job security
- Move to permanent contracts where possible
- More accountable owners –address issue of pensions
- Compensation issues –fix lag-time between on-time repatriation and salary triggers
- Have rolling contracts to provide more certainty
- Improve working condition, better connectivity
- Manage career progression –include seniority payments even if not promoted
- Provide benefits such as insurance for families
- Invest in upskilling –better access to online training
- Leadership training
- Provide the skills needed for shore jobs
- Provide better links to shore-based professions
- Ship to shore transition career programs
- Improve recruitment focus towards the younger generation
- Ensure psychological & physical safety are given equal priority
- Engage school children –sponsor ship scheme
- Engage with teachers and STEM subjects
- Tax breaks for seafarers –drive policy change
- Change the reality for female seafarers but also understand the barriers for men, fears and stresses
- Digital twin seafaring
- War gaming careers, social interactions, and relationships
- Develop incentives and rejoining benefits to come back
- Audit the industry, find extent of seafarer welfare activities and develop best practices and guidance
- Learn from Navies globally. The Royal Navy and U.S. Navy have done much work in these areas.
- As AI impacts white collar employment in traditional maritime supply nations, offer skilled people with careers at sea.

4. LIVING AND WORKING CONDITIONS

- Talk to seafarers, listen and survey. Understand issues on ships. Those already being done by SHI and Idwal –how can we ensure a meta data approach
- Ensure a living wage
- Assist with flow of costs between time at sea and ashore
- Definitions and responses to health to include mental health
- Provide a psychological “safe space” to talk and share with professional guidance and support
- Minimum victualling allowance requires planning
- Minimum standards benchmarking
- Ensure right engagement and buy-in from industry
- Ensure seafarers feel a sense of trust across the vessel –can talk to seniors and be heard
- Ensure onboarding/familiarization includes what they do to socialize and enjoy life
- Improve vessel designs for improved homely environment –make ships a nicer place to live

- Mattresses and bedding are part of MLC –but who is testing?
- Explore shorter contracts
- Explore maternity leave and rotation patterns
- Access to sanitary products and ability to dispose
- Access to correctly fitted and sized PPE
- Provision of changing rooms/bathrooms for women
- Stop the culture of rumor and gossip. Build teams.
- Ensure no one feels isolated, unsupported, or alone
- Online social network onboard
- Change narrative from cost to opportunity –welfare as risk management and excellence. Seafarer Capital! If you don’t have this, you don’t have a business
- Mechanism for seafarers to report positives. What changes are making an impact and improving life?

5. SUPPORT AND MANAGEMENT ONBOARD AND ASHORE

- Global promotion of seafarers and their importance
- Humanizing shipping
- Emphasize cultural currency of shipping –its importance and get images of ships and seafarers into art
- Create trust, respect between ship & shore, and beyond
- UN Special Seafarer Rapporteur, a potential neutral focal point
- Balance the move from ship to shore –make seafarers feel valued at all stages
- Seafarers issues should be heard and impacts understood
- Harness and focus on soft skills
- Develop mechanism for a better ship-to-shore dialogue
- Make some consistent conditions with shore
- Apply same ethos on team building ashore with at sea
- Review processes to see how things can be made better
- Emphasize people –minimum safe manning
- Ask whether there is genuine respect and appreciation
- Issue of minimum safe manning level required
- Minimum Safe Manning designation
- Women as not less competent; create a level playing field
- Better preparation for new joiners into the industry
- Explore all cultural differences, and manage impact
- Better onboard environment and recreation
- Ensure seafarers have budget for their needs, to pay on time
- Education and outreach in labor supply areas –ensure awareness of rogue agents and scams
- Business students studying seafarer issues to ensure costs of welfare can be mitigated
- In event of accidents, use trauma-informed care and management.



You can access the full report at [Mission to Seafarers](#)

5 REASONS WHY SHIPPING AND AVIATION NEED GREEN HYDROGEN AND DIRECT AIR CAPTURE TO DECARBONIZE

by SASHA Coalition

The shipping and aviation industries are energy intensive, so they have a limited pool of options to choose from when it comes to decarbonization. However, green hydrogen and carbon dioxide derived from direct air capture (DAC) will both be integral in their efforts to reach net-zero.

We established the Skies and Seas Hydrogen-fuels Accelerator Coalition (SASHA Coalition) to highlight the vital role of green hydrogen and DAC in decarbonizing these sectors – here are our top 5 reasons why they are crucial for net-zero aircraft and marine vessels.

1. Shipping and aviation emissions will only increase if action isn't taken

To put it (not very) lightly, the situation is dire. The most obvious reason is that, if we are to reach net-zero by 2050, these sectors cannot continue how they are operating today.

The [International Maritime Organization](#) (IMO) found that in 2018, the shipping industry emitted around 3% of global greenhouse gases. In the same year, the [International Council on Clean Transportation](#) (ICCT) found the aviation industry emitted 2.4% of global CO₂ emissions – a figure that doesn't even account for the [non-CO₂ effects of aviation](#).

These figures are set to increase significantly if decisive action to decarbonize the sectors isn't taken. And a key element of these decarbonization measures will be rolling out green hydrogen and DAC derived fuels. And fast.

2. Oil is out

Engineers have come up with promising solutions such as efficiency improvements, direct electrification where possible and disruptive propulsion technologies. These options can do a lot, but they can also only do so much. Rather than tinkering to make the use of oil more efficient, we need to focus all our efforts on deploying zero-emission technologies. Ultimately, the shipping and aviation sectors need to address the issue at the source – and this means changing fuels.

Implementing sustainable fuels for aircraft and vessels will be instrumental in delivering these industries to net zero by 2050 (at the very latest!). Our launch report with Arup, to be released in September, addresses this exact issue. We found that for shipping, hydrogen, ammonia and methanol are the most promising sustainable fuel options, and for aviation, it's synthetic kerosene.

In the [recent Lloyd's List decarbonization survey](#), 18% of shipowners responded that direct hydrogen would be the most viable fuel option after 2030, with 13% opting for ammonia and 10% methanol (both of which require green hydrogen to be produced in their most sustainable forms).

This is already being seen in practice. In the [Netherlands](#), the [MS Antoine](#) has been given the go-ahead. She is the first inland ship in the country to run on green hydrogen. In the skies, [ZeroAvia](#) are working to put hydrogen-electric engines in every aircraft, with a [test flight](#) being successful last month. So it's clear people agree with us that sustainable fuel is key. Green hydrogen (and its derivative fuels) will play a crucial role in decarbonization of these industries.

3. Green hydrogen is in all future fuel pathways

Green hydrogen – produced using renewable electricity – will be included in ALL pathways for sustainable fuel. Our snazzy infographic demonstrates this:



We need to take into account the full lifecycle of emissions, and green hydrogen is the only route that can produce zero or near-zero carbon fuels. In considering the full lifecycle impacts, it is also clear that only green hydrogen will produce truly sustainable fuels for these sectors, whether that be hydrogen, ammonia or methanol for shipping, or synthetic kerosene for aviation.

Industry agrees with us that green hydrogen is key, and investment in electrolyzers (the technology used to separate hydrogen atoms) is booming. Green hydrogen production capacity is set to see a 50-fold increase in the next five years. Airbus expects green hydrogen to power its future zero-emission aircraft when it reaches the market by 2035, and Maersk is set to become a major green hydrogen consumer as it embraces methanol to fuel vessels.

Yet while it might look at first glance like we're on track to have enough hydrogen projects to meet demand, the reality is that we're still falling short. That's why we need first movers like Airbus and Maersk from the industry to send clear demand signals, and ramp up the supply of hydrogen-derived fuels.

4. There are limited non-fossil fuel sources of CO2

Ah carbon. This notorious element is the climate world's ex-partner – can't live with it, can't live without it. CO2 is still needed for synthetic kerosene and methanol. Notably, there are very limited sources of CO2 which are not reliant on fossil fuel. CO2 derived from DAC is one of those limited sources.

There are several methods of capturing CO2, and you might be wondering what the difference is between DAC and CCUS (carbon capture, utilization and storage). The Congressional Research Service explains it well:

- CCUS only works during the release of carbon during any process. A chemical that can "grab" CO2 is placed at the source of CO2. The captured CO2 is then released and compressed to be transferred by pipeline.
- DAC does not need a simultaneous process. DAC removes CO2 which already exists in the atmosphere, no matter when the CO2 was released. Air is forced over a chemical that can "grab the CO2."

In the spirit of reducing carbon emissions, we are pushing for a preference for DAC rather than the other method of CCUS. This will result in a more circular process without the need for more production of carbon. In shipping, aviation, and other hard-to-abate sectors, carbon cannot be captured at the source – therefore, DAC is the preference.

5. Green hydrogen and DAC are clear solutions for regulators and policymakers

The final reason why shipping and aviation need green hydrogen and DAC is because regulations are already beginning to mandate the use of hydrogen derived fuels from as early as 2030. At the EU and UK level, regulations and policy commitments have already begun sending a message that these fuels will play a key role in decarbonizing shipping and aviation:

SHIPPING

- The FuelEU Maritime regulation aims to increase the demand for and consistent use of renewable and low-carbon fuels – and reduce the greenhouse gas emissions from – the shipping sector.
- However, the regulation only includes a 2% renewable fuels usage target by 2034 if renewable fuels of non-biological origin amount to less than 1% in the fuel mix in 2031.

- The UK's 2019 Clean Maritime Plan also states that the vast majority of emission reductions will be achieved through a switch to low or zero-emission fuels, with "two low carbon hydrogen-derived fuels (ammonia and methanol), meeting the vast majority of energy demand by 2050."
- But, the UK government currently has no hard targets at all for shipping decarbonization and is only looking to regulate for the domestic shipping sector.

AVIATION

- The FuelEU Aviation regulation mandates fuel suppliers to supply a minimum share of Sustainable Aviation Fuels (SAF) at EU airports. This starts at 2% of overall fuel supplied by 2025, reaching 70% by 2050 – of which 35% must be synthetic fuels.
- The UK committed to introduce a SAF mandate in 2025 requiring at least 10% of jet fuel to be made from sustainable feedstocks by 2030 released in 2022. While there's currently no sub-mandate for the use of hydrogen-derived fuels, the UK government has recently consulted on introducing a PtL mandate.

While it is encouraging to see regulations mandating the use of hydrogen-derived fuels, stronger regulations are still needed to drive uptake of these fuels. They can and must go further if both industries are to achieve net zero by 2050.

It will of course be a challenge to scale up production of these alternative fuels. And, policymakers and regulators must recognize that green hydrogen and carbon dioxide from DAC will continue to be in limited supply in the coming decades and should therefore be targeted towards sectors such as shipping and aviation that have no more efficient routes to decarbonization.

Hydrogen is marked to play a critical role in decarbonizing a wide range of sectors. Because of these wide-ranging possibilities, there could be heavy competition for the green hydrogen as the industry develops. This is the likely global usage of hydrogen presented in a hierarchy according to other viable alternative decarbonization pathways.

Scott Pendry, Director of External Relations, of zero emission aircraft developer Cranfield Aerospace Solutions, says *"This report [Green Hydrogen Gap] demonstrates that there is no path to a climate neutral aviation system that does not involve hydrogen on a large scale: whether that be as an energy source itself, or as a feedstock for the sustainable aviation fuels of the future. Both government and industry must now start addressing the question of how to scale the production, storage and use of green hydrogen for both SAF and hydrogen aircraft propulsion."*

The SASHA Coalition report is facilitated by Opportunity Green and aims to create clear and strong messaging around the vital role of green hydrogen and DAC in the decarbonization of the aviation and shipping sectors.

Download the full report: The Green Hydrogen Gap.

Contributed by Sabrina Khan-Dighe.

STUDY ON METHODS AND CONSIDERATIONS FOR THE DETERMINATION OF GHG REDUCTION FOR INTERNATIONAL SHIPPING

by CE DELFT

Executive Summary. The Marine Environment Protection Committee (MEPC) of the International Maritime Organization (IMO) has adopted the Initial IMO Strategy on reduction of greenhouse gas (GHG) emissions from ships which envisages to “reduce GHG emissions from international shipping and phase them out as soon as possible in this century.” It also expresses the ambition to:

- reduce CO₂ emissions per transport work, as an average across international shipping, by at least 40% by 2030 compared to 2008; and
- to peak GHG emissions from international shipping as soon as possible and to reduce the total annual GHG emissions by at least 50% by 2050 compared to 2008 whilst pursuing efforts towards phasing them out as called for in the Vision as a point on a pathway of CO₂ emissions reduction consistent with the Paris Agreement temperature goals.

The Initial Strategy also includes a list of candidate short, mid and long-term measures, defined respectively as measures that will be agreed by the MEPC before 2023, between 2023 and 2030, and after 2030. Given these timelines, the level of ambition for 2030 will have to be achieved by short- and possibly also mid-term measures. The short-term measures could also be instrumental in achieving a peak in emissions as soon as possible and setting them on a downward course. However, the Strategy recognizes that in order to meet the 2050 Level of Ambition, the global introduction of alternative fuels and/or energy sources will be required.

In the context of the Initial Strategy, this report designed short-term measures based on the list comprised in the initial strategy, and assessed their impacts on 2030 emissions.

Short-term Measures. The Initial Strategy contains a list of 13 candidate short-term measures. Of the 13, 5 can be considered to have a direct impact on CO₂ emissions from ships. These are (using the numbering of the Initial Strategy):

- Further improvement of the existing energy efficiency framework with a focus on Energy Efficiency Design Index (EEDI) and Ship Energy Efficiency Management Plan (SEEMP), accounting for the outcome of the EEDI regulations review;
- Develop technical and operational energy efficiency measures for both new and existing ships, with indicators in line with the 3-step approach that can be utilized to indicate and enhance the energy efficiency performance of shipping, e.g., Annual Efficiency Ratio (AER), Energy Efficiency per Service Hour (EESH), Individual Ship Performance Indicator (ISPI), and Fuel Oil Reduction Strategy (FORS);
- Establishment of an Existing Fleet Improvement Programme;
- Consider and analyze the use of speed optimization and speed reduction as a measure, taking into account safety issues, distance travelled, distortion of the market or trade and that such measure does not impact on shipping’s capability to serve remote geographic areas.

- Encourage the development and update of national action plans to develop policies and strategies to address GHG emissions from international shipping in accordance with guidelines to be developed by the Organization, taking into account the need to avoid regional or unilateral measures.

Some of these measures, like the Existing Fleet Improvement Programme, have been described in detail in various submissions to the MEPC. On others, little more information is available than is contained in the list above. This report has developed more detailed designs of the measures which are presented in summary below.

Further Improvement of the EEDI. This report presents two policies to further improve the EEDI. The first is to bring forward the implementation date of Phase 3 of the EEDI from 2025 to 2022, and introduce a fourth phase in 2027.

The second is a policy to apply the EEDI to existing ships, which requires a more elaborate description. Under this policy, each ship would need to have an attained measure of its design efficiency, similar to the EEDI for new ships, but potentially calculated on the basis of existing documentation. A target would be set, e.g., 10%, 20% or 30% above the applicable reference line, and within a certain timeframe, ships would need to meet the new standard through retrofits of energy technologies or reducing engine power.

Further improvement of the SEEMP. This report analyses three options for further improve the SEEMP.

First, the SEEMP could be aligned with other energy efficiency management plans by mandating companies to set a goal for the energy efficiency of a ship. This has proven in other sectors to improve the impact of the policy. A shipping company would need to adopt an energy efficiency metric which it considers to represent the efficiency of the ship well and set a target. In addition, progress towards the target would need to be monitored and the target would need to be updated regularly. SEEMPs would have a limited validity in order to ensure that targets will indeed be updated.

Second, the SEEMP could mandate ships to regularly establish a speed-fuel curve following a standardized method. This could facilitate the communication on efficiency between ship owners and charterers and help reduce the split incentive (where ship owners don’t reap benefits of investments in energy efficiency because charterers benefit from the lower fuel costs).

Third, mandating ships to install cost-effective technologies. This is the most complicated improvement of the SEEMP as it would change the nature of the SEEMP from a management plan that has to be developed on the basis of guidelines into a regulation that requires ships to change their design efficiency. Under this policy, a group of experts would establish a list of technologies that are generally cost-effective to implement. Examples of such technologies could be advanced hull coatings, propeller upgrades like ducts or counter-rotating propellers. Ships would have to apply these technologies at their next drydocking,

unless they can prove to their administration that the technology is not cost-effective for the ship in question.

Operational efficiency standards. This measure would entail that ships monitor their operational efficiency using an indicator that needs to be agreed by the IMO. The IMO would also set reference lines and targets for ships. Ships would then be required to meet the applicable operational efficiency target.

Existing Fleet Improvement Program. The existing fleet improvement program would require ships to set aside a certain amount of money each year, related to the fuel consumption of the ship. This money would need to be invested in Energy Efficiency Bonds, which can only be used to purchase energy efficiency technologies for ships. Shipping companies would be allowed to convert the Bonds for any ship, and would thus have an incentive to invest it in the improvement of the ship for which it is most cost-effective.

Speed Limitation. This regulation would introduce a ship-type and size with specific maximum speed which ships would not be allowed to exceed.

National or Regional Measures. This report presents three possible national or regional measures and focusses on how the IMO could facilitate States or Regions to adopt them. First, IMO could offer a platform for developing a standard for ship-shore communication that could inform ships well in advance on the availability of pilots and berths and allow them to approach ports at an optimal speed. Second, the IMO could offer a platform for the development of a standard for port incentive schemes. Third, the IMO could develop a framework to allow incentivizing the uptake of renewable fuels on short-haul routes.

Impacts of the Short-Term Measures on Emissions. The measures presented and analyzed in this report can be grouped into three categories:

Measures that can help remove barriers to the implementation of cost-effective technologies or operational practices:

- Strengthening the SEEMP;
- Mandatory goal-setting;
- Strengthening the SEEMP
- Mandatory periodic efficiency assessment;
- Develop a standard for ship-shore communication for voluntary use;
- Develop a standard for port incentive schemes for voluntary use; and
- Create a framework for incentivizing the uptake of renewable fuels.

Measures that mandate ships to improve their technical or design efficiency:

- Strengthening the EEDI for new ships;
- Applying the EEDI to existing ships;
- Strengthening the SEEMP;
- Mandatory retrofits of cost-effective technologies; and
- Existing fleet improvement program.

Measures that mandate operational carbon intensity improvements:

- Setting mandatory operational efficiency standards;
- Speed regulation.

The first category of measures in general has a limited impact on emissions because the many cost-effective measures will be implemented anyway over time in most Business as Usual (BAU) scenarios and because some barriers will remain. Although the emission reductions vary per measure, they are typically a few percent. These measures are not able to ensure that the shipping sector meets the 2030 level of ambition of the IMO GHG Strategy, which is to improve the CO₂ intensity of maritime transport by at least 40% relative to 2008.

The second category of measures has a slightly larger impact on emissions because they can also mandate the adoption of measures that are not cost-effective from a private perspective. The measure that applies only to new ships has a limited impact on emissions by 2030, but the impact will increase in later years. However, the measures that apply to the existing fleet can have larger impacts, depending on the stringency applied. Emission reductions by 2030 are typically several percent. Moreover, measures that exclusively incentivize improvements in technical/design efficiency show a risk of a rebound effect. That is to say that savings in technical efficiency are diminished because of an economic incentive created to operate at higher speeds. The results suggest that the rebound effect could perhaps halve the benefit of CO₂ emissions reduction gained from the technical efficiency improvements. These measures by themselves are not able to ensure that the shipping sector meets the 2030 level of ambition.

The third category of measures has the highest impact on emissions because they apply to all ships, can ensure that ship owners have to meet a certain efficiency target, and/or because they incentivize speed reduction which is the measure that has the greatest potential to reduce emissions. This category of measures has the ability to meet or exceed the minimum level of ambition for 2030.

The operational efficiency can be calculated annually for individual ships on the basis of data available within shipping companies and reported to the Flag State in the IMO Data Collection System. Average annual speeds can also be calculated from the Data Collection System. The difference between the measures is that the definition of the average annual speed is straightforward, while there is no agreement yet on what a suitable operational efficiency indicator would be.

Both speed limits and operational efficiency standards will require most ships to reduce their speed if the 2030 CO₂-intensity ambition is to be met. There is a difference, however. At equivalent CO₂ reduction outcomes, operational efficiency standards allow ships more ways to comply than to reduce speed: improving the design efficiency, switching fuels, improving the management or logistics of the ship, et cetera. As a consequence, the resulting speed in 2030 will be somewhat higher than under equivalent speed reduction measures.

GROUND BREAKING FIRST AMMONIA ENGINE TEST COMPLETED

by MAN Energy Solutions

Successful ammonia combustion in MAN B&W two-stroke engine marks 'historic' step for company and maritime sector

MAN Energy Solutions has announced the successful first running of a test engine on ammonia at its Research Centre Copenhagen (RCC). The company reports the successful combustion was performed on a MAN B&W 2-stroke 4T50ME-X type and produced positive results with particularly promising data regarding pilot-oil amount and combustion stability.

Gunnar Stiesch, Chief Technical Officer, MAN Energy Solutions, said: *"This marks a major milestone on our road to developing a full-scale two-stroke ammonia marine engine. It's been a historic week for our team at the RCC where a lot of groundwork and research has now paid off and we have gained a deep understanding of ammonia's unique characteristics as a marine fuel, as well as its effects on fuel supply and safety systems. This successful combustion represents yet another, important step towards decarbonizing the marine market and bringing big things to zero."*

MAN Energy Solutions reports that safety has been of paramount importance at all stages leading to the new milestone. Precautions taken due to the fuel's inherent characteristics include the construction of a custom-built 'cold hall', which can contain ammonia vapor in the unlikely event of a leak with the activation of a water screen. Robust safety features from the company's existing dual-fuel portfolio, such as double-walled piping and system ventilation, have also been built into the ammonia engine's design.

Brian Østergaard Sørensen, Vice President and Head of Research & Development, Two-Stroke at MAN Energy Solutions, said: *"This is groundbreaking for both our company and the maritime industry as a whole. We know we still have a lot of hard work ahead and, over the following months, will execute a testing program that will study aspects such as heat-release, ignition, safety, pilot-oil energy fraction, NOx and N2O emissions. We then plan on rebuilding the test engine from one cylinder capable of running on ammonia to a full-scale test engine running on ammonia around the end of 2023 or in early 2024."*

MAN Energy Solutions states it broadly expects to hold its delivery timeline for the first ammonia engine, with subsequent operation onboard a commercial vessel around 2026.

Bjarne Foldager, Head of Two-Stroke Business, MAN Energy Solutions, said: *"Interest in this breakthrough has been overwhelming. However, while we provide the decarbonizing technology, the maritime industry must show the will to implement it. Now it's up to the International Maritime Organization (IMO) to establish clear regulations that ensure that maritime actors are not penalized for choosing carbon-neutral fuels. At MAN Energy Solutions, our expectations for ammonia are positive owing to its predicted lower production cost compared to other, relevant e-fuels; we foresee around 27% of fuel used onboard large merchant-marine vessels to be ammonia by 2050."*

Thomas S. Hansen, Head of Promotion and Customer Support, MAN Energy Solutions, said: *"The first MAN B&W ammonia engine will be a 60-bore engine, which will be applicable to a very wide range of vessel types. The interest in this engine is very high and we have received many queries across basically all large merchant-marine vessels. MAN Energy Solutions expects a quick uptake of ammonia-fueled engines towards the end of the current decade."*

Project steps. The ammonia engine R&D project started in 2019 with a pre-study and investigation of ammonia combustibility. The following year, a second test-engine arrived in Copenhagen, enabling a parallel-test engine setup with different fuels at RCC; HAZID workshops on the engine concepts were performed simultaneously.

In 2021, the ammonia fuel-supply system and auxiliary systems were specified with the highest possible focus on safety.

In 2022, the installation of the same systems at RCC with instrumentation for test engine No. 1 for 1-cylinder ammonia testing was initiated.

In 2023, ammonia bunkering and service-tank facilities were built with all auxiliary systems enabling a full containment of ammonia in the unlikely event of a leak. Similarly, all auxiliary systems were initially tested with water, followed by ammonia.

Source: <https://www.man-es.com/company/press-releases/press-details/2023/07/13/groundbreaking-first-ammonia-engine-test-completed>



PHILIPPINE NAVY HOSTS THE 17TH ASEAN NAVY CHIEFS MEETING

by Altamira Reyes

The 17th ANCM Plenary Session at the Grand Ballrooms II and III at Grand Hyatt Manila. (Source: Naval Public Affairs Office)

The year 2023 is a monumental year for the Philippine Navy. What started as a revolutionary independent force that was founded by the first Philippine President, President Emilio Aguinaldo on May 20, 1898, grew to become the country's naval warfare service that celebrated its 125th anniversary last May 20, 2023. But before the celebration of its founding anniversary, the Philippine Navy was already busy with an equally important event, one that it has been preparing for since mid-2022 and that is its hosting of the 17th ASEAN Navy Chiefs' Meeting (ANCM) in Manila a decade after its first hosting stint. Under the purview of the 17th ANCM, the Philippine Navy also hosted the 2nd ASEAN Multilateral Naval Exercise (2nd AMNEX) with an ASEAN Fleet Review (AFR) and this was the first time that the Philippine Navy conducted this exercise dovetailed with its official hosting of the ANCM.

ANCM: Origins and Significance

While the ANCM is a familiar platform for Philippine Navy offices and officers and other government agencies that have direct participation in the Association of Southeast Asian Nations (ASEAN) or ANCM-related initiatives, not everyone has knowledge nor has encountered or participated in meetings or activities related to the ANCM. With the Philippine Navy at the helm of this year's ANCM, there is a need to understand its significance and how it contributes to the strengthening of relations between ASEAN navies over the years.

The ANCM is a military-to-military activity that falls under the purview of the ASEAN. Accordingly, it serves as a platform for ASEAN naval leaders to discuss and exchange ideas about steps that can be undertaken together to maintain maritime security in the Southeast Asian region.

Its origins can be traced to its formal establishment in 2001 with the Royal Thai Navy hosting the activity. During that time, it was originally known as the ASEAN Navy Interaction (ANI) and it was conducted biennially. Subsequent interactions including the 2nd iteration hosted by the Royal Malaysian Navy in 2003, the 3rd iteration hosted by the Republic of Singapore Navy in 2005, and the 4th iteration hosted by the Indonesian Navy in 2010 retained the use of ANI. However, during the 5th ANI meeting in 2011 that was hosted by the Vietnam People's Navy, the discussion concerning its renaming to ANCM was implemented with future meetings to be conducted annually rather than biennially. Such a decision was also related to the implementation of the two-year working plan that was discussed and approved between the Chiefs of the Defense Forces of the ASEAN during the 7th ASEAN Chief of Defense Forces Meeting in Hanoi, Vietnam in 2010. To date, this activity retains its name as 'ANCM' with the 10 ASEAN member states hosting the meeting annually on a rotational basis.

While the ANCM's roots can be traced to more than two decades ago, the AMNEX was a recent concept proposed under

the ambit of the ANCM. It was coined by the Royal Thai Navy during the 8th ANCM in 2014 and was officially adopted during the 9th ANCM in the following year. The inaugural exercise was hosted by the RTN in 2017 and the Philippine Navy participated in it by sending *BRP Tarlac* (LD601) and *BRP Gregorio Del Pilar* (PS15). Its second iteration was supposed to be carried out by the Vietnam People's Navy in 2020 but was canceled due to the Covid-19 pandemic. As a result, the next hosting was carried over to the Philippine Navy and dovetailed with its hosting of the 17th ANCM.

Conduct of the 17th ANCM and 2nd AMNEX

Anchored on the theme *"Synergy at Sea: Regional Cohesion for Peace and Stability"* emphasizing the role of ASEAN Navies in preserving Southeast Asia's long peace, the 10 Chiefs of Navies and their respective delegations from all ASEAN member states gathered at The Grand Hyatt Manila from May 08 to 12 to attend a series of activities organized by the Philippine Navy under the 17th ANCM. The roster of activities includes Social Events (e.g., Welcome Cocktails and Gala Dinner), the Maritime Security Symposium 2023 (MSS 2023), Bilateral Meetings, the Plenary Session of the 17th ANCM, and the 2nd AMNEX with AFR.

On the substantive part, the MSS 2023 was part of the 17th ANCM. While the MSS annually forms part of the Philippine Navy's anniversary Activities, this year the MSS served as the strategic scene setter of the 17th ANCM. With the theme *"ASEAN at the Forefront: Emphasizing ASEAN's Perspective, Highlighting its Strength"*, the MSS 2023 highlighted the significance of ensuring ASEAN Centrality through cooperation, and contextualized the role of ASEAN Navies amid geopolitical challenges and the rise of external players in the Southeast Asian region. It is also worth noting how Senior Usec. Carlito G. Galvez Jr., Officer-in-Charge of the Department of National Defense graced the activity as the Keynote Speaker. Further, all Chiefs' of Navy attended the said activity together with their selected Staff Officers. After the MSS 2023, bilateral meetings were conducted on the sidelines of the 17th ANCM.

The 17th ANCM Plenary Session took place on May 10, 2023. The ASEAN Navies were able to cover a total of twelve (12) agenda items divided into three sessions that detail past, present, and future activities under the ANCM. It was also during this session that the approval of the ANCM Guidelines for Maritime Interaction (ANCM GMI) was finalized after its tedious crafting process. With the passing of the ANCM GMI during the 17th ANCM, the PN has become instrumental in the development of a mechanism that may guide ASEAN Navies in promoting safety at sea and the synergy of efforts in pursuit of regional peace and stability.

After the Plenary Session, Day 2 of the bilateral meetings was held. In the evening, the Gala Dinner was hosted to celebrate the meaningful success of the 17th ANCM as well as the continued friendship among ASEAN nations with hopes of continued partnership and cooperation.

The next day, the Chiefs' of Navy and their selected staff departed from Grand Hyatt to attend the AFR in Subic, Zambales. The activity was participated by a total of nine ships from several ASEAN, including two from the Philippine Navy namely *BRP Antonio Luna* (FF151) and *BRP Andres Bonifacio* (PS17). Meanwhile, the *BRP Davao del Sur* (LD602) served as the viewing ship for the activity. While the Royal Cambodian Navy and the Lao People's Army did not send ships to the AFR, they have instead

sent observers signifying their gesture of solidarity and support for the Philippine Navy's hosting of the said activity. Similar to MSS 2023, Senior Usec. Galvez served as the keynote speaker for the said event.



VADM Toribio Adaci J PN delivered the MSS 2023 Closing Remarks. (Source: Naval Public Affairs Office)

Lastly, the 2nd AMNEX was conducted from 11 to 16 May 2023 and was divided into two phases, namely the Harbor Phase and the Sea Phase.

The Harbor phase consisted of activities that can familiarize each participating navy with one another. They were also briefed to help prepare the participating vessel and crew before navigating into open waters for the Sea Phase.

The Sea Phase was also participated by the aforementioned nine ships and centered on a notional scenario carried out to harness cooperation and interoperability between participating navies.



The ASEAN Chiefs' of Navies aboard BRP Davao Del Sur (LD602) during the AFR at Subic, Zambales. (Source: Naval Public Affairs Office)

The Impact of the Philippine Navy's Hosting

The Philippine Navy's hosting of the ANCM contributes to its goal of harnessing purposive engagements and the establishment and maintenance of relations with partner navies. This endeavor is also aligned with the PN's Active Archipelagic Strategy (AADS) whereby maritime cooperation is one of the strategic approaches. Accordingly, the Philippine Navy should maximize collaboration

and cooperation with like-minded navies and partners to address both traditional and non-traditional maritime security threats. It also highlights that given the dynamics of the maritime environment and its geopolitical implications, cooperation among navies is paramount.

The ANCM is an important platform that allows ASEAN navies to discuss developments in the region’s maritime security landscape as well as craft initiatives that promote cohesion among navies. As a platform of collaboration, ANCM also allows ASEAN Navies to synergize efforts centered on practical cooperation such as naval exercises, training exchanges, information sharing, and mutually beneficial dialogues – all of which contribute to the deepening of trust and partnerships between navies of the Southeast Asian region which is certainly crucial in today’s less benign strategic environment.

Regional-led mechanisms such as the ANCM are also important avenues to highlight shared maritime interests as well as common maritime security priorities. The Philippine Navy’s hosting of the 17th ANCM shows that the PN is a significant player and contributor to the ASEAN region’s peace and stability. It contributed to the improvement of ASEAN regional affairs, with the Philippine Navy actively participating in ensuring regional cohesiveness and interoperability among navies.



Senior Usec. Carlito G. Galvez Jr., former Officer-in-Charge of the Department of National Defense served as the Keynote Speaker to the Maritime Security Symposium 2023 (MSS 2023). This year’s MSS is dovetailed with the 17th ANCM.



VADM Toribio Adaci Jr hands out a memento to ADM Muhammad Ali, Chief of Navy of the Indonesian Navy. Indonesia was the ANCM’s host prior to the Philippines. (Source: Naval Public Affairs Office)



BRP Davao del Sur (center) passes RSS Supreme of the Republic of Singapore Navy (left) and KRI GNR 332 (right) of the Indonesian Navy during the ASEAN Fleet Review. (Source: Naval Public Affairs Office)

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WHY PNOY AND BBM LEANED ON AMERICA, NOT CHINA

by Andrew J. Masigan

The world's predominant superpower will always create the conditions to perpetuate its global dominance and weaker nations will always be subsumed by these conditions. Like it or not, that's just how the world works. It was true during the ancient Byzantine and Roman empires as it was true during the recent British and American empires. How do superpowers create the conditions to perpetuate their dominance? They write the rules for global trade and geopolitical engagement; they dominate the world economy; they develop the world's strongest military; they control critical technologies; they become the world's primary source of trade and investments; they form strategic diplomatic alliances and they develop the strongest cultural influence. Superpowers engage in unethical practices to maintain their global influence too. These include instigating wars, interfering in domestic affairs, enforcing trade sanctions, igniting political instability and installing puppet governments, among others. America has been the lone superpower for more than a century. But they are now challenged by China. With its growing economic and military gravitas, China aims to install a new world order based on the values of the Chinese Communist Party. They want to re-write global rules and norms to fit their agenda.

The American and Chinese Systems

Regardless of who we side with, the Philippines (and other smaller nations) will have to adhere to the world order according to the reigning superpower. It becomes a question of where our values and strategic interest are better aligned. We already know the rules-of-engagement of America. We lived under her thumb for decades. The good thing is that our values coincide. America perpetuates democracy, free trade, pluralism and diversity. They value the liberty to pursue individual goals and require a justice system that upholds human rights and social order.

There is no denying that America resorts to the unethical practices mentioned above. But thankfully, America counts the Philippines as an important ally whose continued socioeconomic development serves her purpose. Our sovereignty and economic wellbeing are not under threat by America.

China operates with different ideals. Underpinning Chinese values are Marxist-Leninist principles with the Chinese Communist Party as the supreme authority. Chinese patriotism and their national interest are primordial, even at the expense of individual rights. Enforcement of rules could be severe with nary a respect for human rights. They embrace capitalism with the goal of achieving a socialist society.

China operates with its own set of unethical practices. They ignore international laws; they ignore sovereign boundaries, freely sailing in the exclusive economic zones and flying over the air defense identification zones of sovereign nations; they ignore commitments made in word and written declarations; they resort to bullying tactics, both militarily and through trade sanctions; they buy politicians; they engage in commercial blackmail, among many others.

On Sept. 16, 1991, the Philippines elected not to renew the Philippine-US Treaty of Friendship, effectively ejecting US military bases from the country. American military bases were viewed as a legacy of the colonial era. For 23 years, the U.S. remained a friend and treaty partner, but at arm's length. This was the opportunity for China to win Philippine favor.

But China Pushed Too Hard

Instead of becoming a partner in development, China stabbed the Philippines in the back. In 2005, the Philippine government granted China and Vietnam the rights to conduct seismic surveys on the disputed Spratly island chain. This was the opening that allowed China to illegally grab Philippine sovereign territories.

In 2013, in a unilateral act of aggression, China announced that the Spratlys, Parcel islands and Macclesfield Bank would be administered by Sasha city, a territory of China.

In 2014, the Philippines filed a case against China before the Permanent Court of Arbitration. Many feared that China was preparing to militarize the area – an allegation that China vehemently denied.

But in 2015, satellite images confirmed that China was indeed building an airstrip at Kagitingan (Fiery Cross) Reef. It also showed a second airstrip in nearby Zamora (Subi) Reef. Heavy dredging indicated China's intent to link these small landmasses to build a full-blown military base. This was exactly what happened.

In 2016, the Permanent Court of Arbitration ruled in the Philippines' favor. China refused to recognize the tribunal's decision. It even expanded its territorial grab and accelerated the construction of its military base.

Adding insult to injury is China's relentless and ruthless bullying of our fishermen. They are gunned with water cannons, blinded with laser lights and threatened with gunfire. Our fishermen are bamboozled by Chinese ships, accosted, and their fishing equipment destroyed. In 2022, the Chinese government unilaterally put a stop to all fishing activities in the disputed waters.

The Philippine Conundrum

Unbearable bullying from China left the Philippines with two options. One, strengthen military relations with its former

colonizer and live with the advantages and disadvantages of American presence. Or two, give up our sovereignty of the West Philippine Sea, give up our fishing rights, give up our rights to the minerals, natural gas and oil deposits and live with the threat of Chinese annexation of more Philippine territories. In 2014, the Philippines, under PNoy's leadership, chose to lean-in on the United States. This was manifested in the signing of the Enhanced Defense Cooperation Agreement (EDCA), a covenant that gave U.S. troops access to five Philippine military bases. The Americans were allowed to pre-position supplies and deploy troops therewith. Former president Duterte's reverence for China and the promise of \$24 billion in investments and ODA (which never materialized) were not enough to assuage public distrust for China, the perceived national tormentor. Surveys by SWS and Pulse Asia revealed China as the most distrusted country among Filipinos.

In 2022, the looming threat of China's expansionism and its relentless bullying compelled PBBM to expand EDCA. As a result, the U.S. now has access to four more military bases in Cagayan, Isabela, Zambales, and Palawan.

So were PNoy and PBBM correct to lean-in on the US? Look, the American and Chinese systems are both flawed. The difference is that America has no interest in annexing Philippine sovereign territories. In fact, they are helping us defend our territorial domain. And as mentioned earlier, we know how America operates and have proven that we can thrive under the American system. This cannot be said for China.

While a handful may deem the grass greener on China's side, the majority of Filipinos still cannot fathom living under a world order designed by the Chinese Communist Party. Chinese style authoritarianism goes against Filipino DNA.

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THE MAGNA CARTA OF FILIPINO SEAFARERS

by Karl M. Garcia

The proposed Magna Carta of Filipino Seafarers is designed to provide comprehensive protection for seafarers before, during, and after employment especially in the event of maritime accidents, pandemics or epidemics, or other natural or manmade disasters. It codifies the rights of seafarers into a single reference law.

Who are the seafarers in the Magna Carta. This Act shall cover Filipino seafarers who are employed or engaged or work in any capacity on board foreign-registered ships and Philippine-registered ships operating internationally. This Act shall not cover seafarers on board the following categories of ships: (1) Warships and naval auxiliaries; (2) Government ships not engaged in commercial operations; (3) Ships of traditional build, as may be defined under existing rules and regulations; and (4) Fishing vessels. The bill further noted that “Seafarers who are employed or engaged or work in any capacity on board merchant ships operating domestically shall be covered by the Labor Code of the Philippines, and by other applicable laws, executive issuances, rules and regulations.”

Role in the Philippine economy. In 2019 alone, it was estimated that 519,031 deployed Filipino seafarers remitted US\$6.5 billion to the Philippines. This is practically 1.7% of the country's GDP that year. Throughout the pandemic, the world's 1.9 million seafarers played a vital role in keeping ships moving and ensuring critical goods such as food, medical equipment, and vaccines are delivered. In 2022, 489,852 Filipino Seafarers were deployed, making 25% of the world's seafarers Filipino.

Why does the Magna Carta of the Filipino Seafarers need to be passed?

1. It is a highly regulated Industry. Seafarers are governed by International Conventions, Laws and Practices that are particular to Sea based OFWs and not Land based OFWS.

The Philippines' distinction as the seafaring capital of the world was sustained through its strict compliance to the requirements imposed by the ILO's Maritime Labour Convention or MLC 2006 and International Convention on Standards of Training, Certification and Watch keeping for Seafarers or STCW.

The MLC 2006 is also known as the seafarer's bill of rights. The Convention sees that that every seafarer has the right to secure workplace that complies with safety standards.

The Standards of Training, Certification and Watch keeping for Seafarers SCTW was created to clarify the standards of compliance and introduce qualification requirements for trainers and assessors, provide effective mechanisms for its enforcement and allow greater flexibility in the assignment and functions onboard ship.

2. Well Compensated Work for a high skill set worker. Even the low ranked crew mess man's salary ranges from Php78,400 to Php140,000 and that is about 10 times the minimum wage.

3. The Viability of the Filipino Seafarer in the Global Industry will be protected by the Magna carta. Though the Philippines, Russian Federation, Indonesia and China are the largest supplier's ratings and officers to Merchant ships, more seamen are being hired by Vietnam, Myanmar, Africa and China.

This is an ongoing concern we have been addressing the grievances and shortcomings of past EMSA audits and continuously improve our Maritime Education and Training. The Magna Carta has provisions on training and Education for both Non-Degree and Degree Courses.

4. The Magna Carta will empower our Government Agencies to Help our Seafarers. The law will be a compass for our government agencies especially the relatively young Department of Migrant Workers who is still adjusting to its new jurisdiction and with the legislative measure being able to outline the seafarer's primary concerns, this will aid them in helping our seafarers as well as the manning agencies.

5. Inform our Seafarers of their Rights. Lastly, the charter will be the map of the seafarer along its journey giving information about how to go about their concerns their rights and how to enforce their rights and how to avail of them. According to the measure, Filipino seafarers have a right to:

- Safe and secure workplace that complies with safety standards;
- Fair terms and conditions of employment;
- Decent working and living conditions on board a ship;
- Health protection, welfare measures, medical care;
- Self-organization;
- Information about seafarer's family;
- Against discrimination;
- Educational advancement and training;
- Relevant information;
- Free legal representation;
- Appropriate grievance mechanism;
- Access to communication;
- Fair treatment in the event of a maritime accident; and
- Fair medical assessment.

The House of Representatives has already approved on its third and final reading House Bill (HB) No. 7325 or the proposed Magna Carta of Filipino Seafarers, with 304 affirmative votes, while the Senate has yet to approve this. The legislative status of the Magna Carta bill as per the Senate Website states that as of 22-May-2023 the Bill's second reading is still pending and its committee report is referred to the calendar of the special order of business. It is also worth noting that the Senate version of the bill removed the escrow provision of the bill.

Escrow Provision in HB7325

Sec. 51. Escrow as a manner of Execution

“Any Monetary award by the arbitrator to the seafarer or the seafarers' successor-in-interest, made whether in a voluntary or mandatory arbitration, or by the National Labor Relations Commission, shall be placed in escrow if the employer or manning agency has raised or intends to raise the decision for judicial review in accordance with the Rules of court. The amount in escrow shall not include the claims for salaries, statutory monetary benefits, or those originally determined by the employer or manning agency to be legally due to the seafarer.

WHAT IS THE ESCROW PROVISION?



Photo credit: The Philippine Daily Inquirer

The amount shall remain in escrow until the issuance of an entry of judgement by the appropriate reviewing court or when the employer or manning agency fails to perfect the appeal or petition for review. The fees in obtaining or maintaining the escrow account shall be paid by the employer or the manning agency. The interest earned by the amount in escrow shall inure to the benefit of the prevailing party.”

Groups Supporting The Escrow Provision

European ENVOYS. European envoys urged the Senate to reinstate a provision in the proposed Magna Carta Seafarers bill that would correct what it called a “flawed” system of compensation in the industry that resulted in Php2.5 billion in questionable claims.

The JMC. The Joint Maritime Committee (JMC) of the Dutch, German, Nordic, and Norwegian Chambers of Commerce expressed their concern regarding the removal of the escrow provision in the Senate Bill Number 2221. The version of the House of Representatives includes an escrow provision designed to protect workers and employers from “ambulance chasers” which are unscrupulous lawyers who encourage those with work-related injuries to file cases against their employers, seeking exorbitant damages.

IMEC and ICS. For 15 years, the International Mariners Employers Council and International Chamber of Shipping have been asking the government for an escrow mechanism.

AMOSUP. The Associated Marine Officers and Seafarers Union of the Philippines (AMOSUP), the largest seafarer union in the country is supporting the escrow deposit provision in the Magna Carta of Filipino Seafarers that the House Committee on Overseas Workers included in House Bill No. 7325, also known as “An Act Instituting the Magna Carta of Filipino Seafarers.”

In a statement on 2-March-2023 to the Joint Senate Committee on Overseas Workers Affairs, Foreign Affairs, and Finance Technical Working Group, AMOSUP said that its leadership and members favor the insertion of the escrow deposit provision in the Magna Carta of Filipino Seafarers because it protects seafarers from the predatory practices of ambulance chasers.

AMOSUP made this clarification in response to published reports indirectly alluding that the union is supporting quarters not in favor of the bill’s escrow deposit provision because it is against the unscrupulous activities of ambulance chasers in the local maritime industry.

ALMA. Association of Licensed Manning Agencies (ALMA) Chair Iris Baguilat said that more than Php.5 billion worth of claims awarded by the NCMB alone from 2018 to 2022 had been reversed by either the CA or Supreme Court, illustrating the magnitude of the problem. “The seafarers were ordered to reconstitute the amount to the ship-owners but were unable to do so because more than half of the claims that they got had already gone to ambulance chasers whom they contracted to file and claim on their behalf,” Baguilat said.

AMBULANCE CHASING. By Definition, ambulance chasing occurs when lawyers or their subordinates actively go after victims of accidents or individuals involved in potentially big legal issues with the intent to file cases on their behalf in exchange for an exorbitant fee that will be deducted from the monetary claim or benefit granted to the seafarers or their heirs. For the fines and penalties please refer to the image below.

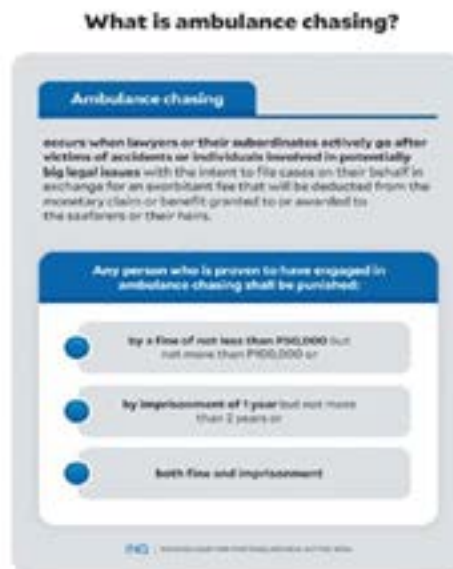


Photo credit: The Philippine Daily Inquirer

For those against the escrow provision, the issue of ambulance chasing can be addressed by strictly implementing and applying the existing law in ambulance chasing in RA 10706 which is otherwise known as the seafarers protection act. The Department of Labor and Employment’s Department Order no. 153 Series of 2016 is implementing Rules for Republic act 10706.

As an example in 2018, a father and son team of lawyers faced a two-year suspension for ambulance chasing and failing to account for the monetary award of the seafarer who sued his employers due to serious work related injuries.

The seafarer won US\$95,000 in a settlement but the lawyers deducted a 35% share leaving only US\$20,000 to the seafarer.

Later, the Supreme Court ruled in favor of the seafarer, found the lawyers conducted malpractice and violated several provisions of the Code of Professional Responsibility for lawyers.

Despite this, the CHR noted that the issue about ambulance chasers should not create a process that further delays the compensation for seafarers who suffer from maritime work-related injuries.

Several groups have protested the escrow provision of the proposed Magna Carta of Filipino Seafarers, raising these issues: (1) Delayed Compensation for victims of maritime-work related injuries; (2) Discrimination against seafarers, violative of the equal protection clause of the Constitution; and (3) The provision discourages the solicitation of legal services.



Photo Credit: FrontpagePH

Groups not in favor of the escrow provision

Labor groups: Escrow provision condemns our seafarers to years of legal Battles

Labor groups have also chimed in on the issue and called on lawmakers to scrap the escrow provision. The Association of Marine Officers and Ratings (AMOR) and the Federation of Free Workers (FFW) said that the escrow clause violates the equal protection clause of the Constitution. The president of the FFW Atty. Sonny Matula said the provision is discriminatory since no such provision applies to the claims of local workers or land-based OFWs.

He said that if the Magna Carta is passed into law with the provision retained, the High Court should declare it unconstitutional. *“This escrow provision condemns our seafarers to years of legal battles with their manning agencies or employers before they can take hold of their claims. It makes those who already have less in life, even have less protection under the law,”* he said.

The National Union of People’s lawyers. The NUPL in its position paper said escrow power is also unilaterally given to the employers who can decide how much would be released and how much would be put in escrow. The seafarers, the group pointed out, have no say in this, and neither does the Labor Arbiter nor the NLRC Commission.

“The legislature would be surrendering the quasi-judicial power to determine the amount of Escrow to the litigant employer. This is one-sided against labor,” said Cortez.

Summary and Conclusion. As of this writing the senate’s version of the Magna Carta of Filipino Seafarers (SBN-2221) has deleted

the Escrow provision found in HB 7325. If the escrow provision will not be reinstated after the third reading then it will have to go to a bi-cameral conference to resolve the differences.

Those for the escrow account provision like the European Envoys, the Dutch-German Joint Maritime Committee, AMOSUP, AMOR, UFS etc. are unanimous about the prevention of ambulance chasing by unscrupulous individuals.

From 2018-2022 a total of Php2.5 Billion already awarded to the seafarers was reversed by the Court of Appeals and Supreme Court, and the Seafarers could not return them because most went to ambulance chasers. If this persists, the risk of Ship-owners shunning Filipino seafarers due to ambulance chasing is quite dire. Seafarer groups like AMOR, the Federation of Free Workers, believe that the escrow provision will condemn our seafarers to years of legal battles before they can get hold of their claims. AMOR and FFW believe that the escrow mechanism is discriminatory against seafarers because there is no such provision for land-based workers or other OFWs.

Both the NUPL and the CHR said the inclusion of the escrow provision runs counter to the law’s objective to protect and promote the rights of the seafarers. In addition, the NUPL thinks that the escrow provision would set a precedent that would make land-based labor and other OFWs be subjected to escrow.

Ambulance Chasing persists in the country despite the law passed on 2015, Republic Act 10706. Will an escrow mechanism sought after by the IMEC and the ICS among others for so long be reinstated by the Senate before the bill reaches the third reading; and if they do not, will that mean we risk being shunned by the International shipping lines?

As Cristina Garcia of ALMA puts it: *“Once we protect our ship-owners, at the end of the day our seafarers will benefit from it because they are the ones that are providing jobs to our seafarers. The bottom line is there is no guarantee of winning a case, and one’s right to appeal should not be taken away from anyone. If a seafarer wins initially, but eventually loses the case in the Court of Appeals, then in my opinion the escrow provision would be justified because the seafarer has to return the money awarded to him.”*

In closing, the Magna Carta of Filipino Seafarers (MCFS) bill is intended to protect both Seafarers and their employers. If the law against ambulance chasers does not penalize the offending parties enough to stop ambulance chasing, perhaps they should also amend RA 10706 through the MCFS legislation. There is a need to pass the MCFS, and to make the issues of escrow and ambulance chasing be debated thoroughly with the hope of having the bill passed into law as soon as possible.

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THE PHILIPPINE BLUE ECONOMY INSIGHTS AND FORESIGHTS PRESENTED AT THE BEACON EXPO 2023, ON 8-SEPTEMBER-2023

by Undersecretary Ignatio Madriaga, DND

INTRODUCTION. To all distinguished guests from various agencies of government and the private sector, subject matter experts, and all our attendees, a pleasant morning to all.

Foremost, I would like to congratulate the Maritime League and the Department of Transportation for spearheading the Blue Economy Annual Trade and Conference, or BEACON 2023.

It is my distinct honor to represent the Secretary of National Defense, Atty. Gilberto C. Teodoro, Jr., and share the DND's perspective on its role in the Philippines' bid to transform its ocean-based resources that make up its maritime economy to become a sustainable and low-carbon blue economy.

BLUE ECONOMY. A blue economy, according to the United Nations Department of Economic and Social Affairs (UN DESA), is *"an economy that comprises a range of economic sectors and related policies that together determine whether the use of ocean resources is sustainable,"* the operative word being **sustainable**. Sustainability of the use of oceans for economic prosperity is front and center to the blue economy concept.

In the Philippines, the sustainable management of our oceans and seas is a vital component of our maritime governance framework because as the world's second-largest archipelagic state with the 5th longest coastline, 2.2 million sq. kms of our national territory is in the maritime domain. This translates to 88% of the total area of our legal jurisdiction. Because 55% of our municipalities are coastal, Filipinos benefit from a variety of ocean-based economic activities such as fishing, offshore and coastal mining, coastal construction, ocean-based power generation, sea-based transportation, and storage.

In the past years, these ocean-based activities have been expanding. According to the latest Philippine Statistics Authority (PSA) data, ocean-based industries grew by 6.7%, meaning, our maritime economy accounts for 3.6% of total GDP in 2021, yielding Gross Value Added of Php707.8 billion. The main contributor to this growth is *ocean fishing*, accounting for 33.9% of the total 2021 Philippine maritime economy; followed by the *manufacture of ocean-based products* (23%); *sea-based transportation and storage* (14.8%); and *ocean-based power generation, transmission, and distribution* (12.8%).

Global data from the United Nations Food and Agriculture Organization (FAO) also revealed the Philippines is constantly within the top 25 Countries and Territories with the highest marine captures. The report shows projected fisheries, and aquaculture production by 2030 will increase to 22.3%. This means by 2030, the Philippines is expected to yield 3,337 tons from fish catch and 1,045 tons from aquaculture, a projection with several implications for the Philippines and the world.

First, the growing fisheries and aquaculture production is directly related to the increasing trend in dependence on ocean-based produce for food security. Second, with this growing aquatic resources consumption is the threat of overfishing, pollution, and mismanagement of ocean resources. And third, the nexus of food security and sustainability through the **Blue Transformation**, or the holistic and adaptive ecosystem approach to sustainably secure economic value chains.

The Role of the Defense Sector in the Blue Economy Framework. In this impending shift towards a blue economy, we ensure the protection of a peaceful and enabling environment for the Philippines to reach this point efficiently and effectively. A blue economy cannot flourish without addressing the persistent and emerging maritime security challenges.

Security is vital to development. As it is the mandate of the AFP to guard our territorial integrity and sovereignty, they need to be equipped with the required capabilities to effectively defend against internal and external threats. This is made possible through the implementation of the AFP Modernization Program, which entails the identification, development, production, and acquisition of capabilities that can address identified threats. In terms of maritime security, the Philippine Navy's Active Archipelagic Defense Strategy (AADS) vis-à-vis the Philippine Navy Sail Plan both serve as guideposts in terms of ensuring that the Philippine archipelago is protected.

In terms of legal approaches, we have champions for the furtherance of our country's Blue Economy as evidenced by proposals filed in Congress to support the establishment and adoption of the Blue Economy framework which promotes the sustainable development of our maritime resources. The President has signified the Blue Economy Act as a priority bill in his second State of the Nation Address.

The DND's role in the Blue Economy Act is to promote a responsive ocean governance framework in order to realize the blue economy's potential. We believe and support the UN Division of Ocean Affairs and Law of the Sea's (UN DOALAS) three elements of ocean governance anchored on 1) legal and political frameworks, 2) sectoral stakeholders of ocean space, and 3) implementing structures based on scale. First, we believe the legal and political frameworks provide foundational principles, rules, roles and responsibilities of major stakeholders in the marine space. Second, many laws and political instruments governing ocean space are tailored for industries such as shipping, fisheries, energy, marine science, national security, and law enforcement. Third, implementing structures must ensure the legal regimes for managing ocean concerns are coordinately applied, with a balance between development and conservation.

With respect to national security, the sustainable development and exploitation of the Blue Economy is necessary as it increases extractive capacity of the State to generate more national wealth. The Blue Economy remains a vast untapped resource reserve where industries with long-term operational designs could generate significant income to finance the provision of public goods such as national defense service.

CONCLUSION. As such, the DND and AFP shall remain steadfast to secure the country's territorial sovereignty and integrity as it is our main contribution to the development of the Blue Economy. We will continue our AFP Modernization Program and establish a credible defense posture and initiatives that promote our intention for regional peace, prosperity, and stability.

OUR MINE WARFARE FORCE

by CDR Mark R Condono PCGA

INTRODUCTION. A country with a 36,289-kilometer coastline and the world's second largest archipelago, the Philippines' lifeline is the sea, thus utilizing it to our advantage is a primary mission as part of today's area denial counter to an invader.

The country having a number of straits, inlets, bays and passageways can use these features in delaying the enemy's advance.

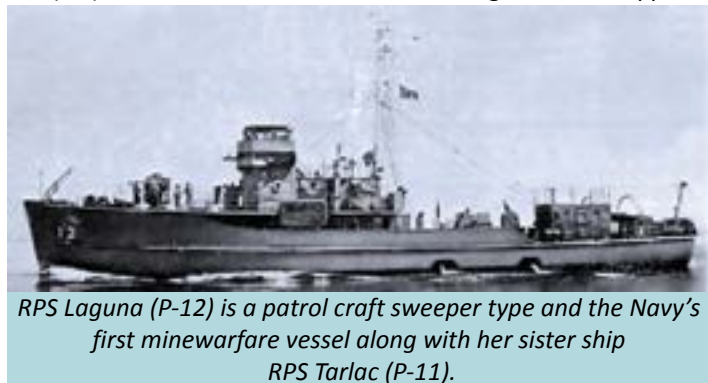
The essence of Minewarfare in our country has never been lost particularly during World War II with the U.S. Navy's mine blockade of Manila Bay and the Japanese Navy's same tactic used in our southern waters resulting in the loss of a U.S. Submarine in 1944.

The birth of Filipino Minewarfare Capability came after the reactivation of the Offshore Patrol (OSP) in 1945 with the formation of its major units namely the Patrol Force comprising our (Patrol Craft Escorts-Miguel Malvar Class), the Service Squadron composed of the First 5 out of 23 Landing Ship Tanks (LSTs), 16 Submarine Chasers of Anti-Submarine Warfare Force (ASWF), and the Minewarfare Force (MWF).



*The Philippine Navy's First Patrol Craft Sweeper USS PCS-1399, later renamed RPS Tarlac (P-11).
Photo credit: Navsource.*

THE FIRST MINEWARFARE SHIPS. The First Ships of the MWF were the former Patrol Craft Sweepers of the United States Navy namely *Ex-USS PCS 1399* and *Ex-USS PCS 1403*. Upon transfer to the OSP on 22-January-1948, they were renamed *RPS Tarlac (P-11)* and *RPS Laguna (P-12)*. *RPS Tarlac (P-11)* was at one time skippered by former Philippine Navy Flag Officer In Command, VADM Eduardo Ma R Santos AFP (Ret), current President of the Maritime League of the Philippines.



RPS Laguna (P-12) is a patrol craft sweeper type and the Navy's first minewarfare vessel along with her sister ship RPS Tarlac (P-11).

Both ships were armed with 1-3inch/50 Gun, 1x20mm Gun, Hedgehogs, and 2 Depth Charge Racks. They served the country for 21 years before they were decommissioned and scrapped in 1969.



*RPS Zambales (PM-55) sister ship of RPS Zamboanga Del Norte (PM-56) both acquired during the Magsaysay Administration.
Photo Courtesy of the U.S. Navy.*



RPS Zamboanga del Norte (PM-56) was the Navy's 4th minewarfare vessel acquired under the U.S. Military Assistance Plan.

COLD WAR TURNED HOT. As the Cold War turned hot during those years, Minesweeping and Anti-Submarine Warfare became the Philippine Navy's core capabilities as entrusted to us by our allies should a regional conflict erupt. We would need to keep the sea lines of communication open by initiating minesweeping and minelaying, conduct anti-submarine missions in our geographical areas, and support our allies.

RPS Tarlac (P-11) and *RPS Laguna (P-12)* were augmented by two USN MSC-218 Class Minesweepers made specifically for the Philippines under the U.S. Military Assistance Plan: the *RPS Zambales (PM-55)* on 15-February-1956 and *RPS Zamboanga Del Norte (PM-56)* on 3-April-1956. This was during the term of President Ramon D Magsaysay, himself a Reserve Lieutenant Commander of the Philippine Navy.

The minesweepers were armed with a 1x20mm Gun. A full load displacement of 375 tons, a speed of 14 knots, and crew compliment of 5 Officers and 34 enlisted men. Both Ships were decommissioned in 1979, each with 22 years of service.

THE LAST MINESWEEPERS. The last ships of the Minewarfare Force were two (2) former Aggressive Class Minesweepers of the USN *Ex-USS Energy (MSO-436)* and *Ex-USS Firm (MSO-444)* transferred on 05-July-1972.

Both are classified as an Ocean Minesweeper capable of long-range operations. *MSO-436* became *RPS Davao Del Norte (PM-91)* while *MSO-444* became *RPS Davao Del Sur (PM-92)*.

Armaments include 1x40mm Gun, 2x50 Cal MG's and for Minesweeper Operations it had the AN/SQQ-14 Sensors (Mine hunting Sonar). Both ships are about 630 tons full load displacement, 52 meters in length, and a beam of 11 meters with a speed of 10 knots and a compliment of 7 Officers and 70 crewmen. Both were returned to the U.S. Navy on 01-July-1977 and were scrapped in Hong Kong 7 days later.



RPS Davao del Norte (PM-91) is one of the two Aggressive Class minesweepers of the Navy capable of long-range operations.



*RPS Davao del Sur (PM-92) formerly the USS Firm (MSO-444)
Photograph Courtesy the U.S. Navy.*

CONCLUSION. In the 5-year AFP Modernization Plan from 1977-1981, envisioned was the acquisition of 2 Ocean/Coastal type Minesweepers and 1 Minelayer, probably to replace the Aggressive Class.

Naval mines are vital components of area denial strategy against the enemy. What if Lamon Bay had a minefield since 1952? or the passage between Coron Island and Linapacan Island in Northern Palawan; or the waters of Sulu and Balabac where various submarine sightings were made during the Cold War period? Having the capability to lay and sweep mines as an Island Nation is a vital factor in our territorial defense.



An enlisted personnel of a Philippine Navy warship secures mines during a SEATO Naval Exercise Circa 70's. Photograph Courtesy of the Philippine Navy.

Both the PCS, MSC, and Aggressive Class played a pivotal role in keeping our sealanes open during the Cold War, in support of friendly forces during SEATO Exercises and Joint RP-US Bilateral Exercises and Naval Gunfire Support (NGFS) in our Southern waters, and the primordial mission of conducting patrol on our vast territorial waters.

Today, potential adversaries can field thousands and various types of mines undetected. With the reactivation of the Philippine Navy's Minewarfare Group, and the proposed acquisitions of dedicated minewarfare ships in the near future, our Navy could inflict a severe loss on a larger adversary both in a tactical (denying passage on our littoral waters) and strategic nature (laying mines along the enemy routes).

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About the Author

AUX CDR Mark R Condono PCG is the Administrative Officer of the Philippine-Korea Friendship Center under the Department of National Defense-Philippine Veterans Affairs Office. He holds a BS degree in Architecture from Palawan State University. He completed the Basic Naval Reserve Officers Training Course with the 420TH NROTCU. He is with Bravo Class of 1999, the Philippine Coast Guard Auxiliary Officers Indoctrination Course, Coast Guard District-Palawan. In 2002, he took the Aerospace Power Course at Air University, United States Air Force and is a 2008 Graduate of the Joint US Military Historical Operations Course. In 2007, he was Research Officer at the Office of the Naval Historian, Philippine Navy. Lastly, he is with Class 26 of the Executive Course on National Security of the National Defense College of the Philippines.

P3 INSIGHTS ON DEALING WITH THE SHIPPING CONTAINER CRISIS

by P3 USA

Photo credit: Pixabay

As a result of the recent pandemic, maintaining the chain of supply has proven to be difficult for businesses across a wide range of industries. At the peak COVID-19 lockdowns, demand for many products decreased, but as the world returns to normal and demand continues to increase dramatically, the shipping industry finds itself struggling to keep up.

Cost per container increased drastically from around USD1,500 in 2019 to USD7,600 in July of 2022; peaking at over USD10,000 in September 2021, impacting the market for medium to large goods the most, especially those of lower value and regular demand. With this shortage, the cost of other methods of transportation, such as airfreight, increased due to the high market demand and low supply, with airfreight rates between Hong Kong and North America as high as USD12.72 per kilogram. New challenges are still expected to arrive when new shipping capacity will come into play in 2023.

How to effectively deal with the shipping container shortage:

- There are several new techniques which companies can implement to get their chain of supply flowing once again. Creating direct lines between ports, cross docking, using break bulk shipping, and locally sourcing parts are effective ways to ease strain on the market for containers.
- Break bulk shipping specifically is beneficial, as it allows for oversized goods to be shipped in their entirety, cutting out the need for a container. For this same reason, smaller ports can be utilized rather than being restricted to large ports that can accommodate massive container ships. This also frees up more container space for goods that need it.
- Another valuable practice is cross docking, the immediate loading of inbound goods onto outbound vehicles, in turn eliminating the need for storage in between. This is used to create a quick turnaround process and effectively lower the margin of time needed to store goods, freeing up the container for its next use rather than using it for storage at a port or in a warehouse. Ownership of your container loop and contractually allocating containers to specific supply chains supports the consistent availability of containers.

- Although sourcing parts from other countries may come at a cheaper cost, the uncertainty and extended delivery times in accompaniment are proving that locally sourcing goods may have greater benefits. Having your suppliers nearby not only decreases the time in transit but can cut out the need for maritime transportation.

Transparency is key to a running supply chain



Andreas Niedermeier, Managing Partner, P3 USA

To reduce these crippling restraints, we are helping our customers implement several broad strategies to create a more efficient, cost-effective supply chain. By putting in place ways for companies to track not only main suppliers but also sub suppliers, companies can ensure their main suppliers are able to acquire the materials they need in order to fulfill orders, better understand which of their suppliers are having issues, and plan in the event of a delay.

Why P3? For many years, P3 has been solving supply-chain problems across different industries. Our consultants have access to valuable data from past projects, as well as real-time insights into current transport & logistics issues, especially for car manufacturers. We strive to assist U.S. manufacturers in overcoming dynamic issues of the global supply chain through this expertise, and our wholistic approach to problem solving.

Source: <https://www.p3-group.com/en/p3-insights-dealing-with-the-shipping-container-crisis/>

PPA EYES 19 MORE SEAPORT PROJECTS BY END 2023

by PPA

16-AUGUST-2023, MANILA — Infrastructure in ports development nationwide will continue to accelerate in the coming months, as the Philippine Ports Authority (PPA) gears toward the completion of another 19 seaport projects before the end of 2023, adding up to the 30 seaport projects already completed during the first year of President Ferdinand 'Bongbong' Marcos, Jr.

PPA's 19 seaport infrastructure projects to be completed by December this year include eleven (11) projects from Luzon, four (4) in Visayas and four (4) in Mindanao ranging from the construction and rehabilitation of back-up areas, breakwaters, RoRo ramps, and RC Piers, among others.

The public can also expect convenience and experience improved cargo handling with the upgrading of the general cargo berth at the Port of Sasa in Davao City amounting to Php902 million which is the highest funded project among the 19 to be completed before the year ends; followed by the P693 million construction of wharf and port operational area with continuous RoRo ramp at the Port of Catagbacan in Bohol; also set to be completed is the construction of the country's first dedicated cruise ship terminal at Jubang Port in Surigao del Norte amounting to Php620 million.

"We remain optimistic that we are continuously evolving to be at par with countries observing the highest level of port standards around the world, we already made it as one of the strongest ports in Southeast Asia as of 2023. Here in PPA, we continue to participate in economic globalization by advancing infrastructure development through building high quality ports," said PPA General Manager Jay Santiago.



As a manifestation of its sound fiscal management and responsible use of financial resources, PPA recorded a 23.18% increase of net income in the 1st half of 2023 amounting to P6.9 billion compared to Php5.0 billion income for the same period in 2022. A record of more or less 12% increase of budget utilization every year has been a trend for PPA since 2016 with its highest budget utilization rate of 83% last year.



"Good governance, transparency, and hard work are among the biggest contributing factors for completing almost 50 infrastructure projects at the end of 2023. This is another milestone for us and a testament that Philippine ports are ready to cater to local and global demands," PPA GM Santiago added.

Other than the increased number of completed projects and high budget utilization rate, the PPA also recorded a 3.23% decrease or Php142.52M less in total expenditures as compared to that incurred during the same period last year.



Claveria Port, Masbate. Photo credit: Discover the Philippines

The additional 19 seaport projects also include rehabilitation of Claveria Port, construction of PPA-PCG K9 academy, Puerto Galera port expansion project, and Balingoan port expansion project in Misamis Oriental among others. In addition, PPA is also set to award and commence 47 new port infrastructure projects for the year 2023

Source: <https://www.ppa.com.ph/content/ppa-eyes-19-more-seaport-projects-end-2023>

NEW APPOINTMENTS AT PCG AND MARINA

by VADM Emilio C Marayag AFP(Ret)



CG ADMIRAL RONNIE GIL LATORILLA GAVAN O-11309
Commandant, Philippine Coast Guard



MS SONIA BAUTISTA MALALUAN
Administrator, MARINA

The President appointed two senior maritime officials under the Department of Transportation to lead the Philippine Coast Guard (PCG) and the Maritime Industry Administration (MARINA) in October and December last year.

The new Commandant of the Philippine Coast Guard is Admiral Ronnie Gil L. Gavan PCG who assumed after the retirement of Admiral Artemio Abu in October. He was Deputy Commandant prior to his new designation. Admiral Gavan holds a Bachelor of Science degree from the Philippine Military Academy and a Master of Maritime Studies degree from the University of Wollongong (Australia). A professional coast guard officer, Admiral Gavan commanded both shipboard and shore-based units nationwide and served several PCG staff positions.

One of his notable initiatives was organizing the PCG’s “Angels of the Sea” teams, consisting of all-female radio operators who complement the crew members of PCG seagoing forces deployed in the West Philippine Sea. These radio operators verbally communicate with ships of other nationalities sighted or monitored in WPS. Their creation was not only to address gender discrimination but to “evoke Asian matriarchal sentiments” and ease tensions at the tactical level by “embodying a sense of stability and calm” in the disputed maritime area.

On the other hand, MARINA’s new Administrator is Ms. Sonia

Bautista Malaluan, a career MARINA official and former Deputy Administrator. She took over from Atty. Hernani Fabia who resigned in December 2023. She earned a bachelor’s degree in Commerce from Western Philippines College and two master’s degrees in Shipping Management and Public Administration from the World Maritime University in Malmö, Sweden and the National University of Singapore’s Lee Kuan Yew School of Public Policy. She is also a certified public accountant.

Being a career official, Ms. Malaluan served as Director, MARINA National Capital Region and became the country’s maritime attaché in London, England. She was the prime mover in crafting the Agency’s Road Map, the Philippine Ten-Year Maritime Industry Development Plan.

During the January 6, 2024 courtesy call of The Maritime League top officials, led by Vice Admiral Eduardo Mario Santos AFP (Ret), Administrator Malaluan mentioned her priorities to improve the Agency’s efficiency and effectiveness by closely coordinating with other maritime agencies, enhancing digitalization, reviewing and revising policies and procedures, and pursuing important legislative agenda. She was subsequently inducted as Honorary Member of The Maritime League by Admiral Santos with her Chief of Staff, Engr. Ramon Hernandez, and The Maritime League’s senior officials in attendance.

MARITIME LEAGUE VP WINS ANEW AS AGFO CHAIRMAN AND PRESIDENT



The Maritime League's Vice President and Maritime Review Editorial Board Chairman, Vice Admiral Emilio C Marayag Jr AFP (Ret), secured anew the trust and confidence of the members of the Association of General and Flag Officers, Inc. during its Annual Membership Meeting and Election held in Camp Aguinaldo, Quezon City on November 24, 2023. He clinched the Association's top position for three consecutive terms.

Admiral Marayag joined AGFO in 2009, a year before his retirement from the military service, and was elected to the 15-man Board of Trustees for two consecutive terms of 3 years in 2019 and 2022. Garnering the highest number of votes in his 2nd term as Trustee, he was elected as Chairman and President for CY 2022 and reelected in 2023. He will serve his final term for the year 2024.

AFP Chief of Staff General Romeo Brawner administered the oath of office of the Board of Trustees during the AGFO Founding Anniversary and Christmas Fellowship on December 7, 2023.

During the Board organizational meeting on December 11, he recommended to, and subsequently secured the approval of, the Board the members of the Association management team from among the trustees and the chairmen of the various standing committees. PMGen German Doria PNP (Ret) retained his Vice President and Board Vice Chairman position; as well BGen Andrew Regacho AFP (Ret) as Corporate Treasurer, VAdm Edmund Tan PCG (Ret) as Auditor, and BGen Ramona Go AFP (Ret) as Executive Director. Newly elected Trustee BGen Rolando Jungco AFP (Ret) is the new Corporate Secretary replacing BGen Romeo Fajardo AFP (Ret) whose term expired.

The chairperson of the following standing committees are as follows:

- Executive Committee - PMGen German Doria PNP (Ret)
- Membership and Ethics - MGen Gerardo Layug AFP (Ret)
- Finance Committee - MGen Jose Lapus AFP (Ret)
- Ways & Means Committee - BGen Restituto Aguilar AFP (Ret)
- Fellowship Committee - MGen Renato Garcia AFP (Ret)
- Welfare Committee - Commo Amado Sanglay AFP (Ret)
- Advocacy Committee - LGen Edilberto Adan AFP (Ret)
- Sports Committee - LGen Oscar Rabena AFP (Ret)
- Publication Committee - BGen Rolando Jungco AFP (Ret)
- Legal Committee - MGen Alphonsus Crucero AFP (Ret)
- Election Committee - BGen Miguel Sol AFP (Ret)

AGFO's 3-fold missions are: (1) To advocate the preservation of the Republic and its Constitution and the welfare of the retirees and veterans; (2) to set example to the active uniformed personnel in perpetuating organizational ethos- discipline, esprit de corps, camaraderie, loyalty to the flag, respect to the chain of command, organizational culture and traditions, and other lofty ideals; and (3) to ensure AGFO's organizational continuity.











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MAAP Profile

Geographic destiny has given the Filipino the innate talent to be an excellent seafarer. To enhance this natural skill, the Maritime Academy of Asia and the Pacific (MAAP) was established on January 14, 1988. The Academy stands on a 103-hectare property in Kamaya Point, Mariveles, Bataan.

The Associated Marine Officers' and Seamen's Union of the Philippines (AMOSUP) founded by the late Capt. Gregorio S Oca, capitalized and developed the Academy. The new AMOSUP President Dr. Conrado F. Oca, heads the Academy's board of governors. The board is comprised of representatives from the private sector, the International Transport Workers Federation, the Filipino Association of Maritime Employers, the International Transport Workers Federation, the All Japan Seamen's Union, the International Mariners Management Association of Japan, the Norwegian Seafarers' Union, the International Maritime Employers' Committee, the Danish Shipowners' Association, the Norwegian Shipowners' Association, and the Japanese Shipowners' Association.

MAAP conducts shipboard training aboard T/S Kapitán Felix Oca, a 5020 DWT dedicated training ship capable of accommodating 180 midshipmen and 9 instructors in 30 air-conditioned cabins and six berths.

MAAP students are all scholars who are entitled to free tuition, board and lodging. They receive a comprehensive, up-to-date and well-rounded education that fully complies with the requirements of STCW 95 and the Commission on Higher Education (CHED). To ensure the highest standards of quality, MAAP adheres to a Quality Standards System that has been certified to comply with ISO 9001 version 2008, the Det Norske Veritas (DNV) Rules for Maritime Academies, and the Productivity and Standard Board (PSB) of Singapore.

The Academy offers three main programs: the Bachelor of Science in Marine Transportation (BSMT), Bachelor of Science in Marine Engineering (BSMarE) and the Bachelor of Science in Marine Transportation and Engineering (BSMTE). The curricula for the three courses were designed with the help of the United States Merchant Marine Academy at Kings Point, New York. Courses are four-year courses with sea phases scheduled in the third year. The BSMT curriculum requires a total of 192 units: 152 at MAAP, 40 practicum/shipboard units on board T/S Kapitán Felix Oca and/or a shipping company sponsorship. The BSMarE curriculum requires a total of 193 units: 153 at MAAP, 40 practicum/shipboard units on board T/S Kapitán Felix Oca and/or a shipping company sponsorship.

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