



MARITIME REVIEW

A PUBLICATION OF THE MARITIME LEAGUE

Issue No. 17-5

September-October 2017

PCG'S 116TH ANNIVERSARY

- ▶ **Maritime Conference 2017**
- ▶ **Haunting Fake News**
- ▶ **Terrorist Safe Havens**
- ▶ **PRS Safety Drive**



Also inside...

- ▶ **Meet the New
PCG OIC**





Manila North Harbour Port, Inc. sets the pace as partner for growth



Manila North Harbour Port, Inc. (MNHPI) continues to scale a sterling record for port operations, steadfast on its modernization program for the Manila North Harbor.

Keen on providing the environment for growth, new equipment are set in place together with enhanced IT and management services.



Berths now accommodate longer and bigger vessels. MNHPI productivity is at a record pace and port capacity has increased to 3 million TEUs.

With a global outlook, MNHPI continues to deliver quality services and improve port facilities, spurring economic growth and building the image of the Philippines as a premier maritime hub.





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About the Cover:

This issue's cover features the PCG's Parola class patrol boat, multi-role response vessel BRP Tubтатаha (MRRV-4401)

Photo courtesy of PCG.



Maritime Events Calendar

SEPTEMBER '17

- 5 DONSO SHIPPING MEET 2017 (DSM 2017)
(DONSO ISLAND, SW)
- 11-15 LONDON INTERNATIONAL SHIPPING WEEK 2017 (LONDON, UK)
- 17-20 IUMI 2017 ANNUAL CONFERENCE (GRAND NIKKO TOKYO DAIBA,
TOKYO, JP)
- 19-22 NEVA2017
(EXPOFORIUM CONVENTION AND EXHIBITION CENTER, ST.
PETERSBURG, RU)
- 21 FT CYBER SECURITY SUMMIT EUROPE 2016 (LONDON, UK)
- 22 MARITIME BREAKFAST FORUM #126**
(PHILIPPINE COAST GUARD (PCG); HPCG, SOUTH HARBOR,
PORT AREA, MANILA)
- 26-28 BWMTech NORTH AMERICA (THE TRUMP INTERNATIONAL BEACH
RESORT, MIAMI, FL, USA)
- 28-29 BALTIC SEA PORTS AND SHIPPING 2017 (RADISSON BLU
OLUMPIA, TALLINN, EE)

OCTOBER '17

- 3-5 INMEX SMM INDIA 2017 (THE BOMBAY EXHIBITION CENTRE,
MUMBAI, IN)
- 4 CREWCONNECT GLOBAL (HOTEL SOFITEL PHILIPPINE PLAZA,
MANILA, PH)
- 4-5 INDONESIA MARINE EXPO 2017 (IME 2017) (JAKARTA
INTERNATIONAL EXPO, KEMAYORAN, JAKARTA, IN)
- 4-6 MALAYSIA INTERNATIONAL MARINE EXPO 2017 (MIMEX 2017)
(PUTRA WORLD TRADE CENTRE, KUALA LUMPUR, MY)
- 10-12 THAILAND MARINE & OFFSHORE EXPO 2017
(BITEC, BANGKOK, TH)
- 12-13 ARACON 2017 (HILTON ROTTERDAM HOTEL, ROTTERDAM, NL)
- 16-17 3RD INTERNATIONAL LNG CONGRESS (PULLMAN BARCELONA
SKIPPER, BARCELONA, ES)
- 20 MARITIME BREAKFAST FORUM #127**
(DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
(DENR), TBA)
- 24 THE MARITIME STANDARD TANKER CONFERENCE
(GROSVENOR HOUSE HOTEL, DUBAI, UAE)

NOVEMBER '17

- 6-8 GLOBAL TRADE CONTROLS (THE HALLAM CONFERENCE CENTER,
LONDON, UK)
- 7-8 CREWCONNECT GLOBAL (HOTEL SOFITEL PHILIPPINE PLAZA,
MANILA, PH)
- 8 SHIP FINANCE & TRADE CONFERENCE (SHERATON ABU DHABI HOTEL
& RESORT, ABU DHABI, UAE)
- 7-10 EUROPORT 2017 (ROTTERDAM AHOY, ROTTERDAM, NL)
- 13-14 OFFSHORE VESSEL CONNECT GLOBAL (RADISSON BLU PLAZA
HOTEL, OSLO, NO)

- 15-17 GST NORTH AMERICA 2017 (SHERATON NEW YORK TIMES
SQUARE HOTEL, NY, USA)
- 15-16 SHIPPING2030 NORTH AMERICA 2017 (SHERATON NEW YORK
TIMES SQUARE HOTEL, NY, USA)
- 15-17 HYDROPOWER BALKANS 2017 (HILTON PODGORCIA, CRNA
GORA, PODGORCIA, ME)

16 MARITIME BREAKFAST FORUM #128 **(DEPARTMENT OF TRANSPORTATION (DOTR), TBA)**

- 28-29 SHIPTECH WITH SHIPPING2030 MIDDLE EAST (THE ADDRESS
HOTEL DUBAI MALL, DUBAI, UAE)

DECEMBER '17

- 5-8 MARINTEC CN 2017 (SHANGHAI NEW INTERNATIONAL EXPO
CENTER, SHANGHAI, CN)
- 6-8 SALVAGE & WRECK LONDON 2017 (LONDON, UK)
- 12-14 BWMTech 2017 (GRANGE TOWER BRIDGE HOTEL, LONDON, UK)

JANUARY '18

19 MARITIME BREAKFAST FORUM #129 **(DEPARTMENT OF FOREIGN AFFAIRS(DFA), 2330 ROXAS BLVD.,** **PASAY CITY)**

- 23-24 MEGA CARGO SHOW 2018 (HALL NO. V, BOMBAY EXHIBITION
CENTRE, MUMBAI, IN)
- 24 VIETSHIP 2018 (VIETNAM NATIONAL CONVENTION CENTER,
HANOI, VN)

FEBRUARY '18

8 MARITIME BREAKFAST FORUM #130 **(CEBU PORTS AUTHORITY (CPA), NORTH RECLAMATION AREA,** **CEBU CITY, CEBU)**

MARCH '18

- 14-16 ASIA PACIFIC MARITIME 2018 (MARINA BAY SAND, SINGAPORE,
SINGAPORE)
- 21-23 SHIPPING 2030 EUROPE (RADISSON BLU SCANDINAVIA HOTEL,
COPENHAGEN, DK)
- 21-23 GREEN SHIP TECHNOLOGY EUROPE (RADISSON BLU SCANDINAVIA
HOTEL, COPENHAGEN, DK)

20 MARITIME BREAKFAST FORUM #131 **(MARITIME ACADEMY OF ASIA AND THE PACIFIC (MAAP),** **KAMAYA POINT, MARIVELES, BATAAN)**

APRIL '18

27 MARITIME BREAKFAST FORUM #132 **(MARITIME INDUSTRY AUTHORITY (MARINA), TAFT AVE. COR.** **TM KALAW ST., ERMITA, MANILA)**

MAY '18

- 16-17 NAVIGATE 2018 (MARINA BAY SAND, SINGAPORE, SINGAPORE)
- 25 MARITIME BREAKFAST FORUM #133**
(PHILIPPINE NAVY (PN), HEADQUARTERS, PHILIPPINE NAVY,
ROXAS BLVD, MANILA)



PCG Foundation Anniversary

by VAdm Emilio C Marayag Jr AFP (Ret)

The nation and its maritime community join the **Philippine Coast Guard (PCG)** in commemorating its founding anniversary in October. Originally created as a civilian bureau in 1901 by the United States, the organization assumed its military character in 1967 by virtue of Republic Act 5173. It used to be one of the **Philippine Navy's** major units until its separation in 1998 when it reassumed its civilian character. It remains, however, a uniformed service with many of its administrative systems similar to the **Armed Forces of the Philippines**. In 2009, under Republic Act 9993, the **PCG** received fresh mandate that covers marine environmental protection, maritime safety, maritime search and rescue, maritime security, and maritime law enforcement.

Marine environmental protection is the agency's core function that aims to prevent, mitigate, monitor and control oil spills in the country's maritime jurisdiction. **Maritime safety** involves the promotion of safety of life and property at sea by operating aids to navigation, issuing notice to mariners, removing hazards to navigation, managing vessel traffic separation schemes, and inspecting merchant vessels' seaworthiness for safe voyage. **Maritime search and rescue** entails the conduct of prompt and sustained sea operations to locate and assist vessels in distress to save lives and property. **Maritime security** includes the protection of sea passengers, seafarers and offshore installations from lawless elements, the maintenance of the freedom of navigation in the **sea lines of communications (SLOCs)**, and the preservation of territorial integrity. **Maritime law enforcement** involves the prevention, detection and suppression of violations of laws, rules and regulations pertaining to immigration, fisheries, quarantine, customs, drug enforcement, human trafficking, firearms and explosives, forestry and other applicable laws in waters subject to Philippine jurisdiction, including transnational crimes.

The multiple functions given to the **PCG** may require more resources to effectively implement them. As a seagoing agency, **PCG's** fleet must be capable of undertaking most, if not all, of those functions. It must consider building a shipyard of its own for intermediate or depot-level maintenance to ensure the operational availability of its floating assets most of which

came from different countries. To enhance operational readiness, its fleet may regularly engage the **Philippine Navy** and the **PNP's Maritime Group** in conducting maritime exercises. With some fifteen thousand Philippine-registered vessels plying various sea routes and a few thousands of foreign merchant ships visiting ports annually, the task of securing our archipelagic waters and safeguarding trade and commerce that go through these waters is enormous. The **PCG** land-based units —type commands, districts and stations— either provide support to or employ the Coast Guard vessels within their geographical or defined area of responsibility.

Attaining high level of operational availability for Coast Guard vessels necessitates well-established systems and procedures. These systems and procedures must be concise, widely circulated, properly implemented, closely monitored and periodically reviewed for possible changes by concerned staff at head-quarters level. One of the most important systems that would need a thorough examination is **Procurement**, for both its physical and human resources. For example, the recent deliveries of six of ten **multi-role response vessels (MRRVs)** reportedly propelled by marine engines unsuitable for the warm seas surrounding the Philippines may soon affect **PCG's** deployment and employment targets, unless corrective measures are undertaken. Also, the indictments of some **PCG** senior officers several months ago involving procurement matters can provide valuable lessons to avoid similar incidents from happening in the future.

With existing and emerging challenges at the maritime domain, the **PCG's** chain of command must continuously assess its organizational relevance, effectively manage its tangible and intangible assets, and truly inspire its human resources. Achieving a noble goal through noble means is the acme of leadership as one author contends. In public governance, the real and continuing challenge is to accomplish the mission by operating within the tight bounds of the law. This would require integrity, intelligence and energy starting from the top leaders, down to the rank and file.

Happy Foundation Anniversary to the Philippine Coast Guard!



Parola class patrol boat, multi-role response vessel BRP Tubbataha (MRRV-4401). Photo credit: PCG.

Maritime Conference 2017 Synthesis

by Vicky Viray Mendoza

The Maritime Conference 2017 was held on 12-July-2017. It was organized by the **Maritime League** led by its President **Commo. Carlos L. Agustin** (AFP Ret), and co-sponsored by the **Department of Agriculture's Bureau of Fisheries and Aquatic Resources** led by its Director **Commo. Eduardo Gongona** (AFP Ret). The conference took place in partnership with the **PhilMarine 2017** organized by **Fireworks International**, and was held at the SMX Convention Center, Manila.

My task was to synthesize all the speeches and present at the end of the day. This was a memorable event as it was the fourth major Maritime Conference organized by the **Maritime League** after the International Waterfront 2000 at the PTTC in Manila. In my view, it was a well-attended event and graced by top-level representative speakers of the U.S. Embassy and the Russian Embassy, SND Gen. **Delfin N. Lorenzana**, BFAR's Commo. **Eduardo Gongona**, and PEZA's BGen **Charito Plaza**, making the maritime conference successful and highly informative. Hopefully, the **Maritime League** could organize another event next year showing the nexus between maritime and aerospace safety. Until then, here is what was discussed at our first Maritime Conference 2017.



The first presentation was on the **"Philippine Self-Reliant Defense Posture Program"** by Philippine Secretary of Defense Gen. **Delfin N. Lorenzana** (AFP Ret). He highlighted the difficulties that the local defense manufacturers encounter, such as: technology and lack of skills; cumbersome procurement processes; a need to revise procurement laws; and although AFP Modernization Law supports local defense and weapons building, there is also a need for

the maritime industries to dedicate resources to design, construct, upgrade or upkeep materiel for our armed forces.

The second presentation was on **"Protecting Maritime Commons"** by His Excellency **Michael S. Klecheski**, Deputy Chief of Mission (on behalf of U.S. Ambassador Sung Kim who was in Cebu), U.S. Embassy, Manila. He stressed that the U.S. promotes peace and prosperity, navigation, over-flight, and commerce with the aim to (a) Maintain global access to trade; commitment to free market; and (b) provide their presence symbolic of its stance in favor of Freedom of the Seas; maritime access to the world's waterways; and for its vessels to operate wherever international law allows.



This was followed by a more detailed presentation by LCDR **Patrick Panjeti** (USN). He focused on providing the definition of the maritime zones, for example, 12 nautical miles of national airspace; 24 nautical miles of contiguous zone; and 200 nautical miles of EEZ. He pointed out the 10 global chokepoints in a 75-80-90 principle, where 75% is water; 80% live in coastal areas; and over 90% is seaborne trade. In the Q&A session, he was asked what he believed was the most time consuming versus what should take priority. LCDR Panjeti responded to the first part of the question indicating that the sea is



very dynamic, particularly in the Sulu Sea where problems of piracy affecting global trade continue to persist; as well as the disputes surrounding the South China Sea due to maritime expansionism. **VADM Ronald Mercado, Flag-officer in Command, Philippine Navy** responded to the latter part of the question indicating that the Philippines is focusing more on tackling piracy, anti-terrorism, HADR because of the effects of climate change, and cyber security.

The third presentation was on **"Food Security in the Maritime Domain"** by the Director of BFAR, **Commo. Eduardo Gongona** (AFP Ret). He said that BFAR states that our maritime resources are in peril. Coral cover has dwindled to less than 1%; mangrove cover has lost over 33%; and 10 out of 13 fishing grounds are over-fished. He laid out the impacts of **Illegal-Unreported-Unregulated Fishing (IUUF)** as follows: (a) Net loss from Blast or Dynamite Fishing is estimated at Php3.28T yearly, or Php65.6T over the next 20 years; (b) 90% of foreign vessels operating in Philippine waters are engaged in illegal fishing; (c) In Region 2, Cagayan Valley, economic losses is estimated between \$37K-\$75K per foreign fishing vessel; (d) Environmental impacts: economic losses from degradation of West Philippine Sea is about Php4.5B annually; and (e) Social impacts: the encroachments of commercial fishing boats in municipal waters are displacing 37 municipal fisherfolk per day.



Commo. Gongona explained that the **KEY strategies to achieve food security, fight IUUF effectively, and provide support to the fisheries sector** are as follows: (a) Develop and expand access to new fishing grounds, for example the **Philippine Rise** (Benham), which has 100% coral cover and in the migration path of high-value Tuna. 15 Payaos or fish aggregating devices will be deployed by BFAR to serve as fish markers for our small-scale fisherfolk; (b) Strengthen anti-IUUF Measures by: acquiring more patrol vessels; **training law enforcement** personnel; intensifying resource conservation; and delineate and zone coastal land and water uses. BFAR will grow its fleet to 123 vessels and add 167 vessels by 2022; BFAR will procure drones, helicopters, and land-based monitoring systems; and will provide fisherfolk and LGU with 38-footer fiberglass patrol boats; (c) Implement science-based conservation and management measures like developing inter-LGU Coastal Resource Management Plans; (d) Promote the use of appropriate and updated technology such as 20-38 footer fiberglass fishing boats for more stability and longevity of fishing vessels; and (e) Improve fisheries post-harvest facilities and equipments.

In closing, **Commo. Gongona** stressed that to achieve all these, **"BFAR needs strengthened collaboration with other agencies and the private sector."** At the Q&A portion, **Commo. Gongona** was asked his opinion on the regulation of fishing vessels in terms of the definition of limited and unlimited waters. His response was that the demise of the bigger commercial vessels will take place due to over-fishing in waters 15 km from shoreline, and only 3 gross tonnage vessels and below should be in

municipal waters. He said that since our oceans are already over-fished, and we need to lessen fishing vessels and develop aquaculture instead. He believes in the need to improve fishery production by employing long-line fishing methods for Tuna fishing. Most fishing is done by purseine and long-line methods, but the best method for sustainable fishing is through the hand-line method. He said we should also promote our agricultural products, and package them better to make our products more competitive and ultimately bring in higher sales revenues.



The fourth presentation was on the “**Russian Naval Industry: the Ability to Oppose Modern Maritime Threats**” by His Excellency **Igor Anatolyevich Khovaev**, Russian Ambassador to the Philippines. He stated that the key factor in maintaining maritime strategy is a developed shipbuilding industry. He indicated that Russia’s shipbuilding industry is modern, with highly skilled workers, is ready to cooperate with other countries, and ready for fair competition. He further stated that

Russia is willing to discuss with Partners on delivery sale and transfer of technology. He noted that Russia has strategic long-term interest in its desire to help Partners develop their defense industry. He highlighted the accomplishments of the Russian Navy. He said the first submarine was constructed in Russia in 1721. The Russian Navy has built different types of ships for Russia and other countries; has exported naval equipment to more than 20 countries for \$20B overall; and maintains a good Russia-Philippine naval relationship through a port visit to Manila.

This was followed by a more detailed presentation by **Sergei Lavkin**, a Defense Specialist on Russian weaponry. In his presentation, he featured the diesel/electric submarines and club missiles used against terrorists in Syria land targets of ISIS; Russian frigates and submarines that destroyed land-based targets; Missile equipped Corvettes and Cutters with 250 km stealth capabilities and small Corvettes with missiles; Russian landing ships; Russian patrol ships and boats such as SBOL and Mangoost fast patrol boats; Russian assault boats such as the BK16 and BK20; Russian coastal missile system BAL-E reaching 250 kms away; and having excellent maritime security systems. In conclusion, **Sergei Lavkin** stated that Russian weapons could help a country survive major threats. During the Q&A portion, a question was asked about whether Russia could provide a manual so we could learn more about the diesel/electric submarine. **Khovaev** responded that they would deal with the proper government persons when releasing sensitive weaponry design information. Another question related to whether bilateral talks were taking place between the Russian and Philippine governments. In brief, **Khovaev** replied stating that possibilities of Russian operations with bilateral talks between President **Putin** and President **Duterte** are going on. **Lavkin** added that there are specific country needs for Russian arms and weapons, and that Russia and Philippines have common concerns such as terrorism.



The fifth and final presentation was on “**The Role of PEZA in Maritime Defense Industry Development**” by PEZA Director **BGen Charito Plaza**. The scope of her presentation was PEZA’s performance during the period 01-July-2016 to 30-June-2017 wherein she highlighted that Philippine exports reached over \$42B. Worth noting was that the Xiang Lu Dragon Group proposed project amounting to \$360B utilizing 300 hectares to build a petrochemical facility complex, and an 85-storey mixed use “green” IT Center.



BGen Plaza also provided the details on PEZA’s role and operations. She said that PEZA is attached to the Department of Trade and Industry; promotes investments and creates employment; generates exports; has 372 operating zones nationwide and 3,995 locator countries; locator investments is led by Japan 28% compared with U.S.A 15% and Dutch 12%; by exports, the electronics and semi-conductor industry comprises 37% while IT Services comprises 11%; the major shipbuilders are Tsuneishi, Keppel,

Asian Craft, Austal Phil, FBMA MARINE; and Japan provides the most support to the shipbuilding industry. PEZA has 73 Manufacturing Economic Zones; 243 Information Technology Park Centers; 21 Agro-Industrial Economic Zones; 19 Tourism Economic Zones; and 2 Medical Tourism Park Centers.

BGen Plaza explained the benefits of registering your business with PEZA. She pointed out that the business would enjoy an income tax holiday of 6-8 years for pioneer businesses, or 4-6 years for non-pioneer businesses. It would: enjoy tax and duty free importation of capital equipment; exemption from wharfage dues on import shipments of equipment; be provided domestic sales allowance; zero VAT rate to all local purchases, telecom, power, and water bills and lease on the building; be exempted from local government tax and fees; allow employment of foreign nationals; and special multiple entry non immigrant visa for foreign investors. Altogether, she said that PEZA is a one-stop non-stop shop, and that PEZA had been cited by IFC (the private sector arm of the World Bank) as a model investment climate supporter.

BGen Plaza also spoke about PEZA’s major programs. PEZA has built: several types of economic zones in every project and city for industries such as Agro-Industrial business, aquaculture, defense industrial complex, etc; free trade zones in international air/sea ports and logistics parks; and Island Cities. In order to improve competencies, she suggested the following to address the gaps: **(a)** Complete the supply chain. Aim for less dependency on imports such as steel, which is abundant in the Philippines as raw material. Unfortunately, steel is still being imported; **(b)** Build stability and have low cost of supply of utilities; **(c)** Build more regional international logistics hubs; **(d)** Enhance and transform the workforce into a world class labor force; and **(e)** Take advantage of incentives and stability of policies and laws, and exemptions of ecozones and industries to the VAT zero-rating of local purchases.

During the Q&A portion, she was asked how a Renewable Energy investor could apply. **BGen Plaza** replied that they could drop by PEZA and fill out the application forms thereat, or download the forms from the website. Another question inquired about ecozones in Cebu where competitiveness may hamper operations. **BGen Plaza** replied that the common issue is allowing foreigners to own land, but we should give Filipinos the birthright to own land. Foreigners are allowed to lease land up to 75 years. However, if a joint venture is made with a Philippine entity with a ratio of 60% Filipino and 40% Foreigner, they can acquire property. Another question inquired about whether PEZA has safety nets against damages to environment, intrusion, and competition with local business; and what is being done with the mining industry. **BGen Plaza** replied that PEZA has put in place different types of ecozones, which will not destroy but enhance environment according to the potential of the land. It will build “green” buildings. PEZA would help industries identify where to locate best their industries. These are enhancements to business, not intrusion. PEZA would help in transfer of technology, and in so doing, build local entrepreneurs. PEZA is in discussion regarding defense industrial industries, which includes mining and steel. She emphasized that PEZA is not into the shopping malls and casino industry. 📌

The Haunting Fake News

by Commo. Carlos L. Agustin AFP (Ret)



As I was thinking of how to start this topic, I came across an article written by Cheyenne MacDonald for the London *Daily Mail* (based on a study published in the journal *Geology*) that was forwarded to me about 6 months ago (I have a file on things of interest) on **The Five Great Extinction Events**:

Five times, a vast majority of the world's life has been snuffed out in what have been called mass extinctions.

End-Ordovician mass extinction. *The first of the traditional big five extinction events, around 540 million years ago, was probably the second most severe. Virtually all life was in the sea at the time and around 85% of these species vanished.*

Late Devonian mass extinction. *About 375-359 million years ago, major environmental changes caused a drawn-out extinction event that wiped out major fish groups and stopped new coral reefs forming for 100 million years.*

End-Permian mass extinction (the Great Dying). *The largest extinction event and the one that affected the Earth's ecology most profoundly took place 252 million years ago. As much as 97% of species that leave a fossil record disappeared forever.*

End-Triassic mass extinction. *Dinosaurs first appeared in the Early Triassic, but large amphibians and mammal-like reptiles were the dominant land animals. The rapid mass extinction that occurred 201 million years ago changed that.*

End-Cretaceous mass extinction. *An asteroid slammed down on Earth 66 million years ago, and is often blamed for ending the reign of the dinosaurs.*

"With that, the marine algae productivity was stalled." According to the researchers, the oceans didn't begin cooling until 6-7 million years after the extinction, at which point the nutrients returned. 'The boundaries that kept the nutrients from reaching the surface were weakened and the ocean waters were mixed,' J.L. Knies says. "This caused the upwelling of nutrients, resuscitating the oceans, and leading to an explosion of life. The ecosystem voids created by the worst mass extinction in Earth's history were finally filled."

Not only does the study aim to answer questions about this ancient extinction, but also sheds light on the potential long-term effects on the oceans as global temperatures continue to rise, the researchers say.

Is this TRUE OR NOT? Of course it's true, unless the Daily Mail was hoodwinked into publishing fake news, which is completely possible. However, the five extinctions in our geological history have been well established and are taught in school. I mentioned this not only due to its being of marine nature, but because extinction events have been good material for publicizing fake news, reminiscent of how H. G. Wells stunned New York (and the U.S.) on 30-October-1938 but with somehow longer duration of expectation and eventual erosion of belief.

Fake news on extinction events are at times not news per se but speculations or fiction written or scripted in film as have a few profitable productions showed, such as "2012" and "End of Days." Many associated with space physics involve future close earth encounters with meteors, comets and even planets. We've known for centuries that such cosmic events do happen in addition to volcanic activity encompassing thousands and millions of years' cycles, mainly

because of geological activities as smaller events associated with the larger continental drift.

A couple of years ago, I read about a Spanish organization that had prophesied an extinction event based on biblical predictions – centered on the arrival of a wayward planet called **Nibiru**. I sent for the free book they offered and still have it. In the past few months, a series of YouTube videos do indeed predict more specifically the fortuitous coming close of a large Planet X as two suns in the sky on 23-September-2017, just about the day after Maritime Forum 126 is to take place. If we are still here by then, try to Google “Nibiru” or Planet X.

Fortunately, judging from the hits on YouTube videos, it appears that not too many people believe them, and thus they added another dimension – that of an alleged Ronald Reagan Executive Order putting a muffle on NASA to impart information on it. Naysayers of course know that many amateur astronomers and astrophysics students and professors would certainly be aware, if such is to occur shortly. Contacted for comment, a retired USN nuclear physicist SSBN submariner classmate of mine from North Carolina trained in nuclear warfare said to me that he just hopes his golf course would still be there as his plan for 24-September-2017 was a day on his favorite course.

Indeed lots of fake news abound and confuse us. It is a means of political warfare, for sowing international and domestic political intrigue, and for creating a means to scam others or to commit serious crimes. Often, it just creates confusion for no reason except that someone believed a post that conveys news that seemed right and thus he becomes party to propagating fake news. The term for this propensity is the “scoop news syndrome” that we sometimes feel when you learn something that you think others would be pleased to know, and you saw it first. And it could be serious.

Advertisements, a legal means of selling commercial goods, are a form of fake news as they often lie or exaggerate claims of quality, potency and other traits that help sell. Often, ingenious means of degrading popular consumer goods, such as Coke (no doubt encouraged by competitors), come in the form of “scientific” studies to show what harm they can do (indeed soda does lots of harm, but primarily because of the large sugar content they have). The Harvard Medical School has been often used for such, especially on cancer and other ailments.

Some fake news sites are there for satirical coverage of real issues, and they are used to entertain and sometimes to egg government into action. The website **ThoughtCo** discusses this well.

What about a ban on fake news? In a pastoral letter last June 2017, the CBCP warned about fake news and listed at least 29 websites generating the same in the Philippines.

The organization **Lausanne.org** has a good article on the fake

news phenomenon (see www.lausanne.org), including how lots of fake news favoring Donald Trump was generated by a fake news factory operated by teenagers in Macedonia in the last US election (there were some favoring Hillary Clinton as well, but allegedly not as much).

Graham Ruddick of **The Guardian** wrote on 18-August-2017 that “Kremlin supporters are suspected to be behind a collection of fraudulent articles published this year that were mocked up to appear as if they were from Al-Jazeera, the Atlantic, Belgian newspaper Le Soir, and the Guardian.” The Wikipedia list of Philippine fake news generators is quite appalling, and maybe this is the reason that, per **CNN Philippines**, a Philippine journalist group has launched an effort to counter the proliferation of fake news.

President Rodrigo Duterte signed into law RA 10951 on 01-September-2017. It penalizes any person “*who by the same means or by words, utterances or speeches shall encourage disobedience to the law or to the constituted authorities or praise, justify and extol any act punished by law.*” The IRR is still yet to be written but I wonder if it will really curtail such? I hope so, because for some reason we as a nation are among the top in the world in the generation of fake news.

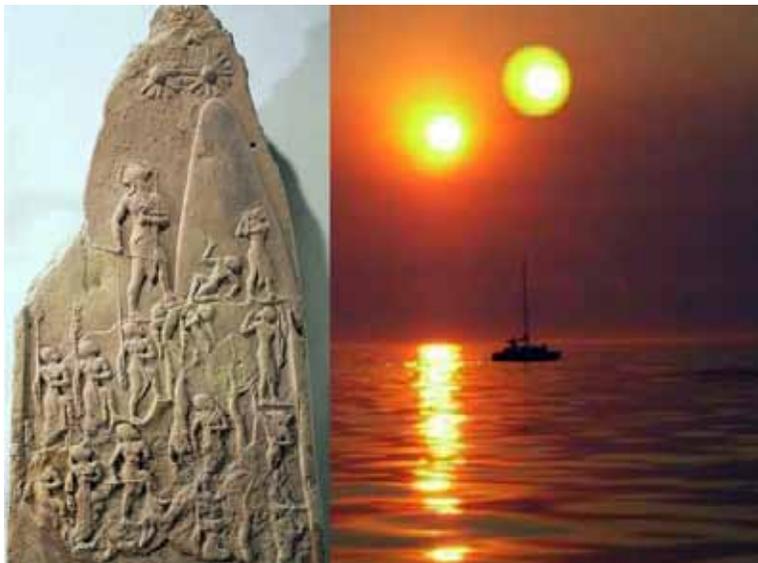
Prohibition of fake news is not new. Germany had banned it and other countries followed suit, or were even ahead, including here. PD 90 dated 06-January-1973 that prohibited “*rumor mongering and spreading false information,*” and specifically: “*... any person who shall offer, publish, distribute, circulate and spread rumors, false news and information and gossip, or cause the publication, distribution, circulation or spreading of the same, which cause or tend to cause panic, divisive effects among the people, discredit of or distrust for the duly constituted authorities, undermine the stability of the Government and the objectives of the New*

Society, endanger the public order, or cause damage to the interest or credit of the State shall, upon conviction, be punished by ‘prison correctional.’ In case the offender is a government official or employee, the accessory penalty of absolute perpetual disqualification from holding any public office shall be imposed.”

The **IFLA.org** has issued a guide on how to spot fake news, but for most of us, there are already reliable websites that we can readily refer to and these are Snopes (some say this site has a liberal bias), **FactCheck.org**, **TruthorFiction**, **ThoughtCo**, or **urbanlegendsonline.com** (this even has a video series) and often, just Google some key words of the alleged news and add the word “hoax” or check out any of these websites earlier mentioned.

What this really means for us is the next time we get news or information on a pending disaster, war, terrorist attack, or whatever interesting item that we have the urge to share, we need to assess carefully before we act, and verify before we push the SEND button.

Happy truth hunting! 📍



A 2,500BC stele of Naram-Sin of Susa, Iran origin showing 2 suns. Photo: Louvre, Paris; Two Suns in the Sky. Photo: Yuval Ovadya, 2017.

Proceedings of 123rd Maritime Forum

The **123rd Maritime Forum** was held at the NDCP last 30-June-2017, 0800-1200H. The Maritime Forum is one of the activities the **Maritime League**, "a nonprofit Filipino maritime foundation was established in 1990 to address the need for an organization, which will help spur progress in the maritime sector and advance the interest of the maritime profession and the maritime industry as a whole in the Philippines." The Maritime Forum is monthly event where various key leaders in the industry and related maritime agencies are invited.

The **123rd Maritime Forum** had the following objectives: 1) to discuss recent developments in the South China Sea (SCS); 2) to discuss the government development and security policies; and 3) to discuss security observations from the Korean peninsula.

A total of seventy participants from the military, civilian government agencies, and civil society were invited as participants of the forum.

The workshop featured the lectures of the following: Mr **Rostum J Bautista**, MNSA, Chief, Research and Special Studies Division, NDCP; Ms **Amelia A Menardo**, Chief Economic Development Specialist, National Economic and Development Authority (NEDA); Undersecretary **Vicente M Agdamag**, Deputy Director General, National Security Council (NSC) Secretariat; and Secretary **Rafael M Alunan III**, Former Secretary, Department of Interior and Local Government (DILG).

Opening Remarks by Commodore Carlos L Agustin AFP (Ret), President, Maritime League

In his opening remarks, Commodore **Agustin** thanked everyone for participating in the event. He expressed his gratitude to the NDCP for hosting the Maritime Forum for the 3rd time. Commodore Agustin also noted that the Maritime League celebrated its 25th anniversary.

Welcome Remarks by Rear Admiral Roberto Q Estioko AFP (Ret), PhD, MNSA, President, NDCP

In his welcome remarks, Admiral **Estioko** thanked Commodore **Agustin** and the Maritime League for partnering with **NDCP** in hosting the Maritime Forum. The NDCP President also noted that in view of the transition of leadership, the country experiences varying degrees of transformation in the domestic and foreign policies, especially on peace and security, which will significantly impact on the pressing defense and security concerns within and outside the Philippines. Taking a close look at the existing security policies and national interests, and if the country is to ponder on its impact on national security, a thorough discussion of these policies, its nature, scope, nuances, applicability, mechanisms, and the pertinent debates is an unquestionable imperative. Such is the very basis and the intention of the activity, Admiral **Estioko** stressed. The NDCP President thanked the speakers for the coming to the event.

"Managing Tensions for Peace and Development: Observations on President Duterte's South China Sea Approach" by Mr Rostum J Bautista, MNSA, Chief, Research and Special Studies Division, NDCP

After presenting an overview of the SCS dispute and developments leading to Manila's decision to file an arbitration case against Beijing before the international arbitral tribunal, **Bautista** argued that the Duterte administration's foreign policy approach could be described as hedging. International relations scholar, **Cheng Chwee Kuik**, said hedging is "an insurance-seeking behavior wherein a sovereign actor pursues deliberately ambiguous policies vis-avis competing powers to prepare for a fallback position should circumstances change." Its objective is to "acquire as many returns from different powers as possible when relations are positive, while simultaneously seeking to offset long-term risks that might arise in worst-case scenarios."

Against the backdrop of hedging, **Bautista** discussed the diplomatic, economic, and military tracks of the foreign policy of the **Duterte** government. On the diplomatic front, the **Duterte** administration has pursued the following: 1) independent foreign policy; 2) restraint and peaceful resolution of disputes; 3) pragmatism; and 4) development-oriented foreign policy. On the economic front, President **Duterte** has promoted intensified trade and investments with China, Russia, and Japan. On the military front, the government has pursued and/or continued: 1) AFP Modernization Program; 2) continuation of PH-US Alliance; and 3) enhancing and forging strategic partnerships. In conclusion, **Bautista** argued that these policies are a combination of economic pragmatism, binding-engagement, and limited-bandwagoning-which are elements of hedging.

"Overview of the Philippine Development Plan 2017-2022 and Ambisyon 2040," by Ms Amelia A Menardo, Chief, Services Division, Trade, Services and Industry Staff National Development, Office for Policy and Planning, National Economic and Development Authority (NEDA)

At the outset of her lecture, **Menardo** noted that the motivation behind the **Ambisyon Natin 2040**, a long-term economic vision for the Philippines, is the Asian Development Bank's (ADB) projection of Asian economies by 2050. There will be 7 economies that will lead Asia's march to prosperity (South Korea, Japan, China, India, Indonesia, Malaysia and Thailand). However, the ADB study indicated that the Philippines would be left out of the boom, overtaken by India and Viet Nam, along with Mongolia and Cambodia. As such, NEDA has taken steps to put the Philippines in the forefront of growth in Asia.

Menardo pointed out that **Ambisyon Natin 2040** has to be the basis for the development planning across political administrations. Nonetheless, Ms **Menardo** noted, there has to be some flexibility to adapt to unexpected developments and changing needs and preferences and this is why NEDA went short of formulating a long-term plan. **Menardo** then explained the specifics of the **Philippine Development Plan (PDP) 2017-2022**, the first PDP to be anchored on **Ambisyon Natin 2040**. The objective of the current administration's development plan is that more Filipinos will be closer to achieving their **Ambisyon** for a "matatag, maginhawa at panatag na buhay." The PDP will therefore aim to lay down a solid foundation for more inclusive growth, a high-trust and resilient society, and a globally competitive knowledge economy. The strategies fall under the three major pillars of "Malasakit, Pagbabago, and Patuloy na Pag-unlad."

"National Security Policy 2017-2022: For Change and Well-Being of the Filipino People," Undersecretary Vicente M Agdamag, Deputy Director-General, National Security Council Secretariat

In his lecture, Undersecretary **Agdamag**, presented the National Security Policy (NSP) 2017-2022, which he noted is a companion of the PDP. Undersecretary **Agdamag** also shared that the national security vision articulated in the NSP 2017-2022 is for the Philippines to become "A Secure and Developed Nation wherein the people's welfare, well-being, ways of life; government and its institutions; sovereignty; and core values are enhanced and protected." The national security vision of the Government is motivated by the following national interests: 1) public safety and order; 2) territorial integrity; 3) economic solidarity; 4) ecological balance; 5) cultural cohesiveness; 6) moral and spiritual consensus; and 7) external peace and harmony. Undersecretary **Agdamag** explained the internal and external security environment of the Philippines as understood in the NSP.

The NSP notes the following internal security concerns: 1) law and order and criminalities; 2) internal armed conflicts; 3) terrorism and transnational crimes; and 4) economic and social threats.

The external security concerns include: 1) overlapping territorial claims and other regional concerns; 2) global and regional geopolitical issues; and 3) global uncertainty and proliferation of weapons of mass destruction.

The NSP also included other strategic issues and challenges: 1) technological advances and threats of cyber-attacks; 2) climate change and its national security risks; and 3) institutional concerns.

Undersecretary **Agdamag** also shared the national security goals contemplated in the latest NSP which include:

1) promote public safety and order; 2) safeguard territorial integrity and sovereignty; 3) bolster economic strength and solidarity; 4) protect and preserve ecological balance; 5) advance cultural cohesiveness; 5) promote moral-spiritual consensus; and 6) contribute to global peace and harmony.

In discussing the means to the said goals, Undersecretary **Agdamag** explained that the NSP contains a chapter on resource generation for national security, which is divided into 4 parts, namely:

1) human resource development; 2) legislations and executive issuances; 3) funding and budgetary resources; and 4) strategic industries/flagship projects.

In discussing the strategic industries that are essential in achieving the aforementioned national security goals, Undersecretary **Agdamag** explained that they would include the industries in the Investment Priorities Plan as well as other industries including transportation industry, space industry, land combat system industry, weapons and munitions industry, and aircraft industry, among others.

In concluding his lecture, Undersecretary **Agdamag** explained that the NSP 2017-2022 contemplates the following elements of national security: cultural security, cyber security, disaster security, economic security, energy security, environmental security, food security, geostrategic security, health security, human security, informational security, and military and border security. The plebiscite would then be held in 2019 and by 2022, there will be an election for the first set of officials under the federal system.

"Learning from the Republic of Korea," by Secretary **Rafael M Alunan III, Former Secretary, Department of Interior and Local Government (DILG)**

In his presentation, Secretary **Alunan** recounted the recent trip, which he and Commodore **Agustin** undertook in Republic of Korea (ROK), otherwise known as South Korea. At the invitation of the South Korean Ambassador to the Philippines, **Kim Jae Shin**, Secretary **Alunan** and Commodore **Agustin** travelled to ROK with the aim of further understanding the following issues: Politico-security matters on the Korean Peninsula, the South China Sea, security alliance concerns, PH foreign policy, PH internal security issues, PH credible deterrence direction, supplier-client risk management, and ROK urban public safety and security systems.

Secretary **Alunan** also shared their experience at the Demilitarized Zone (DMZ) in the 38th Parallel, the South Korea-North Korea border. The former DILG Chief noted that he and Commodore **Agustin** took photos of the Democratic People's Republic of Korea (DPRK) while the North Koreans also took pictures of them.

In a paper written by Commodore **Agustin** regarding the trip, the Maritime League President noted: "Our take away from the various discussions during the 4-day visit are summed up by Mr **Alunan**:

1) A military solution to counter **Kim Jong Un** is not a viable option. Regime change initiated within NoKor is the most acceptable option although the probability of that happening is low at this point. More sanctions, negotiations, defiance and tensions should be expected;

2) The lack of U.S. resolve in the South China Sea: The Freedom of navigation operations prove ineffective so far. China has been taking full advantage of the situation. Security relationships are being adjusted and calibrated;

3) ISIS or Islamist terrorism is not a security risk factor in ROK. Questions were raised about the efficacy of martial law and the country's strategy to contain and defeat the problems of drugs and terror to protect our economic gains and boost investor confidence;

4) The idea of dispersing ROK's strategic industries to other parts of the region as a safety and security measure against a hot conflict on the peninsula was put on the table;

5) Should ROK's shipyards and aerospace industry be destroyed by NoKor, that would cripple our Navy and Air Force that would be unable to find spare parts to repair and maintain the combat assets we're acquiring from ROK for credible deterrence; and

6) The PH and ROK have common denominators in their security environment - the U.S., China, Russia and Japan. The conduct of diplomacy must be given careful attention."

Open Forum

During the open forum, one of the participants pointed out that the Philippines must develop a sense of nationalism in order to fight for the country's territorial rights. Another participant responded that the Philippines should not act tough without anything to back up its stance, and that the country must develop self-reliance, starting in the industry of shipbuilding.

A member of the audience gave tribute and declared respect for the Philippine Navy, but noted that while the agency was good in strategic planning, it still faced challenges when it came to implementation of such plans. This was followed by a suggestion of another participant to give more time regarding the West Philippine Sea (WPS) in the next forum. The same participant pointed out that there must be ways to get the Filipino people, especially the youth, directly involved in discussions regarding the WPS territorial disputes. Commodore **Agustin** agreed and noted that the Department of Education must carry out programs to educate the youth about the WPS. Brigadier General **Rolando G Jungco** AFP (Ret), NDCP Executive Vice President, added to this proposal, and noted that corrections must be made to simple things like posters and t-shirts, which display the Philippine map. He said that such maps must also display the disputed territories in the country's exclusive economic zone (EEZ) such as **Pag-Asa Island**.

"Updates on the West Philippine Sea," from the Philippine Navy, National Coast Watch Council, Department of Transportation, and Philippine Coast Guard

The open forum was followed by several agencies giving updates on WPS, including the Philippine Navy, National Coast Watch Council (NCWC), Department of Transportation (DOTr), Philippine Coast Guard (PCG), and the Asian Institute of Journalism and Communication.

The **Philippine Navy** discussed plans in establishing a forward operating base (FOB) and a littoral monitoring station (LMS) in the area of Batanes in order to address territorial security issues in the northern border of the country and its fishing grounds. The FOB will serve "as a permanent staging area that will fill in the identified gaps in Northern Seaboard specifically, the Bashi Channel and Balintang Channel." The LOS, on the other hand, "will detect and monitor movement of vessels plying in these channels and the seas around Batanes."

The **NCWC** noted it recently held a workshop where it was proposed that an executive order would promote maritime and archipelagic awareness of the country.

The **DOTr** proposed the creation of maritime museum in order to have appreciation of the country as archipelagic and maritime character.

The **PCG** noted its proposed port project in the **Kalayaan Island Group (KIG)**. The KIG project involves two piers: a small pier for fishing boats, and a larger one after for the vessels of the **PCG** and the **Philippine Navy**.

The Asian Institute of Journalism and Communication discussed its "**Diskursong Teritoryo**," a campaign that aims to enhance the quality of public debate on the WPS and the Philippine Rise. It will celebrate in September "**Mana Mo**," which stands for Maritime and Archipelagic Nation Awareness Month.

Commodore **Mariano S Sontillanosa** AFP (Ret), Board Secretary, Maritime League, provided an overview of the upcoming "**Maritime Conference 2017**" to be held on 12-14 July 2017 at SMX Convention Hall, Manila.

After Admiral **Estioko** thanked the speakers and the audience for participating in the activity, Commodore **Agustin** adjourned the Forum. ⚓



AEC Vision 2025 – A Sectoral Contribution of the Philippines to Maritime Connectivity and Ocean Governance

by Alberto A. Encomienda, BalikBalangay

The Philippines will be hosting the 31st ASEAN Summit later this year, at mid-century of its founding and into the second year of the establishment of the ASEAN Economic Community (AEC) in 2015. The 50th year of the ASEAN also marks a milestone with the implementation of the AEC Blueprint 2025, which is the second phase of constructing the AEC. The Philippines must take these important ASEAN milestones as an opportunity to project national concerns and core interests in the context of ASEAN regional integration and consolidation. It must seize the opportunity to promote regional ocean governance as a core regional interest for the AEC, projecting a core interest of the Philippines.

Introduction – A Philippines core national interest and an ASEAN core regional interest

This article hopes to contribute to the continuing narrative on ASEAN economic/political integration and consolidation, and a “caring and sharing” community-building under the ASEAN Community Vision 2025. At this juncture, the core national interests of the Philippines as a millennial archipelagic State must already be introduced to the

regional and international context through an independent foreign policy that is ASEAN-centered and oriented towards the wider Central Indo-Pacific region, under AEC Vision 2025, paragraph 8.7. In the ASEAN community-building narrative, the Philippines must project its core interests especially in transitioning from an archipelago and maritime nation to an archipelagic State created under the 1982 United Nations Convention on the Law of the Sea (UNCLOS).

The concept of an archipelagic State is an economic/political characterization, which the Philippines historically espoused as an added essential element of its Statehood as a mid-ocean archipelago. The so-called “archipelagic doctrine” articulates and reflects the ancient and traditional animus among the early tribal inhabitants of the islands that later comprised the Philippines archipelago. Since those very early times, time immemorial, the pre-Spanish inhabitants of the islands comprising the archipelago were mostly coastal communities and settlements with a natural affinity with the sea, and thus the sense of a “unity between land and sea.” Presently, between 80-85% of municipalities and cities in the country is never more than a hundred kilometers from the coast.

The projection of the archipelagic concept to the international political plane was pioneered by the Philippines at the three United

Nations Conferences on the Law of the Sea; among the longest and largest diplomatic conference process that spanned three decades. For the Philippines, the incorporation of the regime of the archipelagic State in the UNCLOS represents a hard-won success at diplomacy, wherein the leading maritime nations of the world were ranged against it. Thenceforth, the Philippines will have to continue work at progressive development of the international regime of the archipelagic State at UNCLOS Part IV, through customary State practice. The legal regime itself and not just its UNCLOS juridical implementation, is so much work still in progress. For example, an intractable issue then as it is up to the present time is defining what constitutes **freedom of navigation** through archipelagic waters, otherwise known as the right of archipelagic sealanes passage. This is a vessel transit regime that necessarily would be mainly governed through domestic rules and regulations albeit also necessarily balanced with the rights of foreign vessels. This domestic projection towards foreign policy under the ASEAN Community Vision 2025 would serve core interests of the Philippines alongside its own national visioning, positioning and constructing for the Asian Century.

This suggested initiative of the Philippines within the ASEAN, implementing and further developing the UNCLOS regime of the archipelagic State, would be significantly contributory to the AEC community-building “forging ahead together,” in regard to maritime connectivity and ocean governance. This is due to the fact that the ASEAN seas and the Central Indo-Pacific maritime region is flanked in its eastern longitudes by the three largest archipelagic States in a north-south adjacency alignment i.e., Philippines, Indonesia and Papua-New Guinea. On account of the importance of maritime connectivity and ocean governance to AEC economic/political integration and consolidation, the ASEAN must assume its role as the “central and foremost facilitator and driver of regional economic integration in East Asia” (AEC Vision 2025, paragraph 10.5) addressing maritime connectivity through ocean governance and maritime security. Even at this point in time, the ASEAN can intercalate inputs into the Initiative for ASEAN Integration (IAI) Strategic Framework and the Master Plan for ASEAN Connectivity (APSB, paragraph 8.7), and shaping the regional maritime and ocean governance architecture (APSB, paragraph 7). To reiterate, ocean governance and maritime security is a collective regional core interest for the ASEAN region and East Asia, burdened with more than half of the world’s maritime trade and shipping volume quantified at US\$5.3 Trillion annually. Ocean governance is also essential in establishing maritime connectivity. And, the Philippines is the strategic regional epicenter in all aspects of ocean governance and maritime security, whether traditional or non-traditional concerns and issues; and in the thick of a maritime disputes situation that can be a drag on regional integration and consolidation. The Philippines contribution to the ASEAN integration and consolidation process, at this point in time through AEC 2025, would be in ocean governance and maritime security, projecting a core national interest.

The AEC Vision 2025 Blueprint for a Political - Security Community (APSB)

The broad characteristics for the ASEAN Political-Security Community in the AEC Vision 2025 is laid out at paragraphs 7 and 8 of the vision Statement issued by the ASEAN Heads of State/Governments during the 27th ASEAN Summit in Kuala Lumpur that established the ASEAN Community 2015. As a Political-Security Community, the AEC Vision 2025 exhorts that the ASEAN “shall remain cohesive, responsive and relevant in addressing challenges to regional peace and security as well as play a central role in shaping the evolving regional architecture while deepening (our) engagement with external parties and contributing collectively to global peace and stability” (AEC Vision

2025, paragraph 7). To this end, the ASEAN “undertake to realize” a Political-Security Community that, among other broad characteristics:

- ♦ “adopts a **comprehensive approach** to security which enhances (our) capacity to address effectively and in a timely manner existing and emerging challenges, including **non-traditional security issues particularly transnational crimes and trans-boundary challenges**” (AEC Vision 2025, paragraph 8.4);
- ♦ “that **enhances maritime security and maritime cooperation for peace and stability in the region and beyond ... and adopts internationally accepted maritime conventions and principles**” (AEC Vision 2025, paragraph 8.7);
- ♦ “that ... deepens cooperation with Dialogue Partners, strengthens engagement with other external parties, reaches out to potential partners, as well as responds collectively and constructively to global developments and issues of common concern” (AEC Vision 2025, paragraph 8.9).

The above are among broad political-security characteristics that the ASEAN “undertake to realize” for ASEAN Vision 2025 as contained in the ASPB, that impacts on maritime security and ocean governance. This is what defines a sectoral lead role for the Philippines, contributory to ASEAN integration and consolidation, projecting its own core national interests.

Constructing maritime security, connectivity, and ocean governance under the ASEAN Vision 2025

Maritime Asia, which cradles the seas of the ASEAN region and the Central Indo-Pacific, is an archipelagic continent; the classic regional **thalassocracy** wherein the sea dominates the land by natural design and configuration. The seas of the ASEAN and the Central Indo-Pacific collectively are a regional common heritage that must be managed and nurtured comprehensively and seamlessly through joint cooperation among States concerned, whether regional stakeholders or extra-regional interested States (UNCLOS Part IX). The archipelagic waters of the Philippines are also interconnected enclosed/semi-enclosed seas with the archipelagic waters of Indonesia and Papua New Guinea; a regional maritime setting wherein vessel transit, freedom of navigation, exploitation and conservation of marine resources, protection of the marine environment and biodiversity, integrated coastal zone management (and thus food security), transborder marine pollution, and adverse effects of climate change, which are aspects of non-traditional maritime security concerns/issues and transboundary challenges (AEC Vision 2025, paragraph 8.4), are ever-present active or latent transborder issues that can affect regional peace, security, and good order. These non-traditional maritime security concerns in a very significant way contributes to defining the broad characteristics for a 2025 ASEAN political-security community.

It is clear that in the ASEAN community-building as a virtual maritime community, **non-traditional maritime security issues and transboundary challenges** is the other side of the coin in regard to comprehensive security that must be enhanced under the AEC Vision 2025, and about which the ASEAN must remain cohesive, responsive and relevant in addressing as challenges to regional peace and security; playing the central role in shaping the political/security architecture. It is in this aspect of comprehensive security, the **non-traditional maritime security concerns**, where the Philippines can assign to itself a signal national contribution to the AEC Vision 2025 integration and consolidation. It can carve a sectoral role focused on maritime security and ocean governance, and assume the leadership role in establishing regional ocean governance and connectivity under the legal and scientific framework of the UNCLOS, and in particular at

Part IX thereof on enclosed/semi-enclosed sea. The Philippines stake and leadership in regional ocean governance on account of its strategic location would be contributory not only to maritime connectivity in regard to the ASEAN and AEC Vision 2025 economic/political integration and consolidation but even beyond (AEC Vision 2025, paragraph 8.7); implying the wider Central Indo-Pacific in regard to constructing and ensuring regional maritime peace, good order and security. This is an essential and indispensable role for the Philippines that stems from its highly strategic location as an archipelagic State with archipelagic waters and territorial seas forming the Pacific Ocean rampart of maritime Asia, and the South China Sea.

The Philippines, while putting its archipelagic house in order in all aspects of domestic nation-building as an archipelagic State, must take the lead in constructing regional ocean governance and maritime security to help establish the broad characteristics under AEC Vision 2025 especially in regard to maritime connectivity, and establish the clear direction for the next (third) and succeeding phases of AEC construction. In this manner, a pioneering regional role, it would be constructing its own archipelagic house while working on a shared regional blueprint with Indonesia and Papua-New Guinea for interconnected archipelagic seas that are also interconnected enclosed/semi-enclosed seas. This humongous regional sea area is a Large Marine Ecoregion (LME) sharing characteristic regional features (UNCLOS Article 197). Finally, in regard to regional ocean governance and the leadership stake for the Philippines, it must never lose sight that ocean governance and maritime security is a core national interest of the Philippines as an archipelagic State highly vulnerable to all maritime issues and concerns straddling traditional and non-traditional maritime security. And on account of the connectivity of the ocean especially in the context of the ASEAN and Central Indo-Pacific seas as a Large Marine Ecoregion (LME) sharing characteristic regional features, regional ocean governance and maritime security is a core regional interest for establishing maritime connectivity significantly contributory and essential to AEC integration and consolidation.

In another vein and in regard to political-security community-building and inclusivity, a constructive historical double-take would be a geographic reconstruction of the larger Indo-Pacific ancient regional community. And hence, following recent worldwide events relating to an expanded sometimes called “open regionalism,” it might be time for the ASEAN to actively consider the next phase of expansion in membership by formalizing the long-running Observer status of Papua-New Guinea, Sri-Lanka and East Timor to full membership. This suggestion might be a “subversive” thought to some of the current ASEAN member States that would adhere to a strict geographic regionalism and inclusivity. It would however be worthwhile “planting the seeds” for beyond ASEAN Vision 2025 as the next phase of ASEAN integration and consolidation as therein impliedly suggested at paragraph 8.7. This step would also help integrate and consolidate on a wider regional ocean governance scheme and maritime good order, which would serve the overarching principles underpinning the UNCLOS as enunciated in its Preamble.

The AEC Vision 2025 Blueprint for the ASEAN Economic Community (AECB)

The AEC Vision 2025 envisions an ASEAN Economic Community “with enhanced connectivity and sectoral cooperation ...” As broadly defined, the AEC Vision 2025 “undertake to achieve”, among other broad characteristics, the following:

- ♦ 10.3 - Enhanced connectivity and sectoral cooperation with improvements in regional frameworks, including strategic sectoral policies vital to the effective operationalisation of the economic community;

- ♦ 10.5 - A global ASEAN that is “a central and foremost facilitator and driver of regional economic integration in East Asia...” There is nothing much to say on the above AECB aspects, essentially motherhood statements, but merely to emphasize and restate that ocean governance, maritime security and connectivity reflected above, is a principal facilitator for regional economic integration and consolidation in the context of AEC Vision 2025, and beyond. It must be noted that same sense is essentially conveyed in the previous chapter on the Blueprint for Political-Security Community.

The AEC Vision 2025 Blueprint for Socio-Cultural Community (ASCB)

The ASCB is laid out at paragraphs 11 and 12 of the vision Statement where the key descriptive phrase and terminology is of an ASEAN Socio-Cultural Community that “shall be inclusive, sustainable, resilient and dynamic.” The relevant socio-cultural elements and broad characteristics that can be related to ocean governance and maritime security, follows:

- ♦ 12.3 - A sustainable community that promotes social development and environmental protection through effective mechanisms to meet the current and future needs of our peoples;
- ♦ 12.4 - A resilient community with enhanced capacity and capability to adapt and respond to social and economic vulnerabilities, disasters, climate change as well as emerging threats and challenges.

It will be noted that the two aspects above, highlighting social development and environmental protection, and community resilience, which has reference to non-traditional security concerns, those similarly treated in the APSB and AECB. Although seemingly understated in the overall AEC Vision 2025 as regards to its importance to ASEAN maritime connectivity and thus integration and consolidation, ocean governance and maritime security in the context of maritime Southeast/ East Asia is essential to maritime peace, good order and security. To emphasize, a regional *pacem en maribus* is essential for a conducive atmosphere towards ASEAN integration and consolidation promoted under AEC Vision 2025, and in establishing maritime connectivity. The legal/scientific framework and platform serving the ASEAN Vision 2025 Socio-Cultural Community could be holistically pursued under UNCLOS Part IX and at UNCLOS Parts X, XII and XIII and relevant other general duties and obligations under international law (AEC Vision 2025 at paragraph 8.7 cited above). A specific and flagship project that the Philippines can pursue under the above broad socio-cultural characteristics would be **Integrated Coastal Zone Management (ICZM)**, which would benefit the coastal regions of maritime Asia in regard to food security and disaster mitigation.

A separate matter but related to the AEC Vision 2025 socio-cultural mantra addresses another regional maritime concern that is the Spratlys archipelago disputes situation. This is another core interest of the Philippines that could adversely affect ASEAN integration and consolidation. It might be desirable to consciously insinuate into the contemporary ASEAN narrative, a historical ASEAN double-take leaning towards an active reintroduction of the ancient Madjapahit and Shri-Visayan social and cultural norms of **musyawarah** (consultations) and **mufakat** (consensus). These established regional socio-cultural norms can be adapted to address contemporary socio-cultural issues in the new economic/political integrationist direction under the AEC Vision 2025 as restated in the APSB (AEC Vision 2025, paragraph 8.5). In a manner of speaking these regional socio-cultural traits are reflected in ASCB, paragraph 12.5, thus: “A dynamic and harmonious community that is aware and proud of its identity, culture

and heritage with the strengthened ability to innovate and proactively contribute to the global community.” These are ancient core regional socio-cultural values articulated in the Bandung Declaration of 1955 and further manifested and modernized in the ASEAN Treaty of Amity and Cooperation in Southeast Asia (ASEAN-TAC).

The ASEAN seas and the seas of the Central Indo-Pacific with its non-traditional maritime concerns is rife with potential and latent conflict situations that must be addressed the Asian Way. The South China Sea dispute situation, especially post The Hague PCA arbitral ruling that has not contributed in any manner to a peaceful resolution of the dispute situation, may yet be better addressed in a new direction under the ASEAN-TAC and in the spirit of the AEC Vision 2025. In this regard, even the UNCLOS and thus rules-based, reflects the *musyawarah/mufakat* spirit at its opening preambular paragraph that “The States Parties to this Convention, prompted by the desire to settle, in a spirit of mutual understanding and cooperation, **all issues relating to the law of the sea.**

Participatory roles of ASEAN Dialogue Partners in AEC Vision 2025 constructing regional maritime security and connectivity.

The structural set-up of the ASEAN as a regional organization allows for “open regionalism” through so-called Dialogue Partner arrangements. Among existing Dialogue Partners that the ASEAN can engage in a stakeholder participatory arrangement for cooperation in regional maritime security and ocean governance would be Australia, China, the European Union, Japan and the USA. China can participate in two capacities: (1) as an ASEAN Dialogue Partner, and (2) as an UNCLOS State Party bordering the South China Sea as an enclosed/semi-enclosed sea (UNCLOS Part IX).

Australia, Japan, the EU and the USA can also participate in two capacities: (1) as ASEAN Dialogue Partners, and (2) as “other interested States” under UNCLOS Part IX (Article 123). Moreover, maritime cooperation with Dialogue Partners can also be pursued as a universal obligation among States Parties to the UNCLOS provided for in its Annex VI (Resolution on development of national marine science, technology and ocean service infrastructures), and under a North-South and South-South mutual assistance as provided in the United Nations Conference on Trade and Development (UNCTAD). It can be seen however, that in whichever category of stakeholder participation attaching to any concerned or interested countries can be undertaken in a unified ocean governance umbrella whether under the ASEAN or through a regional institutional mechanism under UNCLOS Part IX (Article 123).

There are already ongoing ocean-related cooperation between ASEAN and aforementioned countries whether bilaterally or under ASEAN auspices. These existing arrangements would constitute the initial building blocks towards a coherent, comprehensive and seamless regional maritime joint cooperation. In regard to Australia, Japan, the EU, and the USA, as extra-regional “other interested States” under UNCLOS Part IX (Article 123), their duties and responsibilities in regard to regional ocean governance is not a “feel good” altruistic motivation. They carry duties and responsibilities on account of shipping activities as “user” States; activities that carries threats to the marine environment and safety and security of navigation. China with its Belt and Road Initiative (BRI) regional maritime infrastructure project would be additionally obliged to actively participate in regional ocean governance as a duty and responsibility. The EU and ASEAN have an ongoing ASEAN-EU High-Level Dialogue on Maritime Cooperation. Very recently, the European Commission together with the EU High Representative issued a Joint Communication on international ocean governance, in which the ASEAN can align its own ocean governance

program. The International Maritime Organization (IMO), which necessarily is an “interested international organization” under UNCLOS Article 123, must participate. So must the Food and Agriculture Organization (FAO). In the case of the IMO, the Philippines can reiterate a 1996 standing proposal and invitation for the IMO to establish a Regional Office headquartered in the Philippines.

Conclusion: Regional maritime security and ocean governance - the call of the times for AEC Vision 2025; and a leadership call for the Philippines

The Philippines is the quintessential archipelagic State and the front-line coastal State for all regional challenges and issues relating to traditional and non-traditional maritime security concerns. Equally significant, it has the historical “baggage” and “lessons learned” that led it to constructing itself with a domestic mold of the “archipelago concept”. The archipelago concept served as the legal and scientific framework for the archipelagic State enshrined in the UNCLOS (Part IV). The Philippines is the strategic marine geological microcosm embodying all maritime concerns. Consistent with its political circumstances and blue economy resources, the Philippines must concentrate on **addressing non-traditional maritime security concerns and challenges.** It must assume leadership in extrapolating those concerns regionally that is the ASEAN and Central Indo-Pacific seas; a State duty and responsibility imposed by nature and political circumstances. It is clear that in all aspects of ASEAN Community-building under the AEC Vision 2025, whether Political/Security, Economic, and Socio-Cultural, ocean governance and maritime security, peace and good order is essential to facilitating integration and consolidation. And the archipelagic continent that is maritime Asia, East Asia or Central Indo-Pacific, however the geographic region is politically or economically conceived to be, the Philippines is the front-line State in regard to all possible maritime challenges, and the fulcrum for ocean governance and maritime security. Regional ocean governance leadership for the Philippines is not about an altruistic projection of a subjective national interest but an international responsibility under UNCLOS.

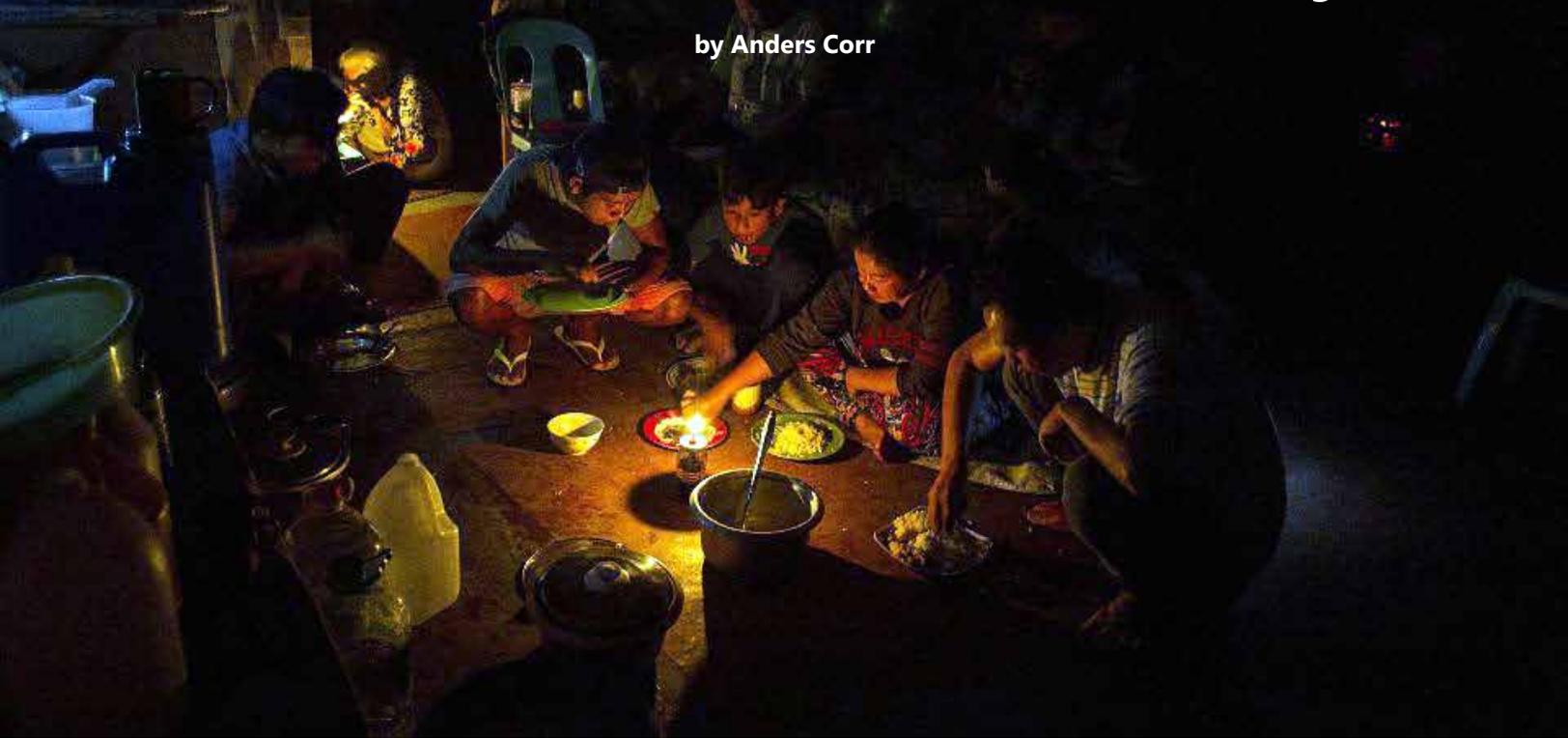
Finally, the Philippines is the front-line in the Spratlys archipelago dispute situation. Everything it can do to promote joint cooperation in addressing non-traditional maritime security and ocean governance concerns, whether as confidence-building measures (CBMs) or as provisional measures pending a peaceful settlement of the conflict situation, would surely contribute to alleviating the political tensions in the wider region. And this mission and vision would call to mind UNCLOS Preambular paragraph 4 which recognizes “the desirability of establishing ... a legal order for the seas and oceans which will facilitate international communication, and will promote the peaceful uses of the seas and oceans, the equitable and efficient utilization of their resources, the conservation of their living resources, and the study, protection and preservation of the marine environment”. The abiding national marine/maritime policy guidance for the Philippines must always be the UNCLOS, which is the lynchpin and underpinning of the Philippines archipelagic State. And so it is for the ASEAN and Central Indo-Pacific maritime region.

The Philippines must seize the moment. The 2017 hosting of the ASEAN Summit would be the best, and possibly the only, opportunity for the Philippines to stake and define for itself a leadership role in constructing regional ocean governance and maritime security. Borrowing some famous words, the same classic question must have motivated and played in the minds of the authors of the archipelagic State led by Senator Arturo M. Tolentino, thus:

“If not us, who? If not now, when?” 🇵🇭

Terrorist Safe Havens Are In The Mind, And Cannot Be Beaten Militarily

by Anders Corr



Counterterrorism operations today often entail attempts to remove territorial “safe havens” for Islamic extremism. This is seen in fights against the Islamic State in Afghanistan, Iraq, Syria, and most recently, the Philippines. These fights are often government-led sieges of cities, like Raqqa, Mosul, and Marawi, where Islamic State has taken control, or at least has a strong presence.

But by using extensive military force to deny safe havens that tend to concentrate Islamic extremists, we may be spreading extremism diffusely across our vulnerable societies. The civilian deaths, property destruction and refugees from the sieges provide terrorists with propaganda tools to expand a network of recruits that strengthen and empower terrorism, making their organizations more dangerous than they were when concentrated in a particular locale. When allowed to concentrate and govern through peace agreements, extremists are shaped, and moderates empowered, by gradual government applications of institutional, economic, and legal influence.

The idea of counter-terrorism as violent conquest of territory is instantiated in a statement by Armed Forces of the Philippines (AFP) spokesman Brigadier General Restituto Padilla on June 9. He discusses Mindanao, which is currently under martial law to facilitate the retaking of Islamic State-controlled portions of the Muslim-majority city of Marawi. “The chief-of-staff [AFP head Gen. Eduardo Año] made an announcement hoping that by Monday [June 12, Independence Day] we can freely wave our flags in every corner of Marawi. We’re working feverishly to do that,” he said. On June 10, 13 more Philippine soldiers tragically lost their lives in the attempt.

But waving the flag in Marawi on Philippine Independence Day will not defeat terrorism in the Philippines. As a result of the government

offensive in Marawi, and the terrorist reaction, over 200 have died, including civilians, soldiers, and enemy combatants. The fight has caused 239,000 internally displaced people (IDPs) in 18 days. Most of these people are Muslims, who could spread across the entire island of Mindanao, the Philippines second-biggest island. For reference, Mindanao is about the same size as South Korea, or the U.S. state of Kentucky.

Some IDPs will head for Manila, and if refugees fleeing Syria and Iraq



Relatives of Abdillah Masid, carries his dead body to be buried in Barangay Saber in Marawi, on the southern Philippine island of Mindanao on June 9, 2017. Abdilla died after a stray bullet hit him in the neck during afternoon prayers inside the mosque. More than 200,000 people displaced after Islamist militants attacked a southern Philippine city are facing deadly health risks, relief groups said Friday after a fleeing mother told AFP her baby died because of a lack of medical care. Credit: NOEL CELIS/AFP/Getty Images

are any indication, a very small portion of them may sympathize with, or be, terrorists. Some IDPs are surely angry at the government for this fight. If they commit terrorist acts in Manila or elsewhere on Luzon Island, President Duterte could impose martial law over the entire country, which he seemed prone to do, even before the Marawi crisis unfolded.

Ostensibly to stop some Islamic terrorists, and the anti-liberal values they stand for, Duterte's tough approach has set in motion a chain of events that could lead to the further spread of Islamic extremism in the Philippines.

Supposedly to defend liberal rights, his actions have led him to suspend those rights in Mindanao, and to threaten to end those rights in all of the Philippines. Duterte's tough approach will not deter determined terrorists from coming to the Philippines. And it will likely create many such terrorists from previously unpoliticized Muslim locals whose increasing poverty and ruptured social networks will make them newly vulnerable to Islamic State recruitment.

By using military force on a large scale to capture a few terrorists, the government proves the impotence of its political influence in Marawi. Had the government more strenuously cultivated such influence, for example by congressional action on popular but lapsed peace agreements from 1996 and 2014, it likely would have achieved its objectives with a much lighter touch. That the government must use armored vehicles, aerial bombing, and U.S. surveillance flights to deal with the situation, shows that Islamist extremists in Mindanao had sufficient truck with the local Muslim community to remain hidden in Marawi. The government's original objective, Islamic State Southeast Asia emir Isnilon Hapilon, is still at large.



An OV-10 Bronco aircraft drops a bomb against an Islamist militant hideout in Marawi, on southern Philippine island of Mindanao on 9-June-2017. Credit: NOEL CELIS/AFP/Getty Images

The Maute Group, which is now part of Islamic State, offered Duterte a cease-fire last year. He rejected it in a way that showed disregard for civilian life in Marawi, saying, "They said that they will go down upon Marawi to burn the place. And I said, 'Go ahead, do it.'" Duterte's orders in the last three weeks have led to the destruction of much of the city. "It was not the spread of ISIS in Iraq and Syria that fueled ISIS cells in the Philippines, but the collapse of the peace process," Zachary M. Abuza of the National War College told the New York Times.

Given the colonialism of Spanish and American occupation, increasing population pressure since the 20th century, Duterte's threats of cannibalism against terrorists, his jokes about rape in the context of the siege in the past few weeks, and draconian military measures foisted on the population of Marawi today, it would not be surprising if a small percentage of Muslims and indigenous people on Mindanao are highly critical of the government in Manila. The island used to have a majority of Muslims, but that majority has eroded to about 20-40% after repeated periods of conflict and government-sponsored immigration. The military methods required to meet the latest Manila-imposed deadline to retake Marawi could be seen, by some discontents on Mindanao, as the violent part of a new form of colonialism emanating from Manila.



A bomb explodes after being dropped on an Islamist militants' hideout in Marawi, on the southern Philippine island of Mindanao on 9-June-2017. Credit: NOEL CELIS/AFP/Getty Images

That discontent feeds extremist ideas that can't be killed with bullets. The ideas that motivate the terrorists in Marawi likely live on in at least some of the 239,000 IDPs that the government offensive against terrorists has created. They live on among a small percentage of the millions of Muslims worldwide who are watching the battle unfold, and who may wonder why the terrorist leader Hapilon could not have been dealt with as a police matter so as not to uproot the entire Muslim community of Marawi. Some of the new IDPs in Mindanao, and those watching their plight abroad, may seek the implements of terror that they wrongly think will further their cause, not only in Mindanao, but Manila, London, or New York City.

The idea of Islamic extremism, or a caliphate, or the attraction to the misguided young of using violence to promote these ideas, will only be strengthened by military sieges of cities like Marawi, Raqqa, and Mosul. We can educate people to no longer believe in the paths of extremism, but to do so we must more often fight that extremism with educational and police, rather than military methods. Military methods will be needed on occasion, but should be used sparingly and only after careful deliberation regarding the effects on civilians, and the propaganda value that such methods will supply to the terrorists. It is not clear that such deliberation occurred prior to the siege of Marawi.

City sieges are themselves extremist forms of violence. The real safe haven for terrorism is not the unbesieged city, but the besieged one. It is a safe haven of the terrorist mind that exceeds the physical limits of the besieging armies. It is a safe haven in the ideas promulgated by terrorism, and amplified by government forms of extremism. Only by gaining entrance to the extremist mind, through education, rational debate, compromise, influence, and where necessary, police methods and the courts, will terrorism and other forms of violent extremism be suppressed at the source.



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Anders Corr has worked in military intelligence for five years, including topics on nuclear weapons, terrorism, cyber-security, border security, and counter-insurgency. He covered and visited Africa, Asia, Europe, Latin America, and the Middle East; and worked in Afghanistan for one and a half years. He holds a Ph.D. in Government from Harvard University, and a B.A. and M.A. in international relations from Yale University (*Summa cum laude*). His company, Corr Analytics, provides political risk analysis to commercial, non-profit, and media clients, and publishes the *Journal of Political Risk*. He is editing a series on the South China Sea conflict. The author is a Forbes contributor.



OPV: The Answer to Maritime Security in the GCC Region

by Defence IQ

The versatile offshore patrol vessel may prove to be a vital solution to the diverse maritime threats in the GCC (Gulf Cooperating Council) Region.

GULF ARAB STATES face significant challenges today, ranging from a slump of oil prices to of domestic terrorism. However, the critical need for maritime security is one that is given precedence because of a collective dependence on seaborne trade and transport. If security of these passageways cannot be ensured, the region will be cut off from the rest of the world.

The situation naturally requires a firm response from regional maritime forces – both in terms of strategic planning and in deploying appropriate equipment.

Forming the backbone of new platforms is the Offshore Patrol Vessel (OPV). Boasting speed, versatility and cost-efficiency, the OPV is slowly becoming a preferred alternative to the conventional corvette in many areas of the world that deal with similar maritime concerns.

As such, Gulf nations are considering an increase in OPV acquisition because a flexible platform may be the best way to address a flexible range of threats.

“New capabilities such as patrol vessels and onboard helicopters have already had an effect off the Somali Coast, where the scale of the attacks on commercial vessels has decreased,” explained Captain Mustafa Kanafani, an independent maritime expert and former representative of the League of Arab States to the UN’s International Maritime Organization (IMO).

KEY THREATS

The most prevalent threats facing maritime security within the Arabian Gulf can be categorized into three core issues.

First is political instability. In the event of conflict,

challenges rising incidents

adversaries – such as Iran’s Revolutionary Guards Corps – are capable of carrying out sabotage, deploying mines, interfering with shipping, and attacking offshore facilities or maritime traffic that belong to GCC nations.

The second danger is that terrorist groups (some of which are state-sponsored) may hijack ships or use small, fast boats to attack offshore facilities and ports. An unstable Yemen has seen a risk of Houthi-led insurgents developing a capability to close off the Bab el Mandeb, while the expansion and continued presence of ISIL in the Sinai has seen security tighten around the Suez canal. Somali piracy has subsided in recent years but analysts foresee an upswing of activity as multinational naval support withdraws from the region.

Following on from this challenge, there is the issue of security offshore oil and gas platforms, which are intrinsically vulnerable to terrorist attacks but require persistent protection and rapid response.

Overall, the scale and diversity of maritime threats represent a highly complex multi-dimensional challenge for the GCC that looks likely to grow with time.

OPV RESPONSE

In a recent survey undertaken by Defense IQ, an overwhelming majority of naval professionals confirmed that

investment into new OPVs, though undeniably a significant expense, is more cost effective and strategically sound than modernizing or adapting current vessels.

Over two thirds (2/3) of respondents also stated that OPVs can be sufficient enough to deal with their current range of combat threats – though countering high-end capabilities still requires the involvement of conventional warships. For those reasons, momentum is steadily building towards new OPV programs in the Arabian Gulf.

The UAE, for example, is currently preparing to receive the second of two newly built Ariala-class multipurpose OPVs from Abu Dhabi Ship Building, with the first vessel having been delivered in February 2017.

The 67-meter Ariala boasts Damen's sea-axe hull – combining a chined hull and deep V-bottom – that provides very low resistance and vertical acceleration, enabling smooth, high speeds and superior seakeeping. The vessels also provide a comprehensive weapon, sensor and command suite.

Saudi Arabia's Border Guard has also been undertaking a number of big development projects, including the acquisition of almost 50 fast boats from Germany and supporting electronic systems.

STRATEGIC COOPERATION

Procurement may be seen as a necessary expense when keeping naval and maritime force readiness at their peak but there is also a need to balance this with a constant study of the environment.

"The shipping industry today offers very high-tech fast patrol vessels," said Admiral Dr Ali Alshualbi (Ret), formerly of the Saudi

Arabian Coast Guard, "but the early warning of maritime threats are more important than platforms when it comes to merely responding to them. That requires decisions based on joint risk assessment."

This is not a case of staying abreast of emergent dangers. There must also be consistent consideration of the opportunities provided by the Partners and Allies.

If it's in the interest of regional nations to operate cooperatively once new technical systems have been purchased, it's clear that it is also in their interest to buy cooperatively as well," said Capt. Kanafani.

This collaborative-customer approach could ensure an essential interoperability and integration of regional systems across surveillance crafts, patrol land stations, and helicopters. While not necessarily complicated, it does require both national and regional policies to be formed.

"At present, cooperation in security across the GCC is limited, but it can be reached if our nations are willing to form a truly joint strategy," said Dr. Ali.

"Meanwhile, participation of civilian organizations is subject to the standards of IMO regulation and countries must observe that, but integrated management can offer solutions on some important issues," added Dr. Ali.

These topics shall be discussed among military and government decision-makers, OPV industry professionals, and security organizations in the GCC region at the coming OPV MIDDLE EAST 2017 CONFERENCE in October 2017, to be held in KUWAIT.



OPVs like the HNLMS Holland have been instrumental in recent seizures of narcotics.



The US and North Korea: Peace in the Asia-Pacific?

by Former President Fidel V Ramos

During the past two weeks, events on the international scene particularly within the Asia-Pacific arena, provided an uncanny (but welcome) reprise of FVR's younger days, which led this columnist to ask, *"Does history really repeat itself?"*

In answer, allow us to share with our readers some personal landmarks along life's journey.

Indeed, history does in this particular episode, but hopefully, will not repeat the destruction and suffering brought about by World War II. This past week, the US and North Korea through their heated rhetoric and provocative actions, have dominated the global limelight. The NoKors, on one hand, have deftly shifted the onus of their death-dealing nuclear threats to a likely and accessible military target – the US stronghold of Guam, which is America's westernmost frontier, at the Philippines' doorstep. Even the landmark ASEAN Foreign Ministers' Summit and Meeting of the Dialogue Partners (which includes the heavyweights: US, China, Japan, Russia, and E.U.) were overshadowed by the intensity of the US–NoKor exchange, in spite of the official statement that: *"Rising tensions on the Korean peninsula stemming from long-range missile tests by North Korea... 'seriously threaten peace, security and stability in the region and the world. In this regard, we strongly urge the DPRK to immediately comply fully with its obligations under all relevant UN Security Council resolutions,' it said, referring to North Korea by its official name."* (Channelnewsasia.com, 05-August-2017).

"HITCH-HIKING" ACROSS THE PACIFIC, 1946. FVR's interest in Guam dates back to July 1946 when he first passed through that war-devastated island on the first leg of a long journey from Manila to New York. He was on his way to the US Military Academy at West Point as the first Filipino cadet after WWII, having won that one coveted "pensionado" (scholarship) slot through competitive exams. That trip took 12 days, with no airlines yet in operation, but only US Air Force bucket-seat C-47s which had to island-hop due to their limited range. Literally, he "hitch-hiked on a space-available basis" on US military cargo planes.

In 1946, Guam was a community of Quonset huts and tent installations, like most US military camps in the Philippines after liberation. Over the years since then, FVR was able to visit or transit through Guam, the last being in June 2005 or 12 years ago as the Guest of Honor at the Philippine Independence Day celebration in Agaña (Hagåtña), the capital. Ironically, but fittingly, the US Government in Guam accorded special honor with a handsome monument to eminent Filipinos like

Apolinario Mabini and 57 other revolutionary heroes who were exiled thereto in 1901 – having refused to take the oath of allegiance to the US. Mabini and others were detained in Agaña's Asan seaside district where he wrote *La Revolucion Filipina*, his seminal work recording Filipino struggles towards independence and nationhood. Much like thousands of Filipino pioneers in Guam and the Marianas, Mabini and his compatriots endured hardships in a foreign land in the middle of the vast Pacific, far away from their loved ones.

UNSINKABLE GUAM: US FORWARD DEFENSE. It was an eye-opener for me to see at that time Guam's visible progress evidenced by new hotels and shopping centers. Amidst the anxieties of global recession, particularly the failure on the mainland of well-known American corporate giants, the people of Guam – even if they had not been spared the impacts of the US meltdown – continued to be cautiously optimistic. Of its then 170,000 population, 45% were of Filipino ancestry who constituted a swing-vote in territorial politics. Two significant factors were cited for their hopeful outlook: (1) ongoing build-up of Guam as the new forward platform for US military power in the Pacific, Indian Ocean, Arabian Gulf, and beyond, as far as Africa; and (2) anticipation of change and hope for a better future represented by the consolidation of US military forces in the Pacific.

Very quietly, with little fanfare, the US was building up Guam as the key to its "forward defense" strategy to project American military power in the Western Pacific and Indian Ocean. Considered an "unsinkable aircraft carrier," as the **Subic Naval Base** used to be known, Guam hosts the Apra Naval Base and Andersen Air Force Base – now major components of the **US Pacific Command (PACOM)**. Compared to the traditional homeports of the US in California or Hawaii, having a military base on Guam results in much shortened transit times to Asia and beyond. The distance from Guam to Manila is 1,700 miles, which is 2 days sailing for a carrier battle group. But from San Diego, Manila is 9 days away, while from Honolulu, it takes 7 days sailing. Analysts say, the 1,300 miles between North Korea and Guam is well within the range of its latest nuke-armed ICBM. At that time, naval visionary **Alfred Thayer Mahan** and his disciples (who included Theodore Roosevelt, then Assistant Navy Secretary and future US President) regarded the projection of American power into the Western Pacific and East Asia as crucial to US "forward defense" – and a powerful expression of America's "Manifest Destiny" as a global power. Guam's importance as

a strategic outpost was clear to American political leaders and military strategists since the 1890s.

AMERICA'S MANIFEST DESTINY. **Mahan** started from the assumption that America's Atlantic coast was well-protected by friendly Europeans (British and French), and that East Asia and the inner group of islands enclosing the China Sea – Japan, Taiwan, Philippines, Borneo, and Sumatra – were occupied by peoples alien to the Americans ethnically, culturally, and politically. And so, it was most likely that an invasion of the American mainland would emanate from the Pacific. **Mahan** and Roosevelt also argued that if America were to overcome the tyranny of distance – and gain the capability to deploy US power westward – vitally needed was a string of coaling stations between California and East Asia where its warships could re-supply. Hence, Washington annexed Midway, Pago-Pago, and other islands. Through Roosevelt's influence, the US acquired Guam and the Philippines in the Treaty of Paris, which ended the Spanish-American War of 1898. And, sure enough, **Mahan's** forecast of a deadly threat to America coming from the Pacific became reality just 4 decades afterwards. In December 1941, feeling beleaguered, Japan launched a pre-emptive strike against America destroying the Pacific Fleet at Pearl Harbor and occupying the Philippines and Guam, before US forces stopped Japan's drive, short of Midway.

FOCAL POINT OF US POWER.

As a result of these developments, Guam's overall value to American deployments towards Asia and the Middle East has tremendously increased. Guam, more than Honolulu, has become America's farther secure base from which to implement its strategy of "Forward Defense" outward from the Pacific. Not only has the island become the site of important bases of US Pacific Command. Washington has almost completed the process of making Guam the linchpin of its overall strategy to insure dominance in the Western Pacific and the Indian Ocean.

Already, the build-up in Guam over the next 10 years is being billed as the largest of the US military. Indeed, Guam is extremely critical to any American need to respond quickly to any sizeable natural disaster, civilian emergency or military crisis anywhere in Asia and all the way to East Africa – at a time when the US will continue to be regarded by the global community as the "guardian of freedom."

GEOPOLITICAL SCENARIO, 120 YEARS LATER. Now, more than a century later, **Mahan's** geopolitical blueprint still serves present-day Pentagon Doctrine. In East Asia, the US clings to air and land bases in South Korea. Moreover, it has existing mutual defense treaties with Japan, South Korea, Thailand, Australia, and Philippines, and maintains a foothold in Singapore. Tensions are still palpable in the Korean Peninsula (where Pyongyang now possesses an ICBM-nuclear capability) even if regional anxieties may have diminished with the warming up between Beijing and Taipei on opposite sides of the Taiwan Straits. In the Indian Ocean and in Southeast Asia's strategic sea lanes with

the oil regions of West Asia and the Middle East, the navies of India, China, Japan and Russia have been active in showing their flags. Today, it is eyeball-to-eyeball between US President Donald Trump and North Korea Leader Kim Jong-Un. With such a heightened state of tension, it won't be easy for either side of the entire Asia-Pacific for that matter to return back to a state of normalcy.

NORTH KOREA BLINKS (*Last of Two Parts*)

"North Korean leader Kim Jong-un said yesterday he would hold off on a planned missile strike near Guam, but warned the highly provocative move would go ahead in the event of further 'reckless actions' by Washington" (Agence France Presse, 16-August-2017)

Eight years ago, North Korea's test on 25 May 2009 of a nuclear weapon, five times more powerful than its first-ever nuke-bomb (exploded last October 2006), threw the UN, US, Japan, China and other countries -- not the least South Korea -- into a state of high alert and tension.



As reported by the Associated Press (27-May-2009): "THE UN SECURITY COUNCIL SAID IT WAS A 'CLEAR VIOLATION' OF THE 2006 RESOLUTION BANNING NORTH KOREA FROM CONDUCTING NUCLEAR DEVELOPMENT, AND THAT IT WOULD WORK IMMEDIATELY TO TAKE STRONGER MEASURES."

US TO DEFEND ASIA.

Accordingly, on 30-May-2009 in Singapore, US Defense Secretary **Robert Gates** warned at the Annual Summit of Defense/Security Ministers that a nuclear-armed North Korea would be unacceptable, while China called for calm, even as Japan and Russia expressed justifiable alarm.

Gates said NoKor's defiant acts could spark an arms race with serious consequences for Asia. "Our goal is complete and verifiable denuclearization of the Korean peninsula, and we will not accept North Korea as a nuclear state," **Gates** declared.

Reiterating the US commitment to defend Asian partners from attack, he added any transfer of nuclear weapons/materiel to other countries or "nonstate entities" (terrorists) would be a grave threat to the US and its allies.

Coming from that timely security summit in Singapore, Secretary Gates pushed for united action among China, Japan, Russia, South Korea, and the US to "punish" North Korea, and work out alternative measures in case cooperative efforts as called for by the UN fell short.

At the epicenter of the threats and tensions is Seoul, its surrounding industrial, financial, and transportation hubs – which were within the bombardment range of 12,000 hostile NoKor artillery pieces. On top of the intensified challenges from the north were two crisis situations converging upon beleaguered South Korea back in 2009, namely:

1. Economic recession that plunged the country, the world's 15th

largest exporter, into its deepest decline since the Korean War; and

2. Effective abrogation by North Korea of the July 1953 armistice on the Korean Peninsula which guaranteed a ceasefire between the Communist forces and UN allies.

AUGUST 2017 – NORTH KOREA BLINKS. *“Some analysts suggested NoKor Leader Kim’s above-cited comments reported by [Agence France Presse](#) this week opened a possible path to de-escalating a growing crisis fuelled by bellicose words between US President Donald Trump and the North Korean leadership.”*

Their recent exchanges were focused on a North Korean threat to fire a volley of four missiles over Japan toward the US territory of Guam (which hosts a number of strategic military bases). The North’s official KCNA news agency said Kim was briefed on the “plan for an enveloping fire at Guam” during his inspection on 14-August-2017 of the NoKor Strategic Force Command in charge of his missile units.

Although Kim said he would want to “watch a little more the foolish and stupid conduct of the Yankees” before executing any order to blast South Korea and Guam, experts claim that NoKor actually blinked and moved one step backward. The North Korean announcement prompted subdued celebrations in Guam, where officials described themselves as “almost ecstatic that Kim Jong-Un has backed off.”

The heightened tension had again sparked global alarm, with world leaders including Chinese President Xi Jinping urging calm on both sides. South Korean President Moon Jae-In had also weighed in, by saying that Seoul would avoid a second Korean War at all costs.

Tensions have been mounting since the north tested two intercontinental ballistic missiles last month, which appeared to bring much of the US within range.

DFA: THE MICIC INITIATIVE. Today, we live in an age of increased mobility with over 232 million international migrants worldwide. When conflicts or natural disasters erupt, migrants require special focused assistance. Launched in 2014, the **Migrants in Countries in Crisis (MICIC)** initiative co-chaired by the US and the Philippines developed the guidelines to protect migrants in countries experiencing conflict or natural disasters.

Thus, the **Department of Foreign Affairs (DFA)** and **Department of Labor and Employment (DOLE)** of the Philippine Government jointly adopted a crisis alert system, which today serves as the basis for emergency repatriation and deployment restrictions. On consultation with the **Department of Health (DOH)**, DFA may impose crisis alert levels in times of pandemics and other medical hazards. In accordance with the established protocols on international relations, these Crisis Alert Levels, with their respective indicators and deployment status, are:

ALERT LEVEL 1 (Precautionary Phase): Issued when there are valid signs of internal disturbance, instability, and/or external threat to the host country. Filipinos are alerted to take necessary precautions.

ALERT LEVEL 2 (Restriction Phase): Issued if there are threats to the life, security and property of Filipinos arising from internal disturbance, instability, and/external threat. Filipinos are instructed to restrict non-essential movements, avoid public places, and prepare for evacuation. DOLE only allows returning Overseas Filipino Workers (OFWs), with existing employment contracts, or a group of OFWs under special circumstances, to go back to their host country.

ALERT LEVEL 3 (Voluntary Repatriation): Issued when violent disturbances or external aggression occur in a limited area. Overseas Filipinos are enjoined to return to the Philippines upon employers’, or if not possible, government’s expense. DOLE shall impose absolute deployment ban.

ALERT LEVEL 4 (Mandatory Repatriation): Issued when there is a large-scale internal conflict or full-blown external attack. The Philippine Government shall undertake mandatory evacuation procedures.

The Philippine Consulate in Agaña (Hagåtña) headed by ConGen **Marciano de Borja** had placed its personnel on an “Alert Level 1” (precautionally phase), as if for a storm warning in the Pacific.

DEFENSE READINESS CONDITIONS. On the other hand, the military in Guam and also the territorial civilian government could be subject to various readiness condition (DEFCON) levels, namely:

DEFCON 1 – COCKED PISTOL; Nuclear war imminent; maximum readiness.

DEFCON 2 – FAST PACE; Next step to nuclear war; Armed Forces ready to deploy and engage in less than 6 hours.

DEFCON 3 – ROUND HOUSE; Increase in force readiness above that required for normal readiness; Air Force ready to mobilize in 15 minutes.

DEFCON 4 – DOUBLE TAKE; Increased intelligence watch and strengthened security measures; above normal readiness.

DEFCON 5 – FADE OUT; Lowest state of readiness; Normal readiness.

LOCKED AND LOADED: PRESIDENT TRUMP. Last 13-August-2017, Reuters reported: “US President Donald Trump, vacationing at his Bedminster, New Jersey Golf Resort, again referred to North Korea’s leader in his latest bellicose remarks. ‘Military solutions are now fully in place, locked and loaded, should North Korea act unwisely.’ ‘Hopefully Kim Jong-Un will find another path!’ Trump wrote on Twitter.

The term ‘locked and loaded,’ popularized in the 1949 war film ‘Sands of Iwo Jima’ starring American actor John Wayne, refers to preparations for shooting a gun. In basic military parlance, “locked and loaded,” means one’s machine gun, bazooka, rifle or pistol is “ready to fire.”

In remarks to reporters after meeting with US Secretary of State **Rex Tillerson** and US Ambassador to the United Nations **Nikky Haley**, Trump said the situation with North Korea was ‘very dangerous’ and it will not continue.

The Pentagon said the US and South Korea would proceed as planned with a joint military exercise in 10 days, an action sure to further antagonize North Korea. China, Russia and Germany for their part, voiced dismay at the war of words between Pyongyang and Washington. Trump, who had pressed China to help rein in its ally North Korea, spoke with Chinese President Xi Jinping by phone on 12-August-2017, with the two leaders reiterating their commitment to denuclearize the Korean Peninsula, and agreed North Korea must stop its provocative behavior (White House Statement). Trump and Xi also agreed that the recent adoption of a United Nations Security Council Resolution imposing additional sanctions on North Korea was an important step towards achieving peace and stability on the peninsula.

China’s state media said Xi told Trump the North Korean Nuclear issue required a peaceful resolution through talks and urged the ‘relevant side’ to exercise restraint, avoiding words or actions that raise tension.

North Korea indeed blinked, but “saved face” by again warning of future blast



Please send any comments to fvr@rpdev.org. Copies of articles are available at www.rpdev.org.

Crowdsourced Bathymetry: Supporting Progress or Threatening Security

by LCDR Carter S. Luma-Ang

For the past few decades, the world experienced a big shift on how information is gathered and disseminated. The internet became a connection which is virtually unlimited. Today, it is norm to have free information – something which is uncommon during the days prior to the conception of the internet. Almost every information is already posted in the world wide web and can be downloaded for free. The **National Mapping and Resource Information Authority (NAMRIA)**, which is the central mapping agency of the Government of the Philippines (EO 192), has also followed the step towards free information by designing and maintaining the Philippine Geoportal. Users can browse or search geospatial data and download them through the Geoportal. They can also share their data by uploading it through the same portal. Previous to the Philippine Geoportal, hydrographic data and paper charts are only given for a fee even for other government agencies. Nowadays, almost every sector is providing free information.

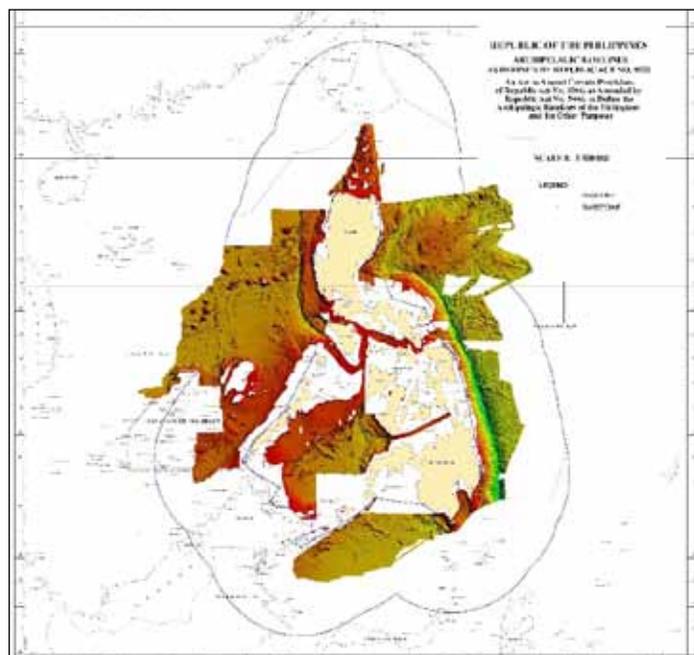


Figure 1. Surveyed area using multibeam system. Note: The colored areas were surveyed using multibeam systems. The image was adapted from the Hydrographic Data Management Section of the Hydrography Branch, NAMRIA.

Aside from being the central mapping agency, **NAMRIA** is also the National Hydrographic Office of the country. It is the agency representing the Government of the Philippines in the **International Hydrographic Organization (IHO)** which is based in Monaco and its regional group **East Asia Hydrographic Commission (EAHC)**. The IHO is an intergovernmental consultative and technical organization that was established in 1921 to support safety of navigation and the protection of the marine environment (www.iho.int). The official representative of each Member Government/State within the IHO or its

regional group is normally the National Hydrographer or the Head of the National Hydrographic Office.

Currently, **NAMRIA** is the only government agency of the Philippines conducting hydrographic survey to produce nautical charts. It is responsible for the survey of all Philippine waters such as the Archipelagic Waters, Territorial Sea, and the Exclusive Economic Zone (EEZ). Hydrographic survey includes among others bathymetric survey, coastline topographic survey and physical oceanographic observations. Bathymetry as defined by the IHO Hydrographic Dictionary is “the determination of ocean depths” (p. 23). The same dictionary defines hydrography as “that branch of applied science which deals with the measurement and description of the physical features of the navigable portion of the Earth’s surface and adjoining coastal areas, with special reference to their use for the purpose of navigation” (p. 108). With the limited resources of the government, not all of the Philippine waters have been surveyed accurately. Only 25% of the Philippine waters below 200 meters have been adequately surveyed (IHO C-55, 2016, p. 355). The remaining 75% either need resurvey or have never been surveyed. Areas deeper than 200 meters are also similarly not surveyed sufficiently. Only 30% of waters more than 200 meters deep have been surveyed (IHO C-55, 2016, p. 355).



Figure 2. Multibeam Bathymetric Surveys

Note. Bathymetric surveys are focused on sea lanes (colored green). Beyond those areas, they are virtually unsurveyed accurately. The image was adapted from <https://maps.ngdc.noaa.gov/viewers/bathymetry/>.

The situation of the Philippines is not different from the global condition. In the 2017 Input to Part I of the Report of the UN Secretary General on Oceans and Law of the Sea, IHO stated that “less than 15% of the depths of ocean waters (>200 metres) have been measured directly and about 50% of the coastal waters (<200 metres) remain unsurveyed” (p. 1). Thus, the statement “mankind has higher resolution maps of the Moon and Mars than for most of the seas and oceans” (Input to the Report of the UN Secretary General on Oceans and Law of the Sea, 2013, p. 1).

Will there be problems if the majority of Philippine waters is not surveyed accurately?

Maritime transport is critical in world trade. It is very important for an archipelagic State like the Philippines whose goods are

transported among its islands, almost all through maritime transport. The **International Maritime Organization (IMO)** International Shipping Facts and Figures – Information Resources on Trade, Safety, Security, Environment (2012) stated, “it is generally accepted that more than 90% of global trade is carried by sea” (p.7).

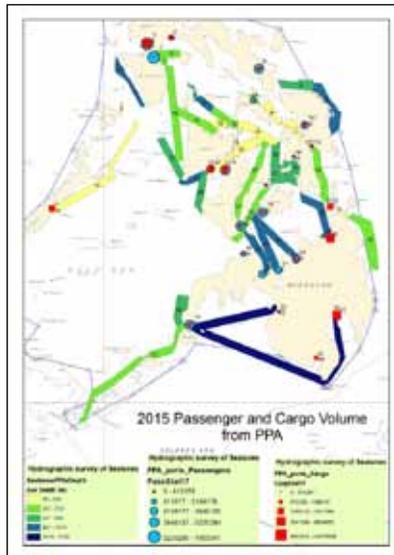


Figure 3. Maritime Routes for Passengers and Cargo. Note. The colored areas represent the maritime lanes used for transport of passengers and cargoes among the islands of the Philippines. The image was adapted from the Hydrographic Data Management Section of the Hydrography Branch using 2015 PPA Data, NAMRIA.

There are almost two million seafarers and over a hundred thousand of ships travelling around the globe. “As at December 2010, today’s world fleet of propelled sea-going merchant ships of no less than 100 GT comprises 104,304 ships of 1,043,081,509 million GT with an average age of 22 years; they are registered in over 150 nations and manned by 1.5 million seafarers of virtually every nationality” (International Shipping Facts and Figures - Information Resources on Trade, Safety, Security, Environment, 2012, p.9). The figure does not even include small vessels used for recreation or small-scale activities.

With the increasing number of seaborne trade, there is also an increasing need for a more accurate seafloor mapping. Accurate mapping is a prerequisite to producing a nautical chart. Despite the increase in maritime activities, many hydrographic offices have claimed that national hydrographic survey activities are being reduced because of conflicting priorities of their government. In order to supplement the survey conducted by national hydrographic offices, the **IHO** has suggested that crowdsourced bathymetry be encouraged and promoted by all stakeholders in its Input to the Secretary General to the UN (2017, p. 4). **Crowdsourced bathymetry (CSB)**, as defined by the IHO website is a collection of depth measurements from vessels, using standard navigation instruments, while engaged in routine maritime operations.

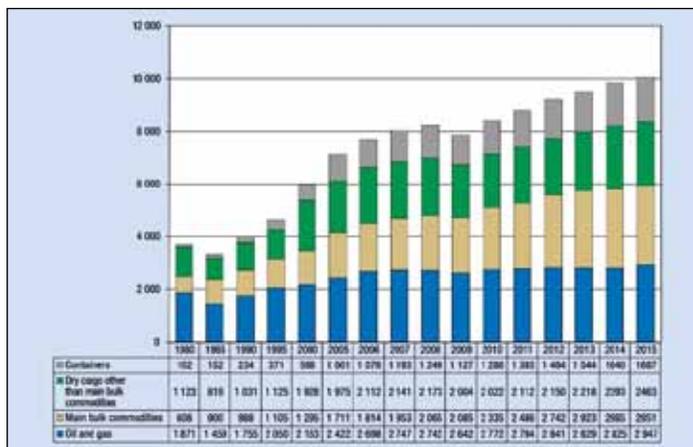


Figure 4. International Seaborne Trade. Note. The left column is expressed in millions of tons. The seaborne trade in 1980 was less than 4 Billion Tons. It grew to more than 10 Billion Tons in 2015. The image was adapted from Review of Maritime Transport, 2016, p. 7.

As a member of the **IHO** and **EAHC**, NAMRIA is mandated to abide by **IHO** and **EAHC** rules and regulations. With the recommendation of IHO for all member states to adopt **CSB**, Philippines might have no choice but allow it inside its waters. The concept of **CSB** allows virtually anyone to have an echo-sounder on his vessel and gather bathymetric data. Permission of the Coastal State may not be sought. In crowdsourcing, anyone can survey and anyone is also allowed to view the data. In other words, bathymetric data will be free and available to anyone.



Figure 5. Crowdsourced Bathymetry (CSB) Diagram. Note: Data are uploaded at the mariner’s convenience and can be viewed in real-time by anyone with a viewer. Adapted from PowerPoint Presentation Overcoming the Lack of Hydrographic Data (n.d.).

Implication

Free bathymetric data through crowdsourcing is definitely a good source of supplemental data for the safety of navigation. It is also beneficial to the scientific community to further explore and exploit the sea. However, the unique situation of the Philippines makes it uncertain whether such bathymetric crowdsourcing brings more benefit than harm. If bathymetric crowdsourcing is allowed, there is no reason for the Coastal State to stop other states to collect bathymetric data using their own equipment. This freedom may bring forth problems specially when the data is collected by unfriendly forces. It cannot be denied that the Philippines and its waters is a strategic location for both aerial and maritime warfare. This may be the reason military why hegemons like US and China are conducting hydrographic surveys within and around the Philippine waters.

In early 2017, news broke out about Chinese vessels conducting hydrographic survey in Philippine waters. Steven Stashwick, in his article in *The Diplomat* (2017) pointed out, “detailed hydrographic information of the area would be critical to helping China’s submarines evade U.S. efforts to find them.” Several TV reports in 2017 have shown that Chinese military vessels have been spotted as far as East of Surigao conducting what appears to be hydrographic survey. Earlier in 2016, China’s Navy seized an American underwater drone near the coast of the Philippines. Unwillingly, the Philippines seems to be examined and planned by the hegemons as a venue for naval warfare.

The Philippines must study whether it will benefit by allowing **CSB** within its waters. It may have a hard time determining whether hydrographic survey activities conducted by foreign vessels are for safety of navigation which is allowed under the UNCLOS or for other purposes. It is easy for vessels of foreign origin to conduct bathymetric survey for their military use but pretend to be as **CSB**. Despite the limited capability of the

Philippine government, it may be wise that **CSB** should still be regulated considering the position of the Philippine Islands as a good location for both defensive and offensive attacks in times of war in the Pacific area.

It will not take long before **CSB** goes into mainstream. The IHO has already composed a Crowdsourced Bathymetry Working Group (CSBWG), comprising representatives from national Hydrographic Offices, academia, and industry. Last June 2015, the Terms of Reference for the CSBWG was approved by the IHO Inter-Regional Coordinating Committee in Mexico City. Also, **CSB** must be defined accurately to eliminate issues with the provisions of UNCLOS. Article 19 of UNCLOS that "Passage of a foreign ship shall be considered to be prejudicial to the peace, good order or security of the coastal State if in the territorial sea it engages in any of the following activities: ... (j) the carrying out of research or survey activities" (1982). Clearly, the provision covers survey activities such as bathymetric activities.

This is the right time for our lawmakers to pass the **Maritime Zones Bill** which is long overdue. The Bill may not directly answer whether **CSB** be allowed or not but it will limit the movement of foreign vessels within the Philippine waters. Without definite sea lanes, navigators may claim that their route are generally accepted and can conduct hydrographic survey for military purposes in the guise of **crowdsourced bathymetry**.

Crowdsourced bathymetry was conceptualized to support hydrographic activities with the ultimate goal of protecting life and property during navigation at sea. Free information improves efficiency and cost effectiveness of national hydrographic offices. However, we must also ensure that free information such as **CSB** should not be prejudicial to the interest of the Coastal State.



About the Author. Lieutenant Commander Carter Luma-ang is a Hydrographic Survey Officer of NAMRIA. He graduated from both the Rhodes Academy on Ocean Law and Policy (2012) and Yeosu Academy on Ocean Law and Policy (2014). He earned his Category B Hydrographic Survey from the Japan Hydrographic and Oceanographic Department (2006). He also earned his Master in National Security Administration from the National Defense College of the Philippines (2016).

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Meet PCG's New Officer-in-Charge

Commodore Joel Sarsiban Garcia PCG, PhD, HD, AI-Haj is a graduate of the Philippine Merchant Marine Academy (PMMA) and took up Bachelor of Science in Marine Transportation, major in Navigational Science. He is currently taking up Bachelor of Laws, Facultad De Derecho Civil, Royal & Pontifical at the University of Santo Tomas. He is a Doctor of Philosophy in Public Administration and a Doctor of Humanities. He earned his Masters of Science Degree in Maritime Safety Administration (Msc. MSA) from the World Maritime University, Malmo, Sweden; Master in Shipping and Business Management (MSBM), PMMA and is a licensed Master Mariner. Presently, he is the **Officer-In-Charge of the Philippine Coast Guard**.



In addition to his current position, he is the National Director of the National Coast Watch Center (NCWC) and Commander of the Coast Guard Education and Training Command (CGETC). He likewise commanded major units of the PCG. Among these are: Coast Guard Weapons, Communications, Electronics and Information System Command (CGWCEIS); Coast Guard District National Capital Region – Central Luzon (CGDNCR-CL); Marine Environmental Protection Command (MEPCOM); Coast Guard District Bicol and Port State Control Office, Coast Guard Station Manila. He was also entrusted with positions in the PCG such as Assistant Chief of Staff for Personnel (CG-1), for vessel safety (CG-8), Marine Environmental Protection (CG-9); Flag Secretary for HPCG, Public Information Officer, student officer to Sweden, Training Officer, Course Director, and Admin/Logistics Officer for the Philippine Navy HQ Ready Force. He commanded three Coast Guard Search and Rescue Vessels which are the primary ship for operations of the Coast Guard namely: BRP Pampanga (SARV 003) where he earned the most coveted Command-At-Sea-Badge, BRP Kalinga (AE-89) and BRP Palawan (PG-64).

Commo Garcia had advance coast guard training on courses such as the Marine Environmental Protection in the Korean Research and Development Institute (KORDI) in Ansan, South Korea and Instructor Course on International Maritime Law Enforcement at the United States Coast Guard (USCG). He attended seminars abroad concerning safety of life at sea and protection of the marine environment in Finland, Sweden, Denmark, Singapore, London, Germany, Canada, Indonesia, Japan, Hongkong, and Norway.

Fully decorated, Commo Garcia has earned various awards and decorations from the PCG and Armed Forces of the Philippines (AFP) in recognition of his outstanding performances in the Coast Guard and Naval service. ⚓



First Remotely Operated Commercial Vessel Demonstrated in Copenhagen

by Marine Satellite Communications, The Digital Ship (20-June-2017)

Rolls-Royce and towage operator **Svitzer** have successfully demonstrated what they claim to be the world's first remotely operated commercial vessel in Copenhagen Harbour, Denmark.

One of **Svitzer**'s tugs, the 28m **Svitzer Hermod**, safely conducted a number of remotely controlled maneuvers, operated from the quay side in Copenhagen Harbour by the vessel's captain, stationed at the ship's remote base at Svitzer headquarters. The captain used the remote-control system to berth the vessel alongside the quay, before continuing on to complete undocking maneuvers, including a 360-degree turn, and piloted the vessel to the Svitzer headquarters before docking again.

The companies say they have also signed an agreement to continue their cooperation to test further remote and autonomous operations for vessels. The primary systems involved will be autonomous navigation, situational awareness, remote control centre and communication.

"Disruption through innovation is happening in almost every industry and sector and technology will also be transforming the maritime industry. As the largest global towage company, Svitzer is actively engaging in projects that allow us to explore innovative ways to improve the safety and efficiency of towage operations to benefit our customers and our crews," said **Kristian Brauner**, Chief Technology Officer, **Svitzer**.

"With its direct impact on our customer performance, operational cost and environmental footprint, vessel efficiency remains a main driver now and going forward. We are proud to be partnering with Rolls-Royce in this high-level research and development of systems for remote operation."

Brauner added.

The **Svitzer Hermod**, a **Robert Allan** ship design, was built in Turkey at the Sanmar Yard in 2016. It is equipped with a Rolls-Royce dynamic positioning system, which is the key link to the remote-controlled system. The vessel also features a range of sensors, which combine different data inputs using specialized software to give the captain an enhanced awareness of the vessel and its surroundings. The data is transmitted to a Remote Operating Centre (ROC) from where the captain controls the vessel.

Instead of copying existing wheelhouse designs, the **ROC** was constructed based on feedback from experienced captains, following their suggestions on where to place different system components for optimum accessibility and performance.

"It was an honor to be present at what I believe was a world's first and a genuinely historic moment for the maritime industry," said **Mikael Makinen**, President, **Rolls-Royce – marine**. *"We've been saying for a couple of years that a remotely operated commercial vessel would be in operation by the end of the decade. Thanks to a unique combination of Svitzer's operational knowledge and our technological expertise, we have made that vision a reality much sooner than we anticipated,"* Makinen added.

Throughout the demonstration the vessel also had a fully qualified captain and crew on board to ensure safe operation in the event of a system failure. ⚓



BISON C-Lift P32 Creates New Container Logistics Possibilities

BISON, the container tech company, this week launched the **C-Lift P32**, a portable container lift system that equips shipping, logistics and military operators to lift containers in any location.

Recognizing that conventional container handling equipment is typically big, heavy and expensive, **BISON** has introduced a compact, portable and more economic alternative aimed at extending the benefits of intermodal logistics to new frontiers. The P32 is easily transported between sites, sets up in minutes and allows containers of all sizes and weights up to 32 tons (70,000 lb) to be lifted on and off trailers safely and efficiently.

“A big challenge if you want to lift containers outside of a freight hub is finding suitable equipment to do the job,” says **Greg Fahey**, **BISON**’s CEO. “So often, the size or weight of the container, space restrictions on site, or simply a lack of suitable equipment in the area, mean that cargo movements are compromised or costs are unreasonably high.”

BISON developed the P32 to solve this problem and sees the P32 as opening up a range of new possibilities for container freight and logistics.

Importers and exporters can lift and ground containers more economically in factories or warehouses. This can allow container

stuffing or unloading in better locations. Or ease the pressure of live loading and chassis detention costs.

Military, aid and project logistics operators can use the P32 to get containers in and out of remote locations more easily, avoiding reliance on local infrastructure. **BISON** is also fielding interest from construction and removals firms, wanting a mobile solution for delivering and collecting full containers at construction and urban sites.

A key part of the P32 design is **BISON**’s patent pending lift and lock mechanism, which reduces the size of the hydraulic system considerably, but still enables heavy containers to be elevated 65 inches off the ground. This in turn reduces the size, weight and cost of the system.

“The novelty of the P32 is its unique combination of portability, lift capacity and price,” says Greg Fahey. “In these respects, it’s a world first for container handling equipment.”

Established in New Zealand in 2014, **BISON** Group Limited is a fast-growing tech company offering a unique range of container lifting and weighing solutions to the shipping and logistics industries. **BISON**’s revolutionary container scales, have quickly propelled the company onto the world stage. **BISON**’s hardware is now in use in over 25 countries. Notable customers include **NASA**, the **US Airforce**, **Virgin Galactic**, and **Emirates Team New Zealand**. ⚓

Philippine Register of Shipping Safety Drive



The **Philippine Register of Shipping (PRS)**, the country's first and largest classification society, has embarked on a rebranding while expanding its services to support its aim of safer shipping and increase its client base in the growing domestic fleet.

Engr. William Hernandez, president of Philippine Register of Shipping (PRS), says the service expansion is to meet the demand from the changing maritime landscape in the Philippines and is a response to the call for safer ships in the country. Engr. Hernandez has noticed the growing vessel maintenance demand from the increasing vessel tonnage in the domestic shipping market.



PRS President Engr. William B. Hernandez

The original PRS, which only provided classification services, has now splintered into two separate companies, namely the **PRS Technical Services Inc.** and **PRS Quality Assurance Inc.** The PRS Tech Services provides third party inspection for shipowners, shipmanagers, cargo and hull underwriters and P&I Clubs. The quality Assurance subsidiary renders third party quality assurance certification for ship managers, shipowners and suppliers services and equipment.

According to Engr. Hernandez, the nation's **Maritime Industry Authority (MARINA)** has enforced the rules on partition and damage stability requirements for Philippine-registered domestic ships and the imposition outlines the requirements of an **IMO SOLAS** provision that are based on the probabilistic concept, using the probability of survival as measured of ships safety in a damage condition. The implementation of its rule required powerful analytic stability calculations from shipping companies.

"There's a strong push at present to strengthen the maritime safety regime in the Philippines, especially with the reissuance of MARINA circular that benchmarks best practices with other maritime nations like Japan and China, which may lead to a Philippine government single class," says Engr. Hernandez. The Southeast Asian nation has one of the poorest maritime safety records in the world.

Engr. Hernandez reckons one of the major challenge PRS is facing is the need to reinforce with shipowners the concern of proper maintenance of their vessels, where safety of the ship, cargo, crew and passengers are of paramount importance.

Another challenge, according to Hernandez, is the cut-throat competition that the other domestic classification societies are employing.

"Table-top survey is being carried out and certificates issued at bargain prices. This means class certificates are being issued without any inspection carried out to determine the actual condition of the vessel. Vessels in a very dismal condition and considered no longer fit for their intended purpose are being given full term certificates without any recommendation or any repairs being done, which is an unacceptable business practice that the other domestic classification societies are employing," Engr. Hernandez says.

"For the short and medium term goal, PRS wants to achieve its goal to be the single classification society in the Philippines whose standards are at par with those of IACS. Through this, we will also achieve the preferred class status that will ensure the implementation of the safety of the Philippines fleet," Engr. Hernandez concludes. ⚓



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Transas Survival Craft Simulator Eliminates Drill Risks

Transas has introduced a new Survival Craft Simulator (SCS) to prepare crew for the multitude of possible scenarios that can occur during lifeboat drills, aiming to address one of the most notorious sources of accidents in shipping without exposing personnel to physical danger.

Effective survival craft training is essential to prepare crew for a disaster at sea but practical lifeboat drills have a troubling track record for causing fatalities. By shifting some elements of training to a simulated environment, the risks are minimized and the crew can focus on the procedures that will increase safety when operating the real lifeboat equipment in an emergency.

IMO expert investigations have focused mainly on the complex quick-release hooks that typically suspend enclosed lifeboats from their davits, which are designed to hold tons of mass securely for years at a time and then come free quickly when the lifeboat is lowered. The Maritime Safety Committee expects new guidelines to enter into force on 1 January 2020, addressing longstanding issues including the need for uniform and documented standards for hook servicing.

However, the failure to follow correct procedures and the lack of proper training have also been cited as contributory factors in incidents. The Transas Survival Craft Simulator allows such training to be conducted either at a training centre or on-board in a benign environment, allowing trainees to learn essential procedures, such as the preparation of survival craft, its launch and boarding, but without the risk.

At the heart of the new simulator is a highly detailed virtual model of a totally enclosed davit-launched, self-righting lifeboat. It is supported by a functional model to simulate the hook-release gear, wire lashings and gripes, and for boat securing onto a davit. Instruction on using the release handle, a safety pin, and hydrostatic interlock level can be delivered either virtually or with a physical device connected to the simulator.

“No one doubts the importance of effective survival craft training,” said Frank Coles, Transas Chief Executive Officer. “Guidance issued by insurers reaffirms that crew should be capable of operating lifeboat systems and understanding the mechanics and procedures, but training itself cannot be the source of risk. The majority of the maritime industry stakeholders still have some way to go to fully embrace the use of simulation to enhance and improve competency in ship-board operations. This tool is further evidence of that competence can be raised safely and efficiently without endangering lives. The time for platitudes is over; resources and recurrent training save lives and enhance safety.”

Survival Craft Simulator was created to function under Transas Academy, the seafarer competency development component of THESIS. In the future, this oversight will enable data collected during exercises to feed into and inform other aspects of vessel and fleet operation. ⚓

5 Eco-Friendly Ways to Reduce Your Ship's Fuel Consumption and Emissions

by Jess Penny, Martek Marine

Just 16 of the world's largest ships are still producing as much sulphur pollution as all the world's cars! So, what's the key to 'green shipping'? How do we reduce fuel consumption & emissions? Here we share the top 5 technologies that the largest shipping companies across the globe are using to dramatically reduce the environmental impact of their operations, and in so doing, also boost profits!

Air lubrication: reducing friction to create energy-saving effects



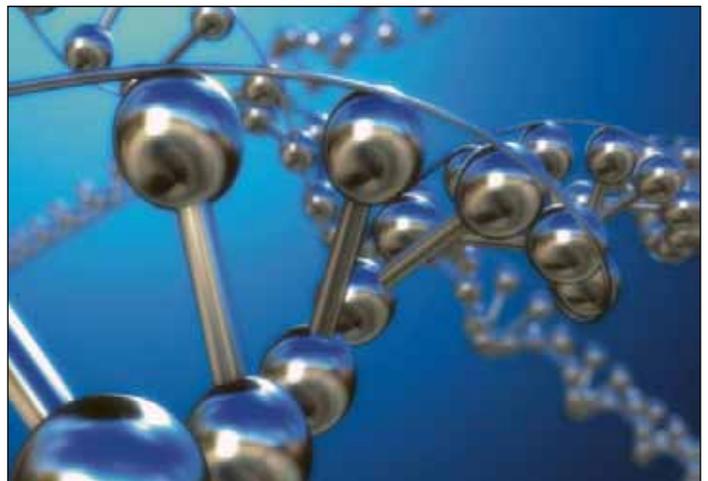
Air lubrication systems use bubble technology to decrease resistance between the hull of the ship and the water. Bubble technology works by supplying air to the ship's underside in order to create a layer of tiny bubbles. With the optimum ship hull design, the air lubrication system is expected to achieve up to 15% reduction of CO₂ emissions, along with large fuel savings too. Vessels that are wide-bodied, slow-moving and have a small draft, such as heavy lift and module carriers, typically benefit the most from these systems.

A great example of air lubrication systems is a project run by the Finnish naval architect and engineering company, **Foreship**. Foreship oversaw the successful design and installation of its own air lubrication system (ALS) in 2015 on its ships built by Meyer Werft. The system's installation meant that propulsive power could be reduced, and that when the ships were operating at cruising speeds, a net fuel saving equivalent to 7-8% was achieved. Foreship says a final evaluation of performance is still ongoing, but the company believes an overall net fuel saving within a defined speed range and set of conditions can be confirmed at roughly 5%!

Nanotechnology: the multi-functional fuel treatment that's revolutionizing fuel efficiency

Nanotechnology fuel treatment uses a multi-functional fuel additive, which contains a molecular catalyst that ensures maximum fuel efficiency. The additive can also reduce engine wear, meaning the time

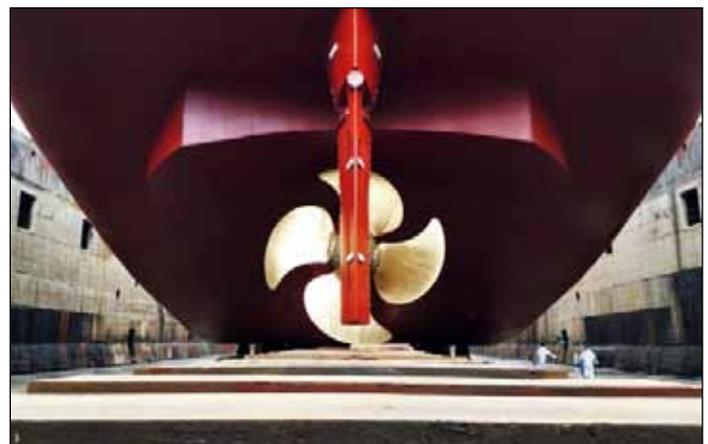
between maintenance can be extended: particles work on existing carbon build-up within the engine to effectively blast away residue.



NanOx™ from Martek Marine is one of the most exciting nanotechnology fuel treatments to hit the market and it's being used by some of the largest shipping companies across the globe, including; Yang Ming, NSNC Kazmortransflot & PDZ Malaysia.

Nano-clusters to improve viscosity by more than 30% for an improved fuel/air mix: boosting engine power by more than 10%. Enhanced fuel atomization in the tank & injectors offers over 7% fuel savings and micro-explosions in the cylinders enable more complete combustion, lowering emissions by 25% and enabling savings on CO₂ tax too. Nano-catalysts remove carbon deposits and prevent future build-up, diminishing engine wear to reduce maintenance and spares costs.

Reducing a ship's fuel consumption using propeller technology



One of the most efficient ways to optimize a vessel is through the use of energy saving propellers in combination with a rudder bulb. Whether an engine is driven by liquid or gaseous fuels, this increases the efficiency of a vessel by up to 10%. In a similar vein, Hyundai Heavy Industries (HHI) has used an energy-saving device called Hi-FIN joined to the hub of the ship propeller, which generates swirls in the water that offset the water movement generated by the propeller, therefore improving propulsion efficiency. HHI has secured orders of Hi-FIN for over 30 ships to date, and the company expects more orders now that it can install the device on broader types of ships from LNG carriers, to VLCC, LPG carriers and containerships.

Introducing a bulbous bow to reduce wave-making resistance



Maersk Lines have recently reported fuel savings of over 5 percent by making some strategic modifications to their ships' bows, to offer improved performance. The new bulbous bow design reduces wave-making resistance by producing its own wave system that is out of phase with the bow wave from the hull, creating a reduction in resistance made by the waves.

Volume, vertical extension of the centre of volume, longitudinal extension and shape, are all elements considered in the design. The characteristics of the bow must be carefully balanced with the shape of the entrance and the transition towards the forward shoulder and bilge.

It's not all plain sailing! Bulbs are most effective at a specific speed-length ratio and draft. Changes in speed and draft significantly change the wave created, meaning that reductions in draft or speed can actually lead to increases in resistance and this being the case, compromises in the bulb design are often needed to provide good performance over the expected range of operating drafts and speeds.

DC Grid power distribution: matching power to the vessel's needs

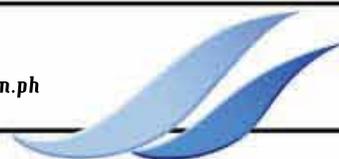
Reducing fuel consumption, noise and a ships environmental impact, are all possible thanks to an Onboard DC Grid system. By ensuring the engine runs at varied speeds for ultimate fuel efficiency at each load level, fuel consumption can be dramatically reduced. In fact, recent tests using DC Grid power distribution on Myklebusthaug Offshore's platform supply vessel Dina Star, showed reduced fuel consumption, in addition to 30 percent engine room noise reduction, leading to improved working conditions aboard the vessel.

Martek Marine provides THE disruptive innovators behind some of the most talked about maritime technology -including NanOx™- that drastically improves ships' performance. ⚓



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Seahorses in the Philippines

by Vicky Viray Mendoza

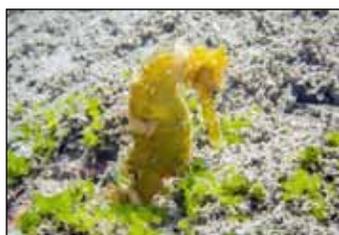
There are 54 species worldwide of marine fishes called the **Seahorse** belonging to the genus *Hippocampus*, of which 14 species are known to live in Southeast Asian waters, and 10 species are known to inhabit Philippine waters. "Hippocampus" comes from two ancient Greek words, *hippos* meaning "horse," and *kampus* meaning "sea monster." The **Seahorse** has a head and neck with an equine appearance, but the **Seahorse** has a segmented bony armor, an upright posture, and a curled tail. According to **Project Seahorse**, the 10 known **Seahorse** species in the Philippines are: *H. barbouri* (Barbour's seahorse), *H. bargibanti* (Bargibant's pygmy seahorse), *H. comes* (Tiger-tail seahorse), *H. denise* (Denise's pygmy seahorse), *H. histrix* (Thorny seahorse), *H. kelloggi* (Kellogg's seahorse), *H. kuda* (Yellow seahorse), *H. pontohi* (Pontoh's pygmy seahorse), *H. spinosissimus* (Hedgehog seahorse), and *H. trimaculatus* (Three-spot seahorse).

Habitat. The **Seahorse** is mainly found in shallow tropical and temperate waters throughout the world, and lives in sheltered areas such as seagrass beds, estuaries, coral reefs, or mangroves. The **Seahorse**, in most likelihood, would be found resting with their prehensile tail. This means its tail seizes, grasps, or winds around a stationary plant or corral.

Description. In the Philippines, **Seahorse** heights range from 1.3 cm of the tiny *H. severnsi*, to 28 cm of the large *H. kelloggi* (Lourie & Kuitert 2008). The **Seahorse** has a flexible bent neck, long snouted head, crown-like spine or horn on its head called a Coronet, followed by a trunk and tail. Although the **Seahorse** is a bony fish, complete with gills, fins, and an exoskeleton, it does not have scales. It has a thin skin stretched over a series of bony plates, which are arranged in rings throughout its body. Its long snout is used to suck up food, and its eyes can move independently of each other. The **Seahorse** is adroit at camouflage and has the ability to change colors, and grow or reabsorb spiny thorns to blend with their habitat. The pygmy species has a lifespan of about 1 year, while the larger species average between 3-5 years.

According to **Project Seahorse**, the **Seahorses** in the Philippines can be broadly grouped as: spiny, smooth, or pygmy.

- ♦ **Spiny Seahorses.** 4 species – *H. barbouri*, *H. histrix*, *H. comes*, *H. spinosissimus*. *H. barbouri* is found in Cuyo Island, Zamboanga, Negros Occidental, Malapascua, and Negros Oriental. *H. histrix* is found in northwestern Bohol, Batangas, Puerto Galera, Tablas Strait, Romblon, Cebu Strait, Negros Oriental, Davao, Iloilo, Puerto Princesa, and Jagna. *H. spinosissimus* is found in Cavite, Danajon Bank, Puerto Galera, and Malapascua. *H. comes* is found in northwestern Bohol, Tablas Strait, northern Masbate, Bantayan, Malapascua, Moalboal, Sogod Bay, Negros Oriental, Iloilo, Gingoog Bay, Sama Island, Bien Unido, eastern Samar, Iloilo, Leyte, Masbate, Quezon, Sorsogon, Surigao del Norte, and Zambales.



H. barbouri, spiny pygmy, Negros



H. histrix, spiny, Romblon



H. spinosissimus, spiny, Bohol



H. comes, spiny tigertail, Gato Island

- ♦ **Smooth Seahorses.** 3 species – *H. kelloggi*, *H. kuda*, *H. trimaculatus*. *H. kelloggi* is found in Bohol, Daanbantayan, Jolo, Negros Oriental. *H. kuda* is found in Danajon Bank, Aparri, Bantayan Island, Moalboal, Masinloc, Samal Island, Iloilo, Lanao del Norte, Negros Oriental, Puerto Galera, Sarangani, and Zambales. *H. trimaculatus* is found in Bohol.



H. kelloggi, smooth, Negros Oriental (P. Poppe)



H. kuda, smooth, Anilao, Secret Bay

- ♦ **Pygmy Seahorses.** 3 species – *H. bargibanti*, *H. denise*, *H. pontohi* & *severnsi* – are so tiny but well camouflaged. *H. bargibanti* is found in Batangas, Malapascua, Mactan, Anda, Cabilao, Panglao, Samal Island, Puerto Galera, Masbate, Romblon, and Negros Oriental. *H. denise* is found in Tablas Strait, Romblon Pass, Malapascua, Moalboal, Cebu Strait, Cabilao, Panglao, and Samal Island. *H. pontohi* & *severnsi* are found in Romblon and Bohol.



H. bargibanti, pygmy, Malapascua, Cebu



H. denise, pygmy, Tubbataha Reef, Palawan

Latest Discovery. In 2013, two rare **Seahorses** were discovered near **Romblon**. These are the **Weedy pygmy Seahorse** (*H. pontohi*) and **Severn's pygmy Seahorse** (*H. severnsi*). The Zoological Society of London's **Project Seahorse** verified both as the first record of these species in the Philippine waters. However, since they are very similar in features and differ only in color, **Project Seahorse** therefore considers *H. severnsi* as a synonym species to *H. pontohi*. The Weedy pygmy **Seahorse** is one the smallest **Seahorses** at 1.4cm, just a tad bigger than Severn's pygmy **Seahorse** at 1.3cm, which is smaller than a Peso coin.

Speed. The **Seahorse** is a poor swimmer. It swims upright, not horizontally like regular fish. The **Seahorse** propels itself by using its dorsal fin.



H. pontohi pygmy. Photo: Lenny Kim, Romblon

The pectoral fins, located on either side of its head, are used for maneuvering and steering. The top speed of a **Seahorse** is .5 mph (2,640 ft/hour). The slowest-moving **Seahorse**, *H. zosterae* (Dwarf **Seahorse**), found in the Bahamas, has a top speed of .0009 mph (5 ft/hour).

Food. The **Seahorse** relies on stealth to feed on copepods and amphipods, which are small crustaceans, Mysid shrimp, invertebrates, and fish fry. The **Seahorse** uses “pivot feeding” to catch the prey, which works by rotating its snout at high speed to suck them in. With excellent camouflage, the **Seahorse** ambushes prey that floats within striking distance. While feeding, it produces a distinctive click each time food is ingested. The same clicks are heard in social interactions.

Courtship and Reproduction. Before breeding, **Seahorses** court for days. They grip a strand of seagrass with their tail, and spin like a carousel. Later, the male pumps water through the egg pouch on his trunk, which expands and opens to display its emptiness. When the female’s eggs reach maturity, she and her mate gracefully spiral above the seagrass. The female swims away and returns the next morning to insert her ovipositor into the male’s pouch and deposits up to 1,500 eggs to be fertilized by his sperm. The male will carry the pups for up to 45 days until they are fully developed. Once the pups are released from the pouch, the male parent’s role is completed but the couple’s relationship is monogamous for life until a partner dies.



Threats. The **Seahorses** are “threatened by massive lantern fishing,” Angie Nellas of **Project Seahorse Foundation (PSF)** said. According to **Marine Conservation Philippines (MCP)**, the real threat is the destruction of habitats caused by increased population growth, and the increasing demand for utilization of coastal resources. Coral reefs and seagrass beds are deteriorating, reducing viable habitats for the Seahorse. The study “Tracking the International Trade of Seahorses” (Evanson, et al 2011), finds that **Seahorses** are heavily traded for traditional Chinese medicinal purposes, aquaria, and souvenirs. About 25% of the world’s **Seahorse** trade – dried or alive – comes from the Philippines.

Classification. Seven **Seahorse** species in the Philippines are listed as **Vulnerable** on the 2017 IUCN Red List of Threatened Species: *H. barbouri*, *H. comes*, *H. histrix*, *H. kelloggi*, *H. kuda*, *H. spinosissimus*, and *H. trimaculatus*. Three other **Seahorse** species are listed as **Data Deficient**, despite heavy exploitation: *H. bargibanti*, *H. denise*, and *H. pontohi*.

Conservation. In support of conservation work by **PSF**, **MCP** and Philippine marine parks, **BFAR’s** goal for implementing the **Amended Fisheries Code Sec 102b for Seahorses** is by end-2018, with the aim to have legislation in place that should allow for the reopening of sustainable **Seahorse** fisheries and trades. ⚓

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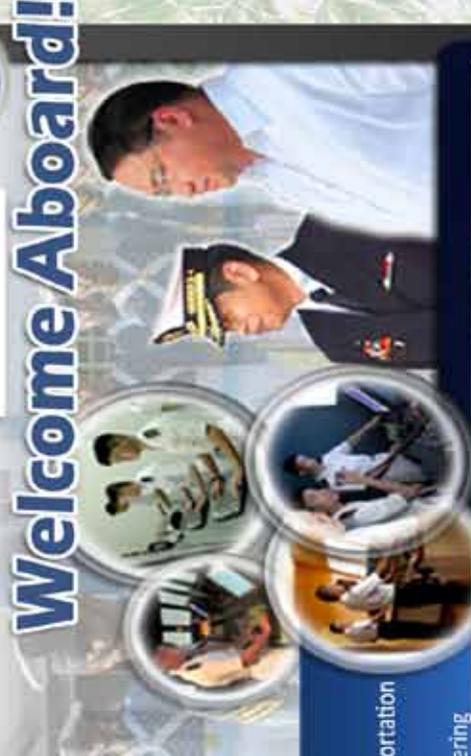




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MAAP Profile

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, 1998. 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.

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Our Curricula

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 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 BSMTE 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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