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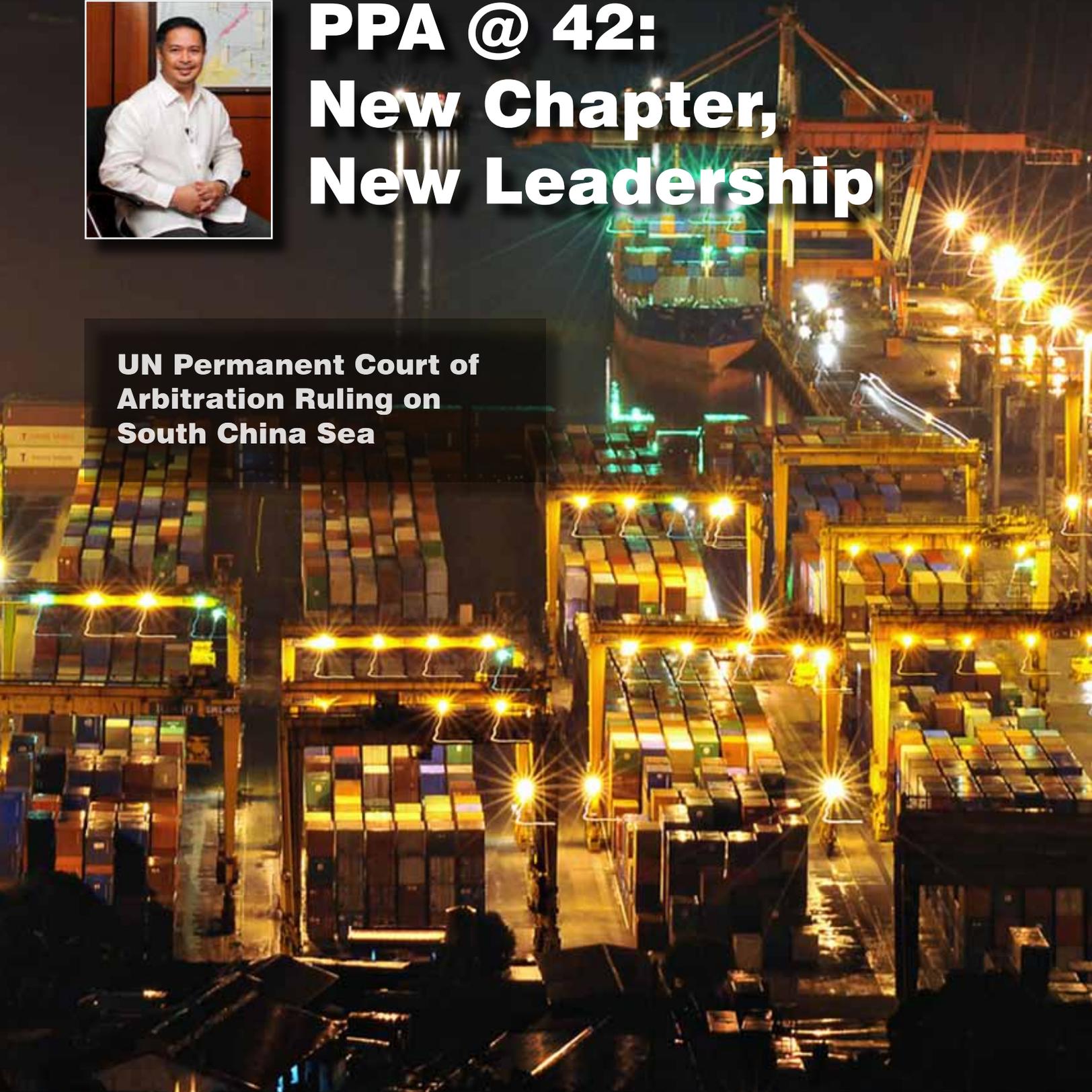
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July-August 2016



PPA @ 42: New Chapter, New Leadership

**UN Permanent Court of
Arbitration Ruling on
South China Sea**





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About the Cover:

This issue's cover photo, the Manila International Container Terminal (MICT), is the Philippine's busiest port with an annual capacity of about 1.9M TEUs. Photo credit: TheUrbanHistorian distributed under CC BY-SA 3.0 license.



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Up Periscope: In this issue -- and more

By Capt. Winston G. Arpon PN (Ret)

BY CAPT. WINSTON G. ARPON PN (RET)

We consider this Maritime Review, MR 16-4 by our shorthand, a milestone issue of sort: the first under this new administration. And if our math is correct, but more importantly, if our finances and other support from benefactors don't dry up, expect a total of 36 issues before another administration takes over on June 30, 2022: the most number of issues in Maritime Review history under any administration, including that of President Fidel V. Ramos, under whose administration the maritime triad that includes the Review along with the League and the Forum, had its beginning. Heretofore, a maximum of five issues were published annually; starting this year and every year thereafter, we're pushing the envelope, so to speak, with an unprecedented plan to add a November-December issue, MR 16-6.

IN THIS ISSUE.....

On Top of Our Cover Story. The ruling of the Permanent Court of Arbitration, PCA, in favor of the Philippines on the South Sea arbitration case, Philippines vs. China inarguably is the top story of the day as far as this country is concerned. It certainly was a shoo-in for a special spot - the Review's cover story- but for the fact that it happened as we were putting the finishing touches to this issue; the best we could do was the inset you see on our cover. The unanimous award issued by the PCA required only one shy of 500 pages, nigh impossible to print in its entirety as we were inclined to do at the outset; so, we settled for a happy compromise, the suggestion coming from no less than the Maritime League Chairman himself: **Press Release by the PCA, The Hague, July 12, 2016** – see page 10 of this issue.

Commodore Carlos L. Agustin—see **Joint Development on the West Philippine Sea**—concurs with one Stewart Taggart who, anticipating the judgment handed down by the PCA on July 12, posited that “the ball will be in the Philippines’ court,” and the new President would have “important decisions to make.” One of them, participation in joint patrols with the US, is a stick. A carrot, on the other hand, would be an offer for joint development of the area, preferably involving other countries in the region that could help foster confidence-building between China and the Philippines. The notion of confidence-building carries a special appeal to Agustin who recalls in this article presenting a paper on the subject before the China-ASEAN Dialogue in Beijing March 11-15, 2008 (Dates that – and I beg the reader's pardon and indulgence for taking the liberty of a personal allusion – bring back unwanted memories. The Commodore paid me a visit at the hotel where I was staying while tending to Iday, my wife, who had been in the hospital for a month. She would pass away three days later, 33 days after we arrived for a four-day tour package in the Chinese capital).



Cover Story. The Philippine Ports Authority, “celebrating 42 years of meaningful developments at the ports,” is our cover story. A new man is at the helm by the Pasig River and so is one South Harbor; the latter, PPA Manager Attorney Jay David Santiago a part of the story, along with his marching order to his troops echoing the battle cry of his fellow attorney and boss at Malacanang.



Words from Two Chairmen. Upbeat in MR 16-2, uncertain about the future in MR 16-2, former President and Maritime League Chairman Emeritus, Fidel V. Ramos in this issue can only be described as nostalgic, if contemplative, as usual, in the Review's regular feature – see **The Battle of Calapan – Philippine Flag Day**. In 1998, he signed Republic Act 8491, “Flag and Heraldic Code of the Philippines.” 18 years later, he marks the event, now known simply as Flag Day, as guest of honor and speaker at the Shrine of the National Flag in Alapan, Cavite. The battle of Alapan was the first major victory of Emilio Aguinaldo.

On the other hand, Commodore Carlos L. Agustin, ML Chairman, in another regular feature, Chairman's Page, looks to the future – see **National Security Scenarios for the post-election period**. In Maritime Forum 112, he received a proposal from Atty. Fernando Campos, a former Undersecretary of National Defense, Governor and Congressman of Cavite, that he accepted and included as an agenda item in the Forum. The discussion paper, “THE BIRTH OF A NEW PHILIPPINES: Converting a crisis into an opportunity” offered foreseeable scenarios in the post-2016 elections- The three general scenarios – Donald Trump winning the Republican nomination; local developments; and, World War III – each, with a host of sub-scenarios; local developments, anticipating a Duterte victory and consequently a FRP, Federated Republic of the Philippines.



Defense on Two Fronts. Two members of the MR Editorial Board take up the cudgel for national defense: Vice Admiral Emilio C. Marayag on procurement – see **Philippine Defense Procurement: Issues and Prospects**; and, Captain Tom D. Bains on submarines – see **Submarine Warfare Capability for the Philippine Navy -- A Necessity**.

Marayag identifies three considerations for a desirable defense procurement policy of the AFP, for buying major defense equipment

and weapons systems: war fighting capability; operational flexibility; and, value for money. War fighting capabilities, he posits, should extend to other operations he calls OOTW, for operations other than war such as counterterrorism, humanitarian assistance and disaster and rescue – and yes, maritime law enforcement. Building on this foundation and related premises in a substantive introduction, Marayag proceeds to review existing defense procurement laws, identify some procurement issues and present prospects for local defense equipment manufacturers, particularly shipbuilding, and the result, in the view of Periscope, is a comprehensive article worthy of serious consideration by our defense procurement policy makers and implementors.

Captain Tom D. Baino who authored the cover story of the last Review, **“The Warship: Design and Construction Parameters,”** segues in this Review with the other defense imperative. Baino, a naval architect, was the beneficiary of the Philippine Navy’s pursuit of submarine development, championed by the Flag Officer in Command, Vice Admiral Eduardo Ma R Santos. Baino was the recipient of a postgraduate study grant at the Department of Naval Architecture at the University of London in U.K. specializing in submarine design and construction. Bringing his technical expertise and naval experience to bear on the topic of this article, after delving on the operational requirements of a submarine suitable for the Philippines, he proceeds to make a strong case for the effectivity of SWATs, Shallow Water Submarines, and therewith concludes with a rather interesting thought – that we can build these submarines ourselves. Which calls to mind, an article in our last Review – a teaser, remember? – **The Philippine Navy should start acquiring submarines, not matter how low tech. Is this a good start or what?**

.... AND MORE

When this Review gets to our readers – the hardcopies, to be sure, in the hands of the attendees to the Maritime Breakfast Forum on July 22 (otherwise, I could lose my job and my annual salary of P1); add a day or two for the electronic copies, on our website www.maritimeleague.com – the administration of President Duterte would have been in office a week shy of two months. Any new administration inevitably draws a mix of hopes, anxiety and fears, certitude and doubts, and President Duterte’s is no exception. The President’s first 60 days in office may have already raise among us, a number of “I-told-you-so,” in favorable or unfavorable terms. As in, I told you so, he’ll be successful. Or, I told you so, he will be a failure.

The Periscope suggests another way of looking at it, like so: If this President fails, the country loses; if he succeeds, the country wins.



Wherever she is, VVM invariably does an excellent job for the Review but we’re happy to have her in person for MR 16-4, after editing MR 16-3 remotely from her roost in the East Coast, USA. VVM, to us; Victoria Viray Mendoza on our editorial page; Vicky or Vixen, to friends – sashaying between our DC, D’Gong Country and the other DC- D’Donald or D’Clinton Country, depending on who wins and succeeds Obama in January.

By the way, that wasn’t a periscope you saw at the waters of Virgin Island, Cebu but a snorkel. And yes, it was VVM taking a well-deserved break from editing MR 16-4, and, charging her batteries for MR 16-5.



VVM made the last sighting of him in Washington, DC, so we would have been happier if she came back with the Vice Chairman of the Editorial Board in tow.



Maritime Events Calendar

JULY '16

- 11 PPA ANNIVERSARY (PHILIPPINES)
- 14-15 14TH ASEAN PORTS & SHIPPING 2016 (BANGKOK)
- 22 MARITIME BREAKFAST FORUM #113 (PHILIPPINE PORTS AUTHORITY (PPA); 637 BONIFACIO DRIVE, PORT AREA, MANILA)

JULY-AUGUST '16

- 30-3 4TH INTERNATIONAL MARINE CONSERVATION CONGRESS (ST JOHN'S NEWFOUNDLAND AND LABRADOR, CANADA)

AUGUST '16

- 19 MARITIME BREAKFAST FORUM #114 (NATIONAL COAST WATCH CENTER (NCWC); HEADQUARTERS PHILIPPINE COAST GUARD, 139 25TH STREET, SOUTH HARBOR, PORT AREA, MANILA)

SEPTEMBER '16

- 1-10 IUCN WORLD CONSERVATION CONGRESS (HONOLULU, HI, USA)
- 5-9 SMM INTERNATIONAL MARITIME TRADE FAIR (HAMBURG, GERMANY)
- 6-8 CANADIAN DEFENCE SECURITY AND AEROSPACE EXHIBITION ATLANTIC - DEFSEC ATLANTIC 2016 (HALIFAX, NS)
- 6-11 CANNES INTERNATIONAL YACHTING SHOW (CANNES, FRANCE)

- 12-15 FLEET MAINTENANCE AND MODERNIZATION SYMPOSIUM 2016 (HAMPTON, VA)

- 16 MARITIME BREAKFAST FORUM #115 (PHILIPPINE COAST GUARD (PCG); HEADQUARTERS PHILIPPINE COAST GUARD, 139 25TH STREET, SOUTH HARBOR, PORT AREA, MANILA)

- 19-22 MTS/IEEE ASIA OCEANS 2016 (MONTEREY, CA, USA)
- 19-25 MARITIME WEEK (PHILIPPINES)
- 21-23 SEATRADE CRUISE MED (STA. CRUZ, TENERIFE)

SEPTEMBER-OCTOBER '16

- 28-1 MONACO YACHT SHOW (MONACO)

OCTOBER '16

- 4-6 IBEX 2016 INTERNATIONAL BOAT BUILDERS EXHIBITION AND CONFERENCE (TAMPA, FL)
- 8 MARITIME LEAGUE 25TH ANNIVERSARY
- 12 MARITIME BREAKFAST FORUM #116 (DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES (DENR); TBD)
- 14 1ST MARITIME LEAGUE/MPCGA GOLF TOURNAMENT (PN GOLF CLUB, BNS, TAGUIG CITY)
- 15-19 41ST INTERFERRY CONFERENCE (MANILA)
- 17-21 EURONAVAL 2016 (PARIS, FRANCE)
- 21-23 INTERNATIONAL CONFERENCE ON NAVAL ARCHITECTURE AND OCEAN ENGINEERING (SHANGHAI, CHINA)
- 24 BATTLE OF SIBUYAN SEA, 72ND ANNIVERSARY

- (ROMBLON CULTURAL & HISTORICAL ASSOCIATION)
- 24-26 ARCTIC TECHNOLOGY CONFERENCE (ST JOHN'S, NF)
- 25-26 OFFSHORE ENERGY 16 (AMSTERDAM, NETHERLANDS)

NOVEMBER '16

- 1-5 SNAME MARITIME CONVENTION (BELLEVUE, WA)
- 2-5 INDO DEFENCE 2016 TRI-SERVICES FORUM (INDONESIA)
- 3-4 FERRIES, MARINE LOG CONFERENCE AND EXPO (SEATTLE, WA)
- 8-9 ASIAN MARINE ENGINEERING CONFERENCE (SINGAPORE)
- 15-17 METS MARINE EQUIPMENT TRADE SHOW (AMSTERDAM, NETHERLANDS)
- 15-17 FUTURE OF UNDERWATER TECHNOLOGY CONFERENCE 2016 (UK)
- 16-18 CREW CONNECT GLOBAL CONFERENCE & EXHIBITION (MARRIOTT HOTEL, MANILA)
- 18 MARITIME BREAKFAST FORUM #117 (DEPARTMENT OF TRANSPORTATION AND COMMUNICATIONS (DOTC); COLUMBIA TOWER, ORTIGAS AVE., BRGY WACK-WACK, MANDALUYONG CITY)

NOVEMBER-DECEMBER '16

- 30-2 INTERNATIONAL WORKBOAT SHOW (NEW ORLEANS, LA)
- JANUARY '17**
- 6-15 LONDON BOAT SHOW (LONDON, UK)

PPA @ 42: New Chapter, New Leadership

by Christopher Paringit

MANILA, 11 JULY 2016 — The Philippine Ports Authority (PPA) is turning another chapter in its corporate life as it celebrates its 42nd Founding Anniversary today beaming with hope and pride with the entry of the new administration.

Armed with a new Vision that “by 2020, PPA shall have provided port services of global standards,” officers and staff, are ecstatic with this promise of better public service through reduced red tape in dealing with the agency resulting in more productivity and efficiency for the entire agency.

As what newly installed PPA General Manager Atty. Jay Daniel R. Santiago announced during his first ever flag raising ceremony, the marching order for the state-owned agency will be: adopting a new work culture anchored on transparency and service in accordance with the battle cry of President Rodrigo R. Duterte.

Santiago assured that adopting a new work culture would enhance PPA's success in implementing its duties and responsibilities and in providing gateways to progress by connecting the 7,107 islands of the Philippines.

Accomplishments

In the past 6 years, the PPA remained as one of the top performing agencies in terms of operations and revenues. It maintained its position in the “billionaires club of GOCCs” in terms of dividends contributed to the national coffers to help in the implementation of the socio-economic programs of the Government.

From 2010 up to the end of the first semester of 2016, the PPA was able to provide adequate facilities and services to accommodate sustained increases in cargo

throughput, vessels and passengers with an annual average increase of 6.11%, 2.74% and 3.74%, respectively.

The agency was also able to complete 251 projects, that have, among others, increased

annual increase of 10%.

Thirteen ports were also certified to Quality Management System (9001:2015) and to Port Safety, Health and Environmental Management System to promote transparency and safety while 83% of the PPA ports have been issued Certificates of Compliance by the Office for Transportation Security with the International Ships and Port Facility Security (ISPS) Code making them viable destination of vessels.

PPA was also able to streamline the requirements for common permits by reducing documents from an average of 8 down to 2 documents, which is a 75% reduction in processing requirements, thus, reducing burden to applicants or ports users. It likewise approved a Terminal Management Policy that enabled PPA to veer away from percentage sharing revenues from service providers to fixed concession fees, which allowed port service providers to level their operations by becoming terminal operators. PPA also developed an e-Permit system and implemented it in 12 base ports designed to facilitate application, processing, and approval of common port permits by service providers.

Since 1974

PPA was also able to put its mark in the international scene after its Training Institute was recognized as a Regional Training Center in the Asean to deliver Sustainable Port Development Training Courses. PPA was also able to

forge an agreement for networking and regional cooperation through the International Association of Ports and Harbors, Asean Ports Association, BIMP-EAGA, International Maritime Organization, UNCTAD, Asia-Pacific Economic Cooperation, APEC Port Services Network, Permanent International Association of Navigation Congresses and Organization of Economic Cooperation and Development.

The government-owned corporation



passenger-seating capacity, and Ro-Ro berths throughout the country at a combined cost of P9.8 billion. Specifically, Ro-Ro projects facilitated the carriage of goods and people, promoted domestic tourism, reduced cargo slippage by at least 50%, and also reduced cost by 30%.

PPA has likewise maintained the ports under its control in optimal operating condition at all times resulting in sustained safety and revenue growth with an average



PH hosts the 1st Asean Sustainable Port Development Network Meeting. The training network is an offshoot of the partnership forged by the German International Cooperation Agency with Asean and the Partnership in Environmental Management for the Seas of East Asia in 2009 to implement the SPD. The event became the official start of the Regional Training Network, handing over to it the sustainability of the GIZ SPD project, thus, a Presentation of the Memorandum of Understanding duly signed by member economies, highlighted the event.

has likewise supported the development of cruise tourism by prioritizing projects that are considered major nautical cruise arteries like those in Catagbacan in Bohol, Puerto Princesa, Caticlan in Aklan, and Currimao in the Ilocos Region.

In terms of personnel capacity building, the PPA Board allotted about P1 billion for a 10-year program to upgrade knowledge of port personnel to global standards which includes Post Graduate Studies at the World Maritime University on Maritime Affairs and a training program on Modern Port Management under the auspices of the United Nations Conference on Trade and Development.

For its social responsibility and good governance initiatives, the PPA continued to support the Government's Anti-Trafficking Program through the operation of Halfway Houses or Bahay Silungan sa Daungan in selected ports and other Gender and Development projects. The agency has likewise continued to advocate "green" technology through the use of solar/renewable lighting system, waste recycling, and compliance with environmental regulations in port development and operations.

On the other hand, one of the notable accomplishments for the period was the elevation of the PPA to Class "A" status

for Government Owned and Controlled Corporations (GOCC) based on the classification guidelines of the Government Commission for GOCCs (GCGs).

Being Implemented

To ensure that Philippine ports are responsive to current times specifically with respect to security threats and safety concerns, the PPA continues to improve the physical and operational structure of the ports.

Currently, the PPA is implementing the Future Proofing of Gateway Ports through the upgrading of the Ports of Iloilo, General Santos, Cagayan de Oro and Zamboanga for Container Operations as well as the Certification of best practices on Quality Management System and Port Safety, Health and Environmental Management or Integrated Management System of Head Office Procedures, including manuals and trainings.

PPA is also constantly increasing the productivity of Ro-Ro operations, container operations at the major ports, and mechanized break-bulk operations of base ports. Privatizations of Passenger Terminal Buildings are also ongoing in Dumaguete, Larena, Tubigon, Legazpi, Benoni, Talibon, Tagbilaran, Calatagan and Manguino-o.

In terms of safety, PPA is implementing the deployment of the Vessel Traffic Monitoring System (VTMS) as well as the ship Automatic Identification System (AIS) in ports to promote safe navigation. The VTMS is being put up in the areas of Roxas- Oriental Mindoro, Iloilo, Davao and Zamboanga while the AIS will be installed in Puerto Princesa, Ormoc, Cagayan de Oro, Iligan, and General Santos.

In the next 6 months or until the end of January of 2017, the PPA is committed to implement its Compensation and Position Classification System; updating of the Medium Term Public Investment



The Makar Wharf in General Santos City



New PPA General Manager Atty. Jay Daniel R. Santiago

Program to consider the priorities of the new Administration; completion of the projects included in the 2016 Performance Scorecard of PPA as submitted to GCG; and the enhancement of the Strategic Performance Management System.

42 years and moving forward under the new Administration...

With the theme “Celebrating 42 years of meaningful development at the ports”, General Manager Santiago has listed his order of battle to guide the agency to greater heights and successes in the next couple of years.

The first order of business is the strict observance of punctuality of PPA personnel. “Respect the time of our transacting public as well as our co-workers. We should give them the time and quality of service they deserve,” Santiago insisted, adding that PPA employees should always be grateful, humble and thankful for the trust and confidence given to them through unparalleled public service.

“The agency will be very transparent and accessible to the public in accordance with the new work culture being advocated by the new President through an streamlined and rationalized transaction processes,” Santiago added.

“Mutual respect and trust between management and employees and between the PPA and the transacting public, is crucial if we are destined to reach unprecedented heights and successes in the future, so that we can say that we are now truly globally competitive,” Santiago said. ⚓



PPA ports are ready to accommodate the increasing volume of trade



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Strategy: National Security Scenarios for Post-Election Period



by Commo. Carlos L. Agustin AFP (Ret)

In the 112th Maritime Forum, I responded positively to the proposal of a former Undersecretary of National Defense, Atty. **Fernando Campos** to discuss Strategy. He suggested discussing "National Security Scenarios for the post-election period." Campos was also a former Governor of Cavite and a former Congressman of Cavite. He sent me his discussion paper, **THE BIRTH OF A NEW PHILIPPINES: Converting a crisis into an opportunity**, which offered perspective scenarios. I also designated some participants to be reactors and asked them and those who may wish to discuss to "hold no punches" in giving personal views; we would use the rule "no attribution" and that views would be construed as not reflecting the position or views of their agencies or organizations. I also said that there is "no school solution" and certainly there are no wrong answers.

Having seen the people's response to a Cavite rally of **Rodrigo Duterte, Campos**, experienced in political analysis (having been a President's son-in-law in the '60s and a Liberal Party pundit), was certain the Davao Mayor would handily win the Presidential race.

His discussion brief included a **SCENARIO 1** with **DONALD TRUMP** winning the US Republican Nomination in July 2016, plus several "developments" such as:

- a. U.S. moves closer to Russia, shifts pivot to Asia;
- b. China thru North Korea strikes Blue House of South Korea with conventional rockets, to test American response;
- c. South Korea with U.S. support responds with conventional missiles;
- d. China strikes Taiwan Island base and Japan's Shinkaku with tactical nuclear missiles but avoids attacking U.S. Aircraft Carriers;
- e. Japan and the U.S. attack North Korea

with tactical nuclear missiles but destroy only China's nava base in Hainan and Spratly's (not directly Mainland China) with conventional missiles; and

- f. RP goes to UN Council for Halt to war.

Thus, in LOCAL DEVELOPMENTS he suggests:

- a. President Duterte calls Initiative & Referendum in December to convert into Parliamentary Federal Government with 12 Regional States - a Federal Republic of the Philippines (FRP); and
- b. FRP goes to UN Security Council to stop military and naval confrontation over WPS and asks for Non-Aggression Pact between U.S. and China to guarantee territorial integrity of the pact of the Philippine Archipelago;
- c. FRP commits to remove all foreign military bases on Philippine soil in return for CHINA's commitment to help convert the Philippines to be the next International Trading and Financial Center to replace Hong Kong and Singapore as they are too small and expensive to accommodate the doubling of trading and financial transactions of China, projected to be the biggest economy by year 2030 upwards;
- d. FRP to expand the concept of new Global Trading and Financial Center to include BIMP-EAGA Region;
- e. FRP to pioneer in establishing a new Federal Reserve Bank for the 12 Regional States but with separate Regional Central Banks to use only 2 international reserved currencies, namely the U.S. dollar and the CHINESE REN/YUAN;
- f. FRP to adopt the doctrine of Extraterritoriality in forming the BIMP-EAGA as the nucleus of the Malayan Economic Union overcoming the obstacles of the present European Economic Union;

- g. FRP to harness the 4 different National Defense Colleges of BIMP to pioneer in using their separate armies' engineering corps to build integrated TOWNSITE projects In 500 to 1,000 hectares in each of the 4 countries to house at least 20,000 families (5,000 from each country) composed of bureaucrats, technicians, professionals and farmers, to form the nucleus of the future interracial, interfaith and intercultural communities to promote the culture of peace in BIMP as a global example of peace and harmony of different peoples;
- h. Through the 4 NDCs of BIMP to pioneer in the mass production of housing units out of old or discarded vehicles and machines of highly developed countries by developing the machines, furnaces, to melt the different parts to mould them into prefabricated parts of the modern house from kitchens to bedrooms, store-rooms, solar roof panels, water tanks, sewerage to furniture, etc., to stimulate infra-regional trading among the four economies; and
- i. Through the 4 NDCs of the BIMP because of the peculiar terrain and ownership of agricultural lands, REGIONAL governments could go into farm mechanization and cultivate agricultural lands by hundred hectares, with subsidies if necessary, and open food manufacturing plants to be owned by the farmers (instead of a few capitalists) to increase their incomes to make growth more inclusive to the bigger part of the population.

Campos called his **SCENARIO 2**, the dawn of a MULTI-POLAR WORLD

U.S. TRUMP leadership accepts the inevitability of a multi-polar world, reconciles with RUSSIA, and accepts the ascendancy of CHINA as a global superpower along with RUSSIA for as long as USA remains the center of the world's attraction with its high standard of living under the DOCTRINE of EXCEPTIONALISM.

U.S. will cease to enforce its political, economic and religious ideals and principles but will maintain its leadership in all facets of life by preserving the power of the market and leading globalization to rule the world.

Necessarily, Wall Street must co-exist with at least three other global international reserved currencies (the Ruble, the Dollar, & the Rem/Yuan) if Russia could unify the Moslem world leaving Israel, Europe, India, Australia, Canada and South America under the dollar block. Because of the nature of CHINA's state capitalism, it must have its separate sphere of influence; and most likely, the majority of Africa and the ASEAN Nations, and Pacific island nations would fall under its sway. Pakistan and others may eventually join the China Block.

Israel is expected to accept the 2-state solution to the Palestinian Problem if Russia reigns over Iran and Saudi Arabia.

Oddly, Campos included a **SCENARIO 3**, Third World War.

At the outbreak of hostilities in SPRTLAYS and combatants start to use of nuclear weapons, there will be a massive Bank run and civil disorder will follow. Unless the country is taken over by a leader like SPARTACUS and martial law is enforced, the country will descend into an Afghanistan, dynasties will behave like tribal warlords and curb the country into fiefdoms. Mindanao will be taken over by MUSLIMS and secede from the Country.

I opined that this discussion paper reflects the ambiguity and complexity of the international situation, and that there is no incorrect answer that may be given and then asked for responses.

No harsh or untoward statements were given, and generally discussants took the exercise in a positive way.

The DFA, the PN and the PCG according to their respondents, would follow the chain of command and would act in accordance with their missions.

One lawyer participant lauded the Forum organizers and particularly the proponent of the SCENARIO discussion, as "the scenarios are quite possible and many of the projections are plausible." Many concurred.

Many others gave their views as to the probability of war, taking either side of the equation.

It was generally agreed that the next administration should pursue some dialogue with China; some opined that we really should go to the UN Security Council as well as increase the effort to get developed countries to support our cause.

The exercise reminded me of an article, "If World War III Erupted in Asia" (How a U.S.-Soviet clash would have played out, based on Washington's war games) that originally appeared at The National Interest written by Robert Farley, a frequent contributor to the National Interest and author of The Battleship Book. He serves as a senior lecturer at the Patterson School of Diplomacy and International Commerce at the University of Kentucky.

Farley describes **how**, in the 1970s and 1980s, the US Naval War College traced the potential course of war in East Asia as part of a series of global war games. These games lend a great deal of insight into the key actors in the conflict, and how the decisive battles of a Second Pacific War might have played out.

He starts:

Nearly every analyst during the Cold War agreed that, if Moscow and Washington could keep the nukes from flying, the Central Front in Europe would prove decisive in war between the United States and the Soviet Union. The NATO alliance protected the Western European allies of the United States from Soviet aggression, while the Warsaw Pact provided the USSR with its own buffer against Germany.

But when the Cold War really went hot, the fighting took place in Asia. In Korea and Vietnam, the Soviet Union waged proxy struggles against the United States, and both sides used every tool available to control the destiny of China. However, while few believed that the Pacific theater would determine the victor of World War III, both the United States and Soviet Union needed to prepare for the eventuality of war there.

Scholars have devoted far less attention to the planning of World War III in East Asia than to the European theater. The two classic novels of the Third World War (Tom Clancy's Red Storm Rising and John Hackett's The Third World War) rarely touched on developments in Asia.

Since China was not a dominant player in the region, Farley's article delved more on how a U.S.-Soviet clash would have played out in Asia, but he based it on "Washington's war games" as carried out by the annual war games in which, as he explained, "the Naval War College examined the potential for World War III in Asia as part of its global war game exercises in the 1970s and 1980s. Played annually between 1979 and 1988, each of the games explored alternative strategic and technological aspects of a confrontation between the superpowers."

It explored the players – China, Japan, North and South Korea, and the Southeast Asian countries – and the "chess pieces," the Soviet Pacific Fleet and the US Pacific Fleet. His précis on the War Games:

Although generally focused on Europe, the games always included an East Asian component. While the early war games saw some variance (informed to some degree by the Sino-Vietnamese War), they held to a basic pattern; the Soviets hunkered down, while U.S. and allied naval forces chipped away at the bastions and tried to distract the Russians from Europe.

The 1984 war game played out much differently. Instead of sitting on its hands, the Soviets opened the war with a massive air and missile assault against Japan. This assault destroyed most Japanese air assets on the ground, along with those of the U.S. special operators delivered by submarine and by clandestine civilian ship-launched unconventional attacks against U.S. bases across the Pacific, including Guam and Pearl Harbor.

The Soviets unleashed Pyongyang early in the conflict, redirecting U.S. attention towards the Korean Peninsula. Washington had effective answers; it quickly undertook offensive anti-submarine operations in the Sea of Japan, decimating Soviet SSN and SSBN forces. Soviet surface ships also came under attack. Nevertheless, in a daring move the Soviets launched a successful amphibious assault against Hokkaido. Although the operation suffered heavy losses, it succeeded in establishing a beachhead in Japan (though this was later withdrawn under fire).

The United States took a more aggressive stance in the 1988 war game. Instead of waiting for a Soviet attack, Washington immediately began air and unconventional offensives against installations in the Soviet

Far East, designed to decimate Soviet air defenses and threaten the survival of military-industrial installations.

For their part, the Soviets hoped that a reticent military stance and a diplomatic offensive could keep Japan out of the war. This gambit succeeded to a point, as the Japanese suspended active military cooperation with the United States. American pressure eventually forced Tokyo to yield, and the Soviet opened offensive operations against the archipelago. By this time, however, the U.S. Navy had devastated Soviet naval forces, confining the Pacific fleet to its bastion in the Sea of Okhotsk.

Late in the war, the Soviets gave Pyongyang the green light to invade South Korea. However, this operation backfired, as the North Koreans failed to make substantial

progress against combined U.S. and South Korean forces. Moreover, the Soviet move confirmed the U.S.-Japanese alliance, and helped drive Beijing into a much more hostile disposition towards the Soviets.

Both the Soviets and the Americans had options in Asia. The strategic environment was far more fluid than in Europe, allowing a variety of different choices to disrupt and destabilize the opponent. This made the course of war far less predictable.

At its (nonnuclear) worst, war could have raged across Asia on multiple fronts, from Korea to Japan to the Sino-Soviet border. At its best, the combatants might have observed an uneasy quiet, at least until it became necessary to outflank a stalemate in the West. But as was the case in Europe, everyone concerned

is fortunate that tensions never led to open combat.

To me, it would appear that the new scenarios would be quite different. East Asia will be a totally separate arena and not tied to the old Russo-Central European-American power game, given the newfound strength, confidence and aspirations of the Sleeping Giant that was.

Commodore Carlos L. Agustin was the Philippine Coast Guard Commandant 199-93, General Manager of Philippine Ports Authority 1993-98 and President of National Defense College of the Philippines 2001-2010. He is the current Chairman of Maritime Forum and President of The Maritime League.



THE SOUTH CHINA SEA ARBITRATION

(The Republic of the Philippines V. The People's Republic of China)

The Hague, 12 July 2016

The Tribunal Renders Its Award

A unanimous Award has been issued today by the Tribunal constituted under Annex VII to the United Nations Convention on the Law of the Sea (the “**Convention**”) in the arbitration instituted by the Republic of the Philippines against the People’s Republic of China.

This arbitration concerned the role of historic rights and the source of maritime entitlements in the South China Sea, the status of certain maritime features and the maritime entitlements they are capable of generating, and the lawfulness of certain actions by China that were alleged by the Philippines to violate the Convention. In light of limitations on compulsory dispute settlement under the Convention, the Tribunal has emphasized that it does not rule on any question of sovereignty over land territory and does not delimit any boundary between the Parties.

China has repeatedly stated that “it will neither accept nor participate in the arbitration unilaterally initiated by the Philippines.” Annex VII, however, provides that the “[a]bsence of a party or failure of a party to defend its case shall not constitute a bar to the proceedings.” Annex VII also provides that, in the event that a party does not participate in the proceedings, a tribunal “must satisfy itself not only that it has jurisdiction over the dispute but also that the claim is well founded in fact and law.” Accordingly, throughout these proceedings, the Tribunal has taken steps to test the accuracy of the Philippines’ claims, including by requesting further written submissions from the Philippines, by questioning the Philippines both prior to and during two hearings, by appointing independent experts to report to the Tribunal on technical matters, and by obtaining historical evidence concerning features in the South China Sea and providing it to the Parties for comment.

China has also made clear—through the publication of a Position Paper in December 2014 and in other official statements—that, in its view, the Tribunal lacks jurisdiction in this matter. Article 288 of the Convention provides that: “In the event of a dispute as to whether a court or tribunal has jurisdiction, the matter shall be settled by decision of that court or tribunal.” Accordingly, the Tribunal convened a hearing on jurisdiction and admissibility in July 2015 and rendered an Award on Jurisdiction and Admissibility on 29 October 2015, deciding some issues of jurisdiction and

deferring others for further consideration. The Tribunal then convened a hearing on the merits from 24 to 30 November 2015.

The Award of today’s date addresses the issues of jurisdiction not decided in the Award on Jurisdiction and Admissibility and the merits of the Philippines’ claims over which the Tribunal has jurisdiction. The Award is final and binding, as set out in Article 296 of the Convention and Article 11 of Annex VII.

Historic Rights and the ‘Nine-Dash Line’: The Tribunal found that it has jurisdiction to consider the Parties’ dispute concerning historic rights and the source of maritime entitlements in the South China Sea. On the merits, the Tribunal concluded that the Convention comprehensively allocates rights to maritime areas and that protections for pre-existing rights to resources were considered, but not adopted in the Convention. Accordingly, the Tribunal concluded that, to the extent China had historic rights to resources in the waters of the South China Sea, such rights were extinguished to the extent they were incompatible with the exclusive economic zones provided for in the Convention. The Tribunal also noted that, although Chinese navigators and fishermen, as well as those of other States, had historically made use of the islands in the South China Sea, there was no evidence that China had historically exercised exclusive control over the waters or their resources. The Tribunal concluded that there was no legal basis for China to claim historic rights to resources within the sea areas falling within the ‘nine-dash line’.

Status of Features: The Tribunal next considered entitlements to maritime areas and the status of features. The Tribunal first undertook an evaluation of whether certain reefs claimed by China are above water at high tide. Features that are above water at high tide generate an entitlement to at least a 12 nautical mile territorial sea, whereas features that are submerged at high tide do not. The Tribunal noted that the reefs have been heavily modified by land reclamation and construction, recalled that the Convention classifies features on their natural condition, and relied on historical materials in evaluating the features. The Tribunal then considered whether any of the features claimed by China could generate maritime zones beyond 12 nautical miles. Under the Convention, islands generate an exclusive economic zone of 200 nautical miles and a continental shelf, but “[r]ocks which cannot sustain human habitation



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or economic life of their own shall have no exclusive economic zone or continental shelf.” The Tribunal concluded that this provision depends upon the objective capacity of a feature, in its natural condition, to sustain either a stable community of people or economic activity that is not dependent on outside resources or purely extractive in nature. The Tribunal noted that the current presence of official personnel on many of the features is dependent on outside support and not reflective of the capacity of the features. The Tribunal found historical evidence to be more relevant and noted that the Spratly Islands were historically used by small groups of fishermen and that several Japanese fishing and guano mining enterprises were attempted. The Tribunal concluded that such transient use does not constitute inhabitation by a stable community and that all of the historical economic activity had been extractive. Accordingly, the Tribunal concluded that none of the Spratly Islands is capable of generating extended maritime zones. The Tribunal also held that the Spratly Islands cannot generate maritime zones collectively as a unit. Having found that none of the features claimed by China was capable of generating an exclusive economic zone, the Tribunal found that it could—without delimiting a boundary—declare that certain sea areas are within the exclusive economic zone of the Philippines, because those areas are not overlapped by any possible entitlement of China.

Lawfulness of Chinese Actions: The Tribunal next considered the lawfulness of Chinese actions in the South China Sea. Having found that certain areas are within the exclusive economic zone of the Philippines, the Tribunal found that China had violated the Philippines’ sovereign rights in its exclusive economic zone by (a) interfering with Philippine fishing and petroleum exploration, (b) constructing artificial islands and (c) failing to prevent Chinese fishermen from fishing in the zone. The Tribunal also held that fishermen from the Philippines (like those from China) had traditional fishing rights at Scarborough Shoal and that China had interfered with these rights in restricting access. The Tribunal further held that Chinese law enforcement vessels had unlawfully created a serious risk of collision when they physically obstructed Philippine vessels.

Harm to Marine Environment: The Tribunal considered the effect on the marine environment of China’s recent large-scale land reclamation and construction of artificial islands at seven features in the Spratly Islands and found that China had caused severe harm to the coral reef environment and violated its obligation to preserve and protect fragile ecosystems and the habitat of depleted, threatened, or endangered species. The Tribunal also found that Chinese authorities were aware that Chinese fishermen have harvested endangered sea turtles, coral, and giant clams on a substantial scale in the South China Sea (using methods that inflict severe damage on the coral reef environment) and had not fulfilled their obligations to stop such activities.

Aggravation of Dispute: Finally, the Tribunal considered whether China’s actions since the commencement of the arbitration had aggravated the dispute between the Parties. The Tribunal found that it lacked jurisdiction to consider the implications of a stand-off between Philippine marines and Chinese naval and law enforcement vessels at Second Thomas Shoal, holding that this dispute involved military activities and was therefore excluded from compulsory settlement. The Tribunal found, however, that China’s recent large-scale land reclamation and construction of artificial islands was incompatible with the obligations on a State during dispute resolution proceedings, insofar as China has inflicted irreparable harm to the marine environment, built a large artificial island in the Philippines’ exclusive economic zone, and destroyed evidence of the natural condition of features in the South China Sea that formed part of the Parties’ dispute.

An expanded summary of the Tribunal’s decisions is set out below.

The Tribunal was constituted on 21 June 2013 pursuant to the procedure set out in Annex VII of the Convention to decide the dispute presented by the Philippines. The Tribunal is composed of Judge Thomas A. Mensah of Ghana, Judge Jean-Pierre Cot of France, Judge Stanislaw Pawlak of Poland, Professor Alfred H.A. Soons of the Netherlands, and Judge Rüdiger Wolfrum of Germany. Judge Thomas A. Mensah serves as President of the Tribunal. The Permanent Court of Arbitration acts as the Registry in the proceedings.

Further information about the case may be found at www.pcacases.com/web/view/7, including the Award on Jurisdiction and Admissibility, the

Rules of Procedure, earlier Press Releases, hearing transcripts, and photographs. Procedural Orders, submissions by the Philippines, and reports by the Tribunal’s experts will be made available in due course, as will unofficial Chinese translations of the Tribunal’s Awards.

Background to the Permanent Court of Arbitration

The **Permanent Court of Arbitration (PCA)** is an intergovernmental organization established by the 1899 Hague Convention on the Pacific Settlement of International Disputes. The PCA has 121 Member States. Headquartered at the Peace Palace in The Hague, the Netherlands, the PCA facilitates arbitration, conciliation, fact-finding, and other dispute resolution proceedings among various combinations of States, State entities, intergovernmental organizations, and private parties. The PCA’s International Bureau is currently administering 8 interstate disputes, 73 investor-State arbitrations, and 34 cases arising under contracts involving a State or other public entity. The PCA has administered 12 cases initiated by States under Annex VII to the United Nations Convention on the Law of the Sea.

In July 2013, the Tribunal in the *South China Sea Arbitration* appointed the PCA to serve as Registry for the proceedings. The Tribunal’s Rules of Procedure provide that the PCA shall “maintain an archive of the arbitral proceedings and provide appropriate registry services as directed by the Arbitral Tribunal.” Such services include assisting with the identification and appointment of experts; publishing information about the arbitration and issuing press releases; organizing the hearings at the Peace Palace in The Hague; and the financial management of the case, which involves holding a deposit for expenses in the arbitration, such as to pay arbitrator fees, experts, technical support, court reporters etc. The Registry also serves as the channel of communications amongst the Parties and the Tribunal and observer States.

SUMMARY OF THE TRIBUNAL’S DECISIONS ON ITS JURISDICTION AND ON THE MERITS OF THE PHILIPPINES’ CLAIMS

1. Background to the Arbitration

The *South China Sea Arbitration* between the Philippines and China concerned an application by the Philippines for rulings in respect of four matters concerning the relationship between the Philippines and China in the South China Sea. First, the Philippines sought a ruling on the source of the Parties’ rights and obligations in the South China Sea and the effect of the United Nations Convention on the Law of the Sea (“Convention”) on China’s claims to historic rights within its so-called ‘nine-dash line’. Second, the Philippines sought a ruling on whether certain maritime features claimed by both China and the Philippines are properly characterized as islands, rocks, low-tide elevations or submerged banks under the Convention. The status of these features under the Convention determines the maritime zones they are capable of generating. Third, the Philippines sought rulings on whether certain Chinese actions in the South China Sea have violated the Convention, by interfering with the exercise of the Philippines’ sovereign rights and freedoms under the Convention or through construction and fishing activities that have harmed the marine environment. Finally, the Philippines sought a ruling that certain actions taken by China, in particular its large-scale land reclamation and construction of artificial islands in the Spratly Islands since this arbitration was commenced, have unlawfully aggravated and extended the Parties’ dispute.

The Chinese Government has adhered to the position of neither accepting nor participating in these arbitral proceedings. It has reiterated this position in diplomatic notes, in the “Position Paper of the Government of the People’s Republic of China on the Matter of Jurisdiction in the South China Sea Arbitration Initiated by the Republic of the Philippines” dated 7 December 2014 (“China’s Position Paper”), in letters to members of the Tribunal from the Chinese Ambassador to the Kingdom of the Netherlands, and in many public statements. The Chinese Government has also made clear that these statements and documents “shall by no means be interpreted as China’s participation in the arbitral proceeding in any form.”

Two provisions of the Convention address the situation of a party that objects to the jurisdiction of a tribunal and declines to participate in the proceedings:

(a) Article 288 of the Convention provides that: “In the event of a dispute as to whether a court or tribunal has jurisdiction, the matter shall be settled by decision of that court or tribunal.”

(b) Article 9 of Annex VII to the Convention provides that:

If one of the parties to the dispute does not appear before the arbitral tribunal or fails to defend its case, the other party may request the tribunal to continue the proceedings and to make its award. Absence of a party or failure of a party to defend its case shall not constitute a bar to the proceedings. Before making its award, the arbitral tribunal must satisfy itself not only that it has jurisdiction over the dispute but also that the claim is well founded in fact and law.

Throughout these proceedings, the Tribunal has taken a number of steps to fulfil its duty to satisfy itself as to whether it has jurisdiction and whether the Philippines’ claims are “well founded in fact and law”. With respect to jurisdiction, the Tribunal decided to treat China’s informal communications as equivalent to an objection to jurisdiction, convened a Hearing on Jurisdiction and Admissibility on 7 to 13 July 2015, questioned the Philippines both before and during the hearing on matters of jurisdiction, including potential issues not raised in China’s informal communications, and issued an Award on Jurisdiction and Admissibility on 29 October 2015 (the “Award on Jurisdiction”), deciding some issues of jurisdiction and deferring others for further consideration in conjunction with the merits of the Philippines’ claims. With respect to the merits, the Tribunal sought to test the accuracy of the Philippines’

claims by requesting further written submissions from the Philippines, by convening a hearing on the merits from 24 to 30 November 2015, by questioning the Philippines both before and during the hearing with respect to its claims, by appointing independent experts to report to the Tribunal on technical matters, and by obtaining historical records and hydrographic survey data for the South China Sea from the archives of the United Kingdom Hydrographic Office, the National Library of France, and the French National Overseas Archives and providing it to the Parties for comment, along with other relevant materials in the public domain.

2. The Parties’ Positions

The Philippines made 15 Submissions in these proceedings, requesting the Tribunal to find that:

(1) China’s maritime entitlements in the South China Sea, like those of the Philippines, may not extend beyond those expressly permitted by the United Nations Convention on the Law of the Sea;

(2) China’s claims to sovereign rights jurisdiction, and to “historic rights”, with respect to the maritime areas of the South China Sea encompassed by the so-called “nine-dash line” are contrary to the Convention and without lawful effect to the extent that they exceed the geographic and substantive limits of China’s maritime entitlements expressly permitted by UNCLOS;

(3) Scarborough Shoal generates no entitlement to an exclusive economic

zone or continental shelf;

(4) Mischief Reef, Second Thomas Shoal, and Subi Reef are low-tide elevations that do not generate entitlement to a territorial sea, exclusive economic zone or continental shelf, and are not features that are capable of appropriation by occupation or otherwise;

(5) Mischief Reef and Second Thomas Shoal are part of the exclusive economic zone and continental shelf of the Philippines;

(6) Gaven Reef and McKennan Reef (including Hughes Reef) are low-tide elevations that do not generate entitlement to a territorial sea, exclusive economic zone or continental shelf, but their low-water line may be used to determine the baseline from which the breadth of the territorial sea of Namyit and Sin Cowe, respectively, is measured;

(7) Johnson Reef, Cuarteron Reef and Fiery Cross Reef generate no entitlement to an exclusive economic zone or continental shelf;

(8) China has unlawfully interfered with the enjoyment and exercise of the sovereign rights of the Philippines with respect to the living and non-living resources of its exclusive economic zone and continental shelf;

(9) China has unlawfully failed to prevent its nationals and vessels from exploiting the living resources in the exclusive economic zone of the Philippines;

(10) China has unlawfully prevented Philippine fishermen from pursuing their livelihoods by interfering with traditional fishing activities at Scarborough Shoal;

(11) China has violated its obligations under the Convention to protect and preserve the marine environment at Scarborough Shoal, Second Thomas Shoal, Cuarteron Reef, Fiery Cross Reef, Gaven Reef, Johnson Reef, Hughes Reef and Subi Reef;

(12) China’s occupation of and construction activities on Mischief Reef

(a) violate the provisions of the Convention concerning artificial islands, instal-

lations and structures;

(b) violate China’s duties to protect and preserve the marine environment under the Convention; and

(c) constitute unlawful acts of attempted appropriation in violation of the Convention;

(13) China has breached its obligations under the Convention by operating its law enforcement vessels in a dangerous manner, causing serious risk of collision to Philippine vessels navigating in the vicinity of Scarborough Shoal;

(14) Since the commencement of this arbitration in January 2013, China has unlawfully aggravated and extended the dispute by, among other things:

(a) interfering with the Philippines’ rights of navigation in the waters at, and adjacent to, Second Thomas Shoal;

(b) preventing the rotation and resupply of Philippine personnel stationed at Second Thomas Shoal;

(c) endangering the health and well-being of Philippine personnel



Photograph: Hearing in session, July 2015, Peace Palace, The Hague. Clockwise from top left: Registrar and PCA Senior Legal Counsel Judith Levine; Judge Stanislaw Pawlak; Professor Alfred H. A. Soons; Judge Thomas A. Mensah (Presiding Arbitrator); Judge Jean-Pierre Cot; Judge Rüdiger Wolfrum; PCA Senior Legal Counsel Garth Schofield; former Secretary for Foreign Affairs of the Philippines, Mr. Albert F. Del Rosario; former Solicitor General Mr. Florin T. Hilbay, Counsel for the Philippines; Mr. Paul S. Reichler; Professor Philippe Sands; Professor Bernard H. Oxman; Professor Alan E. Boyle; Mr. Lawrence H. Martin.

stationed at Second Thomas Shoal; and

(d) conducting dredging, artificial island-building and construction activities at Mischief Reef, Cuarteron Reef, Fiery Cross Reef, Gaven Reef, Johnson Reef, Hughes Reef and Subi Reef; and

(15) China shall respect the rights and freedoms of the Philippines under the Convention, shall comply with its duties under the Convention, including those relevant to the protection and preservation of the marine environment in the South China Sea, and shall exercise its rights and freedoms in the South China Sea with due regard to those of the Philippines under the Convention.

With respect to jurisdiction, the Philippines has asked the Tribunal to declare that the Philippines' claims "are entirely within its jurisdiction and are fully admissible."

China does not accept and is not participating in this arbitration but stated its position that the Tribunal "does not have jurisdiction over this case." In its Position Paper, China advanced the following arguments:

- The essence of the subject-matter of the arbitration is the territorial sovereignty over several maritime features in the South China Sea, which is beyond the scope of the Convention and does not concern the interpretation or application of the Convention;

- China and the Philippines have agreed, through bilateral instruments and the Declaration on the Conduct of Parties in the South China Sea, to settle their relevant disputes through negotiations. By unilaterally initiating the present arbitration, the Philippines has breached its obligation under international law;

- Even assuming, *arguendo*, that the subject-matter of the arbitration were concerned with the interpretation or application of the Convention, that subject-matter would constitute an integral part of maritime delimitation between the two countries, thus falling within the scope of the declaration filed by China in 2006 in accordance with the Convention, which excludes, *inter alia*, disputes concerning maritime delimitation from compulsory arbitration and other compulsory dispute settlement procedures;

Although China has not made equivalent public statements with respect to the merits of the majority of the Philippines' claims, the Tribunal has sought throughout the proceedings to ascertain China's position on the basis of its contemporaneous public statements and diplomatic correspondence.

3. The Tribunal's Decisions on the Scope of its Jurisdiction

The Tribunal has addressed the scope of its jurisdiction to consider the Philippines' claims both in its Award on Jurisdiction, to the extent that issues of jurisdiction could be decided as a preliminary matter, and in its Award of 12 July 2016, to the extent that issues of jurisdiction were intertwined with the merits of the Philippines' claims. The Tribunal's Award of 12 July 2016 also incorporates and reaffirms the decisions on jurisdiction taken in the Award on Jurisdiction.

For completeness, the Tribunal's decisions on jurisdiction in both awards are summarized here together.

a. Preliminary Matters

In its Award on Jurisdiction, the Tribunal considered a number of preliminary matters with respect to its jurisdiction. The Tribunal noted that both the Philippines and China are parties to the Convention and that the Convention does not permit a State to exempt itself generally from the mechanism for the resolution of disputes set out in the Convention. The Tribunal held that China's non-participation does not deprive the Tribunal of jurisdiction and that the Tribunal had been properly constituted pursuant to the provisions of Annex VII to the Convention, which include a procedure to form a tribunal even in the absence of one party. Finally, the Tribunal rejected an argument set out in China's Position Paper and held that the mere act of unilaterally initiating an arbitration cannot constitute an abuse of the Convention.

b. Existence of a Dispute Concerning Interpretation and Application of the Convention

In its Award on Jurisdiction, the Tribunal considered whether the Parties'

disputes concerned the interpretation or application of the Convention, which is a requirement for resort to the dispute settlement mechanisms of the Convention.

The Tribunal rejected the argument set out in China's Position Paper that the Parties' dispute is actually about territorial sovereignty and therefore not a matter concerning the Convention. The Tribunal accepted that there is a dispute between the Parties concerning sovereignty over islands in the South China Sea, but held that the matters submitted to arbitration by the Philippines do not concern sovereignty. The Tribunal considered that it would not need to implicitly decide sovereignty to address the Philippines' Submissions and that doing so would not advance the sovereignty claims of either Party to islands in the South China Sea.

The Tribunal also rejected the argument set out in China's Position Paper that the Parties' dispute is actually about maritime boundary delimitation and therefore excluded from dispute settlement by Article 298 of the Convention and a declaration that China made on 25 August 2006 pursuant to that Article. The Tribunal noted that a dispute concerning whether a State has an entitlement to a maritime zone is a distinct matter from the delimitation of maritime zones in an area in which they overlap. The Tribunal noted that entitlements, together with a wide variety of other issues, are commonly considered in a boundary delimitation, but can also arise in other contexts. The Tribunal held that it does not follow that a dispute over each of these issues is necessarily a dispute over boundary delimitation.

Finally, the Tribunal held that each of the Philippines' Submissions reflected a dispute concerning the Convention. In doing so, the Tribunal emphasized (a) that a dispute concerning the interaction between the Convention and other rights (including any Chinese "historic rights") is a dispute concerning the Convention and (b) that where China has not clearly stated its position, the existence of a dispute may be inferred from the conduct of a State or from silence and is a matter to be determined objectively.

c. Involvement of Indispensable Third-Parties

In its Award on Jurisdiction, the Tribunal considered whether the absence from this arbitration of other States that have made claims to the islands of the South China Sea would be a bar to the Tribunal's jurisdiction. The Tribunal noted that the rights of other States would not form "the very subject-matter of the decision," the standard for a third-party to be indispensable. The Tribunal further noted that in December 2014, Viet Nam had submitted a statement to the Tribunal, in which Viet Nam asserted that it has "no doubt that the Tribunal has jurisdiction in these proceedings." The Tribunal also noted that Viet Nam, Malaysia, and Indonesia had attended the hearing on jurisdiction as observers, without any State raising the argument that its participation was indispensable.

In its Award of 12 July 2016, the Tribunal noted that it had received a communication from Malaysia on 23 June 2016, recalling Malaysia's claims in the South China Sea. The Tribunal compared its decisions on the merits of the Philippines' Submissions with the rights claimed by Malaysia and reaffirmed its decision that Malaysia is not an indispensable party and that Malaysia's interests in the South China Sea do not prevent the Tribunal from addressing the Philippines' Submissions.

d. Preconditions to Jurisdiction

In its Award on Jurisdiction, the Tribunal considered the applicability of Articles 281 and 282 of the Convention, which may prevent a State from making use of the mechanisms under the Convention if they have already agreed to another means of dispute resolution.

The Tribunal rejected the argument set out in China's Position Paper that the 2002 China-ASEAN Declaration on the Conduct of Parties in the South China Sea prevented the Philippines from initiating arbitration. The Tribunal held that the Declaration is a political agreement and not legally binding, does not provide a mechanism for binding settlement, does not exclude other means of dispute settlement, and therefore does not restrict the Tribunal's jurisdiction under Articles 281 or 282. The Tribunal also considered the Treaty of Amity and Cooperation in Southeast Asia, and the Convention on Biological Diversity, and a series of joint statements issued

by the Philippines and China referring to the resolution of disputes through negotiations and concluded that none of these instruments constitute an agreement that would prevent the Philippines from bringing its claims to arbitration.

The Tribunal further held that the Parties had exchanged views regarding the settlement of their disputes, as required by Article 283 of the Convention, before the Philippines initiated the arbitration. The Tribunal concluded that this requirement was met in the record of diplomatic communications between the Philippines and China, in which the Philippines expressed a clear preference for multilateral negotiations involving the other States surrounding the South China Sea, while China insisted that only bilateral talks could be considered.

e. Exceptions and Limitations to Jurisdiction

In its Award of 12 July 2016, the Tribunal considered whether the Philippines' Submissions concerning Chinese historic rights and the 'nine-dash line' were affected by the exception from jurisdiction for disputes concerning "historic title" in Article 298 of the Convention. The Tribunal reviewed the meaning of "historic title" in the law of the sea and held that this refers to claims of historic sovereignty over bays and other near-shore waters. Reviewing China's claims and conduct in the South China Sea, the Tribunal concluded that China claims historic rights to resources within the 'nine-dash line', but does not claim historic title over the waters of the South China Sea. Accordingly, the Tribunal concluded that it had jurisdiction to consider the Philippines' claims concerning historic rights and, as between the Philippines and China, the 'nine-dash line'.

In its Award of 12 July 2016, the Tribunal also considered whether the Philippines' Submissions were affected by the exception from jurisdiction in Article 298 for disputes concerning sea boundary delimitation. The Tribunal had already found in its Award on Jurisdiction that the Philippines' Submissions do not concern boundary delimitation as such, but noted that several of the Philippines' Submissions were dependent on certain areas forming part of the Philippines' exclusive economic zone. The Tribunal held that it could only address such submissions if there was no possibility that China could have an entitlement to an exclusive economic zone overlapping that of the Philippines and deferred a final decision on its jurisdiction. In its Award of 12 July 2016, the Tribunal reviewed evidence about the reefs and islands claimed by China in the South China Sea and concluded that none is capable of generating an entitlement to an exclusive economic zone. Because China has no possible entitlement to an exclusive economic zone overlapping that of the Philippines in the Spratly Islands, the Tribunal held that the Philippines' submissions were not dependent on a prior delimitation of a boundary.

In its Award of 12 July 2016, the Tribunal also considered whether the Philippines' Submissions were affected by the exception from jurisdiction in Article 298 for disputes concerning law enforcement activities in the exclusive economic zone. The Tribunal recalled that the exception in Article 298 would apply only if the Philippines' Submissions related to law enforcement activities in China's exclusive economic zone. Because, however, the Philippines' Submissions related to events in the Philippines' own exclusive economic zone or in the territorial sea, the Tribunal concluded that Article 298 did not pose an obstacle to its jurisdiction.

Lastly, in its Award of 12 July 2016, the Tribunal considered whether the Philippines' submissions were affected by the exception from jurisdiction in Article 298 for disputes concerning military activities. The Tribunal considered that the stand-off between Philippine marines on Second Thomas Shoal and Chinese naval and law enforcement vessels constituted military activities and concluded that it lacked jurisdiction over the Philippines' Submission No. 14(a)-(c). The Tribunal also considered whether China's land reclamation and construction of artificial islands at seven features in the Spratly Islands constituted military activities, but noted that China had repeatedly emphasized the non-military nature of its actions and had stated at the highest level that it would not militarize its presence in the Spratlys. The Tribunal decided that it would not deem activities to be military in nature when China itself had repeatedly affirmed the opposite. Accordingly, the Tribunal concluded that Article 298 did not pose an

obstacle to its jurisdiction.

4. The Tribunal's Decisions on the Merits of the Philippines' Claims

a. The 'Nine-Dash Line' and China's Claim to Historic Rights in the Maritime Areas of the South China Sea

In its Award of 12 July 2016, the Tribunal considered the implications of China's 'nine-dash line' and whether China has historic rights to resources in the South China Sea beyond the limits of the maritime zones that it is entitled to pursuant to the Convention.

The Tribunal examined the history of the Convention and its provisions concerning maritime zones and concluded that the Convention was intended to comprehensively allocate the rights of States to maritime areas. The Tribunal noted that the question of pre-existing rights to resources (in particular fishing resources) was carefully considered during the negotiations on the creation of the exclusive economic zone and that a number of States wished to preserve historic fishing rights in the new zone. This position was rejected, however, and the final text of the Convention gives other States only a limited right of access to fisheries in the exclusive economic zone (in the event the coastal State cannot harvest the full allowable catch) and no rights to petroleum or mineral resources. The Tribunal found that China's claim to historic rights to resources was incompatible with the detailed allocation of rights and maritime zones in the Convention and concluded that, to the extent China had historic rights to resources in the waters of the South China Sea, such rights were extinguished by the entry into force of the Convention to the extent they were incompatible with the Convention's system of maritime zones.

The Tribunal also examined the historical record to determine whether China actually had historic rights to resources in the South China Sea prior to the entry into force of the Convention. The Tribunal noted that there is evidence that Chinese navigators and fishermen, as well as those of other States, had historically made use of the islands in the South China Sea, although the Tribunal emphasized that it was not empowered to decide the question of sovereignty over the islands. However, the Tribunal considered that prior to the Convention, the waters of the South China Sea beyond the territorial sea were legally part of the high seas, in which vessels from any State could freely navigate and fish. Accordingly, the Tribunal concluded that historical navigation and fishing by China in the waters of the South China Sea represented the exercise of high seas freedoms, rather than a historic right, and that there was no evidence that China had historically exercised exclusive control over the waters of the South China Sea or prevented other States from exploiting their resources.

Accordingly, the Tribunal concluded that, as between the Philippines and China, there was no legal basis for China to claim historic rights to resources, in excess of the rights provided for by the Convention, within the sea areas falling within the 'nine-dash line'.

b. The Status of Features in the South China Sea

In its Award of 12 July 2016, the Tribunal considered the status of features in the South China Sea and the entitlements to maritime areas that China could potentially claim pursuant to the Convention.

The Tribunal first undertook a technical evaluation as to whether certain coral reefs claimed by China are or are not above water at high tide. Under Articles 13 and 121 of the Convention, features that are above water at high tide generate an entitlement to at least a 12 nautical mile territorial sea, whereas features that are submerged at high tide generate no entitlement to maritime zones. The Tribunal noted that many of the reefs in the South China Sea have been heavily modified by recent land reclamation and construction and recalled that the Convention classifies features on the basis of their natural condition. The Tribunal appointed an expert hydrographer to assist it in evaluating the Philippines' technical evidence and relied heavily on archival materials and historical hydrographic surveys in evaluating the features. The Tribunal agreed with the Philippines that Scarborough Shoal, Johnson Reef, Cuarteron Reef, and Fiery Cross Reef are high-tide features and that Subi Reef, Hughes Reef, Mischief Reef, and Second Thomas Shoal were submerged at high tide in their natural condition. However, the Tribunal disagreed with the Philippines regarding the status of Gaven Reef (North) and McKennan Reef and concluded that both are high tide features.

The Tribunal then considered whether any of the features claimed by China could generate an entitlement to maritime zones beyond 12 nautical miles. Under Article 121 of the Convention, islands generate an entitlement to an exclusive economic zone of 200 nautical miles and to a continental shelf, but “[r]ocks which cannot sustain human habitation or economic life of their own shall have no exclusive economic zone or continental shelf.” The Tribunal noted that this provision was closely linked to the expansion of coastal State jurisdiction with the creation of the exclusive economic zone and was intended to prevent insignificant features from generating large entitlements to maritime zones that would infringe on the entitlements of inhabited territory or on the high seas and the area of the seabed reserved for the common heritage of mankind. The Tribunal interpreted Article 121 and concluded that the entitlements of a feature depend on (a) the objective capacity of a feature, (b) in its natural condition, to sustain either (c) a stable community of people or (d) economic activity that is neither dependent on outside resources nor purely extractive in nature.

The Tribunal noted that many of the features in the Spratly Islands are currently controlled by one or another of the littoral States, which have constructed installations and maintain personnel there. The Tribunal considered these modern presences to be dependent on outside resources and support and noted that many of the features have been modified to improve their habitability, including through land reclamation and the construction of infrastructure such as desalination plants. The Tribunal concluded that the current presence of official personnel on many of the features does not establish their capacity, in their natural condition, to sustain a stable community of people and considered that historical evidence of habitation or economic life was more relevant to the objective capacity of the features. Examining the historical record, the Tribunal noted that the Spratly Islands were historically used by small groups of fishermen from China, as well as other States, and that several Japanese fishing and guano mining enterprises were attempted in the 1920s and 1930s. The Tribunal concluded that temporary use of the features by fishermen did not amount to inhabitation by a stable community and that all of the historical economic activity had been extractive in nature. Accordingly, the Tribunal concluded that all of the high-tide features in the Spratly Islands (including, for example, Itu Aba, Thitu, West York Island, Spratly Island, North-East Cay, South-West Cay) are legally “rocks” that do not generate an exclusive economic zone or continental shelf.

The Tribunal also held that the Convention does not provide for a group of islands such as the Spratly Islands to generate maritime zones collectively as a unit.

c. Chinese Activities in the South China Sea

In its Award of 12 July 2016, the Tribunal considered the lawfulness under the Convention of various Chinese actions in the South China Sea.

Having found that Mischief Reef, Second Thomas Shoal and Reed Bank are submerged at high tide, form part of the exclusive economic zone and continental shelf of the Philippines, and are not overlapped by any possible entitlement of China, the Tribunal concluded that the Convention is clear in allocating sovereign rights to the Philippines with respect to sea areas in its exclusive economic zone. The Tribunal found as a matter of fact that China had (a) interfered with Philippine petroleum exploration at Reed Bank, (b) purported to prohibit fishing by Philippine vessels within the Philippines’ exclusive economic zone, (c) protected and failed to prevent Chinese fishermen from fishing within the Philippines’ exclusive economic zone at Mischief Reef and Second Thomas Shoal, and (d) constructed installations and artificial islands at Mischief Reef without the authorization of the Philippines. The Tribunal therefore concluded that China had violated the Philippines’ sovereign rights with respect to its exclusive economic zone and continental shelf.

The Tribunal next examined traditional fishing at Scarborough Shoal and concluded that fishermen from the Philippines, as well as fishermen from China and other countries, had long fished at the Shoal and had traditional fishing rights in the area. Because Scarborough Shoal is above water at high tide, it generates an entitlement to a territorial sea, its surrounding waters do not form part of the exclusive economic zone, and traditional fishing rights were not extinguished by the Convention. Although the Tribunal emphasized that

it was not deciding sovereignty over Scarborough Shoal, it found that China had violated its duty to respect to the traditional fishing rights of Philippine fishermen by halting access to the Shoal after May 2012. The Tribunal noted, however, that it would reach the same conclusion with respect to the traditional fishing rights of Chinese fishermen if the Philippines were to prevent fishing by Chinese nationals at Scarborough Shoal.

The Tribunal also considered the effect of China’s actions on the marine environment. In doing so, the Tribunal was assisted by three independent experts on coral reef biology who were appointed to assist it in evaluating the available scientific evidence and the Philippines’ expert reports. The Tribunal found that China’s recent large scale land reclamation and construction of artificial islands at seven features in the Spratly Islands has caused severe harm to the coral reef environment and that China has violated its obligation under Articles 192 and 194 of the Convention to preserve and protect the marine environment with respect to fragile ecosystems and the habitat of depleted, threatened, or endangered species. The Tribunal also found that Chinese fishermen have engaged in the harvesting of endangered sea turtles, coral, and giant clams on a substantial scale in the South China Sea, using methods that inflict severe damage on the coral reef environment. The Tribunal found that Chinese authorities were aware of these activities and failed to fulfill their due diligence obligations under the Convention to stop them.

Finally, the Tribunal considered the lawfulness of the conduct of Chinese law enforcement vessels at Scarborough Shoal on two occasions in April and May 2012 when Chinese vessels had sought to physically obstruct Philippine vessels from approaching or gaining entrance to the Shoal. In doing so, the Tribunal was assisted by an independent expert on navigational safety who was appointed to assist it in reviewing the written reports provided by the officers of the Philippine vessels and the expert evidence on navigational safety provided by the Philippines. The Tribunal found that Chinese law enforcement vessels had repeatedly approached the Philippine vessels at high speed and sought to cross ahead of them at close distances, creating serious risk of collision and danger to Philippine ships and personnel. The Tribunal concluded that China had breached its obligations under the Convention on the International Regulations for Preventing Collisions at Sea, 1972, and Article 94 the Convention concerning maritime safety.

d. Aggravation of the Dispute between the Parties

In its Award of 12 July 2016, the Tribunal considered whether China’s recent large-scale land reclamation and construction of artificial islands at seven features in the Spratly Islands since the commencement of the arbitration had aggravated the dispute between the Parties. The Tribunal recalled that there exists a duty on parties engaged in a dispute settlement procedure to refrain from aggravating or extending the dispute or disputes at issue during the pendency of the settlement process. The Tribunal noted that China has (a) built a large artificial island on Mischief Reef, a low-tide elevation located in the exclusive economic zone of the Philippines; (b) caused permanent, irreparable harm to the coral reef ecosystem and (c) permanently destroyed evidence of the natural condition of the features in question. The Tribunal concluded that China had violated its obligations to refrain from aggravating or extending the Parties’ disputes during the pendency of the settlement process.

e. Future Conduct of the Parties

Finally, the Tribunal considered the Philippines’ request for a declaration that, going forward, China shall respect the rights and freedoms of the Philippines and comply with its duties under the Convention. In this respect, the Tribunal noted that both the Philippines and China have repeatedly accepted that the Convention and general obligations of good faith define and regulate their conduct. The Tribunal considered that the root of the disputes at issue in this arbitration lies not in any intention on the part of China or the Philippines to infringe on the legal rights of the other, but rather in fundamentally different understandings of their respective rights under the Convention in the waters of the South China Sea. The Tribunal recalled that it is a fundamental principle of international law that bad faith is not presumed and noted that Article 11 of Annex VII provides that the “award . . . shall be complied with by the parties to the dispute.” The Tribunal therefore considered that no further declaration was necessary.



Joint Development on the West Philippine Sea



By Commo. Carlos L. Agustin, AFP (Ret)

During the China-ASEAN Dialogue between Senior Defense Scholars held at Beijing, China on 11 – 15 March 2008, I presented a paper on Confidence-Building Measures Towards Greater Regional Stability. Military modernization in China was being perceived in a way that caused concern to some countries which fear a repeat of the arms race during the Cold War on one hand and smaller neighboring countries fearful of being bullied by its giant neighbor on the other, the need for confidence building measures within the region became that more urgent. China's occupation of a few islets, starting a few years earlier, had become a destabilizing issue.

Since time immemorial, winning the trust and confidence of other countries, especially those nearby, has been universally practiced. In this era of globalization, cross-border issues and economic uncertainty, states seek better means to establish a "comfort zone" wherein they can conduct activities with one another, make collective decisions while, at the same time,

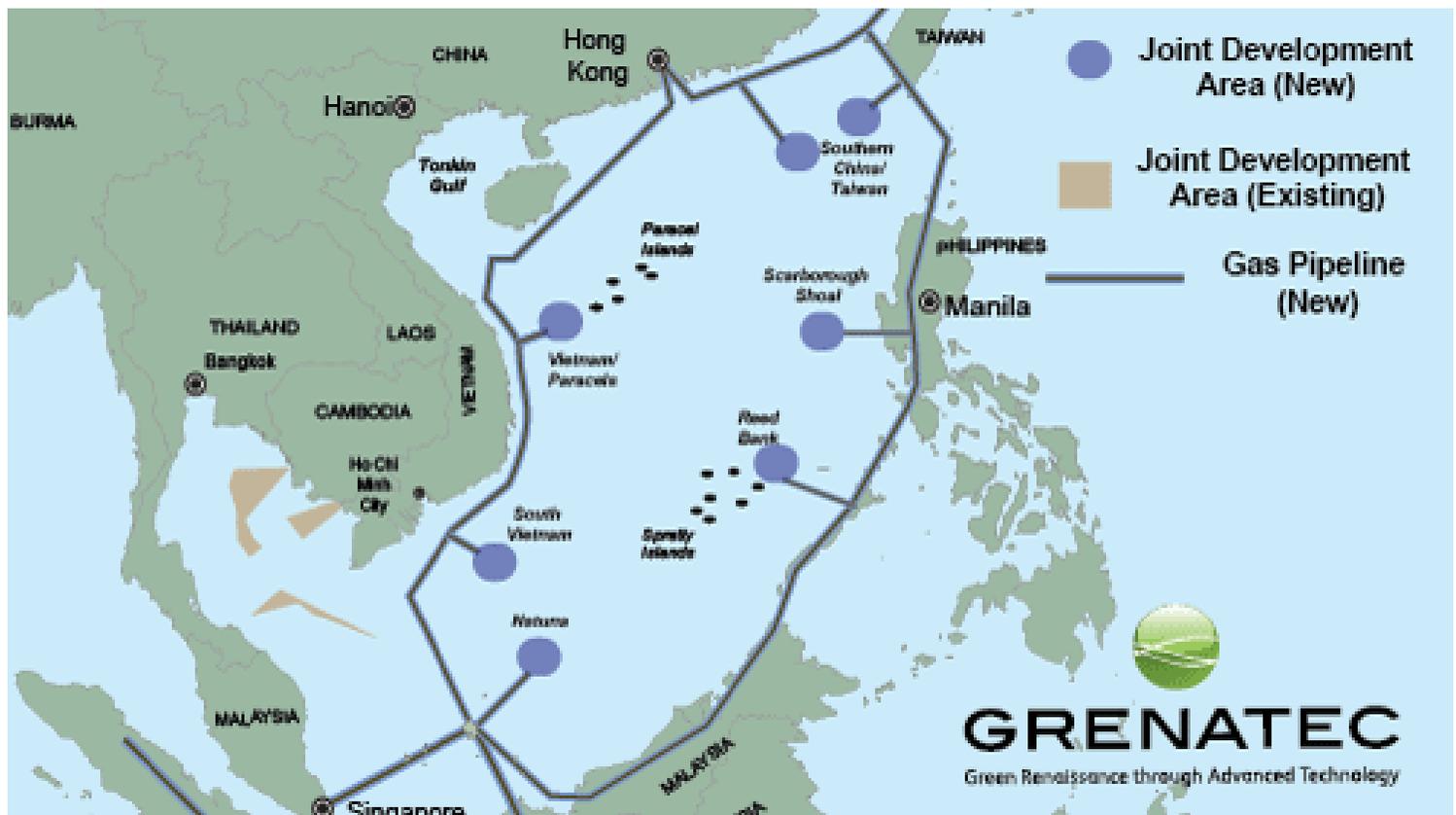
pursue policies without jeopardizing their individual national interests. Confidence-building is a significant concern in the Asia Pacific, not only because of the great number of states in the region with some having historical enmities but, more importantly, because of the wide differences exhibited by states in approaching issues of common concern. For the region to be truly stable, therefore, a significant level of mutual trust has to be developed and ensured between and among regional actors.

The ultimate objective of confidence building is to achieve security from perceived threats. General and specific steps undertaken towards the minimization of apprehensions and distrust constitute what are formally called as confidence-building measures (CBMs). According to Sheldon W Simon, CBMs are arrangements "between two or more parties regarding exchanges of information and verification, typically with respect to the use of military forces and armaments."

As an important element in defense and

military affairs, CBMs spring from states' inherent fear of unanticipated and miscalculated military attacks by other hostile or adversarial countries. They can be useful even at tactical level, as experienced in the use of the "communications hotline" (between commanders of maneuver forces) agreement, which prohibited preemptive attacks during the India-Pakistan hostilities in 1991. In a similar situation about a decade later, Indian and Pakistani commanders had the additional advantage of being personally acquainted by having attended together an advance security course sponsored by the Asia Pacific Center of Strategic Studies in Honolulu, as related to me by retired US Ambassador Charles Salmon (who was then in the APCSS faculty) during his visit in Manila in 2004.

However, the militarization of the South China Sea, including much of the West Philippine Sea, had seriously aggravated the situation. The Philippines' going to the Arbitral Tribunal, moreover, had made the Philippines-China cleavage deeper.



"A series of Joint Development Areas funded by China's Asian Infrastructure Investment Bank (AIIB) would solve several problems at once. Connected by pipeline infrastructure, they would more deeply integrate Asia's energy markets." (source: www.grenatec.com)

Barely at the eve of the announcement of the Arbitral Tribunal's decision to be made by July 12, 2016, I came across a series of papers written by Stewart Taggart in www.grenatec.com that suggests that joint development with China while risking joint patrol with the US may be a Philippine option.

In his July 9 article, Taggart surmised that:

In coming days, a UN Tribunal is expected to rule in the Philippines' favor in its territorial dispute with China over Scarborough Shoal. China has flagged it will reject any tribunal decision that doesn't go its way.

When that happens, the ball will be in the Philippines' court. Manila's newly-elected, largely-untested president Rodrigo Duterte will have important decisions to make.

Given Duterte's 'tough guy' image, one response for Duterte could be to participate in joint patrols with the United States to Scarborough Shoal. That would be a stick, since China would almost certainly hesitate to directly antagonize a US escort ship.

A carrot, by contrast, would be an offer by the Philippines for joint oil and gas exploration of the Scarborough Shoal area. Duterte's also lofted that trial balloon.

Taggart further justifies his proposal:

Chinese and Philippine companies have been holding on and off talks for years now regarding joint exploration and development of the Reed Bank area further south.

Some combination of the two would probably be Duterte's best option. This would include a freedom of navigation exercise with US around Scarborough Shoal in response to the UN tribunal ruling, along with extension of a commercial olive branch to China of joint development at Scarborough Shoal.

Done right, neither side would lose face.

Both could potentially gain: China gets a social license, the Philippines gets needed capital -- and the Southeast Asian region would get a welcome template for managing rising military tensions.

The US — the Philippines' primary military ally — would almost certainly bless this approach. It turns a territorial issue into a trade issue, providing breathing room for everyone. Result: nobody loses face; nobody starts shooting.

The US gets to claim a win on 'freedom of navigation,' the Philippines maintains its territorial assertion Scarborough

Shoal lies within its 200 kilometer Exclusive Economic Zone, and China gets the best outcome for a bad hand of cards due to its miscalculated over-reach in the South China Sea.

For China, South China Sea territorial tensions with the neighbors is damaging China's export infrastructure drive and the economic credibility of China's Asian Infrastructure Investment Bank (AIIB).

Both are much more important right now than bullying the neighbors over offshore waters that may or may not have long-term economic value.

Taggart's idea involves utilization of China's Asian Infrastructure Investment Bank (AIIB), which needs "international outlets for spare capacity in its infrastructure industry."

Certainly it will easily gobble up spare capacity with just the gigantic project he has in mind: the resurrection by the *Association of Southeast Asian Nation States of its Trans-ASEAN Gas Pipeline (TAGP)* project, and its submission to China's AIIB for funding.

The proposal elevates the matter to regional rather than bilateral issue, which can be palatable to China only if the matter of ownership is not discussed. It will be acceptable to all ASEAN countries as they will share in the benefits of cheap energy (see map on p. 17).

Regional confidence building is obviously more demanding and challenging than at the bilateral levels. Establishing regional CBMs would mean more parties to involve, more interests to satisfy, more threat perceptions to understand, more interpretations and assessments to explain, more strategies to incorporate, more proposals to consider, and more logistical concerns to address. Nevertheless, confidence-building measures at the regional stage also offer opportunities. An agreement forged at the regional level (especially if backed by sanctions for non-adherence) is harder to infringe. A country in violation of such an agreement faces the possibility of being multilaterally penalized (or at least criticized). Regional mechanisms, because of their geographical scope, can best cater to calls for regional stability.

Thus I fully subscribe to serious consideration by the National Security Council of the suggestions made by Stewart Taggart. The discussions on implementing the decision of the Arbitral Tribunal can be set aside formally and can be done separately at a convenient time acceptable to both China and the Philippines. ⚓



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Philippine Defense Procurement: Issues and Prospects

by VAdm Emilio C. Marayag Jr. AFP (Ret)



The defense of the Philippines from both internal and external threats is the principal business of the Armed Forces of the Philippines (AFP). To enable the AFP to fully perform its mandate, it should possess affordable war fighting capabilities that can also be used for operations other than war (OOTW) like counter-terrorism, humanitarian assistance and disaster relief, search and rescue, peace-keeping and to certain extent maritime law enforcement. Thus, defense procurement policy must include three basic considerations in buying major defense equipment and weapons systems: war fighting capability, operational flexibility, and value for money.

War fighting consideration involves selecting defense equipment that allows the AFP units to detect, move, communicate, shoot, pursue, withdraw, and prevail in a battle space. Operational flexibility permits the use of a particular war fighting equipment in other roles and missions to sustain one's advantage in battle or to undertake OOTW. Value for money, on the other hand, calls for optimizing the benefit and features of selected defense equipment with the given budget.

As former colony of United States, the Philippines used to receive "hand-me-down" defense equipment and the defense decision makers conveniently depended on the American supply train to sustain those equipment. Previous attempts to develop self-reliant defense posture that was decreed in 1974 miserably failed to a level that none of the major equipment acquisition was ever awarded to a local company. The abrogation of the RP-US Military Bases Agreement in 1992 and the enactment of the AFP Modernization Law in 1995 brought about unparalleled opportunity to harness domestic industries' contribution to national defense. This opportunity is extended by another 15 years with the passage of the Revised AFP Modernization Program.

This article reviews the existing defense procurement laws, identifies some procurement issues and presents prospects for local defense equipment manufacturers, particularly shipbuilding.

Defense Procurement Laws. There are basically four laws that directly deal with procurement of defense equipment and weapons systems: RA 9184 (2002), RA 7898 (1995), RA 10349 (2012), and PD 415 (1974). The Implementing Guidelines, Rules and Regulations for RA 9184 and RA 10349 are detailed instructions to procurement officials in purchasing goods and services, including major defense articles.

The Government Procurement Reform Act (RA 9184) came out in 2002 with its revised implementing rules and regulations (IRR) issued in 2009. This legislative fiat mandates five governing principles in government procurement: transparency, competitiveness, streamlined process, accountability, and public monitoring. It highlights competitive bidding as the general mode of procurement, and assigns the responsibilities of procuring officials from head of agency to its bids and award committee. It also enumerated the offenses that deviate from the normal procurement transactions, and set penalties for public officers who commit such offenses. Likewise, the law created the Government Policy and Procurement Board (GPPB) to "protect national interest in all matters affecting public procurement." GPPB's functions include setting procurement standards, formulating/amending IRRs, and conducting annual reviews on the law's effectiveness.

Central to the procurement process is the Bids and Awards Committee (BAC) that ensures that the procured items are delivered within specified timeframe to the end-users in accordance with defined quality and quantity and right price. The BAC prepares all documentary requirements for the procurement and sees to it that the head of the procurement agency receives all the necessary information before he makes the procurement decision. The BAC also serves as a link to the GPPB legal division, and contacts the invited observers during the bidding sessions.

RA 9184 covers all procurement undertaken by various agencies and instrumentalities, and opens to the public nearly everything for monitoring. This "general

public participation," instead of congressional oversight, compromises the confidential nature of certain goods and services lined up for procurement. Thus, crafting new rules and regulations to govern the purchase of major and highly classified defense articles will enhance national security.

One significant law that provides incentives to local defense industries, including shipbuilders, and preserves the confidentiality of defense equipment is Presidential Decree Nr 415, "Authorizing the Secretary of National Defense to Enter Into Contracts to Implement Projects Under the Self-Reliant Defense Programs and for Other Purposes." The objectives of this mid-70s law were to achieve self-reliant defense posture and, at the same time, generate employment opportunities, stimulate industrial and commercial activities, and conserve dollar reserves. During those times the Defense Department procured from sources other than the U.S. military major equipment, with or without public bidding. In the early 1980s, the navy used SRDP funds to construct two Aguineldo-class 145-foot gunboats and two 32-foot coast guard cutters while the air force built a light aircraft called "Layang." Defense contractors also availed of incentives under the Investment Incentives Act of 1967 (RA 5186). This law allowed some local defense industries to grow by engaging in the manufacture and fabrication of small caliber weapons and ammunitions in the 1970s but none of those defense companies ventured into big-ticket equipment manufacture to develop a robust self-reliant defense posture (SRDP). The program failed to gain support from succeeding political leaders, e.g., the Army's Infantry Fighting Vehicles and Air Force's basic pilot trainer projects in the late 1980s did not consider the local defense contractors participation by way of joint venture arrangement or in-country manufacture.

The security landscape in the 1990s changed drastically after the Cold War. The American forces left their bases in 1992 when Philippine Senate did not ratify the proposed Treaty of Cooperation, Amity and Friendship that would have replaced the 1947 Military Bases Agreement. The bipolar security orientation became multi-polar.

Old animosities among the nation states resurfaced and non-state players emerged. The security environment has become volatile, uncertain, complex and ambiguous. The departure of US troops also created “security vacuum” in Southeast Asia and other parts of the Asia-Pacific region. This may have emboldened China to occupy Mischief Reef, a known Filipino fishing refuge in the Spratlys, and convert it into a naval detachment in 1995. The Chinese seizure apparently hastened the approval of the AFP Modernization Act (RA 7898) of February 1995. In December 1996, Congress came up with Joint Resolution Nr 28 (JR 28) approving the AFP Capability Development Projects to implement RA 7898.

Republic Act Nr 7898 aimed to modernize the AFP to “effectively and fully perform its constitutional mandate to uphold the sovereignty and preserve the patrimony” of the country. It listed five modernization program components, namely: (1) force restructuring and organizational development, (2) capability, materiel and technology development, (3) bases/support system development, (4) human resource development, and (5) doctrines development. Since the operational focus shifted from internal to external the bulk of financial requirements was funneled to capability, materiel, and technology component. According to this law, the AFP will receive 50 billion pesos for the first five years starting 1996 for its capability development program. Unfortunately, the government financial managers did not fund the program so there was not a single delivery of major defense equipment five years after the passage of the law. Fortunately, the AFP continued to receive minor defense articles from the US under the Foreign Military Financing Program to shore up its inventory.

The same law directed the defense department (DND) and the AFP to strengthen their procurement system that involves two sequential yet separate steps: equipment acquisition and contract negotiations. These steps both require the approval of the defense secretary. The armed services (Army, Navy, Air Force, and selected GHQ units) initiate equipment acquisition that should pass through the AFP Weapons Systems Board while the AFP General Headquarters (GHQ) undertakes contract negotiations. One significant provision of this law insofar as acquisition is concerned is that “no major equipment or weapons systems shall be purchased if the same are not being used by the armed forces in the country of origin or

used by the armed forces of at least two countries.” For defense purchasing practitioners, this refers to the “proven design” concept.

With too many defense items listed in the program the AFP did not have enough manpower and competence for large-scale procurement. Further the failure to wipe out the local insurgency by the national police from 1992 up to 1998 led Congress to transfer back to AFP the counter-insurgency duties. The re-assumption of the responsibility for internal security operations (ISO) adversely affected the modernization program. The planned force structure on which defense equipment procurement was based bloated instead of shrinking. Decision makers prioritized the funding for AFP ISO equipment and related projects and constantly revised the programmed items set forth by JR 28. This resulted to delayed deliveries of external-defense equipment.

In July 2012, Congress passed the Revised AFP Modernization Law (RA 10349). The new law extends the program life by another fifteen years and allocates 75 billion pesos for the first five years. It also highlights AFP transformation to a multi-capable force to confront both internal and external threats and established a congressional oversight committee to monitor and oversee the program. However, it retained the “proven design” concept of the old law.

To concretize the intent of the law, the DND issued the Revised AFP Modernization Implementing Guidelines, Rules and Regulations (IGRR) in April 2013. The IGRR reechoes the basic law’s provisions, sets objectives and identifies core security concerns. It also devotes substantial space for procurement procedures. Most importantly the IGRR recognizes the SRDP program and provides an incentive to local industries, to wit: “Article 3.10.4. Local manufacturers shall be exempt from the requirement on the purchase of major equipment and weapons systems only when used by the armed forces in the country of origin or used by the armed forces of at least two countries.”

Procurement Issues. Several issues surfaced with the above procurement laws, rules and regulations. The first issue is the capacity of the DND/AFP to embark on a massive procurement undertaking. In general, the two main actors in purchasing defense equipment are the buyer and the supplier. The complexity of the government procurement requires highly competent

workforce of the purchasing agency to determine the technical specifications of the offered equipment to suit the end-users’ operational requirements. The buyer must also assure compliance by the supplier as to its production and financial capability to deliver the right equipment in the right time and in the right place based on the right price. It must ensure that all procurement actions are in conformity with the rules set by accountability watchdogs.

In 1996, a research paper entitled “Defense Procurement in the Philippines” recommended the creation of a defense-level organization to cater to the expected influx of procurement activities. It cited three components to address the procurement challenge posed by RA7898: clear-cut procurement policy; responsive organizational structure; and a highly trained and competent acquisition workforce. The policy shall consider war fighting capability, operational flexibility, and value for money. In many instances the procurement actions were “supplier driven” that manifest one or a combination of these factors: lack of competence of the workforce, complacency, higher ups directive and absence of procurement strategy. The DND/AFP structure was not designed to absorb massive procurement duties.

The 2003 Joint Defense Assessment found that for every battlefield soldier there were only 3 support personnel, for a 1:3 ratio, far from an ideal of 1:5-8. This obvious lack of manpower hindered an efficient acquisition system. Department-level procurement-reviewing staff easily spotted the deficiencies but did not have a viable solution to offer as they themselves were undermanned. Likewise, while there was a frenzied training activity for project teams to learn the basics of project management their members did not have the motivation to stay on with the acquisition workforce because their military career development would be affected. Thus, until DND/AFP introduces amendments to the AFP personnel career development regulations, particularly Standing Operating Procedure Nr 10 (Officer Promotion System), only few will join the acquisition workforce to the detriment of the program. In addition, the defense department must create a defense procurement bureau with the existing defense acquisition office as nucleus not only to craft acquisition strategy but also provide expertise in technical evaluation, in cooperation with the Department of Science and Technology. Acquiring identified capabilities by an organization that has long depended on a foreign ally would require longer time than anticipated.

The second issue is the restricting provision on “proven design” that dampens interest of local companies to compete with foreign manufacturers, and is exacerbated by absence of major equipment manufacturing standards and rules. As earlier pointed out, the SRDP Program has not been supported since the mid-1980s. It would be unwise for a domestic company to invest substantial resources to manufacture major defense equipment without expressed support from the government. Even the 1994 Marine Policy failed to convince the local industry to invest in building ships for the Philippine Navy. While partnering with foreign companies is permitted, local counterparts lacked the resources to pursue huge defense equipment acquisition projects. In sum, the AFP modernization that started in 1995 practically disenfranchised local companies because they neither built major equipment solely for AFP nor sold their product to two foreign armed forces.

Assuming that local shipbuilders can manufacture naval ships, there are no established ship construction rules or standards by which to determine their seaworthiness and combat survivability. Captain Tomas Baino’s article, with Captain Winston Arpon, entitled “Warship Design and Construction Parameters” (Maritime Review, May 2016), elucidates the sophisticated nature of building naval ships. While there are many classification societies in the Philippines, none possesses a manual on naval ship construction rules. Yet, most maritime nations (U.S., U.K. and Japan) have only one classification society. It is also ironic that the world’s fourth shipbuilder in terms of tonnage has not produced its own warship and only 35 naval architects join the maritime community yearly.

The third issue is the reversion of ISO duties to the Philippine National Police (PNP). In the original version of the AFP modernization law the AFP must transform into an external defense force. This requires alterations in force structure, doctrines, and equipage. By returning to the AFP, by virtue of RA 8551, the ISO responsibility in 1998, and restating it in the revised modernization law (RA 10349), the strategic planning approach changes from “threat-based” to “capability-based.” As for resource allocation, capability-based planning is quite expensive, prompting some foreign defense planners to articulate support for a return to threat-based planning.

Given the developing situation in South China Sea where the country’s territorial integrity and sovereignty are threatened, the AFP must prepare to address specific and immediate threats rather than confront known but non-current threats. The ISO has been in the country’s midst for too long but this internal threat has never succeeded in changing the Filipino’s way of life. A good question to ask: Had PNP continued its ISO duties in 1998 onwards would the internal threats, particularly CPP/NPA, gained more momentum and made the country less secure? The PNP assumed this duty only in 1992 (RA 6975) but Congress removed it six years later because statistics revealed the resurgence of CPP/NPA numbers strength and influence in the countryside. How could one expect the PNP to do a job that took the AFP 23 years to claim strategic victory? There must have been a “disconnect” between the national policy and operational reality. Some years later, a foreign security analyst on counter-insurgency wars who was invited to present the results of his study to the AFP joint staff in 2005 revealed that successful counter-insurgency wars waged by insurgency-affected nations were police-led.

Worth citing is the Malaysian experience. Some 10 years ago, the Malaysian Navy released a number of their officers and enlisted to form the core of their Coast Guard organization because their leaders wanted to focus on territorial defense considering the archipelagic nature of their nation. Their navy has acquired considerable surface and sub-surface assets to beef up its capability by harnessing their national shipbuilding industry and by shedding off their coast guard (internal) function. A senior Malaysian navy officer remarked that their armed forces had to concentrate on war fighting and leave law enforcement to the police and coast guard. While some nations opt to clearly delineate responsibilities among government agencies, others prefer to have overlaps. In a conflict situation where there is a dearth of resources, it would be wiser for a leader to consolidate rather than disperse forces. The interior department (DILG), with its national police at the forefront, must address internal security threats to allow the AFP to ably protect the country’s territory and national patrimony.

Prospects. More than 20 years passed when the AFP started its modernization. This period would have sufficed to professionalize the acquisition workforce and set up a responsive structure to undertake the

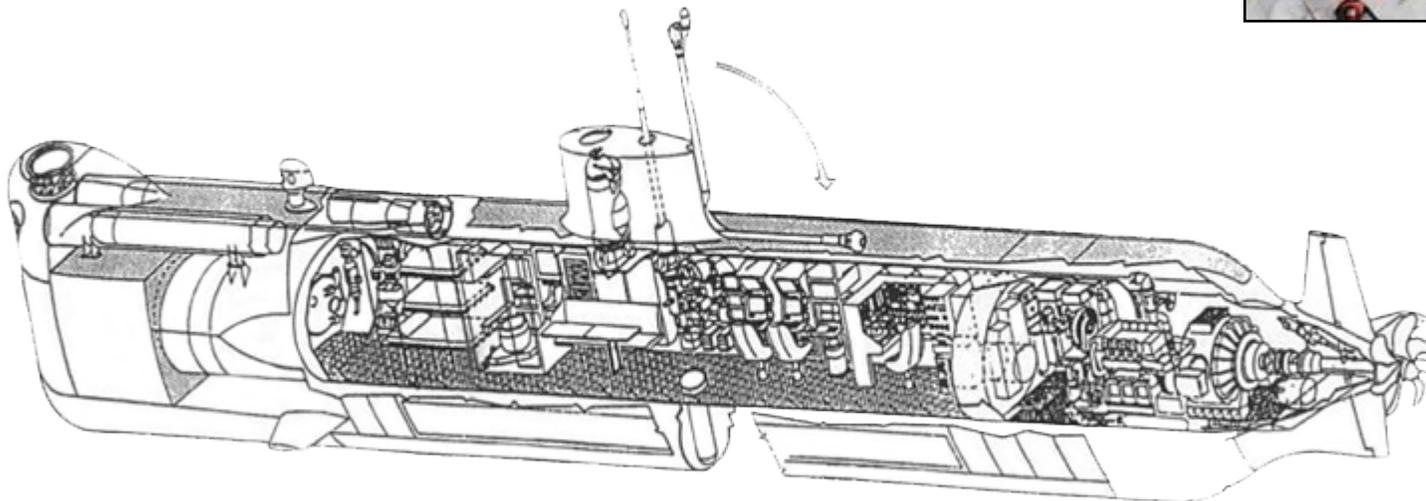
multifarious procurement activities. The 2013 issuance of the IGRR to RA 10349 is a good start to help hasten the defense procurement process. Considering that defense equipment and weapons systems are very expensive and highly sophisticated in design compared with non-defense articles, there must be a dedicated organization under DND to review and evaluate defense items for acquisition with due regard to their war fighting capability, operational flexibility, and value for money. This outfit shall also work for the codification of defense procurement rules to ensure confidentiality and compliance to technical standards. Transparency does not mean “full disclosure” as there are “trade secrets” that only few people need to know, such as the congressional oversight members.

The provision that exempts the local defense companies from the “proven design” requirement is a welcome and comforting development. This resuscitates the SRDP program. DND must circulate this to the defense industry as well as to the maritime community. The department should also work for legislated defense equipment construction rules for air and naval assets. For maritime assets, a single classification society will certainly help the shipbuilding companies in standard compliance. As there are naval ships that do not require stringent design and construction parameters, local shipbuilders must initially focus on building transport vessels to ferry troops, equipment, and supplies. They can also do up-keeping and updating works on existing warships. As they upgrade their production capacity and level-up their technical know-how, they can start constructing combatant ships. For its part, the navy crafted its sustainment strategy that calls for active participation by local shipbuilders during peacetime and crisis. Indeed the expanse of the country’s maritime domain necessitates a strong but affordable navy to protect, preserve and defend those areas.

With the pronouncement of the new administration to open up talks with CPP/NPA and MILF, the internal threat to security is expected to wane. This will usher significant impact on strategic planning assessment and formulation by DND and DILG. It is high time that Congress completely transfers the ISO responsibility to PNP so that the AFP can concentrate on its capability development program. The AFP must buy what it needs as soon as it can so it can do what it does best: war fighting. 🚢

Submarine Warfare Capability for the Philippine Navy -- A Necessity

By Capt. Tomas D. Baino PN (Ret.)



Shallow Water Attack Submarine (SWATS) Midget MG120/ER Submarine. Image credit: Cosmos Spa by Italy.

On 1998, the former Flag Officer In Command of the Philippine Navy, then **Vice Admiral Eduardo Ma R Santos** AFP, endorsed to the Department of National Defense the concept paper for the development of submarine capability for the Philippine Navy. VADM Santos is the proponent of the nucleus of submarine warfare in the PN.

The Department of National Defense acknowledged the proposal of the Philippine Navy positively. At that point, the Navy organized a core group including of young naval officer to conduct the study and organizational structure of a flotilla of three (3) conventional diesel electric air independents propulsion system that has good performance and stealth in the Littoral waters of the Philippine Economic Exclusive Zone (EEZ).

In support to this program, the Ministry of U.K. Ministry of Defense sponsored the Postgraduate Study of then Commander **Tomas D. Baino**, a Naval Architect officer for Post Graduate study at the Department of Naval Architecture at the University of London in U.K. specializing in submarine design and construction, and was approved by the Department of National Defense of the Philippines at no cost to the Philippine Government.

Other countries, who are long established submarine operators, are also looking at

ways of improving capabilities in submarine warfare. For most of the aspiring submarine operators, the emerging overriding mission of submarine operation in Littoral and coastal defense using small attack submarine in extremely shallow water as a mobile flat form and underwater minefield. The course was participated by the engineers /naval architect representatives from U.K. Royal Navy, Bazan of Spain, Spanish Navy, Brazilian Navy, Pakistan Navy, and U.K. Defense Evaluation Research Agency (DERA) and others.

The **Operational Requirement of the submarine** will be deployed in forward areas of the Exclusive Economic Zone (EEZ) for naval presence, surveillance, intelligence and monitoring and interdiction of illegal activities in the EEZ. The surveillance operation will include both coastal areas and islands.

TASKS

Crises Situation (Low Intensity Conflict)

The submarine will be deployed on defensive mode to protect the sovereignty of the state. The specific tasks are the following:

- To detect, classify, and attack hostile surface and sub-surface contacts;
- To gather reconnaissance information pertaining to hostile forces intruding the territorial waters and occupation

of island of the state;

- To carry out mine laying operation in confined water such as channel, straights, passages, bays and harbor entrances;
- To embark SEAL team, launch and recover personnel and equipment on shore; and
- Do limited anti air (by opportunity).

Peacetime Situation

The design of the submarine is flexible to allow following peacetime tasks to be carried out economically.

- To participate in joint naval exercise;
- To assist in special operation such as responding against action, piracy, and smuggling;
- To assist in search and rescue of vessels in distress, especially during bad weather conditions;
- To provide naval presence in the economic zone;
- To assist in the enforcement of IMO regulations and other applicable laws of the high seas; and
- To assist in the conduct of oceanographic study.

AREAS OF OPERATION

The submarine will be expected to operate among the islands of the West Philippine Sea, mostly within the area

co-ordinates of Latitude of 10° to 20° and Longitude of 110° to 120°.

The West Philippine Sea is in littoral waters bounded by Taiwan, Japan, and Korea in North, Vietnam, Thailand and Cambodia in West, the Philippine at the Eastern seaboard of Pacific, and Singapore, Malaysia, Indonesia and Brunei in the South. There are four narrow passages, which leads towards West Philippine Sea. These narrow passages are in the strait of Malacca, Sunda Lombok strait in Indonesia, San Bernardino strait and Balintang channel in the Philippines. The water in these avenues of approach towards the West Philippine Sea is characterized by strong tidal rift, shallowness with variable depth between 60-m to 100-m at the sea lane. The density of traffic is high because this is the crossroad to Pacific and Indian Oceans. During low tide, islets, sandbars, shoals and atolls are emerging bare at free water surface. Approximately 60% of this sea area is safe for navigation; the remaining is considered unsafe based on historical records of ships grounding.

The prevailing climate in these seawaters has a temperature of maximum 32°C, a very high percentage of humidity, strong tidal current and in the path of the typhoon belt from June to November every year. The prevailing sea state condition is 4 with wave height 5-m, wave crossing period of 8 seconds. The seawater is clearer, during

sunny days, and the sea bottom can be visualized from helicopter flying over the region.

The West Philippine Sea is good fishing ground -- various species of fishes are found in the area and is within the migratory route of tuna; piracy is prevalent especially on the approach to strait of Malacca, drug trafficking and records of apprehension are mounting. Spillage and dumping of toxic wastes are very difficult to monitor and control. There are also several occurrences of ship grounding, collisions and sinking due to bad weather conditions.

Also, the South China Sea has an indication of mineral resources deposits, as per records of mineral explorations made in the last fifteen years. The situation in this area is mounting because of overlapping claims on some islands/islets.

LITTORAL SEA AREAS

These are areas close to shore. The characteristic of the physical environment, weather, and climate considerably affect the operation of surface ship and submarines. It is a coast line of land and near-shore water particularly affected by extreme high and low tides. These can be very deep or as shallow as 200 meters or less, typically a narrow sea with variable weather and climate. A short distance and a small area of maneuvering space characterize a narrow sea.

Because of limited open sea area, a high sustained speed for a surface ship is a critical factor for navigation corrective action, should situation become eminent because of the seabed, reefs, shoal which can lead to difficulty that even maneuvering in shallow water can lead to the hull of the ship to squat under the keel.

Movement of submarine through the water also generates on the sea surface a distinctive hump that is detectable at the surface of the water. A nuclear submarine (SSN) in order to operate safely in shallow water must have at least 60-70 feet of water clearance under her keel to the bottom of the seabed for navigational safety. Likewise, the conventional medium size (SSK) needs 30-40 feet clearance. The submarine must at least navigate close to the surface of the sea and must have greater depth under the keel so that in case of emergency she can immediately conduct vertical maneuver and dive.

The problem in shallow water is that Sound Navigation and Ranging (SONAR) sensor equipment is unpredictable because of the seabed proximity coupled with fluctuating variation of sea temperature, fresh-water influx mixed with sea-water from rivers, higher rainfall, and natural as well as ambient noise from the inland activities interfere and can adversely affect SONAR. The passive SONAR (Doppler) receives only echo and picks target acoustic signatures. While the active SONAR's (i.e., projects sound and receives returning echo), performance is affected by the environmental clutter, and the ability to reliably check the target signature in a narrow tonal band is difficult. SONAR performance depends on the principles of physics that is affected by a change of environmental condition.

In extremely shallow water of an archipelago, the problem of the passive SONAR performance is compounded by strong sound reverberation caused by sound reflection from the seabed and the surface, and the nearby island. Many SONAR contacts are false due to irregularly of sea bottom configurations.

EFFECTIVENESS OF SHALLOW WATER ATTACK (SWATS) SUBMARINE IN LITTORAL WATERS

The SWATS are primarily designed for operation in the littorals and shallow water. They are much in smaller size than conventional submarine (SSK) and nuclear submarine (SSN). The SWAT is very ideal



Top: Midget SX 765/K (1970); Bottom: Midget SX 765/S (1990). Photo credit: Cosmos Spa by Italy

in short haul patrol of 30 days in station in extremely shallow, confined waters with highly maneuverable characteristics with indiscretion ratio of 10% to 12% because of its unique length of 27m and diameter of 3 meters and displacement of approx. less than 150 tons with speed of 10 knots submerged and 8 knots at the surface. It plays a major role in its ability to ensure navigational safety when in stationary ambush position in selected areas such as in channels, base and coastal areas, possible avenues and choke points of approach of the intruding hostile targets. It is capable of striking targets with her 2x torpedoes (acoustic guidance or wire guided), destroy targets at the range of 7-8 km. It carries 16 limpet mines and a SEAL Team for commando operation. It can launch and recover the SEAL Team with basic equipment while in stationary position underwater at a water depth of 60-150 feet of water and submarine diving depth of 150 to 200 ft. depth of 50 meters with close cycle diesel Air Independent Propulsion Unit.

ACQUISITION, OPERATION AND MAINTENANCE COST

A flotilla of three SWATS Class Submarine can be acquired in the rough order magnitude of USD 105.778M with carry onboard of spare parts, technical assistance, and shore base spares or computerized program maintenance procedures. The operational cost would be in the range of USD 6.00M per year per submarine for a deployment cycle of 2,160 hours.

SUBMARINE CAPABILITY AS A STARTING POINT

The Philippine Navy can start developing this capability through the SWATS as a model in order to develop submarine war fighting capability in extremely shallow water, develop confidence, skills and doctrine within the affordable budgetary requirements in underwater warfare. Above all, the SWATS is a moving minefield that is very difficult to detect in littoral shallow water.

RESEARCH AND DEVELOPMENT

Through the Department of Science and Technology (DOST) this type of submarine can be developed and constructed by the local shipyards in the country. Using the SWATS model in partner with Cosmos Spa of Italy, the Philippines can construct several units for the Navy that can provide effective deterrent submarine warfare capability in our EEZ. 

Transas Advanced Ship Simulator Installed at the City of Glasgow College

by Lidia Selivanova

On the first of June 2016, Transas completed the installation of Scotland's most advanced integrated ship simulator suite in the City of Glasgow College, the country's largest college. The simulation solution from Transas forms a core part of the new Riverside Campus, Phase One of the City of Glasgow College's super campus development.

The installed simulator suite includes a full mission engine room simulator and four simulator labs for studying electronic navigation systems, GMDSS, liquid cargo handling, and DP operations.

There are also five ship handling simulators comprising four bridges with 135° degrees visualization and a 360° full mission ship handling simulator for advanced training and certification.



Transas worked with the City of Glasgow College and their building architects to ensure that the new facilities meet all of the college's requirements for the next 15-20 years.

Iain Marley, Project Director of City of Glasgow College, said: "Scotland has a strong maritime history and now 10,000 students a year will benefit from this investment at our Riverside Campus, and will continue and build on that proud tradition. The simulation suite allows our students to have a highly realistic experience of operations including navigation, engine room handling, and cargo handling activities within a wide range of ship types. This leading edge technology and hands-on experience of nautical chart rooms will provide advanced and innovative training which will enhance the skills and future employment prospects for cadets, and likewise for the more experienced officers and crew."



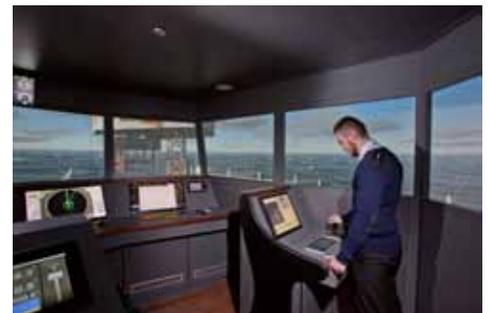
Transas carries a vision to lead the way in creating an ecosystem of harmonized integrated solutions in safety, navigation, and ship operations. In creating these solutions, Transas unites global maritime stakeholders for e-Navigation and operations.

True to its vision, Transas has introduced THESIS, or Transas Harmonized Eco System of Integrated Solutions, a flexible data resource where Ship, Fleet Operations, Academy (simulation & training) and Ship Traffic Control can all be connected to the ecosystem, a community working together effectively on a cloud-based shared data platform to enable smarter operations, safety, and navigation.

United into a single environment, the navigation, simulation, vessel traffic, and fleet management systems become a decision support tool using the data provided by Transas software solutions.

Transas operates over 20 regional offices, and has a global network of partners around the world.

For more information, visit www.transas.com.



Australian ASRV to be Constructed by Damen

by Ben Littler



On April 28 2016, at a ceremony in Hobart Tasmania, the Australian Government signed a contract with **DMS Maritime**, a wholly owned subsidiary of **Serco**, for the delivery, operation and maintenance of an Antarctic Supply Research Vessel (ASRV) with icebreaking capabilities.

The vessel will be built by the **Damen Shipyards Group** and will form an integral part of the **Australian Antarctic Division (AAD)** programme in the coming years. Australia's Minister for Foreign Affairs, **Julia Bishop** and Minister for the Environment, **Greg Hunt** attended the ceremony.

Explaining the decision to subcontract Damen for the design and building of the vessel, Serco CEO Asia Pacific **Mark Irwin** said, "Damen is a leading international shipyards group with a strong international presence. As well as building a broad portfolio of standardised vessels in series, Damen has produced a range of bespoke vessels including scientific, hydrographic, naval, and ice ships. Damen and Serco have a strong partnership, and over the last ten years, Damen has supplied over 40 vessels used by Serco to support naval operations in the UK and Australia."

The realization of this vessel will draw upon a number of companies within the Damen Shipyards Group, and Damen's wider network. Denmark-based **Knud E. Hansen**

executed the concept and tender designs, whilst engineering and project management is at present being delivered by **Damen Schelde Naval Shipbuilding (DSNS)** in Vlissingen, the Netherlands. Construction and outfitting of the vessel will later be carried out at **Damen Shipyards Galati, Romania**.

Damen Sales Director Asia Pacific **Roland Briene** said: "Drawing on the diverse skills found across our organization, we are able to connect up all the dots in order to deliver a cohesive, full scope project execution. An icebreaking research



and supply vessel such as this represents a new market entry for Damen, and we are very pleased to be working with **AAD** and **DMS** on this exciting project."

Vessel description. The ASRV represents a state-of-the-art solution that will facilitate Australia's wider exploration of the Southern Ocean and Antarctica. The vessel will be 156 meters in length, with a beam of 25.6 meters,

a maximum speed of 16 knots, powered by a diesel and electric hybrid propulsion system, with 3 bow thrusters and 3 more at the stern. Alternatively, the ASRV can travel on silent mode at 8 knots. The vessel will be able to break ice up to 1.65 meters at speeds of 3 knots, and will supply Australia's permanent research stations in Antarctica and Macquarie Island with solid and liquid cargo, equipment and personnel. The ASRV will have 3 cargo cranes, a 760 m² flight deck, and a 330 m² hangar, that can accommodate 2 medium or 4 light helicopters. Designed with 500 m² on board laboratory and office facilities, the vessel will also serve to conduct research activities, disaster relief, evacuation, and patrol. The ASRV has the capacity to host up to 32 DMS Maritime crew, and as many as 116 AAD scientific personnel as well as a doctor in climate-controlled accommodations.

The AAD programme aims at the advancement of Australia's scientific, strategic, environmental and economic interests in the Southern Ocean and Antarctica. It is a world-class programme focused on stewardship, climate research and the study of both terrestrial and marine eco-systems.

After completion at Damen Shipyard in Romania, the ASRV will sail to DSNS in the Netherlands for handover to the Australian Antarctic Division programme, scheduled for an April 2020 delivery. ⚓

Naval Multi-Role Auxiliary Vessels by Damen

by Tom Scott



A new series of Damen vessels offers flexibility and reduced total cost of ownership by means of modular mission modules with proven technologies.

On 8 June 2016, during the Oceanographic Survey Vessel Conference in London, Damen Shipyards Group announced the introduction of a new range of Multi-Role Auxiliary Vessels (MRAV). The common theme running through the series was the provision of a basic platform offering reliable and cost-effective multi-role potential and hydrographic survey capabilities to naval clients.

With the addition of supplementary modular mission equipment, this new family of Damen vessels can be mobilised in numerous, mainly littoral, naval tasks such as: explosive ordnance clearance and disposal, diving operations, torpedo recovery and overhaul, ROV and UAV deployment, SAR, coastal infantry and submarine support. The largest version of the range will be able to operate worldwide, on the ocean as well as in littoral waters. This ship has additional capabilities such as disaster and humanitarian relief, oceanography and naval training support.

The introduction of flexible concepts allows as many functions as possible to

be included into a range of smaller vessels without reducing the effectiveness and capacity of the fleet while maintaining the benefits of modularity. This is Damen's ambition with this new family of vessels. "To this end, plug-and-play containerised kit for many support tasks contribute considerable adaptability to a particular mission," explains Damen Shipyards Gorinchem's Principal Naval Advisor **Jan van der Burg**, a retired Vice Admiral of the Royal Netherlands Navy.

One platform – multiple tasks. "The idea behind these vessels is to create a basic platform that can assist in a variety of tasks through the selection of the required mission configuration, e.g., coastal transport, submarine support, or coastal infantry operations. The stimulus to switch from the traditional one-to-one replacement is to lower the total cost of ownership without losing capability and capacity," **Jan van der Burg** further explains.

The new range of vessels consists of three different designs: the MRAV 660, MRAV 1600 and MRAV 3600. Designed for different geographic profiles, these vessels are respectively 43, 62 and 85 metres long. Hydrographic capabilities, to map the seabed for safe navigation and as a preparatory action for military operations in particular, are indispensable to navies

worldwide. Depending on a naval client's specific requirements, any type of hydrographic equipment can be integrated into these three vessels.

Minimal draught. With a draught of 1.9 metres, the MRAV 660 is suited for very shallow coastal, riverine, and inland water operations. In addition to shallow water hydrographic surveys, this vessel is capable of a comprehensive array of duties such as diving operations, EOCD support, ROV and UAV deployment, with a core crew of 8 and capacity for an additional 15 specialists.

"Damen has built up a lot of knowledge on shallow draught ship design – this is the reason we strived towards a shallow draught hull for the MRAV 660 with full confidence. The expertise of our Research Department, combined with input from our Workboats Product Group contributed to a design based upon tested design solutions," notes Damen Design and Proposal Engineer **Tim Viveen**.

"The key points are to maximize displacement, minimize resistance and optimize sea-keeping characteristics for the area in which the ship will operate. The MRAV 660 has design characteristics such as an aluminium superstructure and reduced freeboard section that help to cut down on weight. In addition, tunnel ducts on the underside of the hull ensure enough water reaches the propellers," says **Tim Viveen**.

Additional roles. The MRAV 1600 is designed for littoral and regional offshore operations. Its larger size allows for greater endurance and carrying capacity of the crew, mission modules, and cargo. A crew of 13 may man the vessel with capacity for an additional 30 mission specialists. The main deck can hold six standard 20-foot mission containers, and the below-deck cargo hold can store two 20-foot containers and palletised cargo.

This medium-sized vessel can take on similar hydrographic and auxiliary duties to its smaller sister vessel, with the addition of torpedo recovery and overhaul tasks in support of submarines and anti-submarine warfare units. Small-scale coastal transport and infantry support is also possible.

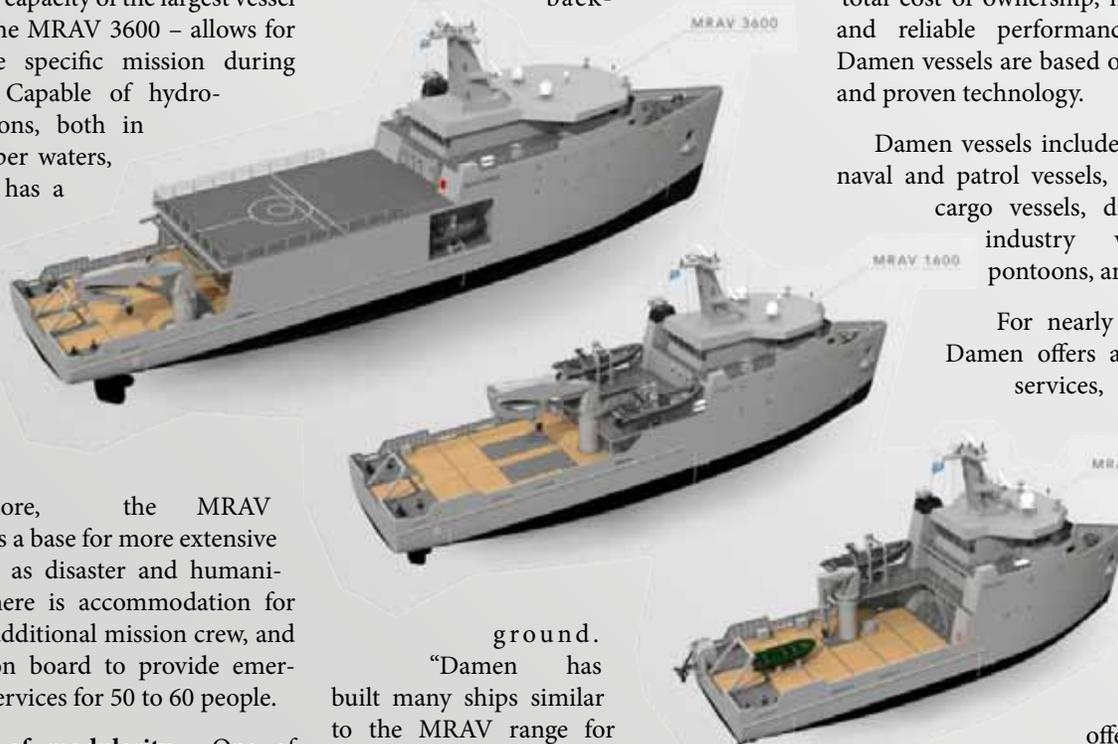
Global coverage. Intended for worldwide service, the capacity of the largest vessel in the range – the MRAV 3600 – allows for more than one specific mission during a deployment. Capable of hydrographic operations, both in littoral and deeper waters, this vessel also has a helideck and substantial storage capacity for other mission configurations, equipment, and cargo. Furthermore, the MRAV 3600 can serve as a base for more extensive operations such as disaster and humanitarian relief. There is accommodation for 14 core and 45 additional mission crew, and enough space on board to provide emergency hospital services for 50 to 60 people.

Advantages of modularity. One of Damen's key aims is to reduce the pressure on a navy's human and financial resources. The modularity of the mission modules also plays a major part in reducing this pressure: "We achieved this by combining the capabilities of specialized ships into one ship by using these add-on equipment modules which can be fitted inside standard 10, 20, or 40-foot containers; or have the footprint of a standard container. When operating multiple ships of the same family and design, the efficiency of training, crew exchangeability, and maintenance programmes are improved," states Damen Design and Proposal Manager **Piet van Rooij**.

Cost results. A modular platform is inherently flexible: this allows naval clients to better react to changes in the mission environment. Modularity also has implications on the total cost of ownership: the lifetime of an individual vessel can be efficiently extended by upgrading capabilities with new equipment modules that are not integrated into the original design.

Financial advantages exist in that the MRAV range is commercially built and uses commercially available components. This is made possible because of the vessels' non-combatant role. **Van Rooij** indicates that, "Using commercial off-the-shelf equipment reduces the total cost of ownership without reducing the quality of the equipment."

Complementary design. The ship design itself has a proven back-



ground. "Damen has built many ships similar to the MRAV range for the offshore industry. This means that there will not be any unwanted surprises for the first customer of this new range," **Van Rooij** elaborates.

Damen has a rich naval shipbuilding heritage, one that goes back more than a century. The new MRAV range serves to expand the company's naval portfolio that includes larger vessels such as frigates, corvettes, LPDs, AORs, and OPVs. "These new MRAV designs are complementary to the range of ships that Damen already offers for the defense and security markets," concludes **Van Rooij**. "We are currently at

the stage of finalised conceptual design. Considering the next step, being more detailed in engineering while taking advantage of COTS equipment and tested designs, we are confident that the actual construction can be swiftly accomplished, with excellent quality and reliability."

Damen Shipyards Group. Damen Shipyards Group operates 32 shipbuilding and repair yards, employing 9,000 people worldwide. Damen has delivered more than 6,000 vessels in over 100 countries and delivers some 180 vessels annually to customers worldwide. Based on its unique, standardized ship-design concept, Damen is able to guarantee consistent quality.

Damen's focus on standardisation, modular construction and keeping vessels in stock leads to short delivery times, low 'total cost of ownership', high resale values and reliable performance. Furthermore, Damen vessels are based on thorough R&D and proven technology.

Damen vessels include tugs, workboats, naval and patrol vessels, high-speed craft, cargo vessels, dredgers, offshore industry vessels, ferries, pontoons, and super yachts.

For nearly all vessel types, Damen offers a broad range of services, including maintenance, spare parts delivery, training and the transfer of (shipbuilding) know-how.

Damen also offers a variety of marine components, such as nozzles, rudders, anchors, anchor chains, and steel works.

In addition to ship design and shipbuilding, Damen Ship-repair & Conversion (DSC) has a worldwide network of 15 repair and conversion yards with dry docks ranging up to 420 x 80 meters. Conversion projects range from adapting vessels to today's requirements and regulations to the complete conversion of large offshore structures. DSC completes around 1,500 repair and maintenance jobs annually. For further information, visit www.damen.com. ⚓

Maritime Proceedings (MBF 109)

The 109th Maritime Breakfast Forum (MBF 109) was hosted by the Cebu Ports Authority (CPA) and held at the CPA in Cebu City on 11 February 2016.

Commo. **Carlos L. Agustin** (Ret), President of the Maritime League, called the forum to order at 1:00pm. He announced that instead of only one presentation from the CPA, there will be two other presentations, namely, "Supply Chain Management in the Philippines: A Maritime Challenge," and "Development Plan for Mandaue (North RORO Terminal) and Talisay (South RORO Terminal)." He also thanked the Cebu Port Authority for hosting the 109th Maritime League Forum. VADM **Edmund C. Tan** (Ret), Vice Chairman of the Cebu Port Commission and General Manager of the CPA, stated that it has been the third time that CPA had hosted this forum.

Shipping Issues in Central Philippines by Dir. Nanette V. Dinopol, MARINA Region 7.

Dir. Dinopol's report was what MARINA Administrator Maximo Mejia, Jr. presented in one of the Congressional hearings at the House Committee on Transport, and was given instructions to present in this forum. Dir then proceeded with the RORO Modernization Program that was created pursuant to Executive Order 170 and 170-A Promoting Private Sector Participation and Investment in the Development and Operation of the Road Roll-on/Roll-off Terminal System, and cited its objectives.

The JICA Study released in 2009 on the RORO Modernization Program reports:

- Only second-hand vessels were purchased;
- No private investment in newly built RORO ships;
- Inadequacy in program scheme to modernize domestic shipping;
- Dependence on supply of second

hand-ROROs;

- Escalation of accidents involving second-hand ships;
- Investments at a stand still in RORO modernization. Dir. Dinopol stated there is a total of 221 RORO ships servicing 140 RORO routes in the entire country as of August 2015.

Over the years, Batangas, Calapan, and Mindoro Oriental attracted the most passengers. Next highest deployment of RORO ships is Matnog, Sorsogon and Samar. The major RORO industry players like **Montenegro Shipping Lines** has the highest number of ships in operation; **2Go Shipping** is the largest shipping company; followed by **Cokaliong Shipping Lines**. MARINA Memorandum



MARINA Region 7 Director Nanette V. Dinopol addresses the maritime community during the 109th Maritime Forum held at the Cebu Port Authority (CPA), Cebu.

Circular 104 was also issued regarding the construction, conversion, modification, alteration of registered ships 2015-07 which policy aims to ensure that all ship construction and modification in the Philippines should be constructed accordingly, and shall verify its structural strength and integrity not only on ships locally constructed but also those constructed abroad and intended to be registered in the Philippines. Prior to the approval of the authority to import, the ship owner will submit their vessel plans. MARINA MC 2015-03 categorizes the navigational areas in the Philippines. Mostly affected by this circular are the motor bancas since their size should be operating only in the protected

waters generally enclosed by land. Further, MARINA MC 2015-04 implementing EO 909 had encouraging incentives such as:

- Protection for investment – applicants and those granted pioneering status shall be given a period of six years by imposing a moratorium of development of additional vessels, or not allowing any vessel to ply in the applied route. Region 7 already issued pioneer status to IACS ships;
- Priority in the issuance of Certificate of Public Convenience;
- Payment of Fees and Charges – those granted Pioneer Status shall only be charged 50% of regular fees in all applications and renewals of ship documents;
- Drydocking of vessels; and
- Provision for special ramps shall be made available to IACS brand new or newly constructed ships subject to existing policies of the Port Authority.

Dir. **Dinopol** also discussed circulars and regulations which are ongoing and for submission to the MARINA Board. Finally, Dir **Dinopol** identified the issues affecting the shipping industry in the Visayas:

- Phase out of wooden hulled ships – there is opposition from the wooden hulled owners, routes served solely by said ships;
- downward adjustment of shipping rates due to decreasing fuel prices – though some shipping owners already reduced passenger rates;
- congestion resulting in the repair of the Mactan Bridge – there was a meeting with the LCT owners to address this; issue special permits to the shipping owners.

Reactions: Cdr. **Neil Azcuna** of PCG Central Visayas welcomed the plan of modernization of the RORO System in the Central Visayas and will be very advantageous to the PCG. Further, he added that the Vessel Traffic Monitoring System (VTMS) project by JICA, which is ongoing, would be helpful in the

enhancement of the safety in navigation along the Mactan Cebu Channel.

Mr. **George Cottrell** of Colorado Shipyard commented that the shipbuilding industry has the capacity to build ships. Dir. **Dinopol** replied that capacity and capability may be there but the problem is that the supply and cost of raw materials is no longer competitive. Shipowners find it cheaper to acquire ships abroad. He also asked about the issue on incentives that can probably be afforded to the shipbuilding industry.

Dir. **Dinopol** suggested that Commo. **Agustin** request the shipyard association to present their issues in the Maritime Forum next month. On the phase-out of the wooden-hulled ships, Dir. **Dinopol** said that the MC is now effective. MARINA is now evaluating on the phase-out of wooden-hulled ships carrying passengers. Commo. **dela Cruz** asked about the shipping issues affecting Central Visayas since the report generally discussed about the MARINA as a whole. The chair answered that it was discussed in the latter part of Dir. **Dinopol's** report.

Mr. **Herminio Esguerra** suggested that a meeting with MARINA and the domestic shipbuilding stakeholders be held to discuss the shipbuilding issues, concerns and current status. Commo **Agustin** answered that it will probably be calendared in the next meeting on March 18, 2016, or better yet, a week before. Cdr. **Sheilon Cadaoas** suggested that there is a need to update existing shipping charts and the need for upscale shipping charts of the new ports for the safety of the navigation. NAMRIA is mandated to survey the country's archipelagic sealanes.

Cdr. **Cadaoas** is encouraging PPA, CPA and MARINA to identify priority ports and harbors for updating of nautical charts. In 2015, NAMRIA and PPA signed a MOA that results of pre and post dredging operations being conducted by PPA shall be used by NAMRIA.

Commo. **Agustin** added that proper plotting of references is very important and it should be reported to NAMRIA. A major problem of NAMRIA is the regular updating of the existing charts.

Supply Chain Management in the Philippines: A Maritime Challenge.

Capt. Rodien Paca described supply chain management in our country as an intermodal connectivity. Supply chain and movement of cargoes is dependent on ships, port and logistics, adding that cargo can never be transported from one island to another without ships. Shipping is an integral part of the whole supply chain. Shipping is just part and parcel of the whole supply chain, yet very vital. Other factors affecting the supply chain are safety, costs, and performance. Commo. Agustin appreciated his report and invited Capt. Paca to join the Maritime League.

Development Plan for Mandaue (North RORO Terminal) and Talisay (South RORO Terminal)

Mr. **Paul Rodriguez** presented the RORO System in the country and started with the provinces in Luzon, and later, the other provinces in the Visayas and Mindanao.

In Cebu, the RORO sector industry is also gearing towards further development. The Dept of Transportation and Communications had been making efforts to promote and upgrade the maritime transport. In 2003, the Strong Nautical Highway became a reality when EO 170 "Development of the Three Nautical Highways: Eastern, Central and Western Nautical Highways" was issued. Mr. **Rodriguez** also discussed the benefits of the RORO system, namely: enhanced connectivity; increased passenger and cargo volume; reduced transport cost; development of local areas; and creation of better business opportunities in the countryside.

Mr. **Rodriguez** also showed the list of different RORO terminals, port constructions and backup areas in Luzon, Visayas, and Mindanao.

In policy improvements, an executive order is in the final stage with the inclusion of CHARO or chassis-mounted containers, as part of the definition of RORO vessel.

In Cebu, the Philippine RORO group, headed by Mr. **Rodriguez**, initiated to develop a RORO Terminal in the North, which is the **Ouano** wharf in Mandaue,

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and another in the South, which is the Talisay City Port. Different views were shown on the 2 RORO terminals. Asian Marine Terminal Corp, a terminal operator in the country, also headed by Mr. **Rodriguez**, reported that it has the largest gross tonnage that consists mainly of RORO vessels, though not brand-new, but IACS classed vessels from Europe. He also showed images of their fleet of vessels.

Commo. **Agustin** commented that the plans on RORO terminal development would help decongest road traffic.

Cdr. **Paculba** shared that this was her first time to attend the Maritime Forum, and further stated that a part of her research was related to the maritime security of RORO ports in our country, and cited that our country having a low rank of #108 among 139 economies in the world is also a subject of her study.

Commo. **Agustin** believes that it will even get worse with the incidents of the “Laglag Bala” which has gotten to be very famous internationally. Commo **Agustin** suggested that the MBF could probably ask the Office of the Transportation Security (OTS) for an update.

Developing a National Transportation Framework

Commo. **Agustin** asked the maritime agencies concerned if their agencies have prepared legislation regarding the matter. Dir **Dinopol** said that MARINA is making plans in coordination with the PPA. AGM **Hector Miolo** added that in the past 30 years that he has been with PPA, he had seen three National Transportation Planning Documents under different administrations. In the present administration, there are plans but due to many interventions along the way, and realignments of priorities including different changes in the transport agencies, another transport plan may be needed.

Mr. **Rodriguez** provided an update on the last meeting of the House Committee on Transport. Being one of the members of the Technical Working Group, he opined that the road map for the improvement of the maritime sector is affected by the integration of the stakeholders, as well as the

alignment of the programs of all agencies.

Commo. **Agustin** asked whether it was the MARINA version of the Cabotage Law that was acceptable to the shipping and maritime sector, or the Cabotage Law approved by Congress. Mr. **Rodriguez** said the Cabotage Law was partially lifted and is looking forward to an expanded version. Commo. **Agustin** suggested that MARINA provide us an update. AGM **Miolo** asked Mr. **Rodriguez** if he was aware of the ongoing IRR study on the lifting of the Cabotage Law handled by the Bureau of Customs under Commissioner **Lina**. He said the stakeholders should participate and be consulted in the study. AGM **Miolo** volunteered to do the inquiry, and suggested that the national security implications of lifting the Cabotage Law should be presented. Commo. **Agustin** suggested the **Naval Strategic Studies** could do the research and the presentation.

Update on the West Philippine Sea

Cdr. **Weniel Azcuna** (PCG) updated that the Philippine Coast Guard is regularly submitting reports to the Department of Foreign Affairs on any activities or movements in the West Philippine Sea, as well as the deployment of coast guard assets in the area. Commo **Edwin Mackay** of NAVFORCEN said that on Nov 2015, together with Task Force Malampaya, they took pictures of the islands entered by the Chinese. USEC **Vicente Agdamag** of NSC updated that in October 2015, a destroyer of the US Navy patrolled the vicinity of Spratly Islands. In January 2016, another destroyer of the US Navy patrolled near the Paracel Islands. This shows that the US, Australia and Japan, will not allow the Chinese to control the SCS.

Hopefully, Philippine Armed Forces will be able to join in patrolling the South China Sea with the coming of the PCG ships donated by Japan, and BFAR vessels will also help in the patrol. Mr. **Victor Smith**, Naval Attaché of the US Embassy, said that he could only share that the US is supporting the country and affirms what the other government agencies have reported. VADM **Jose Alano** of the National Coast Watch Council shared that EO 197 which designates the DOTC secretary as the

civil authority to address the issues and problems on ship and port security. There are different agencies holding specific mandates but are inter-related in the matter of maritime security and environmental safety, e.g., the PCG, PPA, CPA, MARINA, and the OTS as the office to assist DOTC in implementing the department orders.

Hydrographic Surveys

Cdr. **Sheilon Cadaoas** of the National Mapping and Resource Information Authority (NAMRIA) presented an update on the agency's accomplished projects for 2015 and programmed projects for 2016. VADM **Alano** suggested that the MBF could probably invite the agency that organized the recent Philippine Summit to give an update.

Commo. **Dela Cruz** called out for anybody who can probably help and assist the CPA on how to further improve the port operations. Commo. **Agustin** further provided GM Tan's email address to the attendees (ectan80@hotmail.com) for any suggestions. Mr. Arthur said that Colorado Shipyard's concern is that some vessels are parking at the north end of Cebu, which has affected 5-6 shipyards and ports, and sometimes the passage of vessels that are bound for Leyte. Thirty or more vessels are at anchorage at present, and those pumpboat people are preying upon these vessels. GM **Tan** replied that the VTMS would help in ensuring maritime security and vessel monitoring as well as marine environment. The Authority shall call the attention of the vessel owners and will require their vessels to move out of the passage and entrances of the shipyards. Commo **Agustin** suggested that CPA coordinate with the PCG regarding these issues. Mr. **Arthur** also brought up the issue that DPWH awarded a contract on dredging but it was done inside the bay. It was suggested that **Colorado Shipyard** write to CPA and state their concerns, and CPA shall coordinate with DPWH. Also perhaps, we could invite DPWH in the next forum.

Commo. **Agustin** announced that the next issue of the Maritime Review Magazine would come out in early March 2016. Anyone who wishes to contribute to the magazine could submit to Commo. **Mariano Sontillanosa**. 

The Battle of Alapan — Philippine Flag Day

by Former Philippine President, Fidel V. Ramos



Upon the invitation from the National Historical Commission of the Philippines' (NHCP) Executive Director **Ludovico Badoy**, FVR was Guest of Honor and Speaker at the 118th Anniversary of the Battle of Alapan that transpired on 28 May 1898. The commemorative program was held at Dambana ng Pambansang Watawat (Shrine of the National Flag), Heritage Park, Miguel Santo, Alapan, Imus, Cavite.



Dambana ng Pambansang Watawat. Photo Credit: Ervin Malicdem

The Battle of Alapan was the first big military victory of General **Emilio Aguinaldo** after his return to the Philippines from Hong Kong on 19 May 1898 aboard a U.S. vessel provided by Admiral **George Dewey**. After the American naval victory of the Battle of Manila Bay two weeks earlier, **Aguinaldo** returned from exile in Hong Kong, reconstituted the Philippine Revolutionary Army, gave orders for military offensives in Central Luzon and Tagalog provinces, and himself fought at close range against a garrison of Spanish troops in Alapan that lasted for five hours when the "Castilas" ran out of ammunition and surrendered to the Filipinos.

At nightfall after his victory at Alapan, Gen. **Aguinaldo** unfurled the new Philippine flag for the first time, marched to Cavite Puerto, and hoisted it in front of Filipino revolutionaries and captured Spanish troops. A group of American sailors of the U.S. Asiatic Squadron also witnessed the historic event.

The new Philippine flag, which **Aguinaldo** himself designed, had been sewn in Hong Kong by **Marcela Agoncillo** and her daughter with the help of **Delfina Herbosa de Natividad**, a niece of Jose Rizal. That was a glorious launching of our Philippine Flag in Cavite, in the presence of freedom-loving, hitherto, colonized peoples, and before the whole world!

Prelude To Aguinaldo's Return

The previous year marked the end of the first part of the Philippine Revolution with the signing of the Pact of Biak-na-Bato in Bulacan. Under the terms of that agreement, **Aguinaldo** went into exile in Hong Kong. When **Aguinaldo** was in exile, the Spanish-American War began.

Although most of the war's battles took place in the Spanish colony of Cuba 12,000 miles away, the first major battle was between the Spanish and American Navies in the Battle of Manila Bay. On 01 May 1898, U.S. Navy Admiral George Dewey of the U.S. Asiatic Fleet engaged and defeated the Spanish Pacific squadron under Admiral Patricio Montojo. Soon thereafter, **Aguinaldo**, who at the time was visiting Singapore, returned to Hong Kong and sought Dewey's help to return to the Philippines.

In their article titled "The First Unfurling of the Philippine National Flag," **Amorico Alvarez** and **Nicolas Ricalfrente**

recalled that **Aguinaldo** had meetings with U.S. Consuls **E. Spencer Pratt** and **Rounseville Wildman** in Singapore during the third week of April. In those meetings according to **Pratt**, **Aguinaldo** was persuaded to resume the Revolution with assurances from **Dewey** that the U.S. would recognize the independence of the Philippines.

It is now well known that there was no written agreement to this effect. **Aguinaldo** depended solely on the assurances of a U.S. Consul and an Admiral, and it appeared that their words were sufficient guarantees. On 19 May 1898, at about noontime, **Aguinaldo** arrived in Cavite from Hong Kong aboard the USS McCulloch, which **Dewey** sent for him.

Aguinaldo, with his adjutant, Colonel **Jose Leyba**, met Dewey aboard USS Olympia, where they talked about the previous conferences initiated by U.S. Consuls **Pratt** and **Wildman** in Singapore. **Dewey** and **Aguinaldo** discussed the Filipino arms shipment being delayed in China for which, **Dewey** offered to dispatch a steamer to expedite arrival. **Dewey** was said to have also advised **Aguinaldo** that together they should destroy the power of Spain.

The hoisting of a Philippine national flag's symbolism of independence would appear more important and relevant in the eyes of the world, particularly the U.S., than winning military skirmishes. After meeting **Dewey**, **Aguinaldo** reportedly went directly to the shorelines of Cavite Puerto to meet the revolutionary liaison officer from Bataan purposely to hand over his orders for a military uprising in the provinces of Bataan and Zambales. The following day, 20 May 1898,



Gen. Emilio Aguinaldo, Admiral George Dewey, and Col. Jose Leyba

72 Filipino mercenaries belonging to the Spanish military detachment of San Roque-Caridad surrendered to **Aguinaldo**. They were immediately dispatched to Dalahican Beach to intercept Spanish soldiers from entering Cavite Puerto.

Dispositions and Maneuvers

On the night of 20 May 1898, Gen. **Aguinaldo** sent Gen. **Luciano San Miguel** to the revolutionary commands of Manila, Laguna, Batangas, Tayabas, Bulacan, Morong, Pampanga, Tarlac, Nueva Ecija and other military districts to carry out the orders to rise against Spain.

On 25 May 1898, **Teatro Caviteño** was established as **Aguinaldo**'s Cuartel Heneral or Military General Headquarters. **Aguinaldo** later transferred the seat of his Government to the former Casa Gobierno Civil of the Spanish authorities in Cavite Puerto.

While he was at the **Casa Gobierno Civil**, the long-delayed arms shipment consisting of 2,000 rifles, 200,000 rounds of ammunition, and other special armaments arrived at the dock of the Cavite Arsenal. The armaments were immediately distributed to various provinces. In the evening of 27 May, in preparation for the general uprising scheduled for 31 May, the Revolutionary Army of Kawit began reinforcing the Filipino rebels in Alapan with the newly arrived firearms and ammunition. The stage was thus set for a major battle.

Battle of Alapan - First Flag Day

On 28 May, while distributing firearms, **Aguinaldo**'s Army encountered a Spanish column composed of 300 Naval Infantry led by Captain **Pedro Janolino**. The Spanish Gen. **Leopoldo Peña** who commanded 2,800 men loosely scattered across Cavite, sent out the troops. **Aguinaldo**'s soldiers attacked furiously at close range, armed with bamboo cannons and Mauser rifles, and overcame the heavy Spanish resistance. They had much more ammunition than the Spaniards. After five hours, the latter ran out of bullets and surrendered to the Filipinos.

Over 6,000 men under Capitan-Heneral **Artemio Ricarte** (Father of the Philippine Army), Gens. **Luciano San Miguel**, **Mariano Noriel**, and **Juan Cailles** harassed **Peña**'s troops around Cavite greatly. Spanish infantrymen from Manila rushed to reinforce

Peña, but rebel units of Gens. **Paciano Rizal** and **Pío del Pilar** stopped them in Laguna.

After the Battle of Alapan, **Aguinaldo** marched to Cavite Puerto with some 300 Spanish captives, including **Leopoldo Peña** himself. In celebration of the first big victory of the Filipinos, **Aguinaldo** brought out the Philippine flag and, in the presence of his men, their captives and a large triumphant crowd, hoisted it up a flagpole amidst tremendous applause and spontaneous cheers for the "Independent Philippines."

Maka-Diyos, Maka-tao, Maka-kalikasan at Maka-bansa.

Flag Day is celebrated every 28th of May in commemoration of the Battle of Alapan. This day marks the start of the annual National Independence Day commemorations, and the joyful Kalayaan Festivals celebrated in Cavite, honoring its premier role in the struggle for Philippine independence.

At the signing ceremony of R.A. 8491, called the "Flag and Heraldic Code of the Philippines" at Malacañang last 12 February 1998, Pres. FVR reminded all Filipinos: "This time-honored gesture of giving highest respect to the Flag and National Anthem

and Homes from 28 May to 12 June annually); and E.O.343, s-1996 ("Panunumpa sa Watawat" as the Official Pledge of Allegiance for All Filipinos). R.A.8491's Section 25 enhanced the Pledge of Allegiance, where the last 4 lines highlight the core Filipino values of "Maka-Diyos, Maka-Tao, Maka-Kalikasan at Maka-Bansa" (For God,



People, Nature, and Country). Section 40 declared these core values would form the new National Motto, replacing the Marcos era mantra "Isang Bansa, Isang Diwa," abolished 12 years earlier.

Citizens' Accountabilities.

All Filipinos, including foreigners residing in or visiting our country, should take R.A.8491 seriously. Section 50 thereof stipulates: "Any person or judicial entity which violates any of the provisions of this act shall, upon conviction, be punished by a fine of not less than five thousand (P5,000) and not more than twenty thousand (P20,000), or by imprisonment for not more than one year, or both fine and imprisonment, at the discretion of the court: Provided, that for any second and additional offenses, both fine and imprisonment shall always be imposed: Provided, that in case the violation is committed by a juridical person, its president or chief executive officer, shall be liable."

Let us respect, honor and revere our Philippine Flag!

KAYA NATIN ITO!

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



must be instilled in the hearts and minds of our people not only during Independence Day but during every day of the year." R.A.8491 reinforced Pres. FVR's earlier issuances such as E.O.179, s-1994 (Prominent Display of the National Flag in All Buildings

The Humboldt Squid and Seatec Chile

By Vicky Viray-Mendoza



The Humboldt is a large predatory squid living in the waters of the Humboldt Current in the Eastern Pacific Ocean. It is commonly called jumbo squid, jumbo flying, pota, or diablo rojo. The Humboldt Squid (specie *Dosidicus gigas*) is among the largest of squids, with a length exceeding 6 ft. and mass weight of up to 100 lbs. It has an average life span of one year, but can live up to two years. Dennis Bryant reported in **Maritime Professional** in November 2015 that the Humboldt's brain is larger than might be assumed, leading some to believe that it may have intelligence comparable to a dog. The Humboldt's three hearts pump purple blood throughout its body.

Behavior

Although the Humboldt has a reputation of aggression towards humans, this behavior is mostly manifested during feeding times. The Humboldt has also been known to attack recreational scuba divers and render their deep-sea cameras inoperable. **Smithsonian's Friends of the National Zoo** reports that the Humboldt may attack divers when threatened and will continue to put up a fight even after they have been caught, blasting their captors with water and black ink. At other times, the Humboldt is likely to be passive or just curious.

Similar to other members of the subfamily Ommastrephinae, the Humboldt possesses bio-luminescent photophores, and is thus capable of quickly changing body coloration called Metachrosis.

Fox Meyer reported in the

Smithsonian's Ocean Portal in 2015, "many thousands of color-changing cells called chromatophores just below the surface of the skin are responsible for these remarkable transformations. The center of each chromatophore contains an elastic sac full of pigment, rather like a tiny balloon, which may be colored black, brown, orange,



A 52 lb (24 kg) specimen caught off the coast of southern California displays a deep red chromatropic coloring. Photo Credit: Fish Guy

red or yellow. If you squeezed a dye-filled balloon, the color would be pushed to the top, stretching out the surface and making the color appear brighter — the same way chromatophores work. A complex array of nerves and muscles controls whether the sac is expanded or contracted; when the sac

expands, the color is more visible."

It rapidly flashes red and white colors while hunting, earning the name "diablo rojo" or red devil among the shrimp fishermen off the coast of Mexico. The Humboldt squid can rapidly change colors to flash signals and communicate within its shoal, or disguise itself from predators, flashing much too fast for the human eye to see all the color transitions.

Jane J. Lee of the **National Geographic** reported in January 2015, "When Humboldt squid want to go incognito, they start to flicker like a computer screen on its last legs. The animals use special skin cells to produce waves of red and white that scroll across their body. Most likely, the predators are trying to match the undulating pattern of sunlight filtering through the water." They flicker "like light reflecting on the bottom of a swimming pool," says Hanna Rosen, a doctoral student at Stanford's Hopkins Marine Station in Pacific Grove, California.

Ecology

The Humboldt squid is a carnivorous marine invertebrate (phylum Mollusca; class Cephalopoda) that can move in shoals of up to 1,200 individuals at a time. They swim at speeds of up to 15 mph propelled by water ejected through a hypnone or siphon, and by two triangular fins. Their tentacles, with 100-200 suckers, each

lined with razor-sharp teeth, are used to grip their prey.

Prey

The Humboldt squid feeds primarily on small fish, shrimp, mollusks, crustaceans,



360 lb Humboldt off the coast of Japan. Photo credit: Outsideonline.com

cephalopods, and copepods. It uses its barbed tentacle suckers to grab its prey and slices and tears the victim's flesh with its beak and radula, a rasping tongue-like organ covered with rows of tiny teeth to chop food into bite size pieces before swallowing. They approach prey with all 10 appendages extended forward in a cone-like shape. Upon striking distance, they open their eight swirling and grasping arms, and extend two long tentacles covered in sharp teeth-like structures, grabbing their prey and pulling it back towards their parrot-like beak, which can easily cause serious lacerations and tearing of human flesh. These two longer tentacles can reach full length, grab prey, and retract so fast that almost the entire event happens in one frame of a normal-speed video camera.

Another method of hunting is by pulling the prey to great depths until it faints. The Humboldt squid is also known to quickly devour larger prey when hunting in shoals. Recently, Humboldts were seen engaging in cooperative and coordinated hunting.

Shoals of Humboldt surface at night to hunt lanternfish. Many squids cannibalize other species but never those of their own. The Humboldt can cannibalize other jumbo squids that have been maimed or captured in nets, including its own specie.

Predators

Sperm whales, sharks, seals, swordfish, and marlin feed on the Humboldt squid of all sizes, while gulls and large fish capture the juveniles.

Distribution

The Humboldt squid lives at depths of 660 to 2,300 ft in the eastern Pacific (Chile, Peru), ranging from Tierra del Fuego, an archipelago shared by Chile and Argentina in the southernmost tip of South America and northward to California. It gets its name from the Humboldt Current, in which it lives, off the coast of South America. The Humboldt squid has been appearing farther north, into the waters of Oregon; Puget Sound, Washington State; British Columbia, Canada; and Sitka, Alaska.

Reproduction. The ability to change colors may be a factor for mating. The males may engage in Metachrosis to get the attention of females. Experts know little about how the Humboldt squid spawns mainly because the squid spends most of its life at depths unsafe for scuba diving. Their eggs are laid in hidden places at the bottom of the sea, and have never been observed in nature. The Humboldt reproduces only once in their lifetime.

Fishing

Electronic tagging has shown Humboldt squid undergo "diel" vertical migrations, which bring them closer to the surface from dusk to dawn. Fishermen exploit the Humboldt's penchant for lanternfish by using lights to lure them near the boat.

Status

The Humboldt is heavily fished off the coast of Mexico, but because ecologists know little about the size of its population,

it has yet to be determined whether this practice is sustainable or not. Due to a dearth of information regarding the Humboldt squid, it is not protected by CITES or the IUCN Red List.

Protection

The Humboldt is fished commercially, predominantly in Chile, Mexico and Peru. In light of the heavy fishing and short lifespan of the Humboldt, the Friend of the Sea (FOS) releases certifications to fisheries and aquaculture firms that maintain sustainable fishing methods of the Humboldt squid.

FOS is an international certification program for products from sustainable fisheries and aquaculture. Over 500 companies in over 50 countries rely on FOS to assess sustainability of their seafood origins. Accredited independent certification bodies run the audits, based on best and updated scientific data.

Sustainable fishing

Friend of the Sea has recently concluded an audit of **Seatec Chile** for Humboldt squid fishing, and the company can proudly continue to display the international sustainability seal of approval on its delivered products.

Seatec Chile, a premium supplier of calamari products, relies on artisanal fishing, using a hand-made tool called "Tota," which is a type of harpoon. The fishing of the Humboldt Squid occurs in the Coquimbo Region with a Tota being thrown into a depth of about 20 meters, and then hauled back up by hand. Once at the surface, a hook is used to heave the squid up onto the ship.

"**Seatec Chile** is committed to follow and comply with the standards on the sustainable fisheries and recognize the importance of Friend of the Sea in this field," said Pablo Lizana Walsen, Seatec's CEO. "That is why we are very happy to have accomplished the renewal of our certification." Seatec Chile is a premium supplier of various natural calamari products based in Santiago, Chile, and is proud to use traditional manual fishing methods. Each giant squid is custom caught one at a time, making this type of fishing quite selective, as there are no unnecessary discards or bycatch.





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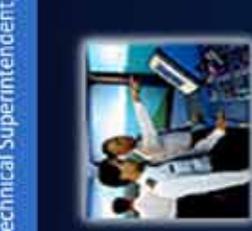
MAAP Profile

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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