

Viewing Maritime Forces Modernization in The Asia-Pacific in Perspective

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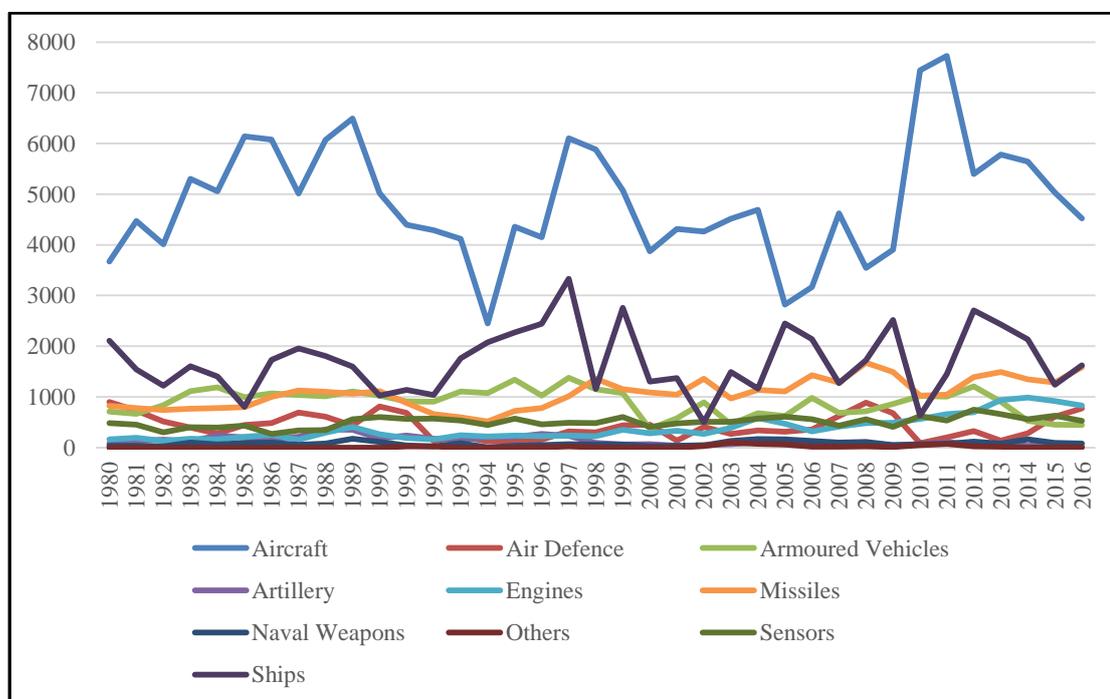
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Introduction

Is there a naval arms race in the Asia-Pacific? This topic has been much dealt with in the scholarly debate on regional military modernization which, though not always often couched in the maritime sphere, does have that strong flavor. Figure 1 shows arms export trade values for 19 Asia-Pacific countries (excluding Russia and the United States) up till 2016. Generally, aircraft ranks higher, followed by ships.¹ Most interestingly, as the figure shows, while the value of aircraft exports dipped, that of ships was on the rise since 2015. These numbers only count imports from external sources; if one considers the burgeoning domestic naval shipbuilding and technological capabilities in the Asia-Pacific, the trade values for ships could well be much higher than presented here.

Figure 1: Arms Exports in the Asia-Pacific (in million US\$)



Source: Stockholm International Peace Research Institute (SIPRI) Arms Transfers Database, accessed at <https://www.sipri.org/databases/armstransfers>.

The issue has also cast a long shadow over media commentaries and reporting about the regional maritime hotspots and geopolitical rivalries. This is unsurprising, given that since the end of the Cold War, Asia-Pacific military modernization focus has been on the maritime aspect to suit the prevailing security environment.

The continually growing economic and strategic importance of the seas as a global commons of mankind, persistent salience of evolving traditional and non-traditional security challenges, and the incessant developmental trends of maritime forces development – from mainly navies (or “grey hulls”) in the 1990s to maritime law enforcement agencies (or “white hulls”) beginning from the early-2000s onwards – would continue to capture the attention of scholars and commentators.

A Review of Motivations

To be sure, one could acknowledge a host of motivations behind the buildups, categorized into interactive, semi-interactive and non-interactive drivers.² However, when one does a survey of the diverse group of countries across the Asia-Pacific, it is not difficult to conclude that there is not one singular driving force behind the buildups. While it might be somewhat reductionist, or simplistic, to argue that maritime forces modernization in the region is in fact motivated by a confluence of these three categories of drivers, the reality is that it is not far from the truth. There are a few reasons.

Interactive Drivers: Competing with Others

First, where interactive drivers are concerned, what one is referring to would be threat perceptions in the most classic sense, that is, one country which is the actual or perceived adversary prompts another to arm itself to prevent or forestall aggression from the former. A classic example is Taiwan, which builds its naval defenses with the invasion threat posed by mainland China first and foremost in mind. And one can argue the same for the two Koreas, situated along the world’s last Cold War frontier and one of the world’s most intractable geopolitical flashpoints as recent events have demonstrated.

There is another catch to threat perceptions. The existing literature on arms dynamics always presupposes the threat to emanate from the nation-state. What about non-state actors? If one broadens the source of threat from state to non-state actors, a more complicated, nuanced picture emerges in the Asia-Pacific. Maritime Southeast Asia especially is a complex domain comprising a multitude of transboundary and transnational security challenges including human trafficking, illegal, unreported and unregulated (IUU) fishing, piracy and armed robbery against ships, and smuggling. In recent years, the growing threat

of terrorism in the region also extends to the seas, as exemplified in the kidnap-for-ransom attacks in the Sulu/Celebes Seas. Table 1 uses the example of Southeast Asia to highlight that not only are the threat perceptions among these regional governments diverse, but that most of the listed challenges are in fact non-traditional in nature.

Table 1. Maritime Threat Perceptions in Southeast Asia

Country	Postulated Key Maritime Security Challenges
Brunei Darussalam	IUU fishing
Cambodia	Human trafficking
Indonesia	IUU fishing, maritime terrorism, smuggling, marine environmental pollution
Lao PDR	Not applicable (land-locked country)
Malaysia	Smuggling, IUU fishing
Myanmar	Human trafficking, IUU fishing
The Philippines	Maritime terrorism, SCS disputes, IUU fishing
Singapore	Maritime terrorism
Thailand	IUU fishing, human trafficking
Vietnam	SCS disputes, IUU fishing, marine environmental pollution

Source: By author drawing from official and academic insights.

In fact, much of the existing commentaries often link maritime forces modernization to threat perceptions. There is certainly truth in this, but threat perceptions do not constitute the only driver of maritime forces buildup. Interactive drivers, as its name implies, envisage an action-reaction dynamic – the genesis of existing scholarship touching on the security dilemma and arms-tension spiral. But action-reaction dynamics do not relate only to classic threat perceptions.

In fact, interactive drivers concern also action-reaction dynamics arising from technological imperatives. In this scenario, imagine that one country does not acquire arms because the other necessarily presents a threat in the classic sense, but because it wishes to match the capabilities of the latter. It is in fact the classical “catching up with the Joneses” [classic security dilemma] context here. Of course, it is not to say that no animosity exists between the two parties – but that animosity, which may be characterized by a lack of mutual trust, does not necessarily have to be mutual perception as a threat.

Thailand's quest for submarines is a case in point. "Neighboring countries like Vietnam, Malaysia, Indonesia, and Singapore have had submarines in their arsenals for many years... Now that I am here, I think it is a part of the strategy to improve our armed forces," then Chief of Staff, Royal Thai Navy (RTN), Admiral Kraisorn Chansuvanich, remarked in April 2015.³ However, it is important to point out that this is not the only justification used by the RTN leadership.

Semi-Interactive Drivers: Seeking Insurance

It appears that semi-interactive drivers constitute the primary motivation for many, if not all, countries in the Asia-Pacific. Generally, such drivers refer to broader, systemic geopolitical and technological patterns and trends that constitute the basis for their maritime forces buildup despite the absence of interstate competition.

In recent years, the regional security environment has become fraught with greater uncertainties, especially as the shift of power from the West to Asia becomes more evident. The United States, despite remaining the preeminent power in the world and in the Asia-Pacific, faces the rise of geopolitical rivals seeking their rightful places in the sun. China, making use of its growing economic and military clout, has started to challenge American ascendancy in the region, and casting open aspersions via words and deeds towards the "international rules based order". Beijing's massive island-building and fortification works in the South China Sea exemplify its attempt to revise this existing order.

In the meantime, one also observes the growing interests of other middle and major powers in managing the regional security environment – Australia, India, Japan and Russia – enhancing their footprints in the Asia-Pacific maritime domain, including the South China Sea. Intensified geopolitical rivalries, as these middle and major powers including China and the United States jostle for influence in the region, sharpen a heightened sense of insecurity in others – prompting a series of mitigation measures (or insurance) such as, inter alia, diplomatic realignments and of course, naval buildups. One would imagine countries such as Singapore, for example, which in recent decades has enjoyed an upswing in relations that were once characterized by acrimony with its immediate neighbors Indonesia and Malaysia, to go down this path.⁴

Another is Thailand, again using the example of its submarine purchase. "There is an uncertain security situation in our region of the world and the need for force can happen at any time... It is necessary to move forward with the purchase," then Chief of Staff, RTN, Admiral Leuchai Ruddis, remarked in May 2017.⁵

Finally, there is the quest to match the general technological patterns and trends. It is like keeping up to the global standards, in this case technological progression and its associated naval operational concepts and doctrinal implications.

As a technical case in point: anti-ship cruise missiles (ASCMs) up to a typical range of 100 kilometers used to be counted as a reliable long-range offensive capability for warships. During the Cold War, Soviet monster ASCMs, such as the supersonic (at high altitude) and over 600-kilometer range P-700 Granit (NATO codename SS-N-19 Shipwreck) that equipped the formidable Project-1144 Orlan (NATO codename Kirov-class) nuclear-powered guided missile cruiser and Project-949/949A Granit/Antey (NATO codename Oscar-I/ II classes) nuclear-powered guided missile submarine would be deemed as “out of the norm”.

But over the past decade, ASCM technologies and proliferation have pushed the envelope further; there is growing interest and demand for modern ASCMs that have ranges beyond 100-kilometers, and some navies in the Asia-Pacific also expressed keen interest in not just subsonic missiles, but also supersonic ones. Several of them – China, India, Japan and South Korea – are pursuing domestic development of long-range, supersonic ASCMs. This development also prompted the United States Navy to seek a new counter – the Long Range Anti-Ship Missile (LRASM) – to replace the venerable but increasingly outclassed Harpoon ASCM. Coping with the evolving ASCM threat at sea requires not just the acquisition of a suitable symmetric, offensive counter, but also a defensive one as well. Asia-Pacific navies hence started to acquire better shipboard anti-air warfare capabilities to intercept incoming modern ASCMs.

Non-Interactive Drivers

More difficult to observe than interactive and semi-interactive drivers are non-interactive ones, which are endogenous in nature, such as domestic politics, inter-service rivalries (and thus the quest for greater budgets to justify their importance within the national institution), the need to replace obsolete capabilities as well as the quest for national prestige, just to name a few. They are not associated with an action-reaction dynamic. In fact, one could surmise that non-interactive drivers do constitute a motivation behind maritime forces buildup in the Asia-Pacific.

An often-overlooked driver has been domestic politics, which adds nuances to the way Asia-Pacific maritime forces buildup can be examined. For many if not all regional governments, naval capabilities are as much for tackling real challenges as the symbol that they represent. A warship also symbolizes a nation-state’s sovereignty, and its level of sophistication reflects the country’s

power. At the operational level, enhanced capabilities also testify to the navy's growing maturity – not just in terms of the state-of-the-art assets it acquires but also the increased competency of the personnel who operate and maintain them.

Without requisite enforcement capabilities to tackle attendant security challenges, the political legitimacy of those governments in the eyes of their domestic constituents are at stake. This is an often-overlooked point; many of these countries – especially in Southeast Asia – have a short history of independent statehood and their ruling elites derive legitimacy not just from addressing bread-and-butter issues but also, safeguarding national maritime interests against external predation. Acquiring and using naval assets amounts to not just a practical but also politically symbolic act – to demonstrate to both domestic and external audiences their resolve to police their national waters. At the height of the Malacca Straits piracy and sea robbery incidents in the early 2000s, Indonesia, Malaysia, Singapore and Thailand constituted the Malacca Straits Patrols and embarked on their own capacity-building efforts. Foreign assistance included fiscal and technical support, not direct military involvement which would be seen as undermining national sovereignty and jurisdictional rights.

One could also relate these considerations to the quest for prestige, which by itself conveys military credibility that facilitates deterrence⁶ – in the absence of perfect knowledge about the others' strategic intent, credible deterrence could be tangibly conveyed using material power, in this case a brand new, highly advanced warship which at least in theory can possibly be a match in a naval battle. This is also why many navies in the Asia-Pacific, Southeast Asia in particular, could only acquire rather small numbers of such vessels, especially in the case of submarines. Consider what the then Deputy Chief of Staff, RTN, Admiral Narongphon Na Bangchang said in July 2015: "We want other countries to be in awe of us and recognize our potential to take care of the sea."⁷

There appears to be a prevailing notion that even a tiny submarine force – amounting to no more than two boats – could still present at least a credible "fleet in being" form of deterrence that would-be adversaries must consider in its naval planning, even if one may question to no end the actual operational status of these machines. A good example can be seen in the US Navy's concerns about the Libyan Navy's tiny fleet of Soviet-built Foxtrot-class submarines, notwithstanding their poor state of material readiness, especially during the Washington's confrontation with the Muammar Qaddafi regime in the 1980s.⁸

Nature of Maritime Forces as the Root Problem?

The above survey of possible drivers behind maritime force modernization in the Asia-Pacific yields a mixed picture. All three categories of drivers can easily co-exist alongside one another, without necessarily having any one of these dominant at any point of time of naval acquisitions planning. Simply, the problem presented here is not so much about what drove maritime forces buildup than two key issues: the very nature of maritime forces themselves, and naval armaments.

Firstly, navies especially are such flexible instruments of statecraft, with which governments utilize for the pursuit of diverse national interests. These interests at the same time can be broadly defined, and whose components – both domestically and externally oriented – can be intertwined and linked. The same applies to the proliferation and expansion of maritime law enforcement agencies (MLEAs) in the Asia-Pacific – these “white hulls” are typically seen as the answer to non-traditional maritime security challenges, such as pirates and sea robbers, thus freeing navies to focus on their traditional roles of defense diplomacy, sovereignty enforcement and warfighting.

Yet at the same time, even MLEAs become so versatile as to become the vanguard of sovereignty and rights assertion in the Asia-Pacific maritime flashpoints such as the East and South China Seas, where “white hulls” are seen spearheading such aggressive actions against their rivals. To compound the situation, not all Asia-Pacific countries draw such a clear distinction between navies and MLEAs. For those which do not possess separate MLEAs, the navies would have to take on the burden of daily operations, including law enforcement against non-state actors. Those regional governments which enjoy the luxury of separate MLEAs either found that those agencies lack capacity such that their navies still have to bear the primary responsibility of constabulary missions,⁹ or that those agencies still found themselves tussling with “turf wars” and stovepipes, which stymie effective coordination and unity of effort, usually also leading to duplication and wastage of resources.¹⁰ In short, maritime forces fulfil a range of strategic objectives that may not necessarily be concerned about responding to a putative adversary.

Then comes the second issue – the very nature of naval armaments. Generally, weapons imbued with such characteristics as being highly mobile tend to be associated with the offensive. Modern warships, combining immense mobility, endurance, range, detection capability, firepower and protection, clearly fit the bill. However, warships are typically dual-functional platforms. Depending on their designed functions, their offensive capabilities vary.

Take for example, the case of amphibious landing ships. Unlike destroyers and frigates acquired by Asia-Pacific navies today, these vessels are ungainly

designs optimized to embark and disembark personnel, vehicles and materiel. Modern amphibious landing ships can dispatch smaller landing craft and conduct helicopter operations, while also under-armed – primarily for self-defense. Yet these ships are popular buys in the region, especially after the Indian Ocean Tsunami in December 2004, a painful episode for Asia-Pacific navies which hitherto focused on acquiring warfighting assets such as frigates and submarines instead of better amphibious sealift assets. This lesson was further driven home by subsequent natural calamities – Cyclone Nargis in 2008, and Super Typhoon Haiyan in 2013.

In many of these instances, better endowed Asia-Pacific navies contributed amphibious landing ships. For example, Singapore mobilized its Endurance-class landing platform docks (LPDs) for disaster relief in Banda Aceh following the tsunami. The Japanese through-deck “helicopter destroyer” JS Ise assisted in post-Haiyan relief. The Filipinos, smarted by their Haiyan experience, decided to rectify their shortfalls by acquiring two Indonesian-built LPDs, designated Strategic Support Vessels – the Tarlac-class.

The proliferation of amphibious landing ships should be a welcome act. But this exposes the problem usually associated with naval armaments – they can perform both defensive and offensive functions. Such vessels can be employed for both amphibious assault operations and peacetime humanitarian assistance and disaster relief (HA/DR) operations. Yet from a pragmatic perspective, while one may argue that acquiring them could contribute to a regional naval arms race, it is important to recognize that amphibious landing ships contribute to regional stability. Imagine the consequences should there be no timely relief delivered by these assets to the disaster zones – scores of displaced victims and the transboundary impact upon their neighbors?

Maritime Force Structure Challenges and Crisis Stability

Often, one may use growing defense expenditures to sound the alarm bells for military buildups in the Asia-Pacific. While it is true that defense expenditures have been on a steady rise in the region, this tangible indicator alone fails to tell the full story. Naval capabilities are in fact increasingly expensive to acquire, operate and maintain. Maritime force buildup cannot be seen in quantitative terms only. For one thing, the size and latent capability per platform (i.e. warplanes or warships) is expanding. To give an example, in the past destroyers used to be armed with eight ASCMs but modern ones these days can be armed with 16 or more.¹¹

Larger platform size translates into better range, endurance, onboard spaces to accommodate modular capabilities or future upgrades. This last point

is particularly important because with the growing costs per unit platform, it becomes critical for navies to keep a ship in service for as long as possible before eventual replacement. A typical warship has an average hull life of 20 years and may serve over 30-40 years with proper maintenance, repairs and overhaul.¹² As such, with increased capability per unit, warships become costlier to acquire, operate and maintain compared to land forces. For example, for a US\$110 million frigate one could possibly purchase over ten main battle tanks, and it does not include expenses incurred for acquiring requisite infrastructure, training and other technical support. This means one-for-one replacement is not always forthcoming in the process of modernization.

An example would be China's PLA Navy: while being blessed with generous funding it still has to streamline its force structure while expanding its capabilities. The once bloated coastal and patrol combatant fleet is gradually downsized – with numerous classes of torpedo and missile boats as well as patrol vessels being incrementally replaced by two main classes, namely the Type-056 Jiangdao-class corvettes and Type-022 Houbei-class catamaran-hulled missile fast attack craft. This not only rationalizes and simplifies logistical requirements, but also frees up funding to allow the PLA Navy to build its major surface combatant fleet.

Another associated challenge to force structural development is the need to balance between capability and capacity, which are essentially two different attributes. For instance, a warship bristling with state-of-the-art warfighting capabilities may be less cost-effective than a greater number of cheaper, more simply-armed patrol vessels that could be better employed for daily, peacetime constabulary missions. A navy with a balanced set of multi-dimensional warfighting capabilities may not possess the capacity to fulfil all types of missions required of it. Militaries generally seek to strike a balance between capability and capacity.

Therefore, looking at current trends, Asia-Pacific navies will find it increasingly more challenging to acquire new platforms in desired numbers. But this should not prevent them from incrementally enhancing their capabilities. However, the stark reality is that with smaller fleets made up of highly sophisticated yet exorbitantly expensive assets – so called “one hit ships”¹³ – navies would find themselves in a potential “use them or lose them” situation during, say, close-proximity encounters in areas of political contention, especially disputed waters.

In modern naval warfare, combat engagements can take place over the horizon upon split-second, life-and-death decisions. The ship's commanding officer may feel compelled to respond pre-emptively to tell-tale signs of attack, for example the illumination of fire control radar systems which can be (mis)construed as hostile intent by the other party. This can lead to

miscalculation and inadvertent incidents – which can be aggravated by various factors that cloud the judgment and decisions of the human operator, for instance psychological stress in an extremely tense naval standoff.¹⁴ Automated naval systems can fail too, as exemplified in past incidents.

The Asia-Pacific is replete with such examples – for instance the illuminating of fire control radar at a Japanese destroyer by a PLA Navy frigate in the East China Sea in January 2013. The Indonesians and Malaysians almost exchanged fire in 2009 after the former's warship illuminated its fire control radar at the latter in the last standoff over a disputed hydrocarbon block in the Celebes Sea. Luckily these were near misses.

What Future Lies Ahead?

In the foreseeable future, Asia-Pacific navies will continue to gravitate towards large, multi-role surface and subsurface platforms that exist in smaller numbers but being each vastly more superior than their older predecessors. They will come equipped with enhanced offensive long-range strike capabilities, such as land attack and supersonic anti-ship cruise missiles. There will also be a focus on acquiring newer and better amphibious landing ships, which would expand the navies' strategic mobility and expeditionary force projection capabilities. At the same time, Asia-Pacific maritime forces will seek to enhance their command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) capabilities that serve as force multipliers for a more networked pool of assets.

Equally notable is the continued expansion of MLEAs. Existing agencies will continue the process of consolidation and mergers, such as the case of China and Indonesia, while new assets will also be sought – often in direct competition for funding with navies. Not only are these coastguard-type fleets expanding in size, but also individual vessels entering service become larger and increasingly better armed.

As long as maritime forces remain flexible foreign policy instruments, Asia-Pacific governments will continue pursuing the game of buildups – doing their best to at least maintain if not significantly enhance their existing forces with the available resources on hand. There is no way to reverse this trend. As the previous financial crises, such as the one in 1997, have shown, maritime forces buildups would continue, albeit at a slower pace and with several pipeline procurements being deferred. But governments in the Asia-Pacific, cognizant of the enduring importance of safeguarding their national maritime interests, will continue to regard maritime forces development a key priority.

This leaves the Asia-Pacific to ponder about what future lies ahead in view of the ongoing maritime forces buildups with the strategic backdrop of persistent geopolitical flux and uncertainties in the region. There are numerous mechanisms that facilitate confidence-building and practical security cooperation. Whether these are effective or otherwise remains debatable, though it would be unfair to dismiss them outright when many policymakers in the region view them favorably overall.

While one should not dismiss legitimate concerns about the potentially dire consequences of naval acquisitions, it is necessary to recognize that naval armaments are dual-functional, which lends to their ambiguity when utilized in such ambiguous medium as the seas. Instead of viewing them through a “destabilization” lens, one may see them as contributing to regional stability. A naval arms race would be a mischaracterization. Preventing regional countries from acquiring the means they need to tackle immediate maritime challenges may cause national insecurities and result in regional instability instead.

It is perhaps time to temper expectations about what the regional security architecture can offer, beyond political assurances. Multilateral political instruments, such as the proposed Code of Conduct for the South China Sea, are certainly welcome. But one needs to ponder over the question of whether it may be better to focus on initiatives aimed at enhancing the professionalism of maritime practitioners (i.e. the sailors and airmen) and promoting operational-tactical confidence-building measures. Expanding the Code for Unplanned Encounters at Sea (CUES), which was signed between 21 navies during the Western Pacific Naval Symposium in Qingdao back in April 2014, to MLEAs, irregular maritime forces and submarines appears a more practical way forward to ameliorate the risks of maritime forces buildup in the Asia-Pacific.

Notes

¹ One may notice from Figure 1 that the rate of increase in value of exports for aircraft, followed by ships and then missiles have been high – though the fluctuations observed here were also significant during times of financial difficulties. Given that these three weapons categories are generally capital intensive, these patterns do reflect regional emphasis on their purchases over relatively less expensive land forces. In other words, the Asia-Pacific military modernization is characterized by maritime forces development, including aircraft capable of operating in the maritime domain. This trend looks set to persist into the foreseeable future.

² Shaun Narine, *Explaining ASEAN: Regionalism in Southeast Asia* (Boulder, Colorado: Lynne Rienner Publishers, Inc., 2002), pp. 69-70.

³ “Thai Navy petitions Govt to buy submarine,” *Khaosod English*, 23 April 2015. Author also heard the same remark from the RTN speaker at a regional underwater defense conference in January 2017, Singapore.

⁴ Despite occasional hiccups in bilateral ties with Indonesia and Malaysia, Singapore's immediate neighborhood has been relatively calmer compared to the 1990s and early-2000s. The countries continue to pursue peaceful means towards resolving their bilateral disputes, thus maintaining a cordial atmosphere. In 2014, Singapore signed a treaty with Indonesia to delineate their maritime boundary along the Singapore Strait, between Changi and Batam, which was ratified in 2016, and jointly submitted for registration with the United Nations the following year. *Joint Press Statement: Joint Submission by Singapore and Indonesia to Jointly Register the 2014 Treaty Relating to the Delimitation of the Territorial Seas in the Eastern Part of the Strait of Singapore with the United Nations on 25 September 2017*, Ministry of Foreign Affairs, Singapore, 26 September 2017. Even though in July 2017, Malaysia filed an application to seek interpretation of the International Court of Justice landmark decision in May 2008 concerning sovereignty over Pedra Branca, Middle Rocks and South Ledge, both Kuala Lumpur and Singapore elected to pursue this legal recourse. "Malaysia seeks interpretation of ICJ's Pulau Batu Puteh judgment," *The Star Online*, 1 July 2017.

⁵ "Navy: Next government can sink sub order," *Bangkok Post*, 2 May 2017.

⁶ Ken Booth, *Navies and Foreign Policy* (London: Croom Helm; NY: Crane, Russak, 1977), p. 51.

⁷ "Navy argues subs protect seas," *Bangkok Post*, 31 July 2015.

⁸ The US Navy was so concerned about the reckless way Qaddafi used his Soviet weapons that each time, whenever a crisis broke out in the Mediterranean between the U.S. Sixth Fleet and the Libyans, the navy alerted its attaché office in Belgrade to conduct an immediate reconnaissance of the Libyan *Foxtrot* boats in Tivat, Yugoslavia, where Tripoli maintained two of the submarines for periodic overhaul. Peter A. Huchthausen and Alexandre Sheldon-Duplaix, *Hide and Seek: The Untold Story of Cold War Naval Espionage* (New Jersey: John Wiley & Sons, Inc., 2009), pp. 302-303.

⁹ For example, the Malaysian Maritime Enforcement Agency (MMEA), until recent new acquisitions, had just two offshore patrol vessels out of the total of 190 vessels of various sizes in service, for sustained operations out to the 200-nautical mile exclusive economic zone. In response to the Chinese coastguard presence in South Luconia Shoals off Sarawak, claimed by Kuala Lumpur and Beijing, it was a Royal Malaysian Navy (RMN), not MMEA, ship (the KD *Serang*) which was deployed to the location in September 2013. The RMN and MMEA respectively conducted 191 and 78 patrols at the shoals in 2014, and 241 and 104 days in 2015. *Parliamentary Debates of the Senate*, Third Session of the Third Term, Thirteenth Parliament of the Federation of Malaysia, December 14, 2015, pp. 52-53.

¹⁰ Indonesia's Maritime Security Board (BAKAMLA) continues to face difficulty in forging inter-agency unity and coordination to deal with the myriad of security challenges within the country's vast archipelago. This remained the case despite formally establishing the Indonesia Coast Guard. Read for instance, Siswanto Rusdi, "The dilemma of Indonesia's coast guard," *The Jakarta Post*, 11 February 2015.

¹¹ For example, the old PLA Navy destroyers of the *Luda* and *Luhu* classes typically carried at most eight ASCMs of the HY-series and newer YJ-81 (said copied from the French MM-38 Exocet) respectively, but subsequent new classes from *Luhai* onwards could easily carry up to 16 more modern and capable YJ-82/83 and the even newer YJ-62 and YJ-18 ASCMs.

¹² Department of Disarmament Affairs, *The Naval Arms Race*, Report to the Secretary-General, A/40/535 (NY: United Nations, 1986), p. 16.

¹³ This means that, if hit even once, they are usually put completely out of action or sunk. Harold J. Kearsley, *Maritime Power and the Twenty-First Century* (Aldershot: Dartmouth, 1992), pp. 30-31.

¹⁴ Read for instance, Michael D. Wallace and Charles A. Meconis, "New Powers, Old Patterns: Dangers of the Naval Buildup in the Asia-Pacific Region," Working Paper No. 9, Institute of International Relations, The University of British Columbia, March 1995, p. 6.