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BETWEEN BOOTS AND BOATS: INDONESIA'S STUNTED NAVAL MODERNIZATION

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Abstrak

Indonesia memiliki latar belakang sejarah maritim yang panjang. Apalagi, bentuk negara kepulauan mendorong Indonesia memiliki kepentingan dan perhatian luas terhadap pemanfaatan laut. Namun, baik sejarah, kepentingan maupun perhatian tersebut belum mampu mendorong Indonesia untuk membangun kekuatan angkatan laut yang tangguh di era modern. Melainkan, perdebatan masih seputar antara "sepatu" atau angkatan darat, dengan "perahu" atau angkatan laut, dalam prioritas pembangunan angkatan bersenjata. Dalam konteks ini, permasalahan utama terletak pada kebijakan pertahanan yang terlalu berpemikiran kontinental dan terlalu terpolitisasi. Kedua masalah ini tidak hanya mencegah Indonesia untuk menjadi kekuatan maritim yang tangguh, tetapi juga secara khusus telah menghambat proses modernisasi angkatan laut sejak masa Orde Lama.

Kata Kunci: *TNI-AL, defence policy, navy, naval modernization*

Irika tanganyabhumi sakahembaning yawa puri,
Hamatehi sajna sang nrpati kapwa satya ringulah,
Pituwi singajna langghyana dinon wisirnna sahana,
Tekapikanang watek bala dhimantryaneka suyasa.

Eventually all domains became subjects of the (Majapahit) Kingdom of Java,
Obedient and loyal to His Highness, the King of Java,
Anyone found disobedient would be attacked and wiped out completely,
By the squadrons of the various meritorious naval officers.

From *Desawarnana/Nagarakrtagama* manuscript, canto 16
The 14th century Chronicle of Javanese Majapahit Empire[1]

The above manuscript highlights that Indonesia's ancient past was strongly attached to the sea. Since the sea had attributably been Indonesia's medium for dominion, it is needless to say that it was significant for the economy, transportation and the spread of information in the archipelago's ancient past.[2] Despite its importance to Indonesia's lifelines, the sea however does not receive the attention it deserves in the way the government prioritizes the "boots" over the "boats."[3] This essay attempts to provide a glimpse of

Indonesia's naval modernization by moulding together historical, political and strategic perspectives. It argues that despite the fact that historically Indonesia has extensive interests and intrinsic maritime concerns, it is unable to modernize its navy effectively since its defence policy is strongly continental-minded and heavily politicised.

This essay is divided in five parts. First, it briefly outlines Indonesia's maritime past and archipelagic nature. Second, it describes Indonesia's contemporary maritime interests and concerns. Third, it explains the role of the navy in Indonesia's defence policy-making. Fourth, it examines the historical development of Indonesia's naval modernization. Finally, it concludes that Indonesia's naval modernization is stunted due to the continental-mindedness and politicisation of defence policy.

Indonesia's Maritime Past and Archipelagic Nature

Indonesia is the largest archipelagic state in the world, comprising more than 17,500 islands and possesses the second longest coastline. As it has jurisdiction over more than 5.8 million sq. km of water, Indonesia regards its seas as its bloodlines and a unifying factor for the country.[4] This geographical condition enables diverse cultures and societies to thrive. However, the centre of whole archipelago remains in Java. It is the centre of government, economic, and military establishments. Java itself is populated by almost 58% of the national population,[5] the base of two Indonesian Navy (TNI-AL) fleets, and ethnic Javanese comprise more than 40% of the total demographic distribution.[6] Thus, Indonesia is actually a complex of archipelagos and large islands with a single dominant island, Java. In this respect it resembles Britain, Fiji, Japan and New Zealand –and is correspondingly unlike the Philippines, the Maldives and Tuvalu, where the pre-eminence of the main island is much less pronounced.[7] In other words, despite its archipelagic nature, Indonesia practices a sort of centre-and-periphery relations, in which Java forms the core.

Historically, Indonesia's lifelines have a strong attachment with the sea. Indonesian prehistoric traders have collected and preserved trepang (sea slug) along the coast of northern Australia.[8] The *I La Galigo* manuscript of Bugis people from South Celebes depicts Sarigade, the son of the king of Luwu' in the land of Bugis, came to visit his sister who had moved away from their parents. His fleet consisted of one large vessel and two hundred smaller ones, crowded with thousands of crewman.[9] As early as the twelfth-century, Indonesian ships had already been:

> divided between those which carried people and good and those which were specialized warships... Flat-bottomed boats or war canoes could sail right to shore to disgorge cargo to waiting porters, or troops. Larger vessels anchored in deeper water in the bays, sheltered among the islands, and sent representatives and cargo ashore in small row boats...Already in the first millennium C.E. archipelago boat builders were constructing double outrigger canoes, sea craft with rudder, a support mast, and a fixed sail. This kind of ship can be seen carved in a wall panel of the Borobudur and in stone reliefs at Lau Biang, north Sumatera (dated around 400-700 C.E.). By the sixteenth century Indonesia shipping included large oceangoing vessels that could carry up to one thousand men and many kilograms of good. They had between two, three, or four masts and sails woven from rattan.[10]

As a result, the 14th century Java-based Majapahit Empire could establish a maritime dominion larger than the modern-day Indonesia. Likewise, modern Indonesia is very much attached to the sea, although in a slightly different notion. In modern Indonesia, the sea forms the bedrock of Indonesian identity as evident in its maritime interests and concerns.

Indonesia's Maritime Interests and Concerns

Indonesia's maritime interests and concerns are relatively non-traditional in a sense. It regards traditional naval conflict as a distant possibility, though it is not impossible. The centre of attention has been how to protect maritime resources, secure the Sea Lanes of Communications (SLOCs) and cope with increasing non-traditional threats, such as armed robbery at sea, piracy and illegal activities at sea. These are somewhat aligned with regional maritime concerns in general. However, increasing concern over regional naval modernization, coupled with maritime border disputes, has heightened Jakarta's sense of urgency to boost the navy's military role in exercising its maritime sovereignty.

Protection of Maritime Resources

Indonesia was and is still known for its abundant resources. Japan's thrust to Indonesia in the Second World War to seize resource rich areas is a clear evidence of this claim.[11] Being cognisant of this fact, Indonesia puts protection of maritime resources upfront in its maritime policy. Two prominent issues in this regard, namely protection of fishing and hydrocarbon resources.

Indonesia has rich fishery resources, with more than 6 million tons of sustainable potential, but it lacks the capacity to harvest even 4 million tons. Indonesia also has mineral rich areas and other undersea wealth in its exclusive economic zone (EEZ) currently

extending over 2.4 million sq. km.[12] At the moment, Indonesia finds it very difficult to prevent illegal, unregistered and unregulated fishing in its waters. In order to do so, it requires about 22,000 fishing vessels. It is estimated that Indonesia loses about US$18 billion per annum from illegal fishing and other illegal activity at sea, such as illegal exports and smuggling of timber logged illegally.[13] Problem over fishing also extends even to the legal fishing industry. Legally, Indonesian enterprises are generally outclassed by foreign ventures. The Indonesian section of the industry is dominated by small, artisanal fishers, while the high-tech sector is dominated by foreign or joint venture firms.[14] Moreover, the navy is also allegedly involved in collusion with trawlers from foreign companies plundering Indonesian fish stocks. In order to obtain a license, a foreign trawler owner has to enter into a joint venture or a 'charter' arrangement with an Indonesian company. The central cooperative of the navy, Inkopal, appears to hold the largest batch of licenses. But these licences did little to provide economic benefits to Indonesia.[15] The navy, nonetheless, praised itself as having successfully addressed this issue. In 2009, the TNI-AL chief announced that the navy managed to secure some Rp. 13.8 trillion (US$ 1.38 billion) in potential state losses by preventing illegal activities. This figure comprised Rp. 2.4 trillion from illegal fishing, Rp. 52.4 billion from illegal logging and Rp. 11.3 trillion from various cases including commodities such as granite, coal, tin, fuel, cement, sand and crude palm oil.[16]

The second issue relates to protection of hydrocarbon resources, particularly oil and gas. Currently Indonesia is at an energy-intensive stage of its development, meaning that industry is developing and good maritime infrastructure is a necessity. Today, Indonesia is a net oil importer and it is estimated that by 2050 Indonesia will import most of its oil requirements.[17] In mid-1996, tension brew over the Natuna Island group adjacent to the South China Sea. The group is estimated to contain 12.7 trillion cubic metres of recoverable gas, which represents 40 per cent of all Indonesian gas reserves.[18] Such was the tension that Jakarta had to send an official note of protest to Beijing and conduct its biggest ever combined military exercise in the South China Sea, involving 20,000 troops, 40 aircraft and 50 naval vessels. The exercise was clearly meant as a warning to China that Indonesia would not tolerate any Chinese attempt to encroach upon the Natuna gas field or Indonesia's contiguous EEZ.[19] Another recent example is the dispute over Ambalat block off Indonesian East Kalimantan Province where Indonesia and Malaysia have awarded overlapping concessions to oil firms. The dispute saw Jakarta sending warships and fighter jets to the area

in March 2006.[20] In May 2009, tensions flared again with the Indonesian Navy came close to firing upon a Malaysian patrol boat.[21]

Security of SLOCs

Another important maritime interest for Indonesia is the security of Sea Lanes of Communications (SLOCs). Indonesia is transited by four of the world's so-called "maritime choke points," where SLOCs came into a bottleneck –the Malacca and Singapore Straits, Sunda Strait and the Lombok Strait. This makes Indonesia the vital passage way for world's shipping, particularly since major powers in the region, like Japan, China and India, "are scrambling to secure deliveries of energy and raw materials to fuel their booming economies."[22] Threats to regional SLOCs mostly involved armed robbery at sea and piracy, though a possibility of maritime terrorism –a nexus between pirate and terrorist– has been seriously contemplated. Despite the responsibility to secure these lanes is shared by a number of neighbouring countries, like Malaysia and Singapore, significant portion of them lies within Indonesia's maritime jurisdiction. Extra-regional powers have also lent their assistance to help patrol this waterway, but persistently declined by Jakarta. For Indonesia, any assistance from extra-regional navies, like the US, in the form of naval presence, would constitute a breach to its sovereignty and a justification that it cannot police its own waters. But Indonesia would and did accept indirect assistance in terms of equipments and facilities that could enhance its maritime capacity. For example, the US gave financial grants and assistance to Indonesia to establish an Integrated Maritime Surveillance System for the Indonesian Navy in the Malacca and Singapore Straits. This program was completed in 2008, with 12 radar stations built along the Malacca Strait, and has significantly increased Indonesian capability to maintain security and safety of navigation in the straits.[23] Another example was Japan which provided three patrol boats to Indonesia also to secure the Malacca Strait.[24] As threats in the Malacca and Singapore Straits gradually declined, concerns arise, however, on other maritime areas that hitherto received scant attention, such as the Sulu and Celebes seas, largely as a consequence of separatist conflict taking place in Mindanao.[25]

Indonesia endeavours to provide protection and security of these waters through various levels. At the unilateral level, TNI-AL has moved to upgrade its patrol platforms, increase its patrols, and set up Navy Control Command Centres in the affected areas, such as Batam and Belawan. It also has operated "communications frequencies and hotlines that have

been made available to the shipping community to contact in response to a pirate incident and placed Special Forces that can respond immediately to hijackings."[26] At the bilateral level, for example, it has conducted bilateral patrols with the Indian Navy in the Six Degree Channel in the eastern end of the Malacca Strait.[27] The Indian and Indonesian navies have also conducted a cooperative exercise called IndIndonCorpat (Indo-Indonesian Coordinated Patrol).[28] At the multilateral level, Indonesia is a non-contracting party of The Regional Cooperation Agreement on Anti-Piracy (ReCAAP), to "foster multilateral cooperation to combat the threat of piracy and armed robbery against ships" which includes "information sharing, capacity building, and cooperative arrangements."[29] These efforts however are still deemed insufficient enough since Indonesia is still lacking the technology to effectively conduct patrol and surveillance.

Exercise of Maritime Sovereignty

Notwithstanding the above-mentioned interests, Indonesia still views the sea as a source of vulnerability to its national security. Indonesia's basic ethnic configuration makes separatism a believable option, but it is the country's archipelagic character that makes it seem actually practicable.[30] In the late 1950s, the Netherlands fomented a secessionist movement in West Irian (Dutch New Guinea) and maintained its presence in the area despite persistent protests from Jakarta. Dutch warships sailed through the Java Sea and seas in the eastern part of Indonesia on their way to West Irian. What infuriated some Indonesian politicians was the fact that under the 1939 ordinance, which limits Indonesian territorial water to only 3 miles from the shoreline, the Indonesian government could do nothing to prevent the warships from passing through these waters.[31] As such, the government made strenuous efforts to close the in-land seas (the seas that connecting the islands making up Indonesia) under Indonesia's complete maritime jurisdiction. Hence, the *Wawasan Nusantara*, or Archipelagic Outlook concept, in which Indonesia's lands and waters are regarded as indivisible, was formulated. Even Indonesia's word for 'Motherland' is 'Tanah Air' or a Place of Land and Water, which clearly conceives the islands and the surrounding seas as a single unit.[32] This concept was later transformed into Indonesia's "Archipelagic Concept" that has become part of United Nations Convention on the Law of the Sea (UNCLOS) 1982 that applies to archipelagic state. Despite swift and strong reactions from major maritime powers, like the Netherlands and the US, at the time of its formulation,

Indonesia insisted on using the concept and incorporated it under Law No. 4/1960 dated 18 February 1960 on Indonesian Waters.[33]

In its contemporary use, the *Wawasan Nusantara* concept is applied to the exercise of maritime sovereignty, particularly in reference to outer islands and maritime boundaries. Indonesia's exercise of maritime sovereignty is by no means a new phenomenon. In September 1988, the Indonesians flexed their muscles by temporarily suspending passage of ships through the Sunda and Lombok Straits. Although it claimed the closure was due to naval live-firing exercises, observers believe Jakarta was testing foreign reaction as it disputes international maritime laws that limit its rights of control over the country's archipelagic sea lanes.[34]

In 2002, Indonesia lost the tiny islands of Sipadan and Ligitan Islands after the International Court of Justice at The Hague ruled in favour of Malaysia. This "compelled Indonesia to realise the importance of managing our outer islands" particularly the 12 dispute-prone islands of Rondo, Nipah, Sekatung, Berhala, Marore, Miangas, Marampit, Batek, Dana, Bras, Fani and Fanildo because of its proximity with neighbouring countries.[35] Having lost the two islands, the Ambalat dispute is a very sensitive issue indeed, both abroad and at home, since its concerns with the government's credibility to uphold territorial sovereignty. As a result, Indonesia increased naval presence in the Ambalat waters which saw the deployment of seven warships in the area before Jakarta and Kuala Lumpur agreed to decrease tension.[36] However, the dispute has in a way also accelerated Indonesian naval modernization. In light of a project to build an indigenous Guided Missile Escort (*Perusak Kawal Rudal*-PKR) modelled after the Dutch SIGMA 10514 Type, the Indonesian Minister of Defence, Purnomo Yusgiantoro, commented that "this ship will have a higher class than what Malaysia has. Our combat capability will hardly be surpassed by this country. And we can no longer afford to be disregarded."[37] Although he did not mention Malaysia singularly as a threat to Indonesia, Yusgiantoro's statement clearly implied that the project was in response to Malaysia's naval modernization and claim over Ambalat. In 2008, this project was accelerated and included in the navy's 2004-2009 strategic planning.[38] Albeit driven by these concerns, the process and result of Indonesia's naval modernization is still in doubt at most, especially since its defence policy is historically continental-minded and heavily politicised.

Indonesian Defence Policy: How the navy fits into the equation

Indonesian strategic outlook has mostly been inward-looking.[39] This outlook inhibits the navy "strategic culture" which demands, among others, performance "in an expeditionary manner: offensive, forward, mobile and joint."[40] As Colin Gray enunciatively put it that "in order to derive the maximum benefit of is navy, a maritime power should be willing and able to seek out the enemy's navy,"[41] this sort of logic just does not work with Indonesia.

The crux of the problem lies in Indonesia's defence policy which is strongly continental-minded and heavily politicised. This is evident during the Indonesian War of Independence against the Dutch in 1945-49 which emphasized on guerrilla warfare by the army. Having fought this asymmetrical war, the army concluded that Indonesia would not be able to fight conventional war and always have to resort to guerrilla warfare.[42] Furthermore, it needs to create an 'emotional' bond with the society it was fighting for through involvement in civilian affairs, especially in social and political realms (*sospol*). This was formulated under the army's territorial structure which saw the establishment of military regions (*kodam*) nation-wide from the provincial to district level. Territorial officers are supposed to monitor political and social developments and "prod" their civilian counterparts when necessary.[43] Internal security threats which Indonesia mostly faced further entrenched and vindicated this belief. As such, the role of the navy has largely been to transport soldiers from one point in the archipelago to another to assist the army in conducting counter-insurgency operations.[44]

Furthermore, political elites exacerbated the inter-service rift within the military by balancing one service against the other. For example, during Sukarno's Old Order regime, a considerable amount of foreign exchange was used to modernize and increase the size of both the air force and the navy, despite the army's earlier warning that Indonesia was in no position to maintain and service large fleets of modern aircraft and warships. This was part of Sukarno's policy of keeping the army in check by playing the other services off against the army leadership.[45] Likewise, Suharto after assuming power in 1967 shored up his power base by strengthening the army at the expense of the navy and air force.[46] By 1979, Indonesian warship tonnage was less than a third of what it had been in the mid-1960s.[47] In 1991, following the Santa Cruz Massacre in Dili, East Timor, the US imposed an arm embargo against Indonesia, further crippling the fleet. The embargo was tightened when military-backed militia laid waste to territory after it voted for independence in August 1999. The unsolved ambush killing two American school teachers in Papua three years later only served

to tighten the ban, which led Indonesia to look to Russia and other countries for military hardware.[48]

After the downfall of Suharto's regime in 1998, the democratic government started to turn the tide. The military (TNI) saw the appointment of an admiral as the chief of the armed forces for the first time in history. The appointment of Admiral Widodo Adi Sucipto was aligned with President Abdurrahman Wahid's desire to build his own loyal following within the TNI, a task which he had begun in October 1999.[49] After he assumed command, Admiral Sucipto announced "his desire to purchase goods, mentioning specifically the planned purchase of two Parchim-class corvettes and the upgrade of seven F-16A/B jet fighters, at a combined cost of over Rp. 60 billion (approx. US$ 6 million). He also wanted to obtain large fast patrol craft, as well as increase the number of navy personnel by 20,000 over five years."[50] Modernization was, however, still hampered by the US arms embargo. In 2004, Singapore offered to donate five ex-US Navy County-class landing ships after they were phased out in favour of Endurance-class vessels, but it was blocked by the US.[51] Despite the embargo was eventually lifted in 2006, only a modest US$ 1 million in Foreign Military Financing was approved for the Indonesian navy, largely to support maritime security which, along with counter-terrorism, is one of the chief concerns of the US Congress.[52] Hence, from 1998 onwards, the Indonesian government has been striving to develop self-sufficiency in its arms procurement through the local defence industry.

Despite making quite substantial progress, naval modernization is undertaken without the expense of other services, especially the army. The army is still the dominant force among the other services. In 2010, the army still maintains 233,000 personnel compared to 45,000 and 24,000 of the navy and air force respectively. This figure does not include the paramilitary, which is under the army's command, numbering up to 280,000 personnel.[53] This means the army constitutes more than 77% of the total number of military personnel, even if the paramilitary force is not included. It also maintains a relatively independent decision in force deployment, without any synergy with the other services. In 2005-2009 periods, the army further reinforced its continental defence posture by adding 19 more military sub-district commands (*kodim*) in Kalimantan, Moluccas, Papua and Sumatera as well as 3 more district commands (*korem*) in Sumatera and Papua. Moreover, it still holds the conventional wisdom that it cannot fight conventionally against state-based threats due to the "lack of equipments" and thereby, compelled to wage a "protracted war," another term for guerilla warfare, in Indonesia's main and small islands. This defence strategy is incorporated

into the army's 2000-2014 force structure development.[54] This view is aligned with Indonesia's defence doctrine which still recognises "deterrence by punishment" will be well-served by waging "protracted war...through effective guerrilla resistance to wear down the technologically-superior enemy so as to frustrate him and eventually unable him to resume his action."[55] Such line of thought seems to highlight the army's influence over defence policy and its stone-walling attitude towards change. This policy clearly inhibits naval modernization which has already been exacerbated by a high level of political interference.

Fleet Modernization: An Historical Development

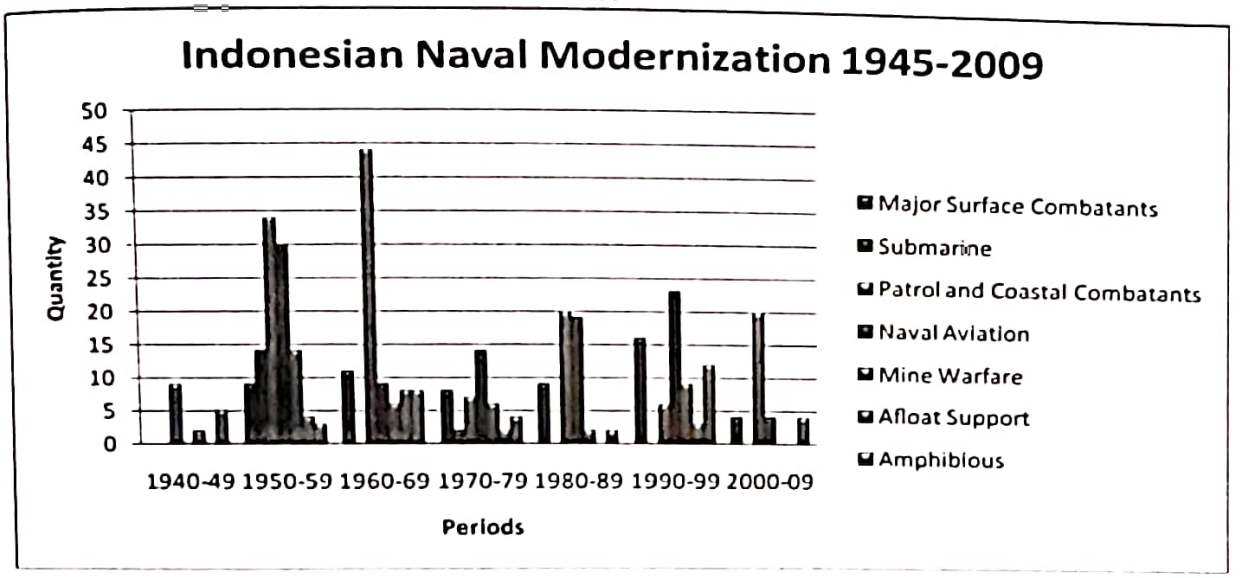
The Indonesian military is notorious for its inability to muster sophisticated military platforms and weapon systems and use them effectively. It is more reliant on warrior's *élan* (Indonesian: *semangat*), a Japanese doctrine of "fighting spirit," since "neither the Dutch nor the Japanese had been eager, for understandable reasons, to train Indonesians, in the broader aspects of military science or in the use of heavy weapons."[56] According to this notion, the warrior's *élan* was supposed to be more important than his technical training, the expectation being that its intensity would overcome all obstacles. For example, in its formative years, the Indonesian military captured heavy Japanese war material, but was incapable of integrating it either strategically or tactically into their operations. Consequently, throughout the years of struggle against the Dutch and indeed until communist bloc military assistance permitted the expansion of AURI and ALRI (former abbreviations of air force and navy, respectively), the Armed Forces of Indonesia consisted, for practical purpose, of infantry units, used operationally in battalion strength.[57] Indeed, a technological approach to defence planning has received only scant attention. Sometimes, it is also despised. Even under the New Order (1966-1998), when significant sums were invested in infrastructure and technology, the dominant mood in cabinet tended to be hostile to interventionist, technological fixes.[58] Indonesia's ruler, moreover, have a long tradition of making a virtue of the lack of access to technology by emphasizing political solutions over technological ones.[59] This belief predisposes the military to mass-based, "low-tech" tactics, when the judicious application of modern military techniques and equipment may be less costly in human and financial terms, and certainly more effective.[60] This belief is rather unfriendly towards naval and air force development.

In the late 1950s and early 1960s, ALRI underwent a leapfrog modernization following an US$1 billion worth of arms credit from the Soviet Union. The fleet included one *Sverdlov*-class cruiser, 12 *Whiskey*-class submarines, 4 *Skory*-class destroyers, 7 *Riga*-class frigates, 4 *Surapati*-class and 12 *Komar*-class Missile Fast Attack Craft. The naval aviation was provided by the AS-4 *Gannet* anti-submarine aircraft, a squadron of IL-28 bombers and a squadron of Mi-4 ASW helicopters. The Marine Corps' arsenal included *Sherman* tanks, Soviet PT-76 amphibious tanks and BTR-50 amphibious armoured personnel carrier (APC) vehicles.[61] Indeed, this was presumably the largest scale of modernization that the navy had ever received compared to other periods, with most types of platforms –surface combatants, submarine, fast attack and patrol boats, naval aviation, mine warfare, and amphibious– being acquired (see Figure 1). However, problems arose over Indonesia's capacity to maintain and sustain this fleet. Despite its size, the Indonesian navy suffered many problems:

> Operational efficiency was not high, and the navy as a whole lacked experience and training: the submarines, for example, were often sighted on the surface even during 'war patrols' and no mine-laying exercises were carried out. Serviceability also tended to be problematic: in the late 1963, for example, the majority of the larger ships (the cruiser, four destroyers, and seven frigates) were in refit. Of the 12 submarines, around 4 were operational at any one time....[62]

Furthermore, the military had poor inter-services cooperation, let alone interoperability. During this period, there was little unity in the military's strategic outlook. Each service developed its own defence doctrine. The army stressed land defence or *wawasan benua* (continental outlook), the navy developed *wawasan bahari* (maritime outlook), the airforce had *wawasan dirgantara* (aerospace outlook) and the police stressed the importance of security and order among the people (*wawasan kamtibmas*), which together, fomented military rivalries and political tension.[63]

Figure 1. Indonesian Naval Modernization 1945-2009



Source: Stockholm International Peace Research Institute (SIPRI) Arms Transfer Database.

When General Suharto rose to power in 1966-67, naval budget was drastically curtailed and most of the Soviet-build platforms were scrapped although they were still serviceable. In 1970, after the severing of diplomatic ties with Russia, which created problems maintaining the Russian ships, TNI-AL obtained an ex-US Navy destroyer escort, and an ex-RAN fast attack craft (K-16M) class to replace the ex-Russian vessels. Until the late 1970s, the only major replacements were four frigates acquired from the United States Navy in 1974. Over the 1978-92 periods, it purchased submarines from the Federal Republic of Germany (West Germany), light frigates from the Netherlands and Britain, and fast attack craft from the Republic of Korea (South Korea).[64] In December 1992, the navy acquired 16 *Parchim*-class corvettes among 39 other vessels from the ex-East German Navy fleet. Although originally equipped with anti-aircraft missiles, most of their armaments have reportedly been removed. Another eight are minesweepers and the remainder are landing craft. These ships were expected to be in service for only 10 years.[65] Controversy surrounded the procurement of these ships due to the Ministry of Finance's rejection to finance the reparation and refitting costs, which exceeded the costs of buying the platforms themselves. The controversy, which was fuelled by the mass media, contributed to the closures of two weekly magazines and a weekly political tabloid.[66] The costs for procurement of these ships also stalled the plan to locally construct 23 2,500-tonne frigates.[67]

Since the 1998 democratic *Reformasi* era, the navy has pinpointed three strategies to fulfil its Minimum Essential Force (MEF) obligation: procure new weapon systems by

prioritising domestic defence industries; increase existing system capabilities; and phase out ineffective systems.[68] Realizing that its fleet can sail, but cannot fight,[69] the navy's initiative to procure new platforms seems utterly reasonable. The Indonesian Strategic Defence Review assesses that the Indonesian military has a very low level of operational readiness in terms of platforms and weapon systems, especially for the platform-dependent navy and air force. The TNI-AL force structure is organized on an Integrated Fleet Weapon System (*Sistem Senjata Armada Terpadu*-SSAT) comprising warships (surface and sub-surface combatants), naval boats (*Kapal Angkatan Laut*-KAL), maritime patrol aircraft (*pesud*), marines and naval bases (*pangkalan*). Each operational readiness in 2009 is respectively put at only 65%, 82%, 52%, 55% and 60%.[70] Thus, the average operational readiness of naval platforms is merely at 46.27% (consisting of warships, boats and marine vehicles).[71] Having acknowledged these deficiencies, therefore, the Indonesian government through its defence establishments pursued a minimum essential force (MEF), which is basically a compromised force development plan due to "limited capacity and budgetary constraints."[72] It is compromised, because the government plainly acknowledges that it cannot fulfil the ideal force structure that the military needs. As such, modernization steps are only incrementally and modestly taken. Naval modernization is thus limited to build a 274-ship green-water navy divided into: a Striking Force (110 ships), Patrolling Force (66 ships) and Supporting Force (98 ships) (see Table 1).[73] Ideally, it requires at least 302 warships and 170 aircraft to defend its sea lanes.[74] Currently, the navy only has 144 ships.

Table 1. Force Structure of Indonesia's 274-ship Green-Water Navy Vision 2029

Striking Force	Light Frigate (FFL)	16
	Corvette (FS)	40
	Submarine (SSK)	10
	Patrol Craft Missile (PCM)	26
	Patrol Craft Torpedo (PFT)	12
	Mine hunter (MH)	6
Patrolling Force	Fast Patrol Boat (PCF)	66
Supporting Force	Command Ship (AGF)	3
	Landing Ship Tank (LST)	41
	Minesweeper (MS)	12
	Landing Platform Dock (LPD)	4
	Tanker (AOT)	6
	Ocean-going Tug (ATF)	7
	Hydro-Oceanography (AGHS)	8
	Logistic Ship (AFS)	3
	Troop Transport (LCPL)	11
	Training Ship (AXS)	3
TOTAL		**274**

Source: Ministry of Defence of the Republic of Indonesia. For the abbreviations, see, International Institute for Strategic Studies, *The Military Balance 2010* (London: International Institute for Strategic Studies, 2010), p. 487-89.

Having laid out its Green-Water Navy vision, the navy has seen new platforms joining the fleet. For the striking force, the navy has acquired four 90m SIGMA-class corvettes armed with MM-40 Block II Exocet anti-ship missiles, Mistral anti-aircraft missiles, and a 76mm Oto Melara main gun. A project to build a Guided Missile Escort (PKR) – with some calling it a light frigate – has also been laid out in November 2010 and is expected to be completed by August 2014.[75] The US$220 million PKR will be jointly built by Dutch Damien Schelde Shipbuilding Company and the local PT. PAL naval shipyard. The vessel will be 105 m in length with a 2,400 tonne displacement and equipped with modern weapon systems for electronic countermeasure, anti-air warfare, anti-submarine warfare, anti-surface warfare and naval gunfire support.[76] The PKR project is part of the "National Corvette" programme launched in 2004, but has only recently been "resurrected" by purchasing two locally-built PKRs. The first PKR is estimated to take at least four years to build, with initial delivery by the end of 2012, followed by test trials in 2013, and the final delivery by 2014. The second ship could be delivered within the following six months.[77] The navy is also going to purchase two submarines in 2014 with either South Korea or Russia as the potential supplier.[78]

In terms of patrolling force, TNI-AL has prioritized the state-owned naval shipyard company, PT. PAL, as the main supplier for its patrol boats. PT. PAL has successfully developed various smaller craft, such as Fast Patrol Boats in different sizes.[79] PT. PAL shipyard completed two Todak (German PB-57)-class large patrol craft in 2000 under a contract suspended for several years after it was originally concluded in 1993.[80] TNI-AL currently has locally-built 20 patrol boats manufactured under the PT. PAL's NAV project. PT PAL has also lamented its ability to construct an Offshore Patrol Vessel (OPV).

For supporting force, TNI-AL has acquired 3 *Makassar*-class Landing Platform Dock (LPD) ships with another still being built. The 7,300–ton LPDs were jointly built by South Korea's Daewoo and PT. PAL, with the former already built the first two vessels. These four LPDs will be vital assets for domestic missions and disaster relief missions around the disaster-prone archipelago. Having successfully developed 50,000-ton cargo ships, Indonesia, through PT. PAL, has an ambition to build a 190m 35,000-ton helicopter carrier. PT. PAL has also been enlisted to construct seven tank landing ships (LST) to replace six US-built LSTs that have been serving for more than 40 years.[81]

Despite their obsolescence, TNI-AL is in no rush to scrap its inventories. Rather, some steps were taken to upgrade existing system capabilities. The navy has upgraded two of the 16 *Parchim*-class corvettes with new caterpillar engines in 2002 and, another six, in 2003.[82] On December 21, 2009, the Navy Chief, Admiral Agus Suhartono, said that the navy would continue to be equipped with Chinese (PRC) C-802 missiles on board the fast patrol boats and Van Speijk (class) warships.[83] In December 2004, South Korea's Daewoo Shipbuilding and Marine Engineering won a $60 million contract to overhaul and upgrade one of the two Indonesian Cakra Type 209 (1300)-class diesel-electric submarines acquired from Germany in 1981.[84] The overhaul and upgrade was completed in February 2006.[85] The boat is armed with Surface and Underwater Target (SUT) Torpedo manufactured by Indonesian state-owned aviation industry, PT. Dirgantara Indonesia.[86]

The navy has also taken steps to scrap its old platforms. In June 2010, Admiral Agus Suhartono stated that "at least 12 warships and 16 airplanes...will be scrapped and be replaced with new ones."[87] Twelve US-made Landing Ship Tank (LST), built in 1942, will be the first platforms to be scrapped. It has also grounded 21 Australian-built GAF N-22 Nomad surveillance aircraft, following a spat of accidents with the ageing aircraft. Out of the 21 Nomad airplanes currently owned by the Navy, only five will still be utilized for training purposes.[88] The Nomads would be replaced by Indonesian-built CN-235 twin-engine aircraft. The navy entered an $80-million contract to purchase three CN-235 maritime patrol aircraft from PT. Dirgantara Indonesia (DI) to replace the Nomads. In addition, the CN-235s will be equipped with anti-submarine capabilities.[89]

Conclusion: the Boots trample the Boats

Indonesia is strongly attached to the sea since its ancient history. The sea forms the bedrock of Indonesia's identity as an archipelagic state. However, the importance of the sea is not correspondingly followed by a sound naval development. Rather, it seems that "boots" always trample the "boats." In other words, the navy does not receive the attention and priority that it deserves. This is due to the flaws in Indonesia's defence policy that is strongly continental-minded and heavily politicised. As a result, efforts to modernize the navy and its fleet were only met with minimum resources. Moreover, these flaws inhibited operational effectiveness as evident in the history of fleet modernization. Unless these flaws are properly addressed, Indonesia is unlikely to become a maritime dominion as it was in the past.

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[85] Indroyono Soesilo and Budiman, *Kapal Selam Indonesia* [Indonesian Submarines] (Bogor: Penerbit Buku Ilmiah Populer, 2008), p. 51.
[86] Ibid., p. 23.
[87] 'Indonesian Navy to scrap old war ships and airplanes', *The Jakarta Post*, June 18, (2010) <http://www.thejakartapost.com/news/2010/06/18/indonesian-navy-scrap-old-war-ships-and-airplanes.html> [accessed on November 7, 2010]
[88] *Ibid.*
[89] "Despite Financial Constraints..."