

A COMPARATIVE ANALYSIS

CENTRE FOR MARITIME SECURITY AND DIPLOMACY (MIMA)

Objectives

- To study the current capabilities and operational requirements of the respective navies
- To comparatively analyse the developments of the RMN and TNI-AL
- To understand their naval strategies and policies

Introduction

- Maritime History embraces naval history
- Maritime Discipline involves science, technology, cartography, industry, economics, trade, politics, international affairs, imperial growth
- The Dictionary of Seas defines "Naval" as Pertaining to Ships or to a navy
- "Navy" is defined as "The ships and seaman of a country" but often referring only to war vessels
- Modern naval discipline looks at navies not only within their contexts or as an instruments of particular nationstates, but also from wider international and comparative perspectives or
- Chronological developments of specific events or longterm development of navies

Navies in International Relations

- Important factor in international relations of nation-states
- Ancient Greece- the utility of navies for political purpose was known as "thalassocarcy" which means supremacy
- In Asia, India was a maritime and naval power from the 2^{nd Century BC}
- China was a sea power in the 9th -14th century
- China later became one of the greatest naval powers between 1100 and 1450
- End of Cold War: rapid power reshuffles in many regions
- Large naval powers- US, Russian Navy, Royal Navy scaled down 40-50%
- Presently navies in Middle East, Persian Gulf and SEA are conversant in Littoral Warfare, using fast attack craft and fast patrol boats
- Now moving towards modernizing their naval fleets
- Due To:
 - a) dynamic shifts in the climate of maritime security
 - b) fast growing technology, politics and geo-economics
 - c) International Laws: UNCLOS

Types of Navies

- Power projection navies offensive operations capability against another country –US, Russia, UK France, Japan
- Coastal Defence navies defence against attacks from sea, limited power, consists of small warships
- Constabulary navies coastal states have legal control over marine resources, protection of EEZ, control of illegal activities such as sea robberies, piracy, smuggling
- Malaysia category of navy capable of both offshore surveillance and coastal defence
- Indonesia coastal defence force, geography-huge archipelago defines the constabulary mission of EEZ surveillance

ROYAL MALAYSIAN NAVY

- Humble Origins formation of Straits Settlement Naval Volunteer Reserve in Singapore by the British in 1934
- 1939, WW II naval forces were strengthened to protect the security of Singapore and Federation of Malaya
- Formation of "Malay Section of The Royal Navy" known as Royal Malay Navy
- 1947 Britain disbands this unit due to economic turmoil
- Britain realised that the defence of Malayan territorial waters was crucial – Malayan Naval Forces formed in 1949
- 1953 Queen Elizebeth II awarded Royal status Royal Malayan Navy
- 1957 Federation of Malaya independence, British handed over Royal Malayan Navy to Malayan Government
- 1958 official ceremony for the raising of RMN
- 1963 Formation of Malaysia, Royal Malayan Navy assumed new title – Royal Malaysian Navy or Tentera Laut DiRaja Malaysia.

Roles of RMN

- Defence of Malaysian Maritime interests
- Ensure maritime sovereignty of the nation
- Wartime Role destruction of enemy forces at sea
- Defending SLOC
- Protecting shipping and seaward defence of offshore oil rigs
- Destruction of any naval threats to Malaysia
- Peacetime Roles- conduct training for war, protecting offshore resources, hydrographic survey, assisting civil agencies in anti-piracy operations, protection of EEZ
- Secondary peacetime role support the Army and Air Force, search-and-rescue, attending to disaster relief missions and supporting national foreign policy objectives

RMN Bases

- Peninsular Malaysia Main Base in Lumut (HQ) dockyard, training centre, naval air station.
 Tanjung Gelang (Kuantan), Penang
- East Malaysia Labuan, Sungai Antu Sandakan
- Spratly Island Stesen Lima, Layang-Layang (Swallow Reef), Stesen Uniform on Terumbu Ubi (Ardasier Reef)
- New Naval Base in Teluk Sepanggar launched on 1/3/04

Malaysian Defence Industry

- Malaysia is one of the most successful economies in ASEAN
- 6th M'sia Plan government embarked on modernisation programme for national defence
- Committed approximately US\$ 3.6 billion for force modernisation
- Govt procurement programme for purchasing latest technologies for the defence industry
- 6th M'sia Plan primarily focused towards the RMN
- RMN focus on cost-effectiveness
- Categorised as acquisition of capital assets for the future fleet and acquisition of equipment for current fleet
- 8th M'sia Plan (2001-2005) has seen introduction of new assets such as NGPVs, Super Lynx 300 and Fennec
- The production of 6 NGPVs for RMN is valued up to US\$2 billion
- 2 Scorpene submarines & 1 Agosta 70B from Armaris of France to be delivered in 2008

TLDM warship and helicopter involved in Operations in the Straits of Malacca



Source: 2003 Annual Report, Ministry of Defence, Malaysia

2 Scorpene Submarines equipped with SM 39 Exocet Block 2 anti-ship missiles and Black Shark Torpedoes to be commissioned by the RMN in 2008.



Source: 2003 Annual Report, Ministry of Defence, Malaysia

Royal Malaysian Navy Fleet Inventory

Туре	Role	Quantity	Delivered
Scorpene SSK Agosta 70B	Submarines	2 1	2007-2008 2005
Meko 100RMN	New-Generation Patrol Vessel	0+6	2004
F-2000 Jebat Batch-1-class	Frigate	2	1999
Rahmat	Frigate	1	1971
Laksamana	Corvette	4	1997-1999
Kasturi (Type FS 1500)	Corvette	2	1984
Musytari	Offshore Patrol Vessel	2	1985-1987
Handalan (Spica M)	Fast Attack Craft – Missile	4	1979
Perdana (La Combattante II)	Fast Attack Craft - Missile	4	1972-1973

Jerong	Fast Attack Craft - Gun	6	1976/1977
Sabah and Kris	Patrol Craft	18	1964/1968
Mahamiru (Lerici)	Minehunter	4	1985
Newport	Landing Ship Tank	1	1974
LCM/LCP/LCU	Transport	28	1974-1984
Damen	Assault Craft	130	1986-
Sri Indera Sakti	Multirole support	2	1980-1983
Duyong	Diving Tender	1	1971
Various	Coastal Supply Ship	7	1980s
Mutiara	Survey Ship	1	1978
Hang Tuah (Type 41/61)	Training Ship	1	1973
Tunas Samudera	Sail Training Ship	1	1989
Various	Tug	9	n/a

Naval Aviation

Type	Role	Quantity	Delivered
Super Lynx 300	Maritime Helicopter	6	2003-2004
Fennec AS 555 SN	Maritime Helicopter	6	2004
B 200T Super King	Maritime surveillance operated by RMAF	4	1994

Development of RIVIN

- Development based on 15-year Strategic Development Master Plan
- Force planning considerations focusing on capability, technology, fiscal and current policies addressing the nation's maritime security needs
- Objectives of development new assets to replace older ones, upgrade existing assets, enhance capabilities in line with technology developments
- Modernisations of fleet includes the upgrading of four Laksamana-class corvettes, enhancement of the anti ship strike capability on the Kasturi & Lekir frigates by replacing the Exocet MM38 anti-ship missiles with MM40
- Mine warfare given new outlook replacement of existing sonar and remote-controlled Mine Disposal Vehicle system on board the Lerici- class MCMVs

Tentera Nasional Indonesia-AL

- The Indonesian Navy was established on 22/8/1945
- Initially was Agency of People's Security Sea Service which was developed by the alumni of Maritime College and Dutch Naval Academy
- ABRI was established on 5/10/1970 Angkatan Laut Republik Indonesia (ALRI)
- Changed to Tentera Nasional Indonesia Angkatan Laut (TNI-AL)
- ALRI conducted sea expeditions to various areas of Java to establish naval bases, marine forces and naval training schools
- Dutch recognized the sovereignty of Indonesia on 1949 and ALRI consolidated its forces as a modern navy
- At that time, it was equipped with ex-Koninklijke Marine vessels, including corvettes and destroyers

Cont...

- The milestone was the establishment of a fleet to organise and operate increased weapon materials
- The Navy initially had craft that was once operated by European and Royal Australian Navy
- In 1959 the Navy began to acquire craft from Soviet Union and East Europe
- Naval capabilities increased during the confrontation cruisers, destroyers, frigates, fast attack (missile craft) and submarines were acquired
- Between 1978-1992 the Navy obtained 2 submarines from Federal Republic of Germany, light frigates from The Netherlands and Britain, and fast attack craft from Republic of Korea

Roles of TNI-AL

- Secure and defend Indonesian archipelago
- Wartime Role
 act with Air Force to interdict invading forces from EEZ
- Defensive operations against those that penetrate the EEZ
- Peacetime Roles- policing EEZ, combating piracy and smuggling

Naval Developments

- 1965-1966 brought Soehatro's New Order regime to power US became the most important supplier of defence equipment
- Aftermath of violence in East Timor in 1999, US, Australia and UK suspended arms sales to Indonesia
- In 1999, Indonesia decided to give priority to the expansion and modernisation of TNI-AL
- 2000 defence budget purchase of 2 Parcham-class corvettes and fast patrol boat approved
- 2001 Defence White Paper specifically excluded expansion of the Marine Corps, but no major acquisitions authorised for the Navy
- Large portion of 2003 defence budget allocated for the Navy
- In 2003 the Navy announced plans to acquire 4 submarines from South Korea and 4 corvettes from The Netherlands
- Current force modernisation priority is to enhance maritime aviation surveillance, acquire additional fast patrol craft for counter-piracy and smuggling operations, and upgrade sealift capabilities
- Force modernisation plan between 2005-2013 needs approximately \$1.95 billion

- Defence procurements facing budget constraints that may scuttle some of the planned purchases
- Modernisation plans and upgrading of defence equipment is important for tackling maritime threats such as piracy, smuggling, separatist conflicts in Aceh and Western Papua, and safeguarding EEZ assets like hydrocarbons exploration sites
- Currently only 20-25% of the Navy's inventory is operational
- Force modernisation constraints due to internal security challenges due to the the socio-political fallout from the 1997 economic crisis, and religious, communal and separatist violence
- These conditions have constrained the power projection capabilities of the TNI-AL

Indonesian Navy Fleet Inventory

Type	Quantity	Delivered	Role
Fatahillah	3	1979/1980	Frigate
Van Speijk	6	1986/1990	Frigate
Tribal	2	1985/1986	Frigate
KI Hajar Dewantara	1	1981	Training Frigate
Claud Jones	4	1973/1974	Frigate
Kapitan Patimura	16	1993/1996	Corvette
Dagger	4	1979/1980	Fast Attack Craft - Missile
Todak (PB57)	2+2	2000-2004	Large Patrol Craft
Andau (PB57 Mk II)	4	1988/1993	Large Patrol Craft
Kakap (PB57)	4	1988/1995	Large Patrol Craft
Pandrong (PB57 Mk IV)	2	1990/1991	Large Patrol Craft
PB57 Mk V	4	1997/1998	Large Patrol Craft
Sibaru (ex-Attack)	9	1968/1996	Small Patrol Craft
Kal Kangean	66	1987/1996	Coastal Patrol Craft
Boeing Jetfoil	2	1993/	Fast Transport
Teluk Bone (ex-US512	1	1961/1970	Landing Ship Tank
Teluk Amboina LST	1	1961	Landing Ship Tank

Teluk Semangka (Tacoma)	6	1981/1982	Landing Ship Tank
Indonesian LCU	3	1978/1980	Landing Craft Utility
Frosch 1 (Type 108)	14	1994/1995	Landing Ship Medium
LCM/LCVP	60	1960-	Landing Craft Mechanised
Pulau Rengat	2	1988	Mine Warfare Vessel
T 43	2	1964	Ocean Minesweeper
Kondor II (Type 89)	9(3)	1993	Minesweeper - Coastal
Hecla	1	1986	Survey Ship
Baruna Jaya	3	1989/1995	Research Ship
Multatuli	1	1961	Command/Supp ort Ship

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Jalanidhi	1	1963	Research Ship
Burujulasad	1	1967	Research Ship
Achelous	1	1971	Repair Ship
Sorong	1	1965	Replenishment Tanker
Rover	1	1992	Replenishment Tanker
Khobi	2	1959	Coastal Tanker
Tisza	2	1963/1964	Transport
Frosch II (Type 109)	2	1993	Transport
Tanjung Oisina	1	1978	Transport
Dewarutji	1	1953	Sail Training Ship
Biduk	1	1952	Cable Laying Ship
Majang/Mizan	2	n/a	Buoy Tender
Soputan	1	1996	Fleet Tug
Rakota (ex-Us Cherokee	1	1961	Fleet Tug

Submarines

Type	Quantity	Delivered	Role
Cakra (Class 209)	2	1981	Diesel-Electric Submarine

Naval Aviation

	Quantity	In Service	Role
Type			等。 10.1000 10.1000 10.1000 10.1000 10.1000 10.1000 10.1000 10.1000 10.1000 10.1000 10.1000 10.1000 10.1000 10.100
Wasp HAS Mk 1	10	9(1)	Shipborne ASW/MR Helicopter
CN-235 MPA	6		Medium-Range Maritime Patrol
Nomad	12/6	15	Medium-Range Maritime Patrol
Searchmaster B	10	10	Short-Range Maritime Patrol
Searchmaster L	6	6	Short-Range Maritime Patrol
NAS-322 Super Puma	27	27	ASW/Assault/Utility Helicopter
Bell 47J	4	4	Shipborne Survey/Liaison
HU-16B	4	4	Search and Rescue
NBO 105C	10	10	Shipborne Survey/Liaison
Mi-2	8(2)		Transport
Mi-17	2(2)		Transport
EC-120 Colibri	3(2)		Transport

Coast Guard

Туре	Quantity	Delivered	Role
Chantiers 28 m	17	1975/81	Customs Patrol Craft
CMN 28 m	7	1979/81	Customs Patrol Craft
Lürssen 28 m	48	1980-	Customs Patrol Craft

Maritime Security Agency

Type	Quantity	Delivered	Role
Kujang	5	1981	Search-and-Rescue
Golok	4	1982	Search-and-Rescue
PAT	10	1978/94	Harbour Patrol Craft
			Note The Maritime Security Agency was established in 1978 to control Indonesia's 200-mile EEZ and to maintain offshore navigational aids.

Marines

Туре	Quantity	In Service	Role
PT-76	100	80	Light Tank
BRDM-2	20	20	Reconnaissance Vehicle
AMX-10 PAC-90	10	10	Infantry Fighting Vehicle
AMX-10P	25	25	Armoured Personnel Carrier
BTR-50P	75	75	Armoured Personnel Carrier
105mm LG-1 Mk11	18	18	Towed Artillery
122mm M-38	28	28	Towed Artillery
81mm Pindad/M29	n/a	n/a	Mortar
140mm BM-14	n/a	n/a	Multiple Rocket Launcher
40mm Bofors L/70	n/a	n/a	Anti-Aircraft Gun
57mm S-60	n/a	n/a	Anti-Aircraft Gun

Source: Jane's Sentinel Security Assessment, Southeast Asia, Indonesia/Navy, 23-Dec-2003

Comparative Analysis

- Future threats at sea against SEA not from other conventional navies of other nation-states
- Threats will arise from non-state actors
- Necessary for navies to revamp and find new definitions for their roles in modern security context
- Malaysian Maritime Enforcement Agency in March 2005 is a milestone - RMN will assist and train the MMEA
- Major changes in the roles of RMN focus fully on war fighting and maintaining a balanced fleet
- Versatile fleet with high-level of combat readiness will be priority for RMN

- Indonesia with huge archipelago and numerous non-state actors and their activities at sea has a bigger challenge
- TNI-AL has to re-equip itself for both its policing role and its naval war fighting priorities
- Indonesian Navy does not have enough resources to monitor all of the country's territorial waters & EEZ
- Thus the TNI-AL will have to priorities its roles, and focus on acquiring requisite capabilities according to its emerging security needs

- Both RMN and TNI-AL should acquire NGPVs, hovercraft and offshore patrol vessels, with helicopters, unmanned aerial vehicles and airborne maritime patrol platforms for long-range patrols and reconnaissance
- Helicopters and hovercraft are extremely useful in lowintensity conflicts whether on land or at sea with the ability to navigate across all types of terrain and transport personnel for various operational purposes
- Long-term cooperation between neighboring states, coordinated patrols and effective and efficient intelligence sharing and security operations between RMN and TNI-AL

Conclusion

- Why Malaysia and Indonesia require attack aircraft, surface combatants and anti-ship missiles?
- Important maritime region
 - anxious to exercise sovereignty over territorial waters
 - To guard against the plunder of offshore maritime resources
 - To clamp down on piracy, smuggling & maintain internal security
 - South China Sea potential oil and mineral wealth claimants have overlapping bilateral claims, some of which have already given rise to show of naval presence
 - Recent threat of maritime terrorism has caused rapid reassessments of national security demands

