



MALAYSIA'S DEFENCE: SELECTED STRATEGIC ISSUES

Edited by
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PREFACE & INTRODUCTION

This book is intended to provide readings for those at the Ministry of Defence (Mindef) currently working on revising the White Paper on Malaysia's Defence (Henceforth White Paper). The previous Government produced two policy documents in 2010 and 2016 respectively on defence and security. The new White Paper will hopefully fix some of the gaps in both documents; it should be more inclusive. A bottom- up approach can complement the more restrictive top- down decision-making process. One suggestion is to engage the rakyat and the relevant Government agencies by inviting them to contribute ideas via a specially designed website. While the traditional approach to town hall consultation is still useful, the process can be slow and tedious.

As a fundamental expression of national policy, the new White Paper should be published only after extensive consultation with the rakyat and the relevant government agencies. As a key policy document that spells out the Government's vision for national security and defence, it should contain a broad strategic policy framework for defence planning within a specified time frame. The White Paper can be used as a negotiating document and justification for budgetary allocation purposes for Mindef and other Ministries to develop the appropriate capabilities, skills, strategies and doctrines for national security.

To get the "buy in" from all quarters, the White Paper must reflect a broadly-based consensus of the appropriate role for the security forces in the country that is consistent with the Government's agenda, priorities and objectives within the context of our Constitution. While the White Paper should also reflect the broad defence and security policies of the country over a time period, it should not contain any classified information that can be used by irresponsible parties to undermine our security.

A key aspect of the White Paper is for the Government to ensure that the security forces receive adequate funding to undertake their task. Currently, the Government spends on average under 4 % of its GDP on security. How much is enough for defense and security can only be determined by a thorough analysis of the nature of threats and challenges to national security as well the types of capabilities that, for example, the Government wants Mindef to have to deal with an uncertain future. However, the current security expenditure as a ratio of the GDP (circa 4%) needs beefing up in line with the cost of maintaining a "strong" deterrent force structure.

The scope of task for security forces in the future is immensely complicated by the fluidity of the challenges in the digital age as well as in geopolitical environment. In the light of the global climate change, the security forces are often involved in humanitarian missions like helping with national/regional disasters. For this, they must be appropriately equipped and given proper training.

The writing of the White Paper itself is not a difficult task. The challenge is to get a general consensus from all on how to respond, with the current capabilities, to the changes in the geopolitical order, development in the cyber space as well as the nature of threat facing the nation. What strategies and doctrines should be applied by the security forces to keep the nation safe at all times. Equally important in arriving at the general consensus is turf management. Managing the overlapping responsibilities and jurisdiction among the

Government agencies can be very challenging as security and defence issues tend to overlap with other sectors. For example, in the cyber security domain. Who are responsible for the security in the digital ecosystem-which include the capability to actively protect the critical national information infrastructure, critical to the survivability of the nation? What is the role of Mindef when it comes to the critical national information infrastructure assets?

In the event of an untoward incident involving a state actor or its proxy were to cripple the national power grid, for example, who should be responsible to counter such an act of aggression? Such incidents have happened in Europe (for example, Estonia 2007) and elsewhere. How should the security agencies in Malaysia react when the national critical services have been compromised? What kinds of preventive security strategies and mechanisms that must be put in place to prevent such occurrences? There is an element of ambiguity of over which agencies are responsible for breaches of national security in the cyber space. Such ambiguity in the cyber space should be spelled out in the White Paper.

This book examines the factors likely to influence the geo- strategic outlook in the region for 2050. BA Hamzah discusses the geo-political dynamics in the region and possible impact on Malaysia in Chapter One. The consequences of the geopolitical dynamics are not always easy to define in terms of defence, security, economics or foreign policy. They are all interconnected and overlapping.

The new regional security order must be seen in the context of the shifting global balance of power.

The Chapter describes the major challenges brought about by the US-China spats over trade and security issues on the region. It is observed that that as a consequence of the US-Sino political rivalry, for example, states in the region are rushing to arm themselves to the teeth. Will the surge in defence expenditure lead to an arms race or merely reflects part and parcel of military modernisation programmes in the region?

As the nation prepares itself rewrite a new White Paper, it is incumbent on Malaysia to define exactly the limits of its territories on land, air and in the sea on its map to exercise its sovereign rights and to impose legitimate jurisdiction. Fixing the limits of territoriality will create more certainty in diplomatic relationship with the immediate neighbours. To understand the intricacies of maritime boundary making the editors commissioned Dr Vivian Forbes, a leading maritime boundary expert, to write Chapter 2 of this book. Vivian Forbes examines the maritime boundary issues and how the disagreements with the neighbours over boundary delimitation can affect Malaysia's defence policy. We should know the limits of our boundaries before we can plan where and what we can fight for.

With the new Government in place, it is timely to revisit Malaysia's interests in the South China Sea including settling the outstanding maritime boundaries with the immediate neighbours. Tun Mahathir was the architect of Malaysia's policy in the South China Sea, where we now occupy five features including Layang-Layang (formerly Swallow Reef) some 200 nautical miles from our shores. All features occupied by Malaysia were at one time underwater-none of them could be classified as island under the 1982 United Nations Law of the Sea Convention.

Malaysia's quest for an extended maritime space began in 1977 during the reign of Tun Hussein Onn when a group of military and civil engineers were sent to survey the area

beyond our territorial sea. In 1979, following the survey, and a decade after Indonesia and Malaysia agreed on the boundaries of their respective continental shelves, Malaysia enacted a map showing the agreed limits of the continental shelf with Indonesia off the East coast of Malaysia, in the Strait of Malacca and off Tg Datu, Sarawak.

We did not agree on a continental shelf map in the Celebes sea in 1969.

It was during Tun Mahathir's reign that the Royal Malaysian Navy was deployed to occupy certain features at sea, including building a resort on Layang-Layang. What began as a policy to show presence has today developed into military outposts which, under normal circumstances cannot be easily defended because of their distance from our bases in Sabah.

Layang-Layang is approximately 200 nautical miles from Labuan. In time of emergency/crisis at Layang-Layang, it takes about ten hours for a naval ship to arrive with reinforcement from Kota Kinabalu (assuming the boat cruises at 20 knots). By then, the battle would have been lost!

Tun Mahathir was probably concerned with the state of geopolitics then. A weak China was on the move. It seized the Parcels in December 1974 from South Vietnam probably with a smiling nod from the retreating Americans. We do not think, in hindsight, that Mahathir did it to forestall China's southward move. Since 2012, China has transformed the Spratlys into a fortified military zone complete with sophisticated air defence systems to the chagrin of Americans returning to the area under the guise of the Freedom of Navigation Programme. Besides, if Malaysia made no effort to convert mere presence into military outposts, other powers like China, Vietnam and the Philippines would have probably occupied them.

Uppermost in Tun Mahathir's policy in the South China Sea were commercial and economics. Those familiar with the region would know that most of our natural gas and oil comes from the Laconia shoals. Moreover, area is an important commercial sea route, referred to among military strategists, as the sea- lanes- of- communication (SLOC). Back then in 1979, we do not think Tun M was worried of Chinese warships; very few then in serviceable state. Who would have thought in twenty years China could have a strong Navy; it would soon have two aircraft carriers!!

Erroneously referred to as the New Map (Peta Baru), the accuracy of the 1979 map has been contested by many. After years of failed negotiations, Malaysia and Indonesia settled the disputed case on the ownership of Ligitan and Sipadan in 2003 at the International Court of Justice, which awarded the Islands to Malaysia.

In 2008, the ICJ decided that Singapore owns Pedra Branca/Pulau Batu Putih.

In both cases, the ICJ was not asked to delimit their respective boundaries. Hence, the current negotiations between the respective parties to determine, for example, who owns a low tide elevation feature known as the South Ledge, off Pedra Branca. Similarly, the discussion to determine the maritime boundary in the Celebes Sea is ongoing. Malaysia has not settled its maritime limits with Indonesia off Ligitan and Sipadan, whose sovereignty was legally settled fifteen years ago! There are other outstanding maritime boundaries between the two close neighbours affecting mainly the divisions of their Exclusive Economic Zones.

Hence it is a welcome news when Bernama reported on 24 July 2018 that Malaysia and Indonesia have agreed to expedite the delineation process of land and sea borders of both countries. Both countries have been meeting since 2005 to delineate the remaining maritime boundaries without much success. Both sides have their own reasons why they cannot agree on details besides what has been agreed to in 1969, 1972 and 1982. In hindsight, the three agreements (in 1969, 1972 and 1982) were crucial to Indonesia achieving its status as an archipelagic state under UNCLOS. In a way, Malaysia could take credit for helping Indonesia to become an archipelagic state. Of course, Malaysia expects more than acknowledgement from Indonesia for this crucial help as both parties negotiate their boundaries.

Thailand and Vietnam agreed to temporarily settle the boundary overlap with Malaysia by agreeing to jointly explore and produce the mineral resources especially oil and gas in disputed areas. All three countries have long started to reap economic benefits from these joint fields. However, in both cases, no delimitation of our boundaries has been agreed to. Hopefully, after the joint venture agreements expire, all three would have finalised their disputed maritime boundaries.

The British contested the 1979 map and protested on behalf of Brunei, which became independent in 1984. Despite a number of meetings at the highest level mainly during Tun Mahathir's reign there was no agreement on the maritime boundary with Brunei. However, in March 2009, just before Tun Abdullah handed over the premiership to Dato Najib Razak, Malaysia and Brunei agreed on, in a Letter of Exchange, approved by the Cabinet on 11 February 2011, "a final and permanent sea boundary." The Prime Minister of Malaysia issued a Statement on 30 April 2010 on the LOE that "This agreement [LOE] serves to settle certain overlapping claims which existed in the past which included the area of the concession blocks known before as Block L and Block M. Sovereign rights to the resources in this area now belongs to Brunei."

Malaysia has still to settle the maritime boundaries with the Philippines, aside from Manila's claim to a portion of Sabah, the territory that Brunei gave to the Sultan of Sulu. For example, in 1978, Malaysia occupied Commodore Reef and included it in the 1979 map. The Filipinos have reoccupied the reef since 1978. The ownership of this feature needs to be settled soon to avoid further unwanted skirmishes.

With Vietnam, apart from the agreement joint development zone referred to earlier, we have yet to settle the status of Amboyna cay we occupied very briefly in 1978. Today, the Vietnamese are reportedly developing the feature into a resort like we did at Layang-Layang, which the RMN occupied in 1983. Incidentally, operating from Labuan, the British occupied Amboyna Cay in 1889 before the French took over.

We have deliberately omitted discussing Malaysia and China relations in the South China Sea in the light of the 2016 Arbitral Tribunal decision. The Tribunal which was constituted under Annex VII to UNCLOS appointed the Permanent Court of Arbitration as the registry for its proceedings on the South China Sea Arbitration case brought by the Philippines against China in 2013. Despite China's non-participation in the proceedings, the Tribunal insists that its decision is final and binding on both parties. Of course, China just ignored the judgement that it claims was politically motivated. China's rejection of the Tribunal brings to forth the unresolved question between politics and law. In this case, it is politics that triumphs.

In the light of the current geopolitical environment, as Tun M revisits his 1979 policy in the SCS he should spare some moments thinking on how to engage China in a balanced way that could help strengthen the security architecture for a more predictable maritime order in the SCS. However, as he engages China, he must not be bogged down with the problem in the SCS. Instead, he should take a broader and multifaced long-term view of China as the strongest military neighbour that can offer Malaysians considerable economic and cultural benefits. Unless something untoward happens, *Pax Sinica* is here to stay. More importantly, he should use his charisma to bring to final closure the outstanding maritime boundary boundaries with the immediate neighbours. The unresolved boundary issues continue to be thorns in Malaysia's relations with its neighbours. The recent spats with Singapore over air space and Indonesia's encroachment and capture of Malaysians inside Sarawak in Borneo highlight this contentious point.

If Forbes' chapter on maritime boundaries focused on borders, the chapter by Inderjit Singh and Sazali Sukardi looks at the borderless world – cyber – and the security risks that emanates from it. The chapter on cyber focuses on the background of Malaysia's response to cyber security risks and provides some insights on some steps taken by Malaysia to mitigate these threats. These steps will provide a framework to understand and practice cyber defence.

In chapter three, Adam Leong provides us with an example of how Malaysia worked with a close defence partner, Australia for mutual geo-strategic and defence benefits. Malaysia and Australia's defence ties dated back to the defence of Malaya against the Japanese invasion in the early months of World War II, against communist terrorists during the Malayan Emergency, and against the Indonesians during the Konfrontasi. Malaysia's strong defence ties for Australia and why Malaysia matters for Australia is vividly described by Adam in this chapter. He also provides an apt assessment on the strategic importance of this relationship today in the face of strategic rivalries between China and the US in the Asian region.

Malaysia's recent purchase of two submarines have created a series of criticism on what two submarines can do and some misunderstandings on what are the purposes of a submarine force for Malaysia. Adam's chapter on the strategic utility of two submarines for Malaysia using strategic history as analogies to explain the strategic value of submarines is a tour de force explanation of strategic logic and effects – a concept in need of revival in its study in strategic studies.

Fadzil Mokhtar's chapter on the importance of military commanders at the tactical level in understanding and application of law of armed conflicts provides us with an important neglected dimension of defence studies. Today's warfare is as much as lawfare. A military commander, as junior as a section commander needs to understand what can and cannot be done on the battlefield. Fadzil argues that Malaysian military commanders poor understanding of legal aspects may hamper future Malaysian military operations; hence, the urgent need to put the law back into target.

The chapters in this book have highlighted some key defence issues and provided some insights as well as points for Malaysian defence planners to account for when they design the White Paper.

The editors would like to thank Ms Aqilah Md Pazil who spent many hours to finalise the manuscript.

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Chapter 1

Strategic Outlook for Indo- Pacific Region in 2020

BA Hamzah

Every nation has to account for geostrategic issues in drawing its defence policy. Malaysia is no exception. For a country that has an open economy, geographically divided into two parts, maintaining a strong defence force is a real challenge. As a member of the Five Power Defence Arrangement (1971) with Great Britain, Australia, New Zealand and Singapore and the Association of Southeast Asian Nations (ASEAN), Kuala Lumpur relies on positive deterrence that emphasises diplomacy to promote friendly relations with its immediate neighbours and others in the region. Strategically located astride the Straits of Malacca and Singapore, Malaysia is at the crossroads of key trade flows from East to West and vice versa. More than thirty per cent of global seaborne trade passes through the Straits of Malacca and Singapore which makes it imperative for the riparian states-Indonesia, Malaysia and Singapore-to remain on friendly terms with each other. No single riparian state is able to ensure the safety and security of the Straits, fast becoming their joint-lifeline. Currently, the riparian states together with other stakeholders in the Straits have established coordinated- naval patrol programmes to combat sea-robberies and other forms of maritime violence at sea. The three countries have also team-up with Thailand to ensure a limited air surveillance capability over the straits. The riparian states have also worked with the London- based International Maritime Organisation (IMO) - a United Nations organization-to ensure safety of navigation and to mitigate pollution from ships plying the straits. The membership in ASEAN has made the cooperation between the four states easier. There exists of a common interest among the international community of states and commerce to keep the straits safe.

Besides relying on friendly neighbours in ASEAN to keep Malaysia safe, a small state (population of 30 million), Malaysia has to contend with its growing economic and strategic interests in the Indo Pacific region including managing China, Japan and the United States of America. At the same time, Malaysia has to account for possible threats from militant and terrorist activities. Although Malaysia has successfully dealt with the armed communist terrorist activities in the past during the First Emergency (1948-1960) and the Second Emergency (1968-1989), the threat from Islamist militants, especially the remnants and returnees from the Iraq and Syrian wars requires a different strategy at least for two reasons: the threat is region wide and secondly, a number of irredentists in Mindanao and Indonesia are Malaysian-bred.

Equally challenging to defence policy planners in Malaysia and elsewhere is how to effectively deal with the threat to national security in the digital age, most notably the threat from cyber activities from both friendly and unfriendly states. While there are some mechanisms to deal with the latter within the ASEAN framework, the challenge is how to stop cyber-attacks from unfriendly sources. Over the years, since 2006, there has been a significant rise in the number of cyber incidents worldwide. The national critical infrastructure— banking systems, power supplies, ports and roads-have become vulnerable to hacking and other forms of cybercrimes. Major attacks on critical infrastructure have already occurred elsewhere, for example, in Iran, Ukraine and Germany.

In 2010, the US and Israel intelligence teams used a malware-the *Stuxnet*- to ruin hundreds of centrifuges used in Iran's uranium enrichment programme. In the process, the malware was able to partially disable the Iranian nuclear programme. One authority insists that the *Stuxnet* was the first time a digital weapon "was intentionally used by a nation-state to physically damage an adversary's industrial control system."

Concerned that the US could be targeted next, in May 2017, President Donald Trump issued an executive order identifying sixteen sectors as critical infrastructure to be protected from cyber-attacks. They include, among others, the chemical sector, communication sector, water reservoirs, defence industrial sector, financial services and the health care and the public health sector.

Nowadays, even the Universities are not spared as we witnessed in March 2018. According to a report, nine Iranians were indicted in a New York Court in March 2018 for hacking into “the computers of 7998 professors at 320 universities around the world over the past 5 years”.

In the past, cyber-attacks from individual hackers have rarely created political risks. They now do as national assets are digitised, making them easy targets for determined hackers. Today, security in the digital domain becomes more complex when governments and state-owned companies become more directly involved in the cyber space for geo-political and commercial interests.

In his recent book *The Perfect Weapon*, David Sanger revealed that, since 2015, the US military has armed its Cyber Command with another offensive virus capable of dismantling Iran. Code named operation *Nitro Zeus*, the plan was devised to disable “Iran’s air defences, communications systems and crucial parts of its power grid” should the *Stuxnet* operation failed to force Iran to the negotiating table.

Iran caved in to the US pressure and agreed to embrace the Joint Comprehensive Plan of Action (2015) during Barrack Obama’s presidency. Iran signed the JPOA with the Permanent Members of the UN Security Council and the European Union. Under the JPOA, Iran was permitted to build an exclusively peaceful, indigenous nuclear programme. In return for good behaviour, some sanctions were lifted. However, the euphoria was short-lived. Soon after President Donald Trump came into office, he unilaterally withdrew the US support for the JPOA deal in 2018. Washington has re-imposed sanctions on Iran.

Nitro Zeus and *Stuxnet* aside, the biggest challenge in managing the cyber domain is the absence of internationally recognised rules similar to the Geneva Convention of 1949 and three other additional protocols that provide the basis for humanitarian treatment in time of war under international law. A group of government experts (GGE) at the United Nations was formed in 2013, to study the relevance of the UN Charter in relation to the activities of states in cyberspace.

In 2015, the group agreed to consider four peacetime norms: that states should not interfere with each other’s critical infrastructure; they should not target each other’s computer emergency response teams; they should assist other nations investigating cyber-attacks; and they are responsible for actions that originate from their territory. According to one authority, the process has reached a dead end.

The sticking point is the application of international law in cyberspace, especially accommodating the inherent right of self-defence and the law of state responsibility, plus acceptable countermeasures. Some states are not comfortable with giving the United Nations too much power with managing security issues in the cyberspace.

However, as states invest more in the cyber sector for security and defence reasons, countries like Malaysia and other like-minded ASEAN member states must start looking for mechanisms to increase cooperation in the cyber sector, bilaterally and, or multilaterally to mitigate what I call the “unintended and accidental encounters” in the cyber space by states, proxies, false flags as well as non-state actors.

In the face of uncertainties in the digital age, it is incumbent on Malaysia to take effective measures to protect our critical infrastructure from cybercrimes.

The challenge to our defence planners is to develop a coherent doctrine (both offensive and defensive) on cyber for the nation, if it has not done so. Malaysia needs to be cyber resilient especially in defence/security domain. This requires, among other things, putting in place the right management and operational governance mechanisms with cyber-savvy manpower and right technology. While Malaysia may have the resources to act alone, the way forward is to convince like-minded states, especially the ASEAN member states, as a first step, to jointly establish the rules for cyber activities. The cyber domain is an uncharted domain that can be best approached through cooperation with like-minded nations.

Uncertainties ahead

Predicting the geo-political future of our region is always a daunting task. In a fast-globalised geo-political environment, everything is so virtually interconnected making any forecast beyond five years an exercise in despair. Fast changing events put at risk any analysis. For example, who would have thought that President Trump and Supreme Leader Kim Jong-Un of North Korea met face to face at Singapore in June 2018 after trading insults with each other? Likewise, who would have thought that the leaders of South Korea and North Korea met at the Summit meeting at Pyongyang on 19 September 2018? Hopefully, the summit meetings could lead to the lessening of tensions and prepare the grounds towards a veritable, comprehensive nuclear regime in the Korean Peninsula. Only time can tell!

The geo-political dynamics in Southeast Asia and Northeast Asia have changed in the last one decade. A new power balance is in place without many realising it. The move towards a more multipolar power structure picked up speed following the election of President Donald Trump. The policies of President Xi-Jing Ping of China and Prime Minister Shinzo Abe of Japan have also contributed to the development of the new power balance in the region.

The decision of North Korea to test the delivery missile systems has also affected the power dynamics in the region albeit on a small scale. Despite recent developments, North Korea remains an enigma in Northeast Asia.

The current US-China trade tensions are likely to reinforce the rivalry between the world's leading economies. No one knows for sure how the trade tensions will end. In the meantime, the short-term implications on global trade and growth are likely to undermine the confidence in the international trading system. There are those who believe the collateral damage from the trade frictions between China and the US that may eventuate into a global trade war.

In the next five years, the South East Asian and the Northeast Asian region will face greater political uncertainty or disarray (after Richard Haas) as the big powers continue to compete with each other for the control of mainly the ocean space in the South China Sea and in the North-East Sea. In an address to the Seventy Third session of the UN General Assembly

(UNGA 73) on 18 September 2018, the UN Secretary General Antonio Guterres remarked that “our world is suffering from a bad case of “Trust Deficit Disorder”. He further lamented that the world order is “increasingly chaotic” as it becomes more multipolar. With the US-China rivalry in mind, Antonio Guterres warned that the shift in power balance could increase the risk of confrontation. Although he did not name the likely power contenders, most analysts believe he meant the United States and China when he referred to Professor Graham Allison, the advocate of the Thucydides Trap, by name.

As a corollary of the US-China rivalry, for example, states are realigning their positions in response to a new power balance taking shape in the region. The formation of the Quadrilateral Security Dialogue comprising the United States and its two allies, Australia and Japan, plus India is cited as one cooperative strategy with a focus on guarding access through the sea-lanes of communication (SLOCs).

Other geopolitical permutations may take place in the near future. For example, the revised Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) not only demonstrates Japan’s diplomatic skill but rather an attempt to provide some economic counterweight to China.

The politics of the region is not all about the major powers but other state and non-state actors too. One cannot understand militancy at Marawi, the Philippines, for example, without understanding the motivations of the Abu Sayyaf group and or the aspirations of the Maute movement within the overall context of longstanding Moro insurgency in Southern Philippines. Likewise, the political violence and lawlessness in the Sulu Sea could be traced to the unresolved Moros’ demand for political autonomy. Subject to a plebiscite in the near future, the passage of the Bangsamoro Organic Law in the Philippines in July 2018 marks a historic step towards the creation of a Muslim-majority sub-state entity within the Catholic-majority Philippines. The path ahead, however, remains bumpy and uncertain.

The following are likely to pose challenges to regional security.

A strong China and regional politics. Many in the West view China’s rise as destabilising. The contrary view is of a peaceful friendly China with deep pockets providing an economic life-support to many. Its easy money policy-when compared with other funding agencies-in dispensing capital and loans for investments and trade has been a boom to many cash-strapped third world countries.

Critics believe China that has a global reach could pose a challenge to the strategic interests of some status quo powers. The extensive Belt and Road Initiative is often cited as an example of China’s soft power to transform the global economic landscape at the expense of the status quo powers like the US. China is expected to consolidate its soft and hard power influence beyond the region with recent decision in March 2018 to remove the two -term Presidential limit.

China’s current policy in the South China Sea-seen by some as assertive- will not go unchallenged, though. However, China is not likely to withdraw from the SCS after investing heavily on the construction of artificial islands complete with airstrips and gun placements. China has also deployed missile batteries and building a resort at Woody Island that they promise to open to the public by early 2018.

Come what may, China is expected to defend the SCS against any intruder. I do not think China can be easily intimidated in the SCS.

China needs a strong military to challenge the US dominance. Currently, anyone who has studied Chinese military power knows, by all measures, China's military might have a lot of catching up to do. China is years behind the US in sea power terms. China's PLA (Navy), for example, is often erroneously described as a coastal Navy with a very limited strategic reach. Compared with the US that has more than one thousand naval, army and air facilities globally through a network of alliances, according to one China's Think Tank on maritime affairs, China's naval facility at Djibouti is no match. However, according to some, while China may lag the firepower of the US Navy, it has geographical advantages, especially in areas that matter most to Beijing: the South China Sea and the waters around Taiwan. In any short- of- war conflict scenario with the US, it is said that China has the capabilities to inflict serious damage on the US forces "making the US intervention in the region too costly for Washington to contemplate."

At US\$ 175 billion, China's defence expenditure for 2018 is miniscule compared with \$700 billion for US. Japan and India plan to boost up their military spending by \$45 billion and \$46 billion respectively in the same year.

A remilitarised Japan will have an impact on regional security, the extent of which still unknown. However, we did learn from history that in the 1940s its Imperial Military invaded South East Asia, Taiwan, Korea and China to establish the Greater East Asia Co-Prosperity Sphere. I do not think Japan intends to re-enact the GEAPS. However, no one can predict what its hawkish Premier Abe-san grand strategy is all about.

A remilitarised Japan will change the geo-strategic equation in the region. Under Prime Minister Shinzo Abe, Japan is beefing up its military ostensibly as a hedge against an assertive China and an unpredictable North Korea though its real objective is to become a global military player probably in the same league as the United States. Towards this end, the Prime Minister plans to upgrade the Japanese Self Defence Forces, already one of the finest fighting units in the region. He is set on removing Article 9 of the 1947 Constitution to re-embrace the right of belligerency that it renounced following defeat seventy years plus ago. The long –term consequences of a policy change on regional security are debateable.

Japan can now export military weapons. In April 2016, it almost won the bid to supply Australia in March 2016 with the latest- state -of- the- art submarines. Currently, Japan is the fifth largest defence spender in the world. Under his watch, Shinzo Abe has increased the defence budget for five successive years.

A retreating Pax Americana may leave behind a geo-political vacuum. Pax Americana remains the most pre-eminent external player in the region, despite President Donald Trump's flip-flop US policies. Although it has exhibited signs of declining strategic influence and international prestige, Washington continues to call the shot in the region. The cancellation of President's Obama policy of pivoting/rebalancing military posture to the East has sent conflicting signals to the region- particularly the treaty allies. The US proposed tariffs on steel and aluminium are likely to create imbalance in the global trading system that could snowball into retribution. An unwanted trade war can spill over into other areas. How

the actors in the region adjust to this phenomenon will be interesting to watch. Bandwagoning or hedging is a policy option for some. Isolation will be a silly policy, though!!

The risk of inter- state conflicts especially among the big powers is high. There are a few scenarios or permutations. They include the likelihood of US conflicts with China and Russia. In our part of the world, the US- China rivalry may end in a conflict, according to some. Among them is Professor Graham Allison who observes that the US and China are destined for war. He reasoned out that the US as an established power, paranoid that its time is up, fearful of rising power, may clash with China. Stephen Bannon, former advisor to President Donald Trump, believed the SCS could be the battlefield. The former commander of the U.S. Army in Europe (General Ben Hodges) warned in December 2018 of a “strong likelihood of war between US and China in fifteen years”.

This paper, however, takes the view that while the US-Sino rivalry will have an impact on defence planning in the region, our prognosis of the regional geo-political dynamics MUST GO beyond the conventional US-Sino rivalry narrative. I am not suggesting that the current US-Sino rivalry is no longer important in understanding the new geo- political dynamics in our region. It remains relevant and retains a significant influence on the geo-political character of the region.

The return of Russia to the international scene has complicated the security situation in Europe and the Middle East (where it maintains a strong military presence in Syria). The threat from Russia may be felt in the region where it maintains some residual security interests, especially in Vietnam. In 2019, Russia supplied six Kilo-class diesel engine submarines to Vietnam.

Europe is suspicious of Russia following the invasion of the Crimea and sightings of Russian submarines in the Baltic and North Sea. The UK blamed Russia for the use of nerve agent (novichok) against a double agent at Salisbury, England, in March 2018. The diplomatic UK-Russia rift has widened to include the US, NATO, European and non –European countries in support of London that expelled twenty-three Russian diplomats. Foreign Minister of Russia (Sergei Lavrov) has accused the West of colossal blackmailing.

Russia’s seizure of three Ukrainian navy vessels in November 2018, following a shoot-out in the Black Sea near the Crimean peninsula, has put Moscow in the spotlight again.

President Putin’s unveiling of two new nuclear delivery systems (underwater and air-launched) in March 2018. These systems (known to the US as the Avangard system) were tested in late December 2018 that Putin claimed could evade detection and hit target anywhere in the world is frightening. Putin’s hypersonic nuclear missile system with invincible warheads could be his response to the new **US Nuclear Posture Review** calling for the modernisation of its nuclear weapons “to preserve a credible nuclear deterrent”.

Taken together, the US nuclear policy posture and the Russian hypersonic nuclear missile systems will make it very difficult to effectively roll-back any nuclear proliferation effort (both vertical and horizontal). It may also signal the demise of US-Russia strategic arms control mechanisms that was first introduced in 1972 via the Strategic Arm Limitation Talks (SALT I and SALT II). The SALT agreements were intended “to restrain the arms race in strategic (long-range or intercontinental) ballistic missiles armed with nuclear weapons”. The

immediate impact will be to send conflicting signals to North Korea and probably “encourage” some states (Japan and South Korea) to go nuclear.

North Korea’s offer of an olive branch should not be taken as a pinch of salt although it is too early to assess the outcome of recent developments in the Korean Peninsula. We need time and more concrete evidence of genuine reconciliation before we can celebrate. Nonetheless, any effort to reduce tensions in the Korean Peninsula can have a positive impact on the security of the region.

The weakening of ASEAN’s cohesion in the face of changing externalities and domestic politics are likely to have an impact on regional security. For example, issues like US-China rivalry in the South China Sea, a remilitarised Japan, an inward-looking US, China’s Belt and Road investments (BRI), and the expulsion of some 630,000 Rohingya-Muslims from Myanmar are likely to be divisive. However, it will be interesting to watch how our diplomats deal with these controversial issues. While I am confident the “ASEAN Consensus” to stay together will survive the test again, the lingering undercurrents may further impact on ASEAN cohesiveness as each member state adjusts to the changing regional geo-political power balance.

Further evidence of policy hedging against political uncertainty takes the form of military insurance. States in the region are rushing to rearm themselves. According to SIPRI, military spending in Asia and Oceania-which groups Southeast Asia with Australia and New Zealand-has reached \$US477 billion in 2017 making it the second largest region in terms of military spending in 2017. Five of the top fifteen largest global defence spenders are in this region: China (rank 2), India (rank 5), Japan (rank 8), South Korea (rank 10) and Australia (rank 13).

The largest relative increases in military spending between 2008 and 2017 were made by Cambodia (332 per cent), Bangladesh (123 per cent), Indonesia (122 per cent) and China (110 per cent). There were other significant increases (higher than 40 per cent, but less than 100 per cent) in Viet Nam, the Philippines, Kyrgyzstan, Myanmar, Pakistan, Nepal and India. Only five countries in Asia and Oceania decreased spending over the decade: Timor-Leste, Afghanistan, Fiji, Malaysia and Brunei Darussalam.

Among the ASEAN member states who have been investing in maritime defence sector are: Singapore, Indonesia, Malaysia and Vietnam. These states have bought submarines, anti-submarine technologies and littoral combat vessels. As far as the members of the public are concerned, the pretext for the acquisition is China. It is more accurate to label the acquisition as part of defence modernisation. The concern with this type of competitive modernisation programme in an unstable geopolitical environment is the absence of cooperative mechanisms in the region to ensure that the weapons will not be used to undermine each other’s security.

Non- traditional Security (NTS) Challenges

Other non-traditional security challenges to regional security that feed into the new geopolitical dynamics may include the following:

The adverse impact of global climate change. The global climate change will take a toll on regional security and affect the pattern of global sea- borne trade. The melting of ice at the Arctic has opened a new shipping route (the Northern Sea Passage) that will cut down transshipment time by one third, by-passing the critical waterways like the Straits of Malacca, Sunda and Lombok.

Twenty sixteen has been declared as the hottest year in the last 137 years. The rise in global temperature and the warming of the sea will a debilitating impact on, for example, the global food chain and access to fresh water. Scientists have linked the intensity of natural disasters with climate change. In the last two years alone, our region has witnessed a number of volcanic eruptions in Bali, Sumatra, Taiwan and most recently Papua New Guinea.

The people in the Philippines who were struck by Hurricane/Typhoon Haiyan in 2013 and Typhoon Mangkhut(2018) are still picking up the pieces from the disaster. When a disaster of the magnitude Typhoon Haiyan strikes, it calls for the mobilisation of the entire regional resources. The question before us: Are our scientists able to provide a timely forecast of the event? Are we ready to handle the next regional disaster that could strike anywhere in the region? If not, what should we do together?

I observe, lately the military is often requested to help with natural disasters mainly because it has the resources not available to the civil societies. Planes, ships and heavy machinery are standard equipment in the military. The question that defence planners have to address with regard to dealing with natural disasters is our preparedness-in term of training, post-disaster management and equipment. Usually no military in the world prepares for national disasters because it rides against their ethos. The military is established for war-fighting purposes.

Nonetheless, because the military is so often deployed for life-saving purposes, it needs a special budget for the purpose.

Rise of nationalism, xenophobia and right-wing politics in Europe may find their way into our region. Some scholars have pointed to the rise of nationalism in China, Japan and other states in the region. What can we do to nip the problem in the bud? Should the ailments inflicting European politics find their way here, be rest assured they too will undermine the fragile “peaceful balance” among some societies in Southeast Asia. Like wild fire, such flame of hatred will engulf the whole region through family ties, cultural, ethnic as well as religious orientations that we share in the region.

Militancy will not decline and remain a thorn in the flesh in dysfunctional societies in our region.

Some countries in SEA have seen the rise of militancy. I distinguish militancy from terrorism. The latter is only the tool of the trade. Terrorism and violence is their trade mark or business model. As why some parts of the region are more “susceptible” to militancy has been the subject of many intellectual discourses. However, like piracy, the problem of political violence is endemic in human societies. Hannah Arendt and Ted Gurr, among others, remind us that removing the root of political violence like militancy in human societies has been an unending challenge. Despite all effort, the world has not been able to rid of political

violence and to think that we can eradicate militancy is like day dreaming of eradicating poverty from the world!

We can, however, mitigate the impact of shared challenges of militancy and extremism in the region with good intelligence and working together to nip-it-in the bud. The importance of regional collaboration to address the shared challenges of militancy and violent extremism needs no emphasis. Apart from the current mechanisms of sharing intelligence on militant activities in the region, what we have done very well lately is to put money where our mouths are. We have cooperated quite to quell militancy in South Philippines and managing the problem of sea robbery in the Strait of Malacca. Unfortunately, in my view, our success stories at Marawi, the Sulu Zone and in the Straits of Malacca are not widely known.

There are unconfirmed reports suggesting that the mercenaries who survived the conflict in Syria, Iraq and Afghanistan may return to the region to “offer” their services. A few battles-hardened criminals have returned to incite troubles, terrorising some communities in the region.

Why the region has become a magnet for militancy remains a question mark. However, most studies show NO single factor can explain preference for militancy. Poverty did not drive Osama Ben Laden and Ayman al Zawahiri to join the Al Qaeda. The Malaysian militants who were in Indonesia, the Philippines, Syria and Iraq were well educated. For example, Dr Azahari Husin, a demolition expert has a Ph D in Engineering from a British University.

Sociologists inform us that militancy thrives best in dysfunctional societies.

Honouring militants as Jihadists-fought in the name of Islam-helps their cause and shows some ignorance. Criminals, murderers and sinners are NOT Jihadists. The “badge of honour” gives them a feeling of invincibility and acknowledgement. Militancy is not the preserve of any particular religion. The Irish Republican Army traced its militant activities from the Catholic and Irish nationalism. The Lords’ Resistance Army terrorising many states in Central Africa began as a Christian Army movement in Uganda. Buddhism in Myanmar should not be blamed for the activities of a few right- wing monks for what U.N. Secretary-General Antonio Guterres described as “ethnic cleansing” against the Rohingya?

The evidence of political violence in the region- either nascent/benign or active- is not difficult to find. Managing militancy and political violence will be more daunting in the future when some states use militant proxies to promote their “Track Two” objectives to remain in power. The use of militant proxies in Syria and Yemen, for example, has widened the scope of military operations on the ground and at the same time, make it more difficult to put an end to local conflicts as the interests of big power intersect with local interests. Those militants who survive the war (including returnees) may offer their services and wares to local militants. A number of militants in our region reportedly fought in the Middle East (some as mercenaries). Apart from own funding, the Abu Sayyaf Group in the Philippines, for example, exchanged hostages for ransom. The fund and guns for “local militia”, according to reliable sources, come from overseas-through their comrades- in- arm notably in the Middle East.

Cybercrimes, cyber warfare, cyber information and espionage go hand in hand. We are now in a new digital age. Managing destructive activities, including cyber military activities, in the cyber domain can be a real headache. As no nation is an island, managing adverse cyber

activities e.g., cyber warfare calls for a regional and global approach. Unfortunately, states are reluctant to tackle the problem for two main reasons: their own insecurity and the fact that they are also perpetrators in this spooky game. States with the means and capacity to undertake cyber offensives will always want to be ahead of the curve and retain the advantage for their operational use. This is a rational behaviour. There is no state in the current digital age without cyber warriors/troopers!

The region has to live with this reality. The challenge is harnessing the technical knowledge for peace.

Cyber warfare is cheap. It is a low-cost tool of statecraft. According to the Director of US National Intelligence, "the potential for surprise in the cyber realm will increase in the next year and beyond as billions more digital devices are connected ...nation states and malign actors will become more emboldened and better equipped in the use of increasingly widespread cyber tool kits." Cyberwarfare will be more complex in the near future because besides "malign actors", it involves state and non-state actors. The latter uses cyber operations for commercial purposes. Cyber thefts of intellectual property happen all the times but like digital espionage against military establishments, they go unreported for various reasons.

According to one Report "Russia, China, Iran, and North Korea will pose the greatest cyber threats to the United States during the next year." Edward Snowden and Julian Paul Assange have separately exposed the extent of wiretapping in the United States and elsewhere. Just like information warfare, propaganda and psychological warfare, cyber warfare can be destabilising. It is a naked form of espionage by digital means. As munitions of minds-after Philip Taylor-such activities existed even in ancient societies; they are being perfected in modern societies. The new elements in cyber warfare are the continuous updating of the virtual tools to destroy the data base of another country. The use of malware Stuxnet by Israel and the US against selected military and non-military targets in Iran is a classic case.

The pervasiveness of cyber warfare in SEA is difficult to determine. The challenge in the region is how to cope with cyber warfare threats. Which parts of the cyber activities are legitimately classified as non-traditional security (NTS) threats; which ones fall within the domain of conventional military threats proscribed under international law? These are standard tools in any military or security organisation. Their indiscriminate use will have a bearing on bilateral relations in the region and elsewhere especially if they are states - sponsored. The stories of the Stuxnet and other how other malwares have been used to steal/destroy/neutralise the digital data (military and non-military) of friends and foes are legendary. The exposure by Albert Snowden and Julian Assange on the extent of state sponsored digital espionage is troubling. The challenge in this digital age is how to harness the virtual technology for a productive global order and not to use the advantages from the advancement in technology to create mischief and undermine the security of friendly countries. Managing regional security will be more complex in the future in weak states that cannot rein in "freelancing cyber- troopers".

Conclusion

The above overview seeks to explain the factors responsible for the changing of the guards in our region. China and Japan are two new power centres that could exert more military muscles in the future in the face of the weakening of US influence and the decline in its regional prestige. Although Japan has justified its militarisation programme on the uncertainties in the region that include a rising China (with whom it has territorial dispute) and an unpredictable North Korea, the real motivation is self-defence and preparing for the day when the US finally leave the region. Because of its past legacy, the ramification of a rearmed Japan is debatable; personally I do not expect a leopard to change its spots. However, in the context of international politics the cliché, often attributed to Lord Palmerston, twice Prime Minister of Great Britain in the 19th century that a state has “No Permanent Friends or Enemies, Only Permanent Interests” remains valid.

The power to watch is China. There is the unfounded fear of China simply because of its size. Its philosophy of peaceful rise and peaceful coexistence has been doubted. There is also the worry that a rising China could trigger a conflict with the US, the established power that sees its pre-eminence threatened. Whether China and the US could escape the Thucydides trap is well documented in Graham Allison's book. While US-Sino rivalry remains a critical feature in understanding the geopolitical dynamics in our region, in my view, the narrative has limitation as it does give sufficient weight to other factors shaping the regional geo-political environment.

To me the greatest security challenge in the 21st century is digital espionage. How do you prepare for it? Should the management of digital espionage be the sole responsibility of Ministry of Defence? One authority sums up the rise of cyber mercenaries and the relationship between activities in the cyber domain and geopolitics in this manner: “cyberspace has become the new battleground for geopolitics. States are now entrepreneurial in their sponsorship, deployment, and exploitation of hackers as proxies to project power. But these modern-day mercenaries have the potential to unleash significant harm undermining global security, stability, and human rights.”

Chapter 2

Malaysia's Maritime Limits: Concerns And Implications For Defence Policy

Vivian Forbes

Introduction

For the purpose of this briefing paper the term Malacca Strait (Selat Melaka) is employed throughout the narrative to refer to the body of water that separates the island of Sumatra and the Malay Peninsula. Likewise the toponyms of Celebes Sea, Sulu Sea, Gulf of Thailand, Johor Straits and Straits of Singapore and South China Sea have been adopted in this study.

This paper has two aims. The first is to offer a commentary on Malaysia's delimited and potential maritime boundaries. The second is to highlight some concerns and security implications for formulating a defence policy in the context of Malaysia's actual and perceived maritime boundaries, as at September 2018. It is presented as an objective and un-bias view of the author.

For details of the delimited maritime boundaries of Malaysia the reader may wish to view the atlases of Malaysia's Maritime Realm produced by the present author and published by the Maritime Institute of Malaysia (MIMA) and his 2014 Springer's publication Indonesia's Delimited Maritime Boundaries. Additional information may be obtained from various articles published by other authors and from webpages of relevant national agencies Wikipedia.

Background

It is nearly 50 years since Malaysia and Indonesia delimited a continental shelf boundary in the Malacca Strait and in the western sector of the South China Sea in the vicinity of the Anambas and Natuna Archipelagoes. The Agreement of October 1969 was one of the first maritime boundary delimitation agreements in the Southeast Asian Seas of the modern era. Two earlier agreements involving Malaysia, in essence, they were the Territorial Waters boundary in the Johore Strait in 1927 and another with Brunei in 1953. In both instances the British Administration of Malaya, in that era, was involved in the negotiations.

There was a flurry of maritime boundary delimitation activity between Indonesia, Malaysia and Thailand during the mid-1970s for the northern sector of the Malacca Strait. This was an exemplary exercise of good faith for the regional states. Thereafter, during the late-1980s, Malaysia and Thailand established a Joint Development Area (JDA) as a form of temporary resolving a maritime boundary dispute in the southern sector of the South China Sea and slightly later, an Agreed Common Area (ACA) with Vietnam for the exploitation of hydrocarbon reserves just south of and partially attached to the JDA. Both Agreements demonstrated Malaysia's commitment towards seeking resolutions to potential territorial and sovereignty disputes.

The period of 1973 to 1982 was an interesting time-frame in the political maritime setting as the international community debated the merits of the provisions discussed at the UN Law of the Sea Convention. The contentious matters such as the width of the concepts of Territorial Sea (TS), Contiguous Zone (CZ), Exclusive Economic Zone (EEZ) and rights and obligations of the Coastal and Island States to the adjacent Continental Shelf (CS) of each state were major concerns. There were many other topics such as rights of ships within 'international straits used for navigation', 'freedom of navigation', and 'harvesting of marine biotic resources on the 'high seas', and 'exploration and exploitation of hydrocarbon reserves' of the substratum of the oceans beyond 'national jurisdiction' to name a few of the geopolitical and legal problems.

The Convention was adopted on 10 December 1982 and some 12 years later it entered into force when the legal/politico document received its 60th instrument of ratification at the UN. The political division of the seas and oceans has brought geographers, lawyers, politicians and indeed defence, social scientist into the fray when difficult territorial and sovereignty matters are raised in managing maritime space and the resources therein. More than two decades later there appear to be some anomalies in the provisions of the 1982 Convention which has left many of the provisions contained in the 1982 Convention's Articles open to interpretation.

By early September 2018, Malaysia's maritime boundaries in localised areas have yet to be settled – defined, negotiated, delimited and delineated on charts and maps where appropriate – and indeed, suites of geographical co-ordinates of the terminal points and turning points of the boundary alignments need to be publicised, as with the geographical coordinates of the its Territorial Sea basepoints.

Malaysia, ideally, would have to maintain maritime boundaries with neighbours Brunei, Indonesia, Singapore, Thailand, the Philippines, Vietnam and possibly China (PRC). In the instance of China and Vietnam, and some may argue with Taiwan as well, the issue is contentious and will only be resolved when the littoral States of the South China Sea, collectively, and possibly with the sound advice of ASEAN (Association of South East Asian Nations) to offer some regional compromise. The Declaration of Code (DOC) of Conduct as discussed in July/August 2018 that includes cooperative ventures may go some way of resolving the territorial dispute in the South China Sea.

In essence, this is a geopolitical problem that is inter-twined with international law, international relations, geographical topics, historical, cultural and social matters. It is not the purpose of the paper to argue the merits of the South China Sea dispute; however, some discussion is necessary in the context of formulating national defence policy. On this point, I take on board the following comments, verbatim, from Professor Dr B.A. Hamzah as a rationale for compiling the paper.

Rationale For This Discussion

It is timely that the Government of Malaysia re-visits its interests in the South China Sea, including settling the outstanding maritime boundaries with immediate neighbours, notable, Indonesia, Singapore, China and the Philippines. Prime Minister, Tun Dr Mahathir Mohamad, was the architect of Malaysia's policy in the South China Sea (SCS), where it now occupies five features, including Pulau Layang-Layang (formerly Swallow Reef), which is approximately 160 nautical miles from Kota Kinabalu, Sabah.

Malaysia's quest for an extended maritime space began in 1977 during the time of Tun Hussein Onn when a group of military and civil engineers was sent to survey the area beyond its territorial sea. Two years later (1979), and a decade after Indonesia and Malaysia agreed, in 1969, on the boundaries of their respective continental shelves, Malaysia published a map and enacted legislation, delineating the agreed limits of the continental shelf with Indonesia off the east coast of Malaysia, in the Straits of Malacca and off Tanjung Datu, Sarawak.

It was during Dr Mahathir's time as Prime Minister during the 1970s that the Royal Malaysian Navy was deployed to occupy certain features at sea, including building a resort on Pulau

Layang-Layang. What began as a policy to show Malaysia's presence on the island has today developed into military outposts which, under normal circumstances cannot be easily defended because of their distance from our bases in Sabah.

Pulau Layang-Layang is 150 nautical miles from Labuan. In case of an emergency at Pulau Layang-Layang, it takes about 10 hours, at a speed of 15 knots, for a naval ship to arrive with reinforcements from Kota Kinabalu. By then, the battle would have been lost! At this point we also stress that this feature is within Malaysia's Exclusive Economic Zone entitlement as well as sitting atop of Malaysia's natural continental shelf.

Dr Mahathir, as the then Prime Minister, was probably concerned with the state of geopolitics then. A weak China was on the move. It seized the Parcels in December 1974 from South Vietnam probably with a smiling nod from the retreating Americans. In hindsight, it was possible that Dr Mahathir did it to forestall China's southward move.

Since early-2012, the Government of China has transformed the Spratly Archipelago into a fortified military zone complete with sophisticated air defence systems to the chagrin of the United States of America returning to the area under the guise of the Freedom of Navigation Programme. Besides, if Malaysia made no effort to convert mere presence into military outposts, other powers like China, Vietnam and the Philippines would have probably occupied them.

Uppermost in Dr Mahathir's policy in the South China Sea (SCS), in 1977 and beyond, were commerce and economics. Those familiar with the region would know that most of Malaysia's natural gas and oil comes from the Laconia Shoals vicinity. Moreover, the area is an important commercial sea route, referred to among military strategists as the sea-lanes-of-communication (SLOC). In the following section I offer a brief discussion on the rationale for the publication of the 1979 Map and its implications thereafter.

Acknowledging The Facts

I acknowledge the fact that although the Government of Malaysia has enacted legislation pertaining to its Territorial Sea datum, it is an insufficient action because it is essential to have knowledge of whether and where straight baselines are employed in lieu of normal baselines, which is the Low Water Line (or Mark), and/or Lowest Astronomical Tide (LAT) level, as depicted on the official nautical charts recognised by the coastal State, which in this instance, is the National Hydrographic Centre (NHC) of the Royal Malaysian Navy.

The NHC with the National Survey and Mapping Agency (JUPUM) are tasked with defining the Territorial Sea basepoints of the nation. It is from this datum that the measurement for the seaward distance of the limits of the maritime jurisdictional zones is taken. Landward of the Territorial Sea baseline the jurisdictional zone is termed the 'Internal Waters' of the State. In my humble opinion, the lack of precise information about the TS datum results in a 'legal grey area' for law enforcement officers and administrators of various agencies who are required to know the limits of their jurisdiction with precision, especially when, tracking with Global Positioning Systems and electronic charting are readily employed.

Peta Baru (New Map Or The 1979 Map) And Its Implications

Erroneously referred to as the New Map (Peta Baru), the accuracy of the 1979 Map, in many aspects, was contested by many. The limits of the claimed continental shelf incorporated, partially, the delimitation in accordance with the 1969 Agreement (see below) and portrayed the limit of a unilateral claim in the southern sector of the South China Sea.

The information contained on the map was adjudged to be contentious in some quarters of the globe and it attracted attention from neighbours, notably, from Indonesia and Singapore. It must be recalled, that during the early-1960s Malaysia made concessions for the benefits of maintaining good relations with Indonesia, and by 1967, with the formation of the Association of South East Asian Nations, positive attitudes from the Governments of Indonesia and Thailand cemented Malaysia's foreign policy.

In February 1980, the then Government Indonesia, sent a protest note to its counterpart in Malaysia stating that it rejected the legality of Malaysia's claim of sovereignty and jurisdiction as shown on Malaysia's 1979 Map of the Continental Shelf of Malaysia. Whilst the focus of the complaint was on the Celebes Sea (Sulawesi Laut) it implied that the Malaysian action to draw unilaterally and arbitrarily territorial waters and continental shelf boundaries in the Straits of Malacca and Singapore, the South China Sea and Laut Sulawesi is contrary to existing principles of international law And State Practice As Well The New Law Of The Sea." (Personal Communication)

Continental Shelf Turning Points In The South China Sea

Malaysia employed 13 Turning Points, namely TP 54 to 66, to delimit the edge of its continental shelf off the north coasts of Sabah and Sarawak which face the South China Sea. The justification for these points apparently was based on the equidistance principle measured from the following features, that are all part of the Spratly Islands group.

TP 54	Amboyna Cay (Pulau Kecil Amboyna) and Spratly Island
TP 55	Barque Canada Reef and Cuareteron or Pearson Reef
TP 56	Barque Canada Reef and Pearson or Alison Reef
TP 57	Barque Canada Reef and Cornwallis South Reef
TP 58	Terumbu Mantanani (Mariveles Reef) and Cornwallis South Reef
TP 59	Terumbu Siput (Erica Reef) and Cornwallis Reef
TP 60	Terumbu Peninjau (Investigator Reef) and Tennent Reef
TP 61	Terumbu Peninjau and Tennent Reef
TP 62	Terumbu Laksamana (Commodore Reef) and Alicia Annie Reef
TP 63	Commodore Reef and First Thomas Shoal
TP 64	Commodore Reef and (unclear)
TP 65	Commodore Reef and Western Shoals (west of Balabac Is)
TP 66	A point agreed (by UK and USA Treaty!)

Political Divisions Of The Seas

The semi-enclosed seas of Southeast Asia are partially or wholly politically determined through negotiations between the respective littoral States and by unilateral declaration, in a few instances, and are delineated on various national maps. The unilateral claims are legally permissible; however, they are naturally subject to negotiations when the parties to the disputes are ready to undertake the initiative of delimitation of the maritime boundary.

Malaysia's continental shelf boundary with Indonesia is in three sections. One part is within the Malacca Strait. It is a series of ten straight lines, which commences at the Common Point and is then numbered from one to ten. The geographical coordinates of the points are defined. The Malaysia/Thailand maritime boundary towards the northern limits of the Malacca Strait is delineated, and it connects to a Common Point that links to a portion of the Indonesia/Thailand maritime boundary which is projected north-westerly into the Andaman Sea.

To the east of Peninsular Malaysia, in the western sector of the South China Sea, the extent of the Joint Development Area (JDA) between Malaysia and Thailand and the Agreed Common Area (ACA) delimited by Malaysia and Vietnam are delineated on this map. The two polygons have been defined for the express purpose of exploration and exploitation of hydrocarbon reserves in the substratum of the South China Sea. One segment (Points 11 to 20) and the other segment (Points 21 to 25) of the Indonesia and Malaysia continental shelf boundary are located in the South China Sea on either side of the Anambas and Natuna Archipelagos, respectively, the groups of islands fall under the sovereignty of Indonesia.

Malaysia's Delimited Maritime Boundaries

In this section I offer a brief commentary of the segment of maritime boundary in each of Malaysia's adjacent seas and bodies of water, commencing at the western limits which is the Malacca Strait and proceeding through the Straits of Singapore, the southern sector of the South China Sea, through the Sulu Sea and then into the north-western sector of the Sulawesi Sea.

Malacca Strait: Indonesia/Malaysia Cs And Ts Limits

An Agreement between the Governments of Malaysia and Indonesia on the Delimitation of the Continental Shelves between the two Countries was signed in Kuala Lumpur on 27 October 1969. This relatively uncomplicated document defined the continental shelf boundary in the Malacca Strait and in the southern sector of the South China Sea. The boundaries of the Malaysian and the Indonesian continental shelves in the Straits of Malacca are the straight lines connecting the points specified by geographical coordinates as listed in the Agreement.

The continental shelf boundary of October 1969 may be best described by stating that it is comprised of ten points, numbered one to 10 from north to south. Point 1 which is located about 41.5 M southwest of Pulau Perak. Point 1 is also a similar distance away from the straight baseline connecting base points 165 and 166 of the 2002 Revised Base Points (or Base Points 181 and 182 of the Indonesia's 1960 Proclamation Act). Thus, it would appear the principles of equidistance and equity and the recognition of the location of geographical

reality, namely Pulau Perak, were considered in determining this point in the bilateral agreement.

The location of Point 3 of the boundary is about 21.5 M west of Pulau Jarak, which in turn is about 37M west of Tanjung Bras Basah. Point 4 of the continental shelf boundary is equidistant, about 15.5 M, from Pulau Jarak and the nearest point of the straight baseline connecting archipelagic base Points 168 and 169 (or Points 184 and 186 of the 1960 Proclamation). Point 5 of the said boundary is equidistant from the coast of Malaysia and the straight baseline of Indonesia that connects Points 169 and 170 (or Points 185 and 186). Points 6, 7, 8 and 9 are also delimited and located equidistant from Indonesia's straight baselines in the vicinity to the west and to the Malaysian coastal and island features to the east. Point 10 is located a little less than eight nautical miles west of Tanjung Piai at the southern tip of the peninsula. Indeed it is equidistant, at about 4.4 M from Malaysia's Pulau Kukup and Indonesia's base point 173 of 2002 (Point 189 of the 1960 Proclamation).

Pulau Jarak And Perak And An EEZ Boundary

It is generally acknowledged, that the two islands, Jarak and Perak, can generate a territorial sea, each of 12 M width and for that matter each could possibly have attached other maritime jurisdictional zones in accordance with the 1982 Convention. Each would have base points which is essence would be the Low Water Mark. However, given their distance away from the mainland coast and their distance apart they could not be linked into a territorial sea baseline system within the meaning of the provisions of the 1982 Convention.

Thus, any proposal by Indonesia to impose an EEZ boundary within this relatively narrow waterway will only create yet another regime which will entail more human and financial resources maintain and implement the regulations and rules that will ensue. The reader's attention is drawn to the arcs of 12-M radius around the islands in close proximity of Peninsular Malaysia and those around Pulau Jarak and Pulau Perak; and, the archipelagic straight baseline off the coast of Sumatra (Sumatera).

T. S. Boundary – Indonesia And Malaysia

The Agreement signed in 1970 between the Governments of the Republic of Indonesia and Malaysia defined the boundary of Territorial Waters of the two Nations at the southern sector of the Malacca Strait, an area where the strait narrows. Article I of the Treaty makes provision for the alignment of the boundary is without curtailment of provision in Section (2) of this Article. The Territorial Sea boundary lines of territorial waters of Indonesia and Malaysia at the Strait of Malacca in areas as stated in the preamble of this Treaty shall be the line at the centre drawn from base lines of the respective parties in the defined areas. Apparently Point 6 does not apply to Malaysia.

The exact details of the anomalous triangle of Points 4 to 8, inclusive, that deviates from the Continental Shelf Boundary requires some clarification here, however, it is beyond the scope of this essay to elaborate on the determination. This will no doubt be addressed in a more detailed study that is being undertaken as a major project. Suffice to say, that the Points were recorded in the Agreement which subsequently entered into force signifying that both Parties were in accord to the delimitation.

The boundary of the continental shelf in the northern sector of the Malacca Strait between Malaysia and the Kingdom of Thailand that was signed on 24 October 1971 comprised a suite of three straight lines.

T. S. Boundary In Johor Strait

The Malaysia and Singapore territorial sea boundary (Point W1 to W25) in the Johor Strait, west branch was re-defined in 1995 to re-enforce the 1927 Agreement based on the deep-water channel through the entire length in western side of the Johor Strait. Points W24 and W25 will feature in any future negotiation to link the present terminal points in order to finalise the delimitation process in the western approaches of the Singapore Strait between Indonesia and Malaysia and Malaysia and Singapore.

The Territorial Sea boundary in the eastern branch of the Johor Strait is defined by geographical co-ordinates whose turning points are labelled E 1 to E 47, inclusive. Points E46 and E47 will be used in the eastern sector of the Singapore Strait in order to link point 8 of the 2014 Agreement of the Indonesia and Singapore Territorial Sea boundary extension. The overall length of the Territorial Sea boundary between these two littoral States commences from Point W25 in the west to E 47 in the east. The terminal Points W1 and E1 are separated by the Causeway which links the Malay Peninsula with the island of Singapore. The terrestrial boundary is defined as being along the middle of the Causeway.

T. S. Boundary Indonesia/Singapore: Straits Of Singapore

The territorial sea boundary between the two states in the Straits of Singapore as agreed in May 1973 utilised the equidistance principle for determining three of the turning points and negotiated location for the three other points. Indeed, Point 2 was located about 0.5 M inside the 1960 Indonesian archipelagic straight baseline system. The 2002 and 2008 revised archipelagic base points proclaimed by Indonesia in this vicinity now places Point 2 just outside the archipelagic waters of Indonesia. The relevant new baseline connects points 190B and 191.

The total length of the geodesics connecting the terminal and turning points is 24.8 nautical miles averaging about 4.9 M. The boundary lies in water depths ranging from 20 to 50 metres. It is aligned to the deep-water channel, which is naturally the recommended deep-draught tanker route.

The agreement of May 1973, noted that extensions to the west and east of the nominated terminal points would require further negotiations. The pending negotiations resumed in February 2005. On 10 March 2009, delegations from Indonesia and Singapore who negotiated, over a four period, a western extension to the territorial sea separating the two countries in the western half of the Straits of Singapore signed an Agreement. Three points were identified in that Agreement and their geographical coordinates, referenced to WGS 84 datum, were published.

These relatively short lengths of geodesics, created by the 2009 Agreement extend the Territorial Sea boundary by an additional 5.5 M in a westerly direction from Point 1 of the May 1973 Agreement. On 30 August 2010, the Ministers from each State met to exchange Instruments of Ratification, thereby, bringing the Treaty into force. The two segments defined in the 2014 Agreement project the boundary in an easterly direction by a distance of 5.3

nautical miles. The extensions to this boundary created two relatively narrow gaps that require attention of Indonesia and Malaysia and Singapore to ensure closure. There is a spat with reference to three marine features that are located at the eastern approach to the Straits.

Eastern Approaches Of The Straits Of Singapore

The publication of the 1979 Map by Malaysia raised a protest by the Government of Singapore. The feature known as Pulau Batu Putih by Malaysia and Pedra Branca by Singapore and two associated features, namely Middle Rocks and South Ledge were encompassed within the limit of Malaysia's continental shelf. The Government of Singapore argued that Pedra Branca was within its territory and that it had administered the light (referred to Horsburgh Lighthouse) and facilities on the island, since its establishment by the British Administrators.

The resultant dispute was taken to the International Court of Justice (ICJ). The judgment of the ICJ, on 23 May 2008, temporarily clarified the status of the Pedra Branca as an island. The ICJ adjudged that Singapore owns Pedra Branca and Malaysia has sovereignty over Middle Rocks. The ICJ was not asked to delimit their respective boundaries. Hence, the current negotiations between the respective parties to determine, for example, who owns a low tide elevation feature known as the South Ledge, south of Pedra Branca.

A lesson here: States should be specific in their requests to any Court or Arbitrator for awards and judgments on all matters relating to territorial disputes, sovereignty issues and delimitation of maritime boundaries.

To complicate the sovereignty dispute the confusion has become complex by the provisions of Article 121 of the 1982 Convention which offers a definition of an island, the discussion on the 'marine features' – a broad term for islands, sand cays, reefs rocks which geographers and marine scientists recognise; however, regretfully, lawyers require definitions for each feature; and the issue of entitlement to maritime space of a LTE (Low-Tide Elevation) and artificial islands. Thus, a discussion on marine features has become important because of the ICJ's position on South Ledge as an LTE and in the statement: to the country in whose territorial sea the feature was located within.

My attention turns further east to the south-western sector of the South China Sea to the delimitation of a territorial sea boundaries: one between Malaysia and Singapore to enclave Pedra Branca with a territorial sea in its own rights given the rather restricted geographical space there is in the vicinity; and, a territorial sea boundary between Indonesia and Malaysia from Point 11 of the 1969 Continental Shelf boundary passing south of South Ledge and projecting westward into the Singapore Strait towards the second Common Point eluded to, above.

The proposed boundary adjustments in this briefing are based on recent developments and this may directly impact on the maritime boundary delimitation within the Straits of Singapore. Our proposals took into account, the decision of the International Court of Justice (ICJ) in May 2008 to award Pedra Branca to Singapore and Middle Rocks to Malaysia. The three sets of rocks are known as Pedra Branca, Middle Rocks and South Ledge which was the focus of a case in a Judgment brought down by the International Court of Justice on 23 May 2008 and subsequent developments.

South Ledge, geographical coordinates are Lat. 1° 17' 51" N., and Lon. 104° 23' 33" E., is about 1.6M to the south-south-west of Middle Rocks. It is a rock formation only visible at low-tide. Within the meaning of the 1982 Convention it is termed a Low-Tide Elevation (LTE). This feature lies about 5.5M north of Indonesia's Archipelagic base point No. 182 which is located on a small island off Tanjung Sading. Each of the three above-named features may be utilised as base points by the sovereign State in establishing a datum to measure the width of its Territorial Sea and other maritime jurisdictional zones where deemed necessary. South Ledge lies within Malaysia's territorial sea.

Malaysia And Brunei: Maritime Limits

The Government of the United Kingdom contested the 1979 Map (Peta Baru) and protested on behalf of Brunei, which became independent in 1984. Despite a number of meetings at the highest level, mainly during Dr Mahathir's time, there was no agreement on the maritime boundary with Brunei. However, in March 2009, Malaysia and Brunei agreed on, in a Letter of Exchange, approved by the cabinet in February 2011, "a final and permanent sea boundary". However, the details of the agreement have not been made public, or at least, not to the knowledge of the present author. Thus, it is not in the best interest of the reader for me to offer any further comment on this subject apart from offering an opinion, namely, that publicity of the geographical co-ordinates of any boundary delimitation is essential for the proper implementation of the rules and regulations for the orderly conduct of users of maritime space.

Southern Sector Of The Gulf Of Thailand

The 21 February 1979 Agreement and Memorandum of Understanding between the Governments of Malaysia and Thailand Parties agreed that as a result of overlapping claims made by the two countries regarding the boundary line of their continental shelves in the Gulf of Thailand, there exists an overlapping area, which is defined as that area bounded by straight lines joining the defined geographical coordinates.

The Agreement also established the territorial sea boundary in the southern sector of the Gulf of Thailand while a separate Memorandum of Understanding was signed in 1979 in which was established a short continental shelf boundary in the area. The boundary beyond that agreed is subject to dispute because of overlapping claims over the seabed. The overlapping claims led to the establishment of a Joint Development Area in 1990 where both countries agreed to share mineral resources in a 7,250 square km wedge-shaped area.

The Governments of Thailand and Vietnam have agreed to temporarily settle the boundary overlap with Malaysia by agreeing to jointly explore and produce the mineral resources, especially oil and gas in the disputed areas. All three countries have long started to reap economic benefits from these joint fields. However, in both cases, no delimitation of Malaysia's maritime boundaries had been agreed to by 3 September 2018.

Southern Sector South China Sea

Malaysia has a unilateral claim of maritime space, in essence – a continental shelf which it proclaimed in 1979 – that stretches from west to east along the southern sector of the South China Sea which encompasses eight marine features whose sovereignty is presently challenged by China, Taiwan and partially by the Philippines and Vietnam. We will not enter

the debate on the geopolitical issues, at this stage, associated with the marine features of the Spratly Group. Malaysia occupies some of these features.

Malaysia's Claim To Marine Features Of Spratly Group

Brunei claims a rectangular-shaped area of the sea, which includes Louisa Reef. Brunei and Malaysia have recently clarified their competing claims to this area. Meanwhile, Malaysia occupies three marine features it considers to be on its continental shelf, including Ardasier Reef (Terumbu Ubi), Mariveles Reef (Terumbu Mantanani), and Swallow Reef (Terumbu Layang). But Malaysia claims eleven features in total, many of them currently under the control of other countries involved in this dispute.

in 1978, Malaysia occupied Commodore Reef and included it in the 1979 map. The Filipinos have re-occupied the reef since 1978. The ownership of this feature needs to be settled soon to avoid further skirmishes.

With Vietnam, apart from the agreement on the joint development zone referred to earlier, Malaysia has yet to settle the status of Amboyna Cay, which it occupied very briefly in 1978. Today, the Vietnamese are reportedly developing the feature into a resort like Malaysia did at Layang-Layang.

In light of the current geopolitical environment, as Dr Mahathir re-visits of his 1979 policy in the South China Sea, perhaps, he could spare some moments to think of how to engage China in a balanced way that could help strengthen the security architecture for a more predictable maritime order in the South China Sea. However, Dr Mahathir must not be bogged down with the problem in the South China Sea. Instead, he should take a broader and long-term view of China as the strongest military neighbour that can offer Malaysians economic and cultural benefits.

Indonesia And Malaysia Off Sarawak's Coast

Despite the fact that Indonesia and Malaysia delimited a continental shelf boundary towards the western half of this sector, the Government of Indonesia is of the strong commitment that an EEZ boundary should also be established. In essence, it is seeking a seabed boundary for the exploitation of hydrocarbon resources and a water column boundary for the harvesting of marine biotic resources. Furthermore, Indonesia sought a re-alignment of the 1979 CS boundary from the terminal point located at Tanjong Datu, Sarawak.

Malaysia And The Philippines In The Sulu Sea

A portion of the continental shelf claim within the Sulu Sea coincides with a limits of a Treaty that was originally agreed upon by the Spanish and USA Governments (Treaty of Paris of 1898) and then later reiterated in an agreement between the then Governments of the UK and USA. The line connecting Points TP 66 and 76 aligns with Article III of the Treaty between UK and USA. However, after the signing of this treaty, misunderstandings arose with respect to some islands that were west of the line because it was assumed that the islands of Cagayan Sulu and Sibutu should have been specifically mentioned as being part of the Philippine Archipelago. This was rectified by the explanatory treaty mentioned above, where it was agreed upon that those two groups of islands and their dependencies should

be comprehended in the cession as fully as if they had been expressly included within the agreement as described by Article III of the Paris Treaty.

The Government of Malaysia still has to settle the maritime boundaries with the Philippines, aside from Manila's claim to a portion of Sabah, the territory that Brunei gave to the Sultan of Sulu.

Northwestern Sector Of Sulawesi Sea: Three Party Solution

The section southward of Point 76 as depicted on the 1979 Map of Malaysia, the easterly point on the division line of the Sulu Sea and Celebes (Sulawesi) Seas. Maritime boundaries have yet to be formalised between Indonesia, Malaysia and the Philippines in the northern waters of the Celebes Sea. After years of failed negotiations, Malaysia and Indonesia settled the disputed case on the ownership of Ligitan and Sipadan in 2003 at the International Court of Justice (ICJ), which awarded the islands to Malaysia.

The Indonesian archipelagic waters baseline system off the coast of Kalimantan which in the context of this study commences at the land boundary terminal between Indonesia and Malaysia on the eastern coast of Pulau Sebatik – an island the northern half of which is administered by Malaysia and whose southern sector is governed by Indonesia. TP 84 is coincident with the land boundary terminal demarcation at the intersection of Lat. 4° 10'N on the east coast of Pulau Sebatik.

The discussion to determine the maritime boundary in the Sulawesi Sea is ongoing. Malaysia has not settled its maritime limits with Indonesia off Ligitan and Sipidan. Malaysia will have to engage with Indonesia and the Philippines to establish a Common Point (tri-Point) and then linking lines to close the maritime boundary delimitation with each of the States. Hence, it was welcome news when it was reported on 24 July 2018, that Malaysia and Indonesia have agreed to expedite the delineation process of land and sea borders of both countries. Both countries have been meeting since 2005 to determine the remaining maritime boundaries without much success.

An EEZ boundary between Indonesia and the Philippines in the Sulawesi Sea (Celebes Sea) was delimited in April 2014.

Recommendations

Indonesia and the Philippines are considered archipelagic states in the context of the 1982 United Nations Law of the Sea Convention whereas Malaysia, a coastal State, may be also categorised as a 'zone-locked' state and hence unable to claim its full entitlement of maritime jurisdictional limits. Any appraisal given must be objective and not bias in content. Any academic comment has no legal recognition until further information comes to hand and confirmation obtained on a number of outstanding issues such as, publication of the territorial sea basepoints of Malaysia and the Philippines.

As stated earlier, Malaysia has not, as yet (by 3 September 2018, to the knowledge of the present author), specified the base points and straight baselines which are to be used for the determination of the width of its maritime jurisdictional zones; with the exception of that portion in the South China Sea relating to its combined submission with reference to legal continental shelf limit in the SCS. That said, legislation is enacted which defines the territorial

sea datum employed by Malaysia which is the Mean Low Water level (or the Lowest Astronomical Tide (LAT)) as depicted on the official charts produced by the authority of that State; however, we must stress that the actual basepoints, nor any straight baselines, if there are any, are delineated on large-scale of the coastline. I argue that there is justification, at least on a legal basis, to portray straight baselines along portions of Malaysia's coastline.

Indonesia has forwarded the argument that the geodetic datum (WGS-84) employed currently, as an international standard presents a discrepancy in ground truth as compared with geodetic data used during the 1970s and earlier. Thus, it is necessary for the Southeast Asian nations to adopt a standard geodetic datum and other spatial datum, especially in the delimitation of maritime boundaries.

Areas That Require Finalisation

The alignments of the continental shelf boundary is now being challenged by Indonesia on the grounds that with the introduction of the 1982 United Nations Convention of the Law of the Sea (1982 Convention), and in particular, the provision for coastal and island States to claim an Exclusive Economic Zone of 200 nautical mile (M) width – in essence, a zone within which States have sovereign rights to resources within the water column and jurisdictional rights within the defined limits.

The Government of Indonesia is of the opinion that there should be in place, within the Malacca Strait and in the southern sector of the South China Sea, a water column boundary and another boundary for the seabed (continental shelf) resources and jurisdiction. By extension, the Government of Indonesia desires that such be the case with all geographical areas in which it has negotiated seabed (continental shelf) with its neighbours, similar to the agreement it reached with Australia in March 1997.

The maritime boundaries negotiated by Indonesia in most instances apply only to the seabed delineation of resource and spatial allocation but at the time signing was considered as a single maritime boundary. Accordingly, Indonesia seeks to determine EEZ boundaries with not only Malaysia but also with Papua New Guinea, Thailand and Vietnam similar to the dual regime established in the March 1997 Agreement with Australia for the Arafura and Timor Seas. Indonesia's official MMAF map of 2009 and the maps of 2010 and 2017 depict the nation's unilateral claim to an EEZ which extends well to the north and east of the agreed continental shelf/seabed boundaries established with Malaysia in 1969 in the Malacca Strait and with Vietnam in 2003 in the vicinity north of Natuna Archipelago in the South China Sea.

Such a provision is fine in principle, however, in circumstances where geographical reality dictates that a coastal State whose neighbour is across a narrow strait – less than 200 nautical miles wide, and generally much narrower in the southern sector of the Malacca Strait – neither State can access the maximum benefits of the many provisions of the 1982 Convention, especially the full entitlements of spatial limits. Indeed, neither State can claim a Territorial Sea of a few nautical miles in that southern sector of the Malacca Strait.

Concerns And Implications For Defence Policy-Making

From a defence-policy perspective the following should be considered:

The continental shelf boundary of 1969 in the Malacca Strait and in the vicinity of the Natuna Archipelago is now the focus of attention because it was established in a time warp of the 1958 and 1982 Conventions. The Government of Indonesia presently calls on its counterpart and neighbour, for a re-negotiation of the boundary employing the provisions of the 1982 Convention with reference to establishment and utilisation of base lines and the delineation of an EEZ boundary. It has also pressured Vietnam to do likewise as it did with Australia. The Indonesian stance is that of an EEZ boundary that would align in a manner as depicted in which would be to the east of the (present) continental shelf and purported to be delineated on the equidistant principle employing, and giving full effect to the relevant straight base lines of Indonesia and the nearest opposing coastline of Malaysia in the vicinity and giving the islands of Perak and Jarak their 12-M territorial sea recognition. The surface area of the difference between the potential EEZ and the delimited continental shelf is in excess of 3,500sqM.

Malaysia has apparently not made public the base points that were utilised to derive the delineated outer limits for both the territorial sea and its continental shelf. However, if there was a need to make a re-adjustment of the geographical coordinates of the turning points of the continental shelf (within the Strait of Malacca) and territorial sea (in the southern sector of the Strait) such a move will be in accord with current states' practice and hence close any legal loopholes when users and stakeholders of the Strait of Malacca have a difference in opinions about the exact location of an incident or potential marine biotic or mineral resource to be harvested or exploited respectively. The role that geography should play, must not be underestimated, in employing international law to delimit an international political boundary in a region burdened with historical baggage and linkages and vague descriptions of a terrestrial boundary and irregular boundary markings on land and especially at the land/sea interface.

It is vital that Malaysia reiterates its claim in the southern sector of South China Sea by defining its TS basepoints around the marine features that it perceives falls under its sovereign rights. Failure to take early action may result in other competing States staking their 'straight baselines – legal or otherwise' and corresponding EEZ limits. In this respect the defence priorities such as MMEA's and RMN's stated missions and obligations must be strongly emphasised.

Summary

The determination of maritime boundaries in the vicinity of Pedra Branca and in the Eastern and Western Approaches to the Straits of Singapore must be considered a priority by the littoral States for many reasons not least for the safety of navigation and maritime security. It is pertinent for Malaysia and Singapore to define and make public knowledge the territorial sea basepoint coordinates if straight baselines are to be used along the coast of southern Johor and the islands of Singapore. In particular, urgency is needed for the information off Tanjung Penyusop of Stork Reef (SR) could be used as a base point.

Malaysia and Singapore are pursuing a settlement of the maritime boundary delimitation in this area including issues concerning South Ledge as it has been over ten years since the

ICJ judgment on this case. The delimitation of at least three sets maritime boundaries in this area is important not only for the three littoral States – Indonesia, Malaysia and Singapore – but is also vital for navigational purposes for the international community. Malaysia has established a ‘defence’ facility on Middle Rock in 2017.

Public hearings on two cases were scheduled to be held during June 2018; however, in letters dated 29 May 2018, the ICJ was informed by both Parties that they had placed on record the discontinuance of the hearings, and directed that the cases be removed from the Court’s list. Malaysia has signalled its keen sovereign interest by completing a maritime base just a kilometre away from Pedra Branca, and hopes to tighten its sea borders in the area where frequent trespasses by Vietnamese fishing boats are allegedly destroying the livelihoods of Malaysian fishermen. The Sultan of Johor officially opened the maritime base on the Middle Rocks in 2017, after some five years of construction at a cost of RM61.5 million (S\$19.5 million). The Abu Bakar Maritime Base is a positive development in maritime security and welcomed facility by the Malaysian defence force.

The reader of this document must note that the delimitation of the continental shelf boundary in the context of this briefing pre-dates the 1982 UN Convention on the Law of the Sea and besides no geodetic datum with reference to the geographical coordinates employed to define the points was stated in the Agreement Article One of the Agreement defined the alignment of the boundary in the Malacca Strait by providing the geographical coordinates of the ten nominated points.

The publication of the 1979 Map of the Continental Shelf of Malaysia was the result of two developments, according to a

authoritative sources that was necessary in the context of the political decision by Malaysia, at that period of time. Namely: 1) to support Indonesia’s archipelagic status claim and proclamation and delineation of straight baseline system in 1960; and, 2) the need to pre-empt the 1982 Convention so that Malaysia would have a cartographic document prepared for future maritime delimitation negotiations based on principles that ‘were perceived to be incorporated when the 1982 Convention eventually entered into force. This was forward thinking at its best.

Chapter 3

An Overview Of Cybersecurity Issues In Malaysia

Inderjit Singh & Sazali Sukardi

Introduction

Cybersecurity is the practice or action taken to prevent unauthorized access, use, disclosure, disruption, modification or destruction towards information. This chapter provides an overview on the background and contemporary challenges posed by cyber security and some steps taken to mitigate these shortfalls. The brief description here, hopefully, will trigger stimulating discourse on the future landscape of cyber security and its linkages with the nation's defence.

Digital technology has become most important key to increase the level of innovation, competitiveness and growth. Digital revolution has fundamentally changed the rules of organizational activities. The world has witnessed how digital technology has been utilized by governments to gain national competitive advantage. The economy sector is depending on effective measures to protect information in organization. Information plays an important part in giving services to people. The launching of Malaysia's Vision 2020 mark the country's journey towards becoming a developed nation and embracing the knowledge-based economy as a mean of achieving it. By consciously choosing to utilize the information and communication technology as a tool for development, it has resulted in the increasing use of digital information systems throughout the industry, the private and public organizations and the society at large. Cyber security comprises technologies, processes and controls that are designed to protect systems, networks and data from cyber attacks. Effective cyber security reduces the risk of cyber attacks, and protects organisations and individuals from the unauthorised exploitation of systems, networks and technologies.

Malaysia's Centralised Approach To Tackle Cyber Security

Malaysia had started addressing computer incidents and threats by establishing the Malaysian Computer Emergency Response Team (MyCERT) in 1997 as a unit under MIMOS Berhad. On 24 January 1998, the National Information Technology Council or NITC proposed for the establishment of an agency to address emerging ICT security issues in Malaysia. As a result, the National ICT Security & Emergency Response Centre (NISER) was created in 2001 as a department in MIMOS Berhad, and the Malaysia Computer Emergency Response Team (MyCERT) was placed under NISER. On 28 September 2005, the Cabinet decided for NISER to be spun off from MIMOS Berhad as a separate entity under MOSTI. On 30 March 2007, NISER was registered as a not-for-profit Company Limited by Guarantee (CLG), wholly owned by the Government of Malaysia, under the purview of MOSTI. During NITC meeting No. 1/2006, the Government decided to begin the implementation process of the National Cyber Security Policy (NCSP). NISER was given the mandate to provide technical support to the Government for the implementation of the NCSP. To reflect the wider mandate and larger role, NISER was renamed CyberSecurity Malaysia. On 20 August 2007, the Prime Minister of Malaysia officiated the rebranding of NISER into CyberSecurity Malaysia, and launched the new CyberSecurity Malaysia brand name and logo.

Vulnerabilities In The Cyber Age

Most governments have already invested in digital projects to improve their functions and operational efficiency as well as delivering critical services to the people. No doubt that,

digital technology helps to spur innovation for governments to progress and prosper. Apart from governments, the industry has also been investing in technology-enabled initiatives to remain competitive and innovative while exploring new opportunities. In the context of Malaysia, it aspires to become a digital nation driven by digital economy. Digital infrastructure and high broadband connectivity combined with the adoption of online activities are expected to further facilitate Malaysia's digital transformation process.

For many years the Malaysian government have been protecting strategically critical infrastructures, however in recent times the information revolution has transformed all areas of life. The way business is transacted, government operates, and national defence is conducted has changed. These activities now rely on an interdependent network of information technology infrastructures and this increases our risk to a wide range of new vulnerabilities and threats to the nation's critical infrastructures. These new cyber threats are in many ways significantly different from the more traditional risks that Governments have been used to addressing. Exploiting security flaws appears now to be far easier, less expensive and more anonymous than ever before. Exploitation and penetration of back end systems has now shifted to threats that target and leverage on endpoint devices, primarily the smartphones and Internet of Things (IoT) such as smart home system, wearables, and tracking devices. The IoT has contributed to the complexity of the threat and exploit. For example in an hospital scenario, a malicious user can connect to the hospital's wifi network and sniff the network traffic. The fact that the network for users and hospital administrators are not normally separated, lack of network access control and applications are using non-secure protocols to transmit data and patient records which can be captured in clear text. An illustration of how a cyber-attack takes place is explained in Figure 1, which describes an attack lifecycle model with classic attacker techniques. Anyone who has been using the Internet or networked-based devices would have experienced some level of these attacks, attempts or successful attacks, at some point in their life, with or without their realisation.

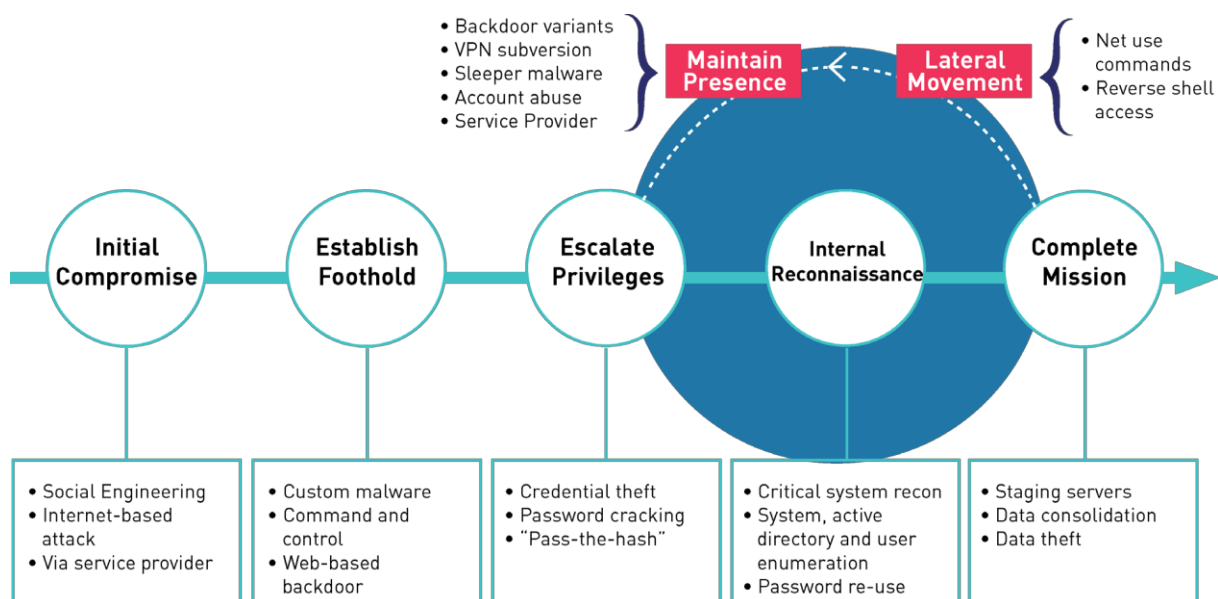


Figure 1: Cyber-attack Lifecycle Model
[Source: FireEye M trends 2016 APAC Edition]

In the absence of authentication of data received by the back end system, malicious users can also tamper and modify patients' data that can result in wrong diagnosis and mistreatment. This has direct safety implications to patients. In illustrating the Malaysian landscape with regard to cyber threats, the trend indicates increase in fraud and intrusion reported incidents as shown in Figure 2. This is consistent with the global studies which show Malaysia in the top 10 in terms of online scam.

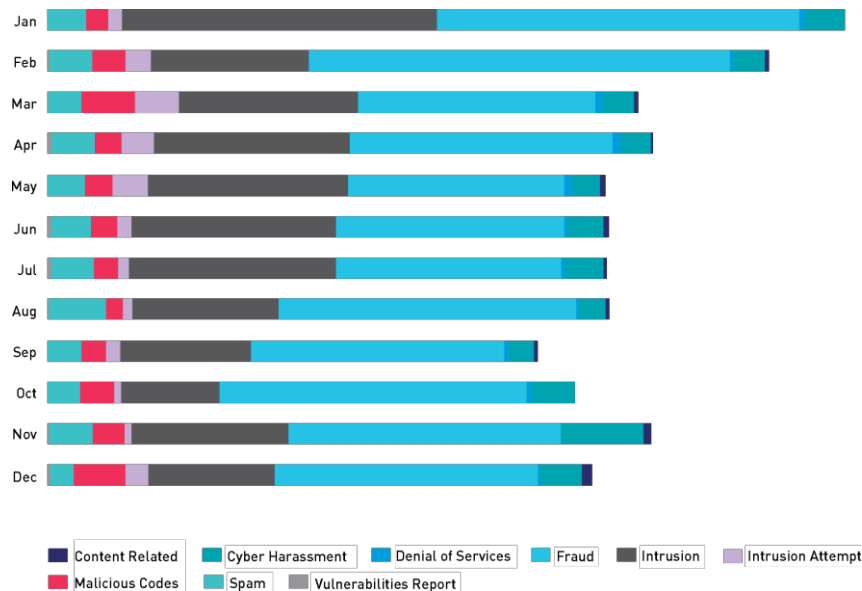


Figure 2: Malaysian Reported Incidents to MyCERT in 2016

Cyber security has embedded organizations with hefty financial costs as reported by Malaysian Royal Police in 2014 whereby the amount of losses due to cyber related crime were over RM162 million. The losses increased by 22% in 2015 to over RM179 million and by November 2016, the amount of losses reported were over RM206 million. This will continue to increase as we approach 2020 whereby the mechanism and modus operandi of cyber threats will be more complicated.

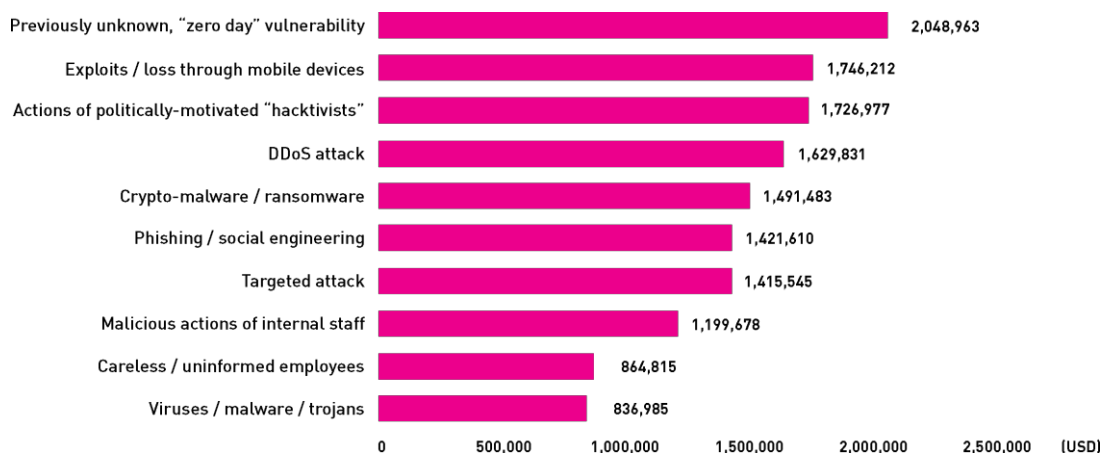


Figure 3: Top 10 most costly security incidents.

[Source: Kaspersky Lab IT Security Risk Report 2016]

Several reports measure the financial impact of various security incidents as well as the impact of data breaches. One report by Kaspersky, as shown in Figures 3 and 4 respectively, demonstrates the amount of cost incurred based on the type of incident experienced. According to the Bukit Aman Commercial Crime Investigation Department, there were a total of 10,203 cases of fraud and scams reported in 2017 while for 2018, the total number of cases reported as at Oct 2018 is 8313.

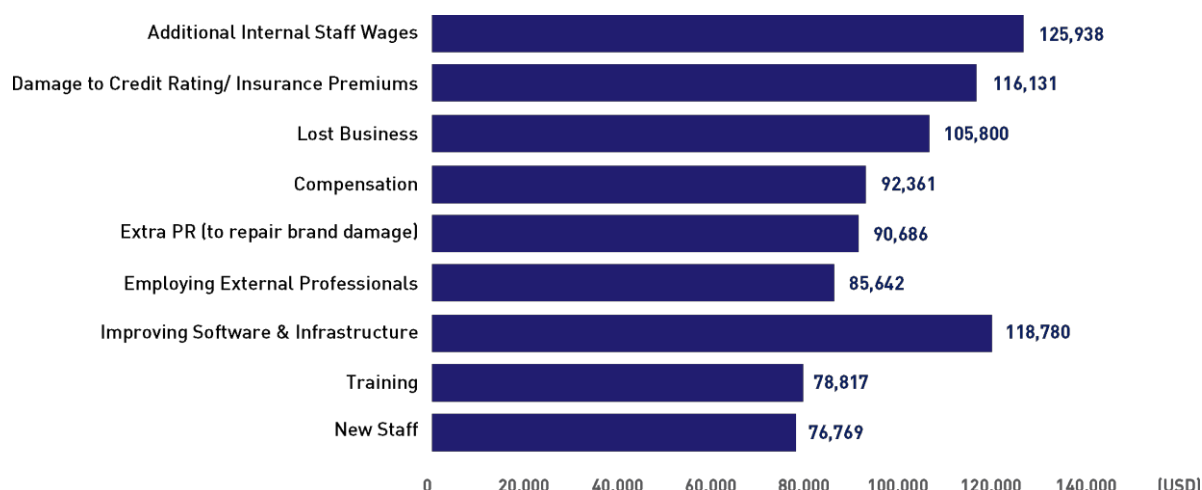


Figure 4: Breakdown of an average financial impact of data breach

[Source: Kaspersky Lab IT Security Risk Report 2016]

Contemporary Cybersecurity Risks

Cyber threats and challenges come in various forms. The risks arise from the increasing complexity of digital environment - modern networks are now more expansive encompassing data centres, endpoints, virtual environments, branch offices, and the cloud. The constant evolution of networks and their components introduces new attack vectors that needed to be secured including home computers, web browsers, mobile devices, wearables, hypervisors, social media, and even home appliances.

As demonstrated throughout the history, technology advancements always have impact on security. When technology changes so does threat, where today's cyber environment has produced new security challenges in the form of cyber threats. The traditional security approach is no longer adequate as cyber threat are rapidly changing, hence demanding more effective security solutions and updates. Nowadays, cyber attack committed at the organizational and state levels is obvious and it is done with technical complexity and sophistication.

Cyber Crime For Financial Gains

Cybercrime is the greatest threat to every company in the world, and one of the biggest problems with mankind. The impact on society is reflected in the numbers. In 2017, Cybersecurity Ventures has predicted that cybercrime will cost the world \$6 trillion annually by 2021, up from \$3 trillion in 2015. Cyber criminals are exploiting system vulnerabilities to intrude computer systems using a combination of techniques. The trends of computing such as cloud computing, mobile devices, Big Data, Bring Your Own Device (BYOD), Internet of Things (IoT) and social media were created for convenience with limited security functions, hence posing new security challenges. Opportunities for cyber attacks have increased with the continued advancements of Internet.

In 2015, Kaspersky researchers uncovered the criminal groups named “Carbanak Gang” for stealing over \$1 billion in 30 countries for a period of two years. The criminals managed to infiltrate about 100 banks' computer systems and gather personal data. In this case, they were able to impersonate and authorise fraudulent transfers, as well as ordering Automated Telling Machines (ATM) to dispense cash. In 2018, a cyber security firm McAfee reported that the global cost of cybercrime has now reached as much as \$600 billion, about 0.8 percent of global GDP. The figure shows the massive growth from 2014, when the same analysis showed the cost was only as much as \$445 billion. The cost of cybercrime in relation to the worldwide internet economy was \$4.2 trillion in 2016 which shows 14% tax on growth.

Governments and organizations are enjoying the benefits of new technologies, while criminals are also using the same innovations to facilitate their malicious activities. Cyber crime situation becomes more alarming with the rise of technology convergent that combines various technological trends into single entities. Many parts of the world have already witnessed the implementation of merging technologies such as Industry 4.0, financial technology (FinTech), block chain, autonomous vehicle and others, making cyber security in years to come more complicated and complex. In view of this, cyber crime is most likely to increase largely due to various merging of technologies that offers machine learning and artificial intelligence capabilities, hence making cyber crimes become smarter and easier.

The Rise of Acts of Cyber Aggression and Hostile Activities

Cyber security experts acknowledge the existence of hostile activities and act of aggression conducted by states, state-sponsored and non-state actors. Such activities can refer to anything from cyber espionage, malicious software (malware) infection and system intrusion to high-scale cyber attacks conducted with technical complexity and sophistication. Cyber space can be categorised as part of hostile activities and acts of exploitation.

The PC World Business Center Economic report in 2008 had already warned that cyber espionage would be a major concern as states employ cyber theft of data to gain economic advantage in multinational deals. Cyber espionage is already widespread, not only suggests criminal involvement but also the involvements of state intelligence and military services. Cyber espionage has become more aggressive nowadays, as states, states-

sponsored, and criminals organizations have been conducting large-scale act of cyber espionage campaign targeting government and industrial computer networks.

It comes as no surprise that global cyber espionage activities often involve world's superpowers. The United States of America (USA) claimed that its computer networks came under series of attacks since 2003 targeting at sensitive information. Such attacks were allegedly attributed to the Chinese hackers known as Titan Rain. The Edward Snowden's leaks have captured global attention. The leaks revealed important things about spying activities of the USA and its allies that targeted amongst others high-profile individuals, major organizations and governments. Cyber espionage is not openly addressed as it has long been part of national and military doctrines, hence there will be obstacles and may jeopardize future cooperation if confronted. Most states seem reluctant to talk about their surveillance programs, making the world far from being transparent in regard to spying issue.

Advanced Persistent Threat

Cyber attacks today, are becoming more complex and damaging. It is alarming to note that Advanced Persistent Threat (APT) actors are one of the biggest challenges for the region. In simple terms, APT is a sophisticated, covert and continuous cyber attack based on well-coordinated plan committed to achieve both for business or political motives. As increasing investments and diversifying economies spur development in the region, this growth simultaneously becomes even more attractive to APT groups. They are mainly geared towards targeting critical services that will result in high impacts on national and public security. Critical services encompass among others, telecommunications, banking and finance, transport, energy, and water sectors.

According to a 2016 report entitled Operation Dust Storm, major industries across Japan, South Korea, the United States, Europe, and several other Southeast Asian countries have been targeted for cyber-attacks since 2010. The attacks compromised a wide breadth of victims across electricity generation, oil and natural gas, finance, transportation, and construction industries. A wide range of attack types and vectors were employed, and the prime motives are long-term data exfiltration and theft.

In 2015, FireEye had already alerted a decade-long cyber espionage operation by the group named APT30 that targeted key political, economic, and military information across Southeast Asia for about ten years. APT30 captured the regional attention not only for their sustained activity and regional focus, but also for its continued success despite maintaining relatively consistent tools, tactics, and infrastructure since at least 2005. In addition, the APT30 could persistently compromise entities across an entire region and subcontinent without significantly changed its modus operandi. According to FireEye, the team behind APT30 works: they prioritize their targets, most likely work in shifts in a collaborative environment, and build malicious software to perform its malicious functions from a coherent development plan (see **Figure 5**).

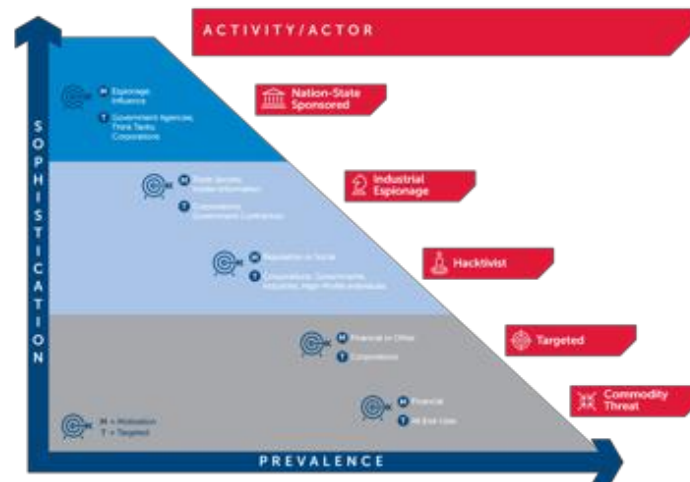


Figure 5. Overview of Advanced Persistent Threat

Source: SecureWorks, Inc. (USA)

Cyber Attacks on Critical Sectors

Cyber attacks on critical systems are often used to describe hostile activities and the act of aggression lodged against predetermined and selected targets. The former U.S. President, Barack Obama in his May 2009 remarks, has emphasized the importance of securing the nation's critical infrastructure, and declared it as a strategic national asset. At a time when cyber attacks are increasing worldwide, U.S. Secretary of State Hillary Clinton declared that an attack on one nation's computer networks "*can be an attack on all*". It describes the rise of hacktivism, cyber espionage and cyber terrorism. These acts of aggression and hostile activities would remain both as national and regional security concerns in years to come.

Critical infrastructure encompasses among others, telecommunications, banking and finance, transport, energy, and water sectors that enable governments to function and deliver critical services to the people. The trend of cyber attacks targeting critical infrastructures has become national security concern and it is growing. According to McAfee Virtual Criminology Report 2007, 120 countries have been developing ways to use the Internet as a weapon and target financial markets, government computer systems and utilities. Most states have declared critical infrastructure as a strategic national asset as any disruption on any sector within the critical infrastructure can affect the states' operations and functions. To date, most states have already formulated various security measures to protect their national critical infrastructures.

Sophistication of Malicious Software (Malware)

Cyber security experts already recognized the sophistication of today's malware attacks. In 2010, the world has seen how "Stuxnet" targeted the operations of industrial systems that run Iranian nuclear facilities. Later in 2011, the world has also witnessed the emergence of "Duqu" that was designed to gather information of critical systems and set as a pre-cursor for a future cyber attack. A more powerful version of "Duqu" appeared in the wild after

going dark in 2012. The so-called "Duqu 2.0" was used in a number of other attack campaigns against a range of targets, including several telecoms firms.

In addition the world was alerted by the sophistication of spyware "Flame" in 2012, which gathered classified information of targeted systems. Modern malware provides an insight into the future state of the ever-changing cyber threat landscape. Protecting against such malware attack is a key challenge as states continue to invest heavily on digital economy. Energy companies especially in the Middle East have already been subjected to a series of cyber attacks. Operation "Night Dragon" in 2011 was an example of cyber attack that struck energy companies that included Shell, Exxon, British Petroleum (BP) and several others. "Night Dragon" used a combination of social engineering, exploitation and coordinated plan. The Middle East region also cannot forget "Shamoon" spyware which was discovered in 2012. The spyware with its destructive module has caused huge impacts on the operations of oil companies.

Currently, there are several trends of ransomware, malicious software that locks computers, tablets or smartphones and demands ransoms to unlock the devices. According to ransomware detection reports compiled from F-Secure Labs' upstream telemetry, ransomware attacks have increased sharply since 2015. 2017 saw the number of ransomware detection reports increase by 415% compared with the previous year where the world was struck by destructive ransomware which was driven by WannaCry outbreak in May 2017 causing global financial and economic losses of up to \$4 billion and impacting 300,00 machines in over 150 countries. Since then, more ransomware such as NotPetya quickly spread and it is expected that the world will witness far more sophisticated and disruptive attacks.

What These Mean For Malaysia?

Malaysia should rethink their security requirements and coming out with a more coherent and innovative cyber security approach to protect our cyber environment, while allowing it to evolve. The Malaysian government has already anticipated and taken some necessary measures to address security challenges that lie ahead in terms of evolving technology. In fact, the Government has already catered substantial budgets to keep pace with the rapidly changing cyber threat environment. As Malaysia's becomes more digitized so do cyber attacks. The Government has gazetted ten of its critical sectors as Critical National Information Infrastructures (CNII) as seen in **Figure 6**. CNII consists systems and assets, whether physical or virtual, so vital to the nation that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters. In October this year the Ministry of Communications and Multimedia mentioned that Malaysia is one of the three ASEAN countries that are expected to contribute 75% to the cyber security service market share by 2025. With the fast growing opportunities in the digital economy including the phenomenal growth of the cyber security industry, the government has envisioned forward looking strategies, which include continuing to produce high income talent to elevate national productivity.

CRITICAL NATIONAL INFORMATION INFRASTRUCTURE (CNII)
- National Assets Which Are Vital To National Security



Figure 6. Malaysia's Critical National Information Infrastructures (CNII)
Source: CyberSecurity Malaysia

It is apparent that CNII is very dependent on digital systems to manage its critical operations, therefore CNII is highly vulnerable to cyberattack. Any disruption on any sector within CNII that affects any of its critical services can cause catastrophic effects that can jeopardize national security. In this regard, the demand for cyber defence capabilities should also grow to respond to the situation. Malaysia will continue to invest in its digital systems especially for the protection of its CNII. There are several indications which highlighted that Malaysia is moving in the right direction towards developing the nation to become cyber resilience. To achieve cyber resiliency, Malaysia is determined to enhance its cyber security through Public-Private Partnership (PPP) both domestically and globally. PPP is essential towards the development of Malaysia's cyber defence capabilities through collaborative efforts amongst the Groups of Government-Industry experts as there is no single entity can work alone in cyber security. Through PPP, Malaysia can earnestly begin confronting cyber attacks from a full security perspective as seen in **Figure 7**.

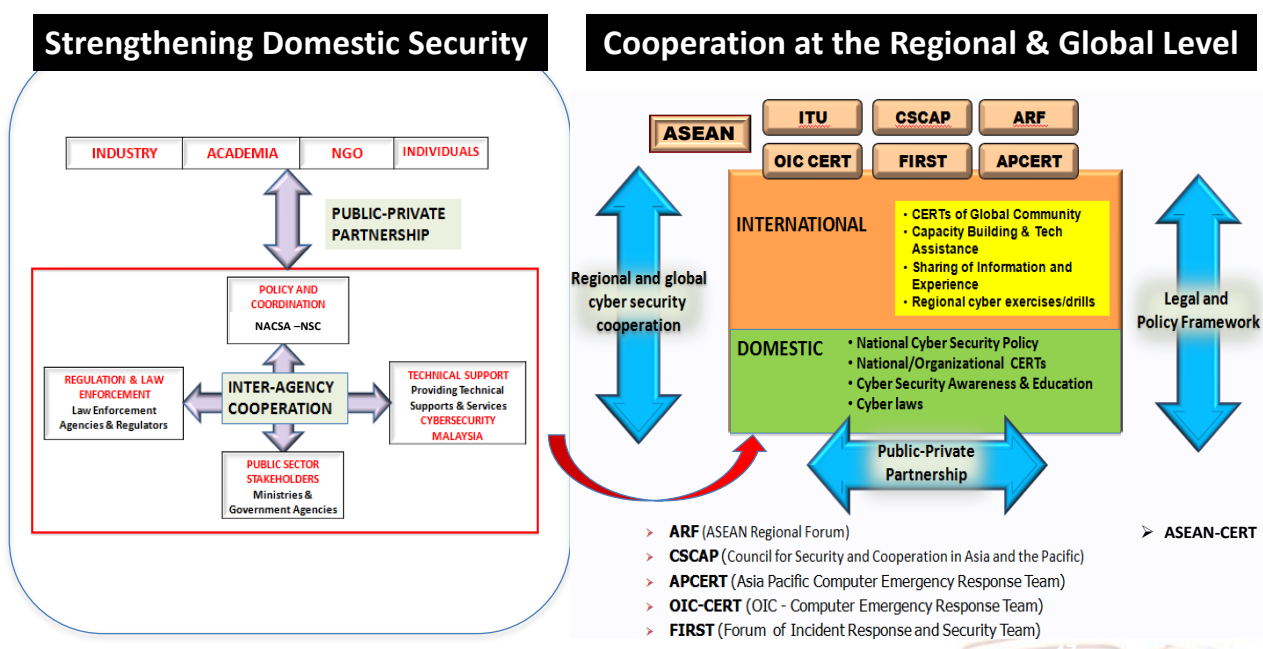


Figure 7. Domestic and Global Cyber Security Strategic Collaboration
 Source: CyberSecurity Malaysia

Malaysia is ranked third in the world and second in Asia Pacific by the Global Cybersecurity Index (GCI) 2017 initiated by International Telecommunication Union (ITU) as seen in **Figure 8**. It shows that Malaysia's cyber security efforts towards ensuring a secure and safer cyber environment are recognized globally.

Country	GCI Score	Legal	Technical	Organizational	Capacity Building	Cooperation
Singapore	0.92	0.95	0.96	0.88	0.97	0.87
United States	0.91	1	0.96	0.92	1	0.73
Malaysia	0.89	0.87	0.96	0.77	1	0.87
Oman	0.87	0.98	0.82	0.85	0.95	0.75
Estonia	0.84	0.99	0.82	0.85	0.94	0.64
Mauritius	0.82	0.85	0.96	0.74	0.91	0.70
Australia	0.82	0.94	0.96	0.86	0.94	0.44
Georgia	0.81	0.91	0.77	0.82	0.90	0.70
France	0.81	0.94	0.96	0.60	1	0.61
Canada	0.81	0.94	0.93	0.71	0.82	0.70

Figure 8. The Global Cybersecurity Index (GCI)
 Source: International Telecommunication Union (ITU)

Cyber threat is growing in sophistication in parallel with technology revolution. Malaysia needs to continue its efforts in strengthening its cyber defence strategies to cope with the rapidly changing cyber threat environment. Despite Malaysia's current efforts and mechanisms, it seems that they are still not effective to deal with ever evolving cyber threat. Therefore our approach should be equally evolutionary to confront any security challenges.

Strategic collaboration among Government and industry entities through Public-Private Partnership is essential towards the development of cyber defense capabilities. This has to be done with continuous and consistent manner. Cyber threat is evolutionary and it is growing in parallel with digital revolution.

Malaysia's journey towards digital economy is more than the mere deployment of technology. Rather, it is also about preparing Malaysian communities to meet the emerging cyber threat challenges. Therefore, despite the current threat landscape, there is a lot of opportunities to enhance its cyber security which is detrimental to its national security. By addressing cyber security as one of its key national security agendas, Malaysia can achieve its aim to be a truly advanced nation.

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Chapter 4

Malaysia And Geo-Strategic Defence Cooperation: Australia-Malaysia Convergent Defence Interests And Strategic Collaboration

Adam Leong Kok Wey

This chapter describes the strategic context of Australia-Malaysia strategic cooperation, and then analyze the strategic logic viewed from both of these states, and provide a persuasive argument that both Australia and Malaysia have complementing strategies in securing themselves in the contemporary state of Asia-Pacific affairs facing a common strategic risk. These strategies involve mutual understanding and usage of each other's positions - Malaysia's geography and Australia's security alliance with the US - to soft balance and contain China's threat in the region.

In 1955, Robert Gordon Menzies, Australia's Prime Minister said

If Malaya is vital to our defence, more vital, properly understood, than some point on the Australian coast, then we must make Malayan defence in a real sense our business.¹

Australia's strategy of forward defense made sense back then when the rise of communism was set to upstage a host of Asian governments. The end of the French Indochina War with the ignominious defeat at Dien Bien Phu in 1954, the Korean War (1950-53), and the communist insurgency raging in Malaya set the tone for the context to defend Australia against threats by ensuring that states in the Asian region remain secure and democratic. The end of the Cold War has brought about a few Asian 'miracles' - the phenomenal rise of economic power in the Asian region - and more recently the rise of China as the world's leading economy, which have also resulted in the emergence of a new set of security threats. China recently revealed, through a series of actions, that her rise is not peaceful as claimed by some analysts. China has been emerging as a regional power with an agenda to increase influence in the region and with expansionist ambitions to claim the entire South China Sea, including the territorial waters of Malaysia, Vietnam, Thailand, the Philippines, and Brunei.²

Underscoring such a high security risk environment, Australia's forward defense strategy of the 1950s remains relevant today. Australia traditionally has a strong relationship with Malaysia, especially in defense terms. Australian troops had fought against communist insurgents during the Malayan Emergency (1948-1960), and during the Confrontation (*Konfrontasi*) against Indonesian troops. In addition, Australian troops and Royal Australian Air Force (RAAF) aircraft continue to be stationed in Malaysia. Both Australia and Malaysia are also part of the Five Power Defence Arrangements (FPDA), which although not an active military pact, has continued to provide a forum for continued cooperation between the Australian and Malaysian defense forces.³

Australia plays a major role in the current U.S. Asia-Pacific pivot strategy, from her long-standing security pact with the United States in the form of the Australia, New Zealand, United States Security Treaty or in short - ANZUS.⁴ Australia has been a reliable American strategic partner, having provided combat troops in the recent U.S. military campaigns in Afghanistan and Iraq. As a starting point of the Asia-Pacific pivot, Australia's military base in Darwin will be used to station 2,500 US Marines. Australia apart from her upper most region, is actually geographically isolated from the main Asia region, buttressed physically by the Indonesian Archipelago, and Malaysia (both Peninsula Malaysia and East Malaysia (Borneo Island)). Australia however, has an important footprint in her close strategic cooperation with Malaysia. Her strong ties with Malaysia will be more important today as Malaysia will serve as a convenient geographical location for Australian strategic projection as part of her

larger alliance with the United States, and the U.S. strategy to manage or contain Chinese military power.

Malaysia, is also set to benefit from this strong historical relationship. Although, under Prime Minister Tun Dr Mahathir Mohamad, there was some anti-Australia rethoric, the underlying strong military cooperation has never waned.⁵ During Mahathir's tenure, there was also a competition for 'middle power' primacy in the region. Countering proposals by Mahathir's East Asia Economic Caucus (EAEC, which excludes Australia) and Australia's Asia-Pacific Economic Co-operation (APEC), formed the backdrop of this middle-power rivalry, which waned after the 1997-98 Asian financial crisis that almost wiped out Malaysia's economy.⁶ All of these past differences appear to have subsided with new leadership changes in the Malaysian political landscape, and facing with a new set of mutual security threats, both Malaysia and Australia have reformed their strong relationship.⁷ One mutual security threat is China's quest for primacy in the region.

Malaysia silently but also cautiously watches China's recent assertion of power and use of non-military aggression. Malaysia's indication to be part of the US driven Trans-Pacific Partnership (TPP) trade pact, something which was not fathomable a decade ago, although with understandably strong opposition from some small quarters of the Malaysian domestic society, provides a strong indication of Malaysia's attempt to reduce its dependency on China for economic prosperity. Australia, with its security alliance with the United States and strong bilateral ties with Malaysia, will provide Malaysia with a 'middle-handler' to secretly ally with the United States in soft balancing China.

Australia's strategic context

The initial idea for the formation of Malaysia mooted by Malaya's Prime Minister Tunku Abdul Rahman in 1961 was welcomed by Australia's Prime Minister Robert Menzies. Further augmenting Australia's 'forward defense' strategic policy, Menzies saw that the independence of Singapore, Sabah and Sarawak from Great Britain, and forming a new federation with Malaya was an important step in ensuring a stable South East Asian state that was also friendly with Australia.⁸ The subsequent realization of Malaysia in 1963 created tensions with the Philippines and Indonesia, since both opposed the formation of Malaysia due to claims on Sabah and Sarawak, respectively. However, only Indonesia launched a military offensive to disrupt Malaysia's formation. Indonesia's military operations, albeit limited, focused initially in Sarawak and Sabah, but escalated subsequently later with the landing of para-commandos and saboteurs in Peninsula Malaysia and Singapore. Australia sent military forces to assist Malaysia, together with Great Britain and other Commonwealth states, in defending and securing Malaysia. This low intensity conflict, famously called the *Konfrontasi*, finally wound down with the ouster of Indonesian President Sukarno and replaced by President Suharto who agreed to end the *Konfrontasi* with Malaysia in 1966. This early involvement of Australia in assisting Malaysian in dire times will have a lasting strategic effect for these two states.

Today, Australia's defense strategy is not much different in concept with Menzies' 'forward defense' policy. In Australia's 2013 Defence White Paper, there are four main dimensions in Australia's strategic policy which are depth in defense based on early detection of threats; long-range sea and air-strike capabilities; mobile and agile land forces; and joint communications and intelligence activities with the United States. These in turn will

safeguard four of the main strategic interests that were identified in the White Paper: “a secure Australia; a secure South Pacific and Timor-Leste; a stable wider region and emerging Indo-Pacific; and rules-based global order.”⁹ The third and last strategic interests have direct implications for Australia-Malaysia defense ties. In the just released Australian 2016 Defence White Paper, three main Strategic Defence Interests were identified as “...a secure, resilient Australia...;...a secure nearer region, encompassing maritime South East Asia and the South Pacific...;...a stable Indo-Pacific region and rules-based global order which supports our interests.”¹⁰ Similarly, the second and third Strategic Defence Interests, have close associations with Malaysia’s own strategic and security concerns.

Australia regards the stability of the Indo-Pacific area with utmost importance. The South East Asia region remains a key geographical space for Australia’s forward defense policy. Australia views that any direct threat to her continent will have to pass through that region as hostile powers need land to sustain forward bases to reach Australia’s shores. The vast air-and-sea gap needs to be secured for Australia’s defense viability. Hence, Malaysia straddling right in the middle of the region will present a unique and important geographical ally for Australia’s defence, apart from Indonesia. Australia also needs to secure her sea lines of communication as a large majority of trade (Australia’s seven of her top ten trading partners are from Asia) passes through the maritime areas of South East Asia. Malaysia with parts of the Straits of Malacca and the South China Sea under her maritime control remains a key geo-strategic ally in ensuring Australia’s economic lifeline remains secure and open.

Australia’s experience in World War II provided a clear strategic historical example of the importance of Australia’s defense doctrine. Japan managed to launch limited attacks on Australian territories through Japan’s invasion and capture of Malaya and the Dutch East Indies (Indonesia). The occupation of these states provided Japan with the land bases and supply chains to reach Australia.¹¹ Australia thus interprets the security and stability of that region as key to Australia’s defense. This coupled with Australia’s alliance with ANZUS serve as the twin pillars of Australia’s contemporary security strategies.¹²

Australia also prioritizes the importance of protecting state sovereignty, especially hostile powers with nefarious ambitions and the threat of the use of force and coercion in the Indo-Pacific region. Australia underscores the need for such states with ill intentions to observe international rules and norms, something which Australia will find justifying in intervening in the assistance of her allies in the region.¹³ Australia’s assertiveness in ensuring the rules-based global order has led her into intervening in various United Nations sanctioned operations around the world, and also in military operations together with U.S. preventive wars waged against terrorism in Afghanistan and Iraq.¹⁴ Australia’s close security alliance with the United States, and in ensuring global security, has paid handsome dividends with the U.S. government viewing Australia as its second most important ally after the United Kingdom. Continued close U.S. cooperation is an important defense strategy and policy in Australia’s context.

Australia’s participation in the FPDA also provides Australia with a unique platform to exercise valuable multilateral and bilateral defense ties with the other four powers.¹⁵ Again, Malaysia and Australia are important strategic partners in this aspect, which allowed the conduct of joint training exercises between both of these states’ armed forces. Malaysia and Australia shares a common historical legacy as Commonwealth nations and common

military traditions and cooperation, which facilitates joint operations. The aforementioned physical presence of Australian armed forces personnel in Malaysia provide special opportunities for both states to increase the level of cooperation.¹⁶ This special military relationship albeit not much publicized, is discussed next within Malaysia's strategic context.

Malaysia's strategic context

Australia had played major roles in both the Malayan Emergency and *Konfrontasi* by militarily aiding Malaysia. Subsequently, during Britain's retreat from the east of the Suez and the expiration of the Anglo-Malaya Defence Agreement (AMDA) in 1970, a new loose arrangement was formed known as the FPDA among Malaysia, Australia, New Zealand, Singapore and Great Britain. The members agreed to 'consult' each other for the defense of Malaysia and Singapore, if the security of these two states were threatened. Australia's military ties with Malaysia has continued under this agreement with troops and fighter squadrons based in Malaysia. At different points since the 1970s, the RAAF had put squadrons of Mirage fighter jets and F-111 fighter bombers at the Butterworth airbase. In response to recently changing strategic priorities, Australia has deployed a squadron of PC-3 Orions at Butterworth for intelligence gathering and surveillance purposes. The value of the Butterworth base is high as it enables Australia to have a forward base for surveillance in both the Indian Ocean and the South China Sea, both critical maritime lines of communication for Australia.

Malaysia and Australia also cooperate through the Integrated Area Defence System (IADS), which involved initially an aerial defense system monitoring Peninsula Malaysia and Singapore, and later evolved into an area defense that also monitors land and maritime approaches. The IADS is commanded by a two-star RAAF general (Air-Vice Marshall). This IADS cooperation represents a platform to quietly develop and enhance further a more active bilateral security and strategic cooperation, which will be discussed later in this chapter.

Apart from the loose security arrangements in the FPDA, Malaysia has consistently used diplomacy to ensure security by actively initiating and promoting multilateral regional organizations and bilateral agreements. Theories of alliance politics tend to argue that small states construct alliances with similar weak powers or bandwagon to engage a more powerful state or alliance. Nonetheless, there are cases in which smaller states simply do not engage in this behavior. For example, Malaysia in the early 1960s refused to join the Southeast Asian Treaty Organization (SEATO), a security pact established to contain Soviet and Chinese influence in Southeast Asia during the Cold War. Instead, Malaysia actively promoted an alternative alliance – the Association of Southeast Asian Nations (ASEAN) – in 1967 to discuss shared socio-economic interests in the region, which strongly supported neutrality and non-intervention in internal affairs of regional members. This was a strategy of using deft diplomatic maneuvers to pre-empt potential powerful states from asserting influence (both from the United States and communist states - Soviet Union and China) in the region by promoting a perception that the region is neutral and there is no necessity for either side to establish footholds to counter each other. Why did Malaysia make such a strategic choice?

Malaysia at that point still maintained close defense ties with her ex-colonial master, Great Britain, and indirect security ties with the United States. The act of forming ASEAN and portraying Malaysia as a non-aligned, neutral state but quietly backed up by Great Britain security-wise (via the FPDA), may point to the dual practice of strategic ambiguity – a two-faced deception strategy, and the use of active defensive diplomacy. The strategic context of unstable and uncertain ideological power plays in the region at that time reinforced the urgent need for states to actively implement independent strategies to secure them from being used as a pawn in the bipolar struggles, or worse dragged into a proxy war. The only means available was using active defensive diplomacy to reach out to other states in the region facing similar threats and uncertainties. A strategy of active defensive diplomacy “anticipates trends and attempts either to redirect them or turn them to advantage.”¹⁷

Malaysia correctly evaluated that the changing tide of the Cold War tensions in the region during the mid-1960s, which necessitated a dire need to promote the region as a neutral and non-aligned bloc against power play threats. Although successful in signaling that Malaysia was a neutral state through ASEAN, Malaysia still maintained close defense ties with Great Britain and Commonwealth states, such as Australia – some British and Australian troops were based in Malaysia during that period. Such an ambiguous foreign policy points to an astute strategy used by Malaysia to enhance security by actively initiating and using a neutral regional alliance as well as a security ‘insurance policy’ with a defense alliance with Great Britain (making Malaysia a *de facto* ally of the West!). This approach did not conform to Kenneth Waltz’s argument that weaker states tend to ally themselves to balance the stronger power as the formation of ASEAN was not to balance power but to work, neutrally and inclusively, with all the key players in the region, to moderate the exercise of power.¹⁸

The current strategic context of China’s rise and its impact on security demands renewed interests in strategic choices to meet this regional challenge. Recently, China has been more aggressive in asserting maritime claims as demonstrated by a string of incidents in 2014 alone.¹⁹ The placement of an oil rig in Vietnamese waters, and the establishment of ‘fishermen outposts’ in reefs/islands in international waters of the South China Sea do not support the arguments of a host of ‘peaceful rise of China’ theorists. More recently in 2015, China’s covert building of an artificial island complete with a large airstrip on Fiery Cross Reef (a reef in the Spratly Islands, South China Sea) was discovered revealing the extent and the aggressive expansion of Chinese strategic maritime footholds in the region.²⁰ The Spratly Islands consist of a chain of reefs, rock outcrops and small islands in the South China Sea which are claimed in whole or in parts (often overlapping) by China, Taiwan, Philippines, Vietnam, Malaysia and Brunei. Apart from its geostrategic location, the Spratly Islands also has rich fishing resources and reputed to hold large oil and gas reserves.

The ‘peaceful’ rise of China

Some of the recent actions taken by China in the South China Sea challenge the arguments propagating China’s rise as peaceful.²¹ China has never hidden the desire for regional hegemony and a preference for primacy in the region, especially when the Chinese government declared a ‘nine-dash’ map demarcating almost the entire South China Sea as Chinese maritime territory including large swaths of sovereign maritime areas and exclusive economic zone (EEZ) waters belonging to Malaysia.²²

China is using a shrewd strategy of claiming waters and islands by using non-military means such as 'fishing boats, fishermen, and coast guard vessels' to encroach into Japanese waters. Similar actions were also employed inside Philippines waters (Spratly Islands) and Vietnamese waters. Recent Chinese oil explorations and the placement of an oil rig overnight in Vietnamese waters indicates China's hostile intentions. China's building of an artificial island and airbase on Fiery Cross Reef, Spratly Islands is an excellent example of China's asymmetric strategy in offsetting her disadvantage in naval airpower by ostensibly setting up a permanent 'aircraft carrier' right in the middle of the South China Sea.

Although China claimed innocence and ignorance in such actions, Sun Tzu, the famous writer of the ancient Chinese military treatise on warfare, *The Art of War*, would have given a nod of approval. Sun Tzu proposed that the key principle in winning wars is deception. The subtle use of civilian non-military assets by the Chinese government is a clear deception strategy to forcibly create a presence in certain maritime areas around the entire Asia-Pacific region. For example, allegedly a couple of Chinese naval vessels sailed about 70 kilometers off the Sarawak coast (East Malaysia) near Kuching and the sailors raised the Chinese flag and chanted that they are in their motherland's waters. China also claimed that the building of the Fiery Cross Reef artificial island is to put weather monitoring equipment, navigation assistance and shelter for fishermen.

The thesis propounded by some scholars that China historically had not been an imperialistic or invasive power is both naïve and historically blind. Why? The Malacca Sultanate as well as other regional fiefdoms in Southeast Asian region in the 15th century were known to have paid tributes to the Chinese Emperor for protection and trade access.²³ China at that time had considered herself as the centre of civilization in the Asia region if not the world then, or contemporary known as the Middle Kingdom (*Zhong Gou*). All states and kingdoms in its immediate vicinities such as Korea and China were considered first rate states, and those in the peripheries such as states or kingdoms in South East Asia were considered as second rate or third rate states. Regardless of each state's status all states and kingdoms were subjected to China's hegemony. Some kingdoms and states are considered vassals or suzerainty states by China. Submission to Chinese mastery and supremacy is usually in the form of tribute paying either in gold (and other precious metals and stones) or goods or virgin girls to the Chinese emperor. In return China offered her gracious agreement to allow these states to trade with China.²⁴

In order to project her expeditionary power and influence, China had the world's largest armada of warships during that period of time and controlled the sea lanes in Asia. China had built 2,000 seagoing ships by 1419. Admiral Zheng He, the famous eunuch Chinese admiral, reputedly made seven maritime expeditions from 1405 to 1433, which sailed through the vast East Asia oceans to the shores of Africa via the strategy

.²⁵ Each of these expeditions comprised of an armada of up to 250 ships and 30,000 men, and had used Malacca as a major naval depot and base for its operations.²⁶ Admiral Zheng He's expedition had also allegedly used coercion, kidnappings of leaders and military action to enforce *Pax Ming* authority, notably in Sumatera, Java, Ayudhya, Burma, Sri Lanka and La-Sa (a city in the Arabian peninsula).²⁷ Nonetheless, China's maritime supremacy in the region declined and vanished. For some strange reasons, China decided to abolish her maritime power and focused her energies internally by the middle of the 15th century.²⁸ China's current claim to control the entire South China Sea harks back to the days when

China collected tributes and exercised her power over the region. It is not surprising that with today's dependence on China for trade and economic prosperity, most of the Asian states are obstructively tied to the Chinese government's whims and fancies without daring to confront the obvious aggressive regional moves.²⁹

Malaysia is no different in this respect. The current premiership of Malaysia appears to be more cautious of China today albeit in a quiet manner. The willingness of Malaysia to join the US-led Trans-Pacific-Partnership trade bloc has indicated that Malaysia is attempting to silently move away from economic dependence with China.³⁰ Malaysia's continued strategic collaboration with Australia, which provides a strategic bridge with the United States, will enhance Malaysia's subtle strategy of reducing economic dependence on China as well as securing itself from China's quest for primacy in the region.

Although the United States has been blamed by some analysts for exacerbating China's expansion of power in the region, this blame is misdirected. The United States has always engaged the Asia-Pacific region through security alliances with South Korea, Japan, Taiwan, Thailand, the Philippines, and Australia (New Zealand through the mid 1980s). Thus, it is important to note that American action to engage China is a natural response to the perceived and real threats China poses to U.S. interests and allies in the region.³¹ It is this dynamic power rivalry that will draw Malaysia into deciding in which camp will better enhance its security and the Malaysian government needs to play its cards well.

China's recent penchant in resorting to the threat of using force (although non-military but cleverly with civilian assets such as Coast Guard naval vessels and 'fishing boats') to resolve regional disputes challenges Australia's strategic interests in maintaining a stable rules-based global order, as well as a possible predilection of what China will do in future disputes, especially when claiming the whole of South China Sea, which directly impacts Malaysia.³² China continues to use ambiguous strategies to consolidate maritime territorial claims. This is to avoid China being seen as overtly seeking primacy in the region with deceptive actions.³³ Clearly, the recent assertive actions by China points to a more aggressive stature in the region that will eventually encroach into Malaysia's strategic interests and territory. This convergence of common threats and security risks between Malaysia and Australia should result in enhanced strategic cooperation to contain China's future intentions in the region.

Conclusion

Australia and Malaysia have long maintained historical strategic cooperation. The Australian military fought on Malayan soil during the Second World War, the First Malayan Emergency and the *Konfrontasi* between Malaysia and Indonesia. Malaysia, with its unique geographical location provides Australia with an excellent launching pad and base for Australian defense and security strategies. The rise of modern China and the use of indirect force to reinforce Chinese claims on islands and maritime waters in the Asian region reiterates the importance of Malaysia working closely with traditional defense allies. This will ensure that China's aggressive pressure to claim China's purported territorial rights can be confronted adequately. Australia with her complimentary interest in 'strategic space' defensive strategy with Malaysia serving as a suitable 'land barrier' can continue to work closely with Malaysia for reciprocal defensive postures against China. Although current economic imperatives underline the importance of working with China to sustain both Malaysia's and Australia's

economic growth, China's future rise and its security risks need to be viewed cautiously. Australia and Malaysia urgently need to transform their defense cooperation into a more agile and formidable deterrence by continuing to share geographic space and strategic cooperation.

Notes

¹ Quoted in Gareth Evans and Bruce Grant, *Australia's Foreign Relations: In the world of the 1990s* (Carlton: Melbourne University Press, 1st edn 1991, ppb 1995), 25.

² Andrew T.H. Tan, *Security Strategies in the Asia-Pacific: The United States' "Second Front" in Southeast Asia* (New York: Palgrave MacMillan, 2011), 153. For an astute albeit brief analysis of China's foreign policy see Rémy Davison, *Foreign Policies of the Great and Emerging Powers* (Frenchs Forest, NSW: Pearson Education Australia, 2008), 96-115.

³ See Carlyle A. Thayer, "The Five Power Defence Arrangements Exercises and Regional Security, 2004-10", Ian Storey, Ralf Emmers and Daljit Singh (eds), *Five Power Defence Arrangements at Forty* (Singapore: ISEAS, 2011), 51-67. See also Australian Government, Department of Defence, *2016 Australia Defence White Paper*, 128-131.

⁴ Australia, New Zealand and the US signed the ANZUS treaty in 1951. Australia was also a member of another security pact with the US in SEATO (Southeast Asia Treaty Organization) formed in 1961 to balance the rise of Communism in China and Indochina. SEATO fell into defunct in the 1970s. See Gary Smith, Dave Cox and Scott Burchill, *Australia in the World: An Introduction to Australian Foreign Policy* (Melbourne: Oxford University Press, 1st edn 1996, ppb. 2005), 53-56.

⁵ Among some of the highlights of altercations between Mahathir and the Australian government were the 'recalcitrant' remarks by Australian PM Paul Keating for Mahathir's non-attendance at the APEC Leaders' meeting in Seattle in 1993, the treatment of Anwar Ibrahim, and the drama series *Embassy*. For a concise description and analysis see Rita Camilleri, *Attitudes and Perceptions in Australia-Malaysia Relations: A contemporary profile* (Bangi: Penerbit Universiti Kebangsaan Malaysia, 2001), and Evans and Grant, *Australia's Foreign Relations*, 206.

⁶ For a case on Australia as a middle power, and what a middle power is, see Smith, Cox and Burchill, *Australia in the World*, 95-113.

⁷ Two key recent events mark the strength of this relationship; the missing Malaysia Airlines (MAS) MH370 over the Southern Indian Ocean and the shooting down of MH17 over Ukraine. Australia and Malaysia has cooperated closely in the search for the missing MH370. There were 48 Australians in MH17, all killed, and Australia has played pivotal roles with Malaysia in ensuring the return of the bodies and investigating on who shot the plane down.

⁸ Moreen Dee, *Documents on Australia Foreign Policy: Australia and the Formation of Malaysia, 1961-1966* (Commonwealth of Australia: Department of Foreign Affairs and Trade, 2005), xxxv.

⁹ Australian Government, Department of Defence, *2013 Australia Defence White Paper*, 24.

¹⁰ Australian Government, Department of Defence, *2016 Australia Defence White Paper*, 17-18, 68-78, and 128-131.

¹¹ Robert Ayson, "Australasian security", Robert Ayson and Desmond Ball, *Strategy and Security in the Asia-Pacific* (Crows Nest: Allen & Unwin, 2006), 245.

¹² For an apt description of ANZUS see Smith, Cox and Burchill, *Australia in the World*, 52-77.

¹³ *Ibid.*, 26.

¹⁴ William Tow, "Alliances and alignments in the 21st century", Brendan Taylor (ed), *Australia as an Asia-Pacific regional power* (Abingdon: Routledge, 2007), 23.

¹⁵ *Ibid.*, 59.

¹⁶ For a succinct description of Malaysia and FPDA see Johan Saravanamuttu, "Malaysian Foreign Policy and the Five Power Defence Arrangements", Ian Storey, Ralf Emmers and Daljit Singh (eds), *Five Power Defence Arrangements at Forty* (Singapore: ISEAS, 2011), 36-49.

¹⁷ Chas W. Freeman, Jr.: *Arts of Power: Statecraft and Diplomacy* (Washington, DC: United States Institute of Peace, 1st edn 1997, ppb. 2007), 73-74.

¹⁸ Kenneth N. Waltz: *Theory of International Politics* (Boston, MA: McGraw-Hill, 1979), 126.

¹⁹ For example see "Territorial Claims in South China Sea", *The New York Times* (31 May 2012), http://www.nytimes.com/interactive/2012/05/31/world/asia/Territorial-Claims-in-South-China-Sea.html?_r=0, accessed on 12 February 2015.

²⁰ James Hardy and Sean O'Connor, "China completes runway on Fiery Cross Island", *IHS Jane's* 360, 24 September 2015, <http://www.janes.com/article/54814/china-completes-runway-on-fiery-cross-reef>, accessed on 27 March 2016.

²¹ See Zheng Bijian, "China's "peaceful rise" to great power status", *Foreign Affairs*, Vol. 85 No. 5 (2005), 18-24; and Chih-yu Shih, "Breeding a reluctant dragon: Can China rise into partnership and away from antagonism?", *Review of International Studies*, Vol. 31 No.4 (2005), 755-774.

²² For a concise description see Jürgen Haacke, *ASEAN's Diplomatic and Security Culture: Origins, development and prospects* (Abingdon: Routledge, 1st edition 2003, ppb. 2005), 122-123.

²³ See Martin Jacques, *When China Rules the World* (London: Penguin, 2012), 345-347; and Harry G. Gelber, *The Dragon and the Foreign Devils: China and the world, 1100 BC to the present* (London: Bloomsbury, 2008), pp. 88-89.

²⁴ Jacques, *When China Rules*, 345-347.

²⁵ Geoff Dyer, *The Contest of the Century: The New Era of Competition with China* (London: Penguin, 2015), 78-81; and Gelber, *The Dragon*, 88-89.

²⁶ Geoffrey Wade, "The Zheng He Voyages: A Reassessment, ARI Working Paper, No. 31, October 2004, www.ari.nus.edu.sg/pub/wps.htm, 12.

²⁷ Ibid. 13-18.

²⁸ See John E. Wills Jr (Ed.), *Past and Present in China's Foreign Policy: From "Tribute System" to "Peaceful Rise"* (Portland, ME: MerwinAsia, 2010).

²⁹ See David C. Kang, *China Rising* (New York: Columbia University Press, 2007), 50.

³⁰ See Ann Capling and John Ravenhill, "Multilateralising regionalism: what role for the Trans-Pacific Partnership Agreement?", *The Pacific Review*, Vol 24 No 5 (2011), 553-575.

³¹ China's claim for the South China Sea is also partly to secure energy supplies for her growing economy, and fish supplies (food security). See Alan Dupont, *East Asia Imperilled: Transnational Challenges to Security* (Cambridge: Cambridge University Press, 2001), 76-77 and 105-109.

³² Remy Davison, *Foreign policies of the great and emerging powers* (Frenchs Forest: Pearson Education Australia, 2008), 113.

³³ Haacke, *ASEAN's Diplomatic and Security Culture*, 124-125.

Chapter 5

What Can Two Subs Do?

Malaysia's Two-Boat Submarine Force And Lessons From Strategic History

Adam Leong Kok Wey

There appears to be renewed interest today on the procurement of the two Scorpène class submarines for the Royal Malaysian Navy (RMN) and arguments continue today on the strategic utility of operating just two boats. This chapter will shed some light on some of the important roles and strategic utility of a submarine force, and the implications for Malaysia's strategic context, to provide a clearer view on the murky business of underwater warfare. It will also provide an analysis of the strategic effects of single submarine actions in warfare since the end of the Second World War to highlight that in the practice of strategy, the strategic yield lies in the tangible and intangible consequences of tactical actions

When Malaysia announced in 2002 that she was buying just two Scorpène class submarines from France, the news created a series of criticism from some Malaysian politicians and the public on the limited strategic utility of such a small number of submarines as well as the suitability of submarines for Malaysia's defense.¹ It was understood then that if Malaysia has just two submarines, one can only be used at any time as the other sub will usually need to be serviced and repaired at its home base. This is because submarines, unlike surface ships, require constant regular and intensive servicing and repairs after certain time at sea.² To these critics, one submarine is of very limited use. Furthermore, there were claims that the Strait of Malacca is too shallow for submarine operations.³ Such criticisms were naïve and strategic historically blind. Lessons from more recent wars had shown that singular combat action by a single submarine still managed to yield significant strategic effects. While the ideal number of submarines for Malaysia is said to be six,⁴ but based on the limited funds available and the need to train suitable number of crew, two submarines, as this article will argue, may just be enough to deter and deny enemy maritime freedom in Malaysian waters in time of war, and serve as a useful stealthy deterrent in contemporary Malaysian naval strategies in the South China Sea and the Strait of Malacca.

Submarines have a multitude of functions such as gathering intelligence (especially signal intelligence (SIGINT)), ballistic nuclear missile launchers (deterrence), launching land attack missiles, stealthily infiltrating special operations personnel, and traditional combat roles in time of war - hunting enemy submarines and sinking enemy surface ships (both merchant and naval). It is in the realm of combat action in sinking enemy ships that have gathered a lot of interest in submarines, especially the famous exploits played by German U-boats during World War I & II, and British and United States submarines during World War II (WWII).⁵ Since the end of WWII, submarines had only twice engaged in sinking enemy ships with their roles more focused on intelligence operations, playing cat and mouse games tracking each other under water especially between NATO and Soviet Union submarines during the Cold War, and more importantly carrying nuclear ballistic missiles – providing a first and second strike capability. A nuclear missile carrying submarine being difficult to detect, provide a credible nuclear deterrent.

Submarines are generally classified into two main categories based on their roles, ballistic nuclear-warhead missile carriers and hunter-killer submarines (which hunt other submarines, especially nuclear missile carrying submarines), and types of propulsion which are nuclear powered submarines and diesel-electric submarines. Nuclear submarines are able to submerge as long as required without need to surface, only limited by food supplies and human endurance, as it can generate its own power using nuclear reactors and generate its own air supply, but more noisier and easier to detect with sophisticated SONAR radars.⁶ Diesel-electric submarines today are quieter than nuclear powered submarines but have limited time submerged, usually between 30-60 days. Some diesel-electric submarines

are also powered by an Air-Independent Propulsion unit (AIP) which effectively made the submarine even more quiet and able to submerge longer.⁷ Malaysia's Scorpènes are hunter-killer submarines and diesel-electric powered, with an option to upgrade to AIP in the future. The first Malaysian submarine was completed and delivered in 2009 with the second operational in the following year. The first submarine is named KD *Tunku Abdul Rahman* with the second named KD *Tun Abdul Razak*, both of them named after the first and second Prime Ministers of Malaysia.

This article will first explain what strategic effect is and then use two cases of submarine attacks conducted after World War 2 (the only two thus far): the sinking of INS *Khukri* by PNS *Hangor* during the 1971 India-Pakistan War, and the Sinking of ARA *General Belgrano* by HMS *Conqueror* during the 1982 Falklands War. This article will then argue that, generally the value of submarine warfare resides in the intangible quality of fear and morale yielding strategic effect, rather than the quantities in how many ships or tonnage sunk, which was commonly used as a measurement of submarine's successes and failures during both World Wars I and II. These two cases using the template of strategic effect as the analytical framework will highlight that although Malaysia has only two submarines, lessons from strategic history aptly demonstrate that even a single submarine can still yield immense strategic consequences in modern naval warfare.

What is strategic effect?

Strategy is the study of how means are used to achieve the ends, in this case how military tools and tactics (the means) are used to achieve the political objectives or policy (the ends). Strategy or strategic actions can only be studied based on its consequences. Colin S. Gray provides a succinct argument about what strategic effect is, "...the net result of our largely coercive behaviour of any and all kinds upon the behaviour of the enemy."⁸ He sums this up further, "Strategic effect ...by definition it can only be in the consequences of what we do."⁹ Both intended and unintended strategic effects, either psychological or material or both, are generated by the strategies we employ.¹⁰ Strategic effects can only be 'measured' based on judgement guided by objective reasoning and logic rather than some mathematical or statistical process.¹¹ Although strategic effects cannot be measured with mathematical precision, it can be observed in the enemy's manner of response.¹² The enemy's response, or non-response, will enable us to understand if the strategy has resulted in its intended or unintended effects. The consequence of strategy is paradoxically different from tactical action.

A tactically effective operation may not yield the intended strategic effect and paradoxically, an unsuccessful tactical operation may instead yield healthy strategic effects.¹³ Therefore, tactical effects cannot be studied in isolation and must be analysed with the strategic outcome of the operation.¹⁴ Most studies on submarine operations tend to focus on the tactics and drama of submarine attacks. While some studied about the lives of submariners but most of these works lacked analysis of submarine operations' strategic effects.¹⁵ This article will highlight that there are cases of singular submarine actions which had produced significant strategic effects as the next two cases will demonstrate.

The Sinking of INS *Khukri*

The 1971 Indian-Pakistan War started on 3 December 1971, within the backdrop of the Bangladesh Liberation War, when Pakistan launched surprise air strikes on India, leading to another war between these two South Asian powers.¹⁶ The geographic location of Western and Eastern Pakistan necessitated the control of maritime sea-lanes of communication, as East and West Pakistan is separated by a 1,000 mile land mass of India.¹⁷ Any supply and transport of troops to East Pakistan from West Pakistan must be conducted by maritime means. India knew this and sought to deny Pakistani navy maritime passage by conducting a retaliatory surprise attack on Karachi naval base on the night of 4/5 December.¹⁸ The attack code-named Operation *Trident*, was successful. The Indian navy used missile boats to conduct the attack and succeeded in destroying a Pakistani destroyer and damaged a few other ships. Following this, the Indian Navy launched a second attack at Karachi on the night of 8/9 December code-named Operation *Phyton*. This second operation resulted in further destruction at the Karachi port with the main Pakistan navy fuel dump destroyed and three merchant ships sank.¹⁹

The Pakistani navy knew that they cannot compete with the Indian navy and sought to disrupt the Indian navy's operations both in East Pakistan (Bay of Bengal) and West Pakistan (Arabian Sea) by sending its small submarine fleet of two submarines. The ageing WWII-era submarine PNS *Ghazi* was sent to the Bay of Bengal to try to locate and sink the Indian navy's only aircraft carrier, INS *Vikrant* operating in the Bay of Bengal.²⁰ PNS *Ghazi* managed to sneak into the Bay of Bengal and caused alarm among the Indian navy ships deployed there. A massive anti-submarine search was launched which diverted valuable naval assets to search for PNS *Ghazi*. The Pakistani ageing submarine however, was mysteriously lost in the Bay of Bengal.²¹ Until today, the reason of its sinking is still not known. The loss of PNS *Ghazi* enabled the Indian Navy to operate freely in the Bay of Bengal.

On the Western Pakistan side, PNS *Hangor*, which was already at sea when the India-Pakistan broke out on 3 December, was redeployed to search and destroy as well as disrupt the Indian navy's operations in the Arabian Sea. With the surface fleet almost destroyed or disabled by the attacks by India on the nights of 3/4 and 8/9 December, the Pakistani navy had to rely on its sole submarine operating in the Arabian Sea to disrupt Indian operations. PNS *Hangor* surveyed the coasts of Bombay and made contact with an India naval fleet but unable to position herself for a viable attack. Nonetheless, the Indian fleet had detected the presence of a submarine and took evasive actions as well as anti-submarine action. This Indian fleet was actually heading for another sneak attack at Karachi on the night of 5 December. The presence of PNS *Hangor* had disrupted the operation and dispersed the Indian navy ships resulting in the cancellation of their attack at Karachi. Despite rigorous anti-submarine actions undertaken by the Indian ships, PNS *Hangor* managed to slip away and continued her combat patrol.²²

PNS *Hangor* subsequently made another contact with two Indian navy ships on the morning of 9 December off the Kathiawar coast. She detected the ships with her sonar and realised that they were two frigates conducting anti-submarine manoeuvres, most likely looking for her. A game of cat and mouse ensued where the hunted will soon turn to be the hunter. PNS *Hangor* took evasive actions as well as tracking the Indian navy frigates searching for her. By the evening of 9 December, PNS *Hangor* managed to position herself on the path of

the frigates undetected. PNS *Hangor*'s captain, decided to launch a torpedo attack. At three minutes to 2000H, PNS *Hangor* fired a homing torpedo but missed. A second torpedo was fired, and this time, it found its mark hitting the Indian frigate INS *Khukri*.²³ The second frigate, INS *Kirkan* closed in on PNS *Hangor*'s position resulting in PNS *Hangor* hurrying off the area not before unleashing a Parthian shot, firing a third torpedo at INS *Kirkan* which managed to evade the torpedo but fearing that the Pakistani submarine may be more accurate the next round decided to call off her hunt for the submarine and instead turned back to rescue INS *Khukri*'s crew – just a few were managed to be rescued. The INS *Khukri*, hit at the magazines, sank within 2 minutes with almost its entire complement of 18 officers and 176 men, including the captain. This was the single largest loss of Indian military personnel during the 1971 India-Pakistan War.

A massive submarine hunt was conducted by the Indian navy involving surface ships, aircraft and helicopters. PNS *Hangor* was attacked by at least 150 depth charges. The sub-hunt managed to disperse and divert the Indian navy ships. A third attack on Karachi port, code-named Operation *Triumph*, was planned for the night of 10 December, had to be cancelled due to the tasking of Indian navy's ships for the sub-hunt as well as the risk posed by the lurking submarine. There will be no more naval attacks on Karachi from that night on. The Indian Navy called off its sub-hunt on 13 December and PNS *Hangor* managing to evade the sub-hunters and successfully returned to Karachi on 18 December, two days after the end of the India-Pakistan War.²⁴

Sink the *Belgrano*!

The Argentinians who had long demanded the return of the Falkland Islands from the British launched an amphibious landing on 2 April 1982 and captured the Falkland Islands which was lightly defended by a small contingent of Royal Marines. The Argentinians had earlier captured South Georgia too, an island south of the main Falkland Islands on 19 March 1982. The British decided to recapture the island with military means and quickly assembled a maritime task force. A British nuclear hunter-submarine, HMS *Conqueror* was also dispatched to the Falkland Islands on 4 April 1982 to conduct advance reconnaissance and combat patrol.²⁵

The British had also declared a Maritime Exclusion Zone (MEZ) of 200 nautical miles around the Falkland Islands threatening to attack any Argentine warship entering the MEZ will be attacked by British submarines. The Argentinians were aware of the British naval task force heading towards the Falkland Islands, and decided to send three naval task forces to intercept the British naval fleet sailing towards the MEZ after diplomatic efforts to end the conflict proved futile.²⁶ The first task force consisted of the Argentinian navy's sole aircraft carrier, the ARA *Vienticinco de Mayo*, two Type 42 destroyers and three corvettes.²⁷ This task force caused considerable alarm for the British, and British submarines including the HMS *Conqueror* were sent to hunt and attempt to sink this aircraft carrier. The aircraft, A-4Q Skyhawks, aboard the aircraft carrier could cause extensive damage to the British fleet and seriously degrade the British's chances of launching a successful amphibious assault on Falklands Island. The second Argentinian task force consisted of a WW II-era cruiser the ARA *General Belgrano*, two WW2-era destroyers and a fuel tanker.²⁸ The third task force consisted of three frigates.²⁹

As the British fleet sailed closer to the Falkland Islands, there was immense pressure to detect and sink the Argentinian ships by the Royal Navy (RN) submarines. The task force led by ARA *General Belgrano* was detected by the HMS *Conqueror* on 30 April. At first HMS *Conqueror* tailed the Argentinian task force from a distance. The WWII-era ships did not have sophisticated SONAR equipment and did not detect the presence of HMS *Conqueror* shadowing them. The first Argentinian task force with the aircraft carrier was also detected by another RN nuclear submarine, HMS *Splendid* but subsequently due to choppy weather lost track of the Argentinian aircraft carrier.³⁰ By now, the British war planners in London were extremely worried about the threat posed by the Argentinian naval task forces on the British fleet. The British Prime Minister Margaret Thatcher knew that the stretched logistics – Falkland Islands is 8,000 miles from the British Isles – meant that any sinking of British ships – the two aircraft carriers and the vulnerable troop transport ships – will result in huge loss of British lives and combat capabilities, and may turn the public opinion against any continuation of hostilities which may have resulted in the permanent loss of the Falkland Islands to the Argentinians.³¹

The British had also intercepted a message to the Argentinian task forces on 1 May ordering them to advance towards the British fleet and conduct a pincer attack, one from the North East and the other from the South West of the Falkland Islands. HMS *Conqueror* managed to locate and carefully shadowed tailing the task force led by ARA *General Belgrano*. In order to avoid detection, HMS *Conqueror* was actually moving directly below the ARA *General Belgrano*.³² The old cruiser did not have modern or effective anti-submarine sonar systems, and the loud noise generated by its old engines blocked HMS *Conqueror*'s detection by her escorting destroyers' SONAR. Based on the new intelligence about the Argentinian's orders to attack the British fleet, the commander of HMS *Conqueror*, Commander Chris Wreford-Brown was given the order to attack and sink the ARA *General Belgrano*, even though it was still sailing outside the MEZ at that time, to pre-empt the chances of the ARA *General Belgrano* slipping away from HMS *Conqueror* (not wanting to repeat the loss in the tracking of the Argentinian aircraft carrier by HMS *Splendid* earlier) and subsequently attacking the British fleet.³³

HMS *Conqueror* fired three torpedoes at ARA *General Belgrano* on the evening of 2 May. HMS *Conqueror* had used WW2-era Mk8 torpedoes as opposed to more modern Mark 24 Tigerfish homing torpedoes as the submariners decided that the MK8 is more reliable – ironically WWII torpedoes for WWII-era targets. Two of the torpedoes hit ARA *General Belgrano* and the third allegedly hit an escorting destroyer but did not explode.³⁴ The torpedoes tore two holes into ARA *General Belgrano* which sunk in a few minutes, killing more than 300 Argentinians out of a complement of slightly more than 1,000 men. The two escorting destroyers did not know that the ARA *General Belgrano* had been hit and the stricken cruiser was left behind. Only much later did they realise that the ARA *General Belgrano* had not been following them and returned to search for her to find the crew of ARA *General Belgrano* on lifeboats and scattered on the sea drowning or frozen to death.

The sinking of ARA *General Belgrano* had rattled the nerves of the Argentinian task forces and realising the dangers and the vulnerabilities of their surface ships against advanced British nuclear submarines, decided to return to port including the aircraft carrier ARA *Vienticinco de Mayo*, which could have caused serious harm to the British fleet.³⁵ There would be no more attempts by the Argentinian navy to oppose or threaten the British maritime fleet which subsequently successfully landed on the Falkland Islands on 21 May, unmolested

from the sea. Nonetheless, the Argentinians did use its airpower to oppose the British fleet, but the considerable distance from the Argentinian mainland to the Falkland Islands were about 400 miles.³⁶ This resulted in the Argentinian aircraft only managing to loiter for a few minutes to conduct air strikes against the British fleet due to the limits of the aircraft fuel and endurance which seriously limited its bombing accuracy.³⁷ The retreat of the Argentinian naval forces inevitably resulted in the termination of resupply by sea for the Argentinian forces based on Falkland Islands, contributing to severe logistic support problems for the Argentinian land forces.

This single submarine action by HMS *Conqueror*, the first, and still, only combat torpedo sinking of an enemy ship by a nuclear submarine, and the second successful submarine sinking of an enemy combatant ship after PNS *Hangor*, had managed to deter and deny the Argentinian navy from posing any problems to the British fleet.

Lessons for Malaysia's contemporary maritime strategic context

The strategic effects of the two submarine actions, although not spectacular in terms of number or tonnage of ships sunk, but the psychological fear these attacks had yielded, managed to garner consequences far above the weight of its torpedoes launched. The sinking of INS *Khukri* in the 1971 India-Pakistan War had forced the India navy to cancel a crucial attack on Karachi port as well as diverting and scattering valuable naval assets to search and sink the PNS *Hangor*. The fact that an enemy submarine, just successfully sunk a frigate, lurking in the Arabian Sea was more than enough to fuel the fear of further losses which led to an intense anti-submarine operation to neutralise the threat. The sinking of ARA *General Belgrano* by HMS *Conqueror* in the early stages of the Falklands War in 1982 had gained immense strategic effect for the British forces sailing to recapture the Falklands Islands – the entire Argentinian navy returned to port and never to venture out again during the Falklands War and not able to threaten the British naval forces.³⁸ British Prime Minister Margaret Thatcher later remarked, “The sinking of the *Belgrano* turned out to be one of the most decisive military actions of the war.”³⁹ Nonetheless, it must be noted that there were also two Argentinian submarines operational during the Falklands War. The ARA *Santa Fe*, a WWII-era submarine was disabled on 25 April 1982, and later captured and scuttled by the British forces.⁴⁰ A second submarine, the ARA *San Luis*, a German-build Type 209 diesel-electric submarine, created anxieties for the British forces as it can threaten the British naval fleet. The ARA *San Luis* however, did not cause any damage during the war even though it had launched some torpedoes at British warships - the torpedoes were faulty- but still managed to divert valuable resources by the British to search and destroy her.⁴¹

From these solitary submarine actions, it can be concluded that submarines in modern warfare, even in limited numbers or individually, can still yield valuable strategic effects. The two Malaysian Scorpène submarines armed with Black Shark torpedoes and Exocet missiles together with a silent diesel-electric propulsion, provides Malaysia with underwater warfare capabilities and to conduct strategies of sea-control which are to deter and deny enemy's naval freedom-of-movement and to secure friendly ships movement in times of conflict.⁴²

Submarines are also very useful in laying mines covertly in vulnerable but important maritime areas such as enemy ports and in narrow chokepoints. Mines had been a very useful naval weapon and was extensively used in some of the major wars and conflicts such as during World Wars I and II, the Korean War, the Vietnam War, and the Iran-Iraq war. A

significant number of surface warships, submarines and merchant ships had been sunk by mines. During World War I, the British attempted to force the Dardanelles strait by using its naval power. However, the sinking of three Royal Navy battleships forcing the Dardanelles strait by mines resulted in the failure of its naval plan and the need to conduct an amphibious landing to capture the Dardanelles peninsula which resulted in the disastrous Gallipoli campaign. Mines had also been used to conduct blockades of enemy fleets in harbours. For example, in World War II, thousands of mines were laid in the Baltic Sea (which was instrumental in blockading Russia), in the Atlantic (to blockade Great Britain) and around Japan (successfully blockading the Japanese islands and cut off vital war supplies to the Japanese). Mine clearance operations are costly, difficult and time consuming. A modern submarine such as the RMN's *Scorpènes* can carry up to 30 mines and are able to covertly manoeuvre into enemy harbours or narrow maritime passageways (chokepoints) to lay its mines at selected critical locations.

Malaysia also has extensive sovereign maritime areas to secure which included the Strait of Malacca and parts of the South China Sea, effectively making Malaysia responsible for some of the most important and busiest maritime sea lanes and critical 'choke points' in the world. The Strait of Malacca in particular had been perceived to be too shallow as well as narrow for submarine operations. Nonetheless, the British had successfully, albeit not popularly known, used submarines in the Strait of Malacca during WWII against Japanese naval ships and merchant shipping. The Japanese used the Strait of Malacca to send much needed supplies by ships and barges to its forces fighting in Burma. The British submarines regularly patrolled the Strait of Malacca despite its narrow passage with certain patches of shallow waters and vigorous Japanese anti-submarine patrols, and yet still managed to register some significant success by sinking more than a 100 Japanese naval vessels.⁴³ The British submarines had also both landed and collected Force 136 Special Operations Executive (SOE) agents in Malaya as well as conduct regular reconnaissance and intelligence gathering missions.⁴⁴ These strategic lessons from WWII in the Strait of Malacca should dispel doubts about the suitability and the strategic value of submarines operating in this narrow waterway.⁴⁵

It must be pointed out also that the littoral nature of the Strait of Malacca provides one of the best maritime waters for submarine operations. The coastal waters, the shallowness, the different salinities and the temperature of the tropical waters, produce lots of ambient 'noises' that could make detection by anti-submarine SONAR difficult.⁴⁶ The RMN's *Scorpène* submarines can lie submerged in wait in familiar waters and used to ambush its targets. The importance of submarines being able to deny enemy freedom of movement through the Strait of Malacca in time of war is an important facet of Malaysia's defense strategy.

The recent assertiveness by China, as evident in recent Chinese aggressive island claims and unitary occupation of islands and reefs in the Spratly Islands (partly claimed by Malaysia) as well as the 'nine-dash map' claim of the entire South China Sea, ensures that Malaysia's *Scorpène* submarines will be useful in providing a silent yet lethal underwater deterrent when needed.⁴⁷ Malaysia's submarines are ideal to stealthily monitor Chinese activities and serve to deter island-grabs in the Spratly Islands and maritime areas claimed by Malaysia, and also Malaysia's Exclusive Economic Zones (EEZ) in the South China Sea.

Malaysia's neighbours such as Singapore and Indonesia had also procured submarines with respectable operating tempos. The Republic of Singapore Navy has two operational *Challenger* class submarines (formerly Swedish *Sjöormen* class subs) and two *Archer* class submarines (formerly Swedish *Västergötland* class subs), and are acquiring up to four new Type 218SG subs from Germany. Indonesia operates four Type 209 submarines (of different variants) and may acquire an additional four more in the near term. Meanwhile Vietnam operates six Russian-made *Kilo* class submarines and Thailand plans to procure up to three Type S26T submarines from China. These developments in the region points that Malaysia's decision to procure two submarines in 2002 was correct. A lengthy time is needed not just to build a submarine (averaging six years to build one), but also to set up the infrastructure required to support the submarine and its logistic support facilities, and more importantly to train a capable and experienced submarine crew and maintenance personnel. The RMN pioneering submarine crew reportedly spent four years training in France learning how to operate a submarine. Attrition rate among submariners are also high – the long time spent underwater within the confines of the size of two buses, isolation from the outside world and its related stress and deprivations are some of the reasons why it is hard to recruit, train and retain submarine crews.

Additionally, the RMN's special operations unit, PASKAL, is now able to train and operate with its own submarines, enabling PASKAL to conduct stealthy maritime infiltration and exfiltration operations. Since the size of the RMN is small, at around 15,000 men, the relative manpower base to source its submarine personnel is limited and requires substantial efforts and time to maintain and manage its submarine manpower needs. Hence the current two-boat fleet needs to be viewed realistically not just from the angle of cost affordability and quantitative value but also the necessary manpower required to sustain its operational tempo.

Conclusion

The two RMN *Scorpène* submarines - being small, agile and versatile - are well suited for operations in the 'strategic choke points' of both the Strait of Malacca as well as in the deeper waters in the South China Sea (the two submarines had sailed upon completion from France and Spain respectively through parts of the Mediterranean Sea, the Arabian Sea, and the Indian Ocean to Malaysia – testimonies of its deeper ocean sailing capabilities). These submarines are essential for Malaysia's defensive posture which places importance on the practice of limited sea-control and anti-access naval strategies. Although Malaysia ideally needs between six to eight submarines to provide satisfactory underwater warfare capabilities, the RMN has to cope with two submarines at this moment until budgetary funds are available to purchase more submarines. The RMN submarine fleet may be small in quantity but as lessons from strategic history have shown that even a single submarine, if used shrewdly, may still be able to produce significant strategic effects well above its tonnage.

Notes

¹ See the online news portal discussion, 'Can our two French-made submarines save M'sia?', *Malaysiakini*, 4 Nov. 2012, <https://www.malaysiakini.com/news/213383>.

² For a recent succinct analysis of maintenance issues as well as the problems of small submarine fleets in South East Asia, see Jan Joel Andersson, 'Submarine Capabilities and Conventional Deterrence in Southeast Asia', *Contemporary Security Policy*, vol. 36, no.3, 2016, pp. 473-97.

³ See 'Malaysia Needs More Submarines', *Defense Studies*, 14 May 2013, <http://defensetudies.blogspot.co.uk/2013/05/malaysia-needs-more-submarines.html>.

⁴ Andersson, 'Submarine Capabilities', p. 477.

⁵ For example see Jack P. Mallman Showell, *U-Boat Warfare: The Evolution of the Wolf Pack* (Hersham: Ian Allan, 2002); and Tim Clayton, *Sea Wolves: The Extraordinary Story of Britain's WW2 Submarines* (London: Abacus, 2012),

⁶ Danny Danziger, *SUB: Real Life On Board with the Hidden Heroes of the Royal Navy's Silent Service* (London: Little Brown, 2011), pp. 14-25; pp. 59-60 & p. 255; J.J. Hall and Paul Kemp, *HM Submarines in Camera: An Illustrated History of British Submarines* (Stroud: Sutton, 1996), p. 150; and Sarah Uttridge, *Submarines* (Bath: Parragon, 2010), pp. 8-13.

⁷ Geoffrey Till, *Seapower: A guide for the Twenty-First Century* (Abingdon: Routledge, 2013), pp. 125-26.

⁸ Colin S. Gray, *The Strategy Bridge: Theory for Practice* (Oxford: Oxford University Press, 2010), p. 171.

⁹ *Ibid.*

¹⁰ Gray has stated, "At its tersest, the concept of strategic effect explains what strategy does and how it delivers its value." See *ibid.*, p. 176.

¹¹ Colin S. Gray, *Explorations in Strategy* (Westport, CT: Greenwood Press, 1996), p. 166.

¹² Gray *The Strategy Bridge*, p. 172.

¹³ *Ibid.* (and footnote 23 on same page)

¹⁴ See Colin S. Gray, *Strategy and Defence Planning: Meeting the Challenge of Uncertainty* (Oxford: Oxford University Press, 2014), p. 72.

¹⁵ For example see Charles Anscomb, *Submariner* (London: William Kimber, 1957); Ben Bryant, *One Man Band: The Memoirs of a Submarine C.O.* (London: William Kimber, 1958); and Brian Izzard, *Gamp VC: The Wartime Story of Maverick Submarine Commander Anthony Miers* (Yeovil: Haynes, 2009); and Keith Hall, *Submariners: Real Life Stories from the Deep* (Stroud: Tempus, 2006).

¹⁶ For a concise analysis of the causes of the 1971 India-Pakistan War see John G. Stoessinger, *Why Nations Go to War* (Boston, M.A.: Wadsworth, 2011), pp. 190-200.

¹⁷ Chris Smith, *India's Ad Hoc Arsenal: Direction or Drift in Defence Policy?* (Oxford: Oxford University Press, 1994), pp. 92-4.

¹⁸ See Till, *Seapower*, p. 171.

¹⁹ 'Indo-Pakistani War of 1971', *GlobalSecurity.org*, http://www.globalsecurity.org/military/world/war/indo-pak_1971.htm.

²⁰ Till, *Seapower*, p. 171.

²¹ G.M. Hiranandani, '1971 War: Sinking of the Khukri', *Indian Defence Review*, 3 Oct. 2014, <http://www.indiandefencereview.com/interviews/1971-war-sinking-of-the-khukri/>.

²² *Ibid.*

²³ *Ibid.*

²⁴ *Ibid.*

²⁵ Stuart Prebble, *Secrets of the Conqueror: The Untold Story of Britain's Most Famous Submarine* (London: Faber and Faber, 2013), pp. 82-90.

²⁶ Martin Middlebrook, *The Falklands War* (Barnsley: Pen & Sword, 2012), p. 144.

²⁷ Nigel West, *The Secret War for the Falklands* (London: Warner, 2000), p. 61.

²⁸ Middlebrook, *The Falklands War*, p. 148.

²⁹ *Ibid.* p. 144.

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- ³⁰ Stuart, *Secrets*, p. 101.
- ³¹ *Ibid.* pp. 107-10.
- ³² *Ibid.* p. 106.
- ³³ Middlebrook, *The Falklands War*, pp. 148-51.
- ³⁴ *Ibid.* pp. 111-16.
- ³⁵ Rowland White, *Vulcan 607: The Epic Story of the Most Remarkable British Air Attack since WWII* (London: Corgi, 2007), p. 467.
- ³⁶ Lawrence Freedman, *Britain and the Falklands War* (Oxford: Basil Blackwell, 1988), p. 48.
- ³⁷ Max Hastings and Simon Jenkins, *The Battle for the Falklands* (London: Pan Books, 1997), pp. 171-2. The Argentinian aircraft managed some successes against the British forces which included the sinking of the Royal Navy destroyer HMS *Sheffield* by an air-launched Exocet missile. For subsequent mainland-launched Argentinian airstrikes see *Ibid.*, pp. 153-66; pp. 218-37; & pp. 304-12.
- ³⁸ Till, *Seapower*, p. 182.
- ³⁹ Margaret Thatcher, *The Downing Street Years* (London: HarperCollins, 1993), p. 215.
- ⁴⁰ Freedman, *Britain*, p. 50.
- ⁴¹ West, *The Secret War*, p. 62; and Till, *Seapower*, p. 269.
- ⁴² This follows Colin S. Gray's apt definition of sea-control, "...the ability to ensure the reasonably secure passage of friendly ships, and denial of same to the foe – by an offensive strategy." See Colin S. Gray, *The Leverage of Sea Power: The Strategic Advantage of Navies in War* (New York: The Free Press, 1992), p. 274.
- ⁴³ The British submarines had sunk, "...a cruiser, three submarines, six smaller naval vessels, 40,000 tons (40,060 tonnes) of merchant ships and nearly 100 smaller vessels." See Innes McCartney, *British Submarines, 1939-45* (Oxford: Osprey, 2006), p. 42.
- ⁴⁴ German U-Boats and Japanese submarines were also active in the Indian Ocean harassing Allied shipping and had used Penang Island in Malaya as a base for resupply and repairs. The German U-Boats were also used to transport strategic materials such as rubber, tin and mercury, and personnel (including the Indian Nationalist leader Subhas Chandra Bose) from Germany to Japan and vice versa by submarines transiting at Penang Island. See John F. White, *The Milk Cows: The U-boat Tankers, 1941-1945* (Barnsley: Pen & Sword, 2009), p. 25, pp. 163-4, pp. 168-9 & 173.
- ⁴⁵ See Clayton, *Sea Wolves*, pp. 347-64.
- ⁴⁶ See Till, *Seapower*, p. 269.
- ⁴⁷ See James Hardy and Sean O'Connor, "China completes runway on Fiery Cross Island", *IHS Jane's 360*, 24 September 2015, <http://www.janes.com/article/54814/china-completes-runway-on-fiery-cross-reef>.

Chapter 6

The Law Of Armed Conflict And The Malaysian Armed Forces: Putting Commanders On Target

Fadzil Mokhtar

This chapter focuses on certain elements of the Law of Armed Conflict (LOAC) that have a bearing on the manner force is used in military operations. It seeks to draw the attention of strategic policy makers and operational commanders to the obligations of the state in ensuring that its military policies, strategies, and operational plans are consistent with the law, and that legal provisions regulating the use of force are transposed into the Armed Forces doctrine, regularly revised and adequate for operational practice.

The LOAC, also known as the Law of War or International Humanitarian Law, aims to limit the effects of armed conflicts by protecting those who do not or no longer participate in hostilities, and by restricting the amount of force, as well as the means and methods of warfare, that can be employed by warring parties.¹ The modern LOAC, contained in the four Geneva Conventions of 1949, and other related treaties, is a codification of centuries-old customs of warfare that strives to balance between military necessity and humanity. However, in spite of universal recognition of the constraints imposed by the LOAC, attempts to regulate the conduct of warfare have not met the desired success. Armed conflicts have continued to be waged without respect for humanitarian considerations, and innocent civilians have remained the primary victims of the ravages of armed confrontations. Such flagrant disregard for legal and moral norms in the conduct of violence only reflects professional incompetency on the part of the militaries involved, raising concerns on the obligations of states to disseminate proper understanding of the provisions of the LOAC, and to set the acceptable standard of conduct among their military personnel.

The Malaysian Armed Forces (MAF) has long recognized the importance of the LOAC, and has emphasized strict adherence to the rules regulating the conduct of military operations. Even though Malaysia is a party to only several principal international treaties dealing with international humanitarian law, and is yet to ratify other related protocols,² the MAF has acknowledged that it is bound by the rules outlined in those protocols as they embody customary international law, including Additional Protocol 1 to the Geneva Conventions of 1949 (Additional Protocol 1). The MAF has, accordingly, incorporated the provisions of Additional Protocol 1 in its doctrinal manuals, particularly the rules relating to targeting. Nonetheless, some of the contents of the manuals lack clarity, and cannot serve as a valuable guide to commanders in their planning or executing targeting operations. In light of the greater expectations for compliance with the LOAC, it is imperative for the MAF to review the related manuals with a view to provide its commanders with a more comprehensible interpretations of the rules on targeting that could ease their practical applications. This article therefore delves into certain aspects of the law on targeting, and seeks to highlight the deficiencies of the related MAF manuals.

¹ Kleffner, J.K. Human Rights and International Humanitarian Law: General Issues, in Gill, T.D., and Fleck, D. (eds) 2015. The Handbook of the International Law of Military Operations. United Kingdom: Oxford University Press, p. 36.

² Malaysia is a party to Geneva Conventions I, II, III and IV as well as several other instruments, but is studying, with a view of becoming a party to Additional Protocol 1 and II to the Geneva Conventions Relating to the Protection of Victims of International Armed Conflict and Non-International Armed Conflict respectively. Attorney General's Chambers of Malaysia Official Portal on International Humanitarian Law available at <http://www.agc.gov.my/agcportal> [accessed on September 25, 2018].

The Law of Targeting

Distinguishing Civilians from Combatants

The LOAC prescribes four conditions, which must all be met, for an attack³ to be lawful; the attack must be directed at a legitimate military target, comply with the principle of proportionality, and observe the requirements for the taking of precautionary measures as well as employment of lawful means and methods in the conduct of warfare.⁴ A failure to comply with these requirements would render an attack unlawful, subjecting commanders and those responsible to the penal liability of grave breaches of Additional Protocol 1 which are also regarded as war crimes. However, this article will only discuss the first two conditions as those relating to precautions as well as the choice of means and methods of warfare are least contentious, and are sufficiently covered in the MAF manuals.

The first condition for a lawful attack is based on the principle of distinction which requires combatants and military objectives to be respectively distinguished from civilians and civilian objects, with operations directed only towards the military objectives.⁵ This principle creates two categories of individuals, namely combatants and civilians. Combatants, who not only cover members of the regular forces, other than medical and religious personnel, but also include irregular forces,⁶ are lawful military targets unless they are rendered hors de combat,⁷ while medical and religious personnel would lose their protected status as non-combatants if they commit any act harmful to the enemy.

Civilians, on the other hand, are non-combatants, and they are those individuals who do not belong to a state's regular or irregular armed forces, and who do not participate in *levee en masse*.⁸ Additional Protocol 1 expressly prohibits the attacking of the civilian population and individual civilians, and the spreading of terror among the civilian population through acts or threats of violence.⁹ The immunity afforded to individual civilians and the civilian population from being the object of attack is absolute **"unless and for such time as they take a direct part in hostilities."**¹⁰ This means that a civilian directly participating in hostilities

³ "Attack" means an act of violence against the adversary, whether in offence or defence. Additional Protocol 1 to the Geneva Conventions Relating to the Protection of Victims of International Armed Conflict (hereinafter referred to as AP 1), Article 49.

⁴ International Committee of the Red Cross. 2013. Handbook on International Rules Governing Military Operations. Geneva, p.145.

⁵ Article 48 of AP 1 stipulates 'In order to ensure respect for and protection of the civilian population and civilian objects, the Parties to the conflict shall at all times distinguish between the civilian population and combatants and between civilian objects and military objectives and accordingly shall direct their operations only against military objectives.'

⁶ Combatants include irregular forces belonging to a state party, like militias, volunteer forces, and organized resistance movements, that fight on behalf of and with the agreement of that state, and under a responsible command. Third Geneva Convention, Article 4, and AP 1, Article 43.

⁷ AP 1, Article 41 provides that "A person is hors de combat if: (a) he is in the power of an adverse Party; (b) he clearly expresses an intention to surrender; or (c) he has been rendered unconscious or is otherwise incapacitated by wounds or sickness, and therefore is incapable of defending himself; provided that in any of these cases he abstains from any hostile act and does not attempt to escape."

⁸ "Levee en masse" refers to "inhabitants of non-occupied territory who, on the approach of the enemy, spontaneously take up arms to resist the invading forces, without having had time to form themselves into regular units, provided they carry their arms openly and respect the laws and customs of war." Third Geneva Convention, Article 4, and AP 1, Article 50.

⁹ AP 1, Article 51.

¹⁰ AP 1, Article 51.

temporarily loses his protected position, and he can then be considered as a legitimate military target.

The MAF manual on the LOAC contains the foregoing conditions regulating an attack as well as the principle of distinction albeit worded in slightly different fashion. It does, nonetheless, emphasize on the obligation to distinguish civilians from combatants, and the prohibition against making civilians the object of attack. Its description on the definition and status of combatants is likewise adequate, posing no difficulty for their application.

Conversely, the aspect of “civilians” is less satisfactorily covered in the MAF manual, although civilians lie at the core of the principle of distinction, wherein it is stipulated:

“Civilians are only protected as long as they refrain from taking a direct part in hostilities. Whether or not a civilian is involved in hostilities is a difficult question which must be determined by the facts of each individual case. Civilians bearing arms and taking part in military operations are clearly taking part in hostilities; civilians working in a store on a military air base may not necessarily be taking such a direct part.”

“Civilians who are not directly involved in combat but are performing military tasks are not combatants.”

The above provisions are ambiguous, and do not shed light on the meaning of “taking a direct part in hostilities.” The illustrations provided, which are supposed to guide commanders in ascertaining the circumstances amounting to direct participation in hostilities, are of not much help either. The manual seems to disregard the fact that the bearing of arms is not a necessary element of direct participation in hostilities, for a civilian may still be participating directly in hostilities without carrying firearms. Secondly, not all military operations with civilian participation would meet the concept of hostilities envisaged by the rule on distinction. Thirdly, the illustration on civilians working on a military air base implies that there could be situations in which such civilians could be participating directly in hostilities, but those situations are not explicated. Moreover, the phrase “performing military tasks” is too vague as it leaves doubt as to what sort of military tasks performed by a civilian would leave his protected status unaffected. The absence of a clear definition of “direct participation” could lead to inaccurate judgment as according to Melzer “...armed forces operating in a hostile environment might be inclined to consider any civilian showing the slightest enmity as participating directly in hostilities, which would amount to a de facto presumption of loss of protection irreconcilable with the fundamental principle of distinction.”¹¹

Hence, a more intelligible explanation is necessary given that the notion of “direct participation in hostilities” has not been universally defined, and is susceptible to varying interpretations. Accordingly, the ICRC, in 2009, issued a non-binding Interpretive Guidance that seeks to establish the criteria for determining what, and for how long, a conduct by a

¹¹Melzer, N. 2008. Targeted killing in International Law. United Kingdom: Oxford University Press, p. 333.

civilian amounts to direct participation in hostilities.¹² According to this guidance, “direct participation in hostilities” refers to “specific acts carried out by individuals as part of the conduct of hostilities between parties to an armed conflict.”¹³ Such a specific act would tantamount to direct participation in hostilities if it cumulatively meets the following criteria:

- a. The act must be likely to adversely affect the military operations or military capacity of a party to an armed conflict or, alternatively, to inflict death, injury, or destruction on persons or objects protected against direct attack (threshold of harm), and
- b. There must be a direct causal link between the act and the harm likely to result either from that act, or from a coordinated military operation of which that act constitutes an integral part (direct causation), and
- c. The act must be specifically designed to directly cause the required threshold of harm in support of a party to the conflict and to the detriment of another (belligerent nexus).¹⁴

The first criterion, called the threshold of harm, has two limbs, the first of which is met if a specific act has the likelihood of adversely affecting the military operations or military capacity of a party to a conflict. There is no need for the act to actually reach any level of violence, for the threshold would still be met once it is determined that the consequence of the act has the likelihood of adversely affecting the military operations or capacity of a party.¹⁵ Additionally, neither the quantum of the harm nor its materialization has an effect on the threshold. What is needed is the act, based on an objective assessment, has the likelihood of causing harm of a military nature which is not necessarily confined to the killing and wounding of military personnel, or physical damage to military infrastructure.¹⁶ The Interpretative Guidance provides an illustration of a broad range of activities that would amount to military harm within the ambit of the first criterion, including sabotage, disturbing deployments, logistics and communications, capturing military personnel, denying the adversary the military use of certain objects or territory, preventing captured military personnel from being forcibly liberated, clearing mines placed by the adversary, interfering electronically with military computer networks, wiretapping of the adversary’s high command and transmitting tactical targeting information for an attack.¹⁷ Nevertheless, the conduct of a civilian that does not positively affect the military operations or capacity of a party would not meet the threshold of harm, like the refusal of a civilian to act as an informant or scout to a party.¹⁸

The second limb of the first criterion is concerned with situations in which specific acts do not likely result in any military harm, but would still reach the required threshold of harm when such acts have the likelihood of causing death or injury of protected persons, or destruction

¹²The guidance is known as the ICRC Interpretative Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law (hereinafter referred to as “ICRC Interpretative Guidance”).

¹³ The term “hostilities” refers to the (collective) resort by the parties to the conflict to means and methods of injuring the enemy, and “participation” in hostilities refers to the (individual) involvement of a person in these hostilities. ICRC Interpretative Guidance, p. 43.

¹⁴ ICRC Interpretative Guidance, p. 47

¹⁵Schmitt, M.N., 2010. Deconstructing Direct Participation in Hostilities: The Constitutive Elements. *Journal of International Law and Politics*, 47, 697-739, p 716.

¹⁶ICRC Interpretative Guidance, p. 47.

¹⁷ICRC Interpretative Guidance, p. 48

¹⁸ICRC Interpretative guidance, p. 49

of protected objects.¹⁹ Thus, in the absence of any adverse military effect on a party to the conflict, acts of civilians could still amount to direct participation in hostilities if those acts would likely lead to death, injury or destruction of civilians or civilian objects. For instance, sniper attacks against civilians and violence perpetrated against urban residential areas would qualify as those acts are likely to result in casualties to civilians as well as destruction to protected objects.²⁰

If the threshold of harm is reached, the act must then either have a direct causal link to the harm that is likely to result, or be an integral part of a coordinated military operation that is likely to produce the harm in question.²¹ In this respect, the harm likely to be caused “must be brought about in one casual step” for the act to satisfy the element of direct causation.²² This, however, does not mean that there ought to be a literal single step between the act and the ensuing harm,²³ but what is needed is a “sufficient causal relationship between the act of participation and its immediate consequences.”²⁴ This condition is exemplified by the illustrations of activities lacking in the required causal link, such the “assembly and storing of improvised explosive device in a workshop, or the purchase of its components,” “the production of weapons and the provision of food to the armed forces,” and “the recruitment or training of military personnel,” all of which would not qualify as direct participation because the casual link between these acts to the resulting harm would only be indirect.²⁵

The “integral test” criterion, in contrast, caters for the collective nature of contemporary warfare in which several persons are involved but only a few carry out activities that would meet the threshold of harm. An example cited is an attack launched by unmanned aerial vehicles that could involve a multitude of actors such as “computer specialists operating the vehicles through remote control, individuals illuminating the target, aircraft crew collecting data, specialists controlling the firing of missiles, radio operators transmitting orders, and an overall commander.”²⁶ Hence, “conduct that produces the harm only in conjunction with other acts” is considered direct causation if the conduct is an “integral part of a concrete and coordinated tactical operation that directly causes such harm.”²⁷

In addition, the Guidance emphasises that the element of direct causation is concerned with causal proximity which does not necessarily coincide with temporal or geographic proximity. Therefore, hostilities conducted using remote systems, like “missiles, unmanned aircraft and computer network attacks,” possess a direct causal relationship to the ensuing harm even though they are distant from each other in time or in space.²⁸ Conversely, the delivery of food for a party’s combatants, although occurring in the same place and at the same time as

¹⁹ ICRC Interpretative Guidance, p. 49

²⁰ ICRC Interpretative Guidance, p. 49

²¹ ICRC Interpretative Guidance, p. 51.

²² ICRC Interpretative Guidance, p. 53.

²³ Schmitt, M.N. 2010. Deconstructing Direct Participation in Hostilities: The Constitutive Elements. New York University Journal of International Law and Politics, 47, 697 – 739, p. 728.

²⁴ Sandoz, Y., Swinarski, C., and Zimmerman, B. 2005. Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949. Geneva: ICRC, para 4787.

²⁵ However, the recruitment and training of personnel for the execution of a predetermined hostile act could amount to direct participation if such activities are an integral part of that act. ICRC Interpretative Guidance, p. 53

²⁶ ICRC Interpretative Guidance, p. 54

²⁷ ICRC Interpretative guidance, p. 55.

²⁸ ICRC Interpretative Guidance, p. 55.

the fighting, does not have a direct causal link to the harm that is likely to be inflicted on an opponent.²⁹

The notion of belligerent nexus, being the final criterion for direct participation in hostilities, refers to the objective purpose of an act rather than the intent of the individuals involved, and the act “must be specifically designed to directly cause the required threshold of harm in support of a party to the conflict and to the detriment of another.”³⁰ Yet determining belligerent nexus is not an easy exercise as violent acts could also be purely criminal in nature without being specifically designed to harm a party in support of the other. The test is “whether the conduct of a civilian, in conjunction with the circumstances prevailing at the relevant time and place, can reasonably be perceived as an act designed to support one party to the conflict by directly causing the required threshold of harm to another party.”³¹ Examples of civilian acts in an armed conflict lacking in belligerent nexus are use of force by civilians to defend themselves against looting or rape by marauding soldiers, civil unrest, and inter-civilian violence because the purpose of these acts is not to support a party to a conflict against another.³²

Lastly, the Guidance lays the duration in which civilians participating directly in hostilities lose protection against direct attack which includes preparatory measures to the execution of an act, the immediate execution phase, and the deployment to and return from the location of its execution, where they constitute an integral part of such specific act.³³

It is thus obvious that the notion of direct participation in hostilities is far more intricate than what is outlined in the MAF manuals. While non-binding and controversial on some aspects, the ICRC Interpretative Guidance is the only available comprehensive document that sets out parameters for determining direct participation in hostilities. The MAF manuals should therefore consider adopting the Interpretative Guidance into its doctrinal manuals to enhance its commanders’ understanding of the rule of distinction, which is one of the cardinal principles of the LOAC. A proper understanding is crucial for commanders given that distinguishing protected civilians from those who compromise their position has become increasingly difficult in today’s battlefield. More military functions are being outsourced to civilian contractors, civilians are increasingly taking the role of farmers by day and fighters at night, and hostilities have shifted to civilian population centres with the intermingling of civilians and combatants.³⁴ Erroneous targeting could attract criminal culpability,³⁵ whereas a

²⁹ICRC Interpretative Guidance, p. 55. An example cited is the delivery by a civilian truck driver of ammunition from a factory to a port for further shipping to a storehouse in the conflict zone is too remote from the use of that ammunition in specific military operation to cause the ensuing harm directly.

³⁰ICRC Interpretative Guidance, p. 58.

³¹ICRC Interpretative Guidance, p. 63.

³²ICRC Interpretative Guidance. P. 61.

³³ICRC Interpretative Guidance, p. 65. However, this criterion has been criticized as overly restrictive, because it creates the “revolving door” through which a civilian passes to become liable to attack as he engages in direct hostilities, and thereafter re-acquires his immunity as he desists from the hostilities, but becomes targetable again when he resumes his participation. Critics have argued that in such situations, the individual should remain liable to attack throughout his activities, only regaining protection upon unambiguously desisting from participation in the hostilities. Schmitt, M.N. Targeting in Operational Law, in Gill, T.D., and Fleck, D. (eds) 2015. The Handbook of International Law of Military Operations. United Kingdom: Oxford University Press, p. 276.

³⁴ICRC Interpretative Guidance, p. 5.

more cautious approach could expose forces to hostile acts of civilians, or lead to commanders' inability to seize or retain operational or tactical initiatives.

Distinguishing Civilian Objects from Military Objectives

The principle of distinction also requires civilian objects to be distinguished from military objectives, and only the latter can be made the object of attacks. In so far as objects are concerned, Article 52.2 of Additional Protocol 1 stipulates that "military objectives refer to objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances prevailing at the time, offers a definite military advantage."³⁶

The MAF manual on targeting does contain the aforesaid provision. Yet, after restating word by word the provision of Article 52.2 of Additional Protocol 1, the manual only stipulates the following:

"It is commonly understood that by virtue of Art. 52.2 of Additional Protocol I, any object has to satisfy two cumulative conditions in order to qualify as a military objective:

- a. The object has to make an effective contribution to the military action of the defender, and
- b. The object's total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers the attacker a definite military advantage.

In such circumstances, the destruction of an object which by its nature makes an effective contribution to a military action but may not offer a definite military advantage hence may not be attacked. This is indeed a question of necessity and proportionality in the LOAC and to caution against confusing the military advantage with the political aim of the war. Military advantage can be understood as a measurement of effects on the whole military operation or campaign and the attack should not be viewed in isolation. In addition, the term 'military advantage' includes the security of friendly forces.

In other word, this is to prohibit people to simply qualify an object as a military objective just by reference to its contribution to the aim of the war rather than its real functions at that particular time."

While the manual on targeting correctly specifies the two conditions for objects to qualify as military objectives, it does not adequately elucidate the details of the rule. No explanation is given to the phrases "effective contribution to military action," "definite military advantage" and "question of necessity and proportionality."

Even though the foregoing is to be read in conjunction with the MAF manual on the LOAC, the latter only provides the following:

³⁵ Article 85 of AP 1 provides that making the civilian population or individual civilians the object of attack is a grave breach.

³⁶ AP 1. Article 52.2.

“Military objectives are those persons and objects which by their nature, location, purpose of use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage. The objective must be measured by its effect on the whole military operation or campaign, and the attack should not be viewed in isolation. Military advantage includes the security of friendly forces.”

“Military objectives may include a very wide range of persons, locations and. *objects*. Some examples are:

- Transportation system for military supplies, transportation centres where lines of communication coverage, rail yards, industrial installations producing materiel for combat forces, fuel dumps and distribution centres supplying military users, industrial installations that repair and replenish lines of communication and other economic targets the destruction, capture or neutralization of which offers a definite military advantage.
- Economic targets that indirectly but effectively support operations are also military objectives if an attack will gain a definite military advantage.”

“Civilian objects are all objects which are not military objectives. In cases of doubt whether an object, normally dedicated to civilian purposes, is being used to make an effective contribution to military action, the presumption is that it is a civilian object. For this purpose, ‘use’ does not necessarily mean occupation. For example, if enemy soldiers use a school building as shelter from attack by direct fire, then they are clearly gaining a military advantage from the school. This means the school becomes a military objective and can be attacked.”

Still, neither the statements in the LOAC manual, nor their illustrations proffer commanders the criteria for interpreting the requirements of Article 52.2. More confusingly, is the term ‘economic targets’ used twice as examples of military objectives; in the first instance it mentions economic targets “the destruction, capture or neutralization of which offers a definite military advantage” while the second talks about “economic targets that indirectly but effectively support operations.” Without a definition of “economic targets,” it is difficult for commanders to conceive the nature of economic targets contemplated by the MAF, rendering it problematic to make the appropriate targeting decisions. More lamentably, the example given in the last paragraph above about the use of a school building by an enemy as a shelter is a fallacious account of Article 52.2. The definite military advantage contemplated by this article refers to the advantage to be attained by the attacker from the destruction of an object used by the enemy, and not the advantage gained by the enemy in using the object in question.

Accordingly, it has to be noted that both the MAF manuals do not portray the accurate rule on military objectives. A perusal of the law in the succeeding paragraphs demonstrates the complexity of the legal provision, and the deficiencies of the MAF manuals.

Article 52.2 provides for various categories of objects that could constitute military objectives if they contribute effectively to any military action, the first of which relates to objects that are by nature used by the military such as weapons, equipment, and communication centres, while the second is concerned with objects, which have no military function by their nature,

but make effective contribution to military action by virtue of their location, like a bridge through which an adversary's forces will pass.³⁷ The third category refers to civilian objects that are intended to be used by the military in the future, such as a school being converted into a military headquarters, and the criterion of 'use' refers to civilian objects presently being used by the military like a hotel that is used as a military shelter.³⁸

As pointed out by the MAF manual on targeting, there are two criteria that must be satisfied cumulatively for the foregoing objects to qualify as military objectives. First, the objects must make an effective contribution to military action. There is no requirement though for the contribution to be of particularly significant, and the term "effective" is only meant to exclude inconsequential contribution.³⁹

Second, the destruction, capture or neutralization of the objects, which make an effective contribution to military action, must offer a definite military advantage. A military advantage is "any consequence of an attack which directly enhances friendly military operations or hinders those of the enemy,"⁴⁰ and the advantage to be gained by attacking the objects must be definite and not merely of speculative, potential or indeterminate nature.⁴¹ Whereas not merely confined to ground gained or enemy destroyed, an advantage that is "solely political, psychological, economic, financial, social, or moral in nature" will not qualify as a military advantage.⁴² In other words, the advantage anticipated ought to have a direct nexus to the military operations in question.⁴³ In addition, military advantage is assessed not in hindsight, but based on the degree of advantage expected to be attained by the attacker "at the time the attack was planned, approved, or executed."⁴⁴ Moreover, the degree of military advantage anticipated is determined from the attack as a whole in the context of the military operation in its entirety, and is not limited to an advantage accruing from single or isolated initiatives.⁴⁵

It can, thus, be restated that a civilian object may lose its protected status if it makes an effective contribution to military action, and its destruction, capture or neutralization is a militarily advantageous to the attacker. Be that as it may, the application of Article 52 is yet to be settled. The United States of America interprets military objectives to include "economic targets that indirectly but effectively support and sustain an adversary's war-fighting capability."⁴⁶ War-sustaining objects, like facilities producing non-military industrial goods to

³⁷ Sandoz, Y., Swinarski, C., and Zimmerman, B. 2005. Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949. Geneva: ICRC, para 2024.

³⁸ Ibid, para 2024

³⁹ Schmitt, M.N. Targeting in Operational Law, in Gill, T.D., and Fleck, D. (eds) 2015. The Handbook of International Law of Military Operations. United Kingdom: Oxford University Press, p. 278

⁴⁰ The President and Fellows of Harvard College. 2010. Commentary on the HPCR Manual on International Law Applicable to Air and Missile Warfare. p. 44.

⁴¹ Sandoz, Y., Swinarski, C., and Zimmerman, B. 2005. Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949. Geneva: ICRC, para 2024.

⁴² Ibid.

⁴³ Schmitt, M.N. Targeting in Operational Law, in Gill, T.D., and Fleck, D. (eds) 2015. The Handbook of the International Law of Military Operations. United Kingdom: Oxford University Press, p. 278

⁴⁴ Ibid. p. 279.

⁴⁵ The President and Fellows of Harvard College. 2010. Commentary on the HPCR Manual on International Law Applicable to Air and Missile Warfare. p. 45.

⁴⁶ Joint Chiefs of Staff. 2002. Joint Doctrine for Targeting. Joint Publication – 3-60, p. A-2.

fund the general war effort, are therefore included along with the common war-fighting and war-supporting entities. Opponents of this approach assert that the US interpretation stretches the definition of military objective too far as it would mean legitimizing, for example, attacks on an enemy's oil production facilities, dedicated solely for export, to deprive an adversary of funding.⁴⁷ The mainstream instead prefers a more restrictive interpretation, limiting the definition of military objectives to civilian objects with proximate nexus to war-fighting only.⁴⁸

It is submitted that only when read in light of the US interpretation can one discern the nature of economic targets envisaged by the MAF LOAC manual. Unlike the US position, economic targets in the manual do not include war-sustaining objects, but are limited to objects that support military operations, like factories producing foodstuff for the military and workshops repairing military equipment. However, in the absence of any elaboration on the requirement for a proximate nexus between those economic activities and military operations, the content of the manual is not only incomplete, but can also be misleading.

It must also be emphasized that Article 57 of Additional Protocol 1 explicitly requires those planning or deciding upon an attack to do everything feasible to verify that objectives are military objectives. This obligation would invariably require the establishment and utilization of intelligence systems that can effectively gather the necessary information pertaining to the characteristics of potential targets.⁴⁹ In the absence of practical criteria for determining military objectives, it would not be possible to specify the essential elements of intelligence required to be collated by reconnaissance and surveillance assets.

Proportionality

The principle of proportionality, which is the second condition for an attack to be lawful, as outlined in Article 51.5 of the Additional Protocol 1 prohibits an attack "which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete military advantage anticipated."⁵⁰

The MAF manual on targeting contains a word by word restatement of Article 52.5, but its exposition of the legal provision is limited to the following:

"This principle requires the commander to weigh the military value arising from the success of the targeting operation against the harmful effects to protected persons and objects. While the determination of proportionality is ultimately a matter for the

⁴⁷ Schmitt, M.N. 2006. Fault Lines in the Law of Attack in Breau, S., and Jachec-Neale, A. Testing the Boundaries of International Law, British Institute of International and Comparative , p. 211.

⁴⁸ Ibid.

⁴⁹ Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia, paragraph 209, available at http://www.difesa.it/SMD_/CASD/IM/ISSMI/Corsi/Corso_Consigliere_Giuridico/Documents/72470_finale_report.pdf

⁵⁰ AP 1, Article 51. 5 (b).

commander, wherever possible this decision should be made with the benefit of advice obtained from the legal adviser.

The term 'concrete and direct military advantage anticipated' (used in both articles) is to be understood as a bona fide expectation that the attack will make a relevant and proportional contribution to the objective of the military attack involved."

The MAF LOAC manual is likewise shallow with only the following"

"Proportionality requires a commander to weigh the military value arising from the success of the operation against the possible harmful effects to protected persons and objects. There must be an acceptable relationship between the legitimate destruction of military targets and the possibility of consequent collateral damage.

Military advantage means:

....the advantage anticipated from the attack as a whole and not only from isolated or particular parts of the attack.

Commanders will, by necessity, have to reach decisions on the basis of their assessment of the information available to them at the relevant time."

As experts have lamented that Article 51.5 is the most difficult to apply, a more thorough explanation is necessary than what is depicted in both the MAF manuals. Firstly, it must be impressed upon commanders that the harm to civilians or civilian objects envisaged by this rule includes both reasonably foreseeable direct and indirect consequences of an attack. For example, civilian casualties occasioned by the disruption of a hospital emergency response system as a result of an attack on an electrical grid must be factored in the proportionality analysis if that harm is foreseeable even though the effect to civilians is indirectly caused by the attack.⁵¹

Secondly, the rule has often been wrongfully characterized by balancing whether the concrete and direct military advantage outweighs the collateral damage.⁵² Rather, compliance with Article 51 is determined objectively, and the issue is whether the expectations of the collateral damage are reasonable in light of circumstances prevailing at the time the attack was planned or executed."⁵³ The test is "whether a reasonably well informed person in the circumstances of the actual perpetrator, making reasonable use of the information available to him or her, could have expected excessive civilian casualties to result from the attack."⁵⁴

⁵¹ Schmitt, M.N. Targeting in Operational Law, in Gill, T.D., and Fleck, D. (eds) 2015. The Handbook of the International Law of Military Operations. United Kingdom: Oxford University Press, p. 285.

⁵² Schmitt, M.N. 2006. Fault Lines in the Law of Attack in Breau, S., and Jachec-Neale, A. Testing the Boundaries of International Law, British Institute of International and Comparative , p. 293.

⁵³ The President and Fellows of Harvard College. 2010. Commentary on the HPCR Manual on International Law Applicable to Air and Missile Warfare. p.92.

⁵⁴ International Criminal Tribunal for the Former Yugoslavia. Prosecutor v. Galić, Judgment, IT-98-29, Trial Chamber, December 5, 2003, para 58.

Nevertheless, the term “excessive” is still debatable with experts on one side holding that incidental losses and damages must never be extensive.⁵⁵ In contrast, Schmitt opines that, although damage that is excessive is prohibited, it is incorrect to equate “excessive” with severe losses or extensive damage.⁵⁶ It is rather a relative standard that considers the collateral damage vis-à-vis the military advantage to be attained.⁵⁷ Accordingly, a slight harm may not be reasonable if the military advantage anticipated is marginal, whereas instances with exceptional military advantage may justify great civilian harm.⁵⁸ The prohibition only comes into play when there is a significant imbalance between the expected collateral damage and the anticipated military advantage,⁵⁹ such as the destruction of a settlement to eliminate the presence of a soldier on leave, or the destruction of an entire village to strike a bridge of vital significance.⁶⁰ Thus, the application of the rule “must be a question of common sense and good faith for military commanders” who are required to carefully weigh the humanitarian interests and military advantage at stake.⁶¹

It must be further noted that collateral damage can only be legitimized by the anticipation of direct and concrete military advantage. The term “concrete” refers to an advantage that is substantial and clearly identifiable, and not one based purely on hope or speculation.⁶² Additionally, the term limits the anticipated advantage to the impact of an attack on the adversary’s military and tactical levels, and security of the attacking forces does constitute a component of military advantage.⁶³

Moreover, compliance with the rule is determined not by the actual results of an attack but by the consequences the attacker reasonably expected prior to launching it.⁶⁴ Hence, even though the reality of the attack might fail to match expectations, the principle of proportionality is not violated for as long as the collateral damage expected and the military advantage anticipated by the attacker are reasonable in the circumstances.⁶⁵

Coming back to the MAF manuals, it is undeniably proper for the manuals to place the determination of proportionality to commanders planning and executing operations. Nevertheless, it is improper to leave commanders to apply the rule on their own, with no

⁵⁵ Sandoz, Y., Swinarski, C., and Zimmerman, B. 2005. Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949. Geneva: ICRC, para 1980.

⁵⁶ Schmitt, M.N.. Targeting in Operational Law, in Gill, T.D., and Fleck, D. (eds) 2015. The Handbook of International Law of Military Operations. United Kingdom: Oxford University Press, p. 284.

⁵⁷ Ibid. p. 284.

⁵⁸ Ibid. p. 284.

⁵⁹ The President and Fellows of Harvard College. 2010. Commentary on the HPCR Manual on International Law Applicable to Air and Missile Warfare. p.92.

⁶⁰ Sandoz, Y., Swinarski, C., and Zimmerman, B. Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949. Geneva: ICRC, para 2214.

⁶¹ Sandoz, Y., Swinarski, C., and Zimmerman, B. Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949. Geneva: ICRC, para 2208.

⁶² The President and Fellows of Harvard College. 2010. Commentary on the HPCR Manual on International Law Applicable to Air and Missile Warfare. p.92

⁶³ Ibid.

⁶⁴ Schmitt, M.N. 2006. Fault Lines in the Law of Attack in Breau, S., and Jachec-Neale, A. Testing the Boundaries of International Law, British Institute of International and Comparative , p. 294.

⁶⁵ The President and Fellows of Harvard College. 2010. Commentary on the HPCR Manual on International Law Applicable to Air and Missile Warfare. p.92

useful guidance on a fundamental legal principle regulating their prosecution of hostilities, an erroneous interpretation of which could constitute a war crime.

The MAF Manuals and Commanders' Responsibility

The MAF manual on the LOAC rightfully encapsulates the legal concept of command responsibility that encompasses, among others, commanders' responsibility to refrain from ordering the commission of war crimes, and to prevent violation of the LOAC by ensuring that their subordinates are aware of their obligations under the various international humanitarian law instruments. The promulgation of the manual, which is to serve as a guidance for the conduct of operations, is a means of facilitating those command responsibilities. Nonetheless, although the manual is commendably acceptable in many aspects of the LOAC, its coverage of the code for targeting is manifestly abysmal.

The necessity for more robust manuals on the LOAC and targeting is thus apparent to equip commanders with the requisite knowledge of the law on targeting, and with the doctrinal tools for them to acquire relevant information pertaining to civilians and civilian objects in order to make informed decisions on targeting. Even though commanders would have the services of legal officers, it is inexpedient to rely completely on legal advice because those officers may not possess the operational experience, the insight about political, diplomatic or strategic considerations, and the wisdom necessary for sound decision-making, especially decisions that have to be made swiftly in the heat of hostilities. It is only with a full grasp of the law will commanders be able to respond flexibly to unforeseen circumstances within the limits set by the LOAC.

Besides facilitating the commanders' decision making process on targeting, sound manuals are also a means for effective dissemination of the LOAC that would in turn promote greater respect for the law among personnel.⁶⁶ Their profound understanding of, and unwavering commitment to, the law, would produce instinctive compliance with legal obligations, but this requires the appropriate integration of the legal regime into collective training. Yet, owing to the lack of substance regarding targeting in the extant MAF manuals, it is difficult to imagine if the confusing concepts of distinction and proportionality are adequately factored in the commanders' decision-making process. Moreover, legal officers, generally, do not have the clout to impress upon exercise planners on the need to incorporate germane targeting scenarios in operational or tactical level exercises. Without constant practise, targeting principles, long considered as the touchstone of humanitarian protection, would not likely be afforded greater priority over mission accomplishment.

Conclusion

The principles of distinction and proportionality seek to maximize the protection of civilians against wanton and impulsive targeting decisions in armed conflicts. Military commanders as well as those planning and executing attacks are imposed with demanding responsibilities to ensure that these fundamental humanitarian principles are observed in their selection of targets, which cannot be overridden by any other considerations. Nevertheless, although

⁶⁶ Article 83 of AP 1 obligates states to disseminate the Geneva Conventions and AP 1 as widely as possible in their respective countries and, to include the study thereof in their programs of military instruction.

couched in simple language, these principles are replete with vague terms, many of which are incomprehensible to the lay military personnel.

The MAF manuals on the LOAC and targeting, which should be expounding this difficult legal framework to promote better understanding among its personnel, can hardly serve as a useful guide for the interpretation of the law into operational practice. Without a full understanding of the legal limitations in their conduct of hostilities, those responsible for organizing attacks would not be in the position to faithfully discharge their obligations to protect innocent civilians from the effects of their violence.

A revision of the manuals is thus timely to provide clarity to the nebulous legal principles because lawful attacks are predicated on legitimate targets. Practicable manuals, containing more than mere abstract statements of the law, would provide commanders with the doctrinal apparatus to instil strict observance of targeting principles, enhance professional competency, and thereby avoiding criminal liability for unlawful targeting.

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Chapter 7

Conclusion

Malaysia can be viewed as a small state - its economic strength, military capabilities and defence posture as compared with some other regional states in South East Asia and regional powers such as China and India. Today, Malaysia has a unique defence capability as it tries hard to be a modern conventional armed force, with modern Scorpene submarines, advanced Russian-made SU-30 air superiority fighters, and Polish PT-91 main battle tanks, but yet when compared with its neighbours, Malaysia has a small quantitative value of each of these sophisticated assets. For example, the Royal Malaysian Navy only has two Scorpene submarines when the ideal number was believed to be six. The Royal Malaysian Air Force only has 18 SU-30s, enough to equip one squadron. These few and odd numbers of assets while providing Malaysia with a very limited technological edge, will have exasperated even the most amateur strategist on what kind of military strategy Malaysia plans and aspires to achieve.

This haphazard defence planning and procurement points to a plausible explanation – there is a vacuum of strategic knowledge informing Malaysia's defence planning process which this book had set out to remedy albeit in a small manner.

The introductory chapter by BA Hamzah started the discourse on the contemporary and forecasted future geopolitical outlook for the Asia-Pacific region that may have direct and indirect strategic consequences for Malaysia. In many facets, the Cold War history appears to be playing out again today in the region with China's recent aggressive claims in the South China Sea, and the US's moves to contain it. Malaysia is caught in a difficult position as it is expected to choose sides. Malaysia, a small state – if measured by population size, GDP level, and military power when compared to both China and the US, has not much choice but to work closely with both parties for its economic survival as well as for its own security. The Asia-Indo-Pacific region looks set for a future that will continue to simmer with strategic rivalries and the threat of war between the US and China in the future – a very likely proposition if lessons from the history of causes of war were taken into account. The only consolation we have is that both the US and China has nuclear weapons and are deterred from getting at each other's throat, for now.

The second chapter introduces the importance of boundaries in defining the geographical space of Malaysia. The recent overlapping claims between Malaysia and Singapore over the water boundaries in the Tuas area and the Johor-Singapore airspace and the subsequent offensive responses by both parties highlighted the fragility of regional cohesion. States have to live within set and defined geographical boundaries that sometimes were artificially created and in Malaysia's case, a lot of borders were simply demarcated by the British and were left to deal with it at the end of the colonial period with its neighbours with lasting impact. Forbes' chapter vividly and succinctly described this problem.

The borderless world in today's context also presents new security threats as described in the following chapter on the cyber space. The increasingly concerns about the threat posed in the cyber space is alarming but appears to be misplaced. Although a lot of modern communication and decision making systems are connected via the cyber world, stealing of data - whether criminal or for state-sponsored intelligence purposes, sabotage of computers with viruses and malwares, and spreading of fake news or perception shaping information are nothing new in its strategic (and criminal) purposes. Cyber activities can be classified into three main strategic functions which are intelligence, sabotage and subversion. Cyber

provides a new tool or technology to enable these functions and make it easier and more cost effective in conducting these operations which in its essence have been operated by the earliest humans although with cruder or different forms of technology or techniques. Nonetheless, Inderjit and Sazali's chapter provides an important oversight on the security risks posed by cyber and steps taken by the Malaysian government to mitigate it and how it can provide opportunities for our defence community to take precautions against and also to exploit the possibilities presented by cyber too.

Adam Leong's chapter on geostrategic cooperation between Malaysia and Australia, and geographical basing is an excellent chapter detailing how states' can use its geographical advantage and disadvantages by cooperating and creating strategic bases for the mutual defence benefits of both states. Australia's defence strategy envisions forward defence. Malaysia being situated in a most strategic location provides Australia with an excellent base to forward deploy its military assets and intelligence gathering operations. Malaysia sees Australia as the most capable partner in the Five Powers Defence Arrangements (FPDA) and also as a dependable strategic defence partner that has a formal security treaty with the sole superpower today – the US.

Adam Leong's continues his strategic logic theme in his next chapter by looking at how two submarines although limited in its operational tempo but using shrewd lessons from strategic history provides examples on how even a single solitary submarine can yield disproportionate strategic effects. He provides an apt argument that while lacking funds to purchase more submarines, Malaysia's two submarines may just be enough to provide Malaysia with sufficient underwater warfare capability – for now.

Fadzil's chapter on the importance for military officers, from the tactical level right up to the strategic level, to understand laws of armed conflict reflects on the new reality on the ground. A simple mistake on the battlefield can be construed as a war crime. Military officers need not just to know and understand the laws but also in its practice. Perhaps both junior and senior military officers should be trained as para-legal practitioners, although not as a full-fledged lawyer, but with sufficient knowledge of relevant rules and regulations, and importantly its application while in the battlefield. This is to ensure that when the orders are given to shoot, the military officers can be dead sure that their men are shooting the right targets.

In view of these wide range of issues, Malaysia's defence policy should shadow closely Malaysia's grand strategy thus far. Strategies focusing on flexible and agile military forces to support the attainment of the defence policy should be formulated based on the means and the strategic choices available. Nonetheless, with a new government in Malaysia, domestic perspectives on the future planning and formulation of defence policy has to be taken note of. One of the plausible reasons why the incumbent ruling coalition of Barisan Nasional (previously known as the Alliance Party) which had ruled Malaysia for 61 years crumbled and a coalition of opposition parties emerged victorious was Malaysia's foreign policy of being too cosy to China that resulted in uneasiness among large segments of the Malaysian population which included Malaysia's ethnic Chinese, that viewed the emerging threats posed by China's assertive actions in the region. Fears that China will control regional politics as well as Malaysia being heavily indebted to China, created a strong domestic opposition on the too- warm-ties with China. An often cited example of Malaysians' worries

about the consequence of overdependence on China is Sri Lanka's failure to service its debt with China resulting in the 99-year leasing of Hambantota port to China. In a world of mass communication enabled by cyber means, the Malaysian public are now well exposed to current international affairs as well as the strategic logic behind these issues.

Defence policy making in Malaysia today, have to take into account these myriad of changes in the strategic context for an uncertain future – compounding the difficulties in the business of defence planning.

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