The Royal Thai Navy's Theoretical Application of the Maritime Hybrid Warfare Concept
by
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In the maritime strategic thought community there has been much talk about the theoretical application of the Maritime Hybrid Warfare concept by second and third-tier naval powers in the Northeast and Southeast Asia sub-regions.[i] On that theme, a recent publication on the Royal Thai Navy's maritime and naval strategic thought concluded that the organisation stands at an existential crossroad with the advent of maritime hybrid threats in the grey-zone warfare era and should therefore consider operationalising the aforesaid multi-dimensional maritime concept to its organisational system and material capabilities.[ii] Since the publication released date though, this conclusion has only become more poignant in light of recent reports that China, a country that has applied the Maritime Hybrid Warfare since 2012,[iii] has signed a secret agreement giving it access to the Ream Naval Base in Cambodia.[iv] This newfound foothold at the mouth of the Gulf of Thailand puts a first-tier naval power – the People's Liberation Army Navy – now within striking distance to one of the Royal Thai Navy's most important naval bases. In response to this event the following article analyses the manner by which the Royal Thai Navy, a second-tier naval power in the Southeast Asia sub-region, could theoretically operationalise the Maritime Hybrid Warfare concept in an effort to combat the soon-to-be present maritime hybrid threats in its internationally-recognised maritime space.

As formulated through the works of several scholars, the Maritime Hybrid Warfare concept constitutes five essential conditions: (1) deniable forces,[v] (2) deception/obfuscation,[vi] (3) destabilisation/attack-on-governance,[vii] (4) well-developed and diverse force,[viii] and (5) dissuasion.[ix] With this understanding as the premise, the article explains the manner by which the Royal Thai Navy (RTN), a second-tier naval power in the Southeast Asia sub-region,[x] could operationalise each essential condition of this particular multi-dimensional maritime concept.

[1] Deniable Forces

Partly characterised by the ability to deny something principally on the basis of being "officially uninformed," deniable forces (also called, "low-visibility combat forces") are the use of non-military units or military units disguised as non-military units performing a wide range of missions across the "war-conflict-peace" spectrum. In the RTN context, the deniability would take form through the use of offensive cyber-attacks and employment of irregular forces, like amphibious or light infantry and special operations forces (SOF).

The RTN's Cyber Center in the Naval Communications and Information Technology Department (NCITD) (**กรมการสื่อสารและเทคโนโลยีสารสนเทศทางทะเล (สสท.ทร.**)) is responsible for electronic and cyber warfare.[xi] The Cyber Center was created in partnership with the adoption of the *Network Centric Warfare Master Plan (2015)* in an effort to protect the systems and networks between different operational units. As told by the RTN's Director of Naval Intelligence, Captain Kiatiyut, the understanding within the Navy is that the furthering of the Network Centric Warfare concept will

mutually increase the quality of the electronic and cyber warfare capabilities and *vice versa*. As a recent addition to the cyber dimension of Thailand, the Cyber Center will remain for the time being a far weaker institution than its Royal Thai Air Force (RTAF) and Royal Thai Army (RTA) brethren. However, this novelty does not necessarily explain away the reasons why the NCITD does not possess any potent offensive capabilities. Therefore, if the RTN wishes to claim a level of deniability in the post-attack environment after carrying out an offensive cyber-attack, then a serious consolidated effort in both investment and attention towards adopting offensive capabilities will be required over the coming years.

In terms of irregular forces, the RTN can muster various units in its long-established SOF community, many already directly under its command. The most renown is the Royal Thai Navy SEALS (**หน่วยซีล**) and Underwater Demolition Teams (UDTs), officially called the Special Warfare Regiment 1 (**กรมรบพิเศษที่ ๑**) under the Naval Special Warfare Command Division (NSWC) (**หน่วยบัญชาการสงครามพิเศษทางเรือ (นสร**.)) of the Royal Thai Fleet (RTF) (**กองเรือยุทธการ (กร**.)).[xii] While the Thai Navy SEALs focus on reconnaissance and intelligence missions, the UDTs are assigned salvage operations, obstacle clearance and underwater demolitions.[xiii] Since its founding in the early post-Second World War era, the Thai Navy SEALS and UDTs participated in countless missions, including East Timor (Indonesian invasion), Somalia (Task Force Route 151) and Chiang Rai Province (the recent cave dive rescue).[xiv] Outside of this Regiment, the RTN does *not* possess any other combat swimmers. The Navy nevertheless does retain the Diving and Explosive Ordnance Disposal Division (DEODD) (**กองประดาน้ำและถอดทำลายอมภัณฑ**) of the Naval Ordnance Department (NORDD) (**กรมสรรพาวุธทหารเรือ (สพ.ทร**.)),[xv] the Marine Recon Anti-Terrorism Team of the 1st Reconnaissance Battalion (**กองพันลาดตระเวน / กองพลนาวิกโยธิน (พัน.ลว**.)) of the Royal Thai Marine Corps (RTMC) (**หน่วยบัญชาการนาวิกโยธิน (นย**.)) and the Paramilitary Marine Regiment (**กรมทหารพรานนาวิกโยธิน กองทัพเรือ (กรม ทพ.นย, ทร**), nicknamed the "Black Shirt Hunters" (**นักรบเสื้อดำ**). The last regiment is traditionally organised under the RTA's "Thai Rangers" (**ทหารพราน**), though now placed under the command of the RTMC and RTN.[xvi] All of the aforementioned units, except for the last, are specifically trained to navigate complex seas.

[2] *Deception/Obfuscation*

Sun Tzu's famous dictum that "all warfare is based on deception" still holds true today. At the U.S. Army Research Laboratory, in the context of Internet of Battle of Things (IoBT), Alexander Kott penned that "[a] common approach to deception is for the enemy to cause the friendly forces to learn a certain normal pattern, and then perform actions that blend into that pattern, but result in an unanticipated outcome."[xvii] With that in mind, in order for the RTN to effectively implement a deceptive stroke, it will require blending unanticipated outcomes into normal patterns through the use of different types of vessels including civilian ships. Along with traditional naval vessels, the RTN is able to summon into operations civilian Thai fishing vessels and the Coast Guard Squadron (CGS) (**กองเรือยามฝั่ง (กยฝ**.)). These two entities are central to the proficiency of deceptive undertakings, as each provide the perfect presentation of normal patterns where unanticipated outcomes may be concealed.

In the Royal Thai Government's (RTG) *Act of Levying Aid for Military Service Affairs of 1987* (**พระราชบัญญัติ การเกณฑ์ช่วยราชการทหาร พ.ศ. 2530**) three sections are especially pertinent to

deception.[xviii] These sections allows the RTN, and the Royal Thai Armed Forces (RTARF) more generally, to levy "vehicles" (i.e. ships and boats) and "labour" (e.g. humans and works) as "deemed necessary."[xix] The application of the levied vehicles and labour *per contra* is not specified and left open-ended, leading to the conclusion that the RTG intentionally preserved a wide range of available operationability to empower relevant governmental authorities. Even permitting this supposed range of operationability, it is unlikely the RTN would operationalise fishing vessels for any sort of high-end warfighting due to their traditionally low material capabilities. The fishing vessels, on the other hand, could still be used deceptively by gathering intelligence on the position of enemy naval and amphibious units. After the European Union threatened to downgrade Thailand's status as a consequence of fishing and human trafficking violations in 2015, the RTN mandated that every fishing vessel going out to open-waters must be equipped with a radio and GPS transmitter.[xx] In adjudicating in such a way the RTN shrewdly expanded the scope of its Maritime Domain/Situation Awareness. As it were, all Thai fishing vessels now essentially operate as an intelligence gathering node for the Thai state. Moreover, in times of existential crisis (e.g. amphibious assault or incursion), the fishing vessels may assist at the operational level through the laying down of fishing nets across the bottom of the shallow seafloor in the Gulf of Thailand and Andaman Sea.[xxi]

Since its founding in 1989, and later authorisation in 1992, the CGS operates directly under the Royal Thai Fleet of the RTN.[xxii] In contrast to other navies (i.e. United States Coast Guard and Her Majesty's Coastguard), the CGS is not separate from the RTN. Amid the reformation of the Thai-Maritime Law Enforcement Coordinating Center (Thai-MECC) (**ศูนย์ประสานการปฏิบัติในการรักษาผลประโยชน์ ของชาติทางทะเล (ศรชล)**), the RTG High Command assessed the future role of the CGS in relation to the RTN stewardship.[xxiii] The conversations over the CGS polarised sharply the two opposing camps present inside the RTN officer corps. The first camp wanted for the RTN to keep the CGS under its direct control, while the second aspired to divorce the two entities. The majority, however, believed the CGS should indeed remain a subsidiary. Against the entrenched consensus, the position maintained here is that in order to apply the MHW concept it would utterly behove the RTN to separate the two entities into two service branches. Evident nowadays with another Navy that applies the MHW concept (e.g. separation between the Islamic Republic of Iran Navy and the Islamic Revolutionary Guard Corps Navy), the level of deception needed to prevent an escalation in the intensity of conflict involves the ability to declare being "officially uninformed" of actions carried out by the suspected perpetrator, including its sister service. Notwithstanding that the RTN loses direct managerial control, as the primary coordinating unit of Thai-MECC, the RTN's managerial loss over the CGS is purely superficial. In reality, the integrated nature of the new Thai-MECC organisational structure allows the Navy to retain a relatively comparable level of directing control; howbeit, now in possession of a credible level of deniability. Furthermore, they would actually still theoretically be coupled through the Navy's joint operations doctrine that focuses on cohesiveness and integration between (now) the four military service branches.

[3] Destabilisation/Attack-On-Governance

Located in the Southeast Asia (SEA) sub-region,[xxiv] the RTN operates in an environment with governments and institutions that possess weak governance. This vacuum engenders "corruption, low levels of public trust, weak public and private accountability, ineffective marine law enforcement, poor maritime border and port security, weak security protocols for critical infrastructure, and a lack of cooperation between ministries, institutions, and the private sector leave them more vulnerable to these attacks on governance."[xxv] Cognisant of this governance structure in the sub-region, the Chinese

People's Liberation Army (PLA) uses the "Three Warfares" concept to destabilise respective actors, whether in the economic or political domains. In line with the Chinese conceptualisation, the RTN should develop a "Thai Three Warfares" concept to destabilise its competitor as to achieve its desired strategic ends. Two brief points must be made beforehand, though. Firstly, as Michael Raska wrote, use of the "Chinese Three Warfares" concept applies only to the operational level and, secondly, as Charles Dunlap explained, the concept acts as part of a larger multi-dimensional effort.[xxvi] This is convenient for our purposes as the relegation of the Thai three warfares concept at the operational level would be compatible with its new adopted larger multi-dimensional effort – the MHW concept – that is also relegated to the operational level of war.[xxvii]

Like its parent-term, the Thai Three Warfares concept would be distinguished by three elements: psychological warfare, media/opinion warfare, and lawfare/legal warfare. The first element is characterised by the "aim to influence foreign decision makers and their approach towards [country x's] policies, often carried out simultaneously with public opinion warfare."[xxviii] The Thai military enjoys a long legacy and history of applying psychological or informational warfare in its internal affairs.[xxix] It could thus easily replicate this methodological approach in its external operations. Of important note, the psychological warfare concept is understood across the three Thai military branches through an "informational warfare" lens that should not nonetheless be confound with the second element – opinion warfare.[xxx]

The second element is defined as the "implementation of overt and covert media manipulations, e.g. the use of distorted information, spread out through the media, with the objective to influence the international as well as domestic audience about the rightness of [country x's] foreign policy conduct."[xxxi] As is the case in the South China Sea, the Chinese government utilises "historical narratives" to justify its claim towards the islands. Along those same lines, the RTN should pay for the production of entertaining "historical dramas" (ละครประวัติศาสตร์) on national and international television and radio in an effort to romanticise a maritime area of operation currently in dispute (i.e. Cambodian maritime border). This recommendation is far from a stretch, as controlling forces in the Thai society possess an established "royalist-nationalist view" of history with roots in the Pak Nam Crisis of 1893.[xxxii] The movement towards reinforcing the royalist-nationalist historical narrative is already underway through the renewal of the *Internal Security Act of 2008* (ISA), which formed the now all powerful Internal Security Operations Command (ISOC) (กองอำนวยการรักษาความมั่นคงภายในราชอาณาจักร (กอ.รมน.)). This institution will be central to the development of the media/opinion warfare concept in the domestic environment, assisting the Thai military regime assert its use of force by means of a socio-political militarised arm.[xxxiii] This model should be replicated at an international level, too. The RTN should pay for the publication of "tailor-made programs that match the mindset, customs and traditions of different nations" in the ways executed by the South Korean government, who spends six billion won per year (roughly 153,480,890 Baht) on public diplomacy.[xxxiv] One method might be investing in the development of a television network produced in English that would act as a conduit for the Thai state-controlled messaging, in the same way that the Russian Federation utilises the international RT television network to promote its corresponding "strategic narrative."[xxxv] Although this investment would be costly initially, the use of multi-dimensional maritime strategies and concepts requires an adherence to long-term thinking and long-term investing.

The third element, lawfare/legal warfare, is defined as "the use of law as a means of accomplishing what might otherwise require the application of traditional military force."[xxxvi] In much the same way,

Sergio Miracola, at the Italian Institute for Political Studies, described it as the "exploitation of all international norms to fulfilling the set objectives of [country x] while also undermining other states' foreign policy goals through international fora."[xxxvii] This mission would be most effective with the condition that the mandate of the RTN's Military Legislation Division (MLD) (**กองกฤษฎีกา (กฎก.**)) was expanded to include such endeavours and supported by the Thai Ministry of Foreign Affairs (MFA) (**กระทรวงการต่างประเทศ**). In a joint venture, the two governmental institutions would exploit relevant international customary norms and treaties like the United Nations Convention on the Law of the Sea (UNCLOS) and the Law of Armed Conflict (LOAC). Despite the fact this last recommendation breaks from its current foreign policy practices, it remains feasible considering the RTN is already a close onlooker and frequent physical attendee at international forums on warfare.[xxxviii]

[4] Well-Developed and Diverse Force

Among the five essential conditions the RTN is most lacking in terms of possessing a well-developed and diverse force. This position must not be read as a criticism of the quality of the Offshore Patrol Vessels (OPVs) built for the Navy. On the contrary, the quality of the second Krabi-class OPV constructed by the Bangkok Dockyard Ltd., designed after the Royal Navy's River-class OPV and that included technology transfers from the United Kingdom, is viewed in a positive light here.[xxxix] Moreover, the purchase and construction of large OPVs (i.e. Frigates) by the RTN over recent years falls in line with the global trends in naval procurements; where, for instance, the Frigate will go from 22% to 28.7% of global naval vessels and surface combatants in between 2019 and 2029.[xl] The criticism is with the RTN's preferential treatment given to surface warfare over other areas, like sub-surface warfare, seabed warfare, and unmanned aerial vehicle (UAVs) technology.

In the context of sub-surface warfare, the Navy purchased the Yuan-class submarines from China that will arrive fully loaded with technology, operational training, and doctrine. Yet, the RTN Submarine Squadron (SS) (**กองเรือดำน้ำ (กดน.**)) conducted combined submarine training focused on operations procedures and tactics with the United States Navy during the CARAT exercise in 2019.[xli] In coming months after the Covid-19 crisis period eases, the Submarine Squadron must hold the naval military exercises already organised with China in order to acquire the necessary submarine training in three levels of war: tactical, operational, and doctrinal. Unless the RTN Headquarters accepts that the Squadron partly moves towards Chinese politico-military sphere of influence, it will be unable to operate the (~three) submarines with a qualified-degree of efficiency; for, the commanding naval officers will overlay American submarine doctrine learned during naval exercises and at war colleges onto Chinese submarine technology. As noted elsewhere, any drastic change in technology platforms by a service branch necessitates a respective change doctrine or else a qualified-loss of efficiency with the new technology follows.[xlii] The recent planned trip to China by a group of Thai submariners, whom mostly speak fluent mandarin, and which was ultimately cancelled due to Covid-19 travel restrictions, is a step in the right direction towards resolving the doctrinal-technological incompatibility that now hangs over the Squadron.[xliii]

Having said that, the RTN should still seek to counteract the growing multi-domain dependency on Chinese material goods and doctrinal conceptualisation, as a noted scholar recently commented.[xliv] A way this may be achieve is the RTN shifting its gaze from the expensively-priced large, traditional Chinese submarine towards the cheaper domestic mini-submarine project in the works antecedently

green-lighted by the Thai prime minister in 2018. Under the current plan, "the design will take four years and construction of the first mini-submarine another two years, to be followed by seaworthiness checks and training for one year, or a total of seven years," as stated by Captain Sattaya Chandraprabha, the head of the mini-submarine research project.[xlv] These efforts together would seek to prevent the Squadron, and the Navy more generally, from further falling into the Chinese politico-military orbit by requiring the Squadron to develop its own mini-submarine doctrine that would counter-balance the large-submarine doctrine learned in China. More importantly than escaping the Chinese politico-military sphere of influence, as studies have previously shown with North Korea, naval attacks from relatively low-tech mini-submarines exploit the operational gaps in traditional blue-water anti-submarine warfare doctrine.[xlvi] Even perhaps more than the larger imported submarines, the use of domestically constructed mini-submarines would assist the RTN Submarine Squadron successfully operationalise the MHW concept.

In the context of seabed warfare, or, "operations to, from and across the ocean floor,"[xlvii] the RTN does *not* presently possess the material capabilities or any allocated funds to acquire or develop "high-end seabed warfare" (e.g. use of "automated seafloor sensor networks" through the Gulf of Thailand and Andaman Sea) capabilities.[xlviii] In spite of that the RTN is capable of affecting "low-end seabed warfare" by destroying or cutting automated seafloor sensor networks through the use of combat swimmers. The article distinguishes between high-end and low-end seabed warfare seeing that there is a sizeable difference between the laying down of automated seafloor sensor networks – expensive and technology-intensive – and merely cutting of those said networks – cheap and technology-light. In the near-term though, this lack of high-end seabed warfare capabilities will make it increasingly more challenging for second-tier naval powers with a long total coastline (i.e. Thailand's coastline is 3,219 km) to protect their maritime interests as the next chapter in undersea competition is moving away from solely submarine warfare. Meaning, even supposing that the RTN acquires imported submarines and/or develops domestically constructed mini-submarines, at the time of their inductions in the Fleet, the Navy's most valuable naval assets will immediately become genuinely vulnerable to an "undersea family of systems and battle networks."[xlix] Though not yet discussed in both the western and Thai literatures, one of the real threats to the strategic ends found in numerous national strategy documents – *twenty-year national strategy* (2018-2037) and *National Security and Policy Plan* (2019-2022) – actually comes from the RTN's lack of (defensive) high-end seabed warfare capabilities. Therefore, the RTN should extend the operationability of the MHW concept to seabed warfare, as was implemented by the Russian Navy previously,[1] by acquiring or developing comparatively cheap undersea networks that could enable coordinate surveillance or attack operations between the assets already owned by the Fleet.

With the hope to diversify its UAV capabilities, the RTN purchased two sets of Austrian-made vertical take-off and landing (VTOL) "unmanned air systems" (UAS) called Camcopter S-100s from Schiebel Group at a cost of 600 million baht.[li] Yet, similar to the criticism of the Navy's order of the HTMS Chakri Narebet aircraft carrier from Spain in 1992, the RNT should insure future purchases of UAVs comes attached with repair capabilities. A solution is for the Navy to further augment investments in indigenous companies, like RV Connex, who specialises in UAV production.[lii] Another solution is for the RTN to further enhance its relationship with the Defence Technology Institute (DTI) (สถาบันเทคโนโลยีป้องกันประเทศ), a research and development agency operating as a public organisation under the oversight of the Thai Ministry of Defence, which lists development of a domestic UAS as one of its six primary missions.[liii]

[5] Dissuasion

In the earlier writings of Martin Murphy and Gary Schaub, the tenet of dissuasion is fundamentally linked with the previous tenet of destabilisation. In their view, the act of destabilising may in fact create uncontrollable escalation. Nevertheless, if paired with a "program of dissuasion," then the escalation may be controlled accordingly.[liv] An existent example is the Russian nuclear strategy as outlined in its open-secret first-strike doctrine, where the threat or actual use of nuclear escalation would actually serve to "de-escalate" a conflict.[lv] In other words, any acts by the RTN that destabilised another external entity must be conducted once in possession of capabilities that can disproportionately and rapidly escalate the conflict in order to secure de-escalation in the overall situation. The creation and use of a Thai three warfare concept should consequently be coupled with a program of dissuasion organised by the RTN in cooperation with Thai-MECC partnered agencies.

Beyond the traditional naval methods of dissuasion for second-tier naval powers, the RTN's program of dissuasion should start with the purchase of medium-to-long range, mobile cruise missiles. A recent news article announced that the RTN and Indian Navy are in advanced talks for the acquisition of missiles – BrahMos-II cruise missiles – and other indigenous weapon systems.[lvi] The new expected range of the BrahMos-II cruise missiles is around 450 kilometers doubling the range of the original BrahMos-I cruise missile. With these medium-range mobile cruise missiles, the RTN's Air and Coastal Defense Command (ACDC) (**หน่วยบัญชาการต่อสู้อากาศยานและรักษาฝั่ง (สอ.รฝ.**)) could position several dozen across the coasts of the Gulf of Thailand and Andaman Sea. The ownership of medium-range mobile cruise missiles further enhances the RTN's "defense in depth," "anti-access/area denial" (A2/AD) or "entrance denial," and "sea denial" capabilities. The acquisition of mobile cruise missiles also plays a major role, as suggested RTN Rear Admiral Khamron Pisonyuthagarn, for the practical adoption of the "Ring-Fenced" maritime strategy. Originating from the strategic thought of the Royal New Zealand Navy, this maritime strategy focuses on the use and deployment of forces like "multilayer rings" with diplomatic policy controlling each ring.[lvii] It is the position here that the adoption and application of the MHW concept would stand harmoniously within this New Zealand strategic concept with Thai characteristics.

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This article demonstrated that the Royal Thai Navy is indeed theoretically capable to operationalise the five essential conditions of the multi-dimensional maritime concept – Maritime Hybrid Warfare. In regards to the first essential condition of deniable forces, the Royal Thai Navy is constrained in the use of offensive cyber-attacks though possesses a whole wide variety of available irregular forces, like the Thai Special Warfare Regiment. In the context of deception/obfuscation, along with the traditional naval personnel and vessels, the Royal Thai Navy is able to operationalise civilian Thai fishing vessels and the Coast Guard Squadron. For destabilisation/attack-on-governance purposes, the Royal Thai Navy should contemplate developing a Thai three warfares concept similar to the Chinese conceptualisation: psychological warfare, media/opinion warfare and lawfare/legal warfare. With respects to well-developed and diverse force, the Royal Thai Navy should look beyond large, traditional naval assets and accelerate works on foregoing investments like mini-submarines and small UAVs, but, also, develop defensive high-end seabed warfare capabilities. As to dissuasion, along with the traditional naval methods, the Royal Thai Navy should acquire medium-to-long range, mobile cruise missiles positioned along the coasts of the Gulf of Thailand and Andaman Sea.

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