

The Development of Taiwan's Asymmetric Combat Capabilities: A Case Study of the IDS and Military Interactions Between the U.S. and Taiwan

Ming-Shih Shen

Director, Division of National Security Research, INDSR

Abstract

The completion of Taiwan's indigenous submarine is a milestone for Taiwan's national defense development, even though some commentators have argued that the submarine does not meet the definition of asymmetric combat capabilities. Faced with the threat of China's powerful military, Taiwan has no room for normal symmetrical operations. If there is an opportunity, it should use traditional weapons systems in an asymmetrical fashion. Through the assistance of the United States and its allies, Taiwan can restart the direction of submarine development and enhance national defense and the economic benefits to its defense industry. As China continues to surround Taiwan with military aircraft and navy vessels, the completion of Taiwan's indigenous submarines can not only break through a blockade by China, but also unite efforts by the United States, Japan, and other countries to flank Chinese ships passing through important waterways. Nevertheless, Taiwan should not develop weapons systems that can only be used in asymmetric operations. Instead, it must consider how to counter gray zone operations, military coercion, and aggression from China, and develop a complete set of combat strategies and weapons systems.

Keywords: Asymmetric, IDS, U.S.-Taiwan Interactions, Defense Policy, Taiwan Defense

I. Introduction

Taiwan's indigenous submarine Haikun (711) was revealed to the public in

September 2023 and preparations were made for its underwater testing, showcasing the development of Taiwan's underwater combat capabilities. The Haikun is scheduled to carry out harbor acceptance testing (HAT) in October, and after completing sea-going testing (SAT), it is scheduled to be delivered to the Navy before the end of 2024. Taiwan's submarine combat capability plan is to complete three submarines by 2025 and add one more indigenous undersea vessel by 2027 to achieve the goal of four submarines. In the future, Taiwan's submarine force will not only perform the task of defending the country in the southwest waters of Taiwan, but also deploy in the southeast and eastern waters of Taiwan, and even the waters between the northeast and Japan's Yonaguni Island. The focus will be to cut off the People's Liberation Army (PLA) from entering the first island chain and counter efforts by the PLA to encircle Taiwan.

Taiwan's submarine development was interrupted after its acquisition of two Dutch Swordfish-class submarines in 1987. Torpedoes had to be purchased through Indonesia, an effort which almost stagnated for more than 30 years. Even if Taiwan wanted to develop its own submarine, it was unable to make the necessary



Figure 1. IDS Haikun (SS-711) in September 2023

Source: "IDS Haikun," *PTS News*, September 28, 2023, <<https://news.pts.org.tw/tag/30533/>>.

breakthrough as key technologies and systems were difficult to obtain. After U.S. President George W. Bush came to power in 2000, he announced the sale of eight arms packages for Taiwan, including submarines. Due to limited defense budgets, Taiwan chose to prioritize three projects, including submarines, PAC-3 air defense systems, and P-3 anti-submarine aircraft; the submarine arms sales plan was delayed on 69 occasions due to obstruction by the opposition KMT in the Legislative Yuan.

For Taiwan's counter-blockade operations, submarines can perform various offensive and defensive missions in underwater combat and play an important role. However, Taiwan currently has only two of the oldest submarines in the world and

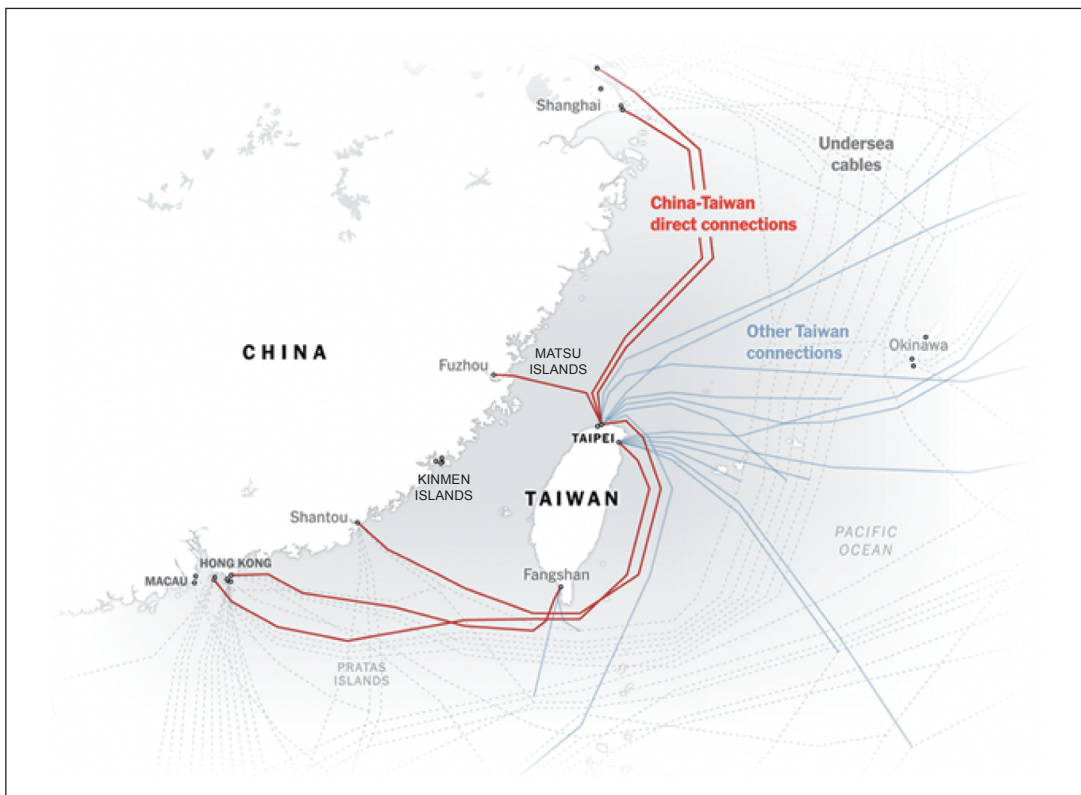


Figure 2. A Potential Chinese Blockade of Taiwan

Source: Chris Buckley, Pablo Robles, Marco Hernandez, & Amy Chang Chien, "How China Could Choke Taiwan," *The New York Times*, August 25, 2022, <<https://www.nytimes.com/interactive/2022/08/25/world/asia/china-taiwan-conflict-blockade.html>>.

the other submarines sold by the Netherlands in the 1980s. These submarines are not suitable to counter a blockade or sea-control operations by the PLA. Due to the urgent need for operational preparations and with no way to outsource, President Tsai Ing-wen was determined to see Taiwan develop its own submarines to break through China's blockade and strengthen the military's underwater combat capability. The completion of the Haikun proves that Taiwan can indeed make its own submarines. After eight ships are completed, they will be able to perform various underwater missions, including setting up ambush areas southwest, east, and southeast of Taiwan to counter a blockade by China and attack the largest ships in the PLA fleet.

Three main points can be made about Taiwan's submarine manufacturing. In addition to demand, budget constraints and functional advancements, the most important issue is whether the use of submarines conforms with the concept of asymmetric warfare and whether it can be called asymmetric combat power. This article discusses Taiwan's views on asymmetric warfare, the relationship between submarine conventional warfare and the use of asymmetric combat power, and

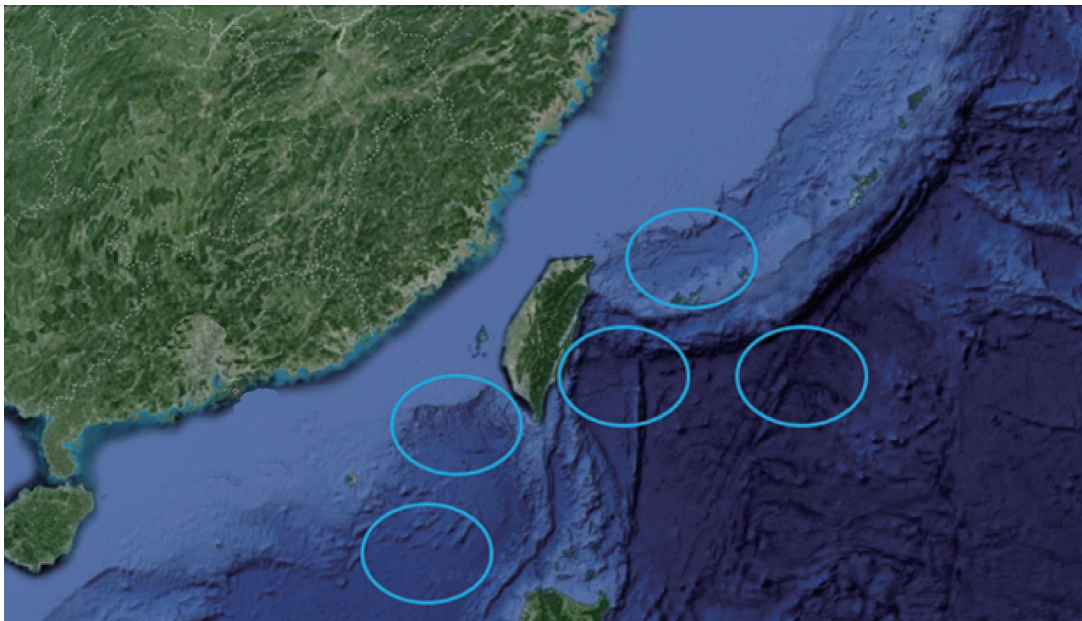


Figure 3. Ambush Areas for Taiwanese Submarines

Source: Drawn by the author.

whether cooperation between the United States and Taiwan in developing submarines takes the concept of asymmetric warfare and future development into account.

II. Debate on Taiwan's Asymmetric Warfare

Asymmetric warfare is a military term that mainly refers to how a weaker military force can win or achieve combat goals in a war against a stronger enemy. Because the definition and application of asymmetry are very broad, the definitions and expressions of asymmetry by the military and society tend to differ. In 1997, the U.S. Department of Defense's *Quadrennial Defense Review* (QDR) stated that "the United States' advantage in conventional weapons competition has prompted its opponents to use asymmetric methods to attack the United States." The use of asymmetry was publicly used in official documents for the first time.¹

The U.S. Department of Defense published "The Security Situation in the Taiwan Strait" in February 1999.² The report defined asymmetric warfare as: "A weaker or technologically backward opponent uses unexpected means or innovative ways to launch attacks on the weak points of stronger enemies while avoiding the sharp front of the stronger enemy." This is similar to China's approach to the United States, with its emphasis on "how small power to fight against the big one, and how the weak to win the strong enemy." That is the asymmetrical way of fighting.

Interpreted broadly, asymmetric warfare seeks a combat method that avoids the enemy's strong points and concentrates all relative advantages to counter the enemy's relative disadvantages. It uses inferior tactics or combat forces to attack the enemy's weaknesses to achieve disproportionate effects, destroy the enemy's will, and achieve the strategic goals of asymmetric actors. This definition emphasizes the

1. U.S. Secretary of Defense, *Report of the Quadrennial Defense Review* (Washington DC : DoD, 1997), pp. 1-69, *U.S. Historical Office*, <<https://history.defense.gov/Portals/70/Documents/quadrennial/QDR1997.pdf?ver=2014-06-25-110930-527>>.

2. "Report to Congress, Pursuant to the FY99 Appropriations Bill," February 1, 1999, *AIT*, <<https://web-archive-2017.ait.org.tw/en/19990226-report-to-congress-pursuant-to-the-fy99-appropriations-bill.html>>.

disproportionate effect, which is the use of limited resources to achieve one's own strategic goals and highlights the importance of its psychological effects.

In terms of practical application, asymmetric warfare focuses on avoiding confrontation with the enemy's strong points. After weighing the relative postures of both sides, it selects the enemy's weak points and attacks them strongly head-on. The so-called weakness is a certain weak point where a country or military cannot withstand an opponent's attack by any means and any action. This blow can weaken the war potential or combat effectiveness of the country or the army and dampen its fighting spirit. A country should make appropriate use of its own strengths (relative advantages), find out the enemy's fatal weaknesses and the gaps between the two sides, and then use critical strengths to attack the enemy's weaknesses, to achieve a dominant position and successful results.



Figure 4. A Harpoon Missile Launched by a Submarine

Source: U.S. Navy, "Harpoon launched by submarine," April 1, 1983, *Wikipedia*, <https://zh.wikipedia.org/zh-tw/AGM-84%E9%AD%9A%E5%8F%89%E5%8F%8D%E8%89%A6%E9%A3%9B%E5%BD%88#/media/File:Harpoon_launched_by_submarine.jpg>.

In Taiwan, the National Military Dictionary defines asymmetric warfare as “operations conducted with asymmetric means, non-equivalent forces, and non-traditional methods, aiming to avoid the enemy’s strong points and attack the enemy with appropriate tactics and combat equipment [...] thereby changing the outcome of the war.” In addition to emphasizing that the Republic of China (ROC) will not engage in an arms race with the PRC in the face of its huge military threat, the *2017 National Defense Report of the Republic of China* states that it will apply asymmetric capability to achieve relative advantage for its armed forces and ensure that the “resolute defense, multi-domain deterrence” military strategy is implemented. It also officially listed “combat power protection, coastal decisive victory, and beach-to-shore annihilation of the enemy” to be the strategy of the formal military build-up. It also emphasizes the need to build “unexpected equipment and tactics by the PLA based on asymmetric “innovation/asymmetric combat power,” making it difficult for the enemy to predict or prevent an attack, and develop precision strike weapons as the priority.³

Throughout that time, all military services were specifically required to develop various asymmetric tactics and weapons systems: the Air Force developed “ski jump” tactics, the Navy micro stealth attack boats, and the Army Tactical Missile System (ATACMS) land-based tactical missile systems. During his tenure, Chief of the General Staff Lee Hsi-min proposed the Overall Defense Concept (ODC), vigorously promoting asymmetric warfare, dividing Taiwan’s defense force into basic combat powers and asymmetric combat powers, and calling for the development of related weapons projects, a plan which caused lively discussion. After he left office, the ODC did not appear in the *2021 National Defense Report*, leading the outside world to conclude that the Ministry of National Defense no longer had such a concept or had abandoned asymmetric warfare entirely.

In reality, although Taiwan’s national defense report did not include the term ODC, the usage of innovation and asymmetric warfare still figured in it. There are also different opinions on whether the above-mentioned weapons systems constitute

3. R.O.C. Ministry of National Defense, *2017 National Defense Report* (Taipei: Ministry of National Defense, 2017), pp. 86-87.

asymmetric combat capabilities. It is even believed that such traditional systems are labeled as asymmetric solely for the purpose of securing defense budgets. For example, the M1A2 main battle tank purchased by the Army was misrepresented as an asymmetric capability. Meanwhile, China has adopted gray zone tactics against Taiwan in recent years; a tactic against which missiles and small ships are ill-suited to respond and counter. Nor can they have a deterrent effect, which calls into question the development of asymmetric combat power.



Figure 5. President Zelenskyy and Members of the Ukrainian Armed Forces

Source: President of Ukraine Official website, “Робоча поїздка Президента України на Миколаївщину та Одещину,” June 18, 2022, *Wikipedia*, <https://commons.wikimedia.org/wiki/File:%D0%A0%D0%BE%D0%B1%D0%BE%D1%87%D0%B0_%D0%BF%D0%BE%D1%97%D0%B7%D0%B4%D0%BA%D0%B0_%D0%9F%D1%80%D0%B5%D0%B7%D0%B8%D0%B4%D0%B5%D0%BD%D1%82%D0%B0_%D0%A3%D0%BA%D1%80%D0%B0%D1%97%D0%BD%D0%B8_%D0%BD%D0%B0_%D0%9C%D0%B8%D0%BA%D0%BE%D0%BB%D0%B0%D1%97%D0%B2%D1%89%D0%B8%D0%BD%D1%83_%D1%82%D0%B0_%D0%9E%D0%B4%D0%B5%D1%89%D0%B8%D0%BD%D1%83_50.jpg>.

At the same time, Russia invaded Ukraine by conventional means, and the inferior Ukrainian military defied the stronger Russian military in a relatively short period of time, drawing attention from the outside world. In the first stage of the war, the Ukrainian military used urban warfare and guerrilla tactics to prevent the Russian military from quickly occupying territory and establishing a foothold, stalling the Russian military's progress and causing immense logistical challenges for the invading forces. In the end, Russia gave up the operational target of Kyiv and instead attacked from the east and south of Ukraine. Ukraine's asymmetric approach obtained the best results possible under the prevailing conditions. Therefore, asymmetric warfare is not only a choice of weapons development, but also the application and choice of strategic situations, tactics, scientific and technological capabilities, as well as combat space and time.

III. Differences and Cooperation Between the United States and Taiwan Regarding Asymmetric Combat Capabilities

As mentioned earlier, the United States and Taiwan have similar definitions of symmetric operations, but they have different views on which weapons platforms constitute asymmetric combat capabilities. For example, as early as 2008, when the American defense expert William Murray proposed the concept of the "Porcupine strategy," he was accused of seeking to write off the Navy and Air Force because he argued that the Navy and Air Force would be wiped out by China. Murray, therefore, argued that Taiwan should strive to build strong ground forces, which, along with missiles, would compel advancing PLA forces to retreat after sustaining heavy losses.⁴ Such statements and policy proposals were strongly opposed by the Taiwan Navy and Air Force at the time. In the end, President Ma Ying-jeou was unable to resist these pressures, and the "Porcupine strategy" did not become part of the national defense policy.

4. William S. Murray, "Revisiting Taiwan's Defense Strategy," *Naval War College Review*, Vol. 61, No. 3, Article 3, Summer 2008, *Digital Commons*, <<https://digital-commons.usnwc.edu/nwc-review/vol61/iss3/3>>.

The *2017 National Defense Report's* discussion on planning for asymmetric force buildup lists many systems, but no submarines. Future force buildup planning must break free from the traditional concept of building equal military power and concentrate the use of national defense resources and technology on key capabilities to build a substantive deterrent force and effective counter-attack capability. As such, future force buildup plans should include the following:⁵

- Focus on the development of precision strike weapons to increase overall combat efficiency.
- Acquire information, communications and electronic countermeasure equipment and review the employment of innovative tactics to gain battlefield superiority in information operations and electronic warfare.
- The Army should continue to acquire high-performance anti-armor missiles and portable short-range air defense missiles to enhance littoral attack-repelling capability.
- Continue to acquire light, fast and multiple-purpose high-performance warships.
- Acquire new smart mines and fast minelayers to raise overall minelaying effectiveness to effectively delay and retard an enemy's operations.
- Develop unmanned aerial vehicles to increase joint intelligence, surveillance and reconnaissance effectiveness and create an advantageous situation for joint air defense operations.

The *2017 National Defense Report* does not mention submarines as part of an asymmetric force buildup. According to the official view of the United States at the time, Taiwan should not spend its defense budget on the purchase of large weapons platforms, because in wartime, these systems would be quickly destroyed and would not be able to deter the superior PLA. Instead, Taiwan should develop small, lethal, and numerous asymmetric combat systems to achieve combat effectiveness in wartime. In other words, the United States hopes that Taiwan will purchase more ammunition, rather than large platforms such as fighter aircraft, large main battle

5. ROC Ministry of National Defense, *2017 National Defense Report*, pp. 86-87.

tanks, and warships. In fact, the U.S. arms sales policy to Taiwan at that time focused on ammunition and systems rather than large platforms. The U.S. also apprehended the theft of advanced American technology – often found on the larger platforms – by China through espionage. China's theft and reproduction of such technologies would narrow the gap in military technology between the United States and China and thereby increase the military threat to the United States.

Furthermore, China's growing military threat against Taiwan means that the period from the purchase, transfer, training and deployment of a large platform may take too much time to have an operational effect on the situation. In addition to the locations where they are parked or stored, large platforms must also benefit from evacuation and cover facilities to preserve their combat utility. If they are expanded or have insufficient defenses against high-yield explosions, they will become the targets of the Chinese Rocket Force's tactical missiles, long-range rockets, air-launched and sea-launched cruise missiles.

The Taiwanese military holds a different view on all this, as in addition to combat, how to modernize its military equipment, execute various naval and air patrol missions in peacetime, and prevent Chinese military raids in the Taiwan Strait are also important tasks. If traditional weapons and equipment are not updated, combat effectiveness will be greatly affected. For example, although Taiwan has 1,500 tanks, most of them are old. The latest ones are the old M60A3 tanks purchased from the United States, as well as indigenously made tanks that integrate American and Taiwanese technology. Destroying PLA Type 90 or Type 99 tanks is no easy task. Although Taiwan has armed helicopters like the AH-1W and AH-64D, as well as many anti-tank missiles, the value and importance of main battle tanks should not be ignored. Weapons that have no advantages in conventional combat can only achieve results if they are used in asymmetric combat with the advantages of time, tactics, and combat environment.

The same reasons and situation apply to Taiwan's artillery. Whether it is towed or self-propelled, Taiwan's active artillery guns are very old. The United States has opposed several arms sales proposals to Taiwan. For example, the M109A6 self-

propelled artillery provides digital combat functionality,⁶ but after more than 20 years, it remains unavailable to Taiwan. The Army has also sought to procure the towed M777, which has affected the modernization of the Taiwanese Army's artillery operations. Although the United States is willing to sell the HIMARS rocket system,⁷



Figure 6. The HIMARS Is a Good Option for Asymmetric Warfare

Source: U.S. Army, "HIMARS - missile launched," January 11, 2005, *Wikipedia*, <https://zh.wikipedia.org/zh-tw/M142%E9%AB%98%E6%9C%BA%E5%8A%A8%E6%80%A7%E5%A4%9A%E7%AE%A1%E7%81%AB%E7%AE%AD%E7%B3%BB%E7%BB%9F#/media/File:HIMARS_-_missile_launched.jpg>.

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6. Mike Yeo, "US Government Clears \$750 Million Artillery Sale to Taiwan," *Defense News*, August 6, 2021, <<https://www.defensenews.com/global/asia-pacific/2021/08/06/us-government-clears-750-million-artillery-sale-to-taiwan/>>.
 7. David Brunnstrom & Mike Stone, "U.S. State Department Approves \$1.8 Billion in Potential Arms Sales to Taiwan-Pentagon," *Reuters*, October 22, 2020, <<https://www.reuters.com/article/usa-taiwan-arms-idUSKBN27706Y>>.

and Taiwan is also studying how to increase the range of its domestically produced RT-2000 multiple rocket launch system, it will ultimately be difficult to replace the use and value of traditional artillery.

The United States hopes Taiwan will abandon traditional platforms and adopt an asymmetric warfare concept based on ammunitions and systems. However, it is impossible to replace all the traditional weapon systems originally possessed by Taiwan's military and require substantial updates in a short time. This will cause Taiwan's military to face the dilemma between modernization and reorganization of armaments and building asymmetric forces. Fortunately, the United States has changed its arms sales policy towards Taiwan and no longer insists on selling only what the United States considers to be asymmetric combat capabilities. This also enables Taiwan to consider the development of arms modernization and asymmetric warfare. In addition, Taiwan has overcome challenges in arms procurement through a greater focus on an indigenous national defense policy, which has, to some extent, resolved the dilemma between arms modernization and the development of asymmetric combat capabilities.

IV. Asymmetric Use of Submarines

People outside the military have different views on whether submarines are traditional weapons or an asymmetric capability. As mentioned above, the Army defines main battle tanks and HIMARS as asymmetric combat platforms. Although opinions differ on the matter, the main battle tank is a type of asymmetric combat capability. For example, the use of an array of tanks along a coastal area to attack landing ships differs from the traditional tactic of using tank maneuvers and firepower to quickly destroy enemy positions on land.

Still, limiting the world's number one main battle tank to the function of anti-landing warfare would arguably be a misuse of budgets and capabilities. However, if enemy landing troops come ashore and Taiwan uses its main battle tank to confront enemy tanks during the land attack and defense, it will be a symmetrical operation.

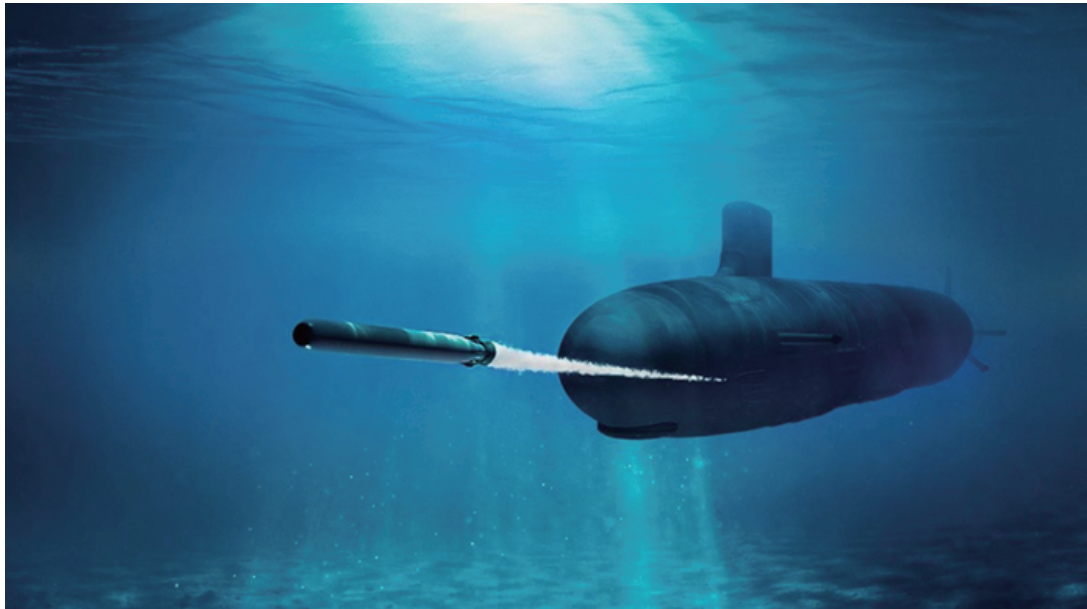


Figure 7. A MK48 Torpedo Launched From a Submarine

Source: Mark Buckton, “U.S. Announces Sale Of Torpedoes To Taiwan,” *The Taiwan Times*, May 21, 2020, <<https://thetaiwantimes.com/u-s-announces-sale-of-torpedoes-to-taiwan/>>.

The thinking for Taiwan’s submarines is similar. Submarines are generally used in anti-submarine warfare to detect enemy submarine activity in advance, then hunt and destroy them. It can serve as an underwater reconnaissance force for aircraft carrier strike groups, patrolling around and detecting targets early to prevent an aircraft carrier from being attacked by an underwater force. Since strategic submarines can already carry medium- and long-range ballistic missiles or cruise missiles, submarines can also be used to attack land targets. If strategic nuclear submarines carry nuclear warheads, they can become an important option for nuclear strategic weapons, hiding under the sea to attack strategic targets on land.

American scholar Bonnie Glaser also expressed doubts about whether submarines have asymmetric combat capabilities. She argues that Taiwan currently needs to adopt a “Porcupine Strategy” to make itself difficult to capture and control. Such “asymmetric defense” means acquiring many small and cheap weapons, making it difficult for the PLA to land troops – and even if it succeeds, it will be difficult to make progress in the homeland of Taiwan. In her view, weapons such as submarines

and fighter jets are not suitable as “asymmetric combat power” because they are not only of little use in an “asymmetric strategy” but also require a long time to build.

With limited defense resources, these weapons are indeed very expensive and will consume a sizable share of the budget.⁸ And yet, notwithstanding their high cost, these platforms do have asymmetrical value. For example, because a submarine’s silent underwater stealth makes it difficult to detect, it can launch surprise attacks on an enemy. The range of underwater deployment of submarines can be quite wide. In addition, submarines can stay submerged for at least 30 or even 60 days. Long-term deployments can deter enemy surface ships; in addition, submarines also have the advantage of independent operations – e.g., they can conduct hit-and-run attacks on ships and submarines, one of the key ingredients of asymmetric warfare.

Submarines can also conduct minelaying operations, firing mines with torpedo devices, and laying mines in important enemy ports and waterways to hinder the movement of enemy surface and underwater ships. Finally, traditional submarines can also carry out infiltration and special operations. Submarines are used to carry special operations troops to a target area, whereupon small boats are used to infiltrate enemy territory and perform various special operations tasks. The combat missions mentioned above have precedents in World War II and subsequent conflicts. For example, U.S. Navy SEALs use submarines to conduct special operations missions.

Basically, the above-mentioned combat missions performed by submarines can be regarded as functions that were envisioned when submarines were originally designed and, therefore, cannot be included in the scope of asymmetric warfare. In terms of the combat functions and applications of Taiwan’s submarines, they mainly designate several ambush areas to target PLA ships and conduct sudden attacks on large vessels part of an aircraft carrier battle group. Since an aircraft carrier battle group is accompanied by frigates and destroyers, a submarine can only hit once, otherwise it will be hunted after it is located. It can be assumed that if China uses an

8. “Interview with Bonnie S. Glaser: Taiwan Should Strengthen Asymmetric Defense,” *Deutsche Welle*, March 14, 2022, <<https://p.dw.com/p/48Qk9>>.

aircraft carrier battle group to perform anti-access and area denial missions in waters east of Taiwan, in addition to the United States using an advanced aircraft carrier battle group to compete with it, the United States' nuclear-powered attack submarines will become a deterrent power to counter a Chinese aircraft carrier.

Since the operational range of Chinese aircraft carriers is far greater than the range of Taiwan's shore-based anti-ship missiles; the same applies to the wolf pack tactics of missile boats, which will also be affected by distance and missile range. If submarines can be used to hide in undersea ambush areas, heavy torpedoes and submarine-launched anti-ship missiles can be used. Using ship-to-ship missiles to attack large Chinese ships is tantamount to an asymmetric use of tactics. If U.S., Japanese and Taiwanese submarines set up ambush areas in the Bashi Strait, the eastern waters of Taiwan, the Miyako Strait and the Areas of Responsibility (AOR) of Taiwanese, American and Japanese submarines, it would form an important undersea defense front line and pose a threat to Chinese submarines, ships, and aircraft carriers.

In the past, submarines were regarded as offensive platforms and did not meet the U.S. specifications for selling defensive weapons to Taiwan. However, as far as Taiwan is concerned, it is unlikely to actively provoke China to cause a war or use submarines to attack important Chinese targets and ships in peacetime. For Taiwan, submarines will be used for defensive operations to counter attacks by China's submarines and large ships. During the Bush Jr. administration, the U.S. government was willing to sell submarines to Taiwan because it recognized the defensive purposes of submarines. This use is naturally different from the traditional submarine attack model and can therefore be called an asymmetric combat capability. Moreover, in the face of large-scale naval and underwater forces, it is difficult to achieve results through traditional combat. Taiwan must use unexpected and innovative methods to perform various combat missions. In terms of naval strength, submarines, by virtue of being difficult to track underwater, are the best choice for Taiwan's asymmetric warfare.

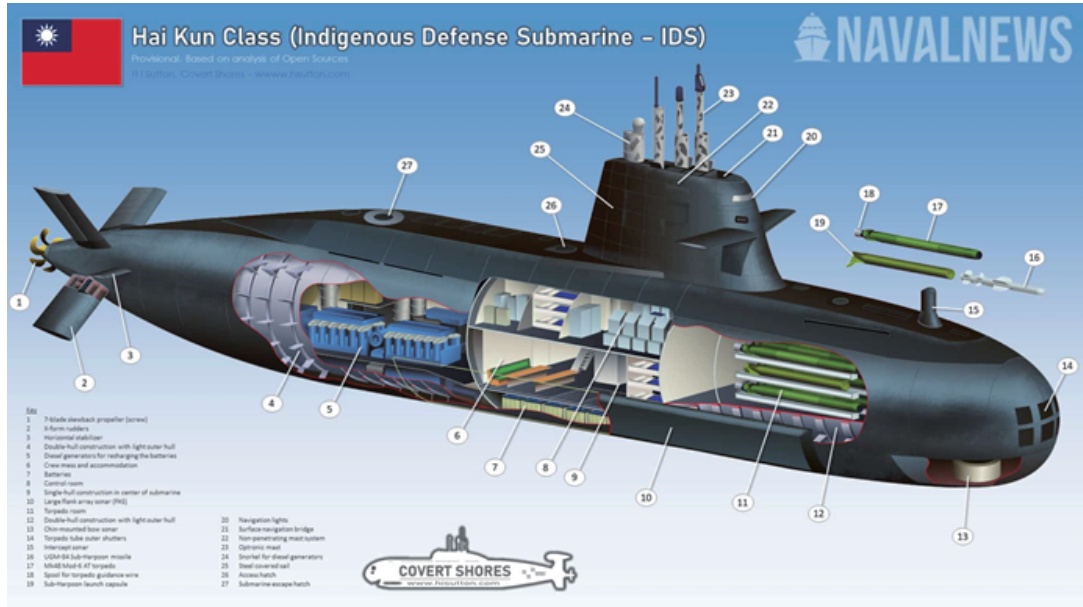


Figure 8. The Structure of the Hai Kun-Class Submarine

Source: H. I. Sutton, “America Providing Advanced Systems for Taiwan’s New Submarine,” *Naval News*, October 11, 2023, <<https://www.navalnews.com/naval-news/2023/10/america-providing-advanced-systems-for-taiwan-new-submarine/#prettyPhoto>>.

V. Conclusion

Based on the military strategy of “resolute defense, multi-domain deterrence,” the Taiwanese military has developed and strengthened an innovative/asymmetric capability and will use equipment and tactics that the PLA cannot easily predict or protect against. Weapons systems development will proceed in the direction of “mobility, stealth, fast speed, low cost, abundance, minimum damage, and high effectiveness.” This will be the focus of future military investment, and the priority of armaments acquisition will be reviewed to build multi-layered defenses and deterrence capabilities, thus preventing a military invasion of Taiwan by the PRC.

With the assistance of many countries, the first phase of Taiwan’s indigenous submarine has finally been completed. Although its performance and combat capabilities cannot be compared with the nuclear-powered attack submarines of advanced countries such as the United States, Taiwan’s submarine’s missiles,

torpedoes, sonar capabilities and combat systems are comparable to other countries' advanced submarines. It is obvious that the number of Taiwan's submarines cannot compete with those deployed by China, nor can it carry out nuclear attacks on China's strategic targets. Rather, Taiwan's submarines are mainly for defensive purposes. The aim is to use submarines to defend the territorial waters around Taiwan and prevent China from attacking Taiwan's land from the sea or conducting landing operations. It can be seen from the United States' open sale of submarine "red zone" equipment – technologies for which there are no domestic research and development capabilities and therefore assistance from foreign countries – that the United States also recognizes the asymmetric value of Taiwan's submarines. Once Taiwan's submarine fleet becomes operational, the United States' underwater defense force in the Indo-Pacific will benefit from burden-sharing. Submarines have their own combat functions, but with Taiwan's military disadvantage, it is necessary to think creatively and asymmetrically about the use of various conventional weapons to surprise the enemy and achieve combat effectiveness.