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Taiwan's Security

An Intertwined Knot

Dr. Wu Shang-su



Since 1949, the Taiwan Strait has been a potential flashpoint for conflict—something especially true in the last decade due to the shifting balance of the forces between the militaries on either side. Traditionally, Taiwan relies on the geographic barrier of the Strait and support from the United States—through arms sales and via the latent threat of potential military intervention—to balance against strategic pressure from China. However, Beijing enjoys both asymmetrical and symmetrical

military advantages. Asymmetrically, the People's Liberation Army (PLA) has expanded the arsenal of standoff firepower with ballistic missiles, rockets, cruise missiles, and air-to-surface missiles in the last three decades. Therefore, the whole island of Taiwan is vulnerable to missile strikes from China.¹ Combined with other capabilities—such as surveillance satellites and submarines—these standoff weapons underpin the PLA's antiaccess/aerial-denial (A2/AD) strategy to counter US military deployments in the region.

Symmetrically, Beijing has substantially modernized its conventional military assets; the PLA Navy (PLAN) boats new surface and underwater fleets could be used to block maritime access to Taiwan and establish sea control, an indispensable condition for amphibious invasion.² The PLA Air Force (PLAAF) and the PLAN Air Force have each strengthened their fighter wings with new indigenous and Russian models, backed by aerial warning and command system and aerial refueling platforms to achieve the air superiority necessary for air strikes and air cover for a possible invasion of Taiwan.³ Finally, both the PLAAF and PLAN have enlarged their airborne and amphibious capacities for projecting forces across the Strait.⁴

In contrast, Taiwan's defenses have fallen into inferiority. Air defense, sea denial, and antilanding measures

have been the core of Taipei's island defense strategy for decades. Still, related capabilities undermine the developments on the other side of the Strait.⁵ Taiwan's fighters and surface-to-air missiles (SAM), and related surveillance facilities are the backbones to prevent airstrikes from China. But Taipei's airbases, radars, SAM batteries, and other air defense facilities have become the main targets of standoff firepower from the Mainland. Consequently, the loss of Taiwan's air defense capacity could be demolished in the first wave of Chinese attacks.⁶ If Chinese Special Forces penetrated Taiwan in advance of an attack, then this would represent another serious threat to Taiwan's air defense. Taiwan's air defense capabilities—especially the fighters—have come to occupy a significant portion of the country's defense budget. There are severe doubts about the wisdom of military spending priorities.⁷

Regarding sea denial, Taiwan's fast attack craft and onshore launchers of antiship cruise missiles are the mainstays to deter the PLAN's surface vessels, which would be essential for an amphibious invasion to capture the island.⁸ However, these defenses may also become the targets of China's standoff firepower, and airstrikes after the neutralization of Taiwan's air defenses. Taipei possesses four destroyers and 22 frigates, but these assets could be vulnerable to Beijing's A2/AD

firepower and may not have much capacity left for sea denial.⁹ Antilanding may be more realistic to achieve because of Taiwan's possible quantitative superiority in terms of conventional forces (although the PLAN's amphibious capacity is increasing, for the foreseeable future, it will be limited). However, Taiwan's antilanding capability significantly relies on conscription, which is how the island can assemble a large reserve of soldiers. Yet conscription has been cut to four months of basic training without being deployed to regular units, raising questions about whether such inexperienced reserves could form the adequate mobilized units to accomplish antilanding missions. Regular units also face a shortage of soldiers due to the lack of conscripts.¹⁰ Sabotage by Chinese Special Forces could further disrupt antilanding forces' preparation, or even paralyze the chain of command.

Since 2016, the Tsai Ing-wen administration has pursued a military build-up, with a focus on defensive capabilities. For air defense, Taipei has procured 66 F-16C/B Block 70 fighters, Patriot Advanced Capability-3 and FIM-92 SAMs, and other equipment from Washington, along with indigenous funding projects such as the Tien-Kung series SAMs and AT-5 advanced trainers/light fighters.¹¹ Such investment certainly strengthens the capacity and capabilities of air

defense. Additionally, the introduction of the indigenous Wan-Chien, American air-to-ground (AGM) missiles such as the AGM-154 and AGM-88, AGM-84 land-attack missiles, land-based Hsiung-Fung 2E cruise missiles, the Army Tactical Missiles, and other standoff munitions allow Taiwan to attack targets (whether standoff fire-power airbases or other military facilities) in Fujian province and even farther inland.¹² Such offensive operations lower the pressure on Taiwan's air defense.

However, the airbases' vulnerability of Taiwan is unchanged, meaning that Taiwanese fighters may not have a chance to take off or return to bases after flying their first sorties. Putting fighters in the shelters in Eastern Taiwan has been a solution for three decades, but it comes at the cost of reducing air defenses and limiting other aerial operations. There is also a risk that China may develop bunker-buster munitions. Taipei's offensive capabilities thus present a dilemma: a preemptive strike is militarily ideal for the most significant impact, but it may cause a "troublemaker" label by the international community with a risk of losing the support of third parties, especially the United States. Suppose Beijing launches the first salvo of attacks. In that case, most of Taiwan's fighters will be occupied with mere survival and air defense—if not entirely neutralized—which would

result in a missed opportunity to use offensive capabilities to relieve pressure on Taiwan's air defenses.

Taiwan's naval modernization program is ambitious. It covers a broad spectrum of vessels, including Tuo Chiang-class stealth corvettes, submarines, frigates, landing platform docks, high-speed minelayers, submarine rescue ships, and mine countermeasure vessels. These various projects reflect the Tsai administration's intention of developing the indigenous defense industry with a balanced naval strategy aimed at both sea control and sea denial.¹³ Although sea control-oriented assets, such as frigates and amphibious transport docks, are valuable in peacetime, their prospects for survival in the face of the Chinese A2/AD fire-power are doubtful. As for the sea denial-oriented vessels, their survival during wartime would be better but far from guaranteed. The limited length of the Taiwanese coastlines could be studied by the PLAN in advance to know the "hideouts" of Taiwanese vessels, which would be vulnerable to Chinese antiship cruise missiles (ASCM) and other weapons.¹⁴ The submarines with the highest stealth level constitute Taiwan's strategic reserve, but China's active deployment of underwater sensors may create constraints on their operations.¹⁵ Besides, transforming an indigenous project of defense manufacturing into a credible fighting force is

expensive, time-consuming, and an uncertain endeavor. Considering the fast pace of PLAN naval construction, time is not on Taipei's side when it comes to maritime projects.

On land, various new procurements have added multiple layers of defense. These include M1A2T main battle tanks (MBT), onshore Harpoon and Hsiung-Fung series ASCMs, indigenous infantry fighting vehicles, multi-launch rocket systems, AH-64E and AH-1W attack helicopters, FGM-148 and BGM-71 antitank missiles, and UH-60M utility and CH-47D transport helicopters.¹⁶ The ASCMs, rockets, and other munitions can directly sink the PLAN amphibious transport docks. The attack helicopters would engage remaining landing vehicles and vessels approaching coastlines and any Chinese airborne troops. The M1A2T MBTs have better armor and firepower than the old M-48Hs and M-60A3s. Along with the infantry and artillery firepower, these units would thwart attempts to form beachheads by Chinese amphibious forces.¹⁷ Utility and transport helicopters could rapidly deploy troops for reinforcement. Tactically, warfare in this stage of fighting would take place under conditions of one side enjoying air superiority, which means that the outcome of antilanding operations depend on how many Taiwanese SAMs and other air defenses remained intact. The issues of conscription and recruitment of

voluntary soldiers will adversely impact Taiwan's ability to repel amphibious landings if not adequately addressed.

Although Taiwan's military modernization in recent years has not entirely removed the weaknesses in its national defenses, it is essential to remember that security dynamics in the Strait are not just a question of bilateral relations. Given Taipei's geographic location on Taiwan's island, operations at the north end of the island are unavoidable. Yet US military bases in Okinawa would face the north flank of any Chinese military operations against Taiwan in this area. If Beijing decides to control the conflict scale, this exposed northern flank would be a potential vulnerability. On the other hand, if China attempted to neutralize the threat from Okinawa with the A2/AD firepower, warfare will naturally go beyond the Strait. In such a scenario, Taiwan's enhanced defenses would pose a problem for Beijing by prolonging the island's military resistance and allowing a longer time for Beijing to succumb to its exposed northern flank. Economic, political, and other nonmilitary policy tools from mainland China would be more effective in dealing with Taiwan and less likely to provoke an intervention from the United States. Threats of the use of force are likely to remain useful only insofar as they can help set a "red line" to deter Taiwan from declaring

de jure independence. In this sense, threats of military force can be used to coerce but not compel. As long as Beijing does not feel desperate, at least, a high-cost military option - even with some chance of victory – must be judged unfavorable in contrast to alternatives such as economic pressure.

If viewed in this wider context, one can see that Taiwan's enhanced military defenses have increased its capacity and capabilities to resist Chinese military threats, despite some drawbacks, and has thus contributed to the cross-Strait security's stability. ■

Dr. Wu Shang-su

Dr. Wu is a research fellow in the S. Rajaratnam School of International Studies (RSIS), Nanyang Technological University.

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Notes

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³ Andreas Rupperecht, *Flashpoint China: Chinese Air Power and Regional Security* (Houston: Harpia, 2016), 33–40; and "The Military Balance 2020," IISS, 232–33, 266, <https://www.iiss.org/>.

⁴ "Asia-Pacific Regional Security Assessment 2019," IISS, 193–94, <https://www.iiss.org/>; and *Military Balance 2020*, 263–65.

⁵ "National Defense Report 2017" (Taipei: Ministry of National Defense, 2017), 67.

⁶ Michael J. Lostumbo, David R. Frelinger, James Williams, and Barry Wilson, *Air Defense Options for Taiwan: An Assessment of Relative Costs and Operational Benefits* (Santa Monica, CA: RAND, 2016), 1–20.

⁷ Lostumbo et al., *Air Defense Options for Taiwan*, 23–25.

⁸ "Military Balance 2020," 312.

⁹ "Military Balance 2020," 312.

¹⁰ Paul Huang, "Taiwan's Military Is a Hollow Shell," *Foreign Policy*, 15 February 2020, <https://foreignpolicy.com/>.

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¹⁴ Shang-Su Wu, “No, Stealth Missile Corvettes Won’t Help Taiwan,” *The Diplomat*, 9 January 2015,

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¹⁵ H.I. Sutton, “China Builds Surveillance Network In South China Sea,” *Forbes*, 5 August 2020, <https://www.forbes.com/>.

¹⁶ “Military Balance 2020,” 312; and SIPRI Arms Transfers Database, Stockholm International Peace Research Institute, 1 February 2021, <https://armstrade.sipri.org/>.

¹⁷ “Military Balance 2020,” 311–12.