



Taiwan's Military Strategy and Preparations for Defense Operations

Strengthening Resilience against a Possible Chinese Invasion

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Chapter

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A U.S. Air Force C-17 transport aircraft carrying a delegation of U.S. senators arrives at Taipei Songshan Airport, June 2021 (Central News Agency)

War with New and Old Characteristics

When Russia began its invasion of Ukraine on February 24, 2022, the phrase “Today’s Ukraine is tomorrow’s Taiwan” spread across Taiwanese society, amplifying a sense of urgency about a Chinese invasion of Taiwan.¹ The day after the invasion began, Taiwanese President Tsai Ingwen stressed that “the situation in the Taiwan Strait is fundamentally different from the situation in Ukraine,” and urged the public not to be misled by false information intended to incite anxiety.² Nevertheless, two months later, Foreign Minister Joseph Wu made it clear that Taiwan was learning lessons from Ukraine.³ Similarly, Taiwanese Vice President Hsiao Bikhim stated after assuming office in May 2024 that “we are learning from Ukraine’s defense.”⁴

In 1991, the Taiwanese government decided to abandon its armed forces’ mission of “Retaking the Mainland” and pivot to a “Defensive Posture” military strategy.⁵ Since then, successive leaders have explored the optimal state of deterrence against China, which continues to modernize its military power, adjusting the operational concept of Taiwan’s military strategy to match the stance of their administration’s policy toward China.⁶ However, having witnessed the reality of international politics—where deterrence has proven to be ineffective against a materially superior Russia that has decided

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- 1) “今日烏克蘭明日台灣？專家教你破解共軍彈道飛彈封台謠言” [Ukraine today, Taiwan tomorrow? Experts debunk the myth that PLA ballistic missiles seal off Taiwan], 中央通訊社 [Central News Agency], February 25, 2022, <https://www.cna.com.tw/news/aip/202202255004.aspx>.
 - 2) [Taiwan] Office of the President, “出席成大「國家級船艦試驗水槽動土典禮」總統：強化船艦試驗能量 讓造船產業更有競爭力 成為國艦國造進步動力” [President attends the National Cheng Kung University’s “groundbreaking ceremony for the national-level ship testing tank”: Enhancing vessel testing capabilities and making the shipbuilding industry more competitive will be a driving force for promoting the domestic ship, domestically built policy], February 25, 2022.
 - 3) “Taiwan Learning Lessons from Ukraine’s Stout Resistance, Foreign Minister Says,” *Politico*, May 1, 2022, <https://www.politico.com/news/2022/05/01/taiwan-china-ukraine-invasionzakaria-00029186>.
 - 4) Kieron Monks, “Taiwan Learning from Ukraine to Prepare for Chinese Attack,” *iNews*, June 20, 2024, <https://inews.co.uk/news/world/taiwan-learning-ukraine-china-attack-3122942>.
 - 5) Igarashi Takayuki, “When Did the ROC Abandon ‘Retaking the Mainland’? The Transformation of Military Strategy in Taiwan,” *Journal of Contemporary East Asia Studies* 10, no. 1 (2021).
 - 6) Igarashi Takayuki, “Taiwan no gunji senryaku (1988–2016): Yokushi no arikata wo meguru shidosha tachi no hanmon” [Taiwan’s military strategy (1988–2016): Leaders’ worries over what deterrence should be like], *Toa*, no. 650 (August 2021), 76–83.

to change the status quo—has the Taiwanese government learned a lesson from Ukraine, which shares a similar asymmetry in power, and reconsidered its conventional deterrence-based military strategy?

The issue of Taiwan's security cannot be discussed without factoring in the United States. It is true that not having a military alliance with any other country puts Taiwan in the same diplomatically vulnerable situation as Ukraine. However, the United States did enact the Taiwan Relations Act as a national law immediately after severing diplomatic relations with Taiwan in 1979. This law provides for continued involvement in Taiwan's security, and its effectiveness was demonstrated during the Third Taiwan Strait Crisis of 1995–1996.⁷

Nevertheless, when U.S. troops pulled out of Afghanistan in 2021, it stirred up public opinion that “today's Afghanistan is tomorrow's Taiwan.”⁸ Then, when the United States made it clear that it would not send troops to Ukraine in response to the Russian invasion, the fear that the United States would abandon Taiwan, or the so-called “America Skepticism Theory” (疑美論, skepticism toward U.S. commitment), gained prominence in Taiwan.⁹

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- 7) Igarashi Takayuki and Kuroki Misato, “Today Ukraine, Tomorrow Taiwan? Analysis of China's Possible Invasion of Taiwan,” 中共解放軍研究學術論文集 [Essays on PLA Studies], no. 5 (May 2024): 125–130.
 - 8) “今日阿富汗明日台灣？民進黨團：不倫不類的類比” [Afghanistan today, Taiwan tomorrow? DPP caucus: Inappropriate analogy], 中央通訊社 [Central News Agency], February 25, 2022, <https://www.cna.com.tw/news/firstnews/202108170122.aspx>.
 - 9) “中共若攻台 陸軍退將：美國會保台灣 無需派地面部隊” [If China invades Taiwan – Retired army general: United States will defend Taiwan, with no need for the dispatch of ground troops], 中時新聞網 [China Times Net], March 9, 2022, <https://www.chinatimes.com/realtimenews/20220309003691-260407?chdtv>. According to an opinion poll held in Taiwan in mid-March 2022, the percentage of respondents who answered “Very likely/somewhat likely” to the question “How likely do you think the United States will send troops to defend Taiwan, if China invades?” dropped sharply from 65% in the previous survey in October 2021 to 34.5%, while that of those who answered “Somewhat unlikely/totally unlikely” soared from 28.5% to 55.9%. The March poll also showed that 43.1% of the respondents answered “Very likely/somewhat likely” to the question “How likely do you think Japan will send its Self-Defense Forces to defend Taiwan, if China invades?” (財團法人台灣民意基金會 [Taiwanese Public Opinion Foundation], “俄烏衝突、兩岸危機與台灣民主” [The Russo-Ukrainian conflict, the Taiwan Strait crisis, and Taiwan's democracy], March 22, 2022. The Mainland Affairs Council of the Executive Yuan of Taiwan notes that China has spread the phrase of “Ukraine today, Taiwan tomorrow” in Taiwan as part of its information manipulation efforts to stoke fear among the Taiwanese people (“陸委會：北京刻意操作今日烏克蘭明日台灣” [Mainland Affairs Council: Beijing deliberately engages in manipulation regarding Ukraine today, Taiwan tomorrow], 中央通訊社 [Central News Agency], March 16, 2022, <https://www.cna.com.tw/news/acn/202203160413.aspx>).

Although the United States has shown a commitment to defending Taiwan, albeit ambiguously, the fact remains that there are no U.S. military units stationed in Taiwan, and if China were to launch a surprise invasion, Taiwan would have to defend itself on its own until U.S. military reinforcements arrived.

In recent years, individuals in the United States—the country that holds the key to Taiwan’s security—have frequently sounded the alarm about the possibility of China invading Taiwan. Perhaps the most influential statement was made by Philip Davidson, commander of the U.S. Indo-Pacific Command, who testified before the Senate Armed Services Committee on March 9, 2021, that China could invade Taiwan within the next six years.¹⁰ Many experts and media outlets latched onto his statement, leading to widespread discussions and simulation exercises based on the assumption that China would forcefully invade Taiwan by 2027.¹¹

Recently, Taiwanese experts have also been participating in simulation exercises conducted overseas. The scenarios in these exercises assume that China will inevitably invade Taiwan. However, it is not easy to decipher how China, as the aggressor, will actually invade, nor can it be said that the scenarios in these frequent simulations necessarily correspond to China’s strategic thinking or operational plans.¹² On the other hand, Taiwan, as the side awaiting invasion, has the option of proactively and systematically preparing for defensive operations in anticipation of a Chinese invasion rather than waiting passively, and thus it is not difficult to follow the progress.

At the same time, most studies on lessons from the Russo-Ukrainian War tend to focus on China, while those that do focus on the Taiwanese side tend

10) United States Senate Committee on Armed Services, “Hearing to Receive Testimony on United States Indo-Pacific Command in Review of The Defense Authorization Request for Fiscal Year 2022 and The Future Years Defense Program,” March 9, 2021, 47–48.

11) Wargame simulations based on so-called Taiwan contingency scenarios have been conducted in Japan by the Japan Institute of International Affairs, the Cannon Institute for Global Studies, the Institute of Geoeconomics, and the Sasakawa Peace Foundation, among others, and in the United States by the Center for Strategic International Studies and other think tanks.

12) A number of wargame simulations are based on scenarios in which China launches preemptive strikes on United States Forces Japan (USFJ) bases and other facilities to prevent U.S. intervention. However, this paper focuses on China’s assertion that reunification with Taiwan is an issue of internal affairs and bases its analysis on the premise that China would not choose to launch attacks on USFJ bases and other facilities in the event of a Taiwan invasion, in an attempt to avoid sparking a diplomatic problem.

to either conclude their findings by sounding the alarm about a Chinese invasion of Taiwan,¹³ or have the character of a policy report, emphasizing recommendations for building up Taiwan's military capabilities.¹⁴ These recommendations, however, are very rarely reflected in the development of Taiwan's military forces. This is because, although Taiwan relies on the United States for the majority of its major equipment, such as tanks, destroyers, and fighter aircraft, the United States does not always allow Taiwan to purchase the equipment it requests based on its operational constructs, and conversely, the United States sometimes provides Taiwan with equipment it does not request.¹⁵ Unable to procure equipment as planned, Taiwan's military often finds that its future operational constructs

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- 13) 王立 [Wang Li] and 林秉育 [Lin Ping-yu], 再談阿共打來怎麼辦：從烏克蘭戰場看台海局勢 [Discussing again what we should do in the event of a Chinese invasion: Looking at the Taiwan Strait situation through the lens of the Ukrainian battlefields] (Locus Publishing, 2024); Matsuda Yasuhiro, Fukuda Madoka, and Kawakami Yasuhiro, eds., “*Taiwan yuji*” *wa yokushi dekiru ka: Nihon ga torubeki senryaku to wa* [Can a “Taiwan contingency” be deterred? What strategy Japan should adopt] (Keiso Shobo, 2024).
 - 14) Jared M. McKinney and Peter Harris, *Deterrence Gap: Avoiding War in the Taiwan Strait* (Carlisle, PA: USAWC Press, 2024).
 - 15) For example, the concept of “Hard ROC 2.0” presented by the Center for Strategic and Budgetary Assessments (CSBA) of the U.S. in 2014 is a play on words referencing “Hard ROC” (固若磐石: Hard “rock”/“Republic of China”), which President Ma Yingjeou (May 2008–May 2016) emphasized when discussing the defense of Taiwan. With this concept, the CSBA recommended that Taiwan enhance its deterrence and improve its endurance in the event of a conflict (Jim Thomas, Iskander Rehman, and John Stillion, *Hard ROC 2.0: Taiwan and Deterrence Through Protraction* (Washington, DC: Center for Strategic and Budgetary Assessments, 2014). The doctrine for the defense of Taiwan is sometimes referred to as the “porcupine strategy,” which was proposed by William S. Murray, professor at the U.S. Naval War College, in his paper titled “Revisiting Taiwan’s Defense Strategy” (William S. Murray, “Revisiting Taiwan’s Defense Strategy,” *Naval War College Review* 61, no. 3 (Summer 2008)). Lee His-min, who served as Taiwan’s Chief of the General Staff from May 2017 to June 2019, reportedly integrated the concept of the “porcupine strategy” into Taiwan’s military strategy (“What Is Taiwan’s Porcupine Defence Strategy?: Russia’s Invasion of Ukraine Raises Questions about How Taiwan Could Fend Off China,” *Economist*, May 10, 2022, <https://www.economist.com/the-economist-explains/2022/05/10/what-is-taiwans-porcupinedefence-strategy>). However, the term “porcupine strategy” is not found in Taiwanese official documents and does not accurately describe Taiwan’s military strategy or operational concept, although it is used to illustrate the image associated with the defense of Taiwan (“軍事無禁區：積極性‘豪豬戰略’——臺灣應有的防衛設想” [No sanctuary for military issues: Proactive “porcupine strategy” – the defense concept Taiwan should adopt], 自由亞洲電台 [Radio Free Asia], December 28, 2023, <https://www.rfa.org/mandarin/zhuannlan/junshiwujinq/mil-12282023142437.html>).

amount to nothing more than pipe dreams. Accepting this reality, Taiwan has a tradition of developing operational constructs with the semi-detached attitude of “Fight with whatever you’ve got,”¹⁶ meaning that it is difficult to gain insight into its future combat strategies based on these unfulfilled recommendations.

In addition, it has been pointed out that one of the reasons Ukraine has been able to withstand Russian aggression for so long is its ability to mobilize reservists, which it has been strengthening since the invasion of Crimea in 2014.¹⁷ What is Taiwan’s reserve mobilization capability against the threat from China? To try to estimate the endurance of Taiwan’s forces, in addition to its reserve mobilization capability, we must consider Taiwan’s systems and organizational preparedness for defending Taiwan with total national mobilization as key factors.

Therefore, the first section of this chapter will summarize the conditions under which China would decide to invade Taiwan. Then, the second section will trace the evolution of Taiwan’s military strategy, which is a prerequisite for its defense operations, and clarify how Taiwan’s government and military have adjusted their military strategy in light of Russia’s invasion of Ukraine. The third section will introduce the defensive operation phases envisioned by Taiwan’s government and military in their scenarios of a Chinese invasion of Taiwan, and then identify trends in military force development according

16) [Taiwan] National Defense Report Editing Committee, Ministry of National Defense, 中華民國85年 國防報告書 [1996 ROC National Defense Report] (Li Ming Cultural Enterprise Co., Ltd., 1996), 54.

17) Ukraine made a drastic shift in its defense policy in response to the Russian invasion of the Crimean Peninsula of Ukraine in February 2014 and its forced annexation of the peninsula the following month. At the time, the country faced significant problems with its ability to conduct operations, and Kyiv pushed ahead with the rapid rebuilding of its military power. The country first embarked on mobilizing the general public, resuming the military service system in 2015. Some have pointed out that these measures are aimed at giving a certain amount of military experience to the public for future mobilization. On February 1, 2022, immediately before Russia’s aggression, Ukraine issued a presidential decree to abolish the conscription system by January 1, 2024, and to replace it with a military training program for the public to secure the capability to mobilize reservists (Koizumi Yu, “Ukraine no gunjiryoku: kysoren dai nii no gunjiryoku no genjo, kadai, tenbo” [Ukraine’s military power: The current situation of, challenges, and prospects for the second largest military power in the former Soviet Union], in *Taikokukan kyoso jidai no Roshia* [Russia in an era of great power competition], ed. Japan Institute of International Affairs (FY2021 Ministry of Foreign Affairs of Japan Foreign/Security Affairs Research Project, March 2022), 96–99).

to these phases. Finally, the fourth section will provide a general overview of Taiwan's national mobilization system before concluding with some insights into the future of the Taiwan Strait.

The Possibility of a Chinese Military Invasion of Taiwan

Postponement of the “Liberation of Taiwan”

In recent years, several analysts have raised concerns by pointing to specific years—such as 2027 or 2035—as possible dates for a Chinese invasion of Taiwan. However, the Chinese government and military have never explicitly stated an intention to launch a military invasion in any particular year.

It has now been 75 years since the political separation across the Taiwan Strait. During this time, China has not employed military force to achieve unification with Taiwan. Looking back, China was effectively defeated by Vietnam in the 1979 Sino-Vietnamese War, which is said to be the last major conventional conflict involving China.¹⁸ Deng Xiaoping—who had consolidated power within the Chinese leadership—initiated the modernization of national defense as part of his broader “Four Modernizations” policy. At the same time, China also shifted its Taiwan policy from forceful liberation to pursuing “Peaceful Unification.” This shift implicitly acknowledged that the Chinese People's Liberation Army (PLA) at the time lacked the capability to seize Taiwan by force and that rebuilding the PLA was an urgent strategic priority.

18) As the Sino-Soviet conflict surfaced in the late 1950s, Moscow withdrew the scientists and technicians it had dispatched to China. This coincided with the launch of the Great Leap Forward policy in China. The failure of the policy was followed by the Cultural Revolution, ushering in an era of political and social upheaval in the country. Meanwhile, the Soviet Union provided North Vietnam with large-scale military assistance in the Vietnamese War, which had intensified since the beginning of the 1960s. In other words, due to its stalled “modernization” efforts since the 1950s, the PLA was forced to fight an uphill battle against Vietnam, which had introduced state-of-the-art technologies from the Soviet Union in the Vietnamese War and accumulated actual combat experience.

In the years that followed, the Chinese military was gradually rebuilt, backed by sustained high economic growth under the reform and opening-up policy. Nonetheless, as long as the United States—with its overwhelming military superiority—remains committed to intervening in the Taiwan Strait, it remains highly difficult for China to successfully invade and occupy Taiwan by force. However, when *Kyodo News* published a report in May 2020 titled “Chinese military to conduct exercise staging takeover of Taiwan’s Dongsha (Pratas) Islands,”¹⁹ it drew public attention to the offshore islands administered by the Taiwanese government.²⁰ In early 2021, one expert sounded the alarm in connection with Chinese politics, claiming that Xi Jinping would likely decide to continue for a third term by demonstrating some kind of “achievement” on the Taiwan issue, possibly by seizing the Dongsha Islands to symbolically highlight the “Chinese Dream” during the 100th anniversary of the founding of the Chinese Communist Party (CCP) in July 2021 or the 20th National Congress of the CCP in 2022.²¹ However, any military action to seize outer islands in the South China Sea would certainly worsen relations between China and its neighbors with territorial and sovereignty disputes, inviting further U.S. intervention.²² In the end, Xi Jinping refrained from taking military action to seize the Dongsha Islands as a political “achievement” on the Taiwan issue.

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- 19) “Chugokugun ga tosa shoto no dasshu enshu wo keikaku minamishinakai de, Taiwan jikko shihai no yosho” [Chinese military to conduct exercise staging takeover of Taiwan’s Dongsha (Pratas) Islands, a strategic location under the effective control of Taiwan, in the South China Sea], *Kyodo News*, May 12, 2020.
 - 20) Momma Rira notes that as the PLA has been advancing into the South China Sea and then into the Pacific Ocean, Dongsha Island has increased in its geopolitical importance as a chokepoint located between the Taiwan Strait and the Bashi Channel, and that the island has gained more significance than Kinmen Island and the Matsu Islands in terms of the military strategy (Momma Rira, “Kinpakuka suru Taiwan honto shuhen josei [2]: Takamaru bashi kaikyō/tousato no chiseigakuteki juyosei” [Heightened tensions in the situation surrounding the main island of Taiwan part 2: Increasing geopolitical importance of the Bashi Channel and Dongsha Island], *NIDS Commentary* (June 16, 2020).
 - 21) Ogasawara Yoshiyuki, “Minamishinakai ‘Tousa Shoto’ ga Taiwan kiki no hakkaten ni naru” [The “Dongsha Islands” in the South China Sea will be a flashpoint for a Taiwan crisis], *Newsweek Japan*, February 18, 2021, https://www.newsweekjapan.jp/stories/world/2021/02/post-95651_1.php.
 - 22) Matsuda Yasuhiro, “Jotaika suru chutai kankei no kincho: Taiwan shakai no kozo henka to shukinpei seiken no senryaku tankan” [Normalized tensions in cross-strait relations: Structural changes in Taiwanese society and the Xi Jinping administration’s strategic shift], Akiyama Associates Society of Security and Diplomatic Policy Studies, <http://ssdpaki.la.coocan.jp/proposals/74.html>.

Nevertheless, even after Xi entered his third term, experts have continued to warn that he might attempt a military seizure of the Dongsha Islands as a way to demonstrate to the Chinese people significant progress in reunifying Taiwan with the mainland before his fourth election in 2027, even if such an action would clearly provoke strong condemnation from the international community.²³

It is true that there was once a two-term limit for the presidency of the People's Republic of China (PRC), so it was not entirely impossible that Xi might have sought to showcase a political "achievement" prior to the 20th National Congress of the CCP in 2022. However, this term limit was abolished at the National People's Congress in March 2018. In other words, whether Xi continues for a fourth or fifth term in the future, the institutional hurdle that existed prior to his third term has essentially disappeared. Therefore, there is no compelling need for him to take political risks to demonstrate tangible results before 2027.

After prevailing in the power struggle of the late 1970s, Deng Xiaoping presented three points as "major tasks for the 1980s" at the expanded meeting of the Political Bureau of the Central Committee of the CCP in August 1980: (1) to oppose hegemonism and strive to preserve world peace, (2) to return Taiwan to the motherland and realize the reunification of the motherland, and (3) to concentrate on economic construction, or the "four modernizations."²⁴ This was reiterated at the 12th National Congress of the CCP in September 1982, where it was formalized as the "Three Great Tasks of the 80s."²⁵ At this meeting, (1) and (3) were swapped, while the wording

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- 23) Momma Rira, "Annexation of Remote Islands Through Selective Use of Cognitive Warfare and Armed Force to Show the Chinese People Achievement Toward Taiwan Reunification," *SPF China Observer* (December 2023); One analysis indicates that Xi Jinping's intention to make a historic political achievement by 2027, the final year of his second term, and secure his third term lay behind the testimony by USINDOPACOM Commander Phillip Davidson in a Senate Armed Services Committee hearing in March 2021, where the commander mentioned the possibility that China would invade Taiwan within the next six years (Adela Suliman, "China Could Invade Taiwan in the Next 6 Years, Assume Global Leadership Role, U.S. Admiral Warns," *NBC News*, March 10, 2021).
 - 24) "党和国家领导制度的改革" [On the reform of the system of party and state leadership], 邓小平文选 [Selected works of Deng Xiaoping] (People's Publishing House, 1983), 327–342.
 - 25) "中国共产党第十二次全国代表大会隆重开幕" [Chinese Communist Party's 12th National Congress successfully begins], 人民日报 [People's Daily], September 2, 1982.

of (2) was changed to “reunification of the motherland, including Taiwan,” implying the inclusion of Hong Kong as an object of reunification. As early as June 1983, however, Deng stated that these tasks were “also the tasks of the 90s.”²⁶ Subsequently, Jiang Zemin, who inherited the Three Great Tasks that Deng Xiaoping had implied would be postponed, expressed his resolve on the reunification issue during the 1995 Spring Festival, declaring, “The reunification of the motherland is the common aspiration of the Chinese people. The patriotic compatriots do not wish to see reunification delayed indefinitely.”²⁷ Nonetheless, in 2000, Jiang then said, “Reunification of the motherland is one of the three great tasks of the new century,” thereby postponing the deadline by 100 years.²⁸

After Xi Jinping became General Secretary of the Central Committee of the CCP and Chairman of the Central Military Commission (CMC) in the fall of 2012, he met with former Taiwanese Vice President Vincent Siew Wan-chang, who was attending the APEC Summit the following October. There, Xi said, “We cannot put off [resolving the Taiwan issue] for generation after generation,”²⁹ and expressed his strong desire to achieve it himself. However, it is possible that Xi Jinping will also postpone the reunification, just as successive Chinese leaders have done in the past.³⁰

Conditions for a Chinese Invasion of Taiwan

On November 29, 2012, just two weeks after being elected General Secretary of the CCP Central Committee, Xi Jinping described the Chinese Dream, stating, “In my opinion, achieving the rejuvenation of the Chinese nation has been the greatest dream of the Chinese people since the advent of

26) “我对香港政策不会改变 要继续把港澳工作做好” [Our policy toward Hong Kong will remain unchanged; we must continue to steadily tackle Hong Kong and Macau affairs], 人民日报 [People’s Daily], June 26, 1983.

27) 江泽民 [Jiang Zemin], “为促进祖国统一大业的完成而继续奋斗 (1995年1月30日)” [Continue to promote the reunification of the motherland (January 30, 1995)], 人民日报 [People’s Daily], January 31, 1995.

28) “中共十五届五中全会在京举行” [Fifth plenary session of the CCP’s 15th Central Committee takes place in Beijing], 人民日报 [People’s Daily], October 11, 2000.

29) “习近平会见萧万长一行” [Xi Jinping meets a delegation led by Vincent Siew Wan-chang], 人民日报 [People’s Daily], October 7, 2013.

30) Matsuda Yasuhiro details the history of how China has “postponed” the Taiwan issue (Matsuda Yasuhiro, “Naze Chugoku wa Taiwan wo shihai shitai no ka?” [Why does China want to rule Taiwan?] in *“Taiwan yuji” wa yokushi dekiru ka*, ed. Matsuda et al., 7–11).

modern times.”³¹ In addition, at the closing ceremony of the first session of the National People's Congress, shortly after Xi Jinping was elected to the presidency of the PRC and Chairman of the CMC of the PRC, thus wielding all party, political, and military power in China, he also said, “Realizing [...] the Chinese Dream of the rejuvenation of the Chinese nation means that we will make China prosperous and strong, rejuvenate the nation, and bring happiness to the Chinese people.”³²

Although the precise meaning of the “Chinese Dream” remains ambiguous, Xi's repeated emphasis on “national reunification” and his stated readiness to resort to force have led many observers to interpret Taiwan's reunification as an integral part of this vision. At times, it has even been suggested that reunification is a prerequisite for extending Xi's tenure.³³

From this perspective, it is worth examining the official conditions under which China might resort to force against Taiwan. The Chinese government has published white papers on the “Taiwan issue” in 1993 and 2000.³⁴ Of the two, China first announced its conditions for an armed invasion of Taiwan in the white paper titled *The One-China Principle and the Taiwan Issue* published in 2000. This white paper indicates that (1) if a grave turn of events occurs leading to the separation of Taiwan from China in any name, or (2) if Taiwan is invaded and occupied by foreign countries, or (3) if the Taiwan authorities refuse, sine die, the peaceful settlement of cross-Straits reunification through negotiations, then the Chinese government will take all possible measures, including the use of force.

31) “习近平在参观《复兴之路》展览时强调 承前启后 继往开来 继续朝着中华民族伟大复兴目标奋勇前进” [Xi Jinping emphasizes during his visit to “The Road of Rejuvenation” exhibition: By inheriting past legacies and carving out a future path, let's continue to muster courage and move forward toward the goal of the great rejuvenation of the Chinese nation], 人民日报 [People's Daily], November 30, 2012.

32) “十二届全国人大一次会议在京闭幕” [First session of the 12th National People's Congress closes in Beijing], 人民日报 [People's Daily], March 18, 2013.

33) Ogasawara, “Minamishinakai ‘Tousa Shoto’ ga Taiwan kiki no hakkaten ni naru”; Ishii Toshinao, “Chugoku no Taiwan toitsu senryaku no yukue” [Future of China's Taiwan unification strategy], *Yomiuri Quarterly*, no. 61 (April 2022).

34) [China] Taiwan Affairs Office of the State Council and the State Council Information Office, “台湾问题与中国的统一” [The Taiwan issue and China's unification], 人民日报 [People's Daily], September 1, 1993; [China] Taiwan Affairs Office of the State Council and the State Council Information Office, “一个中国的原则与台湾问题” [The one-China principle and the Taiwan issue] white paper, February 21, 2000.

Subsequently, in March 2005, the Chinese government enacted the Anti-Secession Law, which legislates its right to use force against Taiwan. This law stipulates that in the event that (1) the “Taiwan independence” secessionist forces should act under any name or by any means to cause the fact of Taiwan’s secession from China, or that (2) major incidents entailing Taiwan’s secession from China should occur, or that (3) possibilities for a peaceful reunification should be completely exhausted, then the Chinese government will employ non-peaceful means and other necessary measures to protect China’s sovereignty and territorial integrity.³⁵

Although China has formally outlined its criteria for military intervention, it remains unclear what threshold China would consider to constitute “Taiwan independence” or a “major incident” that might trigger such a response. Xi Jinping has repeatedly expressed his willingness to use force to achieve reunification, but this posture is not unique to him. Previous Chinese leaders have similarly brandished the threat of force—albeit with varying intensity—as a means of pressuring Taiwan. In the future, China will likely continue evaluating military options in line with the Anti-Secession Law, but it is also possible that the ultimate decision to invade Taiwan could be shaped by the personal determination of the top leader to realize “national reunification.”

Conditions for a Chinese Invasion of Taiwan as Indicated by Taiwan and the United States

As discussed above, China has clearly articulated the conditions under which it would resort to force against Taiwan, albeit without specifying any particular timeline. In contrast, Taiwan and the United States have each analyzed and publicly identified the scenarios they believe could prompt such military action by China.

According to the 2021 *CCP Military Power Report*, which Taiwan’s Ministry of National Defense is required to submit to the Legislative Yuan, there are seven scenarios that could trigger the PLA to invade Taiwan. These seven points are: (1) Taiwan declaring independence, (2) Taiwan clearly

35) “反分裂国家法2005年3月14日第十届全国人民代表大会第三次会议通过” [Anti-secession law adopted in the third session of the tenth National People’s Congress on March 14, 2005], 人民日报 [People’s Daily], March 15, 2005.

moving toward independence, (3) Taiwan possessing nuclear weapons, (4) domestic turmoil or instability in mainland China, (5) delay in the “Peaceful Unification” of the Cross-Strait, (6) involvement of foreign powers in Taiwan’s internal affairs, and (7) stationing of foreign troops in Taiwan.³⁶

In addition, the 2023 edition of the *Military and Security Developments Involving the People’s Republic of China*, which the U.S. Department of Defense is required to submit to Congress, noted that the circumstances under which China has indicated it would consider the use of force against Taiwan have evolved over time, but listed the following six: (1) formal declaration of Taiwan’s independence, (2) undefined moves toward Taiwan independence, (3) internal unrest in Taiwan, (4) Taiwan’s acquisition of nuclear weapons, (5) indefinite delays in the resumption of cross-strait dialogue on unification, and (6) foreign military intervention in Taiwan’s internal affairs.³⁷

These assessments by Taiwan’s Ministry of National Defense and the U.S. Department of Defense are broadly consistent and, taken together,

36) Although the *CCP Military Power Report* remains confidential, some of the content has been leaked to the media. Triggers for the PLA’s invasion of Taiwan in the 2021 edition cited in this chapter remain unchanged from the 2015 edition. Meanwhile, the 2010 edition mentioned the following eight points: (1) Taiwanese government establishing a constitution, holding a referendum, or promoting other policies leading to the independence of Taiwan, (2) Taiwan declaring independence, (3) significant collapse in the cross-strait military balance, (4) Taiwan possessing weapons of mass destruction, (5) occurrence of internal turmoil or a large-scale disaster in Taiwan, (6) upheaval in the political situation in China, (7) intervention of foreign forces in Taiwan’s internal affairs, and (8) international situation favorable to China’s resolution of the Taiwan issue by force (翁衍慶 [Weng Yen-ching], 中共軍史、軍力和對臺威脅 [Communist party of China military history, military strength, and Taiwan strait crisis] (Independent & Unique, 2023), 365–366). Based on an analysis of statements by CCP leaders, the first *National Defense Report* released by the Taiwanese government in 1992 presents the following six situations that could lead China to move forward with an invasion of Taiwan: (1) when Taiwan moves toward “independence,” (2) when internal turmoil in Taiwan occurs, (3) when relative military strength has weakened, (4) when foreign forces attempt to intervene in Taiwan’s internal affairs, (5) when the Taiwanese side rejects negotiations on the unification issue for an extended period of time, and (6) when the Taiwanese side has developed nuclear weapons ([Taiwan] National Defense Report Editing Committee, Ministry of National Defense, 中華民國81年 國防報告書 (修訂版) [1992 ROC National Defense Report (Revised)] (Li Ming Cultural Enterprise Co., Ltd., 1992), 42–43).

37) U.S. Department of Defense, *Military and Security Developments Involving the People’s Republic of China 2023* (Washington, DC: Department of Defense, 2023), 136–137. The 2019 edition listed (6) foreign intervention in Taiwan’s internal affairs and (7) foreign forces stationed on Taiwan, while the 2021 edition combined the two into (6) foreign military intervention in Taiwan’s internal affairs and the 2023 edition followed suit.

offer a clearer understanding of the types of “major incidents” ambiguously referenced in China’s Anti-Secession Law. These major incidents are “Taiwan’s possession of nuclear weapons” and “involvement of foreign powers and militaries in Taiwan.”³⁸ On the other hand, the U.S. and Taiwanese assessments differ in that Taiwan cites “domestic turmoil or instability in mainland China,” while the United States cites “internal unrest in Taiwan” as factors. In light of this, it is necessary to recognize that internal instability in either China or Taiwan could trigger Chinese armed aggression against Taiwan, and that attention must be paid to the internal situation of each side.

That said, identifying what constitutes “major incidents entailing Taiwan’s secession from China” remains a near-impossible task. This is because China holds all the power to decide whether or not to invade Taiwan, and it will make this decision regardless of Taiwan’s intentions. For this reason, it is important that Taiwan consistently maintains a state of readiness to deter or withstand potential Chinese aggression and ensures that its defense posture remains robust and adaptive.

Taiwan’s Military Strategy to Counter a Chinese Armed Invasion

The Shift Toward a “Defensive Posture” Strategy Centered on Homeland Defense

In December 1949, the leadership of the Nationalist Kuomintang (KMT) party, struggling for power in the political order of postwar China, positioned Taiwan as the Base of Revival for “Chinese unification” and relocated the central government of the Republic of China (ROC) to Taiwan. Chiang Kaishek, who returned as the President of the ROC in Taiwan, set this

38) The author of this chapter explains the possibility of U.S. forces being stationed in Taiwan in another article (Igarashi Takayuki, “Taiwan ni beigun ga ‘futatabi’ churyu suru hi wa honto ni kuru ka: Beitaikan no kabe wa hikuku nari tsutsu aru ga, issen wa aru” [Will the day really come when U.S. troops will be stationed in Taiwan “again”? While the barrier between the U.S. and Taiwan has become lower, there remains a line to cross], Toyokeizai Online, September 26, 2024, <https://toyokeizai.net/articles/-/829445>).

goal for the government: “Prepare for one year, counterattack in two years, sweep out the enemy in three years, and succeed within five years.” Then, after defining its military strategy as an “Offensive Posture,” Chiang Kaishek assigned the armed forces the mission of “Retaking the Mainland” and initiated preparations for the military reconquest of China.³⁹

Entering the 1960s, the ROC government made numerous attempts to initiate “Retaking the Mainland,” but despite proposing various strategies, it was unable to gain the United States’ agreement to the operation. Then the international environment surrounding Taiwan began to change. One of these changes was that the United States began to demand that Asian countries bear the burden of defending themselves. In 1969, the ROC shifted to a military strategy of “Unity of the Offensive and Defensive,” which placed more emphasis on Taiwan’s defense than before.⁴⁰

Even after the United States severed diplomatic relations with the ROC in 1979, the military’s “Retaking the Mainland” mission formally remained in place. However, following the end of the Cold War in 1989, China began to improve relations with the Soviet Union, Vietnam, and other countries with which it shared borders, and this caused Taiwan to become increasingly alarmed that China might redirect troops stationed on those borders to the Taiwanese front and move to invade Taiwan. Amidst these shifting international circumstances surrounding Taiwan, the Taiwanese government decided in 1991 to abandon the military’s “Retaking the Mainland” mission and switch to an exclusively defense-oriented “Defensive Posture” military strategy.⁴¹

Successive Administrations’ Deterrence-related Adjustments to the Military Strategic Concept

Beginning with the reform and opening-up policies led by Deng Xiaoping in the 1980s, China gradually adopted market principles and formally committed to a “socialist market economy” at the 14th National Congress of the CCP in 1992. Backed by rapid economic growth, China began

39) Igarashi Takayuki, *Tairiku hanko to Taiwan: Chukaminkoku ni yoru toitsu no koso to zasetsu* [The “retaking the mainland” by the Taiwanese government: The concept of Chinese unification by the ROC] (The University of Nagoya Press, 2021), 33–37.

40) *Ibid.*, 55–85.

41) *Ibid.*, 203–255.

modernizing its military capabilities. In response to Taiwan's active diplomacy, such as Taiwanese president Lee Tenghui's visit to the United States, China interpreted these actions as signs of a push for "independence," and launched ballistic missiles in July 1995 as a show of force. This led to the Third Taiwan Strait Crisis, which lasted until March 1996, when Taiwan held its first direct presidential election. Under unprecedented military pressure, Taiwan came to believe that it could not stop China simply by maintaining an exclusively defensive posture. It strengthened its deterrence posture by flaunting its military power and established the policy of "Resolute Defense, Effective Deterrence" as the operational concept of its "Defensive Posture" strategy.⁴²

Ahead of Taiwan's 2000 presidential election, the KMT's Lien Chan, who was nominated to succeed Lee Tenghui, advocated strengthening naval and air power and building a reliable counterattack capability as measures of "Effective Deterrence."⁴³ In response, Chen Shuibian of the Democratic Progressive Party (DPP), who was seeking the first change of ruling party in Taiwan's history, raised the idea of "Decisive Battlefield Outside Territory" to keep invasions at bay in areas beyond Taiwan's sphere of control.⁴⁴ However, because his idea stirred up commotion both at home and abroad,⁴⁵ when Chen Shuibian won the election and brought the new DPP administration to power, Chen ultimately proposed a strategic concept of "Effective Deterrence, Resolute Defense." This concept basically followed the strategic concept put forth by the Lee Tenghui administration, but with the priorities switched to emphasize deterrence. During Chen Shuibian's two

42) Igarashi, "Taiwan no gunji senryaku (1988–2016)," 77–78.

43) [Taiwan] Office of the President, "副總統參加跨世紀國家安全與軍事戰略學術研討會開幕典禮" [Vice president attends the opening ceremony for a turn-of-the-century academic seminar on national security and military strategies], December 8, 1999, <https://www.president.gov.tw/NEWS/6210>.

44) 羅先治 [Lo Hsien-chih], "從台澎防衛作戰戰略指導檢視參謀本部之定位：國防二法架構體系下之角度" [Review of the positioning of the general staff through the strategic guidance of Penghu defense operations: From the angle of the system framework of two national defense laws]. (Master's Program in Strategy and International Affairs, College of International Affairs, National Chengchi University, 2004), 83, <http://ncur.lib.nccu.edu.tw/handle/140.119/3382>; 中央日報 [Central Daily News], June 17, 2000.

45) "扁決戰境外戰略 立委圍剿 國防政策易守為攻 國民黨批挑釁、外行" [Chen Shuibian's battles out of the territory strategy caught in the crossfire by legislators: National defense policy must emphasize defense as a means of offense; Kuomintang calls the policy provocative and amateurish], 中央日報 [Central Daily News], June 28, 2000.

terms in office, lasting eight years, his administration grappled with a divided government, with the opposition party holding a majority in the Legislative Yuan. Consequently, his administration failed to develop a military strategy that incorporated the concept of “Decisive Battlefield Outside Territory.” Nevertheless, Chen concluded his time in office by paving the way for the type of deterrence that Taiwan was forced to consider during the Lee Tenghui administration: possessing missiles capable of striking military targets on the Chinese mainland.⁴⁶

Ma Yingjeou, who ran for the KMT, claimed power in the 2008 presidential election. What Taiwanese voters most desired from Ma was improved relations with China, which had deteriorated during the Chen Shuibian administration.⁴⁷ During his election campaign, Ma indicated that his national defense policy would be one of “Rock-Solid Defense.” After taking office, he reaffirmed the “Defensive Posture” military strategy and reverted to the “Resolute Defense, Effective Deterrence” strategic concept established in 1995 under the Lee Tenghui administration. During his two terms in office, the Ma Yingjeou administration toned down Taiwan’s focus on deterrence and continued to demonstrate “goodwill” toward China. While his conciliatory policies brought a degree of stability to the Taiwan Strait, they failed to stem China’s ongoing military modernization or provide a credible response to the growing threat it posed.⁴⁸

In 2016, when the Tsai Ingwen-led DPP was back in power, the Ministry of National Defense updated the previous administration’s strategic concept in its Quadrennial Defense Review (QDR), a document which the ministry is required to submit within the first 10 months of a new presidential administration, and stated that it would pursue “Resolute Defense, Multi-Domain Deterrence,”⁴⁹ leaving room for interpretation regarding the nature

46) Igarashi, “Taiwan no gunji senryaku (1988–2016),” 78–80.

47) Ogasawara Yoshiyuki, *Taiwan soto senkyo* [Taiwan presidential election] (Koyo Shobo Publisher; 2019), 177–182.

48) Igarashi, “Taiwan no gunji senryaku (1988–2016),” 80–81; Momma Rira, “Taiwan ni yoru Chugoku jinmin kaihogun no tai Taiwan togo sakusen he no hyoka to Taiwan no kokubo taisai no seibi [Does “Taiwan can help” apply to Taiwan itself?: Taiwan’s assessment of the People’s Liberation Army’s joint operations against Taiwan and the development of Taiwan’s national defense system], *Anzenhosho Senryaku Kenkyu* 2, no. 2 (March 2022): 11–12.

49) [Taiwan] Ministry of National Defense, 中華民國106年 四年期國防總檢討 [2017 Quadrennial Defense Review] (Ministry of National Defense, 2017), 7, 24–25.

of deterrence. Then, the 2021 QDR, submitted after Tsai's reelection in 2020, took this a step further by prioritizing the development of long-range precision strike capabilities. This aimed to extend the depth of Taiwan's strategic defensive operations and signaled a strong commitment to intercepting enemy forces at greater distances.⁵⁰

Since shelving the mission of "Retaking the Mainland" in 1991, the Taiwanese government's military strategy has not remained a static, exclusively defense-oriented "Defensive Posture." Instead, successive leaders have switched between "Resolute Defense" and "Effective Deterrence" as their top operational priority, depending on the stance of their policies toward China. However, these strategic adjustments were merely changes in wording, and leaders continued to grapple with the question of how to deter China as it continued to modernize its military power.⁵¹

"Resilience" at the Core of Taiwan's Military Strategy

In February 2022, despite many experts optimistically believing that Russia was unlikely to invade Ukraine due to common sense, Russia proceeded to use its overwhelming power to change the status quo. Later, in August, after U.S. Speaker of the House Nancy Pelosi paid a surprise visit to Taiwan, China conducted its largest military exercise in the waters surrounding Taiwan since the Third Taiwan Strait Crisis of 1995–1996. Experts focused on the policy decisions of Taiwan's government and speculated that, having witnessed the reality of international politics where deterrence has proven ineffective, Taiwan may revise its traditional deterrence-based military strategy by drawing lessons from Ukraine, a country facing the same power asymmetry.⁵² However, the *ROC National Defense Report* published in September 2023 presented the exact same military strategic concept as before: "Resolute Defense, Multi-Domain Deterrence."⁵³ The experts

50) [Taiwan] Ministry of National Defense, 中華民國110年 四年期國防總檢討 [2021 Quadrennial Defense Review] (Ministry of National Defense, 2021), 3, 14, 17.

51) Igarashi, "Taiwan no gunji senryaku (1988–2016)," 82.

52) "112年國防報告書出爐 中共對台威脅篇幅大增" [2023 National Defense Report completed; many more pages devoted to Chinese threats to Taiwan], 中央通訊社 [Central News Agency], September 12, 2023, <https://www.cna.com.tw/news/aip/202309120098.aspx>.

53) [Taiwan] Editorial Committee, 2023 National Defense Report, Ministry of National Defense, 中華民國112年 國防報告書 [ROC National Defense Report 2023] (Ministry of

explained that under the same military strategic concept, there was now a greater emphasis on leveraging Taiwan's geographical features through defense in-depth and joint defense with regional partners.⁵⁴

Having said that, *ROC National Defense Report 2023 (2023 NDR)*—the first issued after Russia's invasion of Ukraine—did incorporate lessons from the conflict. Two months after Russia invaded Ukraine, Joseph Wu cited “asymmetric warfare” as a lesson to be learned from the Russo-Ukrainian War, stating, “Look at the Ukrainians, they use small personal weapons to go against a large enemy,”⁵⁵ and this point was emphasized in *2023 NDR*. The report also asserts the importance of mission command,⁵⁶ a decentralized command and control method in which commanders at each level are empowered to exercise their own judgment in how they carry out orders. In addition, to compensate for insufficient depth, the report indicates that Taiwan will actively introduce small, mobile AI-enabled weapons, unmanned systems, and other assets to complement its existing coastal defense capabilities, as well as increase its number of high-performance naval vessels and mobile anti-ship missiles capable of destroying enemies at greater distances during their vulnerable strait-crossing phase. It further details issues with energy security and the development of a system for whole-of-society defense, including reforming the conscription system and improving the mobilization capabilities of reserve forces—in other words, developing Taiwan's national mobilization system.⁵⁷

National Defense, 2023), 63–65.

- 54) “借鏡俄烏戰爭 國防報告書建軍原則新增分散式指管” [Lessons of the Russo-Ukrainian War: Distributed command and control newly added to the principles of military structures in the National Defense Report], 中央通訊社 [Central News Agency], September 12, 2023, <https://www.cna.com.tw/news/aip/202309120130.aspx>.
- 55) “Taiwan Learning Lessons from Ukraine's Stout Resistance.”
- 56) Mission command, announced by the U.S. Joint Chiefs of Staff as a joint doctrine (Joint Publication 1: Doctrine for the Armed Forces of the United States, March 25, 2013, Incorporating Change July 1, 2017, <https://irp.fas.org/doddir/dod/jpl.pdf>), has attracted attention in recent years, but the concept itself is not new. It was conceptualized in the AirLand Battle (ALB) doctrine developed by the U.S. Army in the 1980s as a command and control approach required for responding to dynamically changing battlefield situations (Kikuchi Shigeo, “Mission Command in Networked Forces: Adoption of Mission Command in Recent U.S. Navy and Air Force Doctrines and Operational Concepts,” *Security & Strategy*, no. 5 (January 2025): 25–45).
- 57) “112年國防報告書 延伸防衛縱深建構社會防禦韌性” [National Defense Report 2023: Extending defense depth and developing social defense resilience], 中央通訊社 [Central News Agency], September 12, 2023, <https://www.cna.com.tw/news/aip/202309120030>.

Nonetheless, the features that many experts pointed out had already been explained in previous National Defense Reports and were merely emphasized or elaborated on in the 2023 *NDR*. For example, Taiwan had already been discussing “asymmetric operations” since around 2008.⁵⁸ These initiatives were not started because of the lessons learned from Ukraine. Rather, they are likely manifestations of Taiwan’s renewed confidence from reaffirming its past efforts in light of the situation in Ukraine.

Meanwhile, the new keyword emphasized above all else in the 2023 *NDR* was “resilience.” One factor that has helped Ukraine hold out against Russian aggression over the long term is its resilience—a quality that has been cited as a lesson to be learned from Ukraine.⁵⁹ As if having learned that lesson, the 2023 *NDR* pinpoints the aforementioned “asymmetric operations” and mission command as critical elements for improving resilience in defense operations. It also calls for building national resilience in all areas, including the ability to produce weapons independently, energy security, a whole-of-society defense system, and the mindsets of each individual. However, the term “resilience” was actually first used in Taiwan in late 2019, before the Russian invasion of Ukraine and near the end of the first term of the Tsai Ingwen administration. With three months left before the 2020 presidential

aspx.

- 58) The reference to China’s “asymmetric engagement capabilities” against the United States in the “Security Situation in the Taiwan Strait” report, released by the U.S. Department of Defense in February 1999 ([U.S.] Department of Defense, “The Security Situation in the Taiwan Strait,” February 1, 1999) drew attention to China’s “asymmetric operations” in Taiwan. Following Taiwan’s first change of government in 2000, the first *National Defense Report* under the administration of the Democratic Progressive Party (DPP) was released in August, which noted that PLA personnel raised such theories as “unrestricted warfare” and “asymmetric warfare” ([Taiwan] National Defense Report Editing Committee, Ministry of National Defense, 中華民國89年國防報告書 [2000 ROC National Defense Report] (Ministry of National Defense, 2000), 29). The 2002 *National Defense Report* mentioned China’s asymmetric warfare capabilities ([Taiwan] National Defense Report Editorial Committee, Ministry of National Defense, 中華民國91年國防報告書 [2002 ROC National Defense Report] (Ministry of National Defense, 2002), 63). After the Kuomintang came back to power in 2008, Taiwan began considering the buildup of “asymmetrical warfare capabilities” against China on the back of Beijing’s enhancement of its military power ([Taiwan] National Defense Report Editing Committee, Ministry of National Defense, 中華民國98年國防報告書 [2009 ROC National Defense Report] (Ministry of National Defense, 2009), 75).
- 59) Judy Dempsey, “Ukraine’s Resilience Is About Winning the War,” Carnegie Europe (April 2023), <https://carnegieendowment.org/europe/strategic-europe/2023/04/ukraines-resilience-is-aboutwinning-the-war?lang=en>.

election, Tsai Ingwen emphasized “resilience” when she delivered an address on the theme of “Nation of Resilience, Forward into the World” at the 2019 Double Ten Day celebration. In this address, Tsai stressed that Taiwan has recovered from domestic and international crises time and time again for over 70 years, continuing to defend democratic values against pressure from authoritarian states.⁶⁰ She described this “resilience” as the source of Taiwan’s ability to confront seemingly insurmountable adversity in the face of mounting political, economic, and military pressure from China and to garner support from democratic countries.⁶¹

Throughout her second term starting in May 2020, President Tsai continued to emphasize resilience. On December 23, 2022, President Joe Biden signed the Fiscal Year 2023 National Defense Authorization Act, which included the Taiwan Enhanced Resilience Act (TERA). TERA authorized up to \$10 billion in military assistance over five years, including purchases through Foreign Military Financing, the creation of pre-positioned stockpiles in anticipation of a large-scale Chinese invasion, training for the Taiwanese armed forces, joint military exercises, and cybersecurity cooperation.⁶²

TERA reflects lessons the United States learned from its support for Ukraine.⁶³ Thus, the emphasis on “resilience” in the 2023 *NDR*—the first defense report issued after the Russian invasion of Ukraine and the last for the Tsai administration—not only reflects the slogan promulgated by Tsai Ingwen, but has also received strong support from the United States. “Resilience” thus occupies a central position in Taiwan’s military strategy, which is based on exclusive defense, and has become a crucial keyword indicating the direction of Taiwan’s military force development.⁶⁴

60) “中華民國108年國慶總統講話” [2019 national day presidential address], Presidential Office Gazette No. 7449, October 16, 2019, 2–5.

61) Igarashi Takayuki, “Chugoku no shapu pawa to Taiwan no rejirient pawa” [China’s sharp power and Taiwan’s resilient power], *Koryu*, no. 963 (June 2021), 10–16.

62) United States Committee on Foreign Relations, “Risch on Final Passage of FY 2023 NDAA,” December 15, 2022, <https://www.foreign.senate.gov/press/rep/release/risch-on-final-passage-offy2023-ndaa>.

63) Omer Duru, “Logistical Lessons from Ukraine and What It Means for Taiwan,” Lawfare Institute (March 2023), <https://www.lawfaremedia.org/article/logistical-lessons-ukraine%E2%80%94and-what-it-means-taiwan>.

64) Trends in U.S. arms sales to Taiwan in accordance with the Taiwan Enhanced Resilience Act and Taiwan’s resilience are explained by the author in another article (Igarashi Takayuki, “Toranpu 2.0 de Taiwan he buki baikyaku tsuzuku ka? Fukusayo ha?: Jishu seisan ni eikyo kenen, rejiriensu kyoka no yukue” [Will arms sales to Taiwan continue

Military Force Development in Preparation for an Invasion of Taiwan by China

Scenarios That Simulate a Chinese Invasion of Taiwan in the Han Kuang Defense Operation Exercises

In recent years, Taiwanese and foreign think tanks have been frequently conducting exercises simulating scenarios of a Chinese invasion of Taiwan under various contingencies. However, Taiwan's Ministry of National Defense has long explained that the PLA's most basic method of invading the main island of Taiwan would consist of three phases: (1) ballistic missile strikes, (2) taking control of the air and sea, and (3) amphibious landing operations.⁶⁵ Taiwan's military has been training for this basic invasion

under Trump 2.0? Any side effects?: Concerns over domestic production and the future of enhanced resilience], Toyokeizai Online, September 26, 2024, <https://toyokeizai.net/articles/-/845745>).

- 65) An estimated overview of China's armed invasion of Taiwan was first released as early as in 1992 as part of the *National Defense Report*, the first of its kind published by the Taiwanese government. The report cites the following four methods: (1) taking over remote islands such as Kinmen Island, (2) blockade with naval and air forces, (3) attacks with tactical fighters and missiles, and (4) landing with a combination of regular and irregular methods. It further notes that the methods will be employed individually or in combination ([Taiwan] National Defense Report Editing Committee, Ministry of National Defense, 中華民國81年 國防報告書 (修訂版) [1992 ROC National Defense Report (Revised)] (Li Ming Cultural Enterprise Co., Ltd., 1992), 43–44). The 2008 *National Defense Report* published at the end of the Chen Shuibian administration lists the following four methods: (1) military intimidation in peacetime, (2) partial blockade, (3) missile attacks against key targets, and (4) landing operations against the main island of Taiwan. Under the Chen administration, Taiwan reduced its forces on remote islands including Kinmen Island, based on the assessment that China would launch a direct attack on the main island of Taiwan. The reference to taking over remote islands, which was included in the 1992 *National Defense Report*, was removed in the 2008 edition. ([Taiwan] National Defense Report Editing Council, Ministry of National Defense, 中華民國97年 國防報告書 [2008 ROC National Defense Report] (Ministry of National Defense, 2008), 74–75). The 2009 *National Defense Report*, which was the first one under the Ma Yingjeou administration, remained basically the same as the 2008 edition but added asymmetrical warfare, thus citing a total of five methods: (1) military intimidation in peacetime, (2) partial blockade, (3) missile strikes against critical targets, (4) asymmetrical warfare including decapitation operations and network warfare, and (5) landing operations against the main island of Taiwan ([Taiwan] National Defense Report Editing Committee, Ministry of National Defense, 中華民國98年國防報告書 [2009 ROC National Defense Report] (Ministry of National Defense, 2009), 65–66). The 2023 annual report by the U.S. DOD lists (1) air and

sequence with a clear “hypothetical enemy.” Particular attention has been paid to the Han Kuang exercises, held almost every year since 1984 to rehearse defense operations in anticipation of a PLA invasion.⁶⁶

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- maritime blockade, (2) decapitation operations and network warfare, (3) missile campaign, (4) amphibious invasion, and (5) strikes on remote islands ([U.S.] Department of Defense, *Military and Security Developments Involving the People's Republic of China 2023*, 140–142). Media leaks of the classified 2024 *Chinese Communist Military Power Report* mentions the following four methods: (1) military intimidation in peacetime, (2) naval and air blockade, (3) missile attacks, and (4) amphibious operations (“國防部分析中共對台威脅態樣 強化聯合登島作戰” [Ministry of National Defense’s analysis on the patterns of China’s threats to Taiwan indicates enhanced joint landing operations], 中央通訊社 [Central News Agency], August 30, 2024, <https://www.cna.com.tw/news/aip/202408300075.aspx>). While “air and maritime blockade,” which precedes missile strikes, is included in the possible actions mentioned above, the author regards it as a sign of a full-scale armed invasion in this chapter and thus does not cite it as a basic method of invading the main island of Taiwan. Other signs of such full-scale invasion include economic sanctions, cyberattacks, important statements by leaders, large-scale military exercises, and military mobilization.
- 66) Following Taiwan’s democratization, Han Kuang exercises have been increasingly opened to the public to gain the understanding of voters. However, they have gradually become more akin to demonstration exercises, sparking criticism in recent years that they are showy performances. Under these circumstances, for the 40th Han Kuang exercises, the first since the inauguration of the Lai Chingde administration in May 2024, it was announced that the training demonstrations would be reduced significantly; that the exercises would not be conducted in an adversarial style with an “enemy side”; and that no live ammunition would be used on the main island of Taiwan (“漢光40號演習 取消校閱展示、實戰服儀不整不懲處” [40th Han Kuang exercises to reduce inspections and demonstrations; no penalty for disheveled uniforms in actual combat], 中央通訊社 [Central News Agency], June 23, 2024, <https://www.cna.com.tw/news/aip/202406230020.aspx>). In response, some experts criticized the change, asserting that the exercises would not be realistic without the presence of an enemy (side) who would take unexpected actions (“批漢光演習取消假想敵對抗「為德不卒」揭仲：功虧一簣” [Abolition of the adversarial style with the potential enemy in the Han Kuang exercises criticized as “starting virtuously but giving up”; Chieh Chung: “all the efforts come to naught at the last minute”], 中時新聞網 [China Times Net], June 23, 2024, <https://www.chinatimes.com/realtimenews/20240623002059-260407?chdtv>). The author of this chapter counters these criticisms, asserting that given a significant increase in new recruits due to the revised military service system starting in 2024, familiarizing personnel with operational environments and operational plans, as the Ministry of National Defense explained, would make drills more realistic in preparation for a potential Chinese invasion of Taiwan, and is preferable to having new recruits engage in showy performances or excluding them from the exercises (Igarashi Takayuki, “Omoigakenai ‘isan’ de doin taisei ga totonou Taiwan no jitsuryoku: Rai soto, Chugoku yurai no shikan gakkō de Taiwan boei no ketsui” [Taiwan’s real power to develop a mobilization system with unexpected “legacies”]: President Lai expresses his determination to defend Taiwan at a military academy that originates from mainland China], Toyokeizai Online, July 11, 2024, <https://toyokeizai.net/articles/-/774207>).

The 40th Han Kuang exercises were the first to be held following the inauguration of the Lai Chingde administration in May 2024. Based on the PLA's assumed invasion sequence, these exercises were conducted in four phases: (1) force preservation, (2) air defense, (3) interception, and (4) anti-landing operations. Drills for the comprehensive defense system, including mobilization and civil defense, were also conducted. The exercises were intended to verify five key items: (1) mission command, (2) joint operation plan, (3) overall logistical support, (4) inter-unit cooperation in a continuous day-and-night situation, and (5) rules of engagement.⁶⁷ The word “resilience” also appeared frequently in these exercises.⁶⁸ As the first Han Kuang exercises held after the publication of the 2023 *NDR*, these exercises verified the effectiveness of the mission command and “resilience” strategies outlined in the report. However, the timing of the 2024 Han Kuang exercises coincided with the arrival of Typhoon No. 3 in Taiwan. As a result, the exercises were scaled down and ended ahead of schedule at noon on the fourth day,⁶⁹ which likely made it difficult to verify the key items as anticipated.

Considering the above, this section will examine trends in Taiwan's military force development in relation to the phase classifications used in the 40th Han Kuang exercises—which are based on the Taiwanese government's and military's assumptions about the PLA's invasion sequence—while keeping in mind Taiwan's military strategy centered on “resilience.”

67) “國防部說明漢光演習實兵演練規劃 務實驗證訓練成效” [Ministry of National Defense explains actual combat drill plans and examines the success of the exercises from a practical viewpoint], 軍事新聞通訊社 [Military News Agency], July 9, 2024, <https://mna.gpw.gov.tw/news/detail/?UserKey=35d0c3df-3ab0-4659-806f-bba95dccbdc5>.

68) “務實訓練誠實檢討 強化整體防衛韌性” [Practical drills and sincere reviews, comprehensive enhancement of defense resilience], 青年日報 [Youth Daily News], July 27, 2024, <https://www.ydn.com.tw/news/newsInsidePage?chapterID=1695463>; “強化全社會韌性 漢光將演練戰時境外戰略物資接轉” [Enhancing the resilience of the whole society; drills for the relay transport of wartime strategic goods from outside the zone conducted in the Han Kuang exercises], 聯合新聞網 [udn.com], July 21, 2024, <https://udn.com/news/story/7314/8108821>.

69) “國防部：漢光40號演習結束 各部隊協助地方政府災害防救” [Ministry of National Defense: 40th Han Kuang exercises completed; each unit to work together with local governments for disaster relief], 軍事新聞通訊社 [Military News Agency], July 25, 2024, <https://mna.gpw.gov.tw/news/detail/?UserKey=55112596-9a70-43ef-979e-d496797ee0ab>.

Preserving Forces against Missile Attacks in the Early Stages of Invasion

Many scenarios of a Chinese invasion of Taiwan assume the PLA launching ballistic missile strikes against Taiwan's critical military installations in the early stages of an invasion. Accordingly, in the Han Kuang exercises, which are positioned as an annual comprehensive exercise, drills to preserve forces against ballistic missile attacks and other threats are generally conducted on the first day.

Taiwan began implementing countermeasures against air raids and other threats by China in the 1970s. In 1972, Richard Nixon became the first U.S. president to pay a visit to China, where he told Mao Zedong and his associates that he wanted to eventually withdraw U.S. troops from Taiwan, and this prompted Taiwan to consider how it could free itself from its economic and military dependence on the United States. For example, when asked about the Ten Major Construction Projects, which were launched in 1973 to sustain Taiwan's economic growth, Chiang Chingkuo—who spearheaded the projects as premier of the Executive Yuan—answered, “The Ten Major Construction Projects are progressing smoothly and are not merely building transportation and the economy, but also strengthening national defense.”⁷⁰ In this way, National Freeway 1, a highway that runs north to south across Taiwan and which received the largest investment among the Ten Major Construction Projects, was constructed with five runways that could also be used in wartime.⁷¹ This ensured Taiwan's defense posture by enabling Taiwan to deploy airpower even if the runways at its air force bases are destroyed in attacks by the PLA.

In addition, when Chiang Chingkuo became president, he ordered the installation of underground shelters immediately after United States broke off diplomatic ties with Taiwan in 1979.⁷² Based on this order, the Ministry

70) “增強國軍戰力 製造新式武器” [Reinforcing the combat capabilities of the armed forces, producing new-type weapons], 青年戰士報 [Youth Warrior Daily], February 28, 1976.

71) “聽高速公路簡報（1974年11月29日）” [Listening to highway news updates (November 29, 1974)], 賴名湯日記III民國61～65年 [Lai Ming-tang diary III 1972–1976] (Academia Historica, 2017), 411–412. “Wartime runways” are highways or other roads used for the takeoff and landing of military aircraft when enemy attacks or other circumstances render military air bases (runways) unusable. They are also known as “highway strips.”

72) “蔣主席講話” [Chairman Chiang's address], 中國國民黨第11屆中央委員會常務委員會第127次會議紀錄（1979年7月4日） [Records of the 127th session of the standing committee

of National Defense formulated a “National Armed Forces Undergrounding Plan” the following year, in 1980. This plan included the construction of concrete facilities to protect assets such as tanks and other key equipment, ammunition, and fuel, as well as the undergrounding of bases such as the Hualien Air Force Base on the eastern coast of Taiwan. On April 12, 1983, a proposal to build underground hangars in the mountains behind the Hualien Air Base (the “Chiashan Project”) was subsequently approved by the National Military Meeting.⁷³ Thus, Taiwan sought to build up its airpower by introducing high-performance fighter jets while simultaneously proceeding to build facilities to safeguard its most critical airpower assets.

When the 40th Han Kuang exercises kicked off on July 22, 2024, the Taiwanese military began force preservation drills in preparation for missile attacks. Fighter jets deployed at air force bases in western Taiwan flew to Chiashan Air Base and to Chihhang Air Base in eastern Taiwan, where they retreated to underground hangars in mountain tunnels.⁷⁴ On Kinmen, an island off the coast of mainland China that is effectively controlled by the Taiwanese government, tanks and armored vehicles were evacuated into tunnels excavated in granite.⁷⁵ Naval ships made emergency departures

of the 11th central committee of the Kuomintang (July 4, 1979)] (KMT Party History Institute, record number: 會11.3/273).

- 73) [Taiwan] Military History and Translation Bureau, Ministry of National Defense, ed., 國防部年鑑 中華民國74年度 [1985 Ministry of National Defense yearbook] (Military History and Translation Bureau, Ministry of National Defense, 1987), 56, 92; [Taiwan] Military History and Translation Bureau, Ministry of National Defense, ed., 國防部年鑑 中華民國75年度 [1986 Ministry of National Defense yearbook] (Military History and Translation Bureau, Ministry of National Defense, 1987), 48; “令頒『東部空軍基地地下化案』指示事項，請照辦” [As the instructions regarding the “undergrounding of eastern air bases project” have been issued, please implement them as per the directions] (May 10, 1983), armed forces files (Ministry of National Defense, document number: 71_0540_2821-2_1_65_00043081) ; Hau Pei-tsun, “（1983年）4月12日” [April 12, (1983)], 八年參謀總長日記（上）[Diary of eight years as chief of the general staff (part 1)] (Commonwealth Publishing Company, 2000), 301–302.
- 74) “漢光40號演習拂曉展開 軍機轉場東部基地戰力保存” [40th Han Kuang exercises conducted at dawn; relocating military aircraft to eastern bases to preserve forces], 中央通訊社 [Central News Agency], July 22, 2024, <https://www.cna.com.tw/news/aip/202407220020.aspx>.
- 75) “漢光演習「戰力保存」金門戰、甲車進出花崗石坑道畫面曝” [Han Kuang exercises “force preservation” for Kinmen battles; images of armored vehicles entering and leaving granite tunnels published], 自由時報 [Liberty Times], July 23, 2024, <https://def.ltn.com.tw/article/breakingnews/4746033>.

and took measures to avoid missile attacks on bases.⁷⁶ Army units tasked with protecting critical facilities were deployed to predesignated locations to perform protective duties.⁷⁷ They utilized nighttime to tactically maneuver to their respective areas according to their missions, such as anti-amphibious landing operations, and took measures to preserve forces at each location.⁷⁸

Regardless of the timing of the Han Kuang exercises, the Taiwanese military conducts emergency repair drills for air force base runways to ensure that aircraft will be able to take off and land even if the runways are damaged by PLA missile attacks.⁷⁹ Additionally, although it did not happen during the 40th Han Kuang exercises in 2024, fighter pilots practice takeoff and landing drills on highways designated for use as military runways every few years during these exercises, in anticipation of air base runways becoming unusable for whatever reason.⁸⁰

During previous Han Kuang exercises, a drill was conducted in which army helicopters were evacuated to civil industrial facilities.⁸¹ In regular

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- 76) “緊急出港” [Emergency port departure], 軍事新聞通訊社 [Military News Agency], July 22, 2024, <https://mna.gpw.gov.tw/news/detail/?UserKey=af4e81ff-f2a7-4bd5-bdf0-270035b8b9d1>.
- 77) “四戰區「應援重要目標防護」 驗證部隊應變防衛戰力” [Four theaters “support the protection of key targets”; troop response to sudden contingencies and defense capabilities to be examined], 軍事新聞通訊社 [Military News Agency], July 22, 2024, <https://mna.gpw.gov.tw/news/detail/?UserKey=6a633d82-26f1-4a93-93df-13c9ceb83504>.
- 78) “國軍第一作戰區各部隊進入戰術位置 待命出擊” [Each unit of the armed forces’ 1st theater of operations shifts to its tactical position, awaiting an attack order], 軍事新聞通訊社 [Military News Agency], July 22, 2024, <https://mna.gpw.gov.tw/news/detail/?UserKey=bd6e14fc-b8a3-49f5-86a8-3a5e24c337fd>; “第五作戰區夜間戰術機動 運用夜色掩護部隊行蹤” [5th theater of operations units conduct nighttime tactical maneuvers, hiding their movements under cover of night], 軍事新聞通訊社 [Military News Agency], July 23, 2024, <https://mna.gpw.gov.tw/news/detail/?UserKey=2b9c6ba6-eeaf-49e0-b158-3cfba3817dcb>.
- 79) “空軍五聯隊戰備跑道開放操演 確保空軍戰力” [Five air force regiments open wartime runways, securing air force capabilities], 軍事新聞通訊社 [Military News Agency], July 23, 2024, <https://mna.gpw.gov.tw/news/detail/?UserKey=9591023c-051e-4d56-bed8-5e762caed58b>.
- 80) “漢光重頭戲 佳冬戰備道戰機起降15日登場” [Highlight scenes of the Han Kuang exercises: Fighter landing and takeoff on the Jiadong wartime runway to take place on the 15th], 中央通訊社 [Central News Agency], September 14, 2021, <https://www.cna.com.tw/news/firstnews/202109140298.aspx>. Although fighter landing and takeoff drills on highways are designed to simulate highly realistic combat situations, large crowds of media and citizens gather to watch the exercises, which has partly contributed to the Han Kuang exercises being ridiculed as a showy performance.
- 81) “漢光戰力保存 直昇機藏馬桶工廠” [Force preservation in the Han Kuang exercises; hiding

annual air defense exercises called Wan An, following air defense warnings, all city residents practice evacuation to areas such as subways and basement levels of buildings (details discussed later).

As described above, for more than half a century, Taiwan has developed hardened military infrastructure to counter potential missile attacks by the PLA and has taken measures to preserve military forces and ensure the safety of the entire public.

Joint Operation of Air Defense Capabilities Possessed by the Army, Navy, and Air Force

On December 20, 2023, Taiwan's Aerospace Industrial Development Corporation (AIDC) announced the completion of a program in which it upgraded all 139 of Taiwan's F-16A/B (Block 20) fighter jets to the F-16V (Block 70/72) configuration.⁸² These aircraft, initially deployed in 1997, have been upgraded by AIDC with technical support from Lockheed Martin since 2015.⁸³ Separately, Taiwan is scheduled to deploy an additional 66 F-16V (Block 70/72) between 2024 and 2026. Ahead of the deployment, a unit that had been providing flight training with aging F-5F fighter jets was reorganized into an operational squadron in December 2023.⁸⁴

Bolstered by recent improvements in U.S. military assistance, four of the seven combatant wings of Taiwan's air force—more than half—operate F-16V fighter jets, while two operate Taiwan's indigenous F-CK-1, and the other one operates the Mirage 2000-5 purchased from France. The F-CK-1 is a fighter jet that Taiwan decided to develop independently with technical

helicopters in a toilet factory], TVBS新聞網 [TVBS News Network], April 17, 2012, <https://news.tvbs.com.tw/local/14999>.

82) Aerospace Industrial Development Corporation, “漢翔舉辦鳳展專案慶功餐會139架F-16V戰機如期完成昇級” [AIDC holds a celebration for the Phoenix Rising project; upgrades of 139 F-16V fighter jets completed as planned], December 22, 2023, <https://www.aidc.com.tw/tw/news/540>.

83) “台灣逾四分之一F-16戰機躺在工廠等候改裝” [Over a quarter of Taiwan's F-16 fighters wait for upgrades at the arsenal], RFI, October 18, 2019, <https://www.rfi.fr/tw/港澳台/20191018-台灣逾四分之一f-16戰機躺在工廠等候改裝>. Fifteen out of a total of 139 F-16s owned by Taiwan are used for training in the United States.

84) “新購F-16V預計2024年抵台 空軍選派65名官兵赴美受訓” [Newly purchased F-16Vs scheduled to arrive in Taiwan in 2024; air force to select 65 officers and soldiers and dispatch them to the United States for training], 中央廣播電臺 [Radio Taiwan International], December 31, 2023, <https://www.rti.org.tw/news/view/id/2191392>.

assistance from General Dynamics. Taiwan initiated development of the F-CK-1 when the United States refused to sell it the F-16 it had requested after diplomatic ties were severed in 1979, and it began deploying the fighters in 1992. However, the F-CK-1 program was scaled down once the United States reversed its stance and approved F-16 sales.

As a result, Taiwan decided to produce fewer F-CK-1 units than planned and ultimately deployed about 130 units.⁸⁵ Tests for upgrades began later in 2006, and an upgrade program was implemented from 2011 to 2017.⁸⁶

As for the one combatant wing that operates the Mirage 2000-5, when the United States refused to sell the F-16 to Taiwan in the 1980s, Taiwan sought to procure comparable fighters from other countries, and France responded.⁸⁷ However, the units are aging, and there is debate over whether to repair them or replace them with other new fighter aircraft. Additionally, the presence of three different fighter platforms—U.S.-made, U.S.-backed domestic, and French—epitomizes Taiwan's "Fight with whatever you've got" approach to procurement under external constraints, but this heterogeneity has long raised concerns regarding interoperability.⁸⁸



U.S. and Taiwanese private companies signed an agreement to establish an Asia-Pacific maintenance and repair center for F-16 on December 17, 2019 (Central News Agency)

85) Igarashi, *Tairiku hanko to Taiwan*, 225–227, 267.

86) “勇鷹高教機改良自IDF” [Brave Eagle advanced trainer aircraft is an upgraded version of IDF], 中時新聞網 [China Times Net], June 18, 2024, <https://www.chinatimes.com/newspapers/20240618000688-260309?chdtv>.

87) Igarashi, *Tairiku hanko to Taiwan*, 266.

88) In the 1970s, the Taiwanese government requested the United States to sell F-4D fighters to Taiwan, but Washington rejected the request. Taking advantage of this situation, Israel approved the sale of its Kfir fighters, but Taipei determined that deploying fighter jets other than those from the United States would complicate their maintenance and management and ended up compromising by extending joint production of the F-5E fighter aircraft with the United States. However, due to Washington's continuous refusal to sell the F-16 fighters since the 1980s, the Taiwanese government shifted its policy in the 1990s with the “intention of purchasing truly valuable high-tech weapons from any state,” and went on to procure Mirage 2000 fighter jets from France (Igarashi, *Tairiku hanko*

Since 2022, Taiwan has begun deploying the T-BE5A advanced trainer based on the F-CK-1 airframe. This aircraft also has a secondary role as a light combat platform capable of carrying air-to-air and air-to-ground missiles.⁸⁹ Right now, Taiwan is promoting the development of its military forces with an emphasis on joint air defense operations. However, China's rapidly developing airpower makes the issue of procuring fighter jets, including developing them independently, a never-ending challenge for Taiwan.

Meanwhile, Taiwan began developing its own long-range surface-to-air missile systems in the 1980s to replace the U.S.-manufactured MIM-14 Nike Hercules. In the 1990s, Taiwan deployed the Tien Kung (Sky Bow) I, a fixed-launch missile, and its improved version, the Tien Kung II. Both were researched and developed by the National Chung-Shan Institute of Science and Technology, which was then the R&D arm of the Ministry of National Defense. However, during the Third Taiwan Strait Crisis from 1995 to 1996, Taiwan became more aware of the threat posed by ballistic missile attacks from the PLA and took measures to improve survivability. Similar to the U.S.-manufactured Patriot air defense missile systems that were being introduced at the time, it mounted the Tien Kung I and Tien Kung II missiles, as well as the radars and control equipment comprising these missile systems, on vehicles. Research and development on the next-generation Tien Kung III also began around this time. Then, in 2015, Taiwan began mass-producing the Tien Kung III, mobile, long-range surface-to-air missile systems with a range of 150 kilometers and an altitude of 45 kilometers, to replace the existing MIM-23B Improved HAWK medium-range surface-to-air missile systems with 12 batteries completed by 2024.⁹⁰

to Taiwan, 206–207, 265–266).

89) “勇鷹高教機改良自IDF”

90) “天弓是我國自主研發的第一款防空飛彈” [Tien Kung, our first independently-developed air defense missile], 中時新聞網 [China Times Net], December 27, 2022, <https://www.chinatimes.com/newspapers/20221227000589-260309?chdtv>; “獨家：鷹式飛彈112年底全數裁撤 天弓三型飛彈量產接替防務” [Exclusive: All HAWK missiles scheduled for retirement by the end of 2023; mass-produced Tien Kung III missiles to take over defense duties], 自由時報 [Liberty Times], April 7, 2022, <https://def.ltn.com.tw/article/breakingnews/3885188>; “63年老兵退休 鷹式飛彈今全面除役” [Old soldiers retire after 63 years of service; HAWK missiles are about to entirely retire], 自由時報 [Liberty Times], June 29, 2023, <https://def.ltn.com.tw/article/breakingnews/4348144>.

Taiwan regards the Tien Kung series surface-to-air missile system as essential equipment for “asymmetric operations.” Improvements to the Tien Kung III are ongoing, and 12 new deployment sites are slated for completion by 2026 to enhance survivability against ballistic missile attacks.⁹¹ Research and development on the next-generation Tien Kung IV has also begun,⁹² and sea-launch tests are being conducted on naval landing ships carrying containers for the Tien Kung III vertical launch system, with long-term plans to deploy a Taiwan-made Aegis-like vessel equipped with Tien Kung series air defense missile system radars, launchers, and other equipment.⁹³

With the naval and air force modernization program on track after 2016, the Ministry of National Defense initiated long-overdue upgrades for the army. This program had been postponed due to the defense budget being allocated to the large-scale procurement of AH-64E and UH-60M helicopters. In 2018, the Taiwanese army submitted a “nine-item priority combat equipment renewal plan.” One of the points in this plan was the self-propelled surface-to-air missile system, specifically, updating the aging MIM-72 Chaparral and M998 Avenger. In response, the National Chung-Shan Institute of Science and Technology—which had been reorganized into an administrative corporation under the supervision of the Ministry of National Defense—proposed a field air defense system that included the Lu Chien (Land Sword) II missile, an improved, land-based version of the Tien Chien (Sky Sword) II air-to-air missile, which is normally mounted on Taiwan’s indigenous F-CK-1 fighter jet.⁹⁴

This system is designed to operate in coordination with the F-CK-1. Using target information acquired by the F-CK-1, it can launch Lu Chien II missiles from the ground with a maximum range of 15 kilometers, and

91) “空中威脅嚴峻 國防部擬增12處天弓三型飛彈陣地” [With greater airborne threats, the Ministry of National Defense plans to build 12 additional Tien Kung III missile positions], 中央通訊社 [Central News Agency], October 23, 2023, <https://www.cna.com.tw/news/aip/202310230155.aspx>.

92) “中科院今試射罕見「10萬呎」以上高度飛彈 疑「天弓四型」二度現蹤” [NCSIST test-fires rare missiles reaching an altitude of over “100,000 feet” today; the missile alleged to be “Tien Kung IV” appears twice], 中時新聞網 [China Times Net], September 24, 2024, <https://www.chinatimes.com/realtimenews/20240924001349-260417?chdtv>.

93) “天弓是我國自主研發的第一款防空飛彈。”

94) “陸軍汰舊更新 提9項採購清單” [Army to replace the old with the new, submitting a nine-point procurement list], 自由時報 [Liberty Times], May 7, 2018, <https://news.ltn.com.tw/news/focus/paper/1198525>.

the missiles themselves can lock onto and follow targets. This new field air defense missile system was approved in the FY2020 defense budget, with the upgrade scheduled for completion by 2026.⁹⁵ It was also included in the five-year Sea-Air Combat Power Improvement Plan Purchase Special Budget Proposal (2022–2026), which was passed by Taiwan’s Legislative Yuan in November 2021 with a total budget of approximately NT\$240 billion.⁹⁶

The army began receiving deliveries of the new field surface-to-air missile system in May 2023, and it has since been using it to conduct live-fire exercises. In addition, to bridge the gap between the new field air defense missile system and long-range surface-to-air missiles such as the Patriot and Tien Kung III, Taiwan’s Ministry of National Defense has introduced NASAMS, which was jointly developed by Norway and the United States. Plans are underway to build an air defense network that uses Link-16 to connect fighter jets and naval ships to the existing air defense system.⁹⁷

In recent years, PLA combat aircraft have been entering Taiwan’s Air Defense Identification Zone and crossing the median line of the Taiwan Strait with increasing frequency. Simply comparing the number of fighter aircraft possessed by each side puts the balance of power overwhelmingly in China’s favor. To protect itself from this significant imbalance in combat power, Taiwan must accelerate the construction of a joint air defense system

95) “陸軍防空新利器 將採購陸射劍二飛彈” [Army to procure land-based Lu Chien II missiles as its new air defense weapons], 聯合新聞網 [udn.com], September 1, 2019, <https://udn.com/news/story/10930/4022622>.

96) [Taiwan] Legislative Yuan, “海空戰力提昇計畫採購特別預算案各採購案均係獨立建案並分別函報行政院審議之計畫，却未逐案列明執行期程及分年經費，難謂妥適” [Sea-air combat power improvement plan purchase special budget proposal: Each procurement proposal is planned to be independently prepared and submitted to the Executive Yuan for deliberation, but the implementation schedule and annual expenditure for each project are not clearly stated, and thus it cannot be called reasonable], November 1, 2021, <https://www.ly.gov.tw/Pages/Detail.aspx?nodeid=45371&pid=215887>; Laws & Regulations Database of the Republic of China, “海空戰力提昇計畫採購特別條例” [Sea-air combat power improvement plan purchase special regulation], <https://law.moj.gov.tw/LawClass/LawAll.aspx?pcode=F0090035>.

97) “台灣軍購NASAMS 二型 學者：提昇中程防空能量與接戰效率” [Taiwan’s military to purchase NASAMS-II; experts: it will improve mid-range air defense capabilities and engagement efficiency], 中央通訊社 [Central News Agency], July 18, 2023, <https://www.cna.com.tw/news/aip/202307180236.aspx>; “專家：陸射劍二部署全台 完備中低層防空間隙” [Experts: Deployment of all land-based Lu Chien II missiles will completely close the gap in low- to mid-altitude air defense], 聯合新聞網 [udn.com], April 4, 2024, https://udn.com/news/story/10930/7877412?from=udnrelatednews_ch2.

that seamlessly and organically integrates the air defense capabilities of its army, navy, and air force.

The Naval Blockade Operations and the Interception of Invasion Forces

Tsai Ingwen, who became Taiwan's president on May 20, 2016, had been advocating an "Indigenous Defense Warship" policy since her election campaign period. On June 20, exactly one month after Tsai's inauguration, the navy announced a twelve-point plan based on this "Indigenous Defense Warship" policy. Although much attention was focused on Taiwan's first indigenous defense submarine, the plan also proposed measures such as the mass production of small, high-performance ships to build up Taiwan's forces for "asymmetric operations" against sea blockade operations by China. This kicked off joint research and development by the Ministry of National Defense's equipment development department and private shipbuilding companies.⁹⁸ Subsequently, based on the special ordinance for the Sea-Air Combat Power Improvement Plan Purchase Special Budget that was passed in November 2021, Taiwan began mass-producing the *Tuo Chiang*-class corvette (dubbed the "carrier killer"). This fast, twin-hulled corvette is equipped with long-range missiles and was researched and developed by a private shipbuilding company. Taiwan also began procuring additional long-range surface-to-ship missiles that were developed by the National Chung-Shan Institute of Science and Technology.⁹⁹



A *Tuo Chiang*-class corvette armed with eight Hsiung Feng III long-range anti-ship missiles (Central News Agency)

98) “展國艦國造決心 海軍公布12項建軍規畫” [Resolve for the domestic ship, domestically built policy demonstrated; the navy announces a 12-point military buildup plan], 中央通訊社 [Central News Agency], June 19, 2016, <https://www.cna.com.tw/news/aip/201606190134.aspx>.

99) “沱江級第2艘量產艦完成測試 富江艦月底交艦海軍” [Testing for the second mass-produced version of the *Tuo Chiang*-class corvette completed; ROCS *Fu Chiang* planned

Twelve *Tuo Chiang*-class corvettes, which are symbolic representations of the “asymmetric combat capability” in Taiwan’s naval force development, are scheduled to be deployed. The Hai Feng Group, under the Naval Fleet Command, received with its sixth mass-produced version of the *Tuo Chiang*-class corvette by July 3, 2024, and has been using it for warning and surveillance activities.¹⁰⁰

In addition, the Coast Guard Administration, Taiwan’s maritime law enforcement agency, has procured 12 of the 600-ton class patrol vessels based on the *Tuo Chiang* class and began deploying them in 2020. These high-speed catamaran patrol vessels, known as the *Anping* class, are each equipped with a water cannon and 20mm gun, but are designed to be reconfigurable with the same 76mm rapid-fire gun and anti-ship and anti-aircraft missiles as the *Tuo Chiang*-class corvettes.¹⁰¹ In 2022, *Anping*, the first patrol vessel of the class, was outfitted with anti-ship missile launchers and underwent a test launch. The vessels were then incorporated into the naval fleet for the 39th Han Kuang exercises in 2023, during which “peacetime-to-wartime transition” drills were conducted, including the launch of anti-ship missiles.¹⁰²

As China accelerates the deployment of aircraft carriers and large destroyers, Taiwan is expected to finish deploying 12 *Tuo Chiang*-class corvettes and 12 *Anping*-class patrol vessels by the end of 2026. Armed with long-range anti-ship missiles, these small and fast ships will be a key

for delivery to the navy at the end of the month], 中央通訊社 [Central News Agency], June 24, 2023, <https://www.cna.com.tw/news/aip/202306240036.aspx>; “中科院海空戰力提昇計畫約聘人員 2026年三分之一留用” [NCSIST plans to improve naval and air force capabilities; a third of contract staff to be retained in 2026], 聯合新聞網 [udn.com], June 19, 2024, <https://udn.com/news/story/6656/8040688>.

100) “沱江級艦安江、萬江7/3成軍 投入戰備反制共艦” [Deployment of the *Tuo Chiang*-class corvettes ROCS *An Chiang* and ROCS *Wan Chiang* completed on July 3, with the ships entering combat readiness to counter Chinese vessels], 中央通訊社 [Central News Agency], June 30, 2024, <https://www.cna.com.tw/news/aip/202406300021.aspx>.

101) “國防MIT：海巡沱江11月下旬交船 明年漢光加裝飛彈測試「平戰轉換」” [National defense MIT: Coast Guard Administration’s *Tuo Chiang*-class corvettes scheduled for delivery in late November; testing of the “operational transition of the Taiwan Coast Guard from peacetime to wartime” to be conducted with missiles mounted on the vessels in next year’s Han Kuang exercises], 自由時報 [Liberty Times], October 17, 2020, <https://news.ltn.com.tw/news/politics/breakingnews/3324073>.

102) “海巡「安平級艦」納入海軍62特遣部隊三度射雄二反艦飛彈” [Coast Guard Administration’s “*Anping*-class vessels” incorporated into the navy’s 62nd Special Task Force, launching the Hsiung Feng II anti-ship missile three times], 中時新聞網 [China Times Net], April 21, 2024, <https://www.chinatimes.com/realtimenews/20240421001386-260417?chdtv>.

component of Taiwan's asymmetric combat capability, as they can be used in anti-sea blockade operations and to intercept cross-Strait invasion forces. Meanwhile, the twelve-point plan based on the "Indigenous Defense Warship" policy also included large naval ships, such as the aforementioned Taiwan-made Aegis-like vessel. In addition, Taiwan's government and military have positioned their first indigenous defense submarine, which has drawn significant attention under the "Indigenous Defense Warship" policy, as a key component of Taiwan's asymmetric combat capability. Launched in September 2023, the submarine underwent a series of tests before being delivered to the navy at the end of 2024, and it is scheduled to enter service in 2025.¹⁰³ However, since indigenous defense submarines are conventional weapons operated by many other countries and are costly to build, there is an argument that a more preferred strategy for "asymmetric operations" would be to deploy a large number of small, AI-equipped unmanned submarines.¹⁰⁴

That said, in addition to the small, fast, and maneuverable ships armed with long-range anti-ship missiles that have become synonymous with "asymmetric operations," Taiwan has been working to deploy land-based versions of ship-mounted long-range anti-ship missiles since the 1990s. In recent years, Taiwan has purchased land-based Harpoon anti-ship missiles from the United States and has been increasingly deploying them for "asymmetric operations." In Taiwan, land-based anti-ship missiles are also deployed to the navy's Hai Feng Group, which has the aforementioned *Tuo*

103) "建構不对称战力关键拼图 国造海鯤潜艦28日下水" [Building a key puzzle piece for asymmetrical warfare capabilities: *Hai Kūn*-class domestically produced submarine launched on the 28th], 中央通訊社 [Central News Agency], September 27, 2023, <https://www.cna.com.tw/news/aip/202309270096.aspx>; "國造原型艦海鯤軍艦下水 陸國防部批：不過是螳螂擋車" [Prototype of the *Hai Kūn* domestically produced submarine launched; China's Ministry of National Defense criticizes it as nothing more than kicking against the pricks], 聯合新聞網 [udn.com], January 14, 2022, <https://udn.com/news/story/7331/7471796>.

104) This argument is a criticism against Huang Shu-kuang, who served as Commander of the Navy and Chief of General Staff before becoming head of the domestically built submarine project at the Office of the President, for describing the employment of eight submarines to counter the PLA's maritime blockade operation and block the sea routes leading to the waters east of Taiwan as an "asymmetric operation" ("國戰會論壇：國造潛艦註定無法成為不對稱（譚傳毅）" [Taiwan International Strategic Study Society forum: Domestically built submarines destined to be unusable for asymmetric operations (Tan Chuan-ji)], 中時新聞網 [China Times Net], October 22, 2023, <https://www.chinatimes.com/opinion/20231022000045-262110?chdtv>).

Chiang-class corvettes, and this unit collectively controls all anti-ship missile forces. A second Hai Feng Group was newly formed in July 2023, as was a third group by the end of the year, and the navy plans to set up a new Sea Control Missile Command as a senior unit that will command all these groups.¹⁰⁵

Howitzers, which are equipped by the army's artillery units, are another traditional weapon for naval blockade operations and for intercepting cross-Strait invasion forces. During the 40th Han Kuang exercises in July 2024, live-fire drills were not conducted on Taiwan's main island. However, on the second day, 240mm howitzers were fired on Kinmen, an island off the coast of mainland China, and on the third day, 155mm cannons were fired on the Matsu Islands, simulating artillery fire to repel amphibious landings and disrupt sea blockades.¹⁰⁶ In the near future, the army also plans establish a posture for intercepting cross-Strait invasion forces from a greater distance by introducing the U.S.-manufactured High Mobility Artillery Rocket System (HIMARS) and forming a new artillery battery in each of the three Theaters of Operation on Taiwan's west coast.¹⁰⁷

To further enhance capabilities, the Ministry of National Defense announced on August 21, 2024, that it would procure 16 unmanned reconnaissance (rotary-wing) drones for the navy between 2024 and 2025, and 96 land-launched fixed-wing reconnaissance drones between 2024 and

105) “共艦殺手！海峰第二大隊首亮相 第三大隊年底前「這地區」正式編成” [Chinese warship killer! 2nd Hai Feng Group makes its debut; third group to be officially organized in “this district” by the end of the year], 中時新聞網 [China Times Net], February 1, 2024, <https://www.chinatimes.com/realtimenews/20240201002348-260417?chdtv>; “打造刺猬島！海軍成立「制海飛彈指揮部」機動發射車大增” [Building a hedgehog island! Navy establishes a “Sea Control Missile Command,” significantly increasing mobile launch vehicles], 中時新聞網 [China Times Net], January 23, 2024, <https://www.chinatimes.com/realtimenews/20240123002404-260407?chdtv>.

106) “金防部火力支援演練” [Kinmen Defense Command conducts firepower support exercises], 軍事新聞通訊社 [Military News Agency], July 23, 2024, <https://mna.gpwb.gov.tw/news/detail/?UserKey=1990ca22-5577-41a3-9c50-12699ca43913>; “馬防部航道封鎖實彈射擊展現精實防衛戰力” [Matsu Defense Command blocks sea routes and conducts live-fire exercises, demonstrating its lean defense capabilities], 軍事新聞通訊社 [Military News Agency], July 24, 2024, <https://mna.gpwb.gov.tw/news/detail/?UserKey=145f4449-10b1-4884-95aa-0c6bc4d9e17d>.

107) [Taiwan] Editorial Committee, 2023 National Defense Report, Ministry of National Defense, 中華民國112年 國防報告書, 71.

2028. These are commercial-standard drones that have been altered for military use.¹⁰⁸

One of the reasons Ukraine has been able to sustain its resistance over time is the continued delivery of supplies by land from neighboring countries.¹⁰⁹ In contrast, Taiwan is surrounded by the ocean on all sides, which would make it difficult to continue fighting if its maritime traffic were cut off from the outside world. Due to its limited natural resources, Taiwan is said to need to maintain its lifelines by disabling sea blockades as well as to establish a system that can stop invading forces from crossing the strait from as far away as possible.¹¹⁰

Improving Counter-Landing Operation Capabilities

In counter-landing operations, laying sea mines in advance is key to impeding or preventing the landing enemy. One of the points listed in the twelve-point plan announced by the navy in June 2016 was the production of new high-speed minelaying ships.¹¹¹ Previously, Taiwan's military did not have dedicated minelaying ships; instead, it used small landing ships to lay mines manually. This method was extremely inefficient and highly dependent on the weather. Therefore, the navy invested about NT\$900 million to build four new, small, high-speed ships dedicated to laying mines. With a maximum displacement of 376 tons, each of these small ships can be operated by a crew of 17 and is equipped with an automatic mine-laying

108) [Taiwan] Legislative Yuan, “國防部主管113年度單位預算評估報告” [2024 unit budget evaluation report for the Ministry of National Defense], October 2023, <https://www.ly.gov.tw/Pages/List.aspx?nodeid=46442>; “68.87億採購6款軍用商規無人機放榜了！最快明年投入戰備部署” [Six models of commercial-standard drones procured at 6.887 billion for military use announced! They will enter combat readiness next year at the earliest], 自由時報 [Liberty Times], August 21, 2024, <https://def.ltn.com.tw/article/breakingnews/4775437>.

109) Lawrence Freedman, “What Should Ukraine Do Next?: Preparing for a Long War,” *Comment Is Freed*, November 29, 2023, <https://samf.substack.com/p/what-should-ukraine-do-next>; Rob Lee and Michael Kofman, “How the Battle for the Donbas Shaped Ukraine’s Success,” Foreign Policy Research Institute (December 2022), <https://www.fpri.org/article/2022/12/how-the-battle-for-the-donbas-shaped-ukraines-success/>.

110) Mark F. Cancian, Matthew Cancian, and Eric Heginbotham, *The First Battle of the Next War: Wargaming a Chinese Invasion of Taiwan* (Washington, DC: Center for Strategic and International Studies, 2023).

111) “展國艦國造決心 海軍公布12項建軍規畫.”

system newly developed by the National Chung-Shan Institute of Science and Technology. Between 2019 and 2021, all four ships were then turned over to the navy, some of which were put into service in January 2022 under the navy's newly formed minelaying squadrons.¹¹²

During the 39th Han Kuang exercises in July 2023, the navy's minelaying squadrons prepared the mines on the first day, then conducted a drill in which they performed an emergency departure on high-speed minelayers and laid mock mines to delay an enemy invasion.¹¹³ During the 40th Han Kuang exercises in July 2024, the squadrons reloaded the mines onto the navy's minelaying ships, which had completed a minelaying operation, on the second day.¹¹⁴ And after this exercise, the navy submitted a budgetary request to the Legislative Yuan to procure six high-speed minelaying ships at a cost of approximately NT\$1.8 billion from 2025 to 2027.¹¹⁵ In the three years since they were formed in 2022, these minelaying squadrons have more than doubled in size and continue to add more ships. They have become a key component of Taiwan's asymmetric combat capability in counter-landing operations.

As for the army, it submitted a “nine-item priority combat equipment renewal plan” in 2018 and began a full-scale renewal of its aging equipment. One of this plan's priorities was to update the M60A3 and CM11 main battle tanks deployed from the 1970s to the 1980s; the army had previously approached the United States about providing it with M1A2 battle tanks. It also decided to procure BGM-71F TOW-2B anti-tank guided missiles from the United States, as well as to begin full-scale research and development

112) “海軍布雷中隊成軍 成為不對稱作戰可恃戰力” [Navy establishes mine-laying squadrons as future reliable forces in asymmetrical operations], 中央通訊社 [Central News Agency], January 14, 2022, <https://www.cna.com.tw/news/aip/202201140118.aspx>.

113) “漢光首日著重戰力保存 海軍模擬布雷遲滯敵軍行動” [Han Kuang exercises focus on force preservation on the first day; navy's laying of mock mines delays enemy force activities], 中央通訊社 [Central News Agency], July 24, 2023, <https://www.cna.com.tw/news/aip/202307240332.aspx>.

114) “海軍布雷作業大隊整補再戰 發揮不對稱戰力” [Navy's mine-laying squadrons reload equipment to prepare for another battle, demonstrating their asymmetrical warfare capabilities], 軍事新聞通訊社 [Military News Agency], July 23, 2024, <https://mna.gpwb.gov.tw/news/detail/?UserKey=6b8dd1ff-e429-415d-aafd-dfdc9a795498>.

115) “海軍增購6艘快速布雷艇 有效對抗兩棲進犯” [Navy to procure six additional rapid mine-laying vessels, effectively countering invasions in amphibious operations], 中央通訊社 [Central News Agency], August 30, 2024, <https://www.cna.com.tw/news/aip/202408300151.aspx>.

of combat vehicles and mortar carriers based on the Yunpao (Clouded Leopard), an eight-wheeled armored vehicle produced independently by the Taiwanese army.¹¹⁶

Shortly thereafter, the M1A2 main battle tanks were incorporated into the budget, and Taiwan decided to allocate approximately NT\$40.5 billion to procure 108 units between 2019 and 2027. Of these, 38 tanks arrived in Taiwan on December 15, 2024, with 42 more scheduled for delivery in 2025 and another 28 in 2026.¹¹⁷ In August 2024, a vehicle armed with TOW-2B missiles was unveiled.¹¹⁸ In addition, Taiwan has decided to purchase M136 Volcano anti-tank mine-dispensing systems from the United States by 2029. This equipment will be used to rapidly scatter mines immediately before the landing of the PLA troops.¹¹⁹ While Taiwan has been continuously deploying combat-tested, U.S.-manufactured equipment, it has also been making progress in producing its own equipment domestically. In June 2024, Taiwan reportedly unveiled an eight-wheeled armored combat vehicle armed with a 105mm gun, with completion scheduled for June 2025.¹²⁰



A U.S.-manufactured M1A2T tank arriving in Taiwan in December 2024 (Central News Agency)

116) “陸軍汰舊更新 提9項採購清單。”

117) “M1A2T戰車今年起抵臺 國軍報告曝去年已在美交裝14輛” [M1A2T tanks arrive in Taiwan this year; an armed forces’ report reveals the delivery of 14 units in the United States last year], 自由時報 [Liberty Times], June 13, 2024, <https://def.ltn.com.tw/article/breakingnews/4703738>; “M1A2T晚間啟動吊掛作業 戰車被黑色防水布包裹” [M1A2T hoisting operation begins during nighttime; tanks covered in black tarpaulin], 中央通訊社 [Central News Agency], December 15, 2024, <https://www.cna.com.tw/news/aip/202412150210.aspx>. Taiwan’s armed forces already received 14 M1A2 units as early as at the end of 2023 and are receiving training with them in a U.S. military base.

118) “天馬操演 新型拖式飛彈車首亮相” [Tien Ma exercises debut a vehicle mounted with a new TOW missile], 青年日報 [Youth Daily News], August 27, 2024, <https://www.ydn.com.tw/news/newsInsidePage?chapterID=1703455>.

119) “台美簽署採購陸上機動布雷系統45.4億元反制共軍登陸進犯” [Taiwan and the United States sign a contract worth 45.4 billion yuan to procure land-based mobile mine-laying systems to counter the Chinese military landing and invasion], 自由時報 [Liberty Times], June 29, 2023, <https://def.ltn.com.tw/article/breakingnews/4348125>.

120) “105公厘輪型戰車第3輛樣車生變？軍備局：明年6月底前完成” [Third prototype of the

Aside from updating its equipment, Taiwan is training continuously for counter-landing operations. During the 40th Han Kuang exercises, a live-fire anti-landing exercise was conducted on the Penghu Islands on the third day, during which personnel trained to destroy landing enemy forces under the cover of man-portable surface-to-air missiles (MANPADS) and multi-purpose missiles, with fire support from various types of howitzers and mortars.¹²¹ At the Port of Anping in Tainan, training to stop infiltration and sabotage operations was conducted at night.¹²² During the 39th Han Kuang exercises in July 2023, a unit composed of mobilizing military reservists participated in training for counter-landing operations.¹²³

Taiwan's plan to prioritize the renewal of naval and air force equipment until around 2018 has undeniably resulted in the renewal of its counter-landing operations equipment, which is primarily the responsibility of the army, to lag behind that of its naval and air force equipment. However, in recent years, Taiwan has continued to mobilize its reserves to form new army infantry brigades. This reorganization of the reserve infantry brigades, which were previously under the Reserve Command, strengthens Taiwan's posture by forming garrison forces that can quickly counter enemy landings in wartime.¹²⁴

It should also be noted that Taiwan is rapidly introducing commercial-standard drones that have been modified for military use. On August 21, 2024, the Ministry of National Defense announced that it would procure 72 observation drones between 2024 and 2025, mainly for use by the army artillery units in collecting target information; 1,552 multicopter-type

105mm wheeled combat vehicle to undergo modifications? Armaments Bureau: Vehicle scheduled for completion by the end of June next year], 自由時報 [Liberty Times], August 10, 2024, <https://def.ltn.com.tw/article/breakingnews/4765110>.

121) “第一作戰區聯合反登陸作戰 展現堅實防衛戰力” [1st theater of operations demonstrates robust defense capabilities in joint anti-landing operations], 軍事新聞通訊社 [Military News Agency], July 24, 2024, <https://mna.gpw.gov.tw/news/detail/?UserKey=5228e94c-5769-4512-a82e-2f59ccfb8c31>.

122) “夜間反浸透” [Preventing nighttime infiltrations], 軍事新聞通訊社 [Military News Agency], July 24, 2024, <https://mna.gpw.gov.tw/news/detail/?UserKey=a67cd9eb-c1f2-4d57-bc1a-7ffa47cbc410>.

123) “強化後備動員能量 厚植防衛戰力” [Strengthening reserve mobilization capacity and significantly developing defense capabilities], 青年日報 [Youth Daily News], July 23, 2023, <https://www.ydn.com.tw/news/newsInsidePage?chapterID=1601939>.

124) [Taiwan] Editorial Committee, 2023 National Defense Report, Ministry of National Defense, 中華民國112年 國防報告書, 71.

reconnaissance drones used across all services (army, navy, and air force); and 1,485 ultra-compact micro drones modeled after the Black Hornet drones developed by a Norwegian military company, for use by army special forces, reserve brigades, and air force base defense units.¹²⁵ These dual-use military–civilian projects are notably spearheaded by the Ministry of Economic Affairs, which leads the projects.¹²⁶ Taiwan will also purchase 720 Switchblade 300 loitering munitions from the United States by 2025. These drones have a limited operational scope due to their 20-minute flight endurance and 20-kilometer maximum cruising range, but they can be launched from a small canister.¹²⁷ Along with introducing drones, Taiwan is rushing to deploy drone jammers capable of downing enemy drones via electronic interference. These jammers have already been deployed to offshore island units, including those on Kinmen and Matsu.¹²⁸

Thus, Taiwan seeks to enhance not only its counter-landing operations but also its counterattack capabilities in the event of an enemy landing, by supplementing its “asymmetric operations” capacity with drones and counter-drone systems.

Building Stand-off Capabilities

As described above, Taiwan is in the process of building up its forces for counter-landing operations. However, if China were to decide to invade Taiwan in the near future, it would be difficult to argue that Taiwan's current counter-landing capabilities are sufficient. Conversely, Taiwan's military

125) [Taiwan] Legislative Yuan, “國防部主管113年度單位預算評估報告”; “68.87億採購6款軍用商規無人機放榜了！最快明年投入戰備部署”; “軍方採購1485架微型無人機 全台18個縣市後備旅也用到” [Military procures 1,485 micro drones, making them available for reserve forces in all 18 counties and cities in Taiwan], 自由時報 [Liberty Times], November 22, 2023, <https://def.ltn.com.tw/article/breakingnews/4497761>.

126) “經濟部進駐亞創無人機研發中心 專案辦公室揭示牌” [Ministry of Economic Affairs enters the Asia UAV R&D center, putting up a signboard of the project office], 中央通訊社 [Central News Agency], December 11, 2023, <https://www.cna.com.tw/postwrite/chi/359310>.

127) “台灣軍購千套攻擊式無人機獲准 美：2025年前交貨” [Purchase of 1,000 attack drones by Taiwan's military approved; U.S. to deliver them by 2025], 中央通訊社 [Central News Agency], December 11, 2023, <https://www.cna.com.tw/news/aip/202406200011.aspx>.

128) “金防部反制無人機 干擾槍應處” [Kinmen Defense Command to use jamming guns to respond to drones], 青年日報 [Youth Daily News], September 3, 2022, <https://www.ydn.com.tw/news/newsInsidePage?chapterID=1530252&type=immediate>.

strategy could change drastically with enough time. This is because it is building a stand-off capability against mainland China, that is, the ability to launch missiles and other weapons from outside the range of enemy air defense missiles in order to attack key military bases and other enemy targets.

The Third Taiwan Strait Crisis of 1995–1996 confirmed for Taiwan the importance of ballistic missile defense. The crisis also sparked discussions about the need for weapons capable of striking mainland China from across the Taiwan Strait, and surface-to-surface cruise missiles were one of the options raised.¹²⁹ Subsequently, research and development began at the National Chung-Shan Institute of Science and Technology. It conducted successful launch tests of the Hsiung Feng IIE surface-to-surface cruise missile Type A with a range of 500 kilometers in 2004, and Type B with a range of 1,000 kilometers in 2007; deployment to military units is said to have begun thereafter. The Hsiung Feng IIE was shrouded in a veil of secrecy until it was listed in the Sea-Air Combat Power Improvement Plan Purchase Special Budget Proposal in November 2021, which included the mass production of an extended-range version of the Hsiung Feng IIE. Furthermore, a report submitted to the Legislative Yuan by the Ministry of National Defense in April 2022 noted that the extended-range version would be used in attacks on fortified command posts, bunkers, runways, and other enemy targets.¹³⁰

As for weapons capable of attacking enemy runways and troop assembly areas, the Wan Chien, an anti-runway guided missile researched and developed by the National Chung-Shan Institute of Science and Technology for the F-CK-1, has been in use since the mid-2010s. Like the Hsiung Feng IIE, this missile was also included in the November 2021 Sea-Air

129) “奔騰思潮：雄風二E的問世與運用構想（揭仲）” [Le penseur: Debut and operational concept of the Hsiung Feng IIE (Chieh Chung)], 中時新聞網 [China Times Net], August 22, 2023, <https://www.chinatimes.com/opinion/20230822005413-262110?chdtv>.

130) “「雄昇飛彈」射程1200公里戰力威猛 空軍再編83.8億做戰力鑑測” [“Hsiung Sheng missile” has a range of 1,200 km and powerful combat capabilities; air force to restructure its budget worth NT\$8.38 billion to assess its combat capabilities], 自由時報 [Liberty Times], August 31, 2024, <https://def.ltn.com.tw/article/breakingnews/4785961>. The firing of the Hsiung Feng IIE was reported in August 2024 (“直擊！機密「雄二E」飛彈今晨率先發射 附帶加力火箭且彈道低平” [From the scene! Classified “Hsiung Feng IIE” missile launched first off this morning; equipped with a rocket booster and flying on a low and flat trajectory], 自由時報 [Liberty Times], August 20, 2024, <https://def.ltn.com.tw/article/breakingnews/4774551>).

Combat Power Improvement Plan Purchase Special Budget Proposal and is being deployed with an extended range of 400 kilometers (originally 200 kilometers).¹³¹ In addition, the United States has decided to sell the AGM-158 Joint Air-to-Surface Stand-off Missiles (JASSM), which have a range of about 370 kilometers, to Taiwan for use on its F-16V fighters.¹³²

Besides stand-off missiles, Taiwan has begun deploying Chien Hsiang loitering munitions developed by the National Chung-Shan Institute of Science and Technology, which takes after Israel's Harpy. Also included in the 2021 Sea-Air Combat Power Improvement Plan Purchase Special Budget Proposal, the Chien Hsiang boasts a maximum flight endurance of five hours and a range of over 1,000 kilometers, which puts inland mainland China within its range.¹³³ Taiwan will also purchase 291 Altius-600M loitering munitions from the United States, although these drones have a somewhat short range of about 400 kilometers.¹³⁴

Facing the reality of prolonged fights and destruction all across Ukraine, a growing number of people in Taiwan believe that a PLA's invasion must be stopped before its forces reach Taiwan's shores. Taiwan is advancing the deployment of stand-off missiles that are capable of striking inland areas of mainland China. However, there is a risk that their use could provoke China and further escalate conflict. Taiwan will likely face a difficult strategic decision over whether and how to employ such capabilities in a future crisis.

131) “萬劍彈3年生產150枚400公里射程增程型傳今年開始小批量產製” [Output of the Wan Chien missile to reach 150 missiles over three years; small-lot production of a version with an extended range of 400 km to begin this year], 自由時報 [Liberty Times], January 26, 2024, <https://def.ltn.com.tw/article/breakingnews/4563555>.

132) “美宣佈售日AGM-158B長程飛彈 傳美同意賣給台灣AGM-158飛彈” [U.S. announces the sale of the AGM-158B long-range missile to Japan; U.S. reportedly approves the sale of the AGM-158 missile to Taiwan], 自由時報 [Liberty Times], August 29, 2023, <https://def.ltn.com.tw/article/breakingnews/4410650>.

133) “攻擊距離超過1000公里 劍翔無人機 實機首公開” [Strike range of over 1,000 km; first public unveiling of the Chien Hsiang drone], 自由時報 [Liberty Times], November 16, 2022, <https://news.ltn.com.tw/news/politics/paper/1551795>; “劍翔無人機「俯衝攻擊」畫面首曝光 攻擊型無人機後續需求大增” [First images of the Chien Hsiang drone's “diving attack” released; future demand for attack drones significantly increases], 自由時報 [Liberty Times], August 19, 2023, <https://def.ltn.com.tw/article/breakingnews/4401074>.

134) “台灣軍購千套攻擊式無人機獲准 美：2025年前交貨。”

Establishment of an All-out Defense Structure

The Military Service Program Supporting Taiwan's Mobilization Structure

As of the end of 2023, about two million people in Taiwan, or nearly 10% of the total population of about 23 million, are registered as reservists. Of these reservists, approximately 280,000 are designated as personnel for mobilized units (organized into army reserve brigades, etc.), which augment the standing forces of the army, navy, and air force. The number of these personnel exceeds the number of standing forces which amounts to approximately 250,000. Taiwan's defense posture also includes approximately 1.7 million other personnel serving in reserve brigades and logistical forces that have been established in each county and city to defend their respective areas; these personnel engage in the same operational activities as the military's standing forces.¹³⁵

Building such a large reserve force overnight is difficult. What has made this possible is Taiwan's military service program, in which young people serve in the armed forces for a certain length of time to fulfill their national defense

135) According to interviews in February 2024. The number of registered reservists was published for the first time in the second *National Defense Report* released in 1994. This report stated that the total number of registered reservists stood at approximately 3.75 million, and that the breakdown by rank was around 300,000 officers, around 1.3 million non-commissioned officers, and around 2.15 million soldiers, with the breakdown by branch of service being around 3.01 million for the army, around 194,000 for the navy, around 233,000 for the marine corps, and around 332,000 for the air force ([Taiwan] National Defense Report Editing Committee, Ministry of National Defense, 中華民國 82-83 年國防報告書 [1993–1994 ROC National Defense Report] (Li Ming Cultural Enterprise Co., Ltd., 1994), 169). Following its peak at approximately 3.87 million in 1997, the number of reservists began decreasing, and it shrank to approximately 2.84 million in 2008. The reason for the significant decrease of approximately 1 million over around ten years is that, as described below, the maximum age at which those who were discharged as soldiers and transferred to the reserves are obligated to perform military service was lowered from 45 to 40, in accordance with the December 2005 amendment to the Act of Military Service System (Sun Hung-hsin, 臺灣全志 卷六 國防志·軍事組織與制度篇 [Complete collection of records on Taiwan volume 6: National defense records – military organizations and systems] (Taiwan Historica and Ministry of National Defense, 2013), 153).

duty.¹³⁶ This program historically came about due to Chiang Kaishek's insistence on securing a large reserve force to carry out the "Retaking the Mainland" operation.¹³⁷ Thus, Taiwan's current military service program boasts a reserve force that is essentially a legacy of the "Retaking the

136) Taiwan's military service system has a long history and dates back more than 90 years. The ROC established its military service system in 1933. Its constitution, which took effect in 1947, stipulates, "The people shall have the duty of performing military service in accordance with law." However, amid the intensifying struggle with the Chinese Communist Party, the military service system did not function effectively. Then, in 1949, the ROC government relocated its central government to Taiwan and worked on developing the system in an effort to rebuild its armed forces following its defeat in the civil war. Following the 1951, 1954, and 1959 revisions, the 1974 amendment lay a foundation for the current military service system (Sun, 臺灣全志 卷六 國防志 · 軍事組織與制度篇, 149–153; "義務役期幾度更迭 最長3年最短4個月" [Repeated revisions to the mandatory military service period, with three years at the longest and four months at the shortest], 中央通訊社 [Central News Agency], December 27, 2022, <https://www.cna.com.tw/news/aip/202212270355.aspx>).

137) Amid an intensifying struggle with the Chinese Communist Party over the post-war Chinese political order, the ROC government proceeded to develop legislation on mobilization. However, as described above, the military service system did not function effectively, and attempts to conduct mobilization and form troops failed due to the lack of capacity to build reserve forces that would constitute such troops in the first place. It was only after its retreat to Taiwan that the ROC government gained leeway to do so, and Taipei developed its mobilization system under the leadership of the National Defense Council newly established in 1952 (Sun, 臺灣全志 卷六 國防志 · 軍事組織與制度篇, 155). Following the advice of the U.S. military advisory group, Chiang Kaishek proceeded with reorganizing and restructuring the armed forces by adopting a U.S.-style military organization. However, the advisory group determined that the existing 31 divisions were excessive for the defense of Taiwan and demanded a reduction to 21 divisions. In response, Chiang accepted the demand on the condition that the divisions targeted for reduction would be reorganized into reserve divisions and retained ("周至柔致蔡斯函稿答復美軍援顧問團一九五一年年終報告書之中國陸軍改編問題，美國軍事援華顧問團蔡斯將軍一九五一年年終報告書" [Chou Chihjou responds in a letter addressed to Chase to the issue of the reorganization of the ROC army in the 1951 year-end report of the Military Assistance Advisory Group; 1951 year-end report of General Chase, Military Assistance Advisory Group] [January 26, 1952], specialized files, Collection of President Chiang Kaishek, stored at the Academia Historica (storage number: 002-080106-00049-010)). As training for military reservists went into full swing in 1954, an army reserve forces training command was newly established in July 1955, with the army's 4th army command as its core, and the ten army divisions targeted for reduction were reorganized into nine reserve divisions and assigned under the training command. Thereafter, reserve divisions stationed across Taiwan rotated to the Chenggongling Camp in Taichung to conduct military training for reserve personnel. Approximately 650,000 reservists were trained by 1961, and a mobilization system capable of completing mobilization within seven to nine days was established (Sun, 臺灣全志 卷六 國防志 · 軍事組織與制度篇, 155).

Mainland” mission, in which only men were obligated to serve. However, in 2000, an amendment to the Act of Military Service System introduced a new volunteer military service program while maintaining the traditional conscription system. The voluntary military service program was opened to women, who were previously ineligible for military service. In 2005, further amendments to the Act of Military Service System lowered the maximum age at which the lowest-ranking soldiers who were discharged and transferred to the reserves—regardless of whether they were conscripts or volunteers—are obligated to perform military service from 45 to 40. Additionally, as more volunteers joined the military, the length of compulsory military service for conscripted personnel began to be shortened. Starting in January 2008, the length of service was reduced to one year.

In 2012, Taiwan decided to abolish conscription and transition to a fully volunteer program. After a transition period of approximately five years, Taiwan’s military became an all-volunteer force at the end of 2018, enlisting only male and female volunteers. Nevertheless, the article in the Act of Military Service System that stipulates one year of military service was left in place, and measures were taken to maintain a large reserve force by requiring military-age men to undergo four months of military training.¹³⁸

As time passed, however, China’s continued military expansion increased pressure on Taiwan. Domestic and international attention became focused on Taiwan’s defense capabilities, prompting discussions about extending the four-month military training program. Thus, against the backdrop of rising tensions across the Taiwan Strait, the Taiwanese government decided to abolish measures requiring only four months of military training. Starting in January 2024, men born on and after January 1, 2005, were once again required to serve a year of military service through conscription.¹³⁹ As of January 2025, in accordance with the provisions of Taiwan’s Constitution, men are obligated to serve in the military beginning on January 1 of the year after they turn 18. Additionally, under the All-out Defense Mobilization system described below, they must respond to mobilization orders during

138) “義務役期幾度更迭 最長3年最短4個月。”

139) “役期恢復為1年 寇謠將籲台灣更進一步加強軍力” [Military service period returns to one year; Taiwan will further strengthen its military power, J. Michael Cole says], 中央通訊社 [Central News Agency], December 27, 2022, <https://www.cna.com.tw/news/aip/202212270353.aspx>.

wartime, even after completing their reserve duty at the age of 45 for officers and non-commissioned officers and at the age of 40 for soldiers. The number of such personnel is approximately 9 million.

Establishment of an All-out Defense Structure That Contributes to Military Operations

On July 1, 1987, Taiwan enacted and promulgated the National Security Act During the Period of National Mobilization for Suppression of the Communist Rebellion, and lifted the martial law that had been in place for about 38 years on July 15.¹⁴⁰ Then, on April 22, 1991, the National Assembly held a special session and passed a bill abolishing the Temporary Provisions Effective During the Period of National Mobilization for Suppression of the Communist Rebellion, which had called for national mobilization and suppression of the Communist rebellion.¹⁴¹ Thus, the Period of National Mobilization in Suppression of Communist Rebellion, which continued even after the martial law was lifted, came to an end on May 1.¹⁴²

This bill unilaterally ended the civil war with the CCP on the opposing shore, although it did not substantially change the confrontational situation between Taiwan and China. However, by ending the 43-year-long Period of National Mobilization in Suppression of Communist Rebellion, Taiwan lost its legal basis for mobilization. This gave rise to a need to enact a new national general mobilization law. Therefore, in March 1995, the Taiwanese government rebranded the term “general mobilization” as “All-out Defense Mobilization.” In May 1997, in light of the need for wartime mobilization, the Executive Yuan promulgated the Regulations for the Implementation of All-out Defense Mobilization Readiness and reintroduced the previous

140) The lifting of the martial law for Kinmen County and Lienchiang County (including the Matsu Island) came approximately five years later on November 7, 1992.

141) “國大完成第一階段修憲法任務 制定憲法增修條文並廢止臨時條款，總統將宣告五月一日起生效” [National Assembly completes the first phase of constitutional revision, enacting additions and amendments to the constitution and abolishing the temporary provisions; President to declare that the amendments will become effective on May 1], 中央日報 [Central Daily News], April 23, 1991.

142) “李總統宣告動員戡亂時期終止 深盼大陸當局拿出誠意 具體行動回應” [President Lee declares the end of the period of national mobilization for suppression of the communist rebellion, in sincere hopes that the mainland authorities will demonstrate their sincerity and respond with concrete actions], 中央日報 [Central Daily News], May 1, 1991.

national general mobilization system as a means of preparing for All-Out Defense Mobilization. However, since these regulations were essentially an administrative order, the government had to act quickly to introduce legislation. The government proceeded to create legislation for All-out Defense Mobilization based on the National Defense Act, which was being prepared at that time. In January 2000, Taiwan enacted and promulgated the National Defense Act. Then, based on Article 25 of this act, the All-out Defense Mobilization Readiness Act was enacted in November 2001. Based on the provisions of this act, the Executive Yuan established the All-out Defense Mobilization Committee and placed it under the management of the Ministry of National Defense. At the same time, Ministerial Mobilization Readiness Programs were established to handle material and economic resources, transportation, financial resources, public hygiene, technology, and military affairs, and similar committees were also established in each county and city. These organizations were tasked with coordinating with each other to prepare for mobilization.¹⁴³

According to the provisions of the All-out Defense Mobilization Readiness Act, central and local authorities are each required to include mobilization readiness matters in their annual administrative plans and build all-out total forces that contribute to military operations. In addition, although the primary purpose of each central authority and other organizations developing their own mobilization capabilities is military-related, this initiative is also touted as being useful for disaster relief and emergency medical care.¹⁴⁴ Having undergone reconstruction in the 2000s, Taiwan's All-out Defense Mobilization program is divided into two systems: Administrative Mobilization, which is handled by central authorities and other organizations,¹⁴⁵ and Military Mobilization, which is handled by the Ministry of National Defense in cooperation with central authorities.

143) Sun, 臺灣全志 卷六 國防志·軍事組織與制度篇, 163.

144) *Ibid.*, 164.

145) The system of Administrative Mobilization is classified into the following seven categories:

(1) mobilization of morale under the responsibility of the Ministry of Education focuses on integrating school education, utilizing mass media to promote the concept of all-out national defense, cultivating the ideology of patriotism, enhancing national defense knowledge, and fostering a strong awareness of participating in safeguarding national security; (2) mobilization of manpower resources under the responsibility of the Ministry of the Interior focuses on controlling professional citizens, civil defense forces, volunteer firefighters, local disaster prevention aid workers, and volunteer disaster rescuers, as well as

“Military Mobilization” is further divided into military force (unit) mobilization and military industry mobilization. For military force mobilization, the emphasis is on building the capability to immediately bring troops into action when a mobilization order is issued. Initially, after the central government retreated to Taiwan, mobilization drills were conducted for the “Retaking the Mainland” operation; however, after the United States terminated diplomatic relations with Taiwan in 1979, the focus of the mobilization exercises shifted to Taiwan’s defense. The first Tung-Hsin exercises, held in the fall of 1979, mobilized approximately 10,000 people, forming nine divisions. These mobilization exercises took place across the entire island of Taiwan and involved various ministries and councils, as well

on arrangement planning for youths, retired veterans, and those who have suffered injury, or physical or mental impediment during wars; (3) mobilization of material and economic resources under the responsibility of the Ministry of Economic Affairs focuses on acquiring, operating, and storing important materials resources and fixed facilities, selecting certain critical materials for stockpiling, establishing a national defense industrial mobilization production system, formulating allocation arrangement for daily necessities in short supply, and devising readiness measures such as maintenance and repairs proceedings, for petroleum, power and water supplies; (4) mobilization of financial resources under the responsibility of the Ministry of Finance focuses on improving fiscal and taxation measures, cultivating tax sources, and coordinating the national financial resources in accordance with the national military strategic concept, as well as strengthening financial and foreign exchange controls to prevent vicious inflation and maintain financial stability; (5) mobilization of transportation under the responsibility of the Ministry of Transportation and Communications focuses on planning the readiness proceedings of land, water, and air transportation, enhancing the operational capacity of ports, planning and implementing the mobilization readiness of airports and navigation aids and training of emergency repairs, and conducting regular investigations, statistics, and adjustments for vehicles, vessels, aircraft, heavy engineering machinery, public and private telecommunications control equipment manufacturers, telecommunications enterprises and dedicated telecommunications installers, related repair shops, and operators; (6) mobilization of public hygiene under the responsibility of the Ministry of Health and Welfare focuses on the condition of medical facilities and the readiness tasks carried out by medical personnel, including investigations, statistics, and organization, to complete the establishment and evacuation plan of temporary medical facilities, as well as assisting public and private hospitals in stocking essential trauma drugs and medical supplies to meet the needs of patients with injuries or illnesses; and (7) mobilization of technology under the responsibility of the National Science and Technology Council focuses on integrating industries, academia, research institutions to plan for the research and development of weapon systems and maintenance mechanisms, as well as strengthening support capabilities for chemical warfare agents and radiation protection mobilization readiness ([Taiwan] All-out Defense Mobilization Agency, Ministry of National Defense, “動員計畫體系” [Mobilization planning system], December 27, 2024, <https://adma.mnd.gov.tw/unit/100006/7148>).

as Taiwan Province and governments of special municipalities. While these exercises were scaled down from the second time onward, the content of the drills was made more realistic, including joint training with standing units and the mobilization of equipment, such as vehicles and heavy machinery. Since 1993, mobilization plans have been reviewed every few years to ensure their feasibility. Starting in 1998, the exercises were increasingly conducted concurrently with vehicle and ship mobilization exercises. Large trucks, various types of heavy machinery, fishing boats, supplies, and other assets were requisitioned and used to train reserve units.¹⁴⁶

As for military industry mobilization, it is handled within the framework of economic mobilization, which is overseen by the Ministry of Economic Affairs. In peacetime, public and private factories are requisitioned to research, develop, and produce weapons and equipment. In wartime, the scope of requisition expands to increase Taiwan's weapon/equipment repair and production capacity to establish a posture to support military operations. For example, between 1996 and 1997, the military outsourced the research, development, and production of components for weapons, equipment, and other items to public and private factories as many as around 4,000 times. During this same period, the command headquarters of the various military branches began considering the reverse engineering and conversion of commercial items for military use, with the conversion of 96 items underway. In 1999, a Military Industry Mobilization Plan was formulated based on the needs of the various command headquarters. This plan listed approximately 100 factories and 500 types of military supplies as mobilization targets. Military industry mobilization exercises are conducted to verify the ability of local governments at all levels, as well as public and private industries, to effectively support the military's wartime requirements for factories and supply centers. The exercises also aim to familiarize those involved with the process of civilian-to-military conversion in wartime. Military industry mobilization exercises known as "Tzu Chiang" were often conducted concurrently with the Tung-Hsin exercises, which mobilized military units. However, after the All-out Defense Mobilization Readiness Act was enacted in 2001, these military mobilization exercises

146) Sun, 臺灣全志 卷六 國防志·軍事組織與制度篇, 165–167.

were incorporated into the scenarios of the Han Kuang exercises, large-scale military exercises that are conducted annually.¹⁴⁷

On July 22, 2024, mobilization exercises began at the same time as the 40th Han Kuang exercises. A mobilization order for the 34th Tung-Hsin exercises was issued one day prior to the start of the exercises on July 22, at 12:00 p.m. on July 21. This mobilization order called reservists to duty and requisitioned various types of vehicles, heavy machinery, and supplies, and authorized the military's weapons production department to requisition civilian factories.¹⁴⁸ In the 5th Theater of Operations in central Taiwan, heavy-duty trucks were requisitioned to transport military supplies, as were supplies such as barbed wire fencing and small generators.¹⁴⁹ In addition, in order to improve Taiwan's operational resilience and war sustainability, the requisitioned heavy-duty trucks and other forms of civilian transport were used to collect various supplies, including rations, fuel, ammunition, and medical supplies at various sites.¹⁵⁰

Thus, in addition to forming reserve units directly involved in operations, Taiwan's Ministry of National Defense has established a foundation for the organic execution of military operations by mobilizing public and private factories to support the munitions industry during wartime.

Civil Defense System and All-out Defense Mobilization Exercises

In Taiwan, the civil defense system has long been regarded as a critical foundation for its military power. In May 2022, two months after Russia's

147) Ibid., 167–168.

148) “「同心34號」演習動員令今午十二時生效” [Mobilization order for the “34th Tung-Hsin” exercises takes effect today at noon], 軍事新聞通訊社 [Military News Agency], July 21, 2024, <https://mna.gpwb.gov.tw/news/detail/?UserKey=3e2520c6-5e49-4711-abcb-a6e664284432>.

149) “第五作戰區執行自強演習 厚實作戰韌性” [5th theater of operations conducts the Tzu Chiang exercises, enhancing operational resilience], 軍事新聞通訊社 [Military News Agency], July 22, 2024, <https://mna.gpwb.gov.tw/news/detail/?UserKey=fc3f3b54-15b5-4c6a-b058-b1a73d8256e0>.

150) “第五作戰區補給品預置分屯 強化部隊作戰韌性” [5th theater of operations performs distributed accumulation of supplies, enhancing operational resilience of troops], 軍事新聞通訊社 [Military News Agency], July 22, 2024, <https://mna.gpwb.gov.tw/news/detail/?UserKey=7dad55aa-14a2-4220-9686-af6cdc6cd782>.

invasion of Ukraine, Minister of Foreign Affairs Joseph Wu cited “civil defense” as one area where Taiwan could learn from Ukraine.¹⁵¹

During peacetime, the Ministry of the Interior is responsible for administrative matters related to civil defense, while the Ministry of National Defense is responsible for operational matters, and the two ministries jointly oversee execution. During wartime, the Ministry of National Defense is expected to oversee operational matters that contribute to military operations in cooperation with the Ministry of the Interior. The civil defense system was designed around the concept of supporting Taiwan’s military forces. However, the Air Defense Law and its related regulations were the first to be enacted; as a result, greater emphasis was placed on civil air defense, which gradually replaced the broader concept of civil defense. It is explained that civil air defense drills prepare the civilian population to minimize damage in the event of an air raid and allow them to practice responding in an organized manner. Therefore, air defense capabilities and experience are linked to civil defense, forming the backbone of Taiwan’s military power.¹⁵²

Regarding Taiwan’s organizational structure related to civil defense, the governments of special municipalities, counties, and cities organize their own general civil defense groups. Under these groups, rural townships, urban townships, cities, and districts organize civil defense regiments. And under these regiments, rural and urban villages organize civil defense sub-regiments. In addition, special protection teams are formed for each public utility, such as railroads, roads, ports, airports, telecommunications, electric power, gas, and water supply. Institutions, schools, organizations, companies, and factories with 100 or more members also form protection teams, while those with less than 100 members form joint defense regiments with others in the same building or zone. With these organizations serving as civil defense units, the All-out Defense Mobilization system contributes to military operations by conducting air defense exercises once a year in

151) “Taiwan Learning Lessons from Ukraine’s Stout Resistance.”

152) [Taiwan] National Defense Report Editing Committee, Ministry of National Defense, “中華民國87年國防報告書” [1998 ROC National Defense Report], (Li Ming Cultural Enterprise Co., Ltd., 1998), 75; [Taiwan] National Defense Report Editing Committee, Ministry of National Defense, 中華民國93年國防報告書 [2004 ROC National Defense Report] (Ministry of National Defense, 2004), 187.

principle and supporting local security and military activities in the event of a disaster.¹⁵³

As for civil defense-related drills, the Wan An exercises began in 1978 in accordance with the Air Defense Law, and each of Taiwan's 25 counties and cities conduct all-out air defense exercises. Until 1999, the exercises (the 1st to the 22nd Wan An exercises) were conducted to prepare participants for air raids by China. Each year, the main island of Taiwan and the Penghu Islands were divided into five theaters, and organizations such as government agencies, schools, public enterprises, and private factories were required to participate in a 40-minute joint military–civilian air defense evacuation exercise planned by the Ministry of National Defense. However, after experiencing a major earthquake in September 1999, Taiwan recognized that a large-scale natural disaster would not only seriously affect the lives and property of its residents, but also pose a threat to national security. Thus, during the 23rd Wan An exercises in August 2000, the first phase consisted of a conventional air defense evacuation exercise, followed by a disaster relief exercise in the second phase. Similar exercises were conducted in 2001 and 2002.¹⁵⁴ In addition, since 2010, the Wan An exercises have been conducted concurrently with the annual disaster management exercises of central ministries and councils. The Wan An exercises are positioned as a more comprehensive “All-out Defense Mobilization Exercise” than in the past. The exercises begin at the mobilization phase and include training in air raid evacuation, disaster relief, emergency medical care, epidemic prevention, and nuclear disaster response. Through these efforts, Taiwan is working to build a system to support its military power in times of war.¹⁵⁵

During the 40th Han Kuang exercises in July 2024, exercises were conducted within the All-out Defense Mobilization Exercise framework to improve the overall resilience of Taiwanese society. These included the 47th

153) [Taiwan] National Defense Report Editing Committee, Ministry of National Defense, 中華民國93年國防報告書, 187–188; [Taiwan] National Defense Report Editing Council, Ministry of National Defense, 中華民國95年國防報告書 [2006 ROC National Defense Report] (Ministry of National Defense, 2006), 201.

154) Sun, 臺灣全志 卷六 國防志 · 軍事組織與制度篇, 169–170.

155) [Taiwan] National Defense Report Editing Committee, Ministry of National Defense, 中華民國98年國防報告書, 173; [Taiwan] Editorial Committee, 2021 National Defense Report, Republic of China, Ministry of National Defense, 中華民國100年國防報告書 [2021 National Defense Report, Republic of China] (Ministry of National Defense, 2011), 171–172.

Wan An exercises, which focused on air raid evacuation drills,¹⁵⁶ and the 10th Min An exercises, which focused on disaster relief.¹⁵⁷ However, because Typhoon No. 3 hit Taiwan during the 40th Han Kuang exercises, the exercises were scaled down midway through and ended ahead of schedule at noon on the fourth day.¹⁵⁸ By coincidence, the 10th Min An exercises became a “real-life battle” against a typhoon disaster.

Conclusion

In March 2021, Philip Davidson, commander of the United States Indo-Pacific Command, testified that there was a possibility of China invading Taiwan in the next six years. Many media outlets picked up on this statement, and Taiwan came to be described as “the most dangerous place on Earth.”¹⁵⁹ But it was the spark that had been smoldering in Eastern Europe, not East Asia, that flared up first. Later, when the PLA conducted its largest military exercise since the Third Taiwan Strait Crisis following U.S. Speaker of the House Nancy Pelosi’s surprise visit to Taiwan in August 2022, many media outlets and experts began to warn that Taiwan was next.

However, China has not specified *when* it would make such a move. As one of the CCP’s top officials has stated, “There is no timetable for an invasion of Taiwan.”¹⁶⁰ Nevertheless, as discussed in Chapters 1 and 2 of this report, China is steadily preparing for an invasion.

On the other hand, Taiwan’s situation is not due to a lack of effort. Since the 1990s, sustained economic growth has allowed China to steadily increase

156) “配合國軍漢光40號演習 萬安演習北部7縣市登場” [In coordination with the armed forces’ 40th Han Kuang exercises, the Wan An exercises take place in seven northern counties and cities], 軍事新聞通訊社 [Military News Agency], July 23, 2024, <https://mna.gpw.gov.tw/news/detail/?UserKey=5870139a-297e-46eb-8b87-cfb70e989a3b>.

157) [Taiwan] Office of the President, “113年新北市全民防衛動員暨災害防救（民安10号）演習” [2024 New Taipei City All-out Defense Mobilization and disaster relief (10th Min An exercises)], July 23, 2024, <https://www.president.gov.tw/News/28601>.

158) “國防部：漢光40號演習結束 各部隊協助地方政府災害防救。”

159) “The Most Dangerous Place on Earth.”

160) “大陸政協主席王滬寧：沒人想打仗 就是好好交流” [CPPCC Chairman Wang Huning: No one wants war; the only thing to do is foster sufficient interaction], 中時新聞網 [China Times Net], May 1, 2024, <https://www.chinatimes.com/newspapers/20240501000309-260108?chdtv>.

its military power, and beginning in the 2000s, the military balance in the Taiwan Strait has continued to tip in China's favor. Indeed, Taiwan has been significantly impacted by its lack of diplomatic relations with Western countries, which have the most advanced military technologies. Taiwan's inability to procure the equipment it desires has forced it to adopt the mindset of "Fight with whatever you've got." In addition, although Taiwan has been pushing to build up its capabilities for "asymmetric operations" since around 2008, the constant uncertainty of not knowing when the United States will refuse to sell it the equipment it truly needs has forced Taiwan to prioritize purchasing whatever equipment is currently approved for sale. This has hindered Taiwan's ability to advance the development of its military forces in line with its envisioned operational concepts. This situation began to change in the 2010s. As the United States and China increasingly came into conflict in various areas, the United States began showing strong support for Taiwan. The first Trump administration approved the sale of the latest F-16 and AH-64 to Taiwan, which Taiwan had requested but was refused during the Obama administration. The Biden administration then passed TERA, reflecting the lessons learned by the United States through the provision of assistance to Ukraine. The United States has begun to earnestly focus on strengthening Taiwan's resilience, so that it can fight with the same persistence and flexibility as Ukraine.

Taiwan has also placed "resilience" at the center of its military strategy. Even before the Biden administration took steps to boost Taiwan's resilience and before Russia invaded Ukraine, the Tsai Ingwen administration promoted "resilience" as a quality that has allowed Taiwan to endure harsh international circumstances. Immediately after taking office, her administration began strengthening Taiwan's indigenous production system, particularly with regard to military force development. The lessons from Ukraine confirmed that the direction of its previous military development efforts had not been misguided. With the backing of the United States, Taiwan was finally able to develop its military forces according to its envisioned style of combat.

Russia's invasion of Ukraine has sparked interest in Taiwan's capabilities to mobilize forces and continue fighting. Ukraine's substantial reserve mobilization capability is one factor that has enabled it to withstand Russian aggression for so long. There has been a view that seeing the Ukrainian resistance inspired Taiwan to improve its reserve mobilization capability

based on the lessons it learned from Ukraine. However, Taiwan already had this system in place. It is true that Taiwan restored the length of its compulsory military service—which had been replaced with four months of military training—to its original one-year period following Russia’s invasion of Ukraine. However, this decision was made even before the Russo-Ukrainian War, against the backdrop of growing military pressure from China. Most importantly, Taiwan’s substantial reserves, which were originally intended for the “Retaking the Mainland” operation, have unintentionally formed the basis for the mobilization capabilities that support today’s “defense of Taiwan.”

Nevertheless, since Taiwan has not experienced actual warfare in a long time, it will likely apply the lessons learned from Ukraine to its combat style, such as “asymmetric operations,” and military force development, as well as its mobilization policies and capabilities. However, these factors alone cannot be considered sufficient to enable Taiwan to endure for as long as Ukraine has. To increase Taiwan’s endurance, it must enhance its overall national strength, including its economy and foreign relations. The lessons from Ukraine can truly be called a case study that serves as a reference for Taiwan as it strengthens the “resilience” at the heart of its military strategy.

On the other hand, Joseph Wu, Taiwan’s minister of foreign affairs, has stated that Ukrainian men enlist in the military with a strong resolve to defend their country, displaying the kind of spirit that is enviable to Taiwan. Indeed, under constant pressure from China, the Taiwanese people have grown “accustomed” to China conducting military exercises on the opposing shore,¹⁶¹ and Taiwan’s lack of tension has been noted. Although Taiwan strives to maintain a system that allows for a rapid response in wartime, it is undeniable that this “accustomed” attitude could delay its response in the early stages of war. No matter how great Taiwan’s endurance capabilities may be, China’s invasion will proceed if China can inflict heavy damages by

161) Wang Tsun-yen (Institute for National Defense and Security Research) of Taiwan said in an interview with the *Asahi Shimbun* that when China carried out military exercises in August 2022, life in Taiwanese society continued as usual and people remained calm, adding that they are accustomed to Beijing’s pressure (“Peroshi shi hotai no hihan wa sujichigai: Taiwan no Nihon kenkyusha ga kataru nittai kankei” [Criticism of Pelosi’s visit to Taiwan is unreasonable; a Taiwanese scholar on Japan talks about Japan–Taiwan relations], *Asahi Shimbun Digital*, August 15, 2022, <https://www.asahi.com/articles/ASQ8D6KMXQ8DUHBI02P.html>).

its first strike. Therefore, the success or failure of Taiwan's defense hinges on the mindset of its people.