



APPENDIX D

Defending Taiwan: Defense and Deterrence

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Executive Summary

The question of Taiwan’s “reunification” with the Chinese Mainland is one of enormous, and potentially existential, importance to the Chinese Communist Party (CCP). In the legitimacy discourse the CCP invokes to justify its own rule in Beijing, it is deeply threatening to the Party for any part of what is deemed to be “China” to remain outside its control. This threat is doubly great where, as with Taiwan, that remaining piece of “China” is a thriving democracy, the governance structure of which is antithetical to the CCP’s system of totalizing authoritarian control and the very existence of which challenges Party insinuations that democracy is unavailable or inappropriate for the Chinese people.

For these reasons, the CCP has spent many years preparing China – and its armed forces, the People’s Liberation Army (PLA) – to subjugate Taiwan by any means necessary, including force of arms. This objective is deemed essential to the CCP’s vision of China’s future, in which the country finally rights the wrongs said to have been inflicted upon it during China’s so-called “Century of Humiliation” by Western imperialists and Japan. In the CCP’s vision, China must restore itself to the status and glory of which such “humiliation” robbed it, not merely by seizing hegemonic control in the Indo-Pacific, but also by displacing the United States at the center of the broader international system. This vision, of course, is starkly incompatible with Taiwan’s continued political autonomy, its democratic governance, and its quasi-alliance with the United States.

To this end, Beijing has developed an impressive degree of military overmatch vis-à-vis the beleaguered democratic government in Taipei. To prepare for a potential invasion of Taiwan, the PLA has been augmenting its aerial and missile capabilities for long-range bombardment and building increasingly powerful amphibious warfare capabilities, naval infantry units, airborne troops, and logistics support capacities. It has also been using such assets to step up “grey zone” pressures against the island’s defenders through incessant threatening deployments of aircraft and naval vessels to the edge of Taiwan’s airspace and territorial waters. These pressures force Taipei’s much smaller forces to respond on an operational tempo that threatens to wear down their servicemembers and wear out their equipment, encourages Taiwan’s Ministry of Defense to spend money on low-volume, high-cost combatants that would be of questionable use in an actual invasion scenario, and potentially allows the initial wave of an actual attacking force to approach Taiwan without warning under the guise of being “just another” routine probe.

All this presents Taiwan’s defense planners with formidable challenges and has led some observers to question whether there is any hope of success against such odds. Yet the island has made some progress in recent years in acquiring the sorts of “asymmetric” anti-ship and anti-air missile systems and other capabilities that would help it present the PLA with an

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“anti-access/area denial” (A2/AD) problem in the Taiwan Strait analogous to the one with which the PLA itself seeks to present the United States in the Western Pacific. With such tools, Taiwan seeks to implement a so-called “porcupine” strategy of making a PLA invasion too costly to contemplate. Such ideas were, for instance, articulated in Taiwan’s Overall Defense Concept (ODC) of several years ago, and – while that specific term is apparently no longer used – these concepts retain some currency in the island’s continuing emphasis upon asymmetric procurements.

Taiwan still faces formidable challenges in terms of military manpower management, as well as defense budgets that were reduced for many years and have only recently begun to turn around. Even under the best of circumstances, moreover, the island has no chance of matching PLA expenditures and force levels. Taiwan’s acquisition of genuinely asymmetric capabilities pursuant to an ODC-style defense strategy is also challenged by the island’s need to provide at least some operational response to PLA “grey zone” pressures on the edges of Taiwan’s national jurisdiction, without which Taiwanese officials fear their island might be taken to have begun conceding to China the very territorial autonomy and sovereignty that it is the whole point of Taipei’s defense strategy to preserve.

This paper outlines the difficulties presented by these challenges, but nonetheless offers a perspective upon how to implement what Western strategists term a “denial” strategy whereby Taiwan’s leaders – in close cooperation with U.S. authorities, perhaps supported by those in other countries – can help make the island sufficiently “indigestible” to China in the event of conflict that deterrence has a chance to work indefinitely. Specifically, this paper contends that the “asymmetric” approach embodied in the ODC and of recent U.S. arms sales to Taiwan is fundamentally correct. A multi-layered deterrent and defensive system – including not just a dense network of A2/AD-focused anti-air and anti-ship missile systems, but also strong defenses ashore, including an innermost layer of distributed capabilities for guerrilla insurgency against occupying PLA forces – represents Taiwan’s best chance for a successful “porcupine” defense, and thus also for a strategy of deterring China by denying it the ability to have any confidence in being able to achieve its objectives.

This paper also argues that it may be feasible to complement the acquisition of more defensively-focused A2/AD systems with some of the more controversial long-range precision strike capabilities that Taiwan also now wishes to obtain – provided that buying such strike systems does not undermine efforts rapidly to expand more defensively-focused asymmetric tools, and that Taiwanese targeting with such weapons focuses not upon vague ambitions of “punishing” China for an attack but rather upon holding at risk the Mainland targets the PLA needs in order to dispatch and control an invasion armada and its associated aerial and missile campaign. The paper suggests, for instance, that U.S. Intelligence, Surveillance, and Reconnaissance (ISR) support could help meet the island’s needs without Taiwan having to expend ruinous portions of its modest defense budget on indigenous long-range ISR and targeting capabilities for long-range missiles. (Such collaboration would also have the added benefit of increasing the interoperability and effectiveness of Taiwanese and U.S. forces in the event of conflict.)

This paper also argues, however, that American leaders should be mindful of the legitimate challenges facing Taiwan’s defense planners in the face of PLA “grey zone” pressures, which are part of a broader CCP campaign against the island’s beleaguered democratic government pursuant to PLA “three warfares” concepts for combining political,

psychological, and legal pressures in support of overall military and strategic objectives. These “grey zone” challenges should be understood and acknowledged, and U.S. planners should work to find ways to help Taipei meet its needs here to the extent that this does not preclude a successful “porcupine” defense. Long-range air defense and anti-ship missiles, for instance, might help ease some of the pressure upon Taiwan’s legacy air and surface assets through the incorporation of such A2/AD systems – along with small and largely expendable uncrewed aerial and naval assets – into a system for tracking, ostentatiously warning, and potentially engaging intruders at the margins of Taiwan’s airspace and territorial waters. (This would have the additional benefit of turning the “grey zone” pressures to some degree back against the PLA, by transforming the PLA’s constant near-incursions into valuable daily training opportunities for the island’s defenders, making them expert at just the sort of anti-air and anti-ship fires they would employ in time of war.) If need be, United States and potentially other allied forces could also offer potent support for a “porcupine” defense of Taiwan through the provision of ISR and targeting support, cyber attack capabilities, long-range precision fires, logistics and combat resupply, and undersea capabilities to threaten or attrit PLA Naval assets both in the Taiwan Strait or engaged in blockade enforcement. Ultimately, such a “denial”-focused “porcupine” defense – combining high-technology asymmetric tools with “old-school” defensive preparations stretching from the shoreline back into the depths of Taiwan’s dense urban areas, jungles, and mountain terrain – represents Taipei’s best chance to deter, and if necessary, defeat, a PLA invasion.

It may not be possible to persuade the CCP to abandon its desire to subjugate Taiwan, for the Party’s domestic legitimacy narrative does not permit this, and any renunciation of “reunification” might threaten the CCP control of China itself. Nevertheless, precisely because the CCP feels its future to be almost existentially bound up with the “Taiwan question,” it is also the case that the Party cannot afford to fail in such an invasion, either. And this is perhaps the secret to implementing a “denial” strategy. A well-implemented collaborative Taiwan-U.S. “porcupine” is likely the best chance to persuade Beijing to display strategic caution and to defer such a war, at least “for now.” Specifically, an enduringly persuasive “porcupine” may open conceptual space for a sort of implied strategic “agreement to disagree” that does not “resolve” the Taiwan issue but that permits it to be managed in ways that preserve core equities for all parties. In such an arrangement, Beijing would preserve its “reunification is inevitable” position and political posture vis-à-vis Taiwan, but it would continue to postpone execution of invasion plans, in practice indefinitely. In return, the United States and Taiwan would work to ensure that the island remained “indigestible” on an ongoing basis, while also avoiding a situation in which Taiwanese officials risk unnecessarily forcing Beijing’s hand by declaring formal independence. Such an approach is not guaranteed to work, of course, but it seems the best course of action available.

Defending Taiwan

In a recent feature article, the *New York Times* warned that the island of Taiwan “has moved to the heart of deepening discord and rivalry between the two superpowers [of the United States and China], with the potential to ignite military conflagration and reshape the regional order,” and that “the balance of power around Taiwan is fundamentally shifting, pushing a

decades-long impasse over its future into a dangerous new phase.”¹ In light of such warnings, it is today more important than ever to understand the challenges and opportunities associated with defending Taiwan from potential attack by the People’s Republic of China (PRC) and its ever more powerful and threatening People’s Liberation Army (PLA).

This paper attempts to explore these issues in order to help inform U.S. leaders struggling with these issues. First, it looks at the huge importance ascribed to the “Taiwan question” by the Chinese Communist Party (CCP) that has ruled China since 1949, which has invested much of its domestic legitimacy narrative in a conceit of “reunification” bolstered by longstanding Chinese conceptions of political authority and nationalist aspiration. The paper then examines the formidable military capabilities that China brings to the table in trying to coerce “reunification” with Taiwan – or, failing that, potentially to bring this about by force – before thereafter looking at Taiwan’s own defense posture in response to such challenges, and some key debates over the nature and direction of that posture. The third and final portion of the paper explores these issues from the perspective of what American defense planners and diplomats can do to help Taiwan be better prepared for such travails, and thereby better deter Chinese aggression.

Taiwan and the Chinese Communist Party

Despite the fervor of its rhetoric about bringing about “reunification” with Taiwan, the CCP has never actually controlled that island. In fact, over the thousands of years of Chinese imperial history, *no* Chinese ever controlled Taiwan until loyalist forces from the remnants of the Ming Dynasty, defeated in China itself by an invading kingdom of foreign Manchu “barbarians,” fled there in the late 17th Century, taking over the island from the Dutch. The island – the name of which was formerly Formosa, from Portuguese sailors who labeled it *Ilha Formosa*, or “beautiful island” – did not pass under control of a Mainland-based Chinese dynasty until those Ming holdouts surrendered to the Qing Dynasty, as China’s new Manchu rulers came to style themselves after conquering the Chinese heartland.

Taiwan passed to Japanese control with the Treaty of Shimonoseki after the Sino-Japanese War of 1895, and did not return to Chinese rule until 1945, under the Republic of China (ROC) headed by Chiang Kai-Shek (a.k.a. Jiang Jieshi) and his Kuomintang Party (KMT). In 1949, however, the KMT reenacted the 17th Century flight of Ming remnants to Taiwan, setting up a Nationalist government-in-exile there upon their defeat by Mao Zedong and the CCP in the Chinese Civil War. Since the 1980s, the KMT’s one-party rule on Taiwan has been succeeded by a vibrant democracy, headed since 2016 by President Tsai Ing-wen of the Democratic Progressive Party.

But although the CCP has never controlled Taiwan, the Party has fixated upon the high-water mark of Qing territory as the standard against which modern Chinese should judge whether or not their country has achieved its full “reunification.” There is considerable irony in this nationalist fixation, of course, not merely because the Qing’s sprawling expanse is a

¹ Chris Buckley & Steven Lee Meyers, “Starting a fire’: U.S. and China Enter Dangerous Territory Over Taiwan,” *New York Times* (November 10, 2021), available at <https://www.nytimes.com/2021/10/09/world/asia/united-states-china-taiwan.html>.

standard set by foreign invaders who had occupied China and used its territory as a springboard for their own Manchu imperialism, but also because the Qing had through imperial conquest come to include lands such as those now constituting Xinjiang, Tibet, and Taiwan, which were *not* historically part of China and that had previously enjoyed independence. Yet the idea of so-called “reunification” with Taiwan has nonetheless acquired an almost talismanic importance in modern CCP propaganda.

Indeed, the CCP has made “reunification” a key plank of its own domestic political legitimacy narrative – the centerpiece of which is a vision of China seizing for itself the greatness, status, and role in the world of which Chinese nationalists feel it was robbed by malevolent Western and Japanese imperial powers in the 19th Century during China’s “Century of Humiliation” at foreign hands. Today, it is the lodestar of Chinese nationalist ambitions, and perhaps *the* defining element of the CCP’s legitimacy narrative, to bring about China’s “restoration” or “national rejuvenation.” And CCP propaganda has fixated to such a degree upon conquering Taiwan – as an indispensable part of this trajectory and China’s imagined destiny – that it is difficult to imagine any CCP ruler ever being able to claim that this “rejuvenation” has been full completed if Taiwan is *not* ruled from Beijing.

Needless to say, in this context, the existence of a separate, non-Communist, and functionally independent government² on Taiwan since Chiang fled from the Mainland in 1949 has made the island a powerful irritant to the CCP ever since. But Taiwan’s continued separate existence is, for the CCP, more than simply an inconvenience or an embarrassment; it is not merely an un-scratched itch for Beijing’s modern territorial self-aggrandizement.

More fundamentally, Taiwan’s continued existence is in important ways a powerful repudiation of the CCP’s legitimacy narrative even on the Mainland itself. The island’s success as a vibrant democracy in which Chinese-speaking people subject their rulers to accountability at the ballot box and periodically change leaders (and the ruling party) through free and fair elections stands as a potent rebuke for the CCP’s autocracy, also giving the lie to the Party’s racist and self-Orientalizing insinuations that such democracy is inappropriate or even impossible for Chinese people.

Within the framework of ancient Chinese concepts of political authority, moreover, Taiwan’s existence free of Beijing’s control also impugns the CCP’s legitimacy narrative by highlighting the self-defined *incompleteness* of the Party’s imperium, and hence implying some lack of political virtue that raises questions about its right to rule even in Beijing. In the juridical monism of traditional Chinese thinking – which powerfully shapes CCP conceptions today, despite the Party’s pretensions to modernity – it is the conceit of every dynasty that its political authority flows from its moral authority, and that it rose to power over its dynastic predecessor and any rival contenders precisely because of its surpassing virtue and their depravity. It also follows from such conceptions, however, that *defects* in political dominion signal some underlying defect in moral virtue, which in turn raises questions about the legitimacy of a dynasty as a whole.³

² President Tsai has declined *formally* to declare Taiwan independent, however, on the grounds that it doesn’t need to and already is: “We don’t have a need to declare ourselves an independent state,” she told the BBC. “We are an independent country already” *Quoted by* Stacey Chen, “China must ‘face reality’ of Taiwan’s independence: Taiwanese President Tsai Ing-wen,” *ABC News* (January 16, 2020), available at <https://abcnews.go.com/International/china-face-reality-taiwans-independence-taiwanese-president-tsai/story?id=68337284>.

³ See, e.g., Christopher A. Ford, *The Mind of Empire: China’s History and Modern Foreign Relations* (Lexington, Kentucky: University Press of Kentucky, 2010), at 29-38, 249-53, & 273-82.

This has important implications for the CCP today. As noted, where it is a foundational assumption – or at least propagandistic assertion – that political authority springs out of virtue, an incompleteness of authority implies some underlying failure of virtue. It is not merely that a “divided” China is assumed to be a “weak” China, and that “full reunification” is a fundamental condition of national rejuvenation.”⁴ It is, furthermore, that for a dynasty to fail to unify the Motherland is for that dynasty to signal an underlying failure in its own virtue. In a culture in which it is the conceit of rulers that their political authority flows from their virtue – and in which territorial fragmentation and popular unrest have traditionally been taken to be manifestations of a dynasty’s loss of the “Mandate of Heaven” and right to rule – such an admission can be profoundly dangerous for the regime. The issue of Taiwan’s continued “independence” thus resonates powerfully within the Chinese socio-cultural context, with potentially existential implications for the CCP.⁵

CCP rulers were for many years grudgingly willing to put off resolution of the “Taiwan question” for so long as they saw little chance of successful reconquest, though for the reasons outlined above they never wavered in supporting the theoretical objective of eventual “reunification.” Under Hu Jintao and now especially Xi Jinping, however, Beijing has emphatically thrown aside Deng Xiaoping’s strategically cautious philosophy of “biding our time and hiding our capabilities.” Increasingly emboldened in its newfound economic weight, military power, and technological sophistication, the modern Chinese Party-State eschews “hide-and-bide” circumspection and today wears its strategic impatience on its sleeve.⁶

Xi has all but promised full “national rejuvenation” on his (now) indefinitely long-tenured watch, and has raised expectations for success at least by 2049, the centenary of the CCP’s seizure of power on the Mainland – a point at which a century of Party dictatorship will supposedly have righted the historical wrongs of the Century of Humiliation and returned China to its destined greatness at the center of the world-system.⁷

As the U.S. Defense Department (DOD) notes:

The PRC’s strategy aims to achieve ‘the great rejuvenation of the Chinese nation’ by 2049 to match or surpass U.S. global influence and power, displace U.S. alliances and security partnerships in the Indo-Pacific region, and revise the international order to be more advantageous to Beijing’s authoritarian system and national interests.⁸

⁴ U.S. Department of Defense, *Military and Security Developments Involving the People’s Republic of China 2021: Annual Report to Congress* (Washington, D.C.: DoD, 2021) [hereinafter “DOD 2021 Report”], at 3, available at <https://media.defense.gov/2021/Nov/03/2002885874/-1/-1/0/2021-CMPR-FINAL.PDF>.

⁵ See, e.g., Christopher A. Ford, *China Looks at the West: Identity, Global Ambitions, and the Future of Sino-American Relations* (Lexington, Kentucky: University Press of Kentucky, 2015), at 202.

⁶ See, e.g., Ford, *China Looks at the West*, *supra*, at 391-411.

⁷ See, e.g., generally, Assistant Secretary of State Christopher Ford, “Technology and Power in China’s Geopolitical Ambitions,” testimony to the U.S.-China Economic and Security Review Commission (June 20, 2019), available at <https://www.newparadigmsforum.com/p2399>; Christopher A. Ford, “Realpolitik with Chinese Characteristics: Chinese Strategic Culture and the Modern Communist Party-State,” in *Strategic Asia 2017-17: Understanding Strategic Cultures in the Asia Pacific* (Ashley Tellis, Allison Szalwinski, & Michael Wills, eds.) (Seattle, National Bureau of Asian Research, 2016), at 29-60.

⁸ DOD 2021 Report, *supra*, at iii; see also *id.* at 1.

This ambition is systemic and global in scope, and not merely regional. Yet the local problem of Taiwan stands conspicuously in the way of the CCP fulfilling its own grandiose narrative of itself. Taiwan, in other words, is a living, breathing, thriving repudiation of the CCP's claimed legitimacy, not just in the outside world but in China as well.

This, then, is the conceptual, historical, political, and philosophical backstory that gives the otherwise fairly small island of Taiwan such enormous importance for decision-makers in Beijing. In this context, it is hardly surprising that defense and national security strategy documents in the PRC have long emphasized that it is one of China's most important defense priorities to contain "Taiwan independence." According to the PRC's 2019 Defense White Paper, for instance:

The fight against separatists is becoming more acute. The Taiwan authorities, led by the Democratic Progressive Party (DPP), stubbornly stick to 'Taiwan independence' The 'Taiwan independence' separatist forces and their actions remain the gravest immediate threat to peace and stability in the Taiwan Strait and the biggest barrier hindering the peaceful reunification of the country.⁹

Chinese leaders, including Xi Jinping, have steadfastly refused to renounce the use of force to resolve the Taiwan issue.¹⁰ As the U.S. Department of Defense has recounted:

The circumstances under which the PRC has historically indicated it would consider the use force have evolved over time. These circumstances have included: Formal declaration of Taiwan independence; Undefined moves toward Taiwan independence; Internal unrest in Taiwan; Taiwan's acquisition of nuclear weapons; Indefinite delays in the resumption of cross-Strait dialogue on unification; and Foreign military intervention in Taiwan's internal affairs.¹¹

One way or the other, however, force is always held out as the ultimate guarantor of eventual "reunification." This position has even been codified in Chinese law,¹² in the form of Article 8 of the PRC's *Anti-Secession Law* of March 2005, which states that the PRC "shall" employ "non-peaceful means and other necessary measures" if "'Taiwan independence' secessionist forces ... cause the fact of Taiwan's secession from China," if "major incidents

⁹ "Full Text of 2019 Defense White Paper, 'China's Defense in the New Era'" (English & Chinese versions), (July 2019), available at <https://www.andrewerickson.com/2019/07/full-text-of-defense-white-paper-chinas-national-defense-in-the-new-era-english-chinese-versions/>.

¹⁰ See, e.g., Lily Kuo, "All necessary means: Xi Jinping reserve right to use force against Taiwan," *The Guardian* (January 1, 2019), available at <https://www.theguardian.com/world/2019/jan/02/all-necessary-means-xi-jinping-reserves-right-to-use-force-against-taiwan>.

¹¹ DOD 2021 Report, *supra*, at 115-116.

¹² One should not ascribe overmuch importance to the existence of "legal" rules in China. Under China's system, all state organs – including the PLA itself, which, formally speaking, is merely the "armed wing" of the CCP and not a Chinese *state* organ at all – work for the Party, the rules and principles of which are antecedent and superior to those of ordinary governance. See generally, e.g., Eleanor Albert, Lindsay Maizland, & Beina Xu, "The Chinese Communist Party," Council on Foreign Relations background (last updated June 23, 2021), available at <https://www.cfr.org/background/chinese-communist-party>. The PRC is thus best categorized as a "rule by law" rather than a "rule of law" country. See, e.g., "Rule of Law or 'Rule by Law,'? In China, a Preposition Makes All the Difference," *Wall Street Journal* (October 20, 2014), available at <https://www.wsj.com/articles/BL-CJB-24523>. Nevertheless, the fact that the legitimacy of using force against Taiwan has been put into "legal" form is a notable signal of the Party's commitment to this idea.

entailing Taiwan's secession" occur, or if "possibilities for a peaceful reunification" are exhausted."¹³

With such objectives in mind, the People's Liberation Army (PLA) has made fighting in a Taiwan contingency – including against a "strong enemy" such as the United States that might choose to intercede on Taiwan's behalf – a significant focus of its modernization efforts and its training.¹⁴ To this end, the PLA has built for itself "a range of options for military campaigns against Taiwan, from an air and maritime blockade to a full-scale amphibious invasion to seize and occupy some or all of Taiwan or its offshore islands."¹⁵

Further, DOD notes:

The PLA continues to prepare for contingencies in the Taiwan Strait to deter, and if necessary, compel Taiwan to abandon moves toward independence. The PLA also is likely preparing for a contingency to unify Taiwan with the PRC by force, while simultaneously deterring, delaying, or denying any third-party intervention, such as the United States and/or other like-minded partners, on Taiwan's behalf.¹⁶

It is important to bear this overall context in mind when evaluating how Taiwan, perhaps acting together with its longtime strategic partner in the United States, might most effectively be able to deter or defend itself against attack from China.

This challenge is a formidable one not merely because of the sheer differences in size and military capacity between the PRC and Taiwan, but also because of the asymmetric stakes involved between Washington and Beijing on this issue. Simply put, the huge importance of the "Taiwan question" for the CCP creates a situation in which it is very likely that China would be "willing to bear much more suffering and risk to achieve its goals" in Taiwan¹⁷ than would the United States. This raw fact of asymmetric great power interest does not necessarily preclude either deterrence or defense – and indeed, as we will see, it may be possible to turn the potentially existential importance of Taiwan for the CCP into a source of advantage for Washington and Taipei – but it makes the challenge of defending Taiwan much more complicated and difficult.

Chinese Capabilities and Strategy

Overall Military Overmatch

The sheer scale of the modern Chinese military machine has become extraordinary, and while Beijing would not enjoy the luxury of being able to deploy all its muscle against Taiwan, the capabilities that it *could* perhaps make available for a Taiwan contingency are formidable. According to the U.S. Defense Department, the PLA's total manpower amounts to about two million personnel in the regular forces, of which some 975,000 belong to the

¹³ "Anti-Secession Law Adopted by NPC (full text)," as adopted by the 3rd Session of the 10th National People's Congress on March 14, 2005, reprinted in *Xinhua News Service* (March 14, 2005), at Art. 8, available at https://www.chinadaily.com.cn/english/doc/2005-03/14/content_424643.htm.

¹⁴ See, e.g., DOD 2021 Report, *supra*, at v, 30, & 45.

¹⁵ *Id.* at 115.

¹⁶ *Id.* at 99.

¹⁷ Elbridge A. Colby, *The Strategy of Denial* (New Haven: Yale University Press, 2021), at 92.

PLA Army itself. For its part, the PLA Navy has 355 ships – including 145 major surface combatants, largely modern multi-role platforms – and this figure is likely to grow to 420 ships by 2025 and 460 by 2030.¹⁸ Additionally, the PLA Air Force (PLAAF) and the aviation component of the PLA Navy (PLANAF) are together:

the largest aviation force in the region and the third largest in the world, with over 2,800 total aircraft (not including trainer variants or UAVs) of which approximately 2,250 are combat aircraft (including fighters, strategic bombers, tactical bombers, multi-mission tactical, and attack aircraft).¹⁹

The PLA's active forces, it is reported, now outnumber the total forces of Taiwan by a factor of 12 to one.²⁰

The PRC also possesses a huge arsenal of missiles – numbering at least a thousand²¹ – that are capable of precision strikes at various ranges, and that now include both a dual-capable (nuclear or conventional) DF-26 missile capable of conducting “precision land-attack and anti-ship strikes in the Western Pacific, the Indian Ocean, and the South China Sea from mainland China,”²² as well as the new DF-17 hypersonic glide vehicle (HGV) launched atop a medium-range ballistic missile (MRBM).²³ This arsenal, moreover, is backed up by an accelerating missile testing and training program in which, despite the global pandemic, the PLA Rocket Force launched more than 250 missiles in 2020 alone – more than the rest of the world combined.²⁴ Even leaving aside ship-based systems and counting only land-based missiles, the PLA is able to extend its anti-air missile coverage all the way across the Taiwan Strait and over much of the island itself, and is capable of anti-surface missile attacks far beyond Taiwan's eastern coastline.²⁵

Even allowing for Beijing's likely inability to concentrate *all* its force against Taiwan, the PLA's suite of capabilities seem well suited – by design – to a campaign plan that would involve: (a) mounting an overwhelming first strike with missile and air power to attrit and disorganize the island's defenders and push (and try to keep) U.S. forces out of the theater, followed by (b) the quick seizure of key Taiwanese territories by an aerial and amphibious invasion force and then (c) a tense standoff in which China would weather global economic sanctions and try to rely upon escalation risks and nuclear deterrence to dissuade the United States from trying to fight its way back into the area to help surviving Taiwanese forces liberate the occupied zones. In broad terms, some variation upon such a plan does indeed seem like Beijing's best chance to realize what Western strategists have described as a

¹⁸ DOD 2021 Report, *supra*, at v & 49.

¹⁹ *Id.* at vi.

²⁰ Lee Hsi-min & Eric Lee, “Taiwan's Overall Defense Concept, Explained,” *The Diplomat* (November 3, 2020), available at <https://thediplomat.com/2020/11/taiwans-overall-defense-concept-explained/>.

²¹ See, e.g., Michael O'Hanlon, “An asymmetric defense of Taiwan,” *Brookings Institution* (April 28, 2021), available at <https://www.brookings.edu/blog/order-from-chaos/2021/04/28/an-asymmetric-defense-of-taiwan/>.

²² DOD 2021 Report, *supra*, at 61.

²³ *Id.* at vii.

²⁴ *Id.* at 60 & 94; see also Steve Trimble, “USAF Secretary Warns of Revived 60-Year-Old Chinese Nuclear Weapon,” *Aviation Week & Space Technology* (September 27-October 10, 2021), at 32.

²⁵ DOD 2021 Report, *supra*, at 119 (map graphic of missile range rings).

Chinese *fait accompli* strategy²⁶ for destroying and subjugating the first and only successful fully democratic government yet established in the Chinese-speaking world.

“Grey Zone” Pressures

Well in advance of such a potential attack and invasion, moreover, the PLA’s numerical superiority has also opened up opportunities for peacetime pressure and strategic manipulation against Taiwan. PLAAF, PLANAF, and PLA Navy (PLAN) forces now regularly deploy in provocative thrusts that intrude into nearby waters and the island’s Air Defense Identification Zone (ADIZ), thus requiring responsive counter-deployments by Taiwanese forces, and then turn around – to date, at any rate – just before the point at which such intruders might be fired upon. In a significant escalation, the PLAN sent an aircraft carrier sailing through the Taiwan Straits for the first time in 2019, and ADIZ intrusions are now routine, reportedly occurring in some form nearly every day. (Over the course of just 10 months between September 2020 and July 2021, in fact, PLA aircraft sent 554 sorties into the ADIZ southwest of Taiwan.)²⁷

These provocative deployments likely have at least four purposes. First, they allow the PLA to take advantage of its numerical superiority to wear out Taiwan’s defenders by forcing them to react to such intrusions on an operational tempo that may eventually prove unsustainable for the island’s much smaller forces. In effect, as the Ministry of Defense in Taipei has warned, these pressure tactics force the Taiwanese to “consume our combat power” on endless responsive patrolling, wearing down service members and their equipment in ways likely to make them less capable in an actual fight.²⁸

Second, the burdens imposed by PLA deployments encourage Taiwan to take the operationally easier option of *not* responding to such routine intrusions, thus potentially creating a symbolic and political victory for Beijing by normalizing PLA operations in areas Taiwan has long claimed to be its own responsibility. This would, of course, be depicted by Beijing as a concession to China on territorial claims, and might be seen both in Taiwan and farther afield as representing a commencement of the island’s retreat from defending one of the central attributes and prerogatives of a sovereign state: its territorial integrity.²⁹ This is

²⁶ See Elbridge A. Colby, *The Strategy of Denial* (New Haven: Yale University Press, 2021), at 119-20, 144-46, & 152 (describing *fait accompli* strategy as China’s best chance of seizing control of Taiwan); see also, e.g., Chris Dougherty, Jennie Matuschek, & Ripley Hunter, “The Poison Frog Strategy: Preventing a Chinese *Fait Accompli* Against Taiwanese Islands,” *CNAS* (October 2021), at 5 (describing risk of Chinese *fait accompli*), available at https://s3.us-east-1.amazonaws.com/files.cnas.org/documents/TaiwanWargameReport_Formatted-1-1.pdf?mtime=20211025143441&focal=none; Aaron Friedberg, “What’s at Stake in the Indo-Pacific,” *Proceedings* (October 2021), at 52, 55-56 (describing likely PLA “theory of victory”).

²⁷ See Republic of China Ministry of National Defense, *ROC National Defense Report 2021* (Taipei: 2021) [hereinafter “ROC MinDef 2021 Report”], at 45 & 61, available at <https://www.ustaiwandefense.com/tdnswp/wp-content/uploads/2021/11/Taiwan-National-Defense-Report-2021.pdf>; “Too close for comfort,” *The Economist* (October 9, 2021), at 41.

²⁸ ROC MinDef 2021 Report, *supra*, at 54; see also, e.g., David Lague & Maryanne Murray, “War Games: T-Day – the Battle for Taiwan,” *Reuters* (November 5, 2021) (noting that the PLA’s “almost daily campaign of intimidating military exercises, patrols and surveillance that falls just short of armed conflict ... has the potential to grind down Taipei’s resistance”), available at <https://www.reuters.com/investigates/special-report/taiwan-china-wargames/>.

²⁹ *Cf.*, e.g., Montevideo Convention on the Rights and Duties of States (December 26, 1933) (entered into force December 26, 1934) [hereinafter “Montevideo Convention”], at Arts. 1 (“The state as a person of international law should possess the following qualifications: (a) a permanent population; (b) a defined territory; (c) government; and (d) capacity to enter

what Taiwan's Ministry of Defense refers to as China "attempt[ing] to alter or challenge the status quo in the Taiwan Strait to ultimately achieve its goal of 'seizing Taiwan without a fight.'"³⁰

Third, such intrusions serve to "soften up" Taiwan psychologically, making its military so accustomed to seeing significant numbers of advancing PLA forces *almost* cross into Taiwan's territorial waters and airspace that the defenders might be taken by surprise when someday these forces do *not* turn around and instead participate in a first wave of aerial assaults. Taiwan's defense strategy has for many years relied upon developing and maintaining long-range surveillance and early-warning capabilities to give as much notice as possible of a Chinese attack in order maximize defenders' ability to disperse mobile assets, mobilize reserve forces, activate civil defense procedures, and in various other ways prepare themselves.³¹ The PLA's campaign of nonstop aerial and maritime incursions increases the odds of at least partly circumventing this defensive planning by allowing the first elements of an attacking force to approach by "hiding in plain sight," as it were, under the guise of being no more than just another exercise.³²

Fourth and finally, the PLA's territorial pressure tactics may serve a broader strategic purpose, as a cost-imposition strategy and technique of strategic military misdirection. Significantly, the types of forces upon which Taiwan relies in responding to the constant barrage of PLAAF, PLANAF, and PLAN incursions are in many respects very *different* forces than those that would be most useful in actually attriting an incoming amphibious armada, fighting a PLA invasion force on Taiwan's beaches, or conducting a guerrilla insurgency against Chinese occupiers in the cities, jungles, and mountains of Taiwan's interior.

Responding to territorial patrol needs offshore in reaction to incoming PLA aircraft or naval assets is a job for large naval surface combatants, coast guard patrol vessels, and high-end aircraft such as Taiwan's recently refurbished American-made F-16 fighters. These assets, however, are not merely less likely to be of use against a full-scale Chinese invasion – or, if useful, not to remain so for very long before themselves becoming casualties. They are also quite expensive, particularly compared to the sort of "low-end" capabilities that *would* be more likely to make an attempted PLA invasion and continued occupation of the island into a "truly awful mess."³³ In this sense, the PLA's campaign of incursions also serves strategic purposes by giving Taiwan incentives to spend as much as possible of its sharply limited supply of defense funding on military assets that today's technologically sophisticated PLA does not particularly fear, and of which Taipei could never really afford very many in the first place.

into relations with the other states.") & 11 ("The territory of a state is inviolable and may not be the object of military occupation nor of other measures of force imposed by another state directly or indirectly or for any motive whatever even temporarily."), available at <https://www.jus.uio.no/english/services/library/treaties/01/1-02/rights-duties-states.xml>.

³⁰ ROC MinDef 2021 Report, *supra*, at 45.

³¹ See, e.g., Zeno Leoni, "Taiwan: How the 'porcupine doctrine' might help deter armed conflict with China," *The Conversation* (October 7, 2021), available at <https://theconversation.com/taiwan-how-the-porcupine-doctrine-might-help-deter-armed-conflict-with-china-169488>.

³² See, e.g., "Too close for comfort," *supra*, at 41.

³³ See, e.g., Christopher Ford, "A 'People's War' Against the People's Republic," *The SCIF* (October 5, 7, & 11, 2021), available at <https://www.newparadigmsforum.com/a-people-s-war-against-the-people-s-republic-deterring-an-invasion-of-taiwan-in-three-parts>.

A Potential Invasion Force

In the event of an actual invasion, the PLA would have some important capabilities upon which it could rely. It has been working for years to improve its amphibious warfare abilities, and U.S. Defense Department sources say that China now has 12 units organized and equipped to conduct amphibious operations, and has fielded new equipment designed specifically for such work. The PLA has also “made efforts to improve its ability to insert forces by air, restructuring the PLA Army’s Airborne Corps and establishing Army air assault units, which would seize key terrain and interdict Taiwan counterattacks.”³⁴

According to DOD, the PLA Navy’s Marine Corps (PLANMC) has expanded to eight brigades and has recently been working toward fully equipping and training its four newly established maneuver brigades, a special operations brigade, and a helicopter-based aviation brigade. For its part, the PLA Army (PLAA) has its own aviation and air assault brigades, which are reported to have “conducted significant training throughout 2020 – some [exercises] directly supporting a Taiwan scenario and others that improve skill sets necessary for a cross-sea invasion,” since “supporting a Taiwan operation is a high priority for the Army.” The PLAAF also has an Airborne Corps, which includes six identified airborne combined-arms brigades.” In 2015, moreover, the PLA also established a Joint Logistics Support Force (JLSF), likely in part with an eye to trying to meet the considerable logistical challenges of supporting a Taiwan campaign.³⁵

In order to help get such a force to Taiwan, the PRC has been acquiring more ocean-going amphibious platform docks (LPDs) and flat deck landing helicopter assault ships (LHAs), and launched a new *Yushen*-class LHA (Type 075) vessel in 2019 and again in 2020. (The DOD describes these vessels as “highly capable large-deck amphibious ships that will provide the PLAN with an all-aspect expeditionary capability.”) The PLAN also has seven *Yuzhao*-class amphibious transport docks (LPDs) (Type 071), with an eighth ship likely to enter service soon. The *Yushen* and *Yuzhao* can each carry several of the new *Yuyi*-class air-cushion medium landing craft and “a variety of helicopters, as well as tanks, armored vehicles and PLAN marines for long-distance deployments.”³⁶

To be sure, mounting an invasion of Taiwan would be an extraordinarily difficult undertaking. From a military perspective, a combined-arms amphibious campaign against a large target such as Taiwan – across a sizeable expanse of water, onto a limited number of well-defended beaches or alternative landing points, and into an island consisting largely of dense urban areas backed by upland jungles and mountains – would be a technically demanding operation of the highest order.³⁷ It has also been reported that the PLANMC’s reform and modernization effort has been going more slowly than Beijing had hoped, and that the PLA “rarely conducts amphibious exercises involving echelons above a battalion,

³⁴ DOD 2021 Report, *supra*, at 120.

³⁵ *Id.* at 51-53, 120, 119, 58, & 118.

³⁶ *Id.* at 120-21, 48, & 51.

³⁷ See, e.g., *id.* at 117 (“Large-scale amphibious invasion is one of the most complicated and difficult military operations, requiring air and maritime superiority, the rapid buildup and sustainment of supplies onshore, and uninterrupted support.”).

although both PLAA and PLANMC units have emphasized the development of combined-arms battalion formations since 2012.”³⁸

The U.S. DOD seems to think that China’s amphibious warfare capabilities are not yet quite up to par for a full-scale Taiwan invasion, with its most recent report on PRC military power noting that the PLA’s amphibious-lift capacities still seem more tailored to “a near term focus on regional and eventually global expeditionary missions ... than the large number of landing ship transports and medium landing craft that would be necessary for a large-scale direct beach assault.”³⁹ All in all, DOD’s 2021 assessment of PLA amphibious capabilities is thus a mixed review:

There is also no indication the PRC is significantly expanding its force of tank landing ships (LSTs) and medium sized landing craft at this time – suggesting a traditional large-scale direct beach-assault operation requiring extensive lift remains aspirational. Although the PLAN has not invested in the large number of landing ships and medium landing craft that outsiders believe the PLA would need for a large-scale assault on Taiwan, it is possible the PLA assess it has sufficient amphibious capacity and mitigated shortfalls through investments in other operational modalities able to bring forces onto Taiwan such as the PLA’s rapidly expanding fleet of rotary-wing assets. The PLA may also have confidence in the PRC’s shipbuilding industry’s massive capacity to produce the necessary ship-to-shore connectors relatively quickly.⁴⁰

From the outside observer’s perspective, it is thus hard to know whether these PLA units are yet up to the task of a full-scale invasion of Taiwan – and, though China’s capabilities have clearly been improving steadily with just such a scenario in mind, they may well *not* be.

Complicating the picture further, however, some observers have warned that the U.S. military’s focus upon whether or not the PLA is capable of a “direct beach assault”⁴¹ on a full Taiwanese scale could be misleading. As one Western journalist has somewhat acidly pointed out, for instance, “LSTs aren’t the only way to land tanks,” and that “the PLA probably *won’t* stick to the beaches”:

Anticipating a firepower disadvantage in a traditional beach-assault, the Chinese military has been mulling indirect invasion strategies, whereby Chinese forces overtly or covertly gain control of Taiwanese ports – and then use commercial vessels to ferry in troops and tanks.

The port-first strategy, while risky, allows the PLA to move more forces, faster. Where the PLAN’s amphibious ships together can transport fewer than 400 tanks, a flotilla of commercial ferries and roll-on/roll-off ships could move potentially *thousands* of vehicles, including tanks.

Chinese law allows the PLA to commander thousands of civilian vessels. The most potent of these, for invasion purposes, might be car ferries. The Bohai Ferry Group alone operates 11 ferries, each of which can haul between 200 and 300 vehicles [...

³⁸ *Id.* at 52 & 120.

³⁹ *Id.* at 120-21.

⁴⁰ *Id.* at 121.

⁴¹ *Id.* at 120.

and] [t]he PLA actively has been modifying Chinese-flag commercial vessels with new heavy-duty ramps and other enhancements that make them more suitable for military roles.⁴²

To be sure, even though Chinese civilian vessels have shown themselves scofflaw enough to switch off their mandatory positional beacons whenever this seems expedient,⁴³ mobilization of such a large civilian-military invasion fleet would likely be visible ahead of time, giving Taiwanese and American commanders some warning of the coming storm. (As discussed below, moreover, the full-scale invasion that such a civilian-military flotilla might support is not the only scenario that might be envisioned for a Chinese attack on Taiwan.) Nevertheless, the verdict on the PLA's ability to mount a full-scale invasion of the island remains ambiguous, though even here its capabilities seem to be growing and maturing rapidly. Few observers doubt, however, the PLA's capability to subject Taiwan to a devastating rain of missile and aerial attacks, nor to mount a *de facto* naval blockade, nor even the possibility of PLA forces being used to seize at least *some* key Taiwanese locations for potential bargaining purposes – *e.g.*, to compel negotiations over the island's accession to the PRC – as part of a *fait accompli* strategy.

Taiwan's Strategy

Two decades ago, it was possible to look at the cross-Strait military balance with a degree of optimism. It was then the case, for instance, that Taiwan's inventory of combat aircraft "enjoye[ed] substantial qualitative superiority over their [PLA] adversary" and that "[o]nly a small percentage of the PLAN's surface combatants are ocean-going, blue-water capable ships" and were on the whole unable to "enforce a blockade of even one of Taiwan's two main ports, much less to carry out a successful quarantine of the island." Even at that point, however, it seemed clear that "Taiwan's 'window of invulnerability' is gradually closing" and that before too long "the conventional force balance between the two [adversaries] will tip in China's favor."⁴⁴

Today, such assumptions clearly no longer hold, and such tipping has indeed occurred. Even though – as we have seen – it is not yet clear how well PRC capabilities stack up against the formidable combined-arms challenges of a full-scale amphibious assault over Taiwan's beaches, the beleaguered island democracy now enjoys neither a quantitative *nor* a qualitative military advantage.

Equipment and Manpower

To be sure, Taiwan has in recent years *begun*, with U.S. help, to make some moves to redress this imbalance – or at least to slow the rate at which it has been falling behind – with a

⁴² David Axe, "The Taiwanese Army Has More Tanks Than a Chinese Invasion Force Does – Until China Captures A Port," *Forbes* (June 29, 2021), available at <https://www.forbes.com/sites/davidaxe/2021/07/29/the-taiwanese-army-has-more-tanks-than-a-chinese-invasion-force-does-until-china-captures-a-port/?sh=5fdda3b7477d>.

⁴³ See, e.g., Joshua Goodman, "Great Wall of Lights: Chinese sea power on Darwin's doorstep," *AP News* (September 24, 2021), available at <https://apnews.com/article/china-oceans-overfishing-squid-294ff1e489589b2510cc806ec898c78f>.

⁴⁴ David Shambaugh, "A Matter of Time: Taiwan's Eroding Military Advantage," *Washington Quarterly* (Spring 2000), at 119 & 121.

particular focus upon capabilities that could be valuable in fighting a PLA invasion. Much of this movement has occurred with American help and assistance. In 2019, for instance, the Trump Administration approved the sale of advanced U.S. Abrams tanks to Taiwan,⁴⁵ a weapon system which was intended to enable Taiwan to replace some of the oldest tanks in its armored units and help defenders “strike back against Chinese invasion troops landing on Taiwan’s beaches,” the first wave of whom, at least, would likely be “lightly armed.”⁴⁶

In 2020, U.S. officials also green-lighted Taiwan’s purchase of hundreds of surface-launched anti-ship Harpoon Block II missiles and associated launching equipment, as well as “weapons ready” Predator MQ-9 drones capable of carrying missiles that could be used against landing vessels in an invasion fleet or PLA targets in a beachhead combat environment.⁴⁷ Such acquisitions should increase the challenges facing Chinese military planners, whose forces might thereafter have to “fight [their] way through deep, overlapping missile kill-zones before [they] could land troops on Taiwan’s beaches.”⁴⁸

The Americans also agreed in 2020 to provide Taiwan with additional Mk-48 heavy torpedoes, and to repair and recertify Taiwan’s U.S.-made Patriot surface-to-air (SAM) missiles, capabilities which should enable the ROC’s navy more effectively to target PLAN vessels and its army to defend Taiwan’s airspace.⁴⁹ In 2021, moreover, the Biden Administration approved the sale of U.S.-made Paladin self-propelled artillery, as well as kits with which to upgrade 155mm artillery shells with precision guidance capability.⁵⁰

Such acquisitions clearly are moves likely to improve the island’s defenses. And though Taiwan has ended its system of national conscription and had been reducing its defense

⁴⁵ U.S. Defense Security Cooperation Agency (DSCA), “Taipei Economic and Cultural Representative Office in the United States (TECRO) – M1A2T Abrams Tanks and Related Equipment and Support,” transmittal 19-22 (July 8, 2019), available at <https://www.dsca.mil/press-media/major-arms-sales/taipei-economic-and-cultural-representative-office-united-states-9>.

⁴⁶ Axe, “The Taiwanese Army Has More Tanks Than a Chinese Invasion Force Does,” *supra*.

⁴⁷ DSCA, “Taipei Economic and Cultural Representative Office in the United States (TECRO) – RGM-84L-4 Harpoon Surface Launched Block II Missiles,” transmittal 20-68 (October 26, 2020), available at <https://www.dsca.mil/press-media/major-arms-sales/taipei-economic-and-cultural-representative-office-united-states-17>; DSCA, “Taipei Economic and Cultural Representative Office in the United States (TECRO) – MQ-9B Remotely Piloted Aircraft,” transmittal 20-74 (November 3, 2020), available at <https://www.dsca.mil/press-media/major-arms-sales/taipei-economic-and-cultural-representative-office-united-states-18>; Matthew Lee, “U.S. approves armed MQ-9B drones purchase by Taiwan,” *Associated Press* (November 4, 2020), available at <https://www.defensenews.com/unmanned/2020/11/04/us-approves-armed-mq-9b-drones-purchase-by-taiwan/>; DSCA, “Taipei Economic and Cultural Representative Office in the United States (TECRO) – AGM-84H Standoff Land-Attack Missile-Expanded Response (SLAM-ER) Missiles,” transmittal 20-69 (October 21, 2020), available at <https://www.dsca.mil/press-media/major-arms-sales/taipei-economic-and-cultural-representative-office-united-states-16>. (By way of full disclosure, the author of this paper approved these sales when fulfilling the duties of the U.S. Under Secretary of State for Arms Control and International Security in 2020.)

⁴⁸ David Axe, “To Invade Taiwan, A Chinese Fleet Might Have To Sail Through 400 Harpoon Anti-Ship Missiles,” *Forbes* (October 29, 2020), available at <https://www.forbes.com/sites/davidaxe/2020/10/29/to-invade-taiwan-a-chinese-fleet-might-have-to-sail-through-400-harpoon-anti-ship-missiles/?sh=648390f071b6>.

⁴⁹ DSCA, “Taipei Economic and Cultural Representative Office in the United States (TECRO) – Mk 48 Mod 6 Advanced Technology (AT) Heavy Weight Torpedo (HWT),” transmittal 20-07 (May 20, 2020), available at <https://www.dsca.mil/press-media/major-arms-sales/taipei-economic-and-cultural-representative-office-united-states-12>; DSCA, “Taipei Economic and Cultural Representative Office in the United States (TECRO) – Repair and Recertification of Patriot Advanced Capability-3 Missiles,” transmittal 20-24 (July 9, 2020), available at <https://www.dsca.mil/press-media/major-arms-sales/taipei-economic-and-cultural-representative-office-united-states-13>. (The author approved these sales as well.)

⁵⁰ DSCA, “Taipei Economic and Cultural Representative Office in the United States (TECRO) – 155mm M109A6 Paladin Medium Self-Propelled Howitzer System,” transmittal 21-44 (August 4, 2021), available at <https://www.dsca.mil/press-media/major-arms-sales/taipei-economic-and-cultural-representative-office-united-states-20>.

budgets since 1990,⁵¹ the stepped-up campaign of Chinese territorial pressures and provocations that began in 2019 seem to have gotten the attention of ROC legislators. In August 2019, it was announced that Taiwan's defense budget would be increased by 5.2 percent (to the equivalent of about \$11.6 billion), and a year later that it would rise by a further 10 percent, increasing overall defense spending to more than two percent of gross domestic product.⁵² (By comparison, this two percent figure is significantly below that of the United States, but nonetheless at a level that many U.S. NATO Allies continue to fail to meet despite repeated promises to do so.⁵³) As the U.S. Defense Department has noted:

Taiwan is taking important steps to compensate for the growing disparities it has compared to the PLA, including building its war reserve stocks, growing its defense-industrial base, improving joint operations and crisis response capabilities, and strengthening its officer and noncommissioned officer corps.⁵⁴

All this, then, is certainly progress, though it is also true that Taiwan's military spending is still – and probably always will be – dwarfed by that of China, “which is more than fifteen times as great.”⁵⁵ As also observed by DOD, moreover, all the island's recent improvements still “only partially address Taiwan's defense challenges.”⁵⁶

Indeed, some commentators have harshly criticized Taiwan's defense planning in recent years for grave failures at the level of force planning and manpower management, especially in connection with the island's recent transition away from its longstanding tradition of military conscription. According to Taiwanese journalist Paul Huang, for instance:

Its front-line units are hollowed out, and the entire reserve system is so dysfunctional that few experts or serving military personnel believe it can make a real military contribution in the event of a war. ... [F]ew front-line units have more than 80 percent of their positions filled. ... The personnel shortfalls are a clear consequence of the ill-executed transition from conscription to an all-volunteer military over the past few years. ... The established practice of Taiwan's Reserve Command, according to [one source cited by Huang], is not to send reservists back to their previous units but to lump everyone together into the newly activated reserve infantry brigades that possess no specialty, no vehicles, and no equipment

⁵¹ Chin-Hao Huang & David C. Kang, “Beyond Military Deterrence: The Multidimensionality of International Relations in East Asia,” in *Cross-Domain Deterrence: Strategy in an Era of Complexity* (Jon R. Lindsay & Erik Gartzke, eds.) (Oxford: Oxford University Press, 2019), at 317, 332.

⁵² DOD 2021 Report, *supra*, at 122.

⁵³ In 2021, the United States was estimated to spend about 3.42 percent of GDP on defense, whereas Norway, Montenegro, the Slovak Republic, North Macedonia, Hungary, Turkey, Bulgaria, Portugal, Germany, the Netherlands, Albania, the Czech Republic, Denmark, Italy, Canada, Slovenia, Belgium, Spain, and Luxembourg (in that order) all spent less than two percent. NATO's official target has been two percent for many years. See NATO, “Defence Expenditure of NATO Countries,” Communiqué PR/CP (2021) 094 (June 11, 2021), at 3, available at https://www.nato.int/nato_static_fl2014/assets/pdf/2021/6/pdf/210611-pr-2021-094-en.pdf.

⁵⁴ DOD 2021 Report, *supra*, at 122.

⁵⁵ Michael O'Hanlon, “An asymmetric defense of Taiwan,” *Brookings Institution* (April 28, 2021), available at <https://www.brookings.edu/blog/order-from-chaos/2021/04/28/an-asymmetric-defense-of-taiwan/>.

⁵⁶ DOD 2021 Report, *supra*, at 122.

except rifles (often older types) and are led by called-up reservist officers who have little experience commanding such ad hoc units.⁵⁷

Even the generally less scathing U.S. DOD has noted that:

The PRC's multi-decade military modernization effort continues to widen the capability gap between the PLA and Taiwan's military.... The unanticipated magnitude of transition costs [in moving to an all-volunteer force] has led Taiwan to divert funds from foreign and indigenous defense acquisition programs, as well as near-term training and readiness. Taiwan also faces considerable equipment and readiness challenges.⁵⁸

Defense Strategy

More broadly, the conceptual contours of Taiwan's defense strategy have been the subject of much debate. As we have seen, after decades in which Taipei could plan on using technologically superior, American-supplied equipment to offset the PLA's longstanding numerical advantages and "counter an invasion force by meeting and defeating it head-on,"⁵⁹ China's growing military power and sophistication have made that traditional approach untenable.

As the ROC has rethought its approaches to self-defense in light of China's growing power and renewed regional belligerence – first under Hu Jintao and now especially under Xi Jinping – a considerable degree of support has emerged for what Western analysts have termed a "porcupine strategy," that is:

an approach that seeks to exploit Taiwan's geographic and innovative advantages to create a painfully costly target for Beijing to seek to subdue. This approach moves Taiwan away from seeking to assert sea control, air superiority, and long-range strike capability toward an emphasis on preventing China's ability to occupy Taiwan with military force. In this concept, Taiwan forces would concentrate the battlefield on their geographic advantages by attacking invading forces at their points of maximum vulnerability near Taiwan's shores, rather than seeking to engage forces on the mainland or in the Taiwan Strait.⁶⁰

The clearest articulation of this approach took shape in what has become known as Taiwan's Overall Defense Concept (ODC). As some of its proponents have described it:

The ODC *redefines winning the war* as foiling the PLA's mission of successfully invading and exerting political control over Taiwan.... Taiwan's military must retain the ability to defend itself and strike back after the PLA conducts its missile, air-strike and cyber campaigns. Principles of force preservation include mobility,

⁵⁷ Paul Huang, "Taiwan's Military is a Hollow Shell," *Foreign Policy* (February 15, 2020), available at <https://foreignpolicy.com/2020/02/15/china-threat-invasion-conscription-taiwans-military-is-a-hollow-shell/>.

⁵⁸ DOD 2021 Report, *supra*, at 122.

⁵⁹ Michael A. Hunzeker, "Taiwan's Defense Plans Are Going Off The Rails," *War on the Rocks* (November 18, 2021), available at <https://warontherocks.com/2021/11/taiwans-defense-plans-are-going-off-the-rails/>.

⁶⁰ Ryan Hass, "Taiwan's leaders need to coalesce around a defense concept," *Brookings Institution* (November 1, 2021), available at <https://www.brookings.edu/blog/order-from-chaos/2021/11/01/taiwans-leaders-need-to-coalesce-around-a-defense-concept/>.

camouflage, concealment, deception, electronic jamming, operational redundancy, rapid repair[,] and blast mitigation.⁶¹

The ODC corresponds well with recent U.S. approvals of arms sales to Taiwan, as described above. It also fits cleanly into what American strategist Elbridge Colby has described as “a denial defense, or a strategy that seeks to deny China’s ability to use military force to achieve its political objectives,” such as “either by preventing China from seizing a target state’s key territory in the first place or by ejecting the invaders before they can consolidate their hold on it.”⁶²

The details of how the ROC has actually implemented the much-vaunted ODC, however, remain contentious. The Brookings Institution’s Ryan Hass, for instance, has written that “[t]he seemingly uneven follow-through by Taiwan’s Ministry of National Defense (MND) in implementing the defense concept ... has raised more questions than answers.”⁶³ For his part, George Mason University Professor Michael Hunzeker is less sparing, contending that the ODC has been “more popular with American analysts and officials than it [is] with currently serving Taiwanese generals and admirals,” and that Taiwan has badly fallen down in implementing it. According to Hunzeker:

Taiwan’s Ministry of National Defense has abandoned asymmetric defense reform in all but name and has not been reined in by President Tsai Ing-wen. Instead, the ministry is now planning to deter an invasion by threatening to retaliate with missile strikes against the Chinese homeland and by pitting Taiwanese units in direct combat against the vastly superior People’s Liberation Army. Moreover, the ministry has the audacity to tell American audiences that this dramatic shift is fully congruent with an asymmetric posture. ... The ministry’s preferred approach to defending Taiwan is unrealistic and destabilizing

Driven by personal animosity and the fact that true asymmetry undercuts the rationale for pursuing high-profile, high-prestige, and high-cost weapons, these military leaders and civilian enablers purged the Overall Defense Concept as soon as [ODC proponent Admiral] Lee [Hsi-min] retired. There are rumors that the ministry has even banned senior officers from using the term and that message has trickled down into the junior ranks. Notably, the term does not appear in either the 2021 *Quadrennial Defense Review* or the recently released *National Defense Review*

No matter how hard the Ministry of National Defense might try to convince American audiences otherwise, there is no hiding the fact that it is once again trying to replace its existing inventory of antiquated and hard-to-maintain legacy weapons with newer, shinier versions of the same.... Meanwhile, genuinely asymmetric

⁶¹ Lee Hsi-min & Eric Lee, “Taiwan’s Overall Defense Concept, Explained,” *The Diplomat* (November 3, 2020), available at <https://thediplomat.com/2020/11/taiwans-overall-defense-concept-explained/>. Retired Admiral Lee Hsi-min was chief of staff of the Republic of China Armed Forces from 2017 to 2019, and was instrumental in developing the ODC. He and co-author Eric Lee are currently with the Project 2049 Institute.

⁶² Colby, *supra*, at xv.

⁶³ Hass, *supra*.

capabilities, like the proposed fleet of 45-ton fast-attack missile boats, remain unfunded.⁶⁴

To be sure, even though the phrase “Overall Defense Concept” does seem to have slipped out of current usage, the Ministry of Defense’s most recent *Quadrennial Defense Review* nonetheless describes the development of “effective defensive capabilities with an asymmetric concept to deter the enemy’s military actions” as a key defense priority for Taiwan.⁶⁵ And, according to U.S. officials, Taiwan has indeed still been “developing new concepts and capabilities for asymmetric warfare.”⁶⁶ Yet Hunzeker is not wrong that much money and attention continues to be given to high-profile traditional conventional armaments, sums that necessarily can therefore not be spent on additional asymmetric capabilities.

Another controversial topic relates to Taiwan’s recent focus upon long-range strike capabilities. According to the ROC’s Ministry of Defense, Taiwan aims to “make use of long-range and multi-domain deterrence measures,” and lists long-range strike as its highest acquisitions priority (followed by counter-air and sea control capabilities).⁶⁷ Such long-range tools are envisioned as the initial layer of a “multi-layered defense in depth”⁶⁸ that begins on the *Chinese* side of the Taiwan Strait and hopes to help deter invasion by being able to threaten Mainland targets and impede invasion by attacking mobilization points, command-and-control centers, airfields, missile launch points, and other such targets. Here again, Western critics such as Hunzeker do not approve, arguing that:

Taiwan lacks the surveillance and targeting capabilities needed to accurately strike distant targets. Developing a full and robust ‘kill chain’ will take much longer — and cost more money — than simply buying more missiles. Survivability concerns also loom large, since China will try to preempt Taiwan’s missiles and the sensors and data links that enable them. Even those who think that missiles might make sense under certain, narrowly circumscribed conditions nevertheless still argue that they should be the ministry’s last priority, not its first. Common sense says that Taipei should find a way to survive a body blow from the Chinese before it worries about poking Beijing in the eye. After all, a long-range strike arsenal cannot compensate for the absence of a credible way to prevent Chinese invasion forces from quickly gaining control over Taiwan’s air, sea, and ground space.⁶⁹

Thus do debates bubble over the direction and effectiveness of Taiwan’s defenses and the United States’ potential role in supporting them, with some observers even drawing the conclusion that the island is fundamentally not defensible, and that Washington should

⁶⁴ Hunzeker, *supra*.

⁶⁵ Republic of China Ministry of National Defense, *2021 Quadrennial Defense Review* (Taipei: 2021) [hereinafter “ROC QDR”], at 18, available at <https://www.ustaiwandefense.com/tdnswp/wp-content/uploads/2021/03/2021-Taiwan-Quadrennial-Defense-Review-QDR.pdf>.

⁶⁶ DOD 2021 Report, *supra*, at 122.

⁶⁷ ROC QDR, *supra*, at 19 & 23.

⁶⁸ ROC QDR, *supra*, at 19.

⁶⁹ Hunzeker, *supra*.

therefore simply give up trying to help arm the beleaguered government in Taipei against attack and subjugation by the Chinese Party-State.⁷⁰

To this author's eye, some of the problems identified by Taiwan's contemporary Western critics in this regard seem quite real. The island's defense budget *is* only now just beginning to reverse years of unwise cuts, manpower issues *do* appear challenging (to put it delicately) in the wake of the transition to an all-volunteer force, and more *does* need to be done to equip Taiwan to attrit an invading force in Taiwan's littoral areas, on its beaches, and as it moves inland – and indeed ultimately to make the island and its population wholly “indigestible” to a PLA occupation force.⁷¹

It must also be acknowledged, however, that Taiwan *does* face challenging dilemmas and must balance important legitimate priorities. It is not, for instance, that the Ministry of Defense seeks high-end aircraft and large naval combatants simply as a manifestation of stereotypical “Third World” military acquisition priorities – namely, desiring such tools because these weapon systems are “cool” and because possessing this flashy gear makes military leaders feel important, irrespective of how effectively such systems can be used. As mentioned earlier, it is in fact part of China's strategy to confront Taiwan with a difficult choice between (a) equipping itself for and undertaking wearying everyday responses with high-end assets to PLAAF, PLANAF, and PLAN probes, and (b) buckling down for a close-in battle near, on, and beyond the beaches.

Of those two approaches, the latter course would certainly be more efficacious in actually fighting off an invasion, and thus presumably also in deterring one. Nonetheless, simply to *give up* on the former objective could be seen as a concession of Taiwanese sovereignty and a step in “normalizing” the symbolic subservience of Taiwan to the PRC and admitting the PLA's supposedly rightful freedom of action throughout the Sinosphere. Such symbolic concessions could have dangerous implications as Taipei seeks to maintain civilian morale and political support for a robust defense posture – as well as, now, a military force based upon volunteer service – against constant threats from a vastly more powerful adversary,⁷² to resist PRC efforts to bring about some kind of “permissive” accession to CCP control, and to carry out day-to-day diplomatic, political, military, and economic life in a geopolitical context that Beijing is doing everything it can to turn against Taiwan.

Taiwan's defense strategy must be understood, therefore, not merely in traditional, technical terms of “force-on-force” military effectiveness, but also in the context of China's broader ongoing campaign against the island democracy through the prism of the PLA's “three warfares” strategy of combining “psychological warfare, public opinion warfare, and legal warfare” in order to achieve strategic ends.⁷³ As explained by U.S. scholar Dean Cheng, the “three warfares” concept seeks to apply psychological, public opinion, and legal

⁷⁰ See, e.g., A. Trevor Thrall, Jordan B. Cohen, & Michael Klare, “New arms sales send the wrong signal on Taiwan,” *Defense News* (August 17, 2021), available at <https://www.defensenews.com/opinion/commentary/2021/08/17/new-arms-sales-send-the-wrong-signal-on-taiwan/>.

⁷¹ This author, for instance, has called for more emphasis upon “prepar[ing] Taiwan to put up an intolerable degree of irregular, non-conventional resistance to any PLA invasion and occupation.” Ford, “A ‘People's War’ Against the People's Republic,” *supra*.

⁷² Cf. Lee & Lee, *supra* (noting that “[t]he high visibility of conventional systems positively impacts Taiwanese morale and improves public confidence in the military”).

⁷³ DOD 2021 Report, *supra*, at 65.

pressures as part of an overall campaign of “informationized warfare” against an adversary’s leadership and population in order to “induc[e] the collapse of the opponent’s psychology and will.”⁷⁴ The PLA’s ongoing “grey zone” pressures against Taiwan must be seen in part through this prism.

This does not mean that actual ROC warfighting capabilities can be ignored – far from it! – but it does help explain some of the ambivalence critics have pointed out in Taiwan’s defense acquisition and military strategy vis-à-vis the conceptual clarity and military logic of the ODC. Taiwan’s leadership may not be getting the balance right, but it clearly *does* have to balance real defense equities that point in somewhat different directions. The Ministry of Defense clearly believes that maintaining *some* high-visibility, high-cost, low-volume assets is important to the ROC’s ability to maintain its peacetime juridical, political, and moral status (in the eyes both of the Taiwanese people and of the rest of the world) as a real country in the face of “three warfares” pressures, even if many of these assets would likely quickly succumb to PLA firepower in a full-scale conflict, and even if their expense reduces the degree to which Taipei can invest in more militarily-useful asymmetric capabilities.

As we will see below, there may indeed be room for the United States to work with Taiwan to find a more sustainable – and more genuinely militarily-effective – defense posture. One should not pretend, however, that Taiwan does not face a difficult balancing act here. Given that the United States itself often finds ruthless strategic prioritization quite difficult vis-à-vis China,⁷⁵ if we are to work successfully with leaders in Taipei to encourage them to strike a *better* balance than at present, we must start by understanding the challenges and tensions they face.

Possible Scenarios

As Elbridge Colby has observed, states approach issues of deterrence and strategy in part through a heuristic process of “imagined wars” – that is, they engage in ongoing calculations of how a conflict *would* go if it occurred.⁷⁶ Because states have good reason to care very much who would win in the event of war, such imaginings inform not just war planning itself, but also peacetime calculations about how much disagreeable behavior to tolerate from one’s potential adversary, when to press for additional concessions, and when to back down. The range of potential ways in which PLA military force could be employed against Taiwan has been outlined both in recent media analyses⁷⁷ and at the unclassified level by the U.S.

⁷⁴ Dean Cheng, *Cyber Dragon: Inside China’s Information Warfare and Cyber Operations* (Santa Barbara, California: Praeger, 2017), at 40-42 & 45 & 48-50.

⁷⁵ Elbridge Colby, for instance, has made an articulate and impassioned case that in order to maximize Washington’s chances of success in implementing a successful “denial strategy” vis-à-vis Beijing, the United States must radically *de-prioritize* many non-China-related missions that we have traditionally given great importance. This would include, for instance, downgrading U.S. defense commitments in Europe and leaving our NATO allies largely to defend themselves against an increasingly predatory Russia. See Colby, *supra*, at 59, 273, 276, & 278-79. There is a real strategic logic to this argument, but there is as yet no sign that U.S. leaders will be willing to prune their non-PRC-focused priorities so pitilessly. In this context, Taiwanese leaders might perhaps find it somewhat churlish for Americans to berate them overmuch for an analogous lack of ruthlessness.

⁷⁶ Colby, *supra*, at 89.

⁷⁷ See, e.g., Lague & Murray, *supra*.

Department of Defense,⁷⁸ and although a detailed examination of these various conflict scenarios is beyond the scope of this paper, it is useful at least to mention them on account of their breadth and diversity.

Significantly, not all such possible scenarios actually involve the use of force to seize Taiwanese territory. Depending upon its assessment of Taipei's willingness and ability either to defend itself or to make conciliatory concessions, for instance, China might initiate a customs quarantine of the island, or a full maritime blockage – either of Taiwan itself or of outlying islands that it might wish to seize or intimidate Taiwan into ceding to the Mainland.

Such blockades might be purely “passive,” or they could be accompanied by air and missile strikes, electronic warfare (EW) and cyberattacks – perhaps on a very large scale – and campaigns of political subversion, against the rest of Taiwan in order to impede ROC efforts to break the PLA's stranglehold, to disorganize Taipei's leadership and the island's defenses, and to punish counterstrikes that defenders might make against besieging PLA assets and their bases or command-and-control networks. (Such scenarios obviously have considerable escalation risks, raising the possibility that a “lower” level of confrontation could quickly grow into an even more significant conflict.) Beijing's hope would presumably be that its military posture vis-à-vis Taiwan would deter involvement by U.S. forces and those of other countries, and that a prolonged blockade would be able to isolate and collapse the island's economy and “strangle Taiwan into capitulation, as Germany almost did twice against Britain in the world wars.”⁷⁹

A range of use-of-force options against the ROC beyond simply imposing some kind of blockade could include “a variety of disruptive, punitive, or lethal military actions in a campaign against Taiwan,”⁸⁰ including the possibility of seizing limited real estate such as the island territories of Kinmen, the Matsus, or the Pratas. At the high end of the spectrum, of course, would be a full-scale invasion. As the U.S. DOD notes:

Publicly available PRC writings describe different operational concepts for an amphibious invasion of Taiwan. The most prominent of these, the Joint Island Landing Campaign, envisions a complex operation relying on coordinated, interlocking campaigns for logistics, air, and naval support, and EW. The objective would be to break through or circumvent shore defenses, establish and build a beachhead, transport personnel and materiel to designated landing sites in the north or south of Taiwan's western coastline, and launch attacks to seize and occupy key targets or the entire island.⁸¹

All of these respective potential PRC approaches would naturally have their own costs and risks. A limited campaign such as a blockade or island seizure would certainly demonstrate PRC resolve vis-à-vis Taiwan. That said, that resolve, in truth, has never really been in doubt, and such aggression might as easily serve to galvanize Taiwanese anger and resistance as to cow its population into submissiveness. (The CCP's brutal recent crackdown

⁷⁸ See DOD 2021 Report, *supra*, at 116-117.

⁷⁹ Michael O'Hanlon, “An asymmetric defense of Taiwan,” *Brookings Institution* (April 28, 2021), available at <https://www.brookings.edu/blog/order-from-chaos/2021/04/28/an-asymmetric-defense-of-taiwan/>.

⁸⁰ DOD 2021 Report, *supra*, at 116-117.

⁸¹ DOD 2021 Report, *supra*, at 117.

in Hong Kong⁸² – demolishing its citizens’ remaining political freedoms and governmental autonomy in flagrant violation of Beijing’s promises that it would be possible to have “one country [with] two systems” – only accentuates this problem, highlighting the now inescapable fact that residents of Taiwan have no middle ground option, instead having to choose between resistance and complete submission to CCP tyranny.)

Such moves might also galvanize an expanded U.S. willingness to assist Taiwan, as well as demonstrate to other regional countries that Beijing really *is* an existential threat against which further defense collaboration with the United States is absolutely necessary⁸³ – as well as potentially catalyzing global economic sanctions campaigns against China. (To say the least, this would not necessarily conduce to Beijing’s net strategic advantage.) A full-scale invasion, moreover, would perhaps catalyze even more global resistance to China, as well as presenting potentially existential risks to the CCP in the event that such an invasion were perceived to fail.

Nevertheless, the prospect of a theoretical “resolution” to the “Taiwan question” is clearly very attractive to China’s leadership, and it might well gamble that Taiwan would seek political accommodation before such costs and risks became unmanageable. This places a premium, therefore, upon arranging circumstances in which such perceived political, economic, and operational military risks to the PRC – as understood from the CCP’s leadership compound at Zhongnanhai in Beijing – seem dangerously high.

Taiwan’s defense minister, Chiu Kuo-cheng, warned in October 2021 that China would be able to launch a full-scale attack on Taiwan with minimal losses by 2025.⁸⁴ That said, U.S. Chairman of the Joint Chiefs of Staff Milley has recently declared that while he did not expect China to attempt to seize Taiwan soon, in the event that it did try, “U.S. forces ‘absolutely have the capability’ to defend Taipei, ‘no question about that.’”⁸⁵ One hopes that Milley – and not Chiu – is correct. Nevertheless, it should clearly be the objective of U.S. and Taiwanese defense policy to ensure both that Beijing reaches Milley’s conclusion *and* that this is never felt *not* to be the case.

An Effective Response?

Military Needs versus the PLA

In raw military-technical terms, what Taiwan needs in the face of a potential PRC attack is, at this point, little mystery. The ROC requires “a ‘porcupine’ defense featuring sea mines, anti-ship missiles launched from shore batteries and helicopters, and concentrated resistance wherever China tries to come ashore.”⁸⁶ Such a “layered defense of sea mines and pre-deployed obstacles along with swarming fast-attack craft and missile assault boats” would attrit invaders approaching Taiwan’s shores, with “land-based precision-guided munitions and ground forces ... provid[ing] additional

⁸² See, e.g., Claire Moses, “China’s Crackdown on Hong Kong,” *New York Times* (June 23, 2021), available at <https://www.nytimes.com/2021/06/23/briefing/china-hong-kong-apple-daily-closure.html>.

⁸³ Colby, *supra*, at 94.

⁸⁴ Gordon Lubold, “U.S. Troops Have Been Deployed in Taiwan for at Least a Year,” *Wall Street Journal* (October 7, 2021), available at <https://www.wsj.com/articles/u-s-troops-have-been-deployed-in-taiwan-for-at-least-a-year-11633614043>.

⁸⁵ Ellen Mitchell, “Milley: US ‘absolutely’ could defend Taiwan from China,” *The Hill* (November 3, 2021), available at <https://thehill.com/policy/defense/579869-milley-us-absolutely-could-defend-taiwan-from-china>.

⁸⁶ O’Hanlon, *supra*.

firepower.”⁸⁷ This approach would leverage “highly mobile coastal defense cruise missiles, short-range air defense, naval mines, mobile artillery, advanced surveillance assets, and unmanned aerial and unmanned underwater vehicles”⁸⁸ to make the already staggeringly complicated operational challenges of large-scale amphibious warfare into ones that are – hopefully – an insuperable challenge for the PLA.

And indeed, this is very much the approach Taiwan spelled out for itself – at least for a time – in the Overall Defense Concept (ODC). The basic conceptual architecture of the ODC still seems militarily sound. As described in an article co-authored by one of the ODC’s principal Taiwanese proponents, Admiral Lee Hsi-Min:

Asymmetric platforms will elevate Taiwan’s warfighting capabilities, which will have a direct impact on deterrence against an invasion by the PLA. ... [A] balanced assortment of armaments that include cost-effective and sustainable asymmetric capabilities will complement existing traditional platforms; the acquisition focus will emphasize achieving operational outcomes.

The procurement of advanced unmanned aerial vehicles (UAVs) will significantly augment Taiwan’s target acquisition, early-warning[,] and tactical reconnaissance capabilities, as will mobile radar platforms. Large inventories of low-cost, short-range precision-guided munitions[,] and mobile coastal defense cruise missiles (CDCMs), including harpoon coastal defense systems (HCDS), can provide shore-based firepower support. Man-portable air-defense systems (MANPADS) and mobile anti-armor weapons, such as high mobility artillery rocket systems (HIMARS), can strengthen guerrilla warfighting capabilities. Stealth fast-attack crafts and miniature missile assault boats can be dispersed among fishing boats across the island’s over 200 fishing ports. Sea mines and fast minelaying ships can complicate enemy landing operations.⁸⁹

This has also been the view propounded by U.S. officials keen to support Taiwan’s development of a defensive posture that will deter PLA aggression. As one U.S. Defense Department official put it in 2019:

If the Overall Defense Concept is to remain Taiwan’s guiding framework and inform ... next steps, much remains to be done to ensure Taiwan strikes [the right] balance by fielding a combat credible force proficient in asymmetric warfare, force preservation, and littoral battle Taiwan cannot afford to overlook preparing for the one fight it cannot afford to lose. ... But to do so in a resource-constrained environment requires a strategy that reflects tough choices – not only on where and how Taiwan invests its defense dollars, but where and how it does not.

... In the face of an adversary that spends more, fields capabilities faster, and expresses a willingness to use force, Taiwan must employ a force that leverages its strengths in terms of geography, advanced technology, [a] highly skilled workforce, and [an] innovative and patriotic society, all while exploiting its adversary’s vulnerabilities. This means a distributed, maneuverable, and decentralized force – large numbers of small things – that can operate in a degraded electromagnetic environment and under a barrage of missile and air attacks

⁸⁷ Lee & Lee, *supra*.

⁸⁸ Hass, *supra*.

⁸⁹ Lee & Lee, *supra*.

These include highly-mobile coastal defense cruise missiles, short-range air defense, naval mines, small fast-attack craft, mobile artillery, and advanced surveillance assets, all of which are particularly well suited for Taiwan's geography and to the mission of island defense. Taiwan cannot match the PRC's defense spending, but it does not have to. Such systems are far less expensive to operate and maintain, and are more survivable, compared to more conventional platforms such as fighter aircraft or large naval vessels.⁹⁰

And indeed, on top of the aforementioned U.S. arms sales support Taiwan's honing of such asymmetric capabilities, American servicemembers *have* apparently been working with Taiwan to help implement such a vision. It was reported in October 2021, for instance, that a U.S. special operations unit and a contingent of U.S. Marines had been "secretly operating in Taiwan to train military forces there ... for at least a year."⁹¹ In fact, the United States is said to have "kept small contingents of troops on the island dating back to at least September 2008."⁹²

Interestingly, some of the conceptual elements that lie behind the ODC show intriguing parallels with ideas central to evolving doctrinal innovations that are coming to be embraced by the U.S. Marine Corps (USMC) and even by Japanese military planners.⁹³ The USMC's recent *Force Design 2030* document, for example, emphasizes the need for more expeditionary long-range precision fires: medium- to long-range air defense systems; short-range (point defense) air defense systems; and high-endurance, long-range unmanned systems with Intelligence, Surveillance, and Reconnaissance (ISR), Electronic Warfare (EW), and lethal strike capabilities.⁹⁴ These improved tools, it is said, would support the evolving Marine Corps concept of "Stand-In Forces," which is itself described as an offshoot of the USMC's Expeditionary Advanced Base Operations (EABO) concept emphasizing the generation of "technically disruptive, tactical stand-in engagements that confront aggressor naval forces with an array of low signature, affordable, and risk-worthy platforms and payloads."⁹⁵

Cutting through such unfortunate jargon, this concept apparently envisions the Marines' deployment of long-range anti-ship and anti-air missiles to islands far forward in the Western Pacific in order to present China with anti-access/area denial (A2/AD) problems in *leaving* China's immediate coastal areas that are analogous to those the PLA has itself been trying to create for United States forces trying to deploy *to* the Taiwan Straits and elsewhere in the region. One component of this nascent U.S. capability, for instance, is the Navy and Marine Corps Expeditionary Ship Interdiction System (NMESIS), which combines the sea-skimming Naval Strike Missile (NSM) with a low-profile and remotely-operated mobile vehicular launcher.⁹⁶ (It has even been suggested that forward-deployed USMC units with such capabilities could be at least partly resupplied via uncrewed underwater vehicles if PLA firepower makes surface and aerial efforts prohibitively risky.⁹⁷) While some authors have expressed skepticism that deployments by U.S. Marines to the "first island chain" would be enough, in themselves, to deter Chinese aggression against Taiwan,⁹⁸ the acquisition of a

⁹⁰ Principal Deputy Assistant Secretary of Defense David Helvey, keynote remarks to the U.S.-Taiwan Defense Industry Conference (October 7, 2019), at 1-3, available at https://www.us-taiwan.org/wp-content/uploads/2020/04/2019_october07_david_helvey_dod_keynote.pdf.

⁹¹ Lubold, *supra*.

⁹² Jack Detsch & Zinya Salfiti, "The U.S. Is Getting Taiwan Ready to fight on the Beaches," *Foreign Policy* (November 8, 2021), available at <https://foreignpolicy.com/2021/11/08/us-taiwan-military-presence-china-biden-porcupine/>.

⁹³ Cf. Friedberg, *supra*, at 57.

⁹⁴ U.S. Marine Corps, *Force Design 2030* (March 2020), at 2, available at <https://www.hqmc.marines.mil/Portals/142/Docs/CMC38%20Force%20Design%202030%20Report%20Phase%20I%20and%20II.pdf?ver=2020-03-26-121328-460>.

⁹⁵ *Force Design 2030*, *supra*, at 3.

⁹⁶ James Winnefeld, "NMESIS Now," *Proceedings* (November 2021), at 26 & 28.

⁹⁷ Karl Flynn, "Unmanned Vessels," *Proceedings* (November 2021), at 32-33 & 36.

⁹⁸ See, e.g., Friedberg, *supra*, at 52.

much denser and longer-ranged network of mobile and survivable anti-ship and anti-air A2/AD capabilities *by Taiwan itself* might in fact help do so.⁹⁹

Though the issue – as we have seen – remains somewhat controversial, there seems no reason that long-range strike capabilities against land targets could not also play a role in Taiwan’s suite of capabilities, provided that this is done with perspicacity. To be sure, the likely expense of a very large arsenal of long-range attack capabilities would surely indeed impose an opportunity cost in terms of foregoing the sorts of tools that might be more directly effective against an actual invasion or occupation force. Nevertheless, precision strike capabilities from mobile, survivable platforms that could be quickly and repeatably relocated between hide sites in Taiwan while still menacing a broad range of PLA targets – from bases on the Mainland to vessels transiting the Straits or conducting blockade operations around the island’s perimeter, and against beachhead PLA assembly points on Taiwan itself – would likely still contribute more to Taiwan’s defense in a full-scale war than the F-16s and large naval combatants that Hunzeker and others properly criticize as showy, expensive, and ineffective against PLA numbers and firepower.

Even so, however, caution is in order. It is unlikely that any arsenal of long-range missiles of a number and type that Taiwan is likely to end up possessing could, in itself, be able to inflict enough debilitating damage on China to compel it to abandon its hopes for “reunification,” or to call off an invasion once in progress. Instead, the Taiwanese approach to long-range strike should be to carefully integrate such tools into a “denial” strategy designed not to lay waste to things on the Mainland *per se* but rather simply to make it unfeasible for the PLA successfully to carry out the kind of massive combined-arms operation that it would need to subjugate Taiwan.

Especially when combined with exogenous (i.e., American) ISR and targeting support – of which more will be said below – a modest and potentially affordable suite of long-range land-attack missiles could help hold at risk a range of PLA command-and-control centers, logistical hubs, airfields, mobilization and disembarkation points, and other targets in ways that could further complicate the enormously difficult task of mounting an invasion. After all, in a Taiwan scenario, the military objective of a “denial” strategy would not be to defeat or suppress Chinese military power overall, but instead merely to impede the PLA’s ability to achieve its already hugely demanding operational requirements – e.g., effectively organizing, supplying, and commanding a huge invasion force, transitioning it across the Taiwan Strait under fire, seizing beachheads on the island in the face of strong opposition, fighting off any efforts at intervention by U.S. or other outside powers, and interdicting outside resupply of Taiwan defenders.¹⁰⁰

Finally, as the innermost layer of a layered defensive system designed to make Taiwan not just a “porcupine” if attacked but also thoroughly “indigestible” even if invaded, some strategists have further suggested that Taiwan should spend at least *some* of its defense energy and funding on preparing to conduct an effective guerrilla insurgency in the event that the PLA *does* manage to seize control of a substantial portion of Taiwanese territory. This author has argued, for instance, that:

We need... to turn Mao Zedong’s theories of ‘People’s War’ back against the People’s Republic of China (PRC).

⁹⁹ The fact that first-rate military powers such as the United States – and indeed China itself, as well as Russia – are investing in precision-strike missile capabilities may also help reduce the degree to which Taiwanese military leaders feel “prestige” attraction to traditional assets such as fighter jets and major surface combatants. Should current trends toward long-range precision fires and uncrewed air, surface, and subsurface assets continue among the world’s premier armed forces, traditional tools may seem less appealing. (Merely owning “legacy” equipment that is being superseded in the arsenals of the most sophisticated players is surely less “sexy” than being part of the cutting edge of military developments.)

¹⁰⁰ See, e.g., Colby, *supra*, at 127, 159-61 & 168-69.

Imagine, if you will, a security assistance program that helps Taiwan establish a network of hundreds (or thousands?) of clandestine arms caches all around the island – in densely-populated urban areas and rugged mountain fastnesses alike – brimming with supplies and equipment to help the Taiwanese people confront the PLA with its own debilitating, humiliating, and utterly unwinnable ‘Vietnam’ or ‘Afghanistan.’ These caches would contain the weaponry needed for Taiwanese irregular fighters to make the PLA’s life on the island a living hell: man-portable air defense systems; anti-tank guided missiles; anti-vehicular mines; sniper rifles and ammunition; and high-grade explosives and detonator/fusing kits to facilitate anti-PLA sabotage missions and improvised explosive device placements against an occupying force.

Portable jammers for the PLA’s ‘BeiDou’ system – China’s analogue to the American GPS network – could also be supplied in order to help the Taiwanese resistance impede PLA aerial navigation and weapon targeting, as well as American equipment optimized for jamming or intercepting Chinese military communications. Short-range, low-power encrypted radios would help Taiwanese guerrillas communicate with each other and organize the fight, while longer-range communications equipment – as well as target-designation gear – would facilitate coordination with long-range precision fires deliverable by U.S. aerial, military, and naval assets from far offshore. (The caches might even include quantities of small, clandestine ‘tag-and-track’ devices, which resistance fighters could affix to vehicles and other assets associated with the PLA occupation, further facilitating targeting and interdiction.) Video gear and satellite communications equipment would also be supplied to enable locals to upload evidence of PLA abuses and atrocities – as well as heroic and inspiring stories of resistance activity – in order to embarrass Beijing, undermine its propaganda, and potentially lay the groundwork for future war crimes prosecutions of senior PLA and CCP officials.¹⁰¹

America’s Role

As implied by much of the foregoing discussion, the United States would presumably have to play a prominent role in helping equip Taiwan with the capabilities it needs for effective deterrence of Chinese imperialist aggression. For the PLA genuinely to be deterred and for Taiwan to have its best chances in an actual wartime contingency, various forms of U.S. help are essential.

To begin with, in terms of equipping Taiwan better for full-scale war against the PLA and thus contributing to deterring Chinese attack, the United States is certainly under no obligation to make Taiwan pay full price – or indeed, in theory, *any* price – for all the U.S.-made arms it needs. American assistance could be provided to this end, as Washington has effectively done with Israel for many years,¹⁰² and as recent legislation introduced in the U.S. Congress has also proposed.¹⁰³

More U.S. attention should also be given to how to *resupply* Taiwan and its defenders in the event of conflict and PLA blockade, as some American strategists have emphasized by suggesting the

¹⁰¹ Ford, “A ‘People’s War’ Against the People’s Republic,” *supra*. Retired Taiwanese Chief of Staff Admiral Lee Hsi-Min might seem to agree with such concepts, for he advocates the “strategic utilization of geographical advantages and civilian resources” to problematize “PLA invasion logistics” through means that include such things as Taiwanese civilians using commercial drones to support military reconnaissance. See Lee & Lee, *supra*.

¹⁰² See, e.g., Peter Baker & Julie Hirschfield Davis, “U.S. Finalizes Deal to Give Israel \$38 Billion in Military Aid,” *New York Times* (September 13, 2016), available at <https://www.nytimes.com/2016/09/14/world/middleeast/israel-benjamin-netanyahu-military-aid.html>.

¹⁰³ See, e.g., S.3131, the “Arm Taiwan Act of 2021” (introduced November 2, 2021), available at <https://www.congress.gov/117/bills/s3131/BILLS-117s3131is.pdf>.

possibility of “a massive U.S. airlift effort to keep Taiwan afloat... modeled after the Berlin airlift of Cold War times.”¹⁰⁴ The PLA’s large and growing Navy and Air Force components are in a steadily better position to impose and enforce a maritime embargo on Taiwan with every passing year, but the island still has a coastline nearly 1,000 miles in length, and there is little doubt that the might of the U.S. Navy and Air Force – not to mention forces from any allied powers – could make effective embargo enforcement enormously problematic, if not impossible. It might prove difficult to maintain a lifeline for Taiwan on a scale capable of keeping its domestic economy afloat for long without considerable domestic sacrifice, but especially in the context of a full-scale conflict, it is hard to see how the PLA could prevent the island’s defenders from receiving considerable support from abroad.

In other aspects short of actual participation in a fight over Taiwan, the United States would also be well advised to do extensive preparatory work – in conjunction with key allies and partners around the world – for a massive global campaign of international sanctions and indeed economic warfare against China in the event that it does use force against Taiwan.¹⁰⁵ Imposing such pressures would hardly be easy or painless, given the deep connections between China’s large and growing economy and the rest of the international community, and it is certainly true that economic pressures against Beijing over affronts such as its human rights abuses, suppression of rights and freedoms in Hong Kong, and genocide in Xinjiang have been hampered by this economic entanglement. Nevertheless, the PRC’s actual attack upon Taiwan would change the global politics of such pressures greatly, and would surely enable a far more damaging suite of measures to be imposed by a great many more countries than has been possible to date. Officials in the United States and likeminded partner nations should do the intellectual and organizational work of preparing a “menu” of such policies ahead of time, in order to enable them to be implemented more thoroughly and effectively if and when the need arises.

Making it known that such economic measures were indeed being prepared, moreover, could also serve the cause of deterrence. The CCP no doubt feels passionately about achieving resolution to the “Taiwan question” on favorable terms as soon as possible, but the Party surely feels even *more* passionate about its own survival in power. CCP leaders in Beijing would surely attempt to nurture nationalist outrage at an international campaign of economic punishment, trying to rally the Chinese people around the flag, as it were, by weaving such pressures into the Party’s longstanding “grievance narrative” of propaganda tropes about China’s mistreatment by malevolent Western powers.¹⁰⁶

Nevertheless, the CCP greatly fears the unfortunate Chinese subjects that it rules with an iron fist, worries constantly about its ability to survive social upheaval, and has for many years staked its survival in large part on an implied bargain in which it tries to persuade Chinese citizens that Party oppression is the price they must pay for economic opportunity and the avoidance of social chaos.¹⁰⁷ Whatever “performance metric” could therefore be said to help sustain the CCP in power depends upon being able to provide the economic goods. For good reason, therefore, the CCP may quite reasonably worry that its rule might not survive the sustained economic storm that could be catalyzed by an invasion of Taiwan,

¹⁰⁴ O’Hanlon, *supra* (discussing an airlift proposal he attributes to Elbridge Colby).

¹⁰⁵ See, e.g., O’Hanlon, *supra*.

¹⁰⁶ Cf., e.g., Assistant Secretary of State Christopher Ford, “Ideological Grievance States and Nonproliferation: China, Russia, and Iran,” remarks at the Institute for National Security Studies, Tel Aviv, Israel (November 11, 2019), available at <https://www.newparadigmsforum.com/p2442>.

¹⁰⁷ See, e.g., Ford, *China Looks at the West*, *supra*, at 212-13.

particularly if such a conflagration entailed or led to direct conflict with the United States.¹⁰⁸ This could contribute to deterrence.

In terms of more concrete military measures, the United States could also play an important role not merely in helping Taiwan acquire some of the long-range precision strike capabilities that the ROC's Ministry of Defense currently prioritizes, but in fact in helping support the *use* of such weaponry through the provision of ISR and targeting support against PLA targets on the Chinese Mainland. This could have several virtues. First, it is unlikely that Taiwan would ever be able to acquire the high-end indigenous and nationally autonomous ISR and real-time targeting capabilities it would need to make most effective use of long-range missiles, or at least that the ROC would be able to do so without the expenditure of so much of the island's defense budget that this would cripple its other priorities. The United States, however, all but *specializes* in such targeting, and could help Taiwan get the information it needs in much more operationally useful and cost-effective ways.

Second, such ISR and targeting support would help ensure the wise use of long-range Taiwanese missiles. As described above, their most efficacious contribution both to deterrence and to actual warfighting would likely come through these capabilities' judicious employment against Mainland targets carefully selected with invasion-denial objectives in mind, rather than squandered upon less effective and likely more escalatory concepts of broader regime "punishment." U.S. ISR support to Taiwanese missile campaigns would help ensure maximum sophistication and effectiveness in such targeting. The fact that Chinese leaders apparently fear the potency of U.S. precision-strike capabilities¹⁰⁹ could also add to the deterrent impact of what would, in effect, be a Taiwanese capability built upon American targeting prowess.

It would be a third benefit that such U.S. targeting support could also lay the groundwork for, and facilitate the use of, long-range precision *American* fires against Mainland targets if the conflict were to escalate. After all, Western observers frequently warn that a campaign to defeat PLA efforts to pummel and ultimately invade Taiwan could require strikes by the United States against a limited selection of Mainland targets.¹¹⁰ Accordingly, preparatory work done in support of Taiwan's own long-range precision targeting could help make such a follow-on U.S. effort more effective should it turn out to be needed.

Fourth, close engagement by U.S. military components in such joint target preparation and planning would also strengthen interoperability and cooperative "muscle memory" between the two countries' armed forces in ways that could have important broader benefits in terms of facilitating joint operations were U.S. forces to become involved more broadly. Retired Taiwanese Admiral Lee Hsi-Min, for one, has already called for strengthened bilateral security cooperation through the establishment of a U.S.-Taiwan Joint Working Group – which, he suggests would conduct "contingency simulations and exercises" and support Taiwanese improvements in "military doctrine, force planning and logistical

¹⁰⁸ Cf., *id.* at 188-89.

¹⁰⁹ See, e.g., Tong Zhao, "Conventional Long-Range Strike Weapons of U.S. Allies and China's Concerns of Strategic Instability," *Nonproliferation Review*, vol. 27, no. 1-3 (September 14, 2020), at 109-22.

¹¹⁰ See, e.g., O'Hanlon, *supra*; Colby, *supra*, at 172.

support, as well as operational tactics.”¹¹¹ Joint involvement in targeting preparations could provide both a catalyst and an important locus for richer cooperative work.

Finally, in terms of potential direct U.S. involvement in a Taiwan conflict, one of the more effective contributions American forces could make is likely in the undersea realm – the domain in which the United States seems to retain the largest share (if nonetheless still a diminishing one) of its traditional military advantages vis-à-vis China in the Western Pacific. Whether with regard to precision strikes mounted inland from the sea against PLA targets, attacks upon PLAN vessels supporting an invasion effort or trying to enforce a blockade against Taiwan, or providing close-in ISR support for a joint U.S.-Taiwan campaign, American fast-attack submarines – and perhaps, as noted below, those from other potential allied powers – would be potent force multipliers and contribute powerfully to “denial strategy” missions.¹¹²

Allied Powers

A comprehensive assessment of other countries’ potential contributions to defending Taiwan is beyond the scope of this paper, but it is still worth mentioning the potential importance of the new Australia-United Kingdom-United States (AUKUS) agreement announced between these powers in 2021. The three countries’ joint statement on the subject does not mention China by name, but its stated objective of “sustain[ing] peace and stability in the Indo-Pacific region” and working to improve the “interoperability, commonality, and mutual benefit” of AUKUS partners in order “to protect our shared values and promote security and prosperity” there¹¹³ leaves little doubt that the partnership is directed at meeting threats emanating from Beijing.

Most media attention surrounding AUKUS has understandably focused upon the remarkable decision to help Australia acquire eight nuclear-powered fast-attack submarines on the level of the extremely quiet and capable assets currently operated by the U.S. Navy and the Royal Navy. With their proposed nuclear propulsion units likely to give the Royal Australian Navy the ability to deploy its submarines for the first time from distant Australian bases on extended-duration deployments essentially anywhere in the entire Indo-Pacific,¹¹⁴ fully implementing this aspect of the AUKUS agreement would significantly add to the undersea capabilities capable of supporting U.S. operations in a conflict with China – including potentially a Taiwan “denial” scenario. Given the potential force multiplier effects that high-end undersea assets could produce in this context, AUKUS thus represents an important strategic development and opportunity for Taiwan.¹¹⁵

¹¹¹ Lee & Lee, *supra*.

¹¹² See, e.g., O’Hanlon, *supra*.

¹¹³ See The White House, “Joint Leaders Statement on AUKUS” (September 15, 2021), available at <https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/15/joint-leaders-statement-on-aukus/>.

¹¹⁴ See “Enter AUKUS,” *The Economist* (September 25, 2021), at 17-18.

¹¹⁵ As Elbridge Colby has suggested, there is some theoretical risk here for Taiwan in tying itself irrevocably, as it were, to the U.S. military mast. “Binding” the United States and Taiwanese defense postures more closely together certainly serves the interests of more effective joint warfighting, but it admittedly also increases the risks for Taiwan of being left without any effective autonomous posture were the United States to choose – perhaps in response to Chinese saber-rattling – to sit out the fight. See Colby, *supra*, at 228. Given the PLA’s significant and growing degree of military overmatch vis-à-vis Taiwan, however, the relative degree of this risk is likely decreasing. There may well today be no feasible scenario in

Less commonly mentioned, furthermore, is the fact that AUKUS also extends to the joint development of “cyber capabilities, artificial intelligence, [and] quantum technologies,” as well as “additional undersea capabilities” apparently beyond merely the high-publicity nuclear submarine plan.¹¹⁶ In light of the anticipated importance of autonomous and uncrewed naval capabilities to the future of military competition with China,¹¹⁷ the AUKUS commitment to step up cooperation in this area therefore gives the agreement additional potential importance.

As for allied cyber cooperation against China, it is worth remembering that even before AUKUS, the U.S. Cyber Command had signed an agreement with Australia to establish a joint “test range” for cyber weaponry.¹¹⁸ With U.S. and British cyber officials also announcing that they plan “enduring combined cyber-space operations that enable a collective defence and deterrence and impose consequences on our common adversaries who conduct malicious cyber-activity,”¹¹⁹ one might expect AUKUS also to lead to the development of much improved joint capabilities in the eventuality of cyber conflict as well.

With even unclassified U.S. intelligence assessments having drawn attention to the degree to which Chinese cyber capabilities pose “a growing attack threat to our core military and critical infrastructure systems”¹²⁰ and given the focus in PLA writings upon “seizing cyberspace superiority by using offensive cyber operations to deter or degrade an adversary’s ability to conduct military operations against the PRC, including during peacetime,”¹²¹ one can expect that a Chinese move against Taiwan would involve extensive cyber-targeting of a full-range of adversary capabilities, including civilian critical infrastructure.¹²² AUKUS’ contribution to improving cyber-interoperability and war planning between the U.S., Australian, and British governments – already close “Five Eyes” intelligence-sharing partners and regarded as first-rate cyber powers – could thus potentially add significantly to the range of capabilities available with which to deter, and if necessary fight, such a conflict.

which the island can stand completely alone, leaving Taipei with the option of developing deep (and militarily functional) interoperability with and dependence upon the U.S. armed forces, or simply accepting the myriad dangers of having a patently inadequate defense.

¹¹⁶ Joint Leaders Statement on AUKUS, *supra*.

¹¹⁷ See, e.g., Tong Zhao, “The Impact of Future Unmanned Systems” *Carnegie Endowment for International Peace* (October 24, 2018), available at <https://carnegieendowment.org/2018/10/24/impact-of-future-unmanned-systems-pub-77497>.

¹¹⁸ U.S. Cyber Command, “US and Australia sign first-ever cyber agreement to develop virtual testing range,” press release (December 4, 2020), available at <https://www.cybercom.mil/Media/News/Article/2434919/us-and-australia-sign-first-ever-cyber-agreement-to-develop-virtual-training-ra/>.

¹¹⁹ Gordon Corera, “UK and US join forces to strike back in cyberspace,” *BBC News* (November 18, 2021), available at <https://www.bbc.com/news/technology-59335332>.

¹²⁰ U.S. Director of National Intelligence Daniel R. Coats, “Worldwide Threat Assessment of the U.S. Intelligence Community,” statement for the record (January 29, 2019), at 5, available at <https://www.dni.gov/files/ODNI/documents/2019-ATA-SFR---SSCI.pdf>.

¹²¹ DOD 2021 Report, *supra*, at 79.

¹²² See, e.g., ROC MinDef Report 2021, *supra*, at 45 (“In wartime, [PLA] activities are transitioned to sabotaging and destroying subject’s national critical infrastructures and C2 systems to cause turbulence and chaos in its society and decimate the internal security kept by the military and law enforcement organs of the nation and its government functions.”); Michael Beckley & Hal Brands, “How War with China Begins,” *The Atlantic* (November 1, 2021) (“When confronted by a mounting threat to its geopolitical interests, Beijing does not wait to be attacked; it shoots first to gain the advantage of surprise.”), available at <https://www.theatlantic.com/ideas/archive/2021/11/us-china-war/620571/>.

Similar points could also be made about U.S. cooperation with Taiwan in the cyber arena, especially given that the Taiwanese Ministry of Defense lists “information, electronic, and cyber warfare” in its top five priorities for a “capability buildup.”¹²³ There already appears to be some degree of U.S.-Taiwan cyber cooperation, as evidenced by the announcement in 2019 of what was described as a “cyber-war exercise” called the “Cyber Offensive and Defensive Exercises (Code).” U.S. diplomats described this exercise as marking a “new frontier” in cyber-co-operation between Washington and Taipei, while a Taiwanese official noted that it “reflects the deepening of US-Taiwan security co-operation and dovetails other efforts under way between the United States and Japan to strengthen cyber-security co-operation.”¹²⁴ These, also, are important developments in augmenting Taiwan’s defense preparedness.

Helping Taiwan Balance its Needs

As a final note before concluding this discussion, it is worth pointing out that as U.S. (and potentially other allied) officials work with Taiwan to improve its defenses against PLA attack, it will be important to remember that, as discussed earlier, Taipei *does* have real concerns in responding to PRC “grey zone” pressures and provocations. Accordingly, the island’s legitimate defensive needs include being resistant to peacetime intimidation, coercion, and “three warfares” gamesmanship *in addition to* being as well positioned as possible to resist outright military assault.

To admit this is not to counsel sacrificing real military effectiveness – and thus also deterrence – on the altar of assets high both in per-unit cost and in wartime vulnerability. Taiwan should certainly be encouraged to prioritize acquiring more genuinely asymmetric tools that would in practice trouble the PLA much more than F-16s and large ships. Nevertheless, as a persuasive exercise, coaxing Taiwanese leaders to implement a better force posture is less likely to work if it starts with lecturing them about being irresponsible. We should acknowledge Taiwan’s genuine “grey zone” challenges, and we should work with its leaders, if we can, to find ways to help meet those needs that do not compromise asymmetric, ODC-style preparedness.

It might be possible, for instance, to imagine that as Taiwan develops an ever more long-ranged, sophisticated, and dense network of anti-air and anti-ship missile systems that would provide the island with its own multilayered A2/AD capability against PLAAF, PLANAF, and PLAN forces, this network *itself* might be able to pick up at least some of the anti-incursion roles currently undertaken by more traditional assets at the edge of Taiwan’s territorial waters – especially if such ROC capabilities are supplemented by a new fleet of small and relatively “disposable” uncrewed aerial or surface surveillance platforms. A missile system cannot, of course, fly menacingly alongside an adversary aircraft and gesticulate angrily for the intruder to turn around or else be fired upon. Nonetheless, radio communications can easily be made in the clear for all to hear (and witness), and modern pilots and naval commanders with electronic warning equipment do tend to be *extremely*

¹²³ ROC MinDef Report 2021, *supra*, at 67.

¹²⁴ “US and Taiwan hold first joint cyber-war exercise,” *BBC News* (November 4, 2019), available at <https://www.bbc.com/news/technology-50289974>.

attentive to whether or not they are being observed by surveillance radar units or, worse, “painted” by target-acquisition radar.

Were Taiwan to develop effective protocols for challenging incoming aircraft or vessels, making clear that these assets are being tracked, and signaling unmistakably about the point at which such tracking would transition into actual target engagement, a well-managed A2/AD system could help perform at least *some* of the sovereignty-maintenance roles currently performed by human pilots and sailors on Taiwan’s periphery. This would represent, in effect, a migration from “eyeball”-based confrontation to a more “virtualized” version, but the same functions would still be fulfilled, and all such interactions and radar tracks could be clearly memorialized for purposes of both legal and public accountability. This might feel somewhat less emotionally satisfying than current approaches, but it would likely work at least as well in practice, would stress and degrade Taiwanese aircrews, sailors, and equipment less than current methods, and would have the additional benefit of giving Taiwan’s air-defense and anti-ship surveillance and missile crews ongoing, day-to-day practice in just the sort of engagements they would need to undertake – on scale and under fire – in time of conflict.

Deterring China: “Not Quite Yet, Forever”

This analysis began with an exploration of the CCP’s enormously strong political commitment to ensuring what Beijing regards as “reunification” with Taiwan, and to doing so by whatever means may prove necessary. On the whole, this asymmetry in commitment – in the sense that on one level Beijing clearly *does* seem to “care more” about Taiwan issues than does Washington – presents significant challenges for U.S. and Taiwanese defense planners, and risks undermining deterrence of aggression across the Taiwan Strait. To the degree that China indeed cares more about Taiwan, Beijing might be harder to deter, more willing to escalate a confrontation in order to achieve its aims, and more willing to bear costs and risks in a conflict.

All this being said, however, there is at least one sense in which the CCP’s potentially existential investment in the “Taiwan question” might be a source of strength for Taiwan and the United States. It is true that the importance of Taiwan to the CCP is such that it might actually imperil the Party’s hold on power in China were it to *give up* on the dream of “reunification.”

Nonetheless, for this same reason, the CCP also cannot afford to *fail* in invading Taiwan should it try to do so. (The same might also be said of a situation in which the PRC initially succeeded in occupying the island, but thereafter faced a widespread, effective, and well-publicized insurgency there. In such a guerrilla conflict, “a largely ethnically Chinese resistance in Taiwan ... would be able to invoke the PRC’s own mid-20th-century propaganda tropes and doctrinal pronouncements about ‘People’s War’ *against* the CCP – a scenario in which, moreover, the PRC would be cast in the role of Imperial Japan.”¹²⁵) The Party therefore finds itself in a tough situation: it cannot *abandon* its Taiwan dream, but it faces huge risks if it attempts actually to bring that dream to fruition.

¹²⁵ See generally, e.g., Ford, “A ‘People’s War’ Against the People’s Republic,” *supra*, at 391-411.

This insight about the CCP's potentially existential vulnerability on *all* Taiwan-related questions can be the foundation of a "denial" strategy vis-à-vis PLA aggression against Taiwan. The CCP has in the past proven itself willing to display a striking degree of strategic patience and caution in deferring passionately-desired objectives for so long as it still seems too costly or risky to try to achieve them. This was, after all, the centerpiece of Beijing's overall strategic policy for a quarter century, during which it hewed to Deng Xiaoping's admonition to "bide our time and hide our capabilities" – that is, putting off the self-assertion that would ultimately be necessary for China to seize for itself the dominant place in the international system it intended all along eventually to obtain, deferring such efforts until Beijing had quietly become strong enough to manage the counter-reactions that such aggressiveness would likely provoke.¹²⁶ Moreover, such strategic patience has been, in effect, China's policy vis-à-vis *Taiwan* for even longer, ever since Mao Zedong failed quickly to invade after Chiang's KMT government set up shop on the island in 1949.

As Elbridge Colby has noted, a "denial" strategy does not require that the United States or Taiwan be able comprehensively to defeat the PLA war machine.¹²⁷ Significantly, moreover, it *also* does not require that Beijing *give up* its Taiwan dream of "reunification." It merely asks Beijing to continue with its traditional "strategic patience," first by leading CCP leaders to the conclusion that *today is not the day* for full vindication of their self-aggrandizing geopolitical agenda, and thereafter by keeping China in that "almost but not quite" position on an ongoing basis.

In effect, a successful "denial" strategy allows a sort of implied strategic "agreement to disagree." Beijing would preserve its "reunification is inevitable" position and political posture vis-à-vis Taiwan, but it would continue to defer execution of its plans, in practice indefinitely. In return, the United States and Taiwan would work together to ensure a continuation of the island's fundamental "indigestibility" while also – and this would have to be an important part of the shadow bargain – avoiding a situation in which Taiwanese officials risk unnecessarily forcing Beijing's hand by declaring formal independence. In return for some perhaps uncomfortable political circumspection on both sides of the Taiwan Strait, this implied bargain might allow both the CCP and Taiwan's democracy each to achieve at least their core objective of survival.

There is no guarantee, of course, that Xi Jinping is capable of such pragmatic strategic wisdom. He might well be impatient, headstrong, risk-tolerant, or simply foolish enough to gamble the CCP's future on a Taiwan campaign. If U.S.-Taiwan defense planning were spectacularly successful in bolstering the island's defenses, moreover, the perception might grow in Beijing that whatever window of opportunity the PLA has to take Taiwan *at all* might be closing – thus potentially raising the risk of such a Chinese gamble, lest all opportunity to subjugate the island be lost. Moreover, China's own ugly crackdown and betrayal of prior "one country, two systems" promises in Hong Kong might so irritate the democratic sensibilities of Taiwanese voters that the ROC's leaders might intemperately declare formal "independence" in a way that goads the PRC into aggressive action.

That said, a joint U.S.-Taiwan "denial" strategy would seem by far the best and most feasible one available in the face of what by most standards is a very damaging and troubling

¹²⁶ See, e.g., Ford, *China Looks at the West*, *supra*, at 391-411.

¹²⁷ Colby, *supra*, at 127.

military balance vis-à-vis a People's Liberation Army that has been working for a generation to prepare itself for just such a fight. With a wise and prudent acquisition strategy, robust defense spending, a strong focus upon asymmetric capabilities, close engagement and cooperation with the United States and other partners, and wise and thoughtful leadership, Taiwan thus may still have the opportunity to make good on this promise.

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