



# A MARITIME BLOCKADE OF TAIWAN BY THE PEOPLE'S REPUBLIC OF CHINA

A Strategy to Defeat Fear and Coercion



**MAREK JESTRAB** 

with a foreword by Stephen J. Hadley

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ISBN-13:978-1-61977-296-0

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December 2023

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### A Strategy to Defeat Fear and Coercion

**Marek Jestrab** 

**Commander, US Navy** 

with a foreword by Stephen J. Hadley

This strategy paper contains the author's personal views, and do not represent official positions of the US Navy or Department of Defense.

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#### **FOREWORD**

he United States currently faces a challenging international security environment, with major ongoing conflicts in Europe and the Middle East. Tensions are also rising across the Taiwan Strait, Xi Jinping views reunification with Taiwan as essential to his ambitions for the "national rejuvenation" of the People's Republic of China (PRC). He has asked his military to give him the ability to invade Taiwan by 2027. The People's Liberation Army (PLA) Air Force now regularly crosses the Strait's median line, which long served as an unofficial barrier between the two nations. and a record-number of PLA Navy warships were spotted in the waters surrounding Taiwan in the summer of 2023. As the PLA accelerates its military modernization efforts. US and allied defense strategists are rightly concerned about a military contingency in the Taiwan Strait.

Yet, the current debate focuses too narrowly on a Chinese invasion of Taiwan while another—perhaps more pressing—scenario should be given greater consideration: a Chinese maritime blockade of Taiwan, which could slowly choke Taipei's economy or even serve as the precursor to an amphibious invasion.

To be sure, an invasion would pose the greatest threat to Taiwan's sovereignty, but a naval blockade may be China's most viable option—especially in the near term. China already possesses the capabilities needed to implement a blockade, and Beijing essentially conducted a dress rehearsal for this option following former Speaker of the House Nancy Pelosi's visit to Taiwan in the summer of 2022. Through a blockade of Taiwan, China could use coercive actions to prevent merchant shipping from transiting to and from the island; cut off Taiwan's economic and energy lifelines; interrupt arms shipments to Taiwan; sever undersea cables that connect the island to the world; and leverage strategic communications to warn other nations not to intervene in China's "domestic" matters. A blockade or quarantine on arms shipments could potentially be waged below the level of armed conflict, complicating Washington's decision calculus as it balances the imperative of defending Taiwan with worries about escalation risks. In the absence or delay of US and allied reinforcements, however, Taipei may feel compelled to capitulate to Beijing.

In this Atlantic Council Strategy Paper, Marek Jestrab assesses the threats posed by a Chinese blockade of Taiwan and recommends a strategy for the United States and its allies to deter and, if necessary, defeat such a blockade.

The success of this strategy will hinge on Taiwan's will and ability to resist and its resilience in a crisis. As seen in Russia's war against Ukraine, resilience and ingenuity have enabled Kyiv to withstand a technologically and militarily superior Russian force. Also critical to Taiwan's success will be support from the United States and other likeminded nations, to counter Chinese coercion and prevent Taiwan's isolation from the world.

A near-singular focus on a potential Chinese invasion risks leaving Taiwan, the United States, and its allies ill-prepared in the event of a naval blockade. This strategy paper provides a thoughtful and comprehensive foundation to advance understanding about this serious threat to global security.

Stephen J. Hadley

Chairman, International Advisory Board, and Executive Vice Chair, Board of Directors, Atlantic Council

Assistant to the President for National Security Affairs, 2005-2009

#### **EXECUTIVE SUMMARY**

# Blockade: The Most Strategically Viable Option for the PRC

The People's Republic of China's intention to unify Taiwan with the mainland is clear. Leveraging decades of sustained military modernization, the PRC possesses the capability and regional overmatch of maritime capacity required to execute a blockade of Taiwan. The specific actions that the PRC could execute will be discussed as part of this paper, but the term "blockade" in the context of this strategy refers to the PRC using coercive actions to prevent merchant shipping from having freedom of navigation in the waters surrounding Taiwan, and sealing off Taiwan's seaports to prevent merchant shipping from being able to enter or exit the island.

A blockade is the most likely and dangerous scenario, due to Taiwan's reliance on maritime trade to sustain its economic prosperity. Moreover, a nonkinetic blockade is appealing to the PRC, as it is the lowest level of coercive action that could remain below the threshold of open hostilities and still achieve its national objectives. The PRC's maritime threat would be a coercive act, designed to instill fear in the Taiwanese population and the merchant shipping industry.

The PRC views the existence of Taiwan as a direct threat to its national sovereignty. Because of these perceived threats, the strategic plans of the PRC call for resolution of the "Taiwan question" before China is able to achieve its desired "national rejuvenation" by 2049. To accomplish this goal, the PRC refuses to renounce the use of force to compel unification of Taiwan with the mainland.

Additionally, the Russia-Ukraine war has made clear that unprovoked invasions of neighboring countries are simple for the world population to understand, and for leaders to rally against. Unlike an invasion, a blockade does not present the same strategic-messaging flaws. Moreover, the PRC's military strategy indicates an openness to blockades and other uses of "restraint warfare," which the People's Liberation Army (PLA) defines as seeking to avoid war first through military preparedness and powerful conventional and strategic forces that act in concert with political and diplomatic efforts to "subdue enemy's forces without fighting."

All these factors point to a maritime blockade of Taiwan as the PRC's most strategically viable option. Therefore, what is required is a strategy specifically tailored to deterring and, if deterrence fails, defeating a PRC maritime blockade of Taiwan. The major elements of this strategy include Taiwan investing in capabilities that help demonstrate the resilience to resist, the United States maintaining the capability to sustain Taiwan in the face of a blockade, and like-minded nations providing enabling capabilities and additional maritime capacity.

A blockade is the most likely and dangerous scenario, due to Taiwan's reliance on maritime trade to sustain its economic prosperity.

<sup>&</sup>quot;2023 Report on Military and Seacurity Developments Involving the People's Republic of China," US Department of Defense (DOD), October 19, 202, https://media.defense.gov/2023/Oct/19/2003323409/-1/-1/1/2023-MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA.PDF.

he focus of this paper is on a nonkinetic blockade, but it is worth noting that there are multiple scenarios in which the PRC could utilize maritime advantages in its attempt to unify Taiwan with the mainland. A fundamental challenge of these actions is that the PRC can dynamically scale the operations based on evolving conditions.

- Kinetic blockade: Focusing effort only on the maritime domain, and the merchant shipping that is vital to sustaining Taiwan's economic activity, the PRC could attack to sink or disable any merchant ship transiting to Taiwan—clearly constituting an act or acts of war. A coalition response would utilize the same forces that would be vital to countering an invasion scenario and PRC maritime forces. These include long-range precision fires from land-based missile batteries, standoff attacks by aircraft and surface ships, and undersea attacks from submarines. Comprehensive defeat capabilities in the space, cyber, and electronic-warfare domains would also need to be employed to assist in the survivability of merchant shipping.
- Nonkinetic blockade: In this scenario, which is the focus of this paper, the PRC would use advantages of mass—enabled by having the world's largest navy and coast guard, and a government-funded and government-controlled maritime militia—to prevent merchant shipping from entering ports in Taiwan. The PRC has used these

- tactics on a smaller scale in disputed maritime areas in the South China Sea.
- Sporadic and tailored blockade: Utilizing some combination of the kinetic and nonkinetic actions described in this paper, the PRC could slowly erode Taiwan's will to resist and that of like-minded nations. The PRC could conduct this effort over a longer period that is deliberately unpredictable. The merchant-shipping industry might evaluate the waters around Taiwan as unsafe and disputed, in turn causing insurance-premium increases that prevent the business case for continuing to sail merchant ships to and from Taiwan's maritime ports.
- Embargo/quarantine: The PRC could utilize its maritime forces to attempt to enforce an "embargo" that would prevent certain products from entering Taiwan. The PRC would leverage its success at shutting out Taiwan from international organizations, claiming the action as a "domestic matter" and no concern of the international community. Utilizing the world's largest coast guard, the PRC would inspect merchant ships transiting to Taiwan or force them to divert to the mainland.

While there is no consensus on a perfect term to describe the possible coercive actions that the PRC could employ in the maritime domain, "blockade" is utilized in this paper as it is the best available and most wildly understood term.<sup>1</sup>

<sup>1</sup> Bradley Martin et al., "Implications of a Coercive Quarantine of Taiwan by the People's Republic of China," RAND Corporation, 2022, https://www.rand.org/pubs/research\_reports/RRA1279-1.html.

This paper puts forth a strategy to prevent and, if needed, defeat a PRC blockade of Taiwan. This is consistent with the US government's existing One China Policy, with a legal basis grounded in the Taiwan Relations Act of 1979, the US-PRC Joint Communiques of 1972, 1978, and 1982, and President Ronald Reagan's Six Assurances to Taiwan of 1982.<sup>2</sup>

### Taiwan's Unique Vulnerability to Blockade

The PRC today possesses the maritime force structure needed for regional overmatch in a blockade scenario. The Chinese Communist Party (CCP) commands the world's largest navy, the world's largest coast guard, and a massive government-subsidized maritime militia. From 2005 to 2022, the People's Liberation Army Navy (PLAN) has added 135 ships to its inventory, while in the same period the US Navy added just two.<sup>3</sup>

Located only one hundred nautical miles from mainland China, Taiwan is uniquely vulnerable to a blockade. Taiwan's dependence on maritime trade is evidenced by the imbalance of its gross domestic product (GDP) in relation to its port activity: Taiwan is the world's twenty-first largest economy by GDP, yet requires the world's sixth greatest number of port calls by container ships to sustain this level of economic activity. Taiwan's largest vulnerability is its energy sector, as it relies on maritime trade to import nearly 98 percent of its energy.

A PRC nonkinetic blockade of Taiwan would consist of a series of coercive actions that are uniquely

scalable, and even reversible if the CCP does not believe they will be successful at that time. The goal of these coercive actions would be to create fear of maritime shipping and urge the Taiwan population to force negotiations in which the PRC has maximum leverage over Taiwan. A nonkinetic blockade by the PRC would likely include:

- strategic messaging to warn countries against interfering in an "internal dispute";
- clearly visible maritime intelligence, surveillance, and reconnaissance (ISR) and military aircraft presence;
- People's Armed Forces Maritime Militia (PAFMM) swarming and ramming merchant shipping;
- Chinese Coast Guard (CCG) harassing and attempting "law-enforcement" interdictions;
- PLAN ships acting as barriers to transit and clearly visible live-fire exercises;
- offensive cyberattacks on government organizations and financial institutions:
- severing or holding at risk undersea cables that connect Taiwan to the world;
- missile exercises from mainland China that land in the waters surrounding Taiwan;
- clearly visible deployment of sea mines; and
- limited covert and deniable submarine attacks on merchant shipping.

<sup>2</sup> Susan V. Lawrence and Caitlin Campbell, "Taiwan: Political and Security Issues," Congressional Research Service, April 26, 2023, https://crsreports.congress.gov/product/pdf/IF/IF10275.

<sup>3</sup> Ronald O'Rourke, "China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress," Congressional Research Service, May 15, 2023, https://crsreports.congress.gov/product/pdf/RL/RL33153/267.

A coalition response coordinated among Taiwan, the United States, and like-minded nations would be needed to restore deterrence. The desired end state would demonstrate the ability to sustain Taiwan's economy indefinitely in the face of a PRC blockade. Senior leaders of the coalition would likely seek response options that manage the horizontal and vertical escalation of the conflict. Counter blockade actions by Taiwan, the United States, and like-minded nations would likely include:

- condemnation through coordinated strategic messaging, with a focus on the harm caused by the PRC's actions to the global economy;
- Taiwan demonstrating resilience and a will to resist, through implementing resourcerationing programs and reserve-force mobilization;
- targeted sanctions against the PRC that limit its access to global financial markets and critical technology;
- maritime ISR being continuously deployed to document the PRC's actions:
- reflagging of merchant shipping to coalition national flags that the PRC would be hesitant to attack;
- escort of merchant shipping through the PRC forces by coalition naval warships;
- mine countermeasure forces identifying minefields for merchant shipping to avoid; and
- defensive cyber operations.

A PRC nonkinetic blockade
of Taiwan would consist of
a series of coercive actions
that are uniquely scalable,
and even reversible if the CCP
does not believe they will be
successful at that time.

### Actions to Defeat the Fear and Coercion of a PRC Blockade

Deterring the PRC from even attempting a blockade requires a strategy that communicates to the PRC that its attempted coercive act would fail and prove to be a grave miscalculation. To communicate this message, an international coalition is required that can demonstrate the capability, ability, and will to sustain Taiwan's economy indefinitely if it were confronted with a blockade. Implementing this strategy would require that:

- Taiwan demonstrate the resilience to resist;
- the United States demonstrate the capability to respond; and
- like-minded nations demonstrate enabling capabilities and maritime capacity.

This strategy paper will demonstrate that a maritime blockade is the most strategically viable action for the PRC, that Taiwan is uniquely vulnerable to a blockade, and that a blockade is both a present and enduring challenge. The author presents specific actions for Taiwan, the United States, and like-minded nations with the goal of deterring and, if deterrence fails, defeating a PRC blockade of Taiwan.

#### STRATEGIC CONTEXT

o best understand the threat of a blockade, one must examine the driving factors impacting both the PRC's and Taiwan's perspectives, as well as the military and merchant forces of likely participants, and present a scenario of a blockade in action that examines likely actions of the PRC and the likely responses from Taiwan, the United States, and like-minded nations.

#### **Driving Factors**

### WHY A NEAR-TERM INVASION SCENARIO IS UNLIKELY

Much of the public discussion around a China-Taiwan conflict centers on an invasion; however, a number of factors make this the least likely scenario. The primary reason why an invasion scenario is unlikely is that it runs contrary to the PRC's strategic objectives and reasons for seeking unification. An invasion would result in significant direct physical violence against the people of Taiwan, the population that the CCP seeks to rule. Additionally, the PRC gives priority to economic development as a "central task" of its continued growth. An invasion would certainly result in harm to the Chinese economy due to international sanctions and significant destruction to Taiwan's infrastructure and economy.

Geographic factors also make an invasion difficult, including the fact that two-thirds of the country is rugged mountains and 80 percent of the population lives in urban environments. Achieving success during an invasion would likely require preemptive attacks on US and allied forces, and



Photograph of the Taiwan Strait, displaying the Fukien Province and Pescadores Islands taken during the Gemini X mission. Source: NASA.

there would be limited de-escalation options if this occurred. The historical precedent is that the United States is highly committed to wars it enters after being attacked.<sup>7</sup> Unlike an invasion scenario, a blockade could be reversable, and the level of force used could be adjusted.

An invasion scenario clearly presents enormous risks for the PRC. Conducting an opposed amphibious or airborne assault is hazardous and unforgiving. Public war-games have found that losses by all participants are significant, but in

<sup>4</sup> Michael E. O'Hanlon, "Can China Take Taiwan? Why No One Really Knows," Brookings, August 2022, https://www.brookings.edu/research/can-china-take-taiwan-why-no-one-really-knows/.

<sup>5 &</sup>quot;2023 Report on Military and Security Developments Involving the People's Republic of China."

<sup>6 &</sup>quot;The World Fact Book: Taiwan," US Central Intelligence Agency, May 15, 2023, https://www.cia.gov/the-world-factbook/countries/taiwan/

<sup>7</sup> O'Hanlon, "Can China Take Taiwan?"

most scenarios, Taiwan maintains the status quo while sustaining extensive damage to infrastructure and its economy. Moreover, open-source intelligence analysis suggests that the PRC being able to achieve strategic surprise during an invasion scenario is unlikely due to the sheer scale of the undertaking. There are currently no indicators that the long-term preparations have begun, such as PLA personnel stop-loss orders (i.e., the involuntary extension of active duty service), which would likely be enacted six to twelve months prior to an invasion. Service of the status quo

While current factors do not support a Chinese invasion as the most likely coercive act to attempt unification, this is subject to change over time and must continue to be addressed by national security strategists.

#### PRC STRATEGY AND OBJECTIVES

The PRC views the existence of Taiwan as a direct threat to its national sovereignty. Rear Admiral Michael Studeman, the director of the Office of Naval Intelligence (ONI), has assessed that "Taiwan's separation from the motherland is the most significant 'core' sovereignty issue for Beijing. If they lose Taiwan, in their eyes, that would set off a chain reaction of fragmentation in other parts of China, like in Tibet or in Xinjiang, which in turn would lead to chaos, disorder, and devastation." <sup>10</sup>

Due to these perceived threats, the strategic plans of the PRC call for resolution of the "Taiwan

question" before the country is able to achieve "national rejuvenation" by 2049. To accomplish this goal, the PRC refuses to renounce the use of force to compel unification of Taiwan with the mainland. It is clear that the PLA is preparing for a contingency to unify Taiwan with the PRC by force, if the CCP perceives that as necessary. China is focused on its ability to achieve this while simultaneously deterring, delaying, or denying any intervention on Taiwan's behalf by a third party such as the United States and like-minded partners. In the coming years, the PLA likely will continue to increase military pressure—in concert with diplomatic, information, and economic pressure—in an attempt to compel Taiwan toward unification.

A study of PLA strategy shows a focus on what Chinese strategists identify as active defense. This is the principle of avoiding initiating armed conflict, but responding forcefully if challenged. In executing active defense, the PLA will strive for the best possibilities, with a focus on the importance of setting conditions in advance. This strategy suggests it is preferable to be prepared and not fight, rather than to fight unprepared. The first principle of the PLA's strategy is the use of restraint warfare, where the PLA seeks to avoid war first through military preparedness and powerful conventional and strategic forces that act in concert with political and diplomatic efforts to "subdue the enemy's forces without fighting."13 The second principle of the PLA's active-defense strategy is that if war is unavoidable, the PLA would strive to take the opening move and use "war to stop war." 14 The PRC's policy toward Taiwan was codified in the Anti-Succession Law of 2005, which estab-

<sup>8</sup> Mark F. Cancian, Matthew Cancian, and Eric Heginbotham, "The First Battle of the Next War: Wargaming a Chinese Invasion of Taiwan," Center for Strategic and International Studies, January 9, 2023, https://www.csis.org/analysis/first-battle-next-warwargaming-chinese-invasion-taiwan.

<sup>9</sup> John Culver, "How We Would Know When China Is Preparing to Invade Taiwan," Carnegie Endowment for International Peace, October 3, 2022, https://carnegieendowment.org/2022/10/03/how-we-would-know-when-china-is-preparing-to-invade-taiwan-pub-88053.

<sup>&</sup>quot;Rear Admiral Studeman Delivers Remarks at AFCEA West Outlinking China Challenges," Office of Naval Intelligence via DOD's Defense Media Activity website, February 23, 2023, https://www.dvidshub.net/news/439016/rear-admiral-studeman-delivers-remarks-afcea-west-outlining-china-challenges.

<sup>11 &</sup>quot;2023 Report on Military and Security Developments Involving the People's Republic of China," 3.

<sup>12 &</sup>quot;2023 Report on Military and Security Developments Involving the People's Republic of China."

<sup>13 &</sup>quot;2023 Report on Military and Security Developments Involving the People's Republic of China," .

<sup>14 &</sup>quot;2023 Report on Military and Security Developments Involving the People's Republic of China," .

lishes that in the event of Taiwan's "succession" or if possibilities for peaceful unification have been exhausted, "the state shall employ non-peaceful means and other necessary measures to protect China's sovereignty and territorial integrity." <sup>15</sup>

The execution of active defense and seeking to subdue enemy forces without fighting is perfectly aligned with the execution of a blockade of Taiwan as the preferred coercive action to attempt to unify Taiwan with the PRC.

### LESSONS LEARNED FROM THE RUSSIA-UKRAINE WAR

The PRC has been vigilantly watching every action in the ongoing war between Russia and Ukraine. The PRC's goal is to learn as much as possible about all aspects of the war, and then apply these lessons to its pursuit of reshaping the international order in China's favor and unifying Taiwan. The PRC has been able to learn lessons not only about the military dynamics, but about the world's responses to the war.

The most important observation that the PRC has likely made is that, in the current information age, the narrative and how the world population views a military action is a vitally important consideration. Unprovoked invasions of neighboring countries are simple for the world population to understand and for leaders to rally against. It is highly likely that nations would have a similar reaction to an invasion of Taiwan. A clearly visible and understandable invasion would result in greater reaction in terms of the number of countries that would rally against the action and the severity of the consequences.

However, the PRC recognizes that the West's model for supporting Ukraine with military and economic assistance, while not being actively engaged in combat, will not work with Taiwan. Because Taiwan is an island, supporting countries will not be able to drive aid across an uncontested border as has been done in Ukraine. The world's developed economies should note that a war between China and Taiwan will have a significantly greater economic impact than that between Russia and Ukraine, due to the scale of the economies involved and their integration in global supply chains. China's economy is ten times the size of Russia's, while Taiwan's economy is four times the size of Ukraine's. Taiwan's impact on the global economy is significant due to its being the global leader in the microchips industry. Taiwan produces 90 percent of all high-end semiconductor microchips used by the United States. 16 For the United States specifically, the US economy's exposure is far greater in a China-Taiwan conflict due to significant trade with both countries. It should be noted that the United States has deeper and longer ties with Taiwan than with Ukraine.

### TAIWAN'S ECONOMIC AND GEOGRAPHIC SITUATION

Taiwan, an island nation, is completely reliant on maritime trade to sustain its economy and provide for its population of nearly twenty-four million people. Taiwan's dependence on maritime trade is evidenced by the imbalance of it being the world's twenty-first largest economy by GDP but needing the world's sixth-greatest number of port calls by container ships to sustain this economic activity.<sup>17</sup> To maintain economic prosperity, Taiwan averaged approximately ninety-two ship arrivals per day in 2021.<sup>18</sup>

<sup>15</sup> Lawrence and Campbell, "Taiwan: Political and Security Issues."

<sup>16</sup> Christine McDaniel and Weifeng Zhong, "Submarine Cables and Container Shipments: Two Immediate Risks to the US Economy if China Invades Taiwan," Mercatus Center, George Mason University, August 29, 2022, https://www.mercatus.org/research/policy-briefs/submarine-cables-and-container-shipments-two-immediate-risks-us-economy-if.

<sup>17 &</sup>quot;Review of Maritime Transport 2022," United Nations Conference on Trade and Development (UNCTAD), 2022, https://unctad.org/publication/review-maritime-transport-2022.

<sup>18 &</sup>quot;Maritime Profile: China, Taiwan Province of," UNCTAD, October 20, 2022, https://unctadstat.unctad.org/countryprofile/maritimeprofile/en-gb/158/index.html.

Table 1: Taiwan's Reliance on Maritime Trade Relative to its GDP

| 1        | United States           |            |      | Country        | # of annual arrival |
|----------|-------------------------|------------|------|----------------|---------------------|
| 2        | China                   |            | 1    | China          | 70,506              |
| 3        | Japan                   |            | 2    | Japan          | 35,562              |
| 4        | Germany                 |            | 3    | South Korea    | 20,652              |
| 5        | India                   |            | 4    | USA            | 18,816              |
| 6        | United Kingdom          |            | 5    | Indonesia      | 15,648              |
| 7        | France                  |            | _    | Tai            | 44.000              |
| 8        | Canada                  |            | 6    | Taiwan         | 14,909              |
| 9        | Russia                  |            | 7    | Spain          | 14,709              |
| 10       | Italy                   |            | 8    | Malaysia       | 14,577              |
| 11       | Iran                    |            | 9    | Singapore      | 13,408              |
| 12       | Brazil                  |            |      |                |                     |
| 13       | South Korea             |            |      |                | 7                   |
| 14       | Australia               |            |      |                |                     |
| 15       | Mexico                  | 11111      |      |                |                     |
| 16       | Spain                   |            |      |                |                     |
| 17       | Indonesia               |            |      | 7              |                     |
| 18       | Saudi Arabia            |            |      | - 191<br>- 191 | En out              |
|          | Netherlands             |            |      |                | 0.00                |
| 19       |                         |            |      | 1111           |                     |
| 19<br>20 | Turkey                  |            | 11:3 | 122 120        |                     |
|          | Taiwan                  | Total Park |      |                |                     |
| 20       | Pirit III - I Romanie I | 700        |      |                |                     |

Data source: United Nations Conference on Trade and Development, "Review of Maritime Transport 2022"; and UNCTAD, "Maritime Profile: China, Taiwan Province of," October 20, 2022.

A significant concern is that Taiwan's top trading partner is the PRC, with China representing 25 percent of total trade and Hong Kong (a special administrative region, or SAR) representing an additional 8 percent. Because of this, the PRC already has significant leverage over many of the shipments to and from Taiwan.<sup>19</sup>

Of all Taiwan's imports, the most significant vulnerability is in the energy sector. Taiwan imports

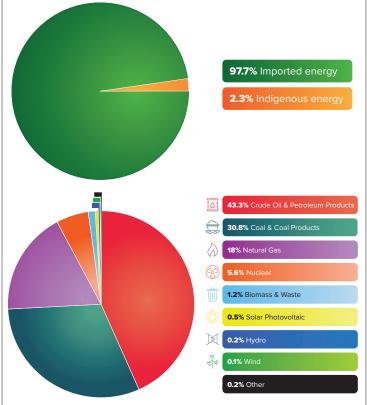
97.7 percent of its energy, with an annual value of US\$47.56 billion. This reliance on imported energy is likely to increase even further since Taiwan plans to divest of nuclear power by 2025.<sup>20</sup> Knowing this is an issue, Taiwan has established a legal requirement for strategic energy reserves and maintains a supply of thirty-nine days for coal, 146 days for oil, and eleven days for natural gas.<sup>21</sup> The exact levels of these strategic reserves are unclear, but Taiwan officials have recently stated

<sup>19 &</sup>quot;Taiwan—Country Commercial Guide," International Trade Administration, September 15, 2022, https://www.trade.gov/country-commercial-guides/taiwan-market-overview.

<sup>20 &</sup>quot;Energy Statistics Handbook," Bureau of Energy, Taiwan Ministry of Economic Affairs, 2021, https://www.moeaboe.gov.tw/ECW\_WEBPAGE/FlipBook/2021EnergyStaHandBook/index.html#p=.

<sup>21</sup> Jeff Kucharski, "Taiwan's Greatest Vulnerability Is Its Energy Supply," *Diplomat*, September 13, 2022, https://thediplomat.com/2022/09/taiwans-greatest-vulnerability-is-its-energy-supply/.

Figure 1: Taiwan's Energy Use by Source



Data source: Taiwan Energy Statistics Handbook. https://www. moeaboe.gov.tw/ECW\_WEBPAGE/ FlipBook/2021EnergyStaHandBook/ index.html#p=.

that all strategic reserves are above the legal requirements. Additionally, the requirement for natural-gas strategic reserves will be expanded from eleven to twenty days by 2030.22 A concerning and possibly significant—loophole exists in these laws, where the criteria and computation formulas for the actual on-hand security stockpiles will be determined by the central competent authority, and are not required to be disclosed. This presents the opportunity for energy that is loaded onboard merchant shipping while in transit to Taiwan to count toward these figures.<sup>23</sup>

As an island nation, Taiwan's undersea data cables are vital to its economy. These cables are the backbone of global connectivity, including transoceanic data and digital communications such as phone calls, emails, and webpages. As of August 2022, there are fifteen undersea cables that connect Taiwan to the world and are vulnerable to being severed during a conflict with the PRC.<sup>24</sup> The PRC also has the option of holding these undersea cables at risk—but not severing them—so that they can be used for intelligence gathering or information operations.

<sup>22</sup> Jeanny Kao and Yimou Lee, "Taiwan to Boost Energy Inventories amid China Threat," Reuters, October 23, 2022, https://www. reuters.com/business/energy/taiwan-boost-energy-inventories-amid-china-threat-2022-10-24/.

<sup>23 &</sup>quot;Petroleum Administration Act," Taiwan Ministry of Economic Affairs, June 4, 2014, https://law.moj.gov.tw/ENG/LawClass/LawAll. aspx?pcode=J0020019.

<sup>24</sup> McDaniel and Zhong, "Submarine Cables and Container Shipments."

Taiwan's geography and the vast Pacific Ocean are a significant advantage of the PRC. Taiwan is only one hundred nautical miles from the coast of mainland China, and its three biggest ports are on the island's west coast, facing mainland China. These ports are responsible for 90 percent of all imports, and there are few deepwater port options on the island's east coast. The tyranny of distance across the Pacific Ocean is a significant challenge to the US Navy, like-minded nations, and merchant shipping. Taiwan is approximately eight thousand kilometers from Honolulu and eleven thousand from Southern California (Long Beach and San Diego).

#### **Forces**

#### PLA FORCE STRUCTURE

The PRC is clearly a peer challenge for the United States military. For decades, it has made significant and sustained investments in growing and modernizing its armed forces. These investments have been made to directly compete with the US military, and the PRC views military power as fundamental to achieving its strategic goals. Providing insight on how the CCP plans to utilize the PLA, most of its investments have been in maritime force structure and anti-access/area denial (A2/AD) capabilities that are exactly what would be needed to execute a blockade of Taiwan. Because of this sustained investment, Chinese strategists seem increasingly confident that the US-China military balance is shifting in China's favor.<sup>26</sup>

The PRC not only possesses the world's largest navy and the world's largest coast guard,

but these maritime forces are supported by a massive flotilla of maritime militia, the PAFMM. There is significant interoperability and integration between PLAN, CCG, and PAFMM. The PLAN likely surpassed the US Navy in 2015 as the world's largest navy, and currently has an inventory of approximately 340 battle-force ships. Concerningly, this figure does not account for an additional eighty-five patrol craft with anti-ship cruise-missile (ASCM) capacity. While the PLAN does not publish its force-structure plans to the public, the US Department of Defense (DOD) expects PLAN's growth to continue to four hundred battle-force ships by 2025 and 440 battle-force ships by 2030.27 The majority of this growth has been in small surface combatants, such as frigates and corvettes that would provide the capacity needed to execute a blockade of Taiwan. Regarding the quality of the PLAN fleet, ONI assesses that "Chinese naval ship design and material quality in many cases is comparable to US Navy ships, and China is quickly closing the gap in any areas of deficiency."28 Additionally, the PLAN reportedly possesses between fifty thousand and one hundred thousand mines, which could be leveraged in a blockade scenario. These are a low-cost weapon that, throughout history, has proven to be highly effective for sea control.<sup>29</sup>

The CCG is the world's largest maritime law-enforcement force. As with the PLAN, the CCG has rapidly expanded in recent years. In 2017, the CCG had an inventory of 185 ships but, as of 2022, it had grown to an inventory of 224 ships.<sup>30</sup> The PAFMM, an offshore fishing fleet that is subject to activation for gray-zone activities by the PRC, plays a major role in coercive activities. The PAFMM's operations are part of a broader Chinese military theory that sees confrontational operations short of

<sup>25</sup> Shamseer Mambra, "8 Major Ports of Taiwan," Marine Insight (platform), March 12, 2022, https://www.marineinsight.com/know-more/8-major-ports-of-taiwan/.

<sup>26</sup> O'Hanlon, "Can China Take Taiwan?"

<sup>27 2022</sup> Report on Military and Security Developments Involving the People's Republic of China," US Department of Defense (DOD), November 29, 2022, https://www.defense.gov/News/Releases/Release/Article/3230516/2022-report-on-military-and-security-developments-involving-the-peoples-republi/.

<sup>28</sup> O'Rourke, "China Naval Modernization."

<sup>29 &</sup>quot;Chinese Mine Warfare—Mines," GlobalSecurity.org, January 8, 2021, https://www.globalsecurity.org/military/world/china/ship-mines.htm

<sup>30</sup> O'Rourke, "China Naval Modernization."

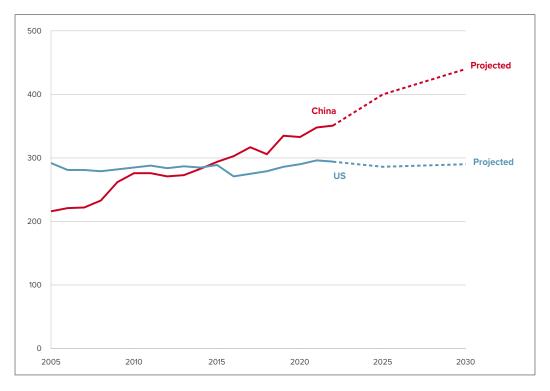


Figure 2: Navy Battle Force Inventory

Data sources: USNI News, Department of Defense, Congressional Research Service

war as an effective means of accomplishing strategic objectives. These militia forces receive government funding and are organized and trained to supplement the CCG. Some vessels were recently noted to be purpose built for maritime militia missions.<sup>31</sup> This fleet would play a significant role in a blockade scenario and has been referred to as the PRC's "little blue men."<sup>32</sup>

Combined with the PRC's numerical advantage in the maritime domain, the People's Liberation Army Rocket Force (PLARF) is a critical component of strategy to deter and counter third-party intervention in a regional conflict. These capabilities have been referred to as A2/AD weap-

ons systems, as their purpose is to deter forces from operating near the blockade area. PLARF anti-ship ballistic missiles (ASBMs) provide the capability to conduct long-range precision strikes from mainland China against ships in the Western Pacific. The DF-21D ASBM possesses a range of more than 1,500 kilometers (km), is dual capable of both conventional and nuclear warheads, and utilizes mobile launcher systems that complicate countertargeting. The PLARF is growing its inventory of follow-on ASBM, the DF-26. In 2022, the DF-17 has been deployed operationally and this system is capable of carrying hypersonic glide vehicles.<sup>33</sup> In a blockade scenario, responding forces would need to honor this threat.

<sup>31 &</sup>quot;2023 Report on Military and Security Developments Involving the People's Republic of China."

<sup>32</sup> Christopher P. Cavas, "China's 'Little Blue Men' Take Navy's Place in Disputes," *DefenseNews*, Sightline Media Group, November 2, 2015, https://www.defensenews.com/naval/2015/11/03/chinas-little-blue-men-take-navys-place-in-disputes/.

<sup>33 &</sup>quot;2023 Report on Military and Security Developments Involving the People's Republic of China."



Arleigh Burke-class guided-missile destroyer USS Kidd transits the Taiwan Strait during a routine transit. Source: US Navy

In addition to traditional conventional forces, the PLA has made significant investments in information-warfare capabilities. The Strategic Support Force (SSF) centralizes space, cyber, electronic-warfare, and psychological operations with the goal of blinding and deafening an enemy. Moreover, the PRC intends to utilize a "three warfare concept" to impact the psychological, public-opinion, and legal-functional areas. PRC leaders have identified that collecting, controlling, and accessing information is crucially important in both warfighting and modern security.<sup>34</sup> These capabilities would be critical to a blockade scenario.

#### **US MILITARY FORCE STRUCTURE**

Even with the world's largest defense budget, the DOD is forced to make challenging prioritization decisions and budgetary tradeoffs. The current strategy, as indicated by the defense budget, clearly prioritizes investments in research and development (R&D) for nextgeneration technologies, personnel to support an all-volunteer force, long-range precision fires to counter an invasion scenario, and nuclear recapitalization. The trade-off that has been required to fund these investments has been

<sup>34 &</sup>quot;2023 Report on Military and Security Developments Involving the People's Republic of China."

placing a lower relative priority on conventional force structure, specifically of maritime forces, which would be required to counter a blockade of Taiwan.<sup>35</sup>

While the number of battle-force ships in each navy's inventory is a one-dimensional measure, the trends in overall ship count are clear and of significant analytic value. From 2005 to 2022, the PLAN has added 135 ships to its inventory, while the US Navy added only two during the same period. This has resulted in the PLAN becoming the largest navy in the world, with a numerical advantage of fifty-seven more battle-force ships than the US Navy.<sup>36</sup>

With a projected battle-force inventory of 293 at the end of Fiscal Year 2024, the US Navy is significantly below its force-structure requirement of 373 battle-force ships.<sup>37</sup> This is the Navy's assessment of the force structure that is required to implement the National Defense Strategy (NDS) of 2022. While force structure is of significant value, the US Navy has correctly prioritized strategic nuclear recapitalization and readiness of the current force over force structure. To ensure any growth is sustainable and does not result in a hollow force, the US Navy would need additional resources allocated to support growth to a Navy with 373 battle-force ships.<sup>38</sup>

The former commander of US Indo-Pacific Command, Admiral Philip Davidson, stated in his 2021 testimony before the Senate Armed Services Committee that the growing military imbalance in the Pacific comes with greater risk that China could move "before our forces might be able to deliver an effective response," and that the "greatest danger is an erosion of conventional deterrence vis-à-vis the PRC." Davidson went on to say that "if this imbalance continues, Chinese leaders could be emboldened to take action." <sup>39</sup>

#### TAIWAN FORCE STRUCTURE

Taiwan's military faces the challenge of balancing investments in both capabilities that deter an invasion by the PLA and the traditional force structure of the navy and air force that is needed to respond to PLA activity in waters and airspace surrounding the island. Taiwan's navy primarily consists of twenty-two frigates, four destroyers, and four submarines. With the exception of the Lafayette-class frigates, these ships are primarily older warships that have been transferred from like-minded nations. Taiwan's military is highly capable, but its budget is less than one-tenth of the PLA's. 41

The US ONI director assesses that the PRC is already attempting to stress this traditional force

Benjamin G. Johnson et al., "Our Military Insiders' Views of the New National Defense Strategy," Atlantic Council, November 21, 2022, https://www.atlanticcouncil.org/blogs/new-atlanticist/our-military-insiders-views-of-the-new-national-defense-strategy/.

<sup>36</sup> O'Rourke, "China Naval Modernization."

<sup>37</sup> Sam LaGrone, "Navy to Decommission 2 Carriers in a Row, 2 LCS Set for Foreign Sales, Says Long-range Shipbuilding Plan," US Naval Institute, April 18, 2023, https://news.usni.org/2023/04/18/navy-to-decommission-2-carriers-in-a-row-2-lcs-set-for-foreign-sales-says-long-range-shipbuilding-plan.

<sup>38 &</sup>quot;Chief of Naval Operations Navigation Plan 2022," US Navy, press release, July 26, 2022, https://www.dvidshub.net/publication/issues/64582.

Jim Garamone, "Erosion of U.S. Strength in Indo-Pacific Is Dangerous to All, Commander Says," US Department of Defense, March 9, 2021, https://www.defense.gov/News/News-Stories/Article/Article/2530733/erosion-of-us-strength-in-indo-pacific-is-dangerous-to-all-commander-says/

<sup>40</sup> O'Hanlon, "Can China Take Taiwan?"

<sup>41</sup> Lawrence and Campbell, "Taiwan: Political and Security Issues."

structure in a campaign in which the "PLA attempts to exhaust the Taiwan Air Force and Navy."42 In response to this increased activity and threat, defense spending by Taiwan has increased from 1.7 percent of GDP in 2018 to 2.2 percent of GDP in 2022.43 However, it is unlikely that significant additional increases are possible without foreign assistance. The United States has attempted to assist with this through the FY 2023 legislative process that authorized and appropriated an additional \$2 billion in foreign military financing (FMF) loans. Additional FMF grants were authorized, but funds were not appropriated.44 The US DOD has announced an intention to utilize presidential drawdown authority to transfer more than \$1 billion in defense articles to Taiwan.45

#### **MERCHANT FLEETS**

Military forces are a vital aspect of a blockade scenario, but the scale of merchant shipping that is friendly to Taiwan represents the most important element of force structure. The capacity of friendly merchant shipping will determine if Taiwan is able to be sustained in the face of PRC coercive actions. Merchant shipping is vital to providing the scale of lift that is a critical to the flow of resources and sustained economic activity. Merchant shipping has played an important role throughout history, serving as a key enabler of the Allied victory in World War II. During this period, the shipbuilding industry in the United States rapidly produced 5,777 cargo vessels.<sup>46</sup> However, drastic changes in the industry have significantly reduced shipyard

capacity, and only one US shipyard is currently producing merchant vessels capable of openocean transit.<sup>47</sup> The PRC has strategically invested in the commercial shipbuilding industry, which now produces 40 percent of the world's large oceangoing vessels.<sup>48</sup>

Due to the structure of the industry, the country of the shipping company's ownership is often different from the country of registration used by vessels. This business practice is commonly referred to as merchant vessels using a flag of convenience. The ability to use open registries of countries worldwide is done to reduce transportation costs through individual countries competing to offer tax incentives, avoid mandating the nationality of workers used by the vessel, and reduce safety and environmental regulations.<sup>49</sup> Using flags of convenience has resulted in only three countries accounting for the registration of 44 percent of global merchant shipping by dead weight tonnage (DWT).50 These countries are Panama, Liberia, and the Marshall Islands. It is worth noting that the Marshall Islands are one of the few remaining countries that maintain official diplomatic relations with Taiwan.

Comparatively, the United States and Taiwan represent 0.6 and 0.3 percent, respectively, of flags of registration (by DWT). Regarding merchant-vessel ownership (by DWT), the United States ranks eleventh, but 81 percent of vessels operate with a foreign flag. Taiwan ranks twelfth, but with 88 percent of vessels operating with a foreign flag. US allies that rank in the top ten of DWT owner-

<sup>42 &</sup>quot;Rear Admiral Studeman Delivers Remarks at AFCEA West Outlinking China Challenges."

<sup>43 &</sup>quot;The World Fact Book: Taiwan," CIA.

<sup>44</sup> Lawrence and Campbell, "Taiwan: Political and Security Issues."

<sup>45</sup> Bryant Harris, "Pentagon to Use New Taiwan Arms Transfer Authority, Similar to Ukraine," *DefenseNews*, April 6, 2023, https://www.defensenews.com/congress/2023/04/06/pentagon-to-use-new-taiwan-arms-transfer-authority-similar-to-ukraine/.

<sup>46</sup> Loren Thompson, "Dwindling U.S. Merchant Fleet Is a Crisis Waiting to Happen," Forbes, October 8, 2021, https://www.forbes.com/sites/lorenthompson/2021/10/08/dwindling-us-merchant-fleet-is-a-crisis-waiting-to-happen/?sh=3d961d202a8d.

<sup>47</sup> Jeremy Greenwood and Emily Miletello, "To Expand the Navy Isn't Enough. We Need a Bigger Commercial Fleet," Brookings Institution, November 4, 2021, https://www.brookings.edu/articles/to-expand-the-navy-isnt-enough-we-need-a-bigger-commercial-fleet/.

<sup>48</sup> Greenwood and Miletello, "To Expand the Navy Isn't Enough."

<sup>49</sup> Penny Thomas, "Swapping States," MarineTraffic, May 17, 2022, https://www.marinetraffic.com/blog/swapping-states/.

<sup>50 &</sup>quot;Review of Maritime Transport 2022," UNCTAD.

Table 2: Merchant Fleet Ownership vs. Registration

|   | Country or territory                            | Deadweight tonnage                    |                          |          | Flag of registration                   | Dead-weight<br>tonnage | Share of total |
|---|---|---------------------------------------|--------------------------|----------|--|------------------------|----------------|
|   | of ownership                                    | Total                                 | Total as a %<br>of world | 1        | Panama                                 | 350,401                | 15.9%          |
| 1   | Greece  | 384.430.215                           | 17.63%                   | 2        | Liberia                                | 335,114                | 15.2%          |
| _   |   |                                       |                          | 3        | Marshall Islands                       | 289,781                | 13.2%          |
| 2   | China   | 277,843,335                           | 12.74%                   | 4        | Hong Kong, China                       | 207,816                | 9.5%           |
| 3   | Japan   | 236,638,365                           | 10.85%                   | 5        | Singapore                              | 131,369                | 6.0%           |
| 4   | Singapore                                       | 136,243,709                           | 6.25%                    | 6        | China                                  | 114,952                | 5.2%           |
| 5   | Hong Kong, China                                | 111.587.729                           | 5.12%                    | 7        | Malta                                  | 114,910                | 5.2%           |
| $\overline{}$   |   | , , , , , , , , , , , , , , , , , , , |                          | 8        | Bahamas                                | 72,998                 | 3.3%           |
| 6   | Republic of Korea                               | 92,302,014                            | 4.23%                    | 9        | Greece                                 | 61,817                 | 2.8%           |
| 7   | Germany   | 79,592,915                            | 3.65%                    | 10       | Japan                                  | 40,263                 | 1.8%           |
| 8   | Bermuda   | 63,407,273                            | 2.91%                    | 11       | Cyprus                                 | 33,461                 | 1.5%           |
|   | Norway including Svalbard and Jan               | 50.001.000                            | 0.750                    | 12       | Indonesia                              | 29,332                 | 1.3%           |
| 9   | Mayen Islands, excluding Bouvet Island          | 59,931,039                            | 2.75%                    | 13       | Danish Int'l Register                  | 26,061                 | 1.2%           |
| 10  | UK including Channel Islands and<br>Isle of Man | 58,746,865                            | 2.69%                    | 14       | Madeira, Portugal                      | 25,863                 | 1.2%           |
| 11  | USA including Puerto Rico                       | 55.113.272                            | 2.53%                    | 15       | Norwegian Int'l Register               | 21,300                 | 1.0%           |
| Sort medaling I d   | 1   |                                       |                          | 16       | Isle of Man                            | 20,661                 | 0.9%           |
| 12  | Taiwan  | 54,974,072                            | 2.52%                    | 17       | Iran (Islamic Republic of)             | 20,196                 | 0.9%           |
|   |   |                                       |                          | 18       | India                                  | 16,934                 | 0.8%           |
| 13  | Denmark   | 40,637,122                            | 1.86%                    | 19       | Republic of Korea                      | 15,635                 | 0.7%           |
| 14  | Monaco  | 38,011,632                            | 1.74%                    | 20       | Saudi Arabia                           | 13,887                 | 0.6%           |
| 15  | Switzerland                                     | 30,887,688                            | 1.42%                    | 21       | USA including Puerto Rico              | 12,526                 | 0.6%           |
| 16  | Türkiye   | 30.433.830                            | 114%                     | 22       | Viet Nam                               | 12,331                 | 0.6%           |
| 10  | TOTALYE   | 30,433,630                            | 1.470                    | 23       | UK excl. Channel Islands & Isle of Man | 11.292                 | 0.5%           |
|   |   | 1                                     | A.T.                     | 24       | Russian Federation                     | 11,039                 | 0.5%           |
| PER CONTRACTOR OF THE | Towns   |                                       | THE REAL PROPERTY.       | 25       | Italy                                  | 9,969                  | 0.5%           |
|   | COSCO   | 70                                    | ***                      | CO110 26 | Belgium                                | 9,791                  | 0.4%           |
| Z   |   |                                       |                          | 27       | Malaysia                               | 9,269                  | 0.4%           |
|   |   |                                       |                          | 28       | Bermuda                                | 7,888                  | 0.4%           |
| NUAR<br>HOSE R  | MO  | - John                                |                          | 29       | Germany                                | 7,069                  | 0.3%           |
|   |   | - Court                               |                          | 30       | Taiwan                                 | 6,755                  | 0.3%           |

Data source: UN's 2022 Review of Maritime Transport: https://unctad.org/system/files/official-document/rmt2022\_en.pdf.

ship are: Greece (first), Japan (third), South Korea (sixth), Germany (seventh), Norway (ninth), and the United Kingdom (tenth).<sup>51</sup>

The US government funds a strategic sealift fleet to avoid complete reliance on a merchant shipping industry that seeks out maximum supply-chain efficiencies to reduce costs. These vessels are primarily reserved to transport military equipment and supplies to a theater of war, but could be used during a blockade to transport critical supplies to support the economy and population of Taiwan. The Department of Transportation (DOT) owns and maintains the National Defense Reserve Fleet (NDRF) of approximately one hundred vessels. A subset of the NDRF is the Ready Reserve Fleet

<sup>51 &</sup>quot;Review of Maritime Transport 2022," UNCTAD.

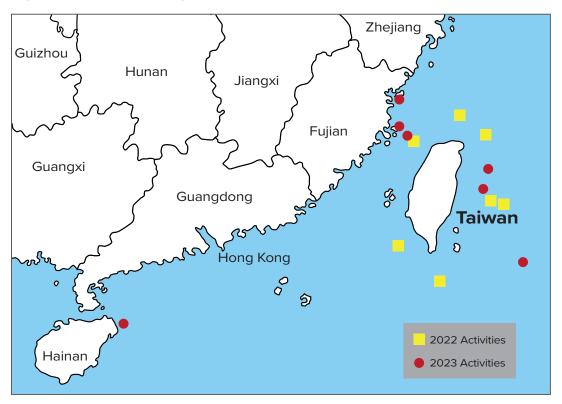
(RRF), which maintains readiness levels of five-toten days and would be the first vessels ready to deploy. In addition to the NDRF, DOT administers the Maritime Security Program (MSP), which provides annual subsidies to seventy-two US-flagged merchant vessels comprising sixty roll-on/roll-off ships, ten petroleum tankers, and two cable-laying ships. In exchange for this subsidy, participating ships perform their normal day-to-day commercial activities, but are subject to be activated as a part of the NDRF in wartime.<sup>52</sup>

#### **Blockade in Action**

#### **ACTIONS BY THE PRC**

While it is difficult to forecast the exact actions of the PRC in executing a blockade, this section contains background on how a scenario could reasonably play out. Through its reactions to then-Speaker of the House Nancy Pelosi's visit to Taiwan in August 2022 and then-Speaker of the

Figure 3: China's Military Exercises and Related Activities Around Taiwan



Data source: https://chinapower.csis.org/tracking-the-fourth-taiwan-strait-crisis/#mapping-pla-exercize-zones and https://chinapower.csis.org/tracking-chinas-april-2023-military-exercises-around-taiwan/.

<sup>52</sup> Ben Goldman, "U.S. Maritime Administration (MARAD) Shipping and Shipbuilding Support Programs," Congressional Research Service, January 8, 2021, https://crsreports.congress.gov/product/pdf/R/R46654.

House Kevin McCarthy's meeting with President Tsai Ing-wen in April 2023, China has already signaled its capability and notional plan of how to execute a blockade of Taiwan. The PRC's response consisted of four days of exercises between maritime, aviation, and rocket-force missile firings in six operating areas that effectively encircled Taiwan.<sup>53</sup> Speaking at the Brookings Institution, Under Secretary of Defense for Policy Colin Kahl stated that China's response served as a "test drive" for what an invasion or blockade scenario might look like.<sup>54</sup>

In executing a blockade, the PRC would seek conditions to achieve maximum leverage, with a desired end state of Taiwan seeking relief by agreeing to concessions on sovereignty. To achieve this, the PRC would use fear and coercion to significantly disrupt maritime trade to and from Taiwan, which is the lifeblood of its economy and prosperity. These efforts would attempt to create an unstable security environment in the waters surrounding Taiwan that would squeeze Taiwan's economy, and this constriction could cause the people of Taiwan to question the value of the status quo.

Chinese Communist Party Chairman Xi Jinping has referred to propaganda and influence activities as a "magic weapon" for advancing the regime's interests, and these capabilities would be fully utilized when executing a blockade of Taiwan. 55 The PRC would employ a robust strategic-messaging and information-operations campaign, seeking to frame the blockade as an internal dispute consistent with its One China "Principle," in which Taiwan is a part of China. The PRC would announce domestic laws and regulations regarding a maritime embargo against all merchant ships conducting trade in the "Chinese Province of Taiwan." In framing the blockade as a domestic matter, the PRC

would not raise the issue at the United Nations or any other international forum. For citizens of the PRC, the CCP would frame its actions as consistent with the plan for national rejuvenation and returning the "rogue province" to CCP control. For the Taiwanese population, the PRC's message would focus on how it seeks a model of "one country, two systems," and would accuse Taiwan's elected representatives of acting as separatists and not behaving in the best interests of the people of Taiwan. A significant priority of this effort would focus on international leaders and populations, and the PRC would forcefully warn against interfering with China's "internal affairs."

Timed to align with PLAN warships encircling the island, PLA SSF cyberattacks would begin to target Taiwan government websites with denial-of-service attacks, and commercial financial institutions would be targeted to disrupt the population's day-to-day life. The PLA would target and begin to sever undersea data cables that connect Taiwan to the outside world. This would be accomplished covertly, in a fashion that would enable the PRC to maintain deniability.

PLA maritime forces would encircle the island in a layered, defense-in-depth fashion. Maritime patrol and reconnaissance aircraft would conduct visible patrols, and ISR assets would be used to identify and track merchant shipping enroute to ports of call in Taiwan. PLA Air Force aircraft would be vectored toward these merchant ships, and would conduct low-altitude and high-speed flybys to ensure the ships were clearly aware that the PLA was tracking their presence. PLAN surface combatants would encircle the waters surrounding Taiwan and would act as a final barrier. These warships would be sure to conduct live-fire exercises directly in the vicinity of, and at times blocking the pathway of, the merchant ships. The PLAN would conduct

<sup>53</sup> Charles Hutzler, "China's Drills Around Taiwan Give Hint About Its Strategy," *Wall Street Journal*, August 4, 2022, https://www.wsj.com/articles/chinas-drills-around-taiwan-give-hint-about-its-strategy-11659633265.

<sup>54</sup> John Grady, "China Will Increase Pressure on Taiwan in Next Two Years Rather Than Invade, Says Pentagon Official," US Naval Institute, USNI News, November 7, 2022, https://news.usni.org/2022/11/07/china-will-increase-pressure-on-taiwan-in-next-two-years-rather-than-invade-says-pentagon-official.

<sup>55</sup> Matt Pottinger, "House Select Committee on the Chinese Communist Party," Prepared Congressional Testimony, February 28, 2023, https://www.congress.gov/118/meeting/house/115402/witnesses/HHRG-118-ZS00-Wstate-PottingerM-20230228.pdf.

highly visible live-fire sink exercises. Media coverage of these exercises, showing ships being sunk, would be highly publicized.

CCG ships and PAFMM vessels would also deploy around the island. The CCG would harass ships using PRC legal actions to attempt to justify demands that the merchant ships change course or be boarded and be taken possession of on behalf of the CCP. At times, CCG ships would resort to using warning shots across the bow of these merchant ships. PAFMM would operate in coordination with nearby CCG ships, and would act in a harassing fashion to carry out dangerous maneuvers, including the swarming of merchant vessels and causing collisions by ramming them. The highest density of PRC maritime assets would focus clearly on the four ports that are responsible for 90 percent of all Taiwan's trade. Any merchant ships that refused to comply would be subject to forced boardings, and even disabling fire on propulsion and maneuvering equipment. Merchant ships would not be sunk by PLA surface combatants but, rather, taken into custody and diverted to ports in mainland China. As Vice Adm. Karl Thomas, commander of the US Seventh Fleet has stated, China has "a very large Navy, and if they want to bully and put ships around Taiwan, they very much can do that."56

The PLARF would conduct extremely publicized ballistic-missile live-fire exercises. The number of missiles expended during each firing would not need to be significant, but the PRC would ensure the firings would be unpredictable and would continue throughout the entirety of the blockade. Some firings would be sure to overfly Taiwan before landing in the Philippine Sea to the east of the island in order to strike fear in the population. Live-fire ballistic-missile strikes would occur in declared exercise areas that would be publicized to merchant ships. These areas would

be dynamic, with the objective of forcing shipping to be rerouted.

The PLAN would publicize that it had deployed sea mines in the area as another method to enforce its "domestic legal action." The locations of minefields would be strategically chosen to assist with establishing sea control surrounding Taiwan. These sea mines would not need to actually strike and sink a merchant vessel to have the desired effect. Simply the threat of mines in the waters surrounding Taiwan would cause merchant shipping to be cautious regarding which areas to transit, and some shipping companies would choose to avoid the area completely.

The presence of the PLAN submarine force operating in the area would be another highly publicized action. The threat of submarines operating in the area during a crisis would have a chilling effect on surface ships also operating in the area. The stealth of submarines makes it difficult for surface warships to conduct anti-submarine warfare (ASW) to track their specific locations, and it is impossible for merchant shipping to know the specific location of an adversarial submarine. Additionally, the PRC would have the option to use its submarine force to make a small number of covert and deniable attacks on merchant shipping. The PRC would likely conduct an attack under the cover of darkness by targeting a merchant ship sailing alone through the South China Sea, with a destination in Taiwan, and confirmed to be both owned by a Taiwanese shipping company and registered with a Taiwanese flag. If the covert attack is executed correctly, the targeted Taiwanese merchant ship could be sunk within minutes before allied forces could respond to the area and document the attack. The PRC would deny any involvement, but the disappearance of a merchant ship would cause fear within the shipping industry.

<sup>56</sup> Niharika Mandhana, "China Is Capable of Blockading Taiwan, U.S. Navy Commander Says," *Wall Street Journal*, September 20, 2022, https://www.wsj.com/articles/china-is-capable-of-blockading-taiwan-u-s-navy-commander-says-11663585457.

### CHALLENGE OF SCALABILITY AND REVERSIBILITY

One of the central challenges for national security strategists in Taiwan and the United States is that, while the above actions represent the quickest and most effective blockade scenario, the PRC's blockade actions are scalable and reversible. The PRC could determine the time is now to solve the Taiwan question and fully commit to all the actions needed for a successful blockade. Alternatively, the PRC could assess that it has additional time to attempt to unify Taiwan, execute a portion of the blockade actions, and do so at sporadic intervals. For example, the PRC could execute actions similar to its August 2022 response to Pelosi's visit to Taiwan, but conduct these four-day blockade exercises every few weeks or months. Another option at the PRC's disposal is tailoring a blockade to an embargo against specific countries and cargos that are conducting trade with Taiwan, similar to the April 2023 announced responses to McCarthy's meeting with President Tsai.57 Unlike an invasion, wherein a preemptive attack is a prerequisite, the PRC can reverse blockade actions at any point and strategically reset to pursue another course of unification. While conducting a tailored blockade or embargo may take longer, it could also achieve the PRC's desired end state. These tailored options provide pathways for the PRC to slowly raise the level of coercive action against Taiwan, but also avoid drawing clear international attention to these actions. A tailored blockade or embargo scenario could complicate decision-making for the United States by not presenting a timeline for when clear and decisive action is needed.

#### IMPACTS OF A NAVAL BLOCKADE

Without mitigation and counterblockade actions, the above scenario would cause significant fear in the population of Taiwan and bring the maritime shipping that supports Taiwan's economy to a grinding halt. For the blockade to be successful, it does not need to stop every single shipment—with an economy that imports 97.7 percent of its energy and relies on approximately ninety-two merchant ship arrivals per day, any disruption would have significant impacts.

The impact of a blockade on maritime shipping would manifest through a war-risk premium to insurance rates or rerouting of merchant shipping transiting to other countries around the blockade area. An example of the merchant shipping industry's reaction to war risk was most recently seen in the Black Sea after Russia invaded Ukraine. Some initial insurance rates to transit the war zone were as high as 10 percent of the value of the ship, compared to prewar insurance rates that were negligible for each individual voyage. An example cited by Bloomberg described that a petroleum tanker valued at \$50 million with one million barrels of oil loaded would expect to be charged a war-risk premium of \$5 million to transit the Black Sea.<sup>58</sup>

Even ships not transiting to or from Taiwan would likely be impacted by a blockade. These ships transiting to other ports would likely be rerouted around the blockade area due to war risk. Maritime shipping, as with much of the global economy, is highly efficient and relies on "just-intime" supply-chain models. Economists estimate that each day of shipping delays would have the

<sup>57</sup> Liz Lee and Ben Blanchard, "China to Inspect Ships in Taiwan Strait, Taiwan Says Won't Cooperate," Reuters, April 5, 2023, https://www.reuters.com/world/asia-pacific/china-inspect-ships-taiwan-strait-taiwan-says-wont-cooperate-2023-04-06/?fbclid=lwAR3e0gfLqseOFRktGyd2\_zdVC9Dx8q\_noKFfJLIZk300SNHTyYVBm3Tvttk&mibextid=Zxz2cZ.

<sup>58</sup> Ann Koh and Alaric Nightingale, "The Cost of Insuring Black Sea Shipping is Out of Control," *Bloomberg*, April 8, 2022, https://www.bloomberg.com/news/articles/2022-04-08/ships-entering-the-black-sea-are-becoming-almost-uninsurable#xj4y7vzkg.

same impact as a cost increase of 1 to 2 percent of the value of the goods being shipped. Supplychain disruptions during the COVID-19 pandemic demonstrated a low level of the disruption and global economic impacts that a blockade would have.<sup>59</sup> The estimated economic impact of undersea cables being severed would result in a loss of \$1.69 billion per month of economic activity, and this loss would increase over time.<sup>60</sup>

Due to policies of strategic ambiguity, it is unclear which countries would come to the assistance of Taiwan in a blockade scenario. This is contrary to a war in Europe, where NATO provides for a unity of effort and collective self-defense. While the United States has many Indo-Pacific allies and partners, these are primarily bilateral relationships and could present challenges in building a coalition to support Taiwan. The PRC has strategically ensured that Taiwan is not represented in international governing bodies. For example, Taiwan does not have representation in the United Nations, but it is listed in reports as "Taiwan, Province of China."61 Even the United States maintains a policy of strategic ambiguity, where it maintains the capability to defend Taiwan but is not legally required to do so.

#### PRC THEORY OF VICTORY

Pursuing unification through a nonkinetic blockade is the next logical step above the PRC's ongoing coercive efforts. Taiwan has proven resilient to political intimidation, economic dependency, and deniable cyberattacks. Current PLA military efforts are focused on operations that systematically wear down Taiwan's conventional military readiness and on exercises with large-scale shows of force. It is evident that these efforts would not prove sufficient to achieve the PRC's stated objective of unification, and additional actions would be required. A nonkinetic blockade exploits existing PRC advantages, is both scalable

and reversible in the face of prevailing conditions, and the PRC would retain the threat of vertical and horizontal escalation in an effort to deter thirdparty intervention.

As discussed in greater depth above, the PRC's military objective would be to disrupt maritime trade without preventing every single shipment. In a blockade scenario, the PRC would seek to inflict economic pain on Taiwan through skyrocketing insurance premiums for merchant shipping companies and thereby sinking the economic viability of continued maritime transportation to and from Taiwan. In executing this blockade, the PRC would surely leverage recently deepened diplomatic and economic ties with oil-producing nations in the Middle East to reduce the quantity of energy supplied to Taiwan.

A successful blockade disrupting maritime trade would shutter Taiwan's economy. Rationing of scarce energy and food reserves, amplified by a lack of viable resupply plans, would generate fear and uncertainty among the Taiwanese population—in sustaining their lives, getting their next meal, and maintaining their personal economic security. The PRC's actions would grind day-to-day life on the island to a halt. Democracy is more sensitive to economic disruptions than other forms of government, and a successful blockade could result in panic.

The Taiwanese population and its elected government representatives would quickly realize that—in the absence of a decisive response by a US-led coalition of like-minded nations—Taiwan does not have the means to resist alone. In this circumstance, it is possible that Taiwan would seek a negotiated settlement due to coercion by the PRC, in which it employed military force to achieve its stated political objective. Taiwan's major political parties have different outlooks on how to address cross-strait relations with the PRC. Generally, the Kuomintang prefer closer ties to the PRC than the

<sup>59</sup> McDaniel and Zhong, "Submarine Cables and Container Shipments."

<sup>60</sup> McDaniel and Zhong, "Submarine Cables and Container Shipments."

<sup>61 &</sup>quot;Review of Maritime Transport 2022," UNCTAD.

East China Sea Blockade in action Missile exercises from mainland China that land in the waters surrounding Taiwan **CHINA** Clearly visible maritime intelligence, surveillance, and reconnaissance (ISR) and military aircraft PLAN ships acting as barriers to transit and clearly visible live-fire exercises Hsinchu People's Armed Forces Maritime Militia (PAFMM) Taichung swarming and ramming merchant shipping Hualien 0,0 Phillipine Sea Chinese Coast Guard (CCG) harassing and attempting "law enforcement" interdictions **TAIWAN** Magong Clearly visible deployment of sea mines Tainan Taitung Offensive cyberattacks on government South China Sea Kaohsiung organizations and financial institutions Limited covert and deniable submarine attacks on some merchant shipping Strategic messaging warning countries not to interfere with an "internal dispute"

Figure 4: Actions China Would Take as Part of a Blockade

Data source: https://chinapower.csis.org/tracking-the-fourth-taiwan-strait-crisis/#mapping-pla-exercize-zones and https://chinapower.csis.org/tracking-chinas-april-2023-military-exercises-around-taiwan/.

Democratic Progressive Party, and political leaders may not demonstrate a united front to the population if confronted by a PRC blockade.

The CCP's ultimate political objective for Taiwan is to complete full unification prior to 2049; however, in the near term, incremental progress toward this end state may be sufficient. An inherent advantage of a nonkinetic blockade is that, due to scalability and reversibility, the PRC could seek complete unification but claim victory with incremental progress. Incremental progress could take the form of Taiwan revising its constitution to adopt the PRC's position on "One China" and agreeing to become a Special Administrative Region (SAR) similar to Hong Kong and Macau. The PRC has advocated for "one country, two systems" as a solution for Taiwan. However, as demonstrated with its implementation in Hong Kong, the SAR model results in forced assimilation and tight control by the central PRC government.

The "one country, two systems" model is currently unpopular in Taiwan, particularly due to its implementation in Hong Kong and given the PRC has breached previous agreements. By undertaking a blockade, the PRC would attempt to change the calculus of the Taiwanese population, unveiling Taiwan's vulnerabilities and presenting a coerced negotiated settlement as the better alternative over a continued maritime blockade, which would cut Taiwan off from the world and thereby threaten energy and food security in the long term.

Those who argue against the likelihood of a nonkinetic maritime blockade may assess that it does not bring a sufficient level of military force to coerce Taiwan into unification. Moreover, Taiwan could find innovative ways to outlast a maritime blockade; once a population has been exposed to the benefits of democracy and economic prosperity, it may be difficult to sacrifice self-determination for security. History shows that populations



The hospital ship USNS Henry J. Kaiser (T-AO 187) while underway in the Pacific Ocean during Pacific Partnership 2024-1. Source: US Navy photo by Petty Officer 2nd Class Jacob Woitzel

can demonstrate exceptional resilience in the face of adversity and coercion, especially when their personal freedom is at risk.

However, even with full awareness of these risks. the PRC could still choose to act. Nationalism is a driving source of power for the CCP, with senior party leaders making the unification of Taiwan a national objective. The CCP may also utilize conflict with Taiwan to distract its population from the structural economic challenges and looming demographic issues that face the PRC. A nonkinetic blockade would provide a pathway for the PRC to reduce risk with the benefits of scalability and reversibility that are not available if they conduct an amphibious invasion. The PRC could therefore view its advantages of economic scale, geography, and maritime capacity as sufficient to justify action with a strategically viable theory of victory.

A nonkinetic blockade scenario is the most likely act of military coercion that could result in a fait accompli. If Taiwan and like-minded nations are unable to implement a strategy to deter a blockade, and defeat the PRC if deterrence fails, Taiwan would be under significant risk of being forced to enter unification negotiations with the PRC. A proper understanding of the situation and a fully implemented strategy would be required to undermine the PRC's theory of victory.

### RESPONSES BY TAIWAN, THE UNITED STATES, AND LIKE-MINDED NATIONS

The most important response to the PRC would be that of Taiwan. A will to resist the PRC's coercive actions would be essential. Without the clearly demonstrated will to resist, all other elements of this strategy would be irrelevant.

International law determines that a blockade is an act of war, so proceeding to open hostilities could be justified. However, in order to manage escalation, senior leaders in Taiwan, the United States, and like-minded nations would demand response options short of war. In order to defeat a blockade (while managing escalation), the appropriate responses would be reflagging merchant shipping to US or coalition flags, navy warships escorting shipping through PLA maritime barriers, and placing targeted economic sanctions on the PRC.

There is no telling whether like-minded nations would directly support a counterblockade campaign. Japan, Australia, and the Republic of Korea would likely be concerned about escalation, reserving many of their forces for their respective national defense. NATO countries would remain concerned with the war in Ukraine, if ongoing, and therefore would likely retain forces for potential escalation in Europe. Like-minded nations would more likely condemn the PRC's actions, contribute to targeted sanctions, reflag some of their merchant fleets to a US flag, and allow merchant shipping to utilize their ports for resupply.

Taiwan would focus on mobilizing its reserve forces, implementing rationing across the population to reduce demand for supplies, and engaging the United States to provide support to counter the blockade. Increased security would be established at critical infrastructure, with a specific focus on energy reserves and deepwater ports. Taiwan's senior leaders would likely understand the military overmatch. They would ensure that Taiwan's military forces followed established rules of engagement to defend themselves, if necessary, while still aiming to avoid escalation. Taiwan would likely view remaining deescalatory actions as the

best pathway to obtaining the world's support. ISR capabilities would document PRC actions against merchant shipping, which could be used to execute a robust strategic-messaging campaign and expose the actions of the PRC. Diplomatic efforts would focus on obtaining support from the United States and like-minded nations to escort merchant ships through the maritime blockade.

In a May 2022 article, retired Admiral James Stavridis provided insights on potential actions and US response options to break Russia's maritime blockade of Ukraine (before a deal was negotiated to allow grain exports). Based on his personal experience from the tanker wars of the 1980s, he notes that escorting ships through a blockade is a provocative and dangerous mission that should not be taken lightly. In a PLAN blockade scenario, the United States would inform the PRC of its plan, and ensure that it understands that the United States will be conducting the counterblockade operation and will tolerate no interference, but also that it has no wish to enter combat in these waters. The United States would count on the PRC also desiring to manage escalation, and, we think, China would thus not take overt action against merchant shipping registered with a US flag and escorted by the US Navy. The United States would clearly communicate that if the PRC used force against US Navy-escorted and coalition-flagged merchant shipping, then it would respond with proportional use of force. 62 The US president and secretary of defense would need to issue clear and unambiguous rules of engagement to Navy warships, as a dynamic situation in close proximity to aggressive PRC forces could require a quick decision by an individual warship's commanding officers, without the opportunity to seek senior-leadership guidance.

<sup>62</sup> James Stavridis, "How to Break Russia's Blockade of Ukraine's Black Sea Ports," Washington Post, May 30, 2022, https://www.washingtonpost.com/business/how-to-break-russias-blockade-of-ukraines-black-sea-ports/2022/05/29/2cd240c2-df26-11ec-bc35-a91d0a94923b\_story.html.



The guided-missile frigate USS Samuel B. Roberts conducts a towing exercise with the amphibious transport dock ship USS New York. Source: US Navy photo by Cyrus Roson

While airlift could be used for critical supplies such as medicines, it would not be sufficient, with merchant shipping being the only viable way to sustain the population. Previous analysis has estimated that one thousand merchant ships of lift in continuous operation would be needed to sustain Taiwan's economy. To obtain this scale of merchant-vessel lift, coalition countries would need to provide funding to subsidize commercial shipping. These funds would be used to either subsidize war premium insurance or provide a guarantee of reimbursement for any reflagged merchant ships that are damaged or sunk.<sup>63</sup>

Mine-countermeasure forces would be critical to a counterblockade effort. These forces would first

attempt to locate minefields that were covertly laid by the PLAN so that convoys can avoid these dangers. These forces would then proceed to the arduous task of neutralizing and clearing mines from the water. This is a time- and resource-intensive task. During the Gulf War, it took six months for a multinational mine-countermeasure force of thirty ships to clear 1,200 mines employed by Iraq.<sup>64</sup>

The capabilities of the PLA—specifically, A2/AD weapons systems—would force the US Navy to split its forces between escorting merchant vessels to and from ports close to Taiwan and forces that are positioned outside the first island chain. The forces outside the first island chain would be positioned to ensure that the PRC

<sup>63</sup> O'Hanlon, "Can China Take Taiwan?"

<sup>64 &</sup>quot;Chinese Mine Warfare—Mines," GlobalSecurity.org.

cannot hold the entire US fleet at risk, and would provide overwatch support for escort forces in contact with PLA maritime forces. These maritime overwatch forces—combined with ground-based US Army and Marine Corps long-range fires, alongside airborne Air Force and Navy aircraft—would be vital to deterring the PRC from attacking US Navy escort forces. Not committing all maritime forces to escort assignments that are easy targets is a prudent risk mitigation tactic and is consistent with deterrence scholar Thomas Schelling's observation that, "A fine deterrent can make a superb target." 65

#### HISTORIC CONTEXT OF 1980S TANKER WARS AND OPERATION EARNEST WILL

In the 1980s, Iran and Iraq engaged in a bloody war centered around their armies, but which still resulted in significant spillover into the maritime domain of the Arabian Gulf. Knowing that oil was the lifeblood of one another's economies, oil tankers were specifically targeted—and Iran threatened to close the only entry and exit point into the gulf, the Strait of Hormuz. The anti-merchant shipping campaign that was an offshoot of the Iran-Iraq war resulted in 441 ships being attacked in that decade, including 115 of them being sunk or written off as losses. Due to these threats, Kuwait became concerned that its oil tankers would be unable to conduct trade. To help bring stability to the region and ensure oil continued to flow through the Strait of Hormuz, the United States conducted Operation Earnest Will.66

This historical operation provides insight on how to execute a counterblockade operation in the present day. Kuwait's oil tankers were reflagged to the United States and convoys were escorted by US Navy warships. These convoys were supported by ISR aircraft and armed overwatch. Similar to the current threats posed by PRC A2/ AD systems, these convoys were forced to operate inside Iran's "silkworm envelope" of land-based ASCM systems. The PRC's modern systems are increasingly lethal, with massively extended ranges, but the concept of needing to split forces remains the same. Surface combatants executed escort operations past hostile Iranian forces inside the adversary A2/AD envelope while aided by armed overwatch support. In Operation Earnest Will, this support was provided by carrier strike groups operating outside the Arabian Gulf. In a PRC blockade of Taiwan scenario, these overwatch forces would include carrier strike groups in the Philippine Sea, US Air Force longrange bombers and forward-dispersed fighters, and land-based long-range fires from the Army and Marine Corps.

Operation Earnest Will included mine threats in the Arabian Gulf and in the waters directly surrounding Kuwait's ports. During this operation, the USS Samuel B. Roberts (FFG 58) was struck by a sea mine. While Operation Earnest Will is viewed as a success, this era highlights the risks of responding in a contested maritime domain, as the USS Stark (FFG 31) was struck by Iraqi ASCMs and the USS Vincennes (CG 49) was involved in the tragic shooting down of a commercial airliner, Iranian Air Flight 665. While the scale and complexity of countering a PRC blockade of Taiwan would be different, Operation Earnest Will provides valuable historical context for how to reflag merchant shipping and escort these ships through contested waters.

<sup>65</sup> Cancian, Cancian, and Heginbotham, "The First Battle of the Next War."

<sup>66</sup> Lee Allen Zatarain, Tanker War: America's First Conflict with Iran, 1987-1988 (Drexel Hill, PA: Casemate, 2008).



Then-US Chief of Naval Operations Admiral Mike Gilday sits down for an interview with Megan Eckstein as part of the Atlantic Council's Commanders Series, October 2022.

### A PRESENT AND ENDURING CHALLENGE

Many commentators are focused on predicting the precise date the PRC will act, but this is nearly impossible. The only clear timeline the PRC has established is to accomplish Taiwanese unification no later than 2049—however, it is likely that the most advantageous window of opportunity is in the near term. This is due to the CCP needing to act before a decline in favorable economic conditions and before its population grows old, and to take advantage of the present-day focus on the Russia-Ukraine war. Democracies have clearly awakened to the challenges posed by the PRC, and the CCP may desire to act before the West can enact economic decoupling efforts, and be-

fore the United States and like-minded nations reap the benefits of their military-modernization investments.

Even if the CCP does not act in the near term, a blockade scenario is both a present danger and an enduring challenge—due to the PLA's massive military buildup, the geography of the battlespace, and Taiwan's reliance on maritime trade. Speaking at the Atlantic Council in October 2022, Chief of Naval Operations Admiral Mike Gilday stated, "It is not what President Xi says, but it is how the Chinese behave and what they do. And what we have seen over the past twenty years is that they have delivered on every promise they have made earlier than they said they were going to deliver on it."<sup>67</sup>

<sup>67 &</sup>quot;CNO Speaks at Atlantic Council's Commanders Series," US Navy, October 19, 2022, https://www.navy.mil/Press-Office/Press-Briefings/display-pressbriefing/Article/3195802/cno-speaks-at-atlantic-councils-commanders-series/.

#### **ASSUMPTIONS**

potential conflict between the PRC and Taiwan is the most-discussed national security problem of this decade, and there are many conflicting views on how hostilities would manifest. In crafting this strategy, the author made certain critical assumptions. These are provided below for transparency.

#### Taiwan and the United States desire the status quo.

Taiwan views the current status quo as favorable for its population. Taiwan will resist PRC coercive actions with a desire to maintain the status quo. The political climate and preferences of the population appear to support this assumption. The United States will continue its existing One China Policy and desires the status quo.

The PRC views Taiwan as a threat and seeks to unify it with the mainland. Public statements by the CCP on its plans for national rejuvenation by 2049, which include unification with Taiwan must be taken at face value. These statements by the CCP do not appear to be political posturing, as they have been clear and reinforced on many occasions.

The PRC will pursue the lowest threshold of coercive action that is most likely to succeed. The PRC's observations of the Russia-Ukraine war, assessment of its ability to conduct high-end joint operations, and readiness for an invasion scenario push its Central Military Commission planners to pursue a blockade scenario. In execution of scenario planning, the CCP would not want to immediately resort to kinetic operations. The scale of the PRC's maritime forces provides the distinct

advantage of not needing to immediately resort to openly attacking merchant shipping to execute a successful blockade.

Escalation dynamics will be a key factor in the responses of the United States and like-minded nations. With the PRC taking coercive actions in executing a blockade that remains below the threshold of open hostilities, the US president and secretary of defense would pursue a counterblockade operation that manages horizontal and vertical escalation. Responding forces will take defensive actions but attempt to avoid offensive actions. The United States and like-minded nations have demonstrated a historical precedent of seeking military response options that are proportional to an adversary's action.

A NATO-style mutual-defense alliance is unlikely in the Indo-Pacific. Due to its unique diplomatic relationships, Taiwan would not be included in a multinational military organization with the benefit of collective self-defense. While there is an increased focus on multinational defense arrangements in the Indo-Pacific, such as AUKUS and the Quadrilateral Security Dialogue, bilateral defense agreements are the primary method of working with allies and partners. Due to strategic ambiguity policies, it is unclear exactly which nations would join a coalition to defeat a PRC maritime blockade of Taiwan if deterrence fails. Each country would likely make individual decisions in its own national interests when deciding how to respond to a PRC blockade. While countries would be supportive of Taiwan, some may limit their responses and not desire direct confrontation with the PRC.

#### GOALS

his strategy seeks to deter a PRC maritime blockade of Taiwan, and defeat it if deterrence fails. The goals of this strategy are as follows.

Desired end state: Taiwan, the United States, and like-minded nations intend to maintain the status quo in order to enable a peaceful resolution. This strategy ensures a relatively stable security environment in the Taiwan Strait. This stability is vital to the continued economic prosperity of Taiwan. These actions keep open a pathway to peaceful resolution of disagreements between the PRC and Taiwan.

Deterring a PRC blockade: Taiwan, with support from the United States and like-minded nations, must demonstrate the ability to sustain maritime shipping indefinitely. The PRC must receive the message loud and clear: taking the coercive action to blockade Taiwan would not achieve success and would be a significant miscalculation. Deterring and, if deterrence fails, defeating a PRC maritime blockade of Taiwan is accomplished through demonstrating the ability to keep sea lines of communication open. Continued access to the maritime domain provides the ability to sustain maritime shipments to the island indefinitely.

Crisis management: The United States must provide options to manage escalation should deterrence fail. If deterrence fails, this strategy provides the US president and secretary of defense a credible option to strategically defeat a maritime blockade of Taiwan without escalating the PRC's coercive action horizontally and vertically. Not executing this strategy risks either immediately escalating to direct war with the PRC, or Taiwan's forced unification with the mainland due to a successful fait accompli by the PRC.

#### **MAJOR ELEMENTS OF STRATEGY**

his strategy seeks to provide clear and specific actions tailored to Taiwan, the United States, and like-minded nations.

Actions for Taiwan: Demonstrating the Resilience to Resist

# STRATEGIC MESSAGING TO THE TAIWANESE POPULATION AND GLOBAL COMMUNITY

It is vital that Taiwan acknowledges its inherent vulnerability to a blockade scenario and demonstrates that it is focused on this enduring national security challenge. Deterrence is achieved by the CCP knowing that Taiwan, with the support of a coalition of partners, can indefinitely sustain maritime trade in the face of a nonkinetic maritime blockade.

If deterrence fails, Taiwan must realize that likeminded nations would be more likely to provide support if they can do so without directly engaging the PRC in open hostilities. While a blockade is an act of war, Taiwan's initial response must be deescalatory in nature to allow time for likeminded nations to mobilize maritime forces and merchant sealift required to indefinitely sustain Taiwan's economy.

Through effective strategic communications, Taiwan must display the will to resist a PRC blockade. Without the clearly demonstrated will to resist, all other efforts are obsolete. To enable global strategic communications in a crisis, Taiwan must

invest in redundant and resilient communications. It should be assumed that undersea cables will be degraded, eliminated, or held at risk by the PRC. Having the capability for resilient communications would be vital to communicating with world leaders, galvanizing support, and coordinating response actions.

# EMBRACE AN ASYMMETRIC DEFENSE STRATEGY ENABLING INVESTMENTS IN RESILIENCE

While this strategy highlights that current factors do not support an invasion as the most likely coercive act to attempt to unify Taiwan, this is subject to change over time and is a real threat that must not be ignored. To balance resources across these two scenarios. Taiwan should focus its counterinvasion resources on asymmetric capabilities such as: mobile ASCM; portable ground-to-air missiles; rapidly deployable shallow-water defensive mining; affordable unmanned intelligence, surveillance, reconnaissance, and targeting; reserve-mobilization strategic depth; and swarming unmanned surface and air drones. Taiwan should maintain investments in defensive mine countermeasure (MCM) capabilities. These would be needed to ensure the waters immediately surrounding deepwater ports of entry are clear of PLA offensive sea mines.

A focus on asymmetric capabilities to counter an invasion frees resources for investments in counterblockade resiliency measures, such as energy and food stockpiles, cyber defenses, resilient communications, and port infrastructure. As an island nation, Taiwan is vulnerable to a blockade; on the other hand, this geography makes an invasion challenging and that should be leveraged.

### INCREASE RESILIENCE OF ENERGY SUPPLY

Taiwan imports nearly 98 percent of its energy resources, and this is the primary vulnerability that the PRC would seek to exploit. To build a credible deterrent, Taiwan must increase energy stockpiles

and remove any loopholes that could allow for in-transit energy imports to count as what's held in reserve. There should be a focus on expanding liquefied natural gas (LNG) import terminals to increase energy optionality. Complementary to this, Taiwan should deepen ties with the US energy sector, particularly given the United States' position as a major LNG producer.

To reduce its dependance on imported energy resources and reduce the need for expansive stockpiles of coal, oil, and natural gas, Taiwan should make long-term investments in renewable energy.

### WHOLE-OF-SOCIETY RESILIENCE EFFORTS

Taiwan must focus efforts on preparing the civilian population for a blockade, including through planning on how to ration resources. Executing a rationing plan would lower the burn rate at which resources are consumed and increase the time that Taiwan can resist a blockade. Insufficient data exists on existing food reserves; this should be examined to validate that a sufficient supply is on hand for a minimum of ninety days.

Moreover, Taiwan should diversify trading partners to reduce its reliance on China, with a particular focus on the countries capable of sustaining Taiwan if confronted with a PRC blockade. Namely, this would include the United States, Japan, South Korea, and Australia.

Taiwan should also invest in physical security for port infrastructure (i.e., cranes and entry/exit channels) to deter PRC acts of sabotage. Deepwater ports of entry are a known constraint for the throughput of the resources Taiwan needs to survive. Taiwan should examine the feasibility of infrastructure investments to develop deepwater ports on the east coast of the island. Moreover, Taiwan should ensure that investments for additional ports also include required land-based infrastructure enhancements so that resources are able to flow to population centers. This would reduce the reliance on four ports that directly face mainland China and are responsible for 90 percent of all merchant

shipping traffic. Focus should also be placed on hardening cyber defenses for both the Taiwanese government and the public sector. Taiwan should evaluate the minimum regulations required for the public sector to ensure that sufficient barriers exist and to increase the difficulty of offensive cyberattacks.

Finally, Taiwan should improve reserve training and mobilization procedures. Taiwan has already increased the length of conscription, but this action must result in higher-quality training. While rehearsal of a full mobilization is not possible, exercises must be periodically conducted to validate the readiness of reserve forces that will be activated during a blockade scenario. Taiwan should also evaluate the force mix of these reserve forces. Current plans focus reserve forces on standing up an additional eight light-infantry brigades, but specialized reserve forces for the Air Force and Navy would be higher valued in a counterblockade scenario.

### Actions for the United States: Maintaining the Capability to Respond

### STRATEGIC MESSAGING TO ASSURE TAIWAN AND DETER THE PRC

While Taiwan will present a hard target through its own investments in resiliency and a sustained ability to resist the PRC's coercive actions, a US strategy must demonstrate the ability to break through the PRC's blockade. If deterrence fails and a blockade is attempted—which is considered an act of war—senior leaders will likely want options to manage escalation. During a nonkinetic blockade, such management would primarily be accomplished through US Navy and maritime shipping capacity to sustain Taiwan's economy.

The United States must develop a strategic-messaging plan to counter the PRC's false narratives justifying a blockade of Taiwan. Information dominance would be critical to gaining the support of like-minded nations and forming a coalition supportive of Taiwan. The United States must be prepared to declassify intelligence as needed to support this strategic-messaging plan. It must also continue efforts to ensure that crisis communication pathways with the CCP are established and maintained. Before a blockade, engagement is important to ensure that US redlines are understood, with the goal of deterring coercive action and preventing CCP miscalculation. During a blockade, the intent of the US and coalition response must be clearly communicated to the PRC-this is vital to the safe passage of merchant shipping escorted by Navy warships. The CCP must understand that the responding coalition does not desire confrontations with their maritime forces, but will respond to hostile and coercive acts as needed.

#### FORWARD PRESENCE IS FOUNDATIONAL TO DETERRING A BLOCKADE

Alongside its allies and partners, the US military should increase active campaigning efforts by executing combat-credible, visible, and continuous forward presence in the Western Pacific. Given the geography that greatly favors the PRC and the tyranny of distance for responding forces, those forces already operating forward could be the only forces on scene for approximately the first thirty days of a "no-notice" crisis. The US Navy must increase the number of forces operating forward by reducing existing warship depot-maintenance backlogs, and explore additional locations in the Western Pacific for forward deployment of maritime forces.

Additionally, the US Navy should increase the frequency of exercises for Naval Cooperation and Guidance for Shipping (NCAGS) Navy Reserve Units in the Indo-Pacific. These organizations will be critical to coordination with merchant fleets, and interoperability with allies and partners must be the focus of these exercises. The NATO shipping center, which is well-established in the European theater, should be used as a model.

Consistent with existing policy, the United States should expand military-to-military training with



LCU-1633 exits USS Tortuga in the South China Sea. Source: US Navy photo by Amanda S. Kitchnera

Taiwan. Interoperability and communication pathways with Taiwan will be vital in a crisis. Before a coercive act occurs, both parties must understand what they need from one another.

## INCREASE FOCUS ON MERCHANT SHIPPING INDUSTRY

The US DOT should establish a plan to rapidly reflag merchant ships to either the United States or a responding coalition nation by maintaining a registry of candidates for reflagging.<sup>68</sup> In a crisis, congressional support will be required to waive some laws and regulations regarding nationality of crews, safety, and environmental protection. Emergency supplemental appropriations will be needed for

war-risk insurance premiums or to subsidize the possible replacement of responding merchant ships.

Congress should enact legislation that supports the shipbuilding industry, recognizing it as vital to national security and taking action to expand US domestic shipbuilding capacity. The goal of this legislation should be to increase the number of merchant vessels eligible for the MSP program and reduce the response time of the merchant-shipping industry during a PRC blockade of Taiwan.

Moreover, the United States should continue to make investments in NDRF strategic-sealift recapitalization. Congress should support the purchase of used strategic-sealift vessels so that this needed

<sup>68</sup> Jasper Campbell and James Martin, "Prepare the Logistics to Break a Chinese Blockade of Taiwan," *United States Naval Institute Proceedings* 148, no. 10 (2022): 1,436.

recapitalization can occur efficiently, and DOD resources can be spread to other priorities. DOD and DOT should also study the mix of vessels in the NDRF needed to account for support in a Taiwan blockade. The RRF should include T-AOT-class vessels (petroleum tankers), as they will be needed in the initial stages of a counterblockade response.

## US NAVY CAPACITY ENABLES MERCHANT-SHIPPING THROUGHPUT

In a challenging fiscal environment, US Navy senior leadership has correctly prioritized nuclear recapitalization, readiness of the force, and lethality over capacity—the number of battle-force ships in inventory. Additional resources are needed to grow the fleet and strengthen deterrence with the battle-force ship capacity that is clearly able to counter a PRC blockade of Taiwan.

The US Navy, with support from the Office of the Secretary of Defense (OSD) and Congress, should reverse plans to decommission battle-force ships significantly before their expected service life. This action would increase projected Navy force structure from 291 to 297 battle-force ships by 2028.<sup>69</sup> Early decommissioning of forces such as the littoral combat ship before delivery of small-surface combatant replacements of the Constellation-class frigate increases risk in terms of fleet capacity for the next decade in deterring and defeating a nonkinetic blockade.<sup>70</sup> This does not, however, apply to ship classes such as the Ticonderoga-class cruiser that are at or beyond their expected service lives.

With enduring bipartisan support, the United States should increase and sustain investments in US Navy shipbuilding to achieve the current force-structure goal of 373 battle-force ships. Increased procurement rates should focus on small-surface combatants and combat-logistics forces, while sustaining procurement rates for other classes of battle-force

ships. A near-term goal should be to increase Constellation-class frigate procurement to four per year as quickly as the shipbuilding industrial base can support this level of production.

The United States should also continue investments in the enabling capabilities of MCM, ISR, and cyber. MCM capabilities will be critical to identifying PRC minefields so that maritime shipping can avoid those waters. ISR capabilities are vital to document PRC coercive actions in the areas surrounding Taiwan in real time, as well as to support strategic messaging. Cyber capabilities are needed to defend critical networks, support Taiwan's cyber defenses, and carry out offensive cyber actions directed at the PRC in an effort to disrupt command and control of blockade forces. Utilizing cyber effects, any disruption to the PRC's centralized command and control at the Central Military Commission will degrade China's ability to sustain the blockade.

## ECONOMIC STATECRAFT SUPPORTS DETERRENCE

The US Department of Commerce and the Office of the US Trade Representative should execute strategic supply-chain decoupling and derisking from the PRC in areas that are vital to US national security interests. These actions will manage the risk of the PRC having leverage over a US response through economic aggression and protect critical advanced technology.

The US Department of Treasury should have a plan in place for targeted sanctions against the PRC that limit its access to global financial markets and critical technology. Expanding trade between the United States and Taiwan would benefit both economies and reduce Taiwan's trade reliance on the PRC, which would further benefit Taiwanese security.

<sup>69</sup> Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2024, Office of the Chief of Naval Operations, Deputy Chief of Naval Operations for Warfighting Requirements and Capabilities, April 2022.

<sup>70 &</sup>quot;Highlights of the Department of the Navy FY 2023 Budget," Secretary of the Navy, 2022, https://www.secnav.navy.mil/fmc/fmb/Documents/23pres/Highlights\_Book.pdf.

# Actions for Like-minded Nations: Providing Enabling Capabilities and Enhanced Capacity

## LEVERAGING EXISTING STRATEGIC AMBIGUITY TO STRENGTHEN DETERRENCE

Like-minded nations should maintain existing policies that govern their bilateral relationships with the PRC, but must also be wary of the PRC's diplomacy efforts, which aim to shape perceptions of Taiwan in international organizations. It is vital that like-minded nations are aware of these deliberate actions and, where able, advocate for peace in the Taiwan Strait. These bilateral relationships, especially with Europe, are valued by the PRC. Deterrence is strengthened by the PRC being fearful of damaging its existing bilateral relationships.

It is unclear exactly which like-minded nations would join a coalition supporting Taiwan and the level and type of support that would be provided. Allies and partners are a center of gravity for the United States, and the United States must dedicate significant effort to expand and deepen these relationships and support its enduring military advantage. To accomplish this, the United States must continue to demonstrate a desire to be the partner of choice in the Indo-Pacific region. These relationships will be vital in seeking support to deter and, if deterrence fails, defeat a PRC blockade of Taiwan.

## MILITARY ENGAGEMENT IN THE WESTERN PACIFIC

US allies and partners should focus their military efforts on visible and combat-credible presence through cooperative operations and deployments in the Indo-Pacific region. These operations should

be more frequent with Indo-Pacific countries, but also include deployments with NATO countries. Their focus must be to ensure the interoperability of forces and generate a shared understanding of challenges in the region.

Additionally, military forces should contribute to shaping efforts in the information domain that highlight the PRC's malign gray-zone activity, as an expansion of the PRC's well-known use of gray-zone activity would serve as a precursor to a blockade. Contributions to strategic messaging that document coercive PRC actions are vital to ensuring that the worldwide community will view a maritime blockade as an act of war. There must be unity in communicating that the PRC and its maritime forces are required to adhere to internationally recognized standards of law, seamanship, and communications.

If deterrence fails, but allies and partners choose to avoid direct confrontation with the PRC, they will be leveraged to backfill US worldwide military commitments in Europe and the Middle East as US forces are surged to the Pacific.

## EXPANSION OF MARITIME CAPACITY AND ENABLING SUPPORT

Clear conversations should be conducted about the enabling roles and support that like-minded nations will be asked to play and provide if they choose not to be involved in a direct confrontation with the PRC. These enablers include access and basing for ports of entry and the resources needed to resupply merchant shipping that is participating in breaking the blockade.

Like-minded nations must be prepared to quickly reflag merchant shipping to either the United States or their own country. This capacity will be needed to demonstrate the ability to sustain Taiwan's economy indefinitely. The most important countries for this effort would be those that rank in the top ten of DWT ownership:

Greece, Japan, South Korea, Germany, Norway, and the United Kingdom.<sup>71</sup>

Defense-modernization efforts of like-minded nations should continue and, where able, support Taiwan's investments in defense and resiliency efforts. Consistent with individual national policies, these like-minded nations should utilize foreign military sales, excess defense-article transfers, and defense-financing agreements to strengthen Taiwan's deterrence.

## ECONOMIC STATECRAFT SUPPORTS DETERRENCE

US allies and partners should execute strategic economic and supply-chain decoupling and derisking from the PRC in areas that are vital to individual countries' national security interests. These actions will manage the risk of the PRC having leverage over a coalition response through economic aggression, and will protect critical advanced technology.

Through economic statecraft, like-minded nations should also have plans ready for targeted sanctions against the PRC that prevent access to global financial markets and critical technology. US allies and partners must be made aware of the global economic impacts that will impact every economy if the PRC chooses to act. Even if like-minded nations do not want to confront a PRC blockade of Taiwan, they will experience the economic consequences.

Lastly, like-minded nations should increase trade with Taiwan and consider free-trade agreements. The current economic leverage possessed by the PRC over Taiwan will be decreased by deepening international trading relationships between Taiwan and like-minded nations.

If deterrence fails, supplemental funding will be needed from US allies and partners to subsidize wartime insurance premiums or guarantee replacement of any coalition-participating merchant vessel.

<sup>71 &</sup>quot;Review of Maritime Transport 2022."



Ships and submarines participating in Rim of the Pacific exercise 2012 sail in formation in the waters around the Hawaiian Islands. Source: US Navy, Keith Deviney.

### **GUIDELINES FOR IMPLEMENTATION**

ue to the challenges presented by a blockade scenario, implementing this strategy will require a significant level of effort to integrate actions and a significant commitment of resources.

Improved execution of integrated deterrence is required. With the challenges presented by a PRC blockade of Taiwan, flawless execution of integrated deterrence by the United States will be vital to prevent the PRC from acting. This strategy requires integrated actions across the full spectrum of conflict, with allies and partners, across theaters, and across domains. Because of the complexity of the counterblockade scenario and the focus on clear strategic communication, the National Security Council (NSC) should be the lead organization for this strategy. As demonstrated with the effective US response to the Russia-Ukraine war, the NSC should retain responsibility as the lead or

ganization when a whole-of-government response is required below the level of armed conflict. This is different than a counterinvasion scenario with open hostilities, where the supported organization would likely be delegated to US Indo-Pacific Command.

If deterrence fails, a quick and decisive response is vital. Should this strategy fail to deter a PRC blockade of Taiwan, the time for strategic ambiguity is over. Due to Taiwan's near-complete reliance on maritime trade to sustain its economy, a quick and unambiguous US decision will be required to sustain Taiwan's economy indefinitely prior to Taiwan exhausting its limited energy reserves. The tyranny of distance in the Pacific also results in needing to quickly surge additional naval forces to the theater with NDRF strategic-sealift forces while beginning the process to reflag merchant shipping. Without indications and warnings providing insight into the

PRC's intentions to execute a blockade, the forward-deployed US forces in the Western Pacific could be the only forces available for, approximately, the first thirty days of a blockade.

A quick decision by the United States would also inform Taiwan's response. Without clearly knowing where the United States stands, Taiwan would likely be forced to either respond to the blockade as an act of war with open hostilities or accept a fait accompli and be forced to negotiate a unification agreement with the PRC. A decisive US response would also inform the actions of like-minded nations that could support a coalition response.

US actions will remain consistent with its existing One China Policy. The PRC will criticize the implementation of this strategy, claiming that the United States is inserting itself into a sovereign matter and causing a confrontation. However, this is simply not factual: there is no greater desire for the United States and like-minded nations than to maintain peace and stability across the Taiwan Strait and have the PRC and Taiwan peacefully negotiate disagreements. This proposed strategy to deter and, if deterrence fails, defeat a PRC blockade of Taiwan is consistent with the US government's existing One China Policy with a legal basis grounded in the Taiwan Relations Act of 1979, US-PRC Joint Communiques of 1972, 1978, and 1982, and President Reagan's Six Assurances to Taiwan of 1982.72 This strategy does not advocate for changing the existing One China Policy. Strategic messaging supporting implementation of this strategy must reinforce this fact.

Additional funding is needed for resiliency efforts and maritime force structure. While the overall magnitude of defense spending is the highest in US history, defense spending remains near historical lows as a percentage of GDP.<sup>73</sup> This allocation of resources to national defense is not consistent with what is needed to compete with the PRC in this de-

cade and beyond. There is a clear need to break through the bow wave of deferred modernization and needed force-structure capacity increases. It is clear that it is cheaper to deter a war than to fight a war with the PRC.

Defense planning must account for multiple scenarios. With the near-singular focus on an invasion of Taiwan, risk has been generated concerning the ability to counter a PRC blockade of Taiwan. When conducting defense foresight to determine where to focus defense war-gaming, experimentation, and analytic resources, all possible scenarios must be considered. Having the national security community coalesce around a single scenario generates risk. An example of this has been in the planned reduction of Navy battle-force ships. As the Center for Strategic and International Studies' Taiwan Invasion wargame found, experts have expressed concerns with surface-ship survivability in the face of the PRC's A2/AD capabilities, and a similar focus on this scenario shown in the NDS has resulted in the planned divestment of warships significantly before their expected service life.74 Current divestment plans do not account for the value of surface ships in deterring PRC coercive action and their vital role in a counterblockade scenario.

#### Focus is needed on defense-industrial base capac-

ity. In a blockade scenario, maritime capacity is a vital factor in being able to deter and, if deterrence fails, defeat such coercive action. For the past thirty years, US shipbuilding capacity has contracted to historic lows. This is an industry that is vital for national defense and cannot be rapidly restored to respond to a crisis in the Pacific at the pace of relevance. Naval forces take years to build and decades to scale. Recent defense budgets have focused resources on record-high levels of R&D to modernize the force, but some of this funding should be reallocated to procurement to provide stable production levels for the defense-industrial base.

<sup>72</sup> Lawrence and Campbell, "Taiwan: Political and Security Issues."

<sup>73</sup> Congressional Budget Office, The Budget and Economic Outlook: 2023 to 2033, February 2023, 4.

<sup>74</sup> Cancian, Cancian, and Heginbotham, "The First Battle of the Next War."

#### **RISKS AND CRITICISMS**

potential conflict between the PRC and Taiwan is the most discussed national security problem of this decade, and there are many conflicting views of how hostilities would manifest. In crafting this strategy, certain risks, criticisms, and alternatives were considered.

#### **Risks**

Capacity investments take away from modernization. If additional resources are not allocated to national defense to support additional force structure, then trade-offs could result in reductions to modernization efforts. Current budgets contain historically high levels of R&D while reducing existing force structure, and some rebalancing is probable. While there are risks associated with slowing some modernization efforts that mostly do not deliver until the 2030s, this action is beneficial to reducing the near-term risk of a blockade scenario.

#### Valuing manned over unmanned surface vessels.

While unmanned surface vessels and the transition to a hybrid fleet are vital to US Navy modernization efforts, they are not factors in a near-term blockade scenario. Significant technical maturity is required for these vessels to operate in a scenario in which they would be attempting to break a blockade.

#### **Criticisms**

Lack of focus on the air domain. This strategy primarily addresses a maritime blockade, and thus does not focus on the air domain or a potential PRC no-fly zone. Due to the massive number of resources that require transport, it is impossible for the air mobility and logistics to be sufficient to sustain Taiwan's economy indefinitely, but some critical supplies such as medicines could be airlifted. The specific actions to respond to a PRC nofly zone are extremely similar to the response to a maritime blockade. If the PRC were to impose a no-fly zone over Taiwan, the United States would message that it will not comply, and then US air transport planes would need to be escorted by fighter jets.

Possible PLA areas of weakness. In assessing the PRC's weaknesses, analysts have focused on the possible inability to conduct joint operations, anti-submarine warfare, long-range targeting, at-sea resupply far from home waters, and a lack of recent combat experience.<sup>75</sup> However, these weaknesses are not factors in the ability to execute a blockade of Taiwan. Specifically, the ability to execute joint operations is not a concern, as a blockade focuses efforts on a single domain that would require limited coordination with other forces within the PLA.

<sup>75</sup> O'Rourke, "China Naval Modernization."

No analysis specific on force-structure requirements. This strategy is not a war-game or tabletop exercise that seeks to predict specific outcomes or timelines. Rather, this strategy should inform these analytic efforts and further analysis of force-structure requirements. Based on the objectives set in the 2022 NDS, the US Navy has established a force-structure requirement of 373 battle-force ships and the existing legislative requirement is 355. Current force-structure plans call for a reduction from 293 battle-force ships in FY 2024 to 291 in FY 2028.76

No discussion of "mothballed" reserve fleet. This strategy paper focuses on active battle-force ships and does not focus discussion on decommissioned ships that are out of commission and in reserve. This is due to the quick response timeline that will be needed to demonstrate that the United States can sustain Taiwan during a blockade. Restoring these ships to active service would require extensive maintenance overhauls that make their response timeline a nonfactor. Additionally, the US Navy does not have the existing depth of the correctly trained personnel required to quickly bring these ships back into the active fleet.

#### CONCLUSION

s has been stated in the most recent NDS, the United States is in a decisive decade and the decisions made today will have impacts for the decades to come. In no other circumstance are these statements truer than in strategic competition with the PRC. In developing a strategy for success in this period, it is vital not to suffer from a failure of imagination. Narrowly focusing on an invasion scenario jeopardizes the ability of Taiwan, the United States, and like-minded nations to counter other scenarios. Implementing this strategy—with a focus on deterring and, if deterrence fails, defeating a PRC blockade of

Taiwan—is the appropriate method to reduce this risk. This strategy alone is not enough, and must be nested within the larger concept of integrated deterrence and Indo-Pacific strategy.

Due to the foundational elements of a Taiwan scenario, the risk of a maritime blockade will never go away and must continually be readdressed. Taiwan must focus its efforts on building resilience to resist, while the United States maintains the capability to respond, and like-minded nations stand ready to provide enabling support and additional maritime capacity.

<sup>76</sup> Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2024.

#### **ABOUT THE AUTHOR**



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A command screened surface warfare officer, he was deployed four times to the Indo-Pacific, participated in NATO exercises in Europe, and was stationed overseas as a member of the forward deployed naval forces in the Kingdom of Bahrain. His division officer assignments were as main propulsion division officer in USS Chafee and as navigator in USS Chung-Hoon. During his initial shore assignment, Jestrab served as executive officer for the Navy Reserve Center Raleigh in North Carolina. His department head tours were as operations officer in USS Gladiator and as operations officer in USS Bunker Hill. During his follow-on shore assignment, he served as program analyst for surface warfare and shipbuilding in the Office of the Chief of Naval Operations, Programing Division. In this assignment, he supported the development of the US Navy's annual fiveyear investment program and defended it at the Department of the Navy and the Office of the Secretary of Defense, as well as through the congressional-approval process.

Jestrab is from the Pacific Northwest and was born in Seattle, Washington. He graduated from the University of Memphis with a bachelor of science in sport and leisure management and was commissioned through the Navy Reserve Officers' Training Corps program. He earned a master of business administration from the University of North Carolina at Chapel Hill's Kenan-Flagler Business School. He is currently pursuing an executive master of arts in international studies at the University of Washington through the Navy's politico-military Master's scholarship.



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