The Challenges of Deterrence in the Taiwan Strait
Recommendations for U.S. Policy

Oriana Skylar Mastro
Center Fellow, Freeman Spogli Institute for International Studies and Courtesy Assistant Professor of Political Science, Stanford University
Non-Resident Senior Fellow, American Enterprise Institute

April 26, 2023
Chairman Gallagher, Ranking Member Krishnamoorthi, and members of the Select Committee:

Thank you for the opportunity to present my views on how to enhance near-term deterrence and our own resilience against the PRC’s attempts to take Taiwan by force. The growth in Chinese military capabilities is well-documented, so I will not take time to summarize it in this testimony. Moreover, this committee has demonstrated an understanding that there is a possibility that China will attempt to take Taiwan by force. My article, “The Taiwan Temptation,” provides more concrete evidence to that fact if it is of interest. Instead, in this testimony, I want to focus on the challenges we face in countering (and thus deterring) China, including some fallacies; my recommendations for how to mitigate US defense challenges in deterring China from attempting a fait accompli; and my four rules for deterrence.

**U.S. Operational Challenges in Preventing a Chinese Fait Accompli**

China does not want to fight a protracted war against the United States at this stage of development. The only situation in which it will initiate a war over Taiwan is if the leadership believes it can move quickly and take the island before the United States has time to respond (I’ll address some caveats to this later on).

The main vulnerabilities the United States experiences in its military power in Asia stem from the fact that it is not a resident power in Asia and thus is attempting to project power across vast distances. The emerging U.S. way of war exhibits several dependencies that China’s A2AD strategy targets. First and foremost, the United States relies on other countries for base access, while China can rely on home bases. This is problematic for several reasons. The number of bases the United States has access to in the first island chain has atrophied since the end of the Cold War, while China has infinite possibilities for basing options on its massive soil. In practice, the result is that the United States has one air base, Kadena Air Base in Okinawa, within combat range of Taiwan, while China has thirty-nine. Each air base can only support so many aircraft (Kadena can house about eighty aircraft, only fifty-four of which are fighters. And even here, the U.S. Air Force has also started to pull many of these aging aircraft out of the base, replacing them only with a temporary unit of more modern F-22s), which translates into China being able to generate far more sorties than the United States.

But the biggest issue is that the United States may not be able to get any aircraft into the sky; all U.S. forward bases in Korea and Japan, including Okinawa, are highly vulnerable to Chinese attack, most likely with ballistic missiles and ground- or air-launched land attack cruise missiles. China’s missile-launch capabilities in the region are staggering. A 2015 RAND report estimated that air force bases in Japan and South Korea, including Kadena, could see thousands of Chinese missiles launched at them. Even Andersen Air Force Base on Guam is within striking range of hundreds of Chinese missiles launched from bombers and fighters. Specifically, the J-20, deployed in 2017, greatly increased China’s ability to strike regional air bases, logistical
facilities, and other ground-based infrastructure. Similarly, Chinese H-6 bombers have undergone several refits enabling them to strike targets as far as Guam.

China has long been aware of the vulnerability of the U.S. bases in the Asia-Pacific region and Washington’s potential efforts to strengthen its bases. Media cite the 2008 RAND simulation, which shows that thirty-four Chinese missiles could damage 75 percent of the aircraft in Kadena, and call attention to Washington’s efforts to build up forces beyond the range of Chinese missiles. The People’s Daily Online and China News republished the Global Times report on a 2014 National Interest article that argued Washington’s Asian military bases were the U.S. Army’s greatest weakness, due to China’s increasing missile capabilities. The articles specifically mentioned that the Yokosuka and Sasebo naval bases in Japan would become targets for Chinese missiles, leaving U.S. maritime strike forces in the region isolated.

While the degree of damage depends on China’s strategy, the impact on the United States’ ability to operate in the region after an attack would be severely limited. U.S. bases could be closed for more than six weeks, with almost all aircraft damaged or destroyed. The range of China’s destructive capability is only increasing. Indeed, China’s cruise and ballistic missile programs, the heart of its long-range precision strike capability, are the most advanced and active in the world; China has deployed thousands of cruise missiles, 600 short-range ballistic missiles (SRBMs), and more than 500 medium-range ballistic missiles (MRBMs) capable of conducting precision strikes against land targets and naval vessels out to the first island chain. China’s MRBMs can extend PLA’s range to 1,000–2,000 kilometers, and new intermediate-range ballistic missiles (IRBMs), including the DF-26, of which China has approximately 250, extend operational ranges to 3,000 km. These are capable of precision attacks on Guam and U.S. carrier battle groups operating beyond the first island chain, in the Indian Ocean, or in the South China Sea.

According to the Pentagon’s annual reports to Congress, China’s ICBM count grew from 45 to 300 missiles between 2010 and 2022; IRBMs grew from 20 to 250; MRBMs grew from 115 to 500. Land-attack cruise missiles and SRBMs actually decreased during this time; however, this might be due to China’s replacing aging systems with newer, more sophisticated variants. China’s missiles have improved dramatically in terms of quality as well as quantity. For instance, the DF-16, which only entered service in 2015, is nearly six times more accurate than the DF-15.

In addition to its forward bases, the United States also projects power into the region from out-of-area locations. A classic example is the aircraft carrier—five of which are assigned to the Indo-Pacific region, with two home-ported in San Diego, two home-ported in Washington State, and only one ported in the region, in Yokosuka, Japan. Aircraft carriers work to project power by geographically unlocking air superiority, allowing air forces to operate even without nearby airbases. The spillover effects of air superiority, or even competitiveness in the air, are many. For instance, during World War II, American aircraft carriers enabled success in critical naval battles, provided air support to make possible amphibious landings, and were able to protect shipping lanes despite the vastness of the Pacific Ocean and incidents being far away from
American airbases. The 2022 film *Top Gun: Maverick* shows how the carrier can be used for deep-strike operations. In the movie, the pilots take off and return to a carrier off the coast of an unnamed hostile country without any concern for the carrier’s safety. This makes sense, as most countries lack the ability to target a moving ship at sea from their shores, especially one as heavily defended as a carrier.

But this is not the case with China. The PLA has terminally guided antiship ballistic missile systems, most notably the DF-21D, that reportedly can engage adversary surface ships up to 1,000 nautical miles from the PRC coast, cued by increasingly sophisticated surveillance and attack networks, holding at risk Tokyo, Manila, Pusan, and targets throughout the South China Sea. With a combination of ballistic missiles, supersonic cruise missiles, rocket torpedoes, and rocket-propelled sea mines laid by submarines, China can destroy or render operationally ineffective all the aircraft carrier strike groups that the United States has in the Indo-Pacific region without levying comparable forces. U.S. commanders are now reluctant to send carriers into a conflict, making it difficult for the United States to establish air superiority.16

Even if U.S. aircraft manage to get in the air despite the threat to aircraft carriers and regional bases, they are still threatened by a robust Chinese air defense system. Any air defense system encompasses two main functions: first, warning systems, including radar networks and other scanner, and second, air defense capabilities, including surface-to-air missiles (SAMs) and fighter deployments. Chinese radar systems are strategically placed to overlap and are on the artificial islands it built in the South China Sea, extending early-warning range further into the Pacific.17 In terms of SAMs, China has continuously increased its deployments of long-range advanced missiles, deploying the HQ-9, the HQ-9B, and the Russian-built SA-10 and SA-20 missiles. All Chinese SAM missiles currently in use can intercept aircraft and also cruise missiles. The overlapping defenses increase the chance of kill and make their system more robust.18

Indeed, such capabilities will make it difficult for the United States to surmount Chinese air defenses with its usual set of tools (e.g., jamming, standoff, and stealth weapons) in the case of a Taiwan contingency. China’s Integrated Air Defense System (IADS) is sophisticated enough to prevent the United States’ fourth-generation, nonstealth aircraft from operating over and near the Chinese mainland. As former senior intelligence officer Lonnie Henley told Congress, by denying the United States the ability to conduct air operations over the Taiwan Strait, largely thanks to its IADS, China could maintain a blockade of the island and continue launching its planes to strike targets on Taiwan or U.S. Navy ships indefinitely.19 Although the United States would do better in conflicts surrounding more remote areas such as the Spratly Islands, Chinese capabilities such as advanced SAM systems and defensive combat air patrols could still stave off an easy defeat.20 In both scenarios, the U.S. would have to rely on fifth-generation stealth technology and standoff weapons to strike Chinese targets on the mainland, but China is also making progress with the HQ-19.21 Although it is unclear whether Chinese air defense could maintain a constant track on advanced U.S. stealth aircraft, the United States would be forced to operate at higher altitudes and disable or destroy antiaircraft capabilities with long-range missiles before being able to establish regional air superiority.22
Because the United States would largely be projecting power from outside the first island chain—from places like Guam, Hawaii, or even the continental United States—its military also relies on many “enablers,” or augmented capabilities that directly impact mission accomplishment. These are assets that main platforms or units need to engage in operations. These enablers also create vulnerabilities that China can exploit to hurt the U.S. ability to project power. For example, bombers and fighters need aerial refueling to engage in long-range operations, and thus they need tankers to carry and provide the fuel. But tankers are vulnerable to being shot down by Chinese surface-based defenses and fighters. Thus, China would compel the United States to refuel farther away from the conflict zone, reducing the amount of combat time fighters and bombers have (since they are flying farther and farther to get more fuel).23

Chinese analysts quickly became aware of the U.S. dependence on space-based assets and services for commanding deployed troops, passing ISR data and enabling precision targeting and engagement.24 Conducting network attacks, blinding, dazzling, or even destroying satellites with a kinetic kill vehicle like an antisatellite could delay the deployment of U.S. military forces by disrupting communications and denying information vital for determining the location and the movement of forces.25 To paraphrase an authoritative Chinese military source, cyber operations can be used to disseminate false information, simulate various combat operations of the troops to mislead the enemy into wrong decisions, disrupt the enemy’s information obtainment, paralyze the enemy’s command-and-control systems, or access the enemy’s internet system and cause information destruction.26 Indeed, Chinese sources describe deterrence in outer space as “the first choice of future deterrence” since space is not limited by politics or geography and could “project the power of deterrence to every corner on the surface of the earth.”27

Given these realities, Chinese experts have advised that the PLA should emphasize military-civil fusion and develop offensive and defensive cyber capabilities that target enemy vulnerabilities.28 As a result of this top leadership focus, China evolved from “a position of relative backwardness in electronics in the 1990s” to “conducting large-scale cyber operations abroad, aiming to acquire intellectual property, achieve political influence, carry out state-on-state espionage and position capabilities for disruptive effect in case of future conflict.”29 China is now among the top five leading source countries for denial-of-service and web application–based global cyberattacks.30

China has also proactively exploited the absence of established norms in space to put forth its own that would constrain the United States and cater to its strengths. For example, China’s Prevention of the Placement of Weapons in Outer Space and the Threat or Use of Force Against Outer Space Objects (PPWT) proposal would limit offensive weapons in space but does little to restrain antisatellite weaponry.31 The United States, which sees little to gain in an agreement that would limit its offensive capabilities while leaving China and Russia’s antisatellite missiles untouched, continues to oppose the PPWT.32 China has also pushed for incorporating concepts such as “cyber sovereignty” through the United Nations and its Digital Silk Road initiative. The term means that states are free to regulate their information technology industries in ways they see fit, justifying China’s stringent censorship of its internet.33
Recommendations

The following recommendations are based on three main assessments about how to deter a war across the Taiwan Strait. First, cost imposition is less impactful than deterrence by denial.34 Second, there is no indication that Xi Jinping needs to take Taiwan by 2027 to secure a new term. I see 2027 as a no earlier than date, not a deadline. Third, Chinese power is not in for a hard fall, making it now or never.35 In other words, China can be deterred. Below are some options for achieving this—none of which are easy, and all of which are far from guaranteed.

More Access, Basing, and Overflight

The U.S. military force’s posture needs to be completely overhauled. There is no way to adequately defend our bases from Chinese attack. Let me say that again: there is no way to ensure our bases are adequately defended. If China wants to render them inoperable, it can (operationally speaking).

Given the difficulty of adequately defending its bases and assets against Chinese attack, the best strategy is dispersal, redundancy, and resilience. The best means of convincing China not to give that a try is to show them that even after absorbing Chinese attacks, the United States can still operate and achieve mission objectives. In other words, the focus is showing China that its attacks will not have the operational benefits it hopes for. This is what I consider resilience. One way of achieving this goal is redundancy—if we are fully reliant on any asset or location to succeed, it becomes too juicy of a target. In space, we need smaller, distributed and redundant space infrastructure. In terms of basing, we need to operate from more locations. Congress should call upon the Department of Defense to do a real global posture review—one in which we start with the threats and goals the U.S. military is hoping to achieve, and wiping the map clean, we evaluate where would be the ideal places to base what types of assets. Political feasibility is important, but an analysis of what is operationally ideal is important before this factor is considered.

Negotiating access agreements and signaling to China that countries will support U.S. military operations in case of a contingency should be a top priority for the State Department. It is my sense that it is currently not, and there is insufficient coordination between DoD and State on this. Countries in the region are reluctant to get involved, but in practice they are choosing China when they choose neutrality, because that is all China needs to win. Access, basing, and overflight (ABO) will be most forthcoming if it is clear that China is the aggressor and Beijing is unable to take Taiwan quickly. U.S. leaders should avoid political maneuvering that does not improve the operational situation and must ensure the country can respond quickly and with minimal warning if China launches an attack on Taiwan.36 In other words, Congress needs to make fewer trips to Taiwan and more to other countries in the region.

Two final points on basing. In a recent trip to Japan, where I met with high level officials, I was reassured that the Japanese would consider an attack on Kadena to be an attack on Japan. However, two points are still concerning. First, before Japan would allow the United States to
use its bases in a Taiwan contingency, there would be a domestic consultation process. It is not clear what this process is and how long this takes. While there are reasons not to discuss this issue in the public domain, **U.S. officials need to make it a priority to clarify the process with Japanese counterparts and ensure the process of permission to use U.S. bases to defend Taiwan would take no more than 2-3 days.**

On the new bases in the Philippines, this is one of the most positive developments in deterrence to date. Only 500 kilometers from Kaohsiung, Taiwan and sitting on key sea lines of communication in the South China Sea, the bases are a step towards regional readiness in the event of a confrontation. However, how successful it is depends on what the United States puts at the bases. I suspect that they might be Army-run; this is important for logistics but not sufficient for the types of firepower we need to get in the theater quickly. Ideally, there would be more airbases as well as submarines positioned in the northern Philippines. Congress should ensure that they are consulted throughout the process to make sure the right posture is put at these new Philippines locations.

**More Mass on Targets**

Having more locations from which to operate will mitigate the problem of Chinese attacks but will be insufficient to deny China the capability to take Taiwan. Doing so would require the United States to hit Chinese ships as they make the one hundred mile voyage to Taiwan’s shores.

Even if by some miracle the United States’ power projection system survived an initial Chinese attack and the majority of its forces were within targeting range of the Taiwan Strait, the United States does not have the type and number of precision-guided munitions necessary to enfeebles enough Chinese ships to put the operation’s success at risk. A 2021 report, written before the Russia-Ukraine war, warned Congress that the services were buying low quantities of these weapons despite the high demand that any conflict would place on U.S. stockpiles. For instance, in its April 2022 procurement request, the U.S. Air Force requested fewer than two hundred long-range anti-ship missiles (LRASMs), while the navy requested fewer than 450. When asked by reporters why the air force prioritized long-range standoff weapons designed to hit fixed, rather than surface, targets, an official replied that the service was not focused on hitting naval targets. The United States also fields the Harpoon anti-ship missile, the Maritime Strike Tomahawk, the Naval Strike Missile, and the ground-based High Mobility Artillery Rockets System (HIMARS, capable of firing antiship missiles). But here too, the United States is not buying enough. The lone exception might be the HIMARS, of which the U.S. Army hopes to procure five hundred by 2028, just barely in time for when the risk of invasion may begin to rise dramatically.

Consider the LRASM a useful example of the deficiency in U.S. procurement plans. Capable of being launched from air or ship and with a range of over three hundred kilometers, the LRASM represents one of the best options for striking Chinese naval and logistics vessels in a cross-strait invasion. PLA analyses estimate that China would need between 550 and 700 logistics ships to transport men and materiel across the Taiwan Strait. Open-source reports suggest that China
could pull from nearly two thousand civilian ships currently suited for mobilization. Under a best-case scenario—in which all of the US Air Force’s LRASMs and bomber fleets survive an initial Chinese missile strike, each LRASM evades China’s impressive antiair defenses, and each missile scores a killing blow against its target—the air force’s paltry 179 LRASMs would barely put a dent in this logistics fleet (not to mention its navy’s surface combatants). This is likewise for the navy, which would only bring another 450 missiles to the fight. Adjust these overly optimistic conditions by assuming that half of the LRASMs survive a first strike and that only half of those missiles find a home, and you are left with 157 missiles on target. As one report notes, with only 179 missiles, the air force could only fly nine B-52 sorties or seven B-1 sorties. With each LRASM costing around $4 million, buying five times as many missiles over the next five years would cost the United States about $13 billion, representing just 1.5 percent of the amount Congress granted the military for 2023 alone.

The U.S. defense industry cannot support the type, amount, and pace of production needed. The United States also faces a backlog of nearly $19 billion in weapons meant for Taiwan, including hundreds of Stingers, Javelins, and Paladin guided artillery. The COVID-19 pandemic and related staffing shortages have led to much of this sclerosis. The crisis in Ukraine and tensions over the Taiwan Strait highlight the long-standing problem that the United States does not have the surge production needed. Part of the problem is that the Department of Defense (DoD) does not provide the demand to justify these companies keeping their production lines online or at least ready to be scaled quickly. For instance, because the Pentagon has not ordered Stingers since 2003, only a few foreign buyers kept Raytheon’s Stinger production lines operational.

Some experts view the U.S. Navy’s fleet of fifty-three fast-attack submarines, consisting of submarines in the Seawolf, Los Angeles, and Virginia classes, as a comparative advantage over China. PLA antisubmarine warfare capabilities are considered poor, while U.S. submarines are world class. But however poor China’s antisubmarine warfare capabilities are, American boats would be operating in a very tight environment in the Taiwan Strait and would have to face the combined might of China’s surface fleet, submarines, and airborne antisubmarine warfare assets. Procurement and maintenance problems exist here, too. According to the navy, less than one-third of U.S. attack submarines have completed maintenance on time over the past decade, and navy officials have expressed concern over how stressed U.S. submarine shipyards have become.

The United States needs to develop frameworks for better coordination and cooperation between the defense industry and the government. Operation Warp Speed (OWS), the interagency initiative that led to the rapid development, approval, and distribution of COVID-19 vaccines, could serve as an example. Defense procurement experts should study this program and determine how DoD might apply OWS’s successes to its research, development, and procurement efforts. Governments must often step in as providers of public goods when the market does not have the incentives necessary to motivate private companies to produce or provide a good or service. It might not make economic sense to train personnel and build production lines that are ultimately underutilized, but the need for a surge capacity in times of
war makes sense strategically. The U.S. government should explore options for a reserve force to produce defense equipment.

Moreover, the civil-military partnership needs to be revitalized. In the 1960s, the DoD funded about half of the country’s entire research and development budget; today, that number is just 10 percent. While this may allow the Pentagon to piggyback off technology funded and developed by private corporations, it does lessen the military’s ability to guide the nation’s overall research and development effort.51

**Leveraging Partners**

Most U.S. efforts in foreign military sales, joint training, and exercises are designed to build partner capacity. The United States, the principal weapons supplier for Taiwan, has been busy helping Taipei adopt its “Overall Defense Concept” (ODC), or what some experts call the “Porcupine Strategy.” The ODC sees Taiwan relying on high numbers of low-cost weapons such as mines, missiles, and mobile artillery systems, rather than expensive, flashy platforms such as fighter jets and submarines.52

Apart from Taiwan, the United States is helping countries across the region prepare for conflict with China. The AUKUS deal will provide Australia with nuclear fast-attack submarines, while Japan plans to buy Tomahawk missiles from the United States to bolster its long-range counterstrike capability.53 The Biden administration recently sold Indonesia $14 billion in F-15 fighter jets, which would certainly help Indonesia contest Chinese air supremacy over the South China Sea. And the Pentagon has made clear that the Philippines’ human rights issues will not impede arms sales in the future, which should become more relevant considering the new president, Ferdinand Marcos Jr., is seen as much more hawkish on China than his predecessor.54

Nowhere is building partnership capacity more important than in Taiwan’s building its own self-defense. Over the past two administrations, the United States has sold Taiwan over $20 billion in arms. These include deals for cutting-edge F-16V fighter jets, radar arrays, Harpoon antiship missiles, and Patriot missile defense systems.55 The United States has also quietly deployed special operations units to Taiwan to train its troops.56

But these actions alone do not present enough of a credible threat to Beijing. The mechanism through which this deters China is that Taiwan needs to show it can hold off long enough to allow the United States to come to its aid; then, other countries need to show the willingness to directly support U.S. military operations.

In prioritizing U.S. allyship, Japan is positioned to play the most pivotal role. It boasts the third-largest economy in the world and the second-largest population in Northeast Asia. And despite the limitations imposed by its constitution, the Japanese Maritime Self-Defense Force (MSDF) is one of the best navies in Asia. It boasts over fifty surface combatants, including eight Aegis-equipped guided missile destroyers and four helicopter carriers, two of which were converted into aircraft carriers capable of fielding advanced F-35B fighters.57 The MSDF also fields
twenty-one diesel-electric attack submarines and has commissioned two of a planned twenty-two Magami-class multi-role frigates. The MSDF’s five major bases at Yokosuka, Sasebo, Kure, Maizuru, and Ominato also provide MSDF and U.S. Navy ships with in-theater ports for repair and replenishment. The U.S. Navy’s only permanently forward-deployed aircraft carrier, the USS Ronald Reagan, is home-ported at Yokosuka. In short, Japan’s size, geography, and naval might could prove decisive in a U.S.-China conflict.

But the role of allies and partners is not relegated only to military roles. Much ink has been spilled about how Beijing would not attack Taiwan if the result were complete diplomatic and economic isolation. However, the bottom line is that there are few indications that this would be the countries’ response, especially if China took Taiwan quickly with limited casualties. The United States needs to work now to brainstorm potential sanctions packages that would be enough to set back Chinese economic growth by a significant margin. Much like we do joint contingency planning for war fighting, we need to coordinate in peacetime with U.S. allies on the steps, stages and nature of the economic sanctions we would levy together. U.S. and allied sanctions on Russia have brought that country’s GDP down by about 3.5 percent, so any sanctions package would need to far exceed that figure—and Washington must also convince countries to communicate their willingness to implement such measures if there is a Chinese use of force.

Taiwan’s Self-Defense

We need to get it right on Taiwan’s self-defense. This is the most important thing that will convince Beijing it cannot achieve a fait accompli. Within this mission, it is essential that we keep China from establishing a significant beachhead on the island of Taiwan. We may think that they should be concerned about the costs of occupation—but they are not (see my Foreign Affairs response in “Strait of Emergency” for more evidence to this fact). Therefore, the most important thing to deter a war is to convince Beijing that Taiwan will be able to keep them at bay long enough for the United States to arrive in force.

This is an exceptionally important point. We discuss Taiwan’s ‘self-defense,’ but there is no situation in which Taiwan can defend itself. It is important for the domestic discourse in the United States for Americans to understand that there is no parallel with Ukraine. There is no option in which China invades Taiwan and then United States sits back it just sells Taiwan weapons to defend itself. First and foremost, there is no way to supply Taiwan once the war starts given that it's an island, the geography is just different than Ukraine. But they are up against a much more sophisticated foe. The only option to ensure that Taiwan does not fall if Beijing attacks is direct military intervention on behalf of the United States. Both Taiwan and United States need to understand this and plan accordingly. All command-and-control, training, equipment needs to take into account the fact that the United States and Taiwan will be fighting together. This means that Taiwan has to have a greater reliance on the United States. It is this reliance that will signal to Beijing that the United States is actually coming.
Let me address some fallacies in understanding about escalation and deterrence of the Taiwan Strait. Some people might be concerned that as United States enhances training, arms sales to Taiwan, this could start the war that we were hoping to avoid. In other words, U.S. policy is leading to a self-fulfilling prophecy. It is true that if Taiwan declares independence Beijing is going to war. Though less explicitly stated, I think that if United States tried to put nuclear weapons in Taiwan or establish an official military alliance with U.S. bases in Taiwan, this would also spark a war. But anything short of this, I don't think Beijing feels compelled to start a war before they feel like they're ready. If United States is engaging in more military operations in the vicinity of Taiwan and if Taiwan is improving in their training, this is not enough to convince Beijing that it is now or never.

Even if the United States makes the changes that I lay out, these are only temporary solutions. As we get closer to Japan, China will get closer to Russia. As we build more munitions and put them in more places, China will build more munitions with the ranges to reach those places. All of the recommendations I lay out only buy us more time; there is no way to resolve the issue forever. In Beijing's mind, even if there are these improvements in U.S. position, I think it's more likely that they go back to the drawing board and decide how to defeat United States again before we are in another threat window. China will not risk a war before it is ready and before its leadership think victory is assured (as long as there is no declaration of independence or formal alliance). This means we have a lot more leeway to enhance Taiwan’s self-defense. That being said, we should do this as quietly as possible. Once Taiwan is ready, we can start signaling these new capabilities. But there's no reason to talk publicly about our hopes of improving Taiwan's defense if that defense has not been improved, at least from a deterrence perspective.

General Principles for Implementing Recommendations: The Four Rules of Deterrence

Congress is likely to get many more recommendations on enhancing deterrence across the Taiwan Strait besides the ones I have provided today. Executing my recommendations or assessing others should be done against the consideration of four basic rules of deterrence. The following rules may seem simple, but in my experience, many recommendations do not meet these basic standards.

1) **To deter by denial, whatever we do in peacetime has to have some positive operational impact.** What this means is that not every military activity has deterrent value in the case of China over Taiwan. Sailing aircraft carriers around Taiwan does not have deterrent value if the Chinese know those carriers are getting as far away from the strait as possible if it looks like conflict is on the horizon. So the question is: does that capability impact China’s ability to take Taiwan? If the answer is no, you cannot use it in peacetime in a signaling capacity to enhance deterrence. This rule should be strictly used when assessing the future of U.S. posture in the Philippines.

2) **Whatever we do to deter the war has to happen before the war.** Allies and partners will come around, the U.S. will jumpstart the defense industry—it’s a common refrain that problems will be solved once the war starts. Maybe. But then we have failed to deter the war. So if we want our actions to serve as a deterrent, we have to do it now. This is
why I argue for peacetime coordination of economic sanctions, clarification of the Japanese consultation process, and fixing our broken defense industry now, not after China attacks.

3) In many cases, to impact deterrence, actions have to meet a certain threshold. In the operational environment, sometimes it’s all or nothing. In other words, while improvement is great, if we still do not get the total force, or Taiwan’s defense, to where it needs to be, it does not deter. If it takes the U.S. x number of days to mobilize what we need for a fight, that is how long Taiwan needs to hold out. If we need x number of munitions to sink enough Chinese ships such that they cannot continue with an amphibious assault, then anything less is not enough. Even if we improve, China will still think they can accomplish a fait accompli.

4) How do we signal to China that taking Taiwan will be too costly or too difficult? Step one, make it true. Then talk to me about messaging.

Conclusion

The issue is not that China has surpassed the United States in military power; it has not. The issue is that, given current trends, China will meet or outmatch U.S. regional capabilities in the next five to ten years. China will soon have a modern military capable of conducting joint operations, such as those necessary to deny access to the South China Sea, retake islands, or force reunification with Taiwan. If, in the meantime, the U.S. military does not improve and strengthen its force posture in Asia, improve its resiliency, and increase its ability to deny China these objectives forcibly, then Chinese leaders may decide it is worth the risk to use force. This is how we end up in a war with China—not because we are overly provocative or push back too much, but because we do not do enough to maintain deterrence in the region and China gains the confidence to jettison a cautious approach.

Military capabilities are not the best answer, but they are the easiest for the U.S. government to control. Upgrading political relationships can be even more challenging, especially given the latent threat of China lurking in the background. We need to ask Indo-Pacific countries what would be necessary to get their support and a closer military relationship—and be open-minded about what such relationships may require.

To balance against the Soviet Union during the Cold War, we had the strategic mindset and political will to look beyond China’s political system, normalize relations, and move that relationship forward. We need that degree of strategic thinking and political will; adhering to the same policies but expecting different outcomes will not change current trends in East Asia. We need to think differently, whether in creating a reserve force for the defense industry, coordinating economic sanctions ahead of time, or managing capability gaps with strategic agility. For example, since the United States might receive an unambiguous warning of an invasion, we should communicate to China (and the world) that the amassing of a certain quantity of troops and ships will be taken as a sign of an impending assault. None of these
recommendations is easy, but deterring a war is always less painful than fighting one. For the sake of peace and security in Asia, experimentation is worth the risk.
1 The author would like to thank Thomas Causey for his expert research assistance.


11 In a RAND simulation of an attack on Kadena, 36 Chinese missiles closed the runways for four days, scaling up to 43 days of closure if 274 missiles were to be used. The study also noted that the DF-21C-class missile could carry hundreds of submunitions, blanketeting hundreds of square feet so that every aircraft parked in the area would have a high probability of being damaged. With just 108 missiles, China could shut down the airfield for a week and, with high probability of success, destroy every single fighter on the base. See Heginbotham et al., US-China Military Scorecard, 60.)


16 In 2013 the PLA tested the DF-21D against a stationary, ground-based target about the size of a US aircraft carrier. In 2020, China fired the DF-21D and its intermediate-range counterpart, the DF-26, at a
moving target in the South China Sea; however it remains unclear whether the test was successful. See DoD, Military and Security Developments 2022, 65.


21 Heginbotham et al., US-China Military Scorecard, 130.


23 Timothy A. Walton and Bryan Clark, “Resilient Aerial Refueling: Safeguarding the US Military’s Global Reach,” Hudson Institute, November 2021, 29.


26 Yu, Second Artillery Campaigns, 341.

27 Zhang Yan, Theory of Strategic Deterrence (Beijing: Social Sciences Literature Press, 2018), 97–98.


30 Omer Yoacimik and Vivek Ganti, “DDoS Attack Trends for Q4 2021,” Cloudflare Blog, January 10, 2022. In its 2021 annual report, cybersecurity firm CrowdStrike found that Chinese state-affiliated hacker groups were responsible for 67 percent of intrusions in the year leading up to June 2021; see “Nowhere to Hide: 2021 Threat Hunting Report,” CrowdStrike, June 2021. As further evidence that its cyber strategy is about exploiting US vulnerabilities, China has not invested the same into its own cyber defenses, which remain weak, and its cyber-resilience policies for its critical national infrastructure are only in the initial stages; see Williams, “US ‘Retains Clear Superiority.’”


35 For the evidence on Xi’s political motivation see: Mattathias Schwartz, “Why China Doesn’t Actually Want to Invade Taiwan,” Insider, November 12, 2022; and Derek Grossman, “Xi Jinping Is Not Looking to Go to War over Taiwan Anytime Soon,” Nikkei Asia, November 16, 2022. For a counter to the peaking China argument, see Oriana Skylar Mastro and Derek Scissors, “China Hasn’t Reached the Peak of Its Power: Why Beijing Can Afford to Bide Its Time,” Foreign Affairs, August 22, 2022.


60 Jude Blanchette and Gerard DiPippo, “‘Reunification’ with Taiwan through Force Would Be a Pyrrhic Victory for China,” Center for Strategic and International Studies, November 2022.
61 Oriana Skylar Mastro and Derek Scissors, “Beijing Is Used to Learning from Russian Failures,” Foreign Policy, April 18, 2022.