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# The Military Challenge of the People's Republic of China

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Over the past twenty-five years, the People's Republic of China (PRC) has heavily invested in modernizing its military, the People's Liberation Army (PLA). Thanks to a 740 percent increase in its budget, top-leadership attention, strategic emulation, and innovation, the PLA now presents a formidable challenge to the US-led international order, the security of US allies and partners, and the United States itself.<sup>1</sup> The increase in resources and effort has resulted in more frequent, sophisticated, and multifaceted PLA presence and activities in the region and beyond, undermining faith in the US's willingness to live up to its defense commitments. Additionally, PLA's anti-access/area denial capabilities instill doubt in capitals around the world that the United States has the necessary military capacity to fight and win a war against China.

In this chapter, I lay out Chinese activities and capabilities with respect to a Taiwan contingency as well as US challenges in countering (and thus deterring) China. The last section presents a series of recommendations to mitigate US defense challenges in deterring China from attempting a fait accompli.

### *The New Strategy of Peaceful Reunification*

For the past twenty-five years, China has tried to strengthen economic, social, and cultural ties with the people of Taiwan to convince them to unify with the PRC. The strategy has failed; today, only 4 to 7 percent of the people of Taiwan are willing to consider unification with the PRC.<sup>2</sup> The PRC's 2005 Anti-Secession Law clarifies that available options include armed reunification, a path currently under open and vigorous debate within Chinese strategic circles. Chinese leaders continue to use the language of peaceful

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reunification officially, but the terms of the strategy have changed to “peaceful reunification backed by significant military force,” according to my conversations with party officials. In other words, as the PLA prepares for armed unification, it is also increasing its belligerent rhetoric and military activities in the vicinity of Taiwan to show Taiwan that it does not stand a chance in a war with the PRC and thus should capitulate without a fight.

The PLA uses constant air and naval sorties to harass Taiwan’s military and slowly wear at their systems. From January 1 to July 31, 2022, the PLA averaged more than four daily incursions into Taiwan’s southwestern air defense identification zone (ADIZ). In the two months following House Speaker Nancy Pelosi’s August 2–3, 2022, visit to Taipei, the PLA flew more than 1,200 sorties near Taiwan’s skies, with 40 percent of those entering the island’s ADIZ.<sup>3</sup> In just a one-month period in late 2022, Taiwan’s Ministry of National Defense reported one hundred instances of the People’s Liberation Army Navy (PLAN) vessels sailing in the waters around Taiwan.<sup>4</sup>

China has also been conducting military exercises of greater sophistication and scope, partly as a show of force. In August 2022, in response to Pelosi’s visit, the PLA launched a series of live-fire drills, antisubmarine practices, and raid rehearsals, imposing a *de facto* blockade on the island. China’s Foreign Minister Wang Yi condemned the United States for disrupting peace in the Taiwan Strait and obstructing the reunification of China.<sup>5</sup> Demonstrating Beijing’s ample capability to disrupt Taiwan’s economy, the exercises included multiarmed joint sea assaults, land strikes, and air superiority operations, and involved as many as fifty ships, eleven conventional missiles launched across the Median Line, and more than one hundred fighter aircraft.<sup>6</sup> For its part, Taipei initiated military exercises off of its East Coast city of Hualien and condemned China’s “continuous military provocations.”<sup>7</sup> The Chinese Communist Party (CCP) subsequently released a white paper on the Taiwan question, reaffirming China’s aggressive stance toward Taiwan and insistence on national reunification.<sup>8</sup>

All these activities display the sophistication and confidence of the Chinese armed forces but also their mere mass. China currently has the largest navy in the world, with 340 ships consisting of aircraft carriers, cruisers, destroyers, frigates, corvettes, submarines, and amphibious assault ships. By 2025, the PLAN is expected to expand to a fleet of four hundred, replacing its previous generations of platforms, most notably with major surface combatants. Major developments include the 7,500-ton Luyang III guided-missile Type 052D(L) destroyers and the 13,000-ton Type 55 Renhai-class guided-missile

cruisers; twenty-five of the former and at least five of the latter are currently in commission.<sup>9</sup> The destroyers could be useful in blockading Taiwan, while the large size of the fleet itself could be deployed to keep the United States and its allies at bay during a Taiwan contingency.<sup>10</sup> The Chinese Air Force is also developing a new strategic stealth bomber called the Xian H-20, which is anticipated to be operational within the next decade. The H-20, likely possessing a range of at least 8,500 km and having both conventional and nuclear capabilities, will join the J-20 fighters, Y-20 airlifters, and Z-20 helicopters in the PLA Air Force's "20" series of new aircraft.<sup>11</sup>

Chinese military improvements are especially concerning, given China's increasingly strident rhetoric over Taiwan. In his New Year's Day speech in 2019, Xi Jinping warned Taiwan that unification is the ultimate goal of any talks over its future and any efforts by the island to assert full independence would be met with armed force.<sup>12</sup> At the celebration of the centennial of the CCP in 2021, Xi delivered a speech emphasizing the inevitability of China's "national rejuvenation" and deemed China's "complete reunification" to be "a historic mission and an unshakable commitment" of the CCP.<sup>13</sup> This goal was further emphasized in subsequent speeches, most recently at the Twentieth National Congress of the CCP in October 2022. It seems that Xi demands concrete progress toward reunification, and he might soon be confident he has the military power for a full amphibious assault to seize Taiwan by force.

Despite this military modernization, invading Taiwan would still represent an immense challenge to the PLA due to the demands that modern, complex operations place on a military's logistical and command-and-control capabilities. Indeed, in November 2022, US chairman of the Joint Chiefs of Staff General Mark Milley assessed that a near-term Chinese attempt to invade Taiwan would result in a "debacle" for the Chinese military.<sup>14</sup> Russia's difficulties in its invasion of Ukraine have also shown how difficult complex offensive operations are, and an amphibious landing would be much more difficult than Russia's overland operations.

First, an amphibious invasion of Taiwan would present an immense logistical challenge to the PLA, and Chinese analysts know it. PLA sources estimate that China would need 3,000 military trains, 1 million vehicles, and over 2,100 aircraft to pull off an invasion. It would require 30 million tons of combat matériel and over 50 million tons of oil.<sup>15</sup> The PLA has made efforts to reform its logistics capabilities, most notably with the 2016 establishment of the Joint Logistics Support Force, but PLA analysts still assess themselves

to be severely lacking in areas critical for an operation on the scale of a cross-strait invasion.<sup>16</sup>

Successful joint operations also require effective command-and-control (C2) structures capable of orchestrating disparate military branches to achieve a particular goal. To subdue Taiwan, China would need the PLA Rocket Force to pummel Taiwan's defenses, the PLA Navy to cordon off Taiwan's merchant and military shipping in a blockade, and other naval forces to escort PLA Army and PLAN Marine Corps units to the landing beaches. All the while, the PLA Air Force would need to maintain air superiority over the region, and the PLA Strategic Support Force would need to use its extensive intelligence, surveillance, and reconnaissance (ISR) capabilities to watch for signs of American intervention.

But the takeaway is not that the complexity of joint operations or that Russia's difficulties in Ukraine imply that China won't (or can't) invade Taiwan. The takeaway is that China knows logistics, precision-guided munitions, and adequate C2 structures are integral to modern warfare. For decades, Chinese military leadership has issued a host of sayings, such as Hu Jintao's "Two Incompatibles" and Xi Jinping's "Two Inabilities" and "Five Incapables," all of which point out severe PLA deficiencies.<sup>17</sup> China's lagging logistical and C2 capabilities might preclude invasion now, but after a few more years of increasingly realistic exercises and ongoing reform efforts, the PLA may have the ability to take Taiwan by 2027.

### *Detering China over Taiwan: The Attractiveness of a Fait Accompli*

In addition to projecting power over the Taiwan Strait, China's military modernization has focused on the ability to prevent a decisive US response, referred to as its anti-access/area denial (A2/AD) strategy. Anti-access refers to the ability to prevent an opposing force from entering an area of operations. Here China has developed capabilities that can slow down the deployment of opposing forces into the theater, prevent US forces from operating in certain areas (like the first island chain—the "barrier" extending from Japan, past Taiwan and the Philippines, to maritime and peninsular Southeast Asia), or compel US forces to operate from distances farther from the conflict than operationally ideal. Chinese strategists recognize that antisatellite operations on communication satellites or cyberattacks on the opponent's command-and-control system would disrupt how the US deploys and operates its forces.<sup>18</sup>

The objective of area denial, on the other hand, is not prevention but disruption—to compel the desired behavior by imposing severe costs on the enemy's freedom of action once it has gained access. Chinese integrated air defenses, antiship cruise and ballistic missiles, maritime bombers, missile- and torpedo-carrying submarines, and fast patrol boats are all designed to inflict prohibitively high costs on any country that dares to operate within the first island chain near the China mainland.<sup>19</sup> Chinese capabilities could force US navy vessels to operate well beyond the first island chain and the US air force to operate at higher altitudes. Both would limit the United States' ability to effectively target PLA units, whether on the mainland, in transit across the strait, or in Taiwan itself. In short, China's increasingly capable layered air defenses, as well as its fighter, ship, and missile assets, could target US bases and assets in the region, hampering operations.

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 US way of war exhibits several dependencies that China's A2/AD 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.<sup>20</sup> 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 US 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.<sup>21</sup>

But the biggest issue is that the United States may not be able to get any aircraft into the sky; all US forward bases in South 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 2016 RAND report estimated that air force bases in Japan and South Korea, including Kadena, could see thousands of Chinese missiles launched at them, and 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.<sup>22</sup> Similarly, Chinese H-6 bombers have undergone several refits enabling them to strike targets as far as Guam.<sup>23</sup>

China has long been aware of the vulnerability of the US bases in the Asia Pacific region and Washington's potential efforts to strengthen its bases.<sup>24</sup> Media cite the 2008 RAND simulation 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.<sup>25</sup> 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 US Army's greatest weakness, due to China's increasing missile capabilities.<sup>26</sup> The articles specifically mentioned that the Yokosuka and Sasebo naval bases in Japan would become targets for Chinese missiles, leaving US 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. US bases could be closed for more than six weeks, with almost all aircraft damaged or destroyed.<sup>27</sup> 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, six hundred short-range ballistic missiles (SRBMs), and more than five hundred medium-range ballistic missiles (MRBMs) capable of conducting precision strikes against land targets and naval vessels out to the first island chain.<sup>28</sup> 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 US carrier battle groups operating beyond the first island chain, in the Indian Ocean, or in the South China Sea.<sup>29</sup>

According to the Pentagon's annual reports to Congress, China's ICBM (intercontinental ballistic missile) 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.<sup>30</sup> 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.<sup>31</sup>

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 anti-ship ballistic missile systems, most notably the DF-21D, that reportedly can engage adversary surface ships up to 1,000 nautical miles (nm) 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. US commanders are now reluctant to send carriers into a conflict, making it difficult for the United States to establish air superiority.<sup>32</sup>

Even if US 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 scanners; 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 China's early-warning range further into the Pacific.<sup>33</sup> 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.<sup>34</sup>

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 US Navy ships indefinitely.<sup>35</sup> 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.<sup>36</sup> In both scenarios, the US 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.<sup>37</sup> Although it is unclear whether Chinese air defense could maintain a constant track on advanced US stealth aircraft, the United States would be forced to operate at higher altitudes and disable or destroy anti-aircraft capabilities with long-range missiles before being able to establish regional air superiority.<sup>38</sup>

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 US'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).<sup>39</sup>



Another obvious example of an enabler is the increasing US reliance on cyber capabilities. Between the Gulf War in 1991 and the Iraq War in 2003, US commanders gained access to forty-two times as much bandwidth and information flow. That number continues to increase, especially as more processes become automated and operation units become accustomed to an informational surplus.<sup>40</sup>

Chinese analysts quickly became aware of the US dependence on space-based assets and services for commanding deployed troops, passing ISR data and enabling precision targeting and engagement.<sup>41</sup> Conducting network attacks, blinding, dazzling, or even destroying satellites with a kinetic kill vehicle like an antisatellite missile could stymie deployed US military forces by disrupting communications and denying information vital for determining the location and the movement of forces.<sup>42</sup> 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.<sup>43</sup> 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."<sup>44</sup>

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.<sup>45</sup> 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."<sup>46</sup> China is now among the top five leading source countries for denial-of-service and web application-based global cyberattacks.<sup>47</sup>

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, 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.<sup>48</sup> 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.<sup>49</sup> China has also pushed for incorporating concepts such as “cyber sovereignty” through the United Nations and its own 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.<sup>50</sup>

### 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.<sup>51</sup> Second, there is no indication that Xi Jinping needs to take Taiwan by 2027 to secure a new term. Third, Chinese power is not in for a hard fall, making it now or never.<sup>52</sup> 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 US military’s force posture needs to be completely overhauled. Given the difficulty of adequately defending its bases and assets against Chinese attack, the best strategy is dispersal, redundancy, and resilience. In other words, if the United States cannot defend against a Chinese attack, at the very least it has to ensure such attacks do not render the combat force ineffective. One way of achieving this goal is to operate from more locations. Negotiating access agreements and signaling to China that countries will support US military operations in case of a contingency should be a top priority for the State Department. 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. US 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.<sup>53</sup>

#### More Mass on Targets

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 attrit 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 US stockpiles.<sup>54</sup> For instance, in its April 2022 procurement request, the US Air Force requested fewer than two hundred long-range anti-ship missiles (LRASMs), while the navy requested fewer than 450.<sup>55</sup> 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.<sup>56</sup> The United States also fields the Harpoon antiship missile, the Maritime Strike Tomahawk, the Naval Strike Missile, and the ground-based high-mobility artillery rocket 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 US Army hopes to procure five hundred by 2028, just barely in time for when the risk of invasion may begin to rise dramatically.<sup>57</sup>

Consider the LRASM a useful example of the deficiency in US 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 matériel across the Taiwan Strait.<sup>58</sup> Open-source reports suggest that China could pull from nearly two thousand civilian ships currently suited for mobilization.<sup>59</sup> 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 anti-air 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); 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.<sup>60</sup> 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.<sup>61</sup>

The US 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.<sup>62</sup> 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.<sup>63</sup>

Some experts view the US 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 US submarines are world class.<sup>64</sup> But however poor China's antisubmarine warfare capabilities are, these 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 US attack submarines have completed maintenance on time over the past decade, and navy officials have expressed concern over how stressed US submarine shipyards have become.<sup>65</sup>

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.<sup>66</sup> 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 US 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.<sup>67</sup>

### Leveraging Partners

Most US 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.<sup>68</sup>

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.<sup>69</sup> 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.<sup>70</sup>

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.<sup>71</sup> The United States has also quietly deployed special operations units to Taiwan to train its troops.<sup>72</sup>

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 US military operations.

In prioritizing US 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 (JMSDF) is one of the best navies in Asia. It boasts more than 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.<sup>73</sup> The JMSDF also fields twenty-one diesel-electric attack submarines and has commissioned two of a planned twenty-two Mogami-class multirole frigates.<sup>74</sup> The JMSDF's five major bases at Yokosuka, Sasebo, Kure, Maizuru, and Ōminato also provide JMSDF and US Navy ships with in-theater ports for repair and replenishment.<sup>75</sup> The US Navy's only permanently forward-deployed aircraft carrier, the USS *Ronald Reagan*, is homeported at Yokosuka. In short, Japan's size, geography, and naval might could prove decisive in a US-China conflict.

But the role of allies and partners is not relegated only to military roles. Much ink has been spilled about the enormous economic costs Beijing would face from a coordinated, US-led sanctions regime.<sup>76</sup> But the bottom line is that there are few indications that many countries would be willing to endure the pain of implementing such a regime, especially if China took Taiwan quickly with limited casualties.<sup>77</sup> 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. US 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.<sup>78</sup>

## 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 US 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 US 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. 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.

## Notes

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