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# RESEARCH BRIEF

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Strategic Competition Between the United States and China in the Maritime Realm

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The highest profile challenges in the US-China relationship are taking I place in the maritime realm. This brief examines the nature and extent of maritime competition between the United States and China and what enduring advantages and disadvantages each possesses, yielding insights for US strategy going forward. It finds that China has pursued an asymmetric approach to counter the US Navy that has focused on China's "near seas." This approach featured investments in long-range radars and cruise and ballistic anti-ship missiles in the 1990s, and has proceeded through today's rapid buildup of China's navy, coast guard, and maritime militia. The US Navy, in contrast, has continued its investment in long-range, high-endurance "blue water" capabilities to project power far from US shores. The level of maritime strategic competition appears to be increasing, although it is still at an early stage. Enduring areas of disadvantage for China are likely to be geopolitical rather than technical in nature. The United States likely can best compete by adopting whole-of-government strategies that incorporate its military, economic, and diplomatic advantages and focus on broader objectives rather than merely ensuring access to contested environments.

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#### INTRODUCTION

The United States and China are engaged in what could be characterized as a great power competition, the nature of which will likely not be uniform across different elements of national power. Interactions in the maritime realm are a key aspect of this challenge. Questions regarding the extent to which a peacetime strategic competition exists, what shape future competition might take, and how the United States can deter a potential conflict often center on each side's prospective naval strategies and investments. This brief provides a background on Chinese naval strategy, then examines the nature and extent of the maritime competition between the United States and China and what enduring advantages and disadvantages each side possesses. This yields important insights for US strategy going forward.

#### CHINA'S NAVAL STRATEGY AND SHIPBUILDING PLANS

Chinese strategic documents indicate that a significant shift in its maritime strategy may be underway, but implementation has been slow. Since 1949, the focus for the People's Liberation Army Navy (PLAN) has evolved outward in several steps, designated in a 2012 article in China Military Science as "coastline and river defense," "littoral defense," "near seas defense," and "distant seas defense." The most recent step reportedly was based on a 2000 directive from then-President liang Zemin that prompted the grad-

ual expansion from "near-seas defense" to "distant-seas defense." This culminated in China's 2015 defense white paper stating for the first time that the PLAN will shift its focus from "offshore waters defense" (near seas) to the combination of "offshore waters defense" with "open seas protection" (distant seas).2 Further demonstrating this shift, the 2013 iteration of The Science of Military Strategy, one of China's most authoritative resources on military strategy, lists eight strategic missions for the Chinese navy, several of which touch on a "far seas" element:

- 1. Participate in large-scale operations in the main strategic axis of operations.
- 2. Contain and resist seaborne invasions.
- Protect island sovereignty and maritime rights and interests.
- Protect maritime transportation security.
- Engage in protecting overseas interests and the rights/interests of Chinese nationals.
- Engage in carrying out nuclear deterrence and counterattack.
- 7. Coordinate with the military struggle on land.
- 8. Protect the security of international sea space.<sup>3</sup>

Changes to Beijing's naval armaments plans may also be taking place. Although China's current national-level Weapons and Equipment Development Strategy—a classified document that forecasts the

international strategic environment and sets military armaments requirements—runs through 2023, the shorter-term naval weapons development plans subordinate to this strategy may be under revision. PLAN Commander Admiral Wu Shengli, speaking at the PLAN Party Committee's 8th plenary session in January 2015, described the PLAN as being in "a critical period of strategic transformation" due to expansions to its missions and ongoing military reforms. He specifically discussed the need to "revise and perfect" PLAN development strategies. The Chinese government announced in July 2016 that it intends to formulate its first "national maritime strategy," which will likely set long-term guidelines for maritime development in conjunction with legal assertions of its maritime rights and interests, further shaping China's naval trajectory.

Most US analysts have emphasized that the PLAN's primary mission will continue to be China's near seas—the area between China's coast and the second island chain—no matter how its strategy shifts on paper.<sup>4</sup> The 2015 defense white paper reaffirms that safeguarding "the sovereignty and security of China's territorial land, air, and sea" and "the unification of the motherland" (referring to Taiwan) are among the military's primary tasks, although "overseas interests" are referenced as well.

The goal of China's military strategy is listed as "winning local wars under informationized conditions," while its "primary strategic direction" is likely the "Taiwan Strait-Western Pacific" area. Moreover, a "counter-in-

<sup>1</sup> Liu Yonghong, "Strategic Consideration on the Transformation of the PLA Navy Under the New Situation," *China Military Science*, November 30, 2012.

<sup>2</sup> Caitlin Campbell, "Highlights from China's New Defense White Paper, 'China's Military Strategy," report for the US-China Economic and Security Review Commission, June 1, 2015, 1.

<sup>3</sup> Andrew S. Erickson, "China's Blueprint for Sea Power," *Jamestown China Brief* 16, July 6, 2016, http://www.jamestown.org/single/?tx\_ttnews%5Btt\_news%5D=45570&tx\_ttnews%5BbackPid%5D=7&cHash=e717a7332ee80a45561860be75770b15#. V4\_7ifmA0ko.

<sup>4</sup> The first island chain refers to a line of islands running through the Kurile Islands, Japan and the Ryukyu Islands, Taiwan, the Philippines, Borneo, and Natuna Besar. The second island chain is farther east, running through the Kurile Islands, Japan, the Bonin Islands, the Mariana Islands, and the Caroline Islands. Bernard D. Cole, *The Great Wall at Sea: China's Navy in the Twenty-First Century* (Annapolis, MD: Naval Institute Press, 2010), 174–76.

tervention" or "anti-access/area denial (A2/AD)" component exists within PLA missions, in anticipation of potential outside interference in contingencies involving China's core interests; this is also likely to encourage continued focus on its near seas.<sup>5</sup>

China's shipbuilding priorities support assessments that it will remain focused on the near seas. China has been building ships at a tremendous pace, launching 67 large surface combatants and 16 submarines between 2005 and early 2015. This surpasses any other country's output in recent years. Observers differ on whether this pace will prove unsustainable: Will it taper off as it nears predetermined objectives, continue along a straight-line trajectory, or be increased due to China's expanding far seas objectives and global interests? The question is further complicated by China's opaque military acquisition process and the potential reevaluation of its naval weapons development strategies.

A 2013 report by the US Office of Naval Intelligence projected China's 2020 force structure in relation to its force numbers in 2015 (see Table 1). The US Department of Defense (DoD) has assessed that the composition (relative number of platform types) of the PLAN is not likely to change over the next five years.

A key change in the longer term could be additional aircraft carriers, which would indicate a potential shift toward far seas capabilities. The DoD projected in 2016 that China "could build multiple aircraft carriers over the next 15 years." Some sources suggest as many as five new carriers could be constructed, for a total of six.

## THE NATURE OF THE STRATEGIC COMPETITION

China is clearly building a navy designed to counter the US Navy, but is not engaging in what would be termed a "symmetric" naval competition. China's military strategy, weapons development strategy, and likely PLAN missions support China's interests in the near seas, and are only slowly evolving to enable operations in support of China's stated objectives in the far seas. Much of the fleet is designed for near seas operations.

For example, only about one-third of PLAN surface combatants are large enough to carry a sufficient complement of defensive and offensive missiles in their vertical launch system magazines to both protect the ship away from mainland-based defenses and conduct independent offensive operations. Similarly, only about one-quarter of PLAN submarines are nuclear powered and able to sustain deployments overseas without having to snorkel frequently, which makes them more vulnerable to detection.

Complementing the PLAN, China employs the world's largest coast guard and maritime militia, which can pursue sub-conventional aggression within range of mainland and naval defenses but are less effective at pursuing Chinese interests in the far seas. China's conventional ballistic missile buildup also is designed to address Chinese objectives in its near abroad, with only about 10 percent of its ballistic missiles able to range outside the "first island chain." Developments such as the DF-21D anti-ship ballistic missile came later as a way to impose costs on the United States and delay intervention.

This "asymmetric" nature, due to Beijing's continued focus on objectives closer to home, has implications for how any future competition might unfold. For example, the United States can probably impose steep costs on China's antisubmarine warfare (ASW) efforts with more and larger submarine payloads, such as the Virginia Payload Module. However, if China is more interested in local objectives, the PLAN can pursue relatively inexpensive and easy ASW approaches combining sea-bed sonar arrays with standoff ASW missiles and "pouncer" aircraft to suppress—rather than destroy— US submarines inside the first island chain.

In response to US investments in air and missile defenses, China is likely to continue its investments in regional precision strike weapons facilitated by persistent targeting and the use of operating concepts and counter-sensor technologies to reduce the effectiveness of these US systems. China is also likely to focus on US force enablers, particularly basing, aerial tankers and logistics ships, and long-range intelligence, surveillance, and reconnaissance platforms. Efforts by the US Navy to develop smaller, more lethal, and more distributed forces-if achieved-could mitigate these PLA efforts.

## THE LEVEL OF STRATEGIC COMPETITION

Whether China is developing maritime capabilities that are "symmetric" or "asymmetric" in relation to those of the United States and whether it is in a fully formed strategic competition with the United States are funda-

<sup>5</sup> According to the US Department of Defense, "anti-access" actions are intended to slow the deployment of an adversary's forces into a theater or cause them to operate at distances farther from the conflict than they would prefer. "Area denial" actions affect maneuvers within a theater, and are intended to impede an adversary's operations within areas where friendly forces cannot or will not prevent access. China, however, uses the term "counter-intervention," reflecting its perception that such operations are reactive. Office of the Secretary of Defense, "Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2013," i, 32, 33; US Department of Defense, "Air-Sea Battle: Service Collaboration to Address Anti-Access and Area Denial Challenges," May 2013, 2.

<sup>6</sup> Office of the Secretary of Defense, "Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2015," May 2015, 11.

TABLE 1. PLAN force structure and 2020 projection

	2015 force structure (% modern)	2020 force projection (% modern)
Aircraft carriers	1	1-2
Ballistic missile submarines	4	4–5
Nuclear attack submarines	5 (50)	6–9 (100)
Diesel attack submarines	57 (33)	59–64 (75)
Destroyers	26 (50)	30–34 (85)
Frigates	52 (45)	54–58 (85)
Corvettes	20	24–30
Amphibious ships	56	50–55
Missile-armed patrol craft	85	85

**Sources:** Ronald O'Rourke, "China Naval Modernization: Implications for US Navy Capabilities—Background and Issues for Congress," Congressional Research Service, May 31, 2016, 47; Office of Naval Intelligence, "The PLA Navy: New Capabilities and Missions for the 21st Century," April 9, 2015, 43.

mentally different questions. Either type of capability can demonstrate increased competition, depending on a competitor's needs. In the case of the United States and China, the consistent action-reaction dynamic between each side's maritime strategy and approach that would indicate tightly coupled strategic decisionmaking is not yet evident, although maritime strategic competition appears to be increasing.

On one hand, China's military strategy, likely PLAN missions, and the A2/AD component within such missions clearly anticipate the potential for US intervention. The network of regional US military facilities and alliances is seen as complicating China's freedom of action in potential contingencies, and some Chinese academic and military writings declare the United States to be pursuing a long-term strategy to "strategically encir-

cle" or "contain" China. This has, as already described, incentivized China's development of capabilities to blunt US force projection. James Holmes of the US Naval War College has pointed out that the 1995–1996 Taiwan Strait crisis in particular served to galvanize China's naval development and its efforts to exploit US vulnerabilities and forestall potential interventions.<sup>7</sup>

On the other hand, China appears to be pursuing a host of capabilities, both symmetric and asymmetric, for its own reasons. Some analysts argue that China is attempting to emulate the US Navy, striving to produce a force of surface ships that has the same capabilities and eventually can undertake similar missions. China may construct carrier battle groups for far seas operations and seek access to additional foreign facilities for reasons other than competition with the United States, such as domestic

and international prestige, non-war military missions, and protecting Chinese interests and citizens abroad.

China differs from the United States in employing its coast guard and maritime militia in territorial disputes and in how the PLAN would employ its attack submarines, but this is due to political factors in the South and East China seas in the former case, and technical reasons in the latter. Ultimately, China has sought to pursue a broad range of symmetric and asymmetric capabilities regardless of US choices, even while it invests in technologies to counter the US military in some cases.

On the US side, new science and technology initiatives such as the Third Offset Strategy and DII may signal the first steps in US efforts to compete directly with China.<sup>8</sup> In addition, the United States has sought to strengthen its presence and lead-

<sup>7</sup> James R. Holmes, "The State of the US-China Competition," in Thomas G. Mahnken, ed., *Competitive Strategies for the 21st Century: Theory, History, and Practice* (Stanford, CA: Stanford University Press, 2012), 135–36.

<sup>8</sup> Tai Ming Cheung et al., "Planning for Innovation: Understanding China's Plans for Technological, Energy, Industrial, and Defense Development," report for the US-China Economic and Security Review Commission by the University of California Institute on Global Conflict and Cooperation, September 2016, 275.

ership in the Asia-Pacific with the "Rebalance to Asia" strategy, initiated in 2011 but building upon initiatives begun under the Bush administration. The strategy aims to uphold the rules-based international order in the region in an era of new challenges, including that posed by China in the maritime realm. The rebalance includes plans to station 60 percent of the US Navy in the Asia-Pacific by 2020, new basing and access agreements, new partner capacity-building initiatives, and the deployment or planned deployment of the most advanced US maritime asset types to the region. These would include the F-35C Lightning II strike-fighter, E/A-18G Growler airborne electronic attack aircraft, Virginia-class attack submarines, Zumwalt-class stealth destroyers, Aegis missile defense-equipped vessels, littoral combat ships, and P-8 patrol aircraft, among others.

Although these developments demonstrate growing competition in recent years, more examples will be needed to confirm a long-term action-reaction dynamic.

## CONSIDERATIONS FOR US COMPETITIVE STRATEGY

In addition to assessing the nature and level of competition thus far, outlining "medium-term" (defined here as approximately 10–20 years) and "enduring" competitive advantages and disadvantages is helpful in considering US strategy options in a long-term competition with China. A comparison of potential advantages held by each side, which draws on a review of analyses by experts inside and outside China, is presented in Table 2.

Going forward, enduring Chinese disadvantages are likely to be geopolitical rather than technical in nature. Analysts have pointed out that China will likely be able to overcome its current technical deficiencies in shipbuilding. It has the initiative in selecting areas of conflict, and enjoys the benefits of geographic proxim-

ity, which will aid A2/AD efforts in its near seas. However, China will be disadvantaged in terms of maritime geography, far seas capabilities, fewer regional and global alliances, and prevailing maritime norms. This implies that whole-of-government strategies, which emphasize all elements of statecraft and include coalition building and support for maritime norms, will be crucial to US maritime competition. On their own, policies that are strictly technical in nature may not fully exploit China's areas of weakness.

Moreover, as observed earlier. China's focus is still largely on its near seas and on asymmetric capabilities to blunt US force projection. China has lagged in shifting to the far seasfocused, more symmetric capabilities called for in its strategic documents. This makes the success of US strategies designed to use force to maintain access to the contested areas of China's near seas less likely. It also raises a red flag regarding concepts such as AirSea Battle (now the Joint Concept for Access and Maneuver in the Global Commons), which seek to preserve the US ability to project power onto the Chinese mainland, or technological initiatives such as the Third Offset and DII, which focus on overcoming access challenges. In seeking to deter conflict long term, such approaches do not fully exploit China's weaknesses.

US strategies that rely on a roll-back of access challenges would contend with China exactly where Chinese enduring advantages are. Rather than give up on its near seas, counter-intervention capabilities in a long-term competition, China might double down on long-range surveillance and strike investments. To the extent that these US strategies are not accompanied by wider efforts to win the competition and deter conflict, such a dynamic would emphasize US disadvantages.

The United States might instead consider a strategy that incorporates

efforts to put Beijing's interests outside of its near seas at risk. Such an approach could broadly include the development of new operational concepts that signal the willingness of the United States to threaten China's sea lines of communication and strategic chokepoints in a conflict. The approach should build on previous US efforts such as the rebalance that seek to preserve strength and leadership in the Asia-Pacific on all fronts, such as investment in regional bilateral and multilateral alliances, building partner capacity, expansion of regional maritime domain awareness, broader regional basing and access, and deployment of additional forces forward to the region. It should also include elements of competition outside of China's A2/AD envelope. Additional research is needed to fully develop such a strategy, but a guiding principle could be to demonstrate that the United States would respond to aggression or a potential conflict in ways that could be countered only by substantial investment in foreign bases and a blue water navy on China's part.

#### CONCLUSION

Moving the competition to the far seas as outlined here is well suited to the current nature and level of maritime strategic competition between China and the United States, and would benefit US interests in many ways. First, it would allow the United States to build on its advantages, most notably global capacity, favorable maritime geography, and regional and global alliances and partnerships. Second, it could place the United States in a better position for a long-term competition at the technical level, based on the potential to employ unmanned and distributed systems and their utility for operational functions such as a blockade. Third, it could advance regional stability by demonstrating US resolve and readiness to involve its global capacity, making it evident

**TABLE 2.** Summary of US and Chinese potential advantages in a maritime competition

Time frame	Chinese advantages	US advantages
Medium-term (10–20 years)	Relative growth in resources: Based on economic growth, but may not persist	Proficiency: Temporary technical limitations to China's shipbuilding industrial base and relative proficiency of US naval personnel
	Local capacity: PLA can focus attention on East and South China Seas	Global capacity: Able to counter China in multiple theaters and sustain operations in a protracted conflict
	Growing A2/AD "envelope"; non- accession to INF Treaty	Undersea warfare capabilities
Enduring	Geography for competition in near seas: China enjoys benefits of proximity, yielding cost advantages in an offense-dominant missile competition	Geography for competition outside the near seas: China has few exits through first is- land chain; is vulnerable to blockade
	<b>Initiative:</b> China can choose when, where, and how to apply coercive pressure or begin hostilities	Maritime norms: Friction with international order may impose costs on China or facilitate US alliance-building
	International politics: Potential for cooperation with states that share opposition to the international order, e.g. Russia	International politics: US regional and global partnerships and alliances

that a short conflict in which China could move quickly and consolidate its gains is unlikely. Fourth, it would demonstrate commitment to US allies and partners in the region, and potentially further these countries' willingness to assist US efforts to defend the rules-based regional order. Fifth, it could preserve US internal lines of communication in a potential conflict, as these would likely be disrupted inside China's A2/AD envelope. Finally, and most important, it could potentially incentivize China to invest more in its own far seas capabilities in the long term, "speeding up" the shift that

may already be occurring in China's own strategic thinking and better fulfilling the intent of US strategies such as the Third Offset and DII. In theory, China would have to respond with investments in a blue water navy, a wider network of basing and access agreements, and international partnerships and alliances, precisely where the United States is well positioned to compete in the long term.

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