



Alliance Requirements Roadmap Series

The U.S.-Japan Alliance: Responding to China's A2/AD Threat

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Bold. Innovative. Bipartisan.

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The views expressed in this report are personal and the author's alone. They are solely responsible for any errors in fact, analysis, or omission.

ABOUT THE SERIES

To build a foundation of subject matter expertise for our study, "Dynamic Balance: An Alliance Requirements Roadmap for the Asia-Pacific Region," CNAS commissioned this Alliance Requirements Roadmap essay series from experts in third offset strategic thinking, Asian-Pacific maritime security issues, and on partner countries in Asia. These essays were the focus of a December 2015 experts' workshop, where CNAS investigators and leaders in the field discussed in depth the tools the United States, Japan, and its regional partners would need to best shape the future security environment of the Asia-Pacific. These conference papers were crucial to our analysis and have done much to shape the study's findings.

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ABOUT THE ASIA-PACIFIC SECURITY PROGRAM

The Asia-Pacific Security program seeks to inform the exercise of U.S. leadership in Asia by analyzing how the United States can rebalance its priorities; shape a rules-based regional order; modernize traditional alliances; build the capacity of new partners; and strengthen multilateral institutions. From exploring rising maritime tensions in the region to crafting ways to renew key alliances and partnerships to articulating strategies to extend and enhance America's influence, the program leverages the diverse experience and background of its team, deep relationships in the region and in Washington, and CNAS' convening power to shape and elevate the conversation on U.S. policy across a changing Asia.

China's anti-access/area denial (A2/AD) strategy has captivated the world's attention since the mid-2000s. Though there are several different interpretations of A2/AD, it is clear that it serves as a basic rationale to justify the Peoples' Liberation Army (PLA) force build-ups during the last two decades. One guiding principle of China's A2/AD approach is the notion that the PLA will remain inferior to U.S. forces in most warfare areas for the next 20 years, both in terms of quantity and quality. Therefore, it has developed a strategy that focuses on the Achilles' heels of U.S. forces.

By demonstrating its military superiority in the Asia-Pacific, China hopes to weaken the United States' ability to intervene in regional conflicts. Thus, without having to fight against U.S. forces, China would be able to keep them out of the Asia-Pacific and Indian Ocean and to achieve its national objectives and monopolistic sphere of influence in the region. The area of China's influence could stretch from the Western Pacific, to the East and South China Seas, to the Indian Ocean. China's A2/AD strategy aims to justify the PLA's force building and be robust enough to keep U.S. forces out of the area – without resorting to battle.

THE U.S.-JAPAN ALLIANCE

Since the Cold War, U.S. forces stationed in and deployed to the region have maintained the area's security and stability. The United States has forces based in South Korea but they are primarily dedicated to deterring North Korea. While these forces are vital for countering North Korea, they do not significantly contribute to the United States' regional and global strategy. In other words, U.S. forces in South Korea, “tethered” to the peninsula and postured against North Korea, are not readily available to serve as value-added forces that can be deployed to other areas in the region.

In reaction to China's activities, the U.S. government has started to implement a “rebalancing” that focuses more on the Asia-Pacific region. U.S. Pacific Command (USPACOM) has also introduced an “access-assurance” strategy that complements the rebalancing policy.¹ PACOM, especially its forces stationed in Japan and those deployed to and operating in the Asia-Pacific region, are really the forces that support the United States regional policy and strategy.

At the same time, Japan, whose geographic location, world-class Self Defense Forces (JSDF), and sophisticated capabilities to support U.S. forces operating in and around Japan, is indispensable in efforts to counter A2/AD strategy. There will be more to do for the JSDF to fully cooperate with U.S. forces, but at the same time, without Japan and the JSDF, it will be very difficult for the United States' new policy and strategy to come to fruition. There are no major U.S. bases in the region between Japan and the east coast of Africa. U.S. bases in Changi, Singapore, and Diego Garcia in the Indian Ocean are strategically important but too small to function as full-scale bases. U.S. bases,

¹ Robert G. Sutter, Michael E. Brown, Timothy J. Adamson, Mike M. Mochizuki and Deepa Ollapally, *Balancing Acts: The U.S. Rebalancing and Asia-Pacific Stability*, Elliott School of International Affairs and Sigur Center for Asian Studies, The George Washington University, August 2013, p. 2; U.S. Department of Defense, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, January 2012, p. 4; U.S. Pacific Command, *USPACOM Strategy*, 2013, www.pacom.mil/about-uspacom/2013-uspacom-strategy.shtml.

with sufficient fuel and ammunition storage in Japan, are the only ones that can support the rebalance.

CHINA'S NATIONAL OBJECTIVES

China's security strategy and military capabilities have two fundamental elements. One involves soft power while the other uses hard power to realize five principal national objectives. These include sustaining the Chinese Communist Party's current regime as a national foundation; protecting national sovereignty and territorial integrity, as well as national rights and interests in its exclusive economic zone; building and maintaining a secure second-strike nuclear force; maintaining continuous economic growth and to improve the quality of citizens' lives; and establishing global power-projection capabilities, which are currently monopolized by the United States, to protect Chinese interests worldwide. Four of these objectives are related to the PLA and maritime subjects.

China needs large-scale and effective naval capabilities to support several of these goals. For example, protecting sovereignty and territorial integrity will depend on building up China's maritime-defense posture and capability. Improved nuclear capabilities would be strongly supported by submarine-launched ballistic missiles, and this will only be established when China can maintain the safety and security of its sea lines of communication. The last national objective, developing a global power projection, also relies on naval capabilities and will be key to China's future success.

At the same time, as China's naval power grows, the outward expansion of the PLA Navy's (PLAN) activities is inevitable. As a result of these policies, China will aim to exclude any foreign interventions around its maritime periphery. The largest obstacle preventing China from achieving its national objectives are U.S. forces that have the global reach of the United States behind them. It makes sense for China to set out to become the world's second-most-powerful nation, and it will first try to establish and enhance its influence with surrounding nations and waters. To accomplish this goal, China seeks to reduce U.S. regional presence.

By demonstrating the PLA's robust capabilities to annihilate U.S. forces operating in and approaching the Indo-Pacific region, China aims to diminish the will of U.S. leaders to deploy forces and intervene in conflicts there. A2/AD's core concept is that by building highly-capable PLA forces able to destroy U.S. forces in the mid-Pacific and other surrounding areas, China will eventually reduce the United States' regional presence in peacetime, prohibit U.S. forces from intervening in regional conflicts, and deter U.S. forces in crisis or conflict.

CHINA'S A2/AD FORCES

China's emerging A2/AD forces have two main components. The first is the ability to attack and destroy U.S. forces advancing into the Indo-Pacific region. China realizes that its overall level of military power will remain far inferior to that of the United States. It intends to improve its capability to attack U.S. forces operating in the Western Pacific area, and also those approaching from the Continental United States or Hawaii toward the region at a greater distance from China's mainland. There are three main categories of military assets to realize this concept:

- *Antiship ballistic missiles (ASBMs)*. China has long been developing ASBMs. Not even the U.S. Navy has countermeasures yet, and it is reported that Chinese development is in its final phases. The main targets would be U.S. carrier strike groups and Marine expeditionary groups, both core fighting elements of U.S. operations in the region.
- *Submarine forces*. Since World War I, submarines have been a method to deny an enemy's use of oceans and seas. Because of their stealthy characteristics and the introduction of today's long-range precision-guided missiles, submarines are an extremely effective antisurface asset, as are antisubmarine and land-attack platforms. Additionally, torpedoes may seem obsolete, but history has established them as one of the most lethal weapons against surface ships. Multiple torpedo hits could sink an aircraft carrier, or at least cause it to experience substantial flooding. The PLAN has been actively developing submarine forces, antiship missiles, and torpedoes, so this will be one of the most serious threats against the JMSDF and U.S. Navy in the future.
- *Countering domain denial*. One aspect of the U.S. military's superiority is its ability to dominate all domains, including space, cyber, air, and maritime, as well as its superior Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) capabilities. If these capabilities are disabled during a future war, U.S. forces would be vulnerable indeed.

China has been developing various capabilities to take advantage of these vulnerabilities. Aware of its inferiority to the United States' robust frontline fighting forces (the muscles), the PLA will avoid direct attacks on Washington, D.C./Hawaii (the brain). Instead China would concentrate attacks on the U.S. military's warfighting capabilities in multiple domains. This would divide the U.S. military into groups of nonfunctioning units, which would become easy targets. If such attacks were successful, the PLA could disrupt and destroy U.S. forces without having to fight in combat. China has been developing several military assets and capabilities to fully meet these objectives, including electromagnetic pulse attacks, anti-satellite capability, cyber-attack functions, and the destruction of sea-bed fiber cables.

These initiatives are all ways that China could keep U.S. forces from advancing in the waters near its mainland. They would also target the JSDF operating around Japan and interfere with the JSDF conducting bilateral operations with U.S. forces.

TARGETING U.S. FORCES IN THE REGION

Just like U.S. forces advancing into the Pacific theater, U.S. forces stationed or already forward-deployed in the region are targets of China's A2/AD strategy. This means that Chinese strategy focuses on U.S. forces in Japan. Furthermore, U.S. logistical functions in Japan, such as the vast stockpiles of fuel and ammunition ready for use, are indispensable for U.S. operations. From China's point of view, these support facilities must be neutralized in wartime and are prominent objectives.

In addition to U.S. supply lines, Japan itself is likely also a target of China's A2/AD strategy. Regardless of Japan's policy stance in a U.S.-China conflict, the PLA will aim to neutralize Japan's ability to support U.S. forces. Japan's military should analyze China's planning, intentions, and force

build-up when assessing its own force requirements. The military must calculate the potential adversary's capabilities and develop the best force-building plan to anticipate the worst-case scenario. China has prioritized three main categories of military assets in this category:

- *Ballistic missiles and cruise missiles.* As a first or preemptive strike against Japan and U.S. forces, the PLA has been improving its ballistic and cruise missile capabilities. Major targets for these missiles are U.S. and JSDF forces, their bases, and other core infrastructure that constitutes Japan's national power.
- *Sabotage by special forces.* A large-scale invasion by full-sized landing forces into Japan's mainland is much less likely than widely believed. On the other hand, the PLA could see value in using many groups of small-sized special forces to disturb the Japanese people and reduce Japan's capability to support U.S. forces.
- *Assault and seizure of islands to ensure control of strategic chokepoints.* For China and the PLA, access for its forces to and from the Western Pacific is an objective of A2/AD. The PLA must develop capabilities to control several chokepoints in Japan's Southwestern Islands chain. It may conduct assault landings on key islands at the chokepoints, i.e., Yonaguni, Ishigaki, and Miyako islands, and seize them. It may then fortify the islands to guarantee transit of PLA's forces in the chokepoints.

COUNTERMEASURES AGAINST A2/AD

A2/AD is not an operational plan or concept, but rather a psychological tool to deteriorate and deter the will and intentions of the United States. Japan and the United States must therefore build their capabilities individually and jointly to demonstrate their ability to cope with this challenge. This includes the following capabilities:

- *Capability to destroy the PLA's ASBMs.* ASBMs are antiship missiles that fly on a ballistic trajectory for most of their flight paths. In the final phase of flight, they hone in on a target at extremely high speed. This revolutionary system is designed to destroy mainly U.S. carrier strike groups and expeditionary strike groups. More specifically, ASBMs target a core ship in the group such as an aircraft carrier. It is troubling that the JMSDF and U.S. Navy—the only ballistic-missile defense (BMD)-capable navies in the world—do not yet have functional capabilities to counter this threat. However, it will most likely take five to ten years for the PLA to operationally field this system. The JMSDF and U.S. Navy must start to develop functioning ASBM systems by fully applying jointly established BMD technologies.
- *Capability to destroy the PLAN's submarine force.* To realize its A2/AD strategy, China will build up robust submarine forces with sufficient capabilities to destroy westbound U.S. reinforcements in the Western Pacific. The United States and Japan must be prepared to deal with this. Our forces must reestablish their antisubmarine warfare capabilities, which lost momentum after the demise of the threat of Soviet Union submarine forces in the early 1990s.

- *Capability to counter the PLA's area denial.* There are presently almost no effective countermeasures to meet every aspect of the PLA's attempts at domain denial. These are new frontiers for the United States and Japan. Nonetheless, the allies should launch new bilateral initiatives to jointly develop these capabilities at the earliest opportunity.

Core elements of U.S.-Japan joint postures in this category include the protection of the areas and facilities in Japan that support U.S. forces in the region. The following aspects of force protection are necessary:

- *Homeland defense: land-attack missile defense capability.* The PLA's Second Artillery may be able to launch various types of ballistic missiles toward Japan, and all of Japan's territory lies within range. Japan must develop sufficient BMD capabilities to fully meet this threat. This includes the introduction of land-based high-altitude BMD systems such as Terminal High-Altitude Area Defense or shore-based Aegis, which complement sea-based Aegis BMD. To counter China's A2/AD comprehensively, the JMSDF must deploy its Aegis guided-missile destroyer (DDG) fleet for combined fleet operations with U.S. forces and for homeland BMD operations. However, the JMSDF does not have sufficient numbers of BMD-capable Aegis DDGs to conduct both missions simultaneously. Cruise missiles will be another pillar of China's A2/AD strategy to attack Japan, and launching platforms include air, surface, subsurface, and ground assets. They will be directed to less-protected "soft" targets such as core political centers, industrial complexes, economic nerves, media centers, power plants, and transportation hubs. Japan must quickly improve its air-defense system to handle this threat.
- *Defense against sabotage.* The PLA may employ sabotage by its special forces to destroy mainstays of Japan's nationwide social infrastructures and confuse Japan's public opinion, which are key for supporting and enabling U.S. forces, directly and indirectly. The JSDF must develop and build a new posture to prepare for this.
- *Defense of the Southwestern Islands.* The JSDF must be prepared to protect the Southwest Islands and repel any PLA attempt to invade them. In developing defense strategies and operational plans the JSDF must consider how to protect 1.5 million islanders in the Southwest Islands, secure local shipping lanes, counter and repel an all-out invasion, and control chokepoints.

COST AND RESOURCE-IMPOSING STRATEGIES

Although China has been aggressively building up the PLA for the last two decades, it still has many problems and deficiencies. In all likelihood, it will remain an inferior force to the U.S. military for a number of years, and remain especially inferior to the combination of JSDF and U.S. forces. By taking this into account, the United States and Japan can undertake certain initiatives to leverage their advantages.

For example, it would be extremely difficult for the PLA to fully defend China's core industrial production areas along its vast coastlines, which stretch from the South China Sea and East China

Sea to Bo-Hai Bay, from saturated cruise-missile attacks. Concentrated and swarm cruise-missile attacks on these areas and targets by U.S. forces, supported by the JSDF, must be one of our core capabilities. This land-strike capability would be effective enough to deter the future adventurism of China in the region and impose huge investment costs on the aggressive nation if it intends to defend its industrial infrastructure and commercial facilities.

The United States and Japan should make several other military investments. First, the latter should adopt operationally offensive capabilities under a strategically defensive posture. If the JSDF focuses on China's dependence on sea lines of communication for its economic activities, the threat of interrupting them will have deterrent power. The JSDF's capability to destroy and sink the PLAN's capital ships, powerful symbols of nationalism, would surely deter China. The loss of one Chinese carrier would be significant. Additionally, the JSDF's mining capabilities, especially mines with state-of-the-art technologies, should be deployed to control chokepoints and blockade harbors.

There are also some bilateral U.S.-Japan initiatives that could target the PLA's center of gravity. First, the allies must consider the vulnerabilities of the PLA's modernization. The more capable the PLA becomes, the more heavily it will depend on high-tech equipment and systems. The allies should focus on capabilities to physically destroy and clandestinely neutralize the PLA's high-tech systems, which would be extremely effective measures. Such capabilities include attacking the PLA's space-based systems, digital networks, C4ISR systems, and other domain-awareness systems.

Second, the United States and Japan should focus on capabilities to destroy key PLA bases on the Chinese coast. Strategic strikes on core Chinese military bases, such as Yalong-Bay Naval Base on Hainan Island, Woody Island in the Paracel Islands, and the artificial islands in the Spratly Islands, would have serious impacts on the PLA's future strategic planning. Defending these key islands and bases will be extremely difficult for the PLA. If Japan and the United States do not develop capabilities to neutralize the bases – and plans to use them – the military balance and competition for sea and air control in South China Sea will become extremely favorable for China.

For China, like Imperial Japan in the Pacific theater in 1944 and 1945, protecting the islands will be an extremely difficult task and it will need to allocate vast resources to this endeavor. The fortified islands on China's coastline and artificial islands in the South China Sea are key elements for PLA's strategic planning against U.S. forces. China and the PLA will face more difficult and serious problems to protect the islands than the construction of the artificial islands themselves. (Indeed, artificial islands are unsinkable; during World War II, U.S. forces converted these seized islands into stepping stones for its counterattack against Japan.)

The allies must also consider the value of engaging in technology racing with China. In general, they can assume that they have technological superiority over China in most areas, as China appears to copy existing military systems rather than innovate independently. Technological inferiority will be a drag on PLA capabilities even as China's military forces continue to modernize. Japan and the United States must take all possible measures to maintain technological superiority over China. A well-organized high-tech transfer-control system, essentially a technology-containment policy toward China, must be developed and enacted at the earliest opportunity. This is not unlike President Ronald Reagan's overwhelmingly superior high-tech oriented yet merely conceptual Strategic Defense Initiative, which exhausted the Soviet Union's resources during the arms race.

Japan and the United States can support these initiatives by developing several key technologies. The highest-priority elements include technologies related to space, underwater, C4ISR, unmanned vehicles, counter-electromagnetic pulse measures, directed energy (laser and electromagnetic), hypersonic vehicles, ballistic, cruise missile, and fleet missile defenses, antisurface warfare, and mines.

China's A2/AD strategy aims to keep U.S. forces out of the Indo-Pacific region, ideally without fighting, in security environments ranging from peace to war. For this purpose, the PLA force build-up has focused on the vulnerabilities of U.S. forces. Japan Self-Defense forces will also be a target. Japan and the United States must jointly develop effective countermeasures to prepare their militaries for this challenge.

The United States and Japan have countless advantages when it comes to facing China. They must use these to develop concrete strategic plans and technologies that acknowledge the realities of A2/AD. As interoperability between the two navies' fighting forces increases and they jointly develop new technologies, Japan and the United States will work more effectively together. This enhanced cooperation will allow them to maintain high-tech superiority over China.