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**China's Blue Water Navy Strategy and its
Implications**

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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

As part of our study, "Beyond the San Hai: The Challenge of China's Bluewater Navy," CNAS commissioned a series of essays from Japanese experts exploring the implications of China's bluewater navy capabilities. These 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.

PREFACE

In recent years, China has been challenging existing and established international maritime norms, represented by the United Nations Convention on the Law of the Sea (UNCLOS), customary international law, and international standards for conduct at sea. It has done so by making extensive, unilateral territorial and maritime claims and through heavy-handed maneuvers in its surrounding waters, especially in the South China Sea (SCS) and the East China Sea (ECS).

China's recent willingness to take extraordinarily strong unilateral step to exercise its influence in maritime affairs is fundamentally related to its national objectives. In general, these seem to be: (1) preserving the Chinese Communist Party's untrammled authority; (2) protecting China's national sovereignty and territorial integrity; (3) promoting social welfare and people's quality of life; (4) building and maintaining a strategic nuclear posture that is comparable with that of the United States; and (5) constructing its own global expeditionary capabilities, which have been a U.S. monopoly for decades.

It is clear that all national objectives except (1) are related to both maritime/naval power and to U.S.-China relations. For example, in order for China to establish objective (2), it needs to construct a defense-in-depth/layered-defense posture in its surrounding waters. To realize this posture, China plans to control as many maritime features in its near seas as possible for national defense purposes, at any cost. However, this policy inevitably introduces serious friction with neighboring coastal nations. In addition to this, when realizing this objective, China often challenges established international norms and generates complicated dilemmas for the international community. In this regard, and due to overwhelming capability gaps between the PLA and those nations it is challenging, U.S. forces in the region have been the only practical deterrent to China's attempts to use military force to establish its national objectives. In case of regional crisis or war, to say nothing of a head-on military clash between superior U.S. forces and the PLA, it is clear that, in order to defend its homeland and protect its national interests China needs to prevent U.S. forces' intervention by all means. For this reason, China developed its strategy to blunt U.S. intervention and, eventually, to keep the United States out of the region at any time and at any cost. These are the reasons why China is so assertive over maritime issues. These are also the fundamental security principles underlying China's A2/AD strategy, which will be discussed in next chapter.

Similarly, national objective (3) is closely connected with the universal right of free use of seas and safety/security of Sea Lines of Communication (SLOCs) of any nation. However, China prefers to narrow and limit these fundamental principles in this regard, generating strong disagreements between China and other seafaring nations including Japan and the United States. National objective (4) is similar to the maritime strategic nuclear rivalry and confrontation between American and the former Soviet Union. China confronts U.S. forces permanently based in its surroundings precincts. For this reason, China will surely and naturally compete against robust U.S. Navy forces. National objective (5) relates to the U.S. global-reach capability, which has been supported by both customary international law and the global expeditionary monopoly enjoyed by the U.S. Navy. In order for China, a late comer with strong determination to be a new great power, to establish objective (5), it must confront regional and global maritime orders dominated by the U.S. Navy in almost all cases.

As examined above, there are many disagreements on the fundamental principles of maritime affairs between the two nations and the navies. In this point of view, it is right to estimate that China, which thinks today's international norms have been largely controlled by the United States and unfavorable to China's maritime policy, is challenging the norms. Thus, China tries to weaken U.S. global influence and the Navy that supports it at any cost, and will do so into the future.

China's approach to solving international problems seems to comprise dynamic combinations of four interlinked stratagems: (1) acting in full compliance with the rules, when they are favorable to China; (2) attempting to advance unique and self-serving interpretations of established international rules, when there is room for wider interpretation to support China's position; (3) claiming full disagreement with or ignorance of the rules, when it is totally unfavorable to China; and finally, (4) maneuvering to create new rule that would supersede existing regimes when precedents are weak or nonexistent.

Depending on the nature of the problem, China will try to selectively apply one or more of above elements that would be best suited to achieve its strategic objectives and preserve its national interests. These Chinese political tactics tend to confuse the international community -- including Japan and the United States -- thus complicating quick and forthright responses.

The recent, more assertive strategies require China to have reach and influence far beyond its shores. The People's Liberation Army Navy (PLAN), which has made significant progress and expansion in both quality and quantity during a two-decade force buildup, is one of the major players in supporting China's assertive maritime claims. Having said this, however, it is also true that the PLAN has many problems that make it still inferior to both the U.S. Navy (USN) alone, and to the allied combination of the U.S. Navy and the Japan Maritime Self Defense Force (JMSDF). It is also true that geopolitical constraints on China also impede the PLAN's operation outside the semi-enclosed waters of the East and South China Seas.

So, a key question naturally arises: can the PLAN, which has grown into a local giant, really be a "blue water navy" that will extend China's influence in the region by operating continuously outside the SCS and ECS -- i.e., in the Pacific Ocean and/or the Indian Ocean? What are the obstacles that could impede sustained PLAN out-of-area operations?

This article will argue that the main impediment to China's military rise is the control of major maritime choke-points in its adjacent seas—choke-points that are vulnerable to interdiction by a number of other nations, most importantly the United States. Thus, China's efforts to raise the costs of U.S. and allied military action within "first island chain" are not only aimed at problems such as the reunification of Taiwan, but at enabling a springboard for China's expansion into the broader maritime and air commons. This article will outline that strategy, discuss the PLA's efforts to build its capabilities and address weaknesses that could undermine the strategy, and finally conclude that Washington and its allies, especially Tokyo, can limit China's blue water ambitions only by retaining control of strategic chokepoints.

CHINA'S POLICY AND STRATEGY TO KEEP THE UNITED STATES OUT OF THE INDO-ASIA-PACIFIC (A2/AD)

Though developed by western naval thinkers, the concept of Anti-Access and Area Denial (A2/AD) has served as a good general theory for how an inferior can cope with a superior in the era of long-range precision weapons. In terms of today's security environment in the Indo-Asia-Pacific region, it is absolutely clear that the former is China and the latter is the United States.¹

A2/AD is China's strategy to establish its national objectives without directly engaging superior U.S. forces in the region. For China, which will still be inferior to USA in the 2020s and possibly into the 2030s, the largest challenges to its national objectives are the United States and its forces in the region, which are critically enabled by the Japan-U.S. alliance. So, China developed a policy and strategy to keep U.S. forces out of the area by demonstrating or just suggesting the PLA's capability to destroy the main U.S. power projection assets, aircraft carriers (CVN), in waters far from China's mainland. In addition to new systems such as its anti-ship ballistic missile (ASBM), China will deploy its submarines and shore-based aircraft equipped with anti-ship cruise missiles.

Even so, due to clear power differences between the two forces, China would very likely lose an all-out, head-on military clash with U.S. forces. Hence, China introduced new "asymmetric" combat capabilities that will neutralize the PLA's inferiority to U.S. forces, and can counter conventional high-end warfare operations.

U.S. forces fully depend on conventional high-end capabilities to conduct their most advanced warfighting and combat operations around the world. Other than the world's best strategic and tactical strike capabilities of U.S. forces, these high-end warfare capabilities include the ability to: operate in space; use digital networks; fight in cyberspace; utilize radar and underwater systems; manage radio communications; collect photo imagery; and conduct effective Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) -- all of which make the U.S. military the world's premier fighting forces.

China's asymmetric warfare capabilities may be described as being aimed at the "nerve networks" that connect the brain (headquarters) and muscles (front-line fighting forces) of the U.S. military. Therefore, if these nerve networks, or even a part of them, were destroyed or disabled, the negative impacts on U.S. forces, even with the brain and muscles still alive, would be substantial and distracting enough to largely degrade their fighting capabilities. Thus, U.S. forces would lose their advantages over the PLA, and could become a sitting duck for easy finishing, even by inferior PLA forces. Even if the United States still prevailed, it would do so at much higher cost than in symmetric force-on-force combat.

¹ At the same time, however, since A2/AD is a general concept to explain the policy and strategy of an inferior toward a superior, there are also several other cases in today's international security situation where this concept could be applied. For example, some strategic thinkers have already used the term to explain U.S.-Russia security competition, especially in Europe and the Middle East. So, in this context, we have to be careful enough when we use the terminology, and I will use the A2/AD concept specific to China's policy and strategy against the United States in this article.

It makes sense for China and the PLA to achieve their objectives without engaging in all-out combat operations against U.S. forces, which could inflict intolerable and unsustainable damages to China's territory and its military. The key to doing so is to demonstrate the A2/AD concept successfully enough that Washington perceives it to have potentially decisive advantages. Such a perception could weaken America's resolve to maintain U.S. forces' forward presence and to conduct interventions in the region. In this regard, the real targets of the A2/AD strategy are the "hearts and minds" of American leaders and people.

PRESENT STATE OF THE PLA

As the result of a series of reform measures in 2016, the PLA was divided into five main service branches: the Ground Force (PLAGF), the Navy (PLAN), the Air Force (PLAAF), the Rocket Force (PLARF), and the Strategic Support Force (PLASSF). There are still striking mission and cultural contrasts between the three traditional service branches: the PLAGF, PLAF, and PLAN.

Other than the Taiwan scenario, which has occupied the central part of PLA planning and force modernization since 1949, the PLAGF and PLAAF have both primarily been land-border and territorial airspace defense forces focused on neighboring nations, such as: India, Russia, Vietnam, North Korea, and several others.² Of course, this does not mean that these two forces are tasked to only conduct exclusively defensive operations. Rather, they are tasked with defending China by marshaling offensive capability sufficient to attack and annihilate its adversary.

In addition to this, PLAAF has historically been both an air-defense force against an adversary's air force and a support force to PLAGF ground operations. However, since the mid-1990s, PLAAF has started expanding its geographical area of operations beyond Chinese territorial airspace, to areas located over distant waters from its coast. This is a clear synchronization with China's expansion of maritime maneuvers into surrounding waters.

In addition to its other responsibilities, the PLAAF's bomber force and its attack fighter force are now also tasked to attack enemy naval forces in distant sea areas. Three artificial islands, with airfields capable of handling fighters and bombers, have recently been built in the Spratly Islands; they will provide the first opportunity for PLAAF to fly over SCS areas very far from mainland China to conduct surveillance and possible air defense/attack operations against U.S. and other regional forces. If this new posture of the PLA in the SCS, i.e., militarization of the Spratlys, is brought to full fruition, it will become an extremely worrisome operational environment where, for example, a USN Carrier Strike Group (CVSG) operating in the SCS will have to contend with a high-level threat from the air.

Nevertheless, at present the PLAGF and PLAAF can mainly conduct robust operations only in and around China's home territory. They lack a full-scale expeditionary capability like that of the United States, with which U.S. Forces are able to utilize worldwide and dispersed networks of military bases and various support infrastructures provided by many allied and friendly nations.

² These two services are both large in size: 1.6 million personnel in the PLAGF, and 400,000 in the PLAAF.

Since the mid-1990s, the PLAN, which was once a tiny coastal defense force and a fully subordinate element to the PLAGF, has become a major player among the services, not least because of its role in fully supporting and realizing China's A2/AD strategy. Indications are that this will remain the case. In contrast to the PLAGF and PLAFAF, the PLAN seems to have been aiming to transform itself from a "brown-water" coastal navy to a true "blue-water" open-ocean navy with expeditionary capabilities and the ability to operate on the high seas in the Pacific and Indian Oceans. The Chinese government's prioritization of the PLAN in resource allocation over the past 15-20 years has yielded some significant successes in this regard.

The main impediment to the PLAN becoming a real blue-water navy may instead be political: because it lacks strong alliances, China has few functioning military bases that have full support capability provided by hosting allied or friendly nations. In this regard, there are clear and substantial differences between the access to international military bases and infrastructure that U.S. forces enjoy today and the limited ports and airports in friendly nations that PLA can use. China, seemingly understood this reality, just started construction of a huge dedicated PLAN base for unlimited use in Djibouti.

PLAN'S STRENGTH BY 2030

The PLAN has been growing rapidly during the last twenty years, and has become the second largest navy in the world, supported by decades of Chinese economic growth and strong government resource allocations. Even though the China's economy will gradually slow down, this encouraging trend for the PLAN is estimated to last for at least ten more years.

The followings is an estimate of what PLAN's strength will be by 2030:

(1) PLAN Force Strength in 2030s

Submarine Force

SSBN: 2 Jin and 4 (New, Type-096)

Total: 6

SSN: 2 (Shang) and 10 (New, Type-095)

Total: 12

SS: 16 (Yuan) and 20-30 (New, Type-039C)

Total: 36-46

Aircraft Carrier (CV) Force

CV: 1 Renovated-prototype (Liaoning) and 2 (New with ski jump flight deck)

Total: 3

Surface Force

DDG: 2 (Luzhou), 6 (Luyang-II), 30 (Luyang-III) and 4 (New, Type-55)

FFG: 2 (Jiangkai-I) and 50 (Jiangkai-II)

DDG/FFG Force Total: 40 DDG + 52 FFG

Mobile Logistic Supply Ship Force

AOE: 8 (Fuchi) and 4 (New)

Total: 12 AOE

Amphibious Force

LPD/LHD: 6 (LPD-Yuzhao) and 3 (New, LHD-Type-81)

LPD/LHD Force Total: 6 LPD + 3 LHD

Naval Aviation

Medium Bomber Force: 60

2016: 30 H-6G

Land-based Tactical Attack Fighter (F/A): 300 Next Generation

2016: 300 JH-7, J-10, J-11, J-15

Carrier-based Tactical Attack Fighter (F/A): 60 (2 CAG, 30 per CAG)

2016: 24 Su-33, 6 J-15

MPA/EW/AWACS: 80 (For two Fleets; 40 in East Sea Fleet and 40 in South Sea Fleet)

2016: 9 Y-8 MPA, 7 Y-8 ELINT, 10 Y-8 AEW

Helicopter Force: 100 ASW (Shipboard) and 100 (Land Based ASW Operations)

10 Carrier-based AEW (5 per CAG)

2016: 25 Z-9C, 19 Ka-28, 10 Ka-31

(2) Major Operational Units: Three Fleets – Good enough to support China's foreign and security policy?

Currently, PLAN forces are formed into three fleets: (1) the North Sea Fleet (NSF) responsible for operations in the Yellow Sea; (2) the East Sea Fleet (ESF) responsible for operations in the ECS, around the Southwestern Islands of Japan and in the Western Pacific, including Taiwan and the Bashi Strait; and (3) the South Sea Fleet (SSF) responsible for operations in the SCS.

However, as the scope and tempo of China's maritime activities and maneuvers get more active and assertive than in the past, the PLAN's area of responsibility (AOR) will also get larger and expand into surrounding waters beyond its traditional sailing areas nearer to the mainland.

One significant recent trend is an increase in the PLAN's out-of-area operations beyond its traditional AOR: the Yellow Sea, ECS, and SCS, and they can provide us with some hints about PLAN's new deployment strategy and operational concepts, as well as its revised naval doctrine.

During the last several years, PLAN units have started conducting operations in the aforementioned waters beyond each fleet's traditional AOR, e.g. the high seas in of the Western Pacific and Indian Oceans. In addition to these, the PLAN's anti-piracy deployments to the Gulf of Aden have become an uninterrupted annual operation since 2008, and China also occasionally sends a flotilla of PLAN forces further into the Mediterranean Sea and even Black Seas. Similarly, during the past few years,

PLAN has started increasing, albeit gradually, its presence in the Indian Ocean, where a numbers of friendly island nations exist, and in the coastal waters of East African nations that are both major sources of natural resource imports and future potential markets.

In the Asia and Pacific region, PLAN units have increased presence operations, both in mid-Pacific waters, home to the fourteen Pacific Islands nations, and in waters west of South America. Relations between China and some South American nations are developing along trajectories similar to those between China and some African nations mentioned above.

A second new line of effort is the PLA's effort to increase joint operations capabilities among its five newly-established service branches. Key points of emphasis are building coordination between the PLAN and PLAAF, as well as among the three geo-separated PLAN fleets. Jointness will enable key military capabilities against U.S. forward-deployed forces and operations in the region.

The PLA has been actively conducting various joint exercises to realize this second objective. PLAN units from the East and South Sea fleets conduct almost daily integrated multi-fleet operations in various Western Pacific waters. In most of the exercises, PLAN units are joined by PLAAF units that cross Japan's Southwestern Islands (Ryukyu) chain through one of several strategic choke points. The PLAN and the PLAAF have increased the frequency of operations that pass through the Ryukyus on the way to the open Western Pacific or the SCS.

Related to the above, the PLA has started sending some joint navy-air force units into Sea of Japan through Tsushima Strait, another strategic chokepoint since the days of the Cold War, to increase China's force presence around Japan and to enhance a cooperative posture with Russian military counterparts.

Significantly, during late December 2016 and early January 2017, the PLAN deployed its Liaoning carrier group (CVG) to the ECS and SCS from its base at Qingdao. The CVG transited the ECS, went through one of the gaps in Japan's Southwestern Islands' chain, and proceeded into the Western Pacific. From there, the CVG turned west into the Bashi Strait and steamed into the SCS. After visiting the newly completed Sanya naval base on Hainan Island, the CVG sailed out again into the SCS, and conducted several training exercises there. Then, the group transited through the Taiwan Strait, and returned back to Qingdao. It is reported that the CVG conducted intense carrier air operations and various maritime warfare exercises during this relatively short deployment.

These recent open-ocean transits and exercises provide striking contrast with past PLAN maritime operations. Recent training deployments have been more significant from a military perspective than those in the past.

The PLA, especially the navy and air force, have in fact started developing new operational capabilities that will support China's A2/AD strategy in its adjacent waters and skies. The primary objectives of China and the PLA are to stop and reduce U.S. forces' forward presence in peace time, and their intervention during crisis or wartime, by demonstrating that the PLA's robust and sophisticated joint operational capabilities could match those of the combined Japan-U.S. alliance.

In this regard, China naturally aims to cut and/or weaken the United States' ties with its Asian allies. For instance, the Japan-U.S. alliance is an indispensable enabler of U.S. forces' operations in the region. More frequent and confident Chinese deployments in areas surrounding Japan have an intended psychological effect on Japanese planners worried about U.S. reliability. In addition to the deterrent effect, in the event of actual hostilities, it is desirable for the PLA to engage and destroy U.S. forces in waters as far away as possible. "Blue-water" out-of-area capabilities and postures can serve all of these goals, broadcasting increased PLA sophistication and providing some defense-in-depth. For China and the PLA, these factors provide critical impetus for the PLAN to continue growing into a real and functioning blue-water navy.

PLAN AS A BLUE-WATER NAVY

As described just above, for the PLAN to fully support China's strategic objectives, which are the core aim of A2/AD strategy, the PLAN must possess substantial operational capabilities in distant open waters, extending to the Western Pacific and Indian Oceans.

From a force structure and operational capabilities point of view, the PLAN seems to have certain characteristics to help it become a real blue-water navy. However, at the same time, it needs to reorganize the operational requirements for its three fleets to establish two different and competing missions: (1) to protect China's national interests in each fleet's AOR, and (2) be able to conduct out-of-area operations to counter U.S. forces operating further afield in the region.

The typical characteristic of the first operational requirement is, by nature, a defensive one; and that of the second requirement is more oriented toward the offensive, i.e., to deter and strike USN forces. These two totally different operational requirements could be described as "water and oil." In this context, the PLAN may need to establish two new operational units, one being a dedicated and custom-made flotilla to operate in the Indian Ocean and further-away Western waters in Europe; and the second being CVGs that operate independently from the three "defensive" PLAN fleets, but can be used either for out-of-area power projection or in support of the fleets.

Another subject to be considered seriously is the geographic reality that constrains and mitigates the PLAN's ambition to be a true blue-water navy. Unlike Japan and the United States, whose major naval bases are fully open to the Pacific Ocean, all of the PLAN's bases are either in the ECS, Yellow Sea, or SCS. This means all PLAN forces are contained in waters that are semi-enclosed by a series of islands chains, as well as that of archipelagic nations located around the SCS. For the PLAN and PLAAF to operate outside of China's immediate littoral, their units have to pass through some choke points to and from outer open waters and airspace. This complicates the PLA's goals to have a real blue-water navy, and for its air forces to freely operate in airspace over the Western Pacific and Indian Ocean.

For the PLAN, peacetime exit and entry operations through these various choke-points are not impeded by any other navy or nation, and this situation will not change in the future. However, deployments of the PLAN's units in contingency and/or wartime could become extremely difficult and troublesome. There are several choke-points that surround the PLAN's AOR, e.g., in Japan's Southwestern Islands chain, between Taiwan and the Philippines, within territorial waters of the Philippines and Indonesia, and the Strait of Malacca. For China, all of these choke-points are

controlled by other nations, and in general, those nations are relatively friendlier to both the Washington and Tokyo than to Beijing.

A point of concern is that, in a contingency and/or war in which the United States and China are involved, neutral nations may try to control these choke-points, even if solely to preserve neutrality. The PLAN cannot count on the luxury of free passage and transit of its operational units through the choke-points. Therefore, choke-point interdiction operations of U.S. allies could cause great difficulties for China. For example, a U.S.-allied nation like Japan can physically block the choke-points in its Southwestern Islands chain by deploying JSDF units, thereby not allowing PLAN units' transits out to the open oceans to fight USN forces. In this context, China and the PLAN probably cannot avoid military clashes between PLA and JSDF over choke-points.

In addition to this, the JSDF will block and control the Bashi Strait, and Australian forces may block and control the outer waters of choke-points in high-seas areas near to the Philippines and Indonesian archipelagos. U.S. forces will also block the choke-points controlled by neutral nations to prevent PLAN units from exiting into the high-seas to attack the USN.

So for China and PLAN, the geographic characteristics of its home waters could be their most difficult obstacles to becoming a real blue-water navy. Of course, China has many options to solve or reduce this problem, but it is true that China will have to pay large costs for any solution.

Last but not least, China's relative political isolation may prevent the PLAN from being a real blue-water navy. In order for any military, especially a navy, to operate its forces in areas far from its homeland, proximate overseas bases are indispensable. In this context, what has helped to make U.S. forces a global power is the large numbers of overseas bases that are provided by various alliance networks. This framework has been a real enabler for U.S. forces' global operational reach. China may be trying to begin remedying this deficit, for example with the planned construction of a PLA base in Djibouti. But, this type of attempt is overwhelmingly small and weak when compared to the United States' alliance network.

SUMMARY

The PLAN has been growing rapidly and has a large potential to become a real blue-water navy. However, it is also clear that China and PLAN will have to solve many problems in order to establish their objective to be a blue-water navy.

Therefore, Japan and the United States will need to prepare ourselves to counter China's strategy by precise coordination to focus on the PLAN's most difficult and unavoidable impeding factor, which is: the semi-enclosed nature of the East and South China Seas. A key question for Tokyo and Washington is how to assure wartime control of these waters' many strategic chokepoints? In other words, in order for Japanese and U.S. forces to maintain an advantageous position over the PLA, the two military forces have to retain the capability to keep big wild birds (PLAN and PLAAF) in their naturally given cages (ECS and SCS). Both Japan and the United States need to develop this capability at the earliest opportunity to deter China's adventurism.