

Strategic Implication and Impact of PRC's Blue Water Navy

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Introduction

Understanding the PRC's Blue Water Navy and its impact and strategic implication must begin with identifying the various definitions of what a “blue water” Navy is. This is particularly the case since the PLA does not use the term “blue water” Navy.

For assessing a potential PRC blue water Navy, we can learn much about current status and future capabilities by briefly reviewing the current PRC maritime forces and trends. These forces include not only the key platforms of the PLA Navy, but also support forces essential to developing blue water capacity.

Another aspect of developing a PRC blue water Navy requires considering the recent trends in operations, increasingly distant from China, in light of the ongoing overall PLA reorganization. In developing a blue water Navy the PRC faces a number of significant challenges. There is the issue of how to balance force structure optimization between more distant global blue water tasks and closer-in regional missions. Closely related is the issue of balancing force

deployments and operations to gain blue water experience, while continuing to uphold nearby regional tasks. A third major challenge is how PRC blue water operations will fit in the context of broader PLA trends of increasing jointness and reorganized Command and Control. The PRC's ongoing evolution of a blue water Navy has several important implications and impacts. There are real stresses and complications between continuing PRC maritime priorities in the closer-in "near seas" and expanding operations and goals in more distant blue water "far seas." Perhaps most important, a PRC blue water Navy operating more globally will increasingly, like Navies of great powers before, face more scrutiny, wariness, and criticism from other states.

Developing a Blue Water Navy

Definition

Understanding the PRC's evolving blue water Navy requires first an analysis of the definition of what is meant by a "blue water" Navy. The term "blue water Navy" has different meanings for different analysts, and even the status of the UK Royal Navy today, and the French and Russian Navies, all of which clearly conduct global operations in "blue water," are disputed when it comes to terming them "blue water" Navies.

The PRC military does not use the term "blue water Navy." Instead, the term "near seas" is used to refer to the South China Sea and East China Sea (including the Yellow Sea and Bohai Gulf), while the term "far seas" refers to all waters

beyond the “near seas.”¹ Thus the PRC definition of “blue water” is essentially all the waters beyond the First Island Chain, which stretches from Japan, Taiwan, and the Philippines through the South China Sea to the Straits of Malacca. This PRC “blue water” definition would thus include all operations beyond the First Island Chain in the Pacific Ocean, out to the Second Island Chain (Guam) and beyond into the central Pacific and the islands of Oceania. Beyond the Pacific, PLA Navy “blue water” operations would include the Indian Ocean and beyond to the Mediterranean Sea and the Atlantic Ocean. Beyond the Pacific Ocean, PLA Navy operations clearly correspond to the more generally accepted Western definition of “blue water” as operating in all the world’s major oceans.

Forces

The development of the PRC’s blue water Navy is reflected in the evolution of its maritime force structure. This includes not only the key platforms of the PLA Navy, but also its major support forces.

A detailed analysis of the overall evolution of the PLA Navy and its major platforms is well beyond the scope of this presentation, but an excellent comprehensive analysis can be found in various sources, including notably Bernard D. Cole’s The Great Wall at Sea: China’s Navy in the

¹ Ryan D. Martinson, “China’s Far Seas Naval Operations, from the Year of the Snake to the Year of the Pig,” CIMSEC, February 18, 2019.

Twenty-First Century.² For the purposes of our topic, a brief summary of the current status and trends of key PLA Navy platforms will suffice.³ The bottom line, as stated in recent official U.S. reports, is that China's Navy "is the region's largest Navy (overall, larger than the U.S. Navy in ship numbers, but not tonnage), more than 300 surface combatants, submarines, amphibious ships, patrol craft, and specialized types."⁴

Aircraft Carriers

China's first aircraft carrier, Liaoning (Type 001) entered service in 2012. It is 60,000 tons (compared to the 100,000 tons of the U.S. Nimitz-class nuclear- powered aircraft carriers

² Bernard D. Cole, The Great Wall at Sea: China's Navy in the Twenty-First Century, 2nd edition, U.S. Naval Institute Press, 2010

³ This summary will draw on CRS (Congressional Research Service) Report RL33153, China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress, by Ronald O'Rourke, updated September 24, 2019

⁴ U.S. Department of Defense, Annual Report to Congress, Military and Security Developments Involving the People's Republic of China 2019, May 12, 2019, (Hereafter "2019 DOD CMSD) and Defense Intelligence Agency, China Military Power, Modernizing a Force to Fight and Win, 2019, (Hereafter 2019 DIA CMP or China Military Power Report). For other earlier data, see Office of Naval intelligence, The PLA Navy, New Capabilities and Missions for the 21st Century, released April 2015

(CVN)), with a ski ramp for launching aircraft instead of catapults (which can launch heavier aircraft). It carries 30 or so aircraft in its air wing. China reported that this Type 001 carrier achieved Initial Operational Capability in May 2018, though it has mainly been used for training. A new second aircraft carrier, Type 001A, similar but slightly larger at 70,000 tons, is now conducting its final sea trails. A third carrier, Type 002, is under construction, larger still at 80,000 tons, and is expected to have catapults to launch more heavily loaded aircraft. Analysts expect an eventual total of six or more aircraft carriers, with the latter ones perhaps being nuclear-powered. The current aircraft carriers are equipped with J-15 (Flying Shark) fighter aircraft, expected to eventually be supplemented by a carrier version of the J-20 stealth fighter. Notably, the PRC aircraft carriers are not required for Taiwan scenarios (since Taiwan is within range of China's land-based aircraft), but the carriers are clearly useful to influence or coerce regional states, and to project power in more distant blue water areas.⁵

Surface Combatant Ships

The PLA Navy over the past two decades has built a large modern surface Navy, whose larger ships (cruisers, destroyers, and frigates) are capable of blue water operations. The newest and largest Cruisers (or "large destroyers" in PLAN

⁵ CRS Report RL33153, p. 11

terms) of the Renhai-class (Type 055) are, at 13,000 tons, larger than the U.S. Navy's Aegis Cruisers. Four have been launched, and several more are under construction.⁶ Many of the remaining thirty PLA Navy Destroyers are of the modern Type 052 (Luyang-class), with nine being the newest Type 052D. These PLAN Destroyers, of 7,500 tons, are similar to U.S. Arleigh Burke class Aegis Guided Missile Destroyers, and have Aegis-like phased array radars and vertical-launch missile systems for anti-ship and anti-air missiles. Somewhat smaller are the almost thirty 4,000 ton Frigates of the newest Jiangkai II (Type 054A) class, out of a total of 54 Frigates in service, with more Type 054A Frigates under construction. Over fifty of the new 1,500 ton Corvettes (or light frigates) of the Jiangdao class (Type 056) have been built in just this decade, and another dozen are said to be under construction. At the smaller end of the PLAN surface fleet is a force of sixty new Houbei-class (Type 022) fast missile attack boats, out of a total force of 86 such boats.⁷ Overall, the modernity, numbers, and capabilities of the PLA Navy's Surface Combatant Ships provide a firm basis for a blue water Navy.

Submarines

China has also modernized its submarine forces, which

⁶ Andrew S. Erickson, "The Pentagon Reports: China's Military Power," The National Interest, May 8, 2019

⁷ For details of these ship classes, see CRS Report RL33153 and Erickson.

include in 2019 fifty diesel-powered attack submarines (SS) and six nuclear-powered attack submarines (SSNs), plus four Ballistic Missile Submarines (SSBNs), with more under construction.⁸ The newer Yuan-class (Type 039) SSs and the newer Shang-class (Type 073) SSNs are the most important submarine forces, in addition to the ongoing SSBN construction of the newest Jin (Type 094 SSBNs), which carries twelve JL-2 nuclear ballistic missiles with a range of 7,400 kilometers.⁹

Amphibious Forces

In light of their potential value as platforms for global blue water operations, as well as in the PLA's lead task to be able to, if ordered, invade and defeat Taiwan, the evolution of PLA Navy Amphibious Forces is particularly interesting. The PRC has an active construction program for new, large amphibious ships. Five of the new Yuzhao (Type 071) amphibious ships (at 20,000 tons similar to the U.S. Navy's new San Antonio-class (LPD-17) ships) are now in service, with at least three more under construction. Other, smaller and older, amphibious ships make up a PLAN total of thirty-seven such ships. The 2019 DOD China Military

⁸ Recent DOD and DIA Reports estimate a total PLAN submarine force of up to 70 by the end of 2020. See 2019 DOD CMSD, pp.35-36 and 2019 DIA CMP, p. 72

⁹ CRS Report RL33153, p. 6

Power Report concludes that, despite the eight new large amphibious ships “there is no indication that China is significantly expanding its landing ship force necessary for an amphibious assault on Taiwan.”¹⁰ However, as the CRS Report notes, these large new amphibious ships might have considerable value for other operations in the South or East China Seas, and as platforms for more distant global blue water operations.¹¹ Perhaps most important in the context of the PLAN’s evolving blue water Navy is the ongoing rapid building of the first of a new class of amphibious assault (helicopter carrier) ship, the Type 075, which at 40,000 tons is similar to the dozen U.S. Navy LHA and LHD type Amphibious Assault Ships.

Key Support Forces for the PLAN

China Coast Guard (CCG) and People’s Armed Forces Maritime Militia (PAFMM)

The 2019 DOD China Military Power Report highlights PRC maritime tactics in the South China Sea and East China Sea that, in enforcing “maritime rights and claims,” uses the China Coast Guard (CCG) and the many “fishing” boats of the People’s Armed Forces Maritime Militia (PAFMM), with the PLA Navy in a backstop deterrent role.¹² Both the CCG and

¹⁰ Erickson and 2019 DIA CMP

¹¹ [CRS Report RL33153](#), p. 15

¹² Erickson and 2019 DIA CMP

the PAFMM are since early 2018 under the command of the People's Armed Police (PAP) and now, like the PLA Navy, under the orders of the Central Military Commission (CMC). The 248 largest ships of the CCG constitute "by far the largest Coast Guard force in the world," and more ships than all the other major Asian Coast Guards combined. Two of the newest CCG ships are Cruiser-sized, at over 12,000 tons. In addition to hundreds of the largely state-owned fishing vessels in the PAFMM, some 84 specially built PAFMM fishing vessels in Hainan have reinforced hulls and ammunition storage, to further enhance their usefulness in coercion in China's gray zone operations.¹³

Fishing Boats

Apart from the PRC fishing boats formally trained and committed to the PAFMM, the PRC has thousands of fishing boats dispersed globally and operating in blue water. Reporting from these Chinese fishing fleets, and their on-scene presence and experience, is an additional national asset that the PLA Navy can draw upon as it continues to expand its own blue water operations.

Ports

Significant assets for a more global PLA Navy are the many overseas ports which PRC companies own, operate, and

¹³ Erickson and 2019 DOD CMSD

build (often with One Belt-One Road infrastructure funding from China.) These ports are potentially very useful to dock and provide logistics support to PLA Navy forces around the world. This includes not only ports nearby in Southeast Asia but also along the “Maritime Silk Road” into the Indian Ocean, and extending to ports in Australia, the Mediterranean Sea, and even Panama.

Shipping Fleets

Last and by no means least among the support elements for a developing PRC blue water Navy are China’s large and growing state-sponsored commercial shipping fleets. Like the network of PRC owned and operated commercial ports, the presence and experience of China’s commercial shipping fleets are a potential asset to the PLA Navy as it expands its global blue water reach.

Developing a Blue Water Plan—Operations

Indian Ocean and Pacific Blue Water Operations

In retrospect, the years 2007 and 2008 may be seen as milestones in the evolution of PLA Navy blue water operations. In 2007, the PLA Navy began what would become routine operations to the east of the First Island Chain further into the Pacific Ocean.¹⁴ Perhaps more important on

¹⁴ Martinson

the longer term evolution of a PLA blue water Navy, 2008 marked the beginning of continuous (to this day) four-month escort task force deployments (usually of three PLAN ships) to the Gulf of Aden and western Indian Ocean in support of the international effort to counter Somali piracy. Though the PLAN anti-piracy escort task force deployments, now totaling over thirty in number since 2008, have all been conducted on an independent national basis, they have resulted in the PLA Navy's initial large scale routine blue water debut being made with the approval and even encouragement of the international community, including the United States. Second, as Dr. Phillip C. Saunders of the U.S. National Defense University has highlighted, "the PLA Navy's counter-piracy presence in the Gulf of Aden facilitates strategic ties in the Middle East and Africa, helps guarantee China's economic security, and provides operational experience in protecting China's sea lines of communication."¹⁵ It might also be added that these task

¹⁵ Dr. Phillip C. Saunders and Jiunwei Shyy, "China's Military Diplomacy," Chapter 13 in Scott D. McDonald and Michael C. Burgoyne, Editors, China's Global Influence: Perspectives and Recommendations, Daniel K. Inouye Asia-Pacific Center for Security Studies, 2019. For a very comprehensive analysis of China's military diplomacy, see Kenneth Allen, Phillip C. Saunders, and John Chen, Chinese Military Diplomacy, 2003-2016: Trends and Implications, China Strategic Perspectives 11 (Washington, D.C.: National Defense University Press, July 2017)

force operations resulted in regular contacts the U.S. Navy and other global navies while on anti-piracy patrols in the region. Also, the need for these PLAN anti-piracy task forces to make port calls for logistics support, and the opportunity to make diplomatic port calls (often at the end of their deployment period) led to greater PLAN understanding of the need for blue water naval operations to access support in regional ports. Ultimately, this resulted in China establishing an overseas military port base in Djibouti in 2017. While the PLA Navy's independent national contributions over the past decade to the anti-piracy operations in the Indian Ocean were largely well-received, or at least non-controversial, in contrast the PLA Navy's increasing "far seas" operations east of the First Island Chain into the western and central Pacific have aroused concerns of the United States, Japan, and others.

Global Blue Water Operations

The PLA Navy's evolution toward a global blue water Navy is perhaps most notably indicated by various PLAN task force deployments in recent years—to the North Pacific and Aleutian Islands area, to the Mediterranean Sea and North Africa (Tunisia and Algeria), and to the South Atlantic and South Africa. In addition to these deployments of surface combatant ships, China has used its Hospital Ship *Peace Ark* for deployments to the Pacific Islands, and as far as the Caribbean Sea. But perhaps most remarkable was the deployment of a PLAN task force in 2017 to the Baltic Sea for

exercises with Russia, and operations through the North Atlantic. The PLA Navy has also conducted exercises with the Russian Navy in the North Pacific. The military cooperation of an aspiring global blue water PLAN with Russia is part of a striking relationship summarized in a recent analysis in *The Economist* as “the real news is how rapidly Russia is becoming dependent on its great neighbor.” In 1989, Soviet GDP was twice that of the PRC; today, China’s GDP is six times larger than Russia’s.¹⁶

Blue Water Operations in Context of PLA Reorganization

As the PLA has been reorganized in recent years under President Xi, new Theater Commands, more Joint Operations, and Command and Control changes also are important potential impacts on evolving blue water operations for the PLA Navy. Some of the “far seas” blue water Navy operations of the PLAN have been conducted directly under the command and control of Navy Headquarters, while others apparently have been conducted under (joint) Theater Commands. Most recently, in the early 2019 deployment to the central Pacific of a four-ship task force (including a new LPD large amphibious ship), the Chinese press termed this a “far seas joint training task force.” This task force operated

¹⁶ “Briefing: Russia and China,” and “Brothers in Arms,” *The Economist*, July 24, 2019, pp. 15-18, p. 8

with forces from other services (PLA Rocket Force, PLA Air Force, and PLA Strategic Support Force) under the Southern Theater Command. PRC official media said that one of the task force's aims was to “explore methods and approaches for building joint operations combat capabilities to win modern war at sea.”¹⁷ The major PLA reorganization is, like PLA blue water Navy operations, still evolving. So it will be important to continue to closely observe and analyze the role of joint Theater Commands (and Navy service Headquarters) in command of PLA Navy blue water operations.

Challenges for PRC in Development of Blue Water Plan Force Structure Optimization

Although a broad analysis of the PLA's maritime strategy is beyond the scope of this presentation, there is a need to briefly consider highlights of this strategy to provide “an overarching framework within which to situate China's maritime transformation.”¹⁸ PLA Navy force structures must be optimized for both regional “near seas” and for “far seas” blue water tasks in quite different contexts. In the “near

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¹⁸ “Crossing the River by Feeling the Stones: The Trajectory of China's Maritime Transformation,” RUSI Occasional Paper, October 14, 2019, rusi.org/publication/occasional-papers/crossing-river-feeling-stones-trajectory-china's-maritime

seas,” the PLA Navy can depend on land-based aircraft (including now those from artificial islands in the South China Sea) to provide the strike and some of the air defense assets need to establish local sea control and, with the PLA Navy, provide a backstop for so-called “maritime rights protection,” through coercion by front line China Coast Guard and PAF Maritime Militia ships. PRC land-based anti-ship ballistic missiles and anti-ship cruise missiles (based on land, sea, and air platforms), and ranging within and in some cases even beyond the First island Chain, provide a powerful joint support for the PLA to establish local sea control in the “near seas” through a strategy of Anti-Access/Area Denial (A2/AD).¹⁹ In the “far seas,” these PRC joint air defense and land based missile strike umbrella forces do not exist. Thus PLA Navy task forces in the “far seas” will face air challenges from U.S. aircraft carrier-based aircraft (and in some areas, aircraft from land bases), plus the challenges of nuclear attack submarines (a challenge also present in the “near seas”). All of this suggests that the PLA Navy will need more and better organic air defense, strike, and Anti-Submarine capabilities in the blue water “far seas” context. These needs are in addition to needs for extended long-range Command and Control and other vital communications, electronic warfare, and other support

¹⁹ Jacek Bartosiak, “Chinese Concepts of A2/AD,” Geopolitical Futures, October 17, 2019 at <https://geopoliticalfutures.com>

elements. A recent RUSI analysis aptly concluded that “China is also gradually extending its defense perimeter outwards, a process which will likely accelerate if China can transform its maritime geography by Finlandizing the South China Sea and recovering Taiwan....In tandem, however, China has developed the nucleus of a blue water force. Beyond its immediate region, the utility of China’s power projection capabilities, which will likely be limited for some time, will be more political than military. However, these capabilities can also form an outer defensive layer at the forward edge of China’s periphery in wartime to augment its near-seas maritime system.”²⁰ In the context of overall PRC goals of protecting maritime trade routes (now even more important as part of the One Belt-One Road priorities) and enhancing global influence, even a still developing PLA Navy blue water power projection capability is clearly very useful.

Force Deployment/Operations Priorities

Another challenge for the PRC in development of a blue water PLAN is how to balance/prioritize its deployments and operations and training. Of course, many of the naval operations capabilities and training requirements for operations in the “near seas,” including air defense, anti-submarine warfare, and strike warfare, will also have benefits for operations in the “far seas” by a blue water PLAN. But, as

²⁰ RUSI

discussed above, the environment of the near seas, and the prime goal there of defending China's so-called "maritime rights and interests" is quite different from the broader blue water goals of projection of influence and power in more distant seas. Furthermore, blue water operations will require experience in the "far seas" context. But blue water deployments and training to gain that experience come at some expense to the continuing priority "near seas" requirements in the South and East China Seas. Of course, the significant growth in PLA Navy forces described earlier can provide some additional force numbers, and new capabilities, to do both "near seas" and blue water tasks, but only to a certain extent.

Joint Operations and Command and Control

PLAN blue water operations, as noted above, have already raised issues of jointness and command and control (C2). For example, to what extent can joint support aircraft for Intelligence, Surveillance, and Reconnaissance (ISR), Electronic Warfare, etc. be based or operated from overseas? Particularly important is the issue of whether C2 should be exercised directly from PLA Navy headquarters or through the new joint Theater Commands (to date, apparently both options have been exercised.) Closely related is the issue of how to extend the communications and other support such as ISR and EW to distant global PLAN operations. In prioritizing and balancing force deployments and operations, the devil will truly be in the details.

Implication for Asia Pacific Regional Security

The implication for Asia Pacific regional security of a blue water PLAN is bound up with the broader goals of a still-rising great power China. A more blue water PLA Navy will be useful to China to attempt to push the U.S. Navy back to or beyond the Second Island Chain into the western and central Pacific, in order to support PRC “near seas” priorities in the South and East China Seas, and threaten Taiwan. But the PRC “far seas” priorities include areas beyond the Second Island Chain in the Pacific, including the vast maritime expanse of Oceania and the small Pacific islands states.

In the Indian Ocean, China depends on critical sea lines of communication (SLOCs) from the Persian Gulf (and East Africa resources) for its overall economic trade and prosperity. Yet PLA Navy dominance of the Indian Ocean SLOCs could be seen as threats to major states such as India, Japan, South Korea, and Australia and New Zealand—not to mention the United States and major powers in Europe who depend on those same SLOCs for trade and freedom of navigation. The PRC’s One Belt-One Road initiative for trade and influence, in and beyond the Indian Ocean and central Asia, has only increased the importance to China of distant global SLOCs, extending even beyond the Indian Ocean, into the Mediterranean Sea and the Atlantic Ocean (and now, according to the PRC, even into the Arctic.)

Also, growing PRC economic and political engagements

in countries around the world (many of which are prone to instability), and the literally millions of PRC citizens now living overseas, bring new requirements for the PLA and for its Navy to protect its citizens and its assets overseas. China has already had several experiences (such as in Libya) where its military has been called upon to evacuate its citizens on short notice from conflict or disaster zones. This will be another significant mission for the PRC's blue water Navy.²¹

Conclusion

All of this strongly implies that the PRC goal of developing a blue water PLA Navy is likely to persist and intensify. That said, China should also expect to experience increasing pushback from other states, many of whom are already generally distrustful of great powers and their influence (political, economic, and military), and more specifically are increasingly likely to respond unfavorably to China's heavy-handed "non-interference with Chinese characteristics."²²

²¹ See China's Strong Arm: Protecting Citizens and Assets Abroad, The International Institute for Strategic Studies, London, May 2015

²² Gideon Rachman, "China Spreads Its Web of Censorship," Financial Times, October 16, 2019, p. 9

