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تريندز للبحوث والاستشارات
TRENDS Research and Advisory

Policy Paper (17)

The China-US Fight for Naval Supremacy

Dr. John Bruni

November, 2020



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The China-US Fight for Naval Supremacy

Dr. John Bruni

Introduction

Much has been said about the military modernization and expansion of the armed forces of the People's Republic of China (PRC) in recent years. Central to this is the growth of the People's Liberation Army Navy (PLAN) fleet and its increased tempo of operations in contested areas such as the Taiwan Strait and the East and South China Seas. But most concerning for the US Navy and American policy planners in Washington is that the US appears to be losing the naval competition to the Chinese.

Warship construction in the PRC is increasing at a prodigious rate. For a country that, since its founding in 1950,¹ had nothing more than a "brown water" flotilla of

1. Poulin A., Going Blue: The Transformation of China's Navy, *The Diplomat*, April 15, 2016

patrol boats, corvettes and light and technologically primitive inshore vessels, unable to move into the deep water to challenge American or allied maritime power, the PRC has come a long way.

Since China's opening of its economy under Deng Xiaoping in 1978, while building a modern navy was not accorded the highest national priority, the wealthier Chinese Communist Party (CCP) cadres became, and through them, the People's Republic, the more ambitious China was to throw off the shackles of maritime incapacity.

After all, it was European and North American naval superiority that was a principal reason for China's "Century of Humiliation"² because it was through the sea that foreign Western countries subdued and ultimately rendered the Qing Dynasty powerless to resist the interests of European and American strategic and commercial interlopers in the mid-19th Century.

2. Harper T., How the Century of Humiliation Influences China's Ambitions Today, Centre for Imperial and Global History (CIGH), Exeter, July 11, 2019

PRC's Sea Power Heritage

But why was this so? Why were the Qing emperors uninterested in developing contemporary naval power? Part of the answer lies in the fact that until 1839, Dynastic China was never threatened from the sea.³ Indeed, for much of dynastic China's reign, the Chinese state's primary external threats came from its western border or internal threats from state breakdown and civil war. All of these involved mobilizing soldiers to fight land wars. Navies did not play critical roles in defense of any Chinese dynasty. Nor were regional navies capable of mounting seaborne invasions of the Chinese coast. Piracy was considered a problem, but ultimately what naval power China did possess was deemed superior to most Asian fleets and was undoubtedly a match for local pirates.

3. For more information see: Schottenhammer A., The "China Seas" in world history: A general outline of the role of Chinese and East Asian maritime space from its origins to c. 1800, *Journal of Marine and Island Cultures*, Vol.1, Issue 2, November 2012, pp.63-86

This relatively benign view of the sea from the Chinese imperial court had a couple of unintended consequences. Firstly, naval technical innovation was never accorded a high priority. Chinese fleets, therefore, stayed at a low level of technical proficiency and organizational readiness. There was a brief respite in Chinese naval complacency in the 1400s when China built its Treasure Fleet, a massive armada of large and technically sophisticated ships of exploration and trade led by Admiral Zheng He. After several stunningly successful voyages as far as the East African coast, the imperial court lost interest in maintaining the expensive fleet,⁴ despite the obvious success of extending Chinese maritime power throughout the Indian Ocean at a time when far smaller European vessels began plying Asian waters.

However, a change in court politics and the Mongols' threat along China's vulnerable western frontier led to renewed

4. Edwards J., 500 years ago, China destroyed its world-dominating navy because its political elite was afraid of free trade, *Business Insider* Australia, February 27, 2017

efforts at wall-building, and imperial funding was redirected to that enterprise.⁵ Furthermore, the relatively peaceful naval environment showed Chinese officials that there was no need to build fleets as there were no hostile regional rivals to confront. Also, the Chinese court was disinterested in maritime exploration and strategic conquest – two factors that drove rapid growth in naval platforms, propulsion, weaponry, and organizational development on the European Peninsula. The competition between maritime powers such as Portugal, Spain, Britain, France, and Holland for trade and colonies beyond Europe, with the opening up of the Americas, Africa, India, and Southeast Asia meant that the evolution of naval warships and war fighting accelerated while dynastic China’s capabilities atrophied.

In 1839-42, the arrival of the technologically-superior Royal Navy inflicted several defeats against the Qing navy so as the British could pay for the import of luxury Chinese goods such as silk, tea, and porcelain in opium. This trade was

5. Szczepanski K., Why Did Ming China Stop Sending out the Treasure Fleet? ThoughtCo., July 23, 2019

something the imperial court wanted to stop because of the drug's harmful effect on Chinese society. The result of the First Opium War was the loss of Hong Kong to Britain and the opening of five Chinese ports to British trade. In the Second Opium War (1856-60), Franco-British forces decisively defeated the Qing Dynasty, opening more Chinese ports to Western trade, further weakening the Chinese monarchy, effectively making it subject to European imperial dictates.

The end of the Chinese Empire in 1912 and the rise of the Republic of China saw a period of domestic political turmoil that led to the Warlord Era 1916-28. China temporarily reunified under Kuomintang leader Chiang Kai-shek, but Communist agitation against Chiang's rule led to the civil war (1927-49) that, together with Japan's invasion of China during the period 1937-45, destroyed much of what was left of China's industrial capabilities. During this time, China had no significant naval assets, nor did either of the warring factions – Kuomintang or Communist – see great use of warships to support their operations against each other or against the Japanese occupation.

With Mao's victory in 1949 and the ascendancy of the Chinese Communist Party (CCP), poor centrally-planned economic management saw the People's Republic suffer from a lack of industry, insufficient agriculture, and critical resources necessary to build and sustain a modern state suited to its burgeoning population. While Mao could field the People's Liberation Army (PLA) *en masse*, as demonstrated by its involvement in the Korean War (1950-53), much of this military intervention was only possible through the Soviet Union's support for the Chinese intervention, providing the PLA and its North Korean allies with small arms, artillery, aircraft, and armor to prosecute the war.

However, the PRC's lack of a proper naval assault force prevented it from invading and occupying the final Kuomintang redoubt – Taiwan's island. Indeed, it was, and supporting long-range airpower, that prevented Mao's China from launching anything except long-range artillery barrages against some of Taiwan's outlying islands. Mao's efforts to reindustrialize China during The Great Leap Forward (1958-62) failed to achieve his objectives, and the Cultural Revolution (1966-76) spread mass terror, and social instability.

The PLA was a central pillar of domestic support for the CCP.⁶ As long as it could conscript a mass army trained in defensive guerrilla warfare, supported by its nascent nuclear weapons program (1964), the navy requirement was not considered important. What few naval assets the PLA did have fell under army command and so these vessels were considered and utilized as adjuncts of land power, primarily for coastal defense. The People's Liberation Army Navy (PLAN) was formed in 1950, but it was no independent "navy" with distinct Chinese "naval thought" or organizational service culture. Its personnel were subordinate to the PLA and its role was limited to supporting the PLA.⁷

However, things were to change. As the Chinese economy opened up under Deng Xiaoping in 1978 and international trade and commerce required the bulk movement of goods

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6. For more information see: Hong A. & Yang-Cheng Wang, The military decision-making process in Beijing and its implications for the PLA's evolution, *Korean Journal of Defense Analysis*, Vol. 2, Issue 2, pp.171-183
 7. Office of Naval Intelligence (USN), The People's Liberation Army Navy: A Modern Navy with Chinese Characteristics, August 2009, pp.12-15

by sea, it was not long before an economically sophisticated and modern CCP realized the importance of the sea to the continuance of Chinese economic wealth and as a path to realizing Chinese strategic power.

The PLAN gradually moved away from PLA control as more surface ships and submarines entered service, giving PLAN personnel a mission independent from the PLA, moving naval assets further from the Chinese coastline, thereby separating the land force from the sea force in terms of military specialization and command. This became even more obvious from an organizational and doctrinal perspective during the tenure of Hu Jintao⁸ where more effort was placed on developing naval warfighting concepts suited for the growing and modernizing PLAN fleet.

Today, it has been said that the PLAN has pulled ahead of the US Navy (USN) in terms of the sheer number of warships. According to 2019 figures, the PLAN has a total

8. Nan Li, The Evolution of China's Naval Strategy and Capabilities: From "Near Coasts and "Near Seas" to "Far Seas," *Journal of Asian Security*, Vol.5, Issue 2, May 28, 2009, pp.144-169

force of 335 warships of various sizes and capabilities – surface and sub-surface. The USN, on the other hand, has 293 warships. But in naval terms, numbers alone tell only part of the story.

The depth of naval training is a critical determinant of overall naval strength. Here, experience and history matters. As the USN was forged as a blue water fighting force in 1775 and it evolved as a separate service designed to carry out operations far from home shores, the USN's connection to the sea is far stronger than the PLAN's. Furthermore, the USN has undergone a radical transformation of technology from sail to steam to diesel/gas to nuclear propulsion during its history that has strengthened its ability to adapt, innovate as well as integrate new technologies and techniques largely free from political constraints.

The same cannot be said of the PLAN. The PLAN's evolution from a “brown water” (i.e. coastal and riverine) fleet to a blue water fleet has only happened since the 1980s. Having no real historical antecedent to draw from since the Treasure Fleet was an aberration rather than part of a



continuum of Chinese experience at sea, there are questions about the competency and experience of PLAN sailors and senior command to confront more seasoned personnel from other blue water navies. Furthermore, as the PLAN's "brown water," army dominated culture is the organization's historic default setting, it is expected that the PLAN, while wanting to match Western naval competence and expertise, may not be able to.

Looking at how the PLAN is deployed, sheltering under the umbrella of the PLA's extensive shore-based anti-access, area denial (A2AD) systems⁹ indicates the service's lack of confidence to penetrate the "Nine-Dash Line" and operate into the Western Pacific where its ships and submarines would be vulnerable to superior US seamanship and technology. Simply put, the USN can operate and enforce Freedom of Navigation Operations (FONOPS) close to the Chinese coast, especially in areas of contention. In contrast, the PLAN cannot operate off the coast of Hawaii or

9. Kuper S., The teeth in China's anti-access/area denial defences, Defence Connect, April 24, 2019



California. There is no symmetry in the PLAN and USN's operational reach despite many alarmist media commentaries to the contrary.

Reflecting on numbers, the PLAN has built up a sizeable naval force that now includes two aircraft carriers, the Liaoning and the Shandong. Much has been said about this carrier force in media commentaries, most pointing to the fact that by the 2030s, the PLAN will have between four to six operational aircraft carriers. And while it is true that the Liaoning and Shandong represent a massive leap in PLAN capabilities and are large flattops by regional standards, the carriers themselves are smaller than their USN counterparts.¹⁰

Thus far, the air compliment of PLAN carriers consists of the Chinese produced Shenyang J-15 multirole fighter,

10. A good comparison between the Liaoning and US carriers can be seen here: How Does China's First Aircraft Carrier Stack Up? China Power, Center for Strategic and International Studies (CSIS) & Brimelow B., China is getting ready to field its 3rd aircraft carrier – here's why it's no match for US flattops, Business Insider Australia, October 8, 2020

which is based on a heavily modified Russian Su-33 airframe.¹¹ It is generally considered that the “non-stealth” J-15 is no match for the USN’s stealth F-35 Lightning IIs in either the carrier (CV) or short take-off and vertical landing (STOVL) configurations, or the USAF’s forward-deployed F-22 Raptors.

The first J-15 carrier take-off was successfully completed in 2010, and the combat plane’s first carrier takeoff and landing were completed in 2012. The PLAN carriers so far lack the means of operating in battlegroups similar to the USN, suggesting that presently their primary means of protection will come from the PRC’s A2AD systems and ad hoc deployments of screening frigates and submarines. Currently, the Liaoning and the Shandong are too expensive and too vulnerable to operate in hostile waters far from China’s A2AD umbrella. They can, however, pose threats to the smaller states of Southeast Asia. Many of these regional countries have neither the land-based airpower nor warships

11. Ait A., Don’t Underestimate China’s Flying Shark, *The Diplomat*, November 17, 2018

of the numbers and quality to challenge PLAN deployments in the heavily contested South China Sea.

Much of the PLAN's naval construction is based on lighter ships-of-the-line such as frigates and corvettes.¹² These surface ships take fewer crew and are generally considered faster and more maneuverable for the closed-in waters they are attempting to dominate, such as the Taiwan Strait and the East and South China Seas. However, because they are lighter vessels, they are also less armored and consequently more vulnerable to USN ship/aircraft launched missiles and ship-based ordnance.

On the other hand, while the USN appears to be losing the numbers game to the PLAN, it should be noted that the USN has larger, heavier and more capable surface ships, submarines.¹³ It is also introducing the 5th generation stealth naval and land-based combat aircraft into its order of battle that is either permanently forward-based in allied

12. How is China Modernising its Navy? China Power, CSIS

13. *ibid*

countries or on rotation through allied countries, thereby reducing the logistical burden of operating entirely from the US mainland.

Furthermore, the US's strategic power is still based on its global network of allies, many of whom are adopting US stealth aircraft in their navies or air forces. Some of them have begun introducing conventional carriers such as the Japanese and South Koreans. It is expected that in any shooting war involving the PRC, allied naval assets would supplement USN capabilities extending and expanding the US power. As the PRC has no formal ally in Asia except for North Korea,¹⁴ and has close military-to-military ties to Myanmar and Pakistan, a point which we will return to later, China's capacity to broaden a Sino-American naval conflict beyond the Strait of Malacca to the west and the Japanese home islands to the east is limited by what Pakistan and North Korea could bring to the table.

14. The only treaty ally of the People's Republic is with North Korea – Treaty of Friendship, Cooperation, and Mutual Assistance, signed in 1961. For more information see: Boc A., Does China's 'Alliance Treaty' With North Korea Still Matter? *The Diplomat*, July 26, 2019

Myanmar's naval capability is too underdeveloped to be of any real assistance.¹⁵

Naval research and development (R&D) in the United States is far more advanced than in the PRC. One of the enduring issues between the US and China is Washington's anger at Chinese theft of American technical intellectual property (IP).¹⁶ This theft allows the Chinese to leverage US technological breakthroughs and adapt what they can to meet their forces' requirements. And while many have argued that Chinese IP theft is rapidly closing the qualitative military gap between the US and the PRC, Chinese made ships or aircraft "borrowing" American designs and technical specifications are still generally considered qualitatively inferior to the original, superficial similarities notwithstanding.

15. See: Selth A., Regional Outlook, Griffith Asian Institute, Regional Outlook Paper No.49, 2016 & Global Fire Power, Myanmar Military Strength (2020)

16. See: Gertz B., Deceiving the Sky: Inside Communist China's Drive for Global Supremacy, Encounter Books, New York-London, 2019

The Naval Race

In the US-China naval race, superficial similarities generate media attention, though, and false historical analogies. For instance, take the oft-quoted similarity in today's Sino-American naval competition to the Anglo-German naval competition on the eve of World War I. In the latter case, both the British and the Germans built their warships and submarines from their own design houses and engineering firms and their resources.

Naval organization's doctrine reflected the national culture from which they sprang. In the former case, China is attempting to play catch-up with the US by the theft of American IP and retrofitting this IP to local design and manufacturing capability. Since these "Chinese copies" of American weapons and complex integrated systems cannot be replicated in full, they are incomplete renderings of the US-made originals. Contemporary American and Chinese philosophies of science and engineering are very different too. In the US, technical innovation is encouraged and rewarded, and the IP is protected by law.

Even though the dynastic China was once a great innovator, having invented gunpowder, the civil service, paper money, and the concept of meritocracy – the PRC is not the natural inheritor of these traits. For instance, Jason Lim, editor of *TechNode* made this observation about the PRC:

“Most Chinese start-ups are not founded by designers or artists, but by engineers who don’t have the creativity to think of new ideas or designs.”¹⁷

Furthermore, the fact that an inventor’s IP is not protected in the PRC means that there is no incentive for the inventor to profit from his or her time, effort, or labor in creating an innovative product. Suppose that product had a national security angle, it is more likely that the state would intervene and confiscate the innovation and allow other “government” engineers to take over its development without the originator’s critical technical expertise.

17. Abrami R.M., Kirby W.C. & McFarlan F.W., Why China can’t innovate, *Harvard Business Review*, March 2014 Issue

In addition, as the CCP controls what is done in the context of setting the national agenda, a government edict requiring the PRC to be “innovative” is not the same as allowing individuals the freedom to explore new ideas. This is where the United States’ technological leadership, and many other countries that do allow this freedom, have a qualitative advantage. So, while evidence supports that China is spending far more on research and development across the board, closing the gap with the US,¹⁸ spending on R&D is not a panacea to innovation.

So, in terms of naval technology today, we see the US making inroads regarding developing rail-gun technology for its surface ships, in hypersonic missiles, in surface and sub-surface autonomous vehicles, which will supplement crewed warships and extend their sensor and kinetic range and capabilities. Chinese R&D personnel will be watching American developments closely as they have with the F-22/F-35 projects to produce the Chengdu J-20. No doubt,

18. McCarthy N., China Is Closing The Gap With The U.S. In R&D Expenditure, *Forbes*, January 20, 2020.

future Chinese naval construction will want to incorporate as many of these innovations as possible, however imperfectly, to demonstrate “parity” with the USN.

The speed of Chinese naval construction is reminiscent of China’s massive civil engineering program’s speed on the country’s famed multi-trillion-dollar Belt and Road Initiative (BRI). Recipients of Chinese engineering assistance often lament the poor quality of infrastructure built by Chinese laborers. Speed leads to short-cuts and design short-cuts can lead to catastrophic failure of the end-product. The PRC’s entire industrial process is based on the speed of delivery. If we translate this to the massive expansion of the PLAN’s order of battle since the 1980s, building a large blue water navy quickly may harbor hidden design and construction deficiencies of that only operational use in war-like environments will reveal.

So far, despite the heated rhetoric between Washington and Beijing on trade and security matters, Chinese Premier Xi Jinping and the CCP are careful to avoid military entanglements far from home or with an enemy that has a

track record of near-constant global military operations, backed by a well-funded and highly innovative military-industrial complex. The PLAN's numbers make a difference in scenarios created to congest maritime space with naval traffic specifically.

As mentioned earlier, it was under the stewardship of Hu Jintao that the PLAN began evolving its naval strategy and supporting doctrine based on what was deemed “near seas” and “far seas”. As most of the maritime areas the CCP wished to control were close to the Chinese mainland, emphasis was placed on securing its near seas first.

However, with the ascension of Xi Jinping as Chinese Premier in 2012, his breadth of ambition was greater than simply securing the waters off the Chinese coast. In 2013, Xi began the BRI with the expressed desire to lessen China's vulnerability to having its maritime trade potentially reduced or interdicted by the USN should the rhetorical differences with the Americans ever turn to war. The BRI would open overland access from the Chinese border through Central

Asia, the Middle East and Africa, and Russia to Western Europe.

Coupled to this was the land reclamation projects launched by Xi in 2013 in the South China Sea (SCS) from which PLAN ships, PLA missile batteries, and PLAAF combat aircraft could be forward based. Garrisoning small islands and atolls in the SCS would complicate other SCS states' (in Southeast Asia) claims, based on UNCLOS and its UN-sanctioned 200 nautical mile exclusive economic zones (EEZs). Supplementing the BRI, China set about developing a complementary naval footprint known as the String of Pearls, which called for a series of Chinese naval bases along the Indian Ocean region (IOR).

Not much has been revealed by China regarding its String of Pearls strategy except for American speculation that the Chinese are working to make this a reality. Nonetheless, what can be said of China's far seas String of Pearls strategy is that the PLAN does have one major base in the IOR, in the Horn of the African state of Djibouti – a place where the PLAN shares naval real estate with the US, France, Germany,

Italy and Saudi Arabia – all collocated in this small African country primarily to fight piracy. China recently secured an atoll from the Maldives, where land reclamation is taking place. Whether this will become a PLAN forward base is not known. However, given its strategic location, some 700 km off India, there is a strong possibility of at least a PLAN surveillance asset being placed on the atoll.

US intelligence assessments have claimed that China is using its close relationships with Pakistan and Myanmar and the respective BRI projects – the China-Pakistan Economic Corridor (CPEC) and the China-Myanmar Economic Corridor (CMEC) – as stalking horses for PLAN permanent basing rights. Currently, there is no concrete evidence for this; however, the likelihood of both CPEC and CMEC having a dual-use role beyond the facilitation of Chinese trade is a distinct possibility.

Furthermore, debt-trap diplomacy¹⁹ as in China's control over the Sri Lankan port of Hambantota is alleged evidence of the PRC gaining access to a strategically important port facility from which to project Chinese naval power into the IOR. However, what can be said is that the Chinese company China Merchant Port Holding Ltd (CM Port) now controls Hambantota under a 99-year lease. Whether this turns into a PLAN IOR base remains to be seen.

Conclusion

The PLAN has come a very long way in a very short time. It is large by international standards, and compared to the USN, it has recently taken the lead in numbers of vessels in service. However, its blue water naval power was only created in the 1980s, and much of the technology it was founded on was not domestic Chinese research and development, but on affordable Soviet/Russian hull designs and what Chinese espionage could glean from the Americans

19 Gopaladas R., Lessons from Sri Lanka on China's 'debt-trap diplomacy',
Institute for Security Studies

and militarily advanced US allies. Speed of construction has netted the PLAN a large fleet, but speed may have also undermined its build quality.

In addition, most of the PLAN ships are of smaller classes than those in the USN. PLAN crews lack the naval traditions and organizational experience of the US and American allied and partner navies. Furthermore, PLAN commanders have yet to deploy their ships in significant numbers outside of China's formidable A2AD defenses on war-like operations. Therefore, there is no way of telling just how competent PLAN command and crews are or how resilient and capable of their ships.

The bigger PLAN fleet may displace the number of the US, allied and partner nation navies willing to enforce FONOPS in China's "near seas" such as the Taiwan Strait, the East and South China Seas. The evolution of Chinese carrier-killing missiles such as the feared DF-21 & DF-26²⁰ and next

20. Holmes J., China's 'Carrier-Killer' Missiles: What Everyone Is Missing, *The National Interest*, September 4, 2020

generation hypersonic missiles²¹ will make the PRC's anti-access, area-denial eastern "missile wall" harder to breach, but any analysis of contemporary Chinese naval and general military technology cannot be made in a vacuum.

Professor Andrew Lambert, a well-known British naval historian, argues that neither the United States of America nor the People's Republic of China are traditional "sea powers" where the sea is the critical life-blood of either country,²² they are continental states where the focus of a nation's security is based upon a land army.

The United States may have a longer lineage of blue water naval seafaring than the PRC, but its indisputable naval dominance came about as a consequence of the USN's victory over the Imperial Japanese Navy (IJN) at the Battle of Midway, 4-7 June 1942, and the subsequent destruction of the

21. Mizokami K., Video Surfaces of Chinese Bomber Apparently Carrying Monster Hypersonic Missile, *Popular Mechanics*, October 20, 2020

22. See: Lambert A., *Seapower States: Maritime Culture, Continental Empires and the Conflict that Made the Modern World*, Yale University Press, New Haven and London, 2018

IJN as a fighting force in 1945. This, together with post-war Britain's financial inability to sustain global naval operations saw traditional British naval supremacy pass to the United States by the 1950s – with the United States consolidating and improving its hold on naval power ever since.

However, while the USN certainly has a vastly more technologically capable navy than any other country, there have been some concerns that a degree of complacency has come about in the way it operates. American sailors and navy command seem too enamored with disruptive technology. They are “systems focused” rather than being “ship and crew” focused. American sailors are adjuncts to the onboard technology they serve – cogs in the machine – as are the command structures.

Human initiative can be discouraged or suppressed as faith that “the machine knows what it's doing” becomes prevalent throughout the service.²³ This situation is likely to get worse

23. See: (eds.) Bruni J. & Tyrrell P.J., MAST 2018 Advanced Workshop on Disruptive Technology in the Maritime Domain White Paper, SAGE International Australia (SIA), Adelaide, Open for Release: February 10, 2020

as artificial intelligent (AI) systems become the primary systems aboard ships and submarines in the decades ahead. One of the detrimental aspects of this phenomenon was the spate of high-profile navigation errors suffered by the USN vessels between 2016-17.²⁴ And if a country with a long history of naval seafaring like the United States of America can be seduced by the siren song of high technology, it can be expected that the PLAN, born at a time of rapidly disruptive technological progress can be similarly seduced.

The Trump administration has recently acknowledged its numerical shortfall in warships against the PLAN and has committed to address this through the USN's fleet expansion called "Future Forward".²⁵ Under this new arrangement, US

24. See: LaGrone S., U.S. Boat Crew Navigation Error, Not Technology Tampering Led to Seizure of 10 Sailors by Iran, USNI News, January 28, 2016; Ewing P./NPR, Navy Navigation Errors May Have Killed More Troops Than Afghanistan So Far in 2017, kpsb, August 23, 2017; Channel News Asia, Deadly US Navy collisions near Singapore, Japan caused by basic navigational errors: Inquiry, CAN, November 1, 2017

25. Larter D.B., US Navy's long-delayed plan for its future force is nearing the finish line ... sort of, DefenseNews, September 10, 2020

Defense Secretary Mark Esper announced that the USN's budget would be increased significantly through to 2045 to cover the cost of ship construction. The aim would be to increase the total number of USN manned and unmanned surface and subsurface units from the current 293 to approximately 355.

A lot of energy would be put into fielding state-of-the-art artificially intelligent (AI) drone vessels and aircraft such as the autonomous anti-submarine Sea Hunter²⁶ trimaran and the MQ-25A Stingray air-to-air refueler²⁷ and possibly a revived version of the X-47B precision strike drone.²⁸ As the US is still very much at the technological forefront, even were Chinese intelligence operatives to gain access to some of this sensitive "high-tech", the fact that local Chinese military/naval designers and engineers lack the motivation to innovate in the same way as their American counterparts

26. Trevithick J., Navy's Sea Hunter Drone Ship Has Sailed Autonomously To Hawaii And Back Amid Talk Of New Roles, The Drive, February 4, 2019

27. Boeing's MQ-25 is ready, www.boeing.com

28. X-47B UCAS Makes Aviation History...Again!, www.northropgrumman.com

will see the PRC stay at a qualitative level under that of the United States in the near term.

This of course does not mean that the PRC is without options. By picking its battles with nations that cannot match Chinese technology and numbers, primarily in the Southeast Asian region, the PLAN could consolidate its hold over the South China Sea since the US government, especially a Biden administration, would not want to spark an international incident with the Chinese where the onus would be on US forces to operate within the range of the PRC's A2AD systems exposing US ships and crews to the PRC's batteries of anti-ship/anti-aircraft missiles.

As for whether the PLAN could confidently operate into the IOR beyond the western chokepoint of the Malacca Strait, this would depend on US determination to keep the Southeast Asian neighborhood engaged and orientated toward Washington. If there was sufficient concern expressed by PLAN commanders that passage of their warships and submarines through the Malacca Strait would be disrupted or blocked, it is unlikely that the PLAN would

risk a forceful entry, limiting any potential breakout into the IOR in force.

The evolution of naval power is a long-term process. It is not just about ships and integrated systems. It is about that, as well as command and crew competence and to a degree, little aversion to risk. The advanced navies of today were those that had a history of active naval engagement with enemy fleets, learnt from those engagements and adapted to new technologies and techniques of war fighting. The PLAN has no historical antecedent. It is a relatively new organization built during a time of great technological change. While the PLAN is now developing a professional Chinese naval ethos, its roots are planted in the army traditions of the PLA and of brown water operations in support of the PLA.

The only naval clash involving the PLAN in recent decades was an incident with the Vietnamese in 1988, known as the battle of Johnson Atoll, where the Chinese came out victorious in a skirmish that led to three Vietnamese vessels sunk. But this was no PRC “Trafalgar moment” against a



near peer competitor and the outcome of this battle had little effect on driving PLAN developments since the PRC has always seen itself as a power of global proportions, being a peer of the likes of the United States and Japan, not a rival power of Vietnam or any other smaller state in Southeast Asia.

Untried in modern battle and unwilling to risk long-range operations far from homeport in pursuit of its national interests, the actual naval abilities of the PLAN are largely untested and constrained by fear of losing difficult to replace high-value warships and crews it is likely that unless this risk aversion changes, the evolution of the PLAN will remain stunted with its power on paper looking far more intimidating than in reality.



About Author

Dr. John Bruni

Dr. John Bruni is the Founder and CEO of geopolitical think-tank SAGE International Australia (SIA), Adelaide, South Australia (est. 2008). John has played pioneering roles in asymmetric warfare in Australia and the UAE while working as an academic at the University of Adelaide. He also helped create the conceptual foundations for Australia, Japan, and US security dialogue. Dr. Bruni is an analyst for Jane's Intelligence Review and is a well-regarded commentator with two decades of media engagement behind him. He completed his Ph.D. at University College, Australian Defense Force Academy, UNSW, Canberra.

