The Third Taiwan Strait Crisis, Iranian asymmetric doctrine, and Russian corvettes…

…or how I learned to stop worrying, and embrace a reimagining of the Royal Australian Navy's surface fleet.

In March of 1996, the United States Navy (USN) conducted a demonstration of combat power, centred on two Carrier Battle Groups (CBG), which was designed to humble the People's Liberation Army (PLA) and force the communist government of the People's Republic of China to back down from its efforts to coerce and threaten Taiwan. Although it faded quickly in the minds of policy-makers in the West, the Third Taiwan Strait Crisis was a watershed moment for Beijing. It was also a catalyst for the acceleration of a military modernisation effort which in only two short decades would alter the balance of military power in the Western Pacific. There does not appear to be any other recent historical event that may have more significant implications for the future of the Royal Australian Navy's (RAN). In the following pages, I hope to show that while the implications of the 1996 Taiwan Strait Crisis are concerning, they also present an exciting opportunity – and possibly a necessity – for a reimagining of the RAN's surface fleet. Indeed, as the Indo-Pacific once again falls under the shadow of great power competition, there may be no better time to explore new possibilities for the RAN and new ways for it to provide credible support our allies, and to the rules based international order in the region.

The Third Taiwan Strait Crisis – the impetus for China's military modernisation.

The Third Taiwan Strait crisis was a wakeup call for Beijing. It shone a spotlight on the dramatic gulf between the military capabilities of the PLA and the US military, crystallising in the minds of Chinese leaders the need to double down on a modernisation effort that had begun in earnest only a few years earlier. In the lead up to the 1996 Taiwanese elections, Beijing embarked upon a series of military exercises and ballistic missile firings designed to intimidate and coerce Taipei. In response, the US Seventh Fleet brought a swift end to the crisis by sending the USS *Independence* and USS *Nimitz* CBGs through the Taiwan Strait, in what at that time was the most dramatic display of American naval power in the region in almost 40 years.[1] The event was particularly dramatic from the perspective of the PLA's leadership; the Chinese military was reportedly incapable of even tracking the big decks as they demonstrated American resolve so close to the Chinese mainland.[2] As a result of its humbling at the hands of the USN, China accelerated a modernisation effort designed specifically to counter or deter any foreign intervention in a future crisis, and as some commentators argue, to displace the US as the Western Pacific's military hegemon.[3]

A Revolution in Military Affairs with Chinese characteristics.

If it were to happen again today, only slightly more than 20 short years after the USN demonstrated its unquestionable primacy of the Taiwan Strait, the picture would look starkly different. The ships, submarines, aircraft and weapon systems that China could deploy in its own show of strength would be unrecognisable to an American sailor who had been there in the good old days of '96. Back then, there were no modern PLA-Navy destroyers bristling with the phased array

---

[1] Barton Gellman, "U.S. and China nearly came to blows in '96," *The Washington Post*, June 21, 1998, https://www.washingtonpost.com/archive/politics/1998/06/21/us-and-china-nearly-came-to-blows-in-96/926d105f-1fd8-404c-9995-90984f86a613/?noredirect=on.

[2] Robert O. Work and Greg Grant, *Beating the Americans at their Own Game. An Offset Strategy with Chinese Characteristics.* (Washington D.C.: Centre for New American Security, 2019), 4.

[3] Ibid., 4.

radars and vertical launch systems that have long been seen as the pinnacle of Western naval power.[4] There were no indigenously designed air-independent propulsion submarines with eye wateringly fast anti-ship cruise missiles lurking below the depths.[5] For that matter, there were no even faster anti-ship ballistic missiles nestled hundreds of kilometres inland poised to rain down on the carriers![6]

These impressive new capabilities were born out of the modernisation effort which was prioritised in the aftermath Third Taiwan Strait Crisis, an effort designed specifically to counter American technological advantage, and by extension the technological advantage of Western navies like the RAN.[7] This effort has been comprehensive, and according to the US Defense Intelligence Agency, has "expanded China's military capabilities across all warfare domains," from command and control, to force structure, training, doctrine, weapons, and platforms.[8] In what the Chinese themselves have now termed a "Revolution in Military Affairs with Chinese characteristics,"[9] Beijing has made significant progress towards being able to fight "local wars under informatized conditions," [10] and to deter or defeat foreign intervention in a future crisis in the waters of the Western Pacific.[11] This effort has been guided by clear timelines and objectives, and the next milestone is rapidly approaching. By 2020, China plans to have achieved "mechanisation" of its military, with "significantly enhanced informationization and greatly improved strategic capabilities."[12]

To quote the title of a recent paper co-authored by the former US Deputy Secretary of Defense, Robert O. Work, what China is doing is "beating the American's at their own game." Work characterises China's effort as an offset strategy which inversely mimics the US approach to countering a numerically superior Soviet Union in the closing stages of the Cold War.[13] Work argues that China's modernisation timelines and objectives are part of a three phase approach, in which China began from a position of technological and military inferiority, which forced it to rely on asymmetric approaches to defeat a more advanced military. It has then moved towards a second

---

[4] US Defense Intelligence Agency, *China Military Power, Modernizing a Force to Fight and Win*. DIA-02-1706-085, Washington, D.C.: 2019., 70.

[5] Ibid., 63.

[6] Ibid., 91.

[7] Work and Grant, *Beating the Americans*, 4.

[8] US Defense Intelligence Agency, *China Military Power*, 31.

[9] State Council Information Office of the People's Republic of China, *China's National Defense in the New Era*. Beijing: State Council Information Office, 2019. http://english.www.gov.cn/archive/whitepaper/201907/24/content_WS5d3941ddc6d08408f502283d.html (accessed August 26, 2019).

[10] A seemingly strange term, and one of varied spelling, the US Defense Intelligence Agency notes that the PLA often uses 'informatization' to "describe the process of becoming a modern military that can operate in the digital age." The idea shares similarities with the Western concept of network-centric warfare, with the PLA using the term to describe the process of "using information to conduct joint military operations across the domains of land, sea, air, space, cyberspace, and the electromagnetic spectrum". US Defense Intelligence Agency, *China Military Power*, 24.

[11] Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2019.* Washington D.C.: Department of Defense, 2019, 14.

[12] State Council Information Office of the People's Republic of China, *China's National Defense in the New Era*.

[13] Work argues that China is currently engaged in a "coherent military-technical offset strategy" designed to prohibitively raise the costs of American intervention in the Western Pacific. While the US offset strategy against the Soviet Union sought to counter numerical advantages with technology, the Chinese strategy seeks to offset US technological advantages. Work and Grant, *Beating the Americans*, 4.

phase where China would aimed to find itself in a position of "rough technological parity."[14] In the third phase, the Chinese military seeks to achieve outright "technological superiority" over the US.[15] In a stark and sobering assessment of how successful this effort may have been in such a relatively short time period, and an indication that we may be living well within Work's 'second phase,' in early 2018 the commander of the US Indo-Pacific Command, Admiral Philip S. Davidson, wrote: "There is no guarantee that the United States would win a future conflict with China."[16] Such a comment from America's senior military commander in the Indo-Pacific should give us pause. If the PLA has indeed entered the 'second phase' of its military modernisation effort, that is to say, produced a force nearing technological parity with US and Western military capabilities, then this has significant implications for the USN and the RAN.

This development would mean that for the first time since the end of the Cold War, Western navies are facing a peer competitor.[17] This is in stark contrast to the asymmetric and non-conventional threats that have defined the last several decades. Over that time, the PLA-Navy has undergone a remarkable transformation, one that has exemplified Beijing's focus on achieving technological parity while also attempting to counter traditional Western naval advantages.[18] What in 1996 was a primarily coastal naval force, is now the largest navy in the region,[19] equipped with modern submarines, multi-role surface combatants, supersonic long-range anti-ship cruise missiles, ballistic missile submarines, and aircraft carriers.[20] These new capabilities are strengthened by an increasingly sophisticated intelligence-surveillance and reconnaissance strike complex,[21] a focus on realistic training, [22] and ever expanding real-world operational experience.[23] This is a blue water navy that has been designed to be part of an 'informationized' military which is capable of ensuring that the humiliation of 1996 will never happen again.

Implications for the survivability of the RAN surface fleet

This new threat environment presents obvious challenges, but it also presents exciting opportunities for a reimagining of the RAN's surface fleet. While the PLA-Navy has undergone a revolutionary transformation over the last two decades, the RAN and the USN have arguably continued an evolutionary approach to their fleet designs. That is not to discount the impressive

[14] Ibid., 5.

[15] Work and Grant, *Beating the Americans*, 5.

[16] Stephen Myers, "With Ships and Missiles, China Is Ready to Challenge U.S. Navy in Pacific," *New York Times,* August 19, 2018. https://www.nytimes.com/2018/08/29/world/asia/china-navy-aircraft-carrier-pacific.html.

[17] Quoted in the New York Times, in March 2018 the commander of the US Indo-Pacific Command, Admiral Philip S. Davidson, described China as a "peer competitor." Myers, "China Is Ready to Challenge U.S. Navy in Pacific."

[18] US Defense Intelligence Agency, *China Military Power*, 65.

[19] Estimations of the global ranking of the PLA-Navy varies on the source and the metric used. Some rank the PLA-Navy as the world's largest, having surpassed the USN with over 300 combatants in 2018, while others continue to hold it behind, poised to overtake the USN sometime in 2020. Regardless of the metric, China will soon operate its second aircraft carrier, its first of a new class of cruiser, advanced destroyers and frigates, and numerous corvettes. The following two sources show the conflicting nature of reporting concerning the size of the PLA-Navy: Myers, "China Is Ready to Challenge U.S. Navy in Pacific." and, Sam Roggeveen, *China's New Navy: A short guide for Australian policy-makers* (Canberra: Australian National University Press, 2018), 3-4.

[20] US Defense Intelligence Agency, *China Military Power*, 65.

[21] Eric Heginbotham, *The U.S.-China Military Scorecard. Forces, Geography, and the Evolving Balance of Power 1996-2017* (Santa Monica: RAND Corporation, 2015), 32.

[22] Dale C. Reilage, "Chinese Navy Trains and Takes Risks," *Proceedings*, Vol. 142 (May 2016)

[23] James Fanell, "China's Global Naval Strategy and Expanding Force Structure: Pathway to Hegemony," US House of Representatives, accessed August 26,2019, https://docs.house.gov/meetings/IG/IG00/20180517/108298/HHRG-115-IG00-Wstate-FanellJ-20180517.pdf

achievements both navies have made, notably the increase in amphibious and anti-air warfare capabilities that the RAN has brought into service. Rather, as some commentators are arguing, [24] it is to say that these evolutionary surface fleets were not designed for this revolutionary new threat environment, which is primarily defined by the PLA and the advantage it holds in anti-surface warfare (ASuW).[25] Within the context of this new threat paradigm, the apparent risks posed by placing more and more combat capability into exceptionally expensive and increasingly more vulnerable surface platforms is leading some observers in the US to call for a new architecture for the USN's surface fleet, one that is more distributed and includes a fewer number of large surface combatants.[26] This is where the necessity to reimagine the RAN's surface fleet becomes more apparent. If our closest ally is talking about the need for greater numbers of more agile and more distributed surface combatants – be they manned or unmanned – because of the questionable survivability of the current force, it is worth asking whether it is prudent for the RAN to continue on an acquisition path that primarily produces surface task forces designed to 'plug in' to a USN construct that may one day not exist.

Iranian and Russian naval strategy and platforms; inspiration for the future RAN surface fleet?

With this considered, reimagining the composition of the RAN's future surface fleet as one that is more agile and diverse could give us a force more capable of providing a valuable contribution to our allies in wartime, and one that could possibly provide a more credible deterrent in peacetime. By leveraging the RAN's inherent strengths, most notably our people, and looking to better exploit the inherent weaknesses of a potential emerging naval hegemon, there exists the exciting prospect of a numerically larger and more lethal RAN. A more agile and diverse surface force also provides a more flexible sea power tool for the Australian Government, and provides a force that would be more adaptable to changing Australian naval strategies, from sea control through to sea denial. In full disclosure, the following propositions are designed to be intentionally provocative, but at the same time they are probably representative of the radical and revolutionary naval thinking that may be required if the RAN is to remain competitive in a future threat environment best represented by a PLA-Navy that has moved into Work's 'third phase.'

---

[24] Captain Arthur H. Barber III, USN (retired) argues that the USN's current fleet is a "mix of ship types that are simply evolutionary improvements and larger versions of designs from two or more decades ago," which were not designed to meet the challenges of a threat environment characterised by long range remote sensing systems, distributed networked sensor fields, and long-range precision weapon systems. Captain Barber stresses the need for a redesign of the USN's fleet, with a focus on platforms that are affordable and lethal while embracing concepts such as distributed operations and autonomy. Arthur H. Barber III, "Redesign the Fleet," *Proceedings*, Vol. 145 (January 2019)

[25] A 2015 RAND study produced a US-China military scorecard over the period 1996-2015. The study concluded that China had made significant advances in its ASuW capabilities, and over the time-period had actually gained an advantage over the USN, becoming capable of holding the USN's surface fleet at risk "at significant ranges from the mainland." According to RAND, while the US held a major advantage in ASuW in a Taiwan contingency in 1996, by 2017 this had dramatically shifted to a Chinese advantage. Eric Heginbotham, *The U.S.-China Military Scorecard*, 153-225.

[26] The US Congressional Research Service (CRS), in a report on navy force structure and shipbuilding plans, notes that some observers believe that the USN's 2016 Force Structure Assessment might produce a more-distributed fleet architecture, one that is made up of less large combatants, more smaller combatants, and a new focus on unmanned surface vehicles. The CRS warns that the current structure, which concentrates combat capability in a limited number of large and expensive ships leaves the fleet "increasingly vulnerable to attack by the improving maritime A2/AD capabilities (particularly anti-ship missiles and their supporting detection and targeting systems) of potential adversaries, particularly China." Congressional Research Service, *Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress.* RL32665, Washington, D.C.: 2019, 5-9.

The contemporary naval forces of Iran and Russia provide insightful examples of fleet architecture and platform development which could be looked to for inspiration for future elements of the RAN surface fleet. These forces have been designed to pose a significant threat to stronger and more technologically advanced naval powers, while also combining small warship designs with, in some cases, extremely long-range offensive weapon systems. Looking first to the Persian Gulf, where over the last decade the Iranian Revolutionary Guard Corps Navy (IRGCN) has looked to smaller and faster platforms equipped with advanced weaponry in order to fulfil its contribution to Iran's broader asymmetric doctrine.[27] According to the US Office of Naval Intelligence, this doctrine emphasises the combination of "speed, numbers, stealth, survivability, and lethality." [28] Iran clearly sees the necessity of raising the potential cost of a conflict to a larger and more technologically advanced adversary. Although the geography of the Strait of Hormuz doesn't match that of the Western Pacific, there are certainly instructive lessons that could be gleaned from the IRGCN's approach to its fleet design, and its asymmetric approach to countering a much more powerful naval force. The RAN could look to borrow part of this naval strategy and procure smaller, faster, stealthier and more lethal combatants to complement a modified version of our future force structure.

There is no denying that due to the operational environment of the Western Pacific the Iranian analogy cannot stretch as far as the suggested procurement of fast attack craft and modified speed boats.[29] To work in our region, the ships would need to be bigger, and the weapons would need a much greater reach. Interestingly, over the last decade the Russian Federation Navy has produced a number of new classes of warship which combine design elements and capabilities which could prove remarkably applicable to this concept.[30] Russia has produced new corvettes and small frigates armed with the KALIBR weapon system, in some cases displacing as little as 950 tons, which are capable of conducting long range strikes out to ranges reportedly as far as 1,550nm.[31] These powerful little ships prove that you do not necessarily require a large multi-billion dollar destroyer to conduct long-range offensive operations.

Notably, these smaller platforms lack the anti-air (AAW) and anti-submarine warfare (ASW) capabilities that have long defined Western multi-purpose warships. However, as Work argues, even those larger platforms may not be survivable in the new threat environment,[32] and would certainly only be so until their magazines are exhausted. Even without an effective AAW or ASW capability, smaller, faster, and more difficult to detect warships, when used in concert with the existing RAN

---

[27] Office of Naval Intelligence, *Iranian Naval Forces: A Tale of Two Navies*. Washington D.C., 2017, https://www.oni.navy.mil/Portals/12/Intel%20agencies/iran/Iran%20022217SP.pdf, 5.

[28] Office of Naval Intelligence, *Iranian Naval Forces,* 27.

[29] According to the Office of Naval Intelligence, the IRGCN has made significant strides in improving the lethality of its surface fleet, but has retained its focus on smaller and faster vessels. The IRGCN is composed primarily of a mix of Fast Attack Craft, capable of very high speeds and employing short range anti-ship cruise missiles, and Fast Inshore Attack Craft, which are more numerous but relatively lightly armed. Office of Naval Intelligence, *Iranian Naval Forces,* 28.

[30] David Axe, "The Russian Navy Is Evolving Right Before Our Very Eyes," *The National Interest*, August 15, 2019, https://nationalinterest.org/blog/buzz/russian-navy-evolving-right-our-very-eyes-74006

[31] According to the Office of Naval Intelligence, the SVIYAZHSK-Class guided missile patrol ship, displacing only 960 tons, is capable of embarking up to eight KALIBR missiles. The KALIBR missile family includes the SS-N-30 land attack cruise missile, the SS-N-27 SIZZLER anti-ship cruise missile, and the 91R anti-submarine missile. The Office of Naval Intelligence notes that the SS-N-30 reportedly has an operational range of as far as 1,550nm. Office of Naval Intelligence, *The Russian Navy: A Historic Transition,* Washington D.C., 2015, https://www.oni.navy.mil/Portals/12/Intel%20agencies/russia/Russia%202015screen.pdf?ver=2015-12-14-082028-313, 20-34.

[32] Work notes that China has placed an emphasis on procuring weapons that have "a high probability of penetrating U.S. battle network defences," including anti-ship cruise missiles designed to defeat the Aegis combat system. As Work highlights, only one of these advanced weapons need to get through the defence for it to be successful. Work and Grant, *Beating the Americans*, 11.

surface fleet, could come into their own. This hybrid concept of a future RAN fleet may require the sacrifice of a small number of our larger combatants in order to resource, but would hopefully see those that remain continue to evolve in capability, as US responses to the new paradigm begin to materialise and filter through.[33]

The combination of an Iranian approach to countering a more powerful naval force, and the Russian design methodology of smaller, offensively orientated platforms operating alongside existing elements of the RAN's surface fleet, is attractive for a number of reasons. Firstly, it would leverage what has always been a strength of the RAN, our talented and tactically innovative people, and afford our officers and sailors the opportunity for command and greater responsibility sooner. Experience at sea and in command of more offensively focused platforms would also foster a true warfighting culture early on. Secondly, it creates a fleet that is inherently more survivable, through its dispersed nature and the disaggregation of combat capability, and one that is possibly easier to rebuild and reconstitute in wartime. Thirdly, it may spur real innovation in our surface community. With the new mindset that these small warships could foster, it is easy to see innovative concepts emerge, such as partnering them with our frigates and destroyers in a mother-ship and shooter type construct. Or indeed, pairing them with unmanned platforms, capable of acting as sensor nodes, radar pickets or decoys. It may even make the RAN look to developing or acquiring long-range hypersonic weapons to fit to these new platforms, creating truly revolutionary capabilities. It would be difficult to argue that a widely dispersed force of fast moving, low observable warships, armed with long-range hypersonic weapons and manned by professional Australian sailors, operating in concert with larger platforms and unmanned systems, all forming a larger kill and decoy web would fail to make any potential adversary at least think twice before starting a fight with us.

Conclusion

The Third Taiwan Strait Crisis was a catalyst for a revolutionary change in the maritime threat environment in the Western Pacific, with significant implications, and opportunities, for the future of the RAN. As a military which has for the last two decades committed itself to countering Western naval advantages seems poised to take on the characteristics of a hegemonic naval power itself, the timing now seems ideal for a reimagining of what the RAN's surface fleet should look like, and also be able to achieve. A continued evolutionary approach to our force design does not appear to be the most effective use of our resources; however, a hybrid approach which leverages our strengths, exploits a greater power's weaknesses, and embraces the fighting spirit of the RAN, seems far more appealing.

[33] As an example of the US's continued focus on addressing the challenge of great power competition, the US military has attempted to rapidly field new weapon systems designed to address emerging capability shortfalls. This has included modifying the USN's Standard Missile 6 with an ASuW capability. Cheryl Pellerin, "DoD Strategic Capabilities Office Gives Deployed Military Systems New Tricks," US Department of Defense, accessed August 26, 2019, https://www.defense.gov/Newsroom/News/Article/Article/712938/dod-strategic-capabilities-office-gives-deployed-military-systems-new-tricks/.