HISTORICAL IMPLICATIONS FOR THE FUTURE OF THE ROYAL AUSTRALIAN NAVY

WINNING AND HIGHLY COMMENDED ESSAYS OF THE 2019 CHIEF OF NAVY’S ESSAY COMPETITION
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# CONTENTS

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>5</td>
</tr>
<tr>
<td>An Introduction from the President of the Australian Naval Institute</td>
<td>7</td>
</tr>
<tr>
<td>Maritime lessons from the Peloponnesian War</td>
<td>9</td>
</tr>
<tr>
<td>Appear Where You Are Not Expected</td>
<td>17</td>
</tr>
<tr>
<td>The Past, Present And Future Of Maritime Trade Warfare</td>
<td>25</td>
</tr>
<tr>
<td>The implications of the Indo Pacific Endeavour on a Thinking, Fighting, Australian Navy</td>
<td>35</td>
</tr>
<tr>
<td>The Third Taiwan Strait Crisis, Iranian Asymmetric Doctrine, and Russian Corvettes</td>
<td>41</td>
</tr>
<tr>
<td>Civilians: The Fulcrum for a Modern Fleet</td>
<td>49</td>
</tr>
<tr>
<td>The Navy and the Nation</td>
<td>55</td>
</tr>
<tr>
<td>Tactics are for Losers</td>
<td>65</td>
</tr>
<tr>
<td>Implications for the Royal Australian Navy of the Second World War in Australia’s Region</td>
<td>75</td>
</tr>
<tr>
<td>Redefining Regional Security</td>
<td>85</td>
</tr>
<tr>
<td>- Building Sea Power on Values</td>
<td></td>
</tr>
<tr>
<td>Undersea Disruption:</td>
<td></td>
</tr>
<tr>
<td>Retaining a Potent Covert Capability</td>
<td>91</td>
</tr>
<tr>
<td>Trial by Fire - The 1866 Battle of Lissa and the Implications for the Future of the RAN</td>
<td>105</td>
</tr>
<tr>
<td>Artificial Intelligence and Its Implications on Future Submarine Warfare</td>
<td>113</td>
</tr>
<tr>
<td>Melos Down Under</td>
<td>119</td>
</tr>
</tbody>
</table>
I am delighted to present the winning and highly commended essays of the 2019 Chief of Navy Essay Competition. Each aimed to promote knowledge of and interest in ‘a thinking, fighting, Australian Navy’.

The topic for the essay was ‘With reference to any historical example, what are the implications for the future of the Royal Australian Navy?’

This publication showcases 14 thought-provoking bodies of work, each approaching the topic from different angles and perspectives. The diversity of thought echoed one similarity; history’s lessons are tomorrow’s teachings.

The pursuit of personal intellectual growth and development will bolster us as individuals and as a Navy. Navy must be a learning organisation that encourages continuous improvement and innovation at all levels. This competition embraces diversity of thought while celebrating personal commitment to bettering one’s self through the lens of value-adding to Navy as an organisation.

I congratulate the divisional winners and all entrants for your hard work and achievement. Your contributions all help to make the Chief of Navy Essay Competition a huge success.

MJ Noonan, AO
Vice Admiral, Royal Australian Navy
Chief of Navy
AN INTRODUCTION FROM THE PRESIDENT OF THE AUSTRALIAN NAVAL INSTITUTE

The two roles of the Australian Naval Institute are to:

- Encourage and promote the advancement of knowledge related to the Navy and the maritime profession, and;
- Provide a forum for the exchange of ideas concerning subjects related to the Navy and the maritime profession.

It was therefore the ANI’s distinct pleasure to support in any way, Vice Admiral Michael Noonan’s initiative to establish a Chief of Navy’s Essay competition. Readers will, I am sure be impressed by the quantity and diversity of thought contained in the essays in this publication. Over 70 entries were received in the competition and I am sure the entrants gained much from the experience of taking part. Importantly, a significant number of the essays were forwarded to the Navy’s senior leadership team to review some of their useful suggestions to make the Royal Australian Navy even better.

I would like to acknowledge the excellent work of the volunteer judging panels who were drawn from the ANI membership. They were ably supported by the Membership and Prizes Committee of the ANI Council and the ANI administration team led by Mrs Sue Hart.

I hope after the success of the inaugural competition encourages even more entries in the next competition.

Vice Admiral Peter Jones
AO, DSC RAN retired.
President, Australian Naval Institute
HISTORICAL IMPLICATIONS FOR THE FUTURE OF THE RAN
When looking towards the future of the Royal Australian Navy (RAN), many would not choose to reflect on the Peloponnesian War, a conflict fought two and half thousand years ago by combatants and weapons hardly recognisable to a modern navy. However, when considering the many lessons that can be gleaned from this war, it becomes apparent that quite a few of them are salient to the future operations of the RAN. The Peloponnesian War was a maritime war, fought across the littoral of the Eastern Mediterranean, the Aegean and Black Seas, and as far west as Sicily. The war involved various navies of the Greek world conducting combat operations at and from the sea, diplomatic operations, and constabulary operations – the span of maritime tasks in modern Australian Maritime Doctrine. When looking towards the near- and medium-term future, it is readily apparent that these tasks will remain at the core of what the RAN will be called upon for in all likely future scenarios.

The Peloponnesian War

Briefly, the Peloponnesian War was fought in the period spanning 431–404 BCE. It saw the involvement of almost all of the Greek city-states across the Mediterranean, including in Sicily and the Anatolian littoral (modern-day Turkish coast) and up into the Black Sea. Two main protagonists, Athens and Sparta, fought a protracted war across the Mediterranean on land and at sea, with maritime operations dominating the conduct of the war. Athens was the great sea power of the ancient Greek world, and although Sparta is remembered for its land army of hoplite warriors, it was only when Sparta embraced a sea power strategy that they were able to defeat Athens.

Athens, under the leadership of the great statesman Pericles, undertook a strategy based on sea power. The city itself was heavily fortified and connected to the port of the Piraeus by the ‘Long Walls’, ensuring uninterrupted and secure access to the port and the sea. From there Athens could send out fleets to attack Spartan interests and keep itself supplied with food and war supplies, in turn, protected by its powerful navy. Resources, especially tribute

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Officers and sailors of HMAS Ballarat line the upper decks in ‘Procedure Alpha’ as the ship awaits the sail past by the Reviewing Officer during the Singaporean Navy’s 50th Anniversary International Fleet Review.
money, flowed into Athens via the Delian League, a vast network of other Greek city-states that paid Athens in return for prosperity through maritime trade and protection from enemies. In effect, Athens was an island, a metaphor used by Pericles and indeed other Greeks when referring to Athenian strategy throughout the fifth century.³ This strategy saw the Athenian fleet conduct combat operations at sea against enemy fleet units and merchant vessels, and combat operations from the sea in landing military units ashore on the Peloponnesian coast, most famously at Pylos in the modern bay of Navarino. The Athenian fleet conducted diplomatic operations, before and during the war. This included reassurance, sending a small fleet to the island city-state of Corcyra (modern Corfu) to support this new Athenian ally and hopefully dissuade the Corinthian fleet from attacking. On the more coercive side, Athens was well-known for sending out a fleet to cruise the Aegean and even the Black Sea to find new allies for the Delian League, with the presence of a fleet of several dozen ships and thousands of men acting as an incentive. Finally, Athenian vessels protected trade, both their own and other trade, from disruption and helped suppress piracy, what we might term maintaining ‘good order at sea’.⁴ In these various ways, Athenian sea power is readily recognisable to modern scholars studying the fundamentals of maritime operations – fundamentals still adhered to across the modern world.

The issue of Athens’ defeat in the Peloponnesian War is not proof of the superiority of a so-called ‘land power’ – Sparta – over that of a ‘sea power’. It was only when Sparta embraced a maritime strategy that they were successful. This was firstly enabled by Athenian overreach in Sicily, where a vast expeditionary force of infantry, some cavalry, and a large number of ships was eventually destroyed by the forces of Syracuse, itself a budding sea power.⁵ After three naval battles in the Great Harbor of Syracuse, the Athenian fleet was destroyed, trapping the land element in Sicily and forcing them into a fruitless retreat that saw them all killed or captured. After this crushing defeat the Spartans renewed their war against Athens on all fronts, and with the aid of Persian money were able to finance a fleet that took the fight to the Athenian centre of Gravity – the Delian League itself and the islands and maritime trade routes that supported Athens with food and money. Unable to project power across the seas and with its maritime trade increasingly under threat the Athenians were forced into battle in the Hellespont (modern Dardanelles) and their fleet annihilated at the battle of Aigispotamoi. The members of the Delian League had either been defeated or had defected from Athens and with no fleet left to protect the critical Sea Lines of Communication the city was starved into submission through the blockade by land and at sea. What is noteworthy here is that the defining battles of the second stage of the War, the so-called ‘Decelean’ or ‘Ionian’ War were not fought in mainland Greece near the cities of Sparta or Athens,⁶ but in the Aegean littoral and into the Black Sea region. It was the ability to project power far across the seas that enabled victory for Sparta.

The future of the Royal Australian Navy

As much as one can look into the future and make judgements on potential naval and military operations, it seems as if many of the core lessons of the Peloponnesian War will remain salient for the RAN and the wider ADF.

Recent works have cast doubt upon the current and future force structure of the RAN and the ADF, decrying a future that sees a so-called ‘balanced force’ as the RAN’s future. While some see requiring balance in the ADF’s force structure as ‘lazy thinking’,⁷ others rightly point out that this is not the case so long as it is not done for the sake of it and that there is a purpose to the projected balance.⁸ This is all in the context of the current debate surrounding Professor Hugh White’s latest work, How to Defend Australia and its prescriptions for Australia’s future defence.⁹ It does not call for a balanced force, but one geared towards
a strategy of sea denial in which the RAN would be reduced to a fleet of submarines. This is a navy geared towards high-end warfighting only, and only in competition with a regional superpower – China in White’s scenario – and useful only in defending the Australian littoral and near seas. This would be the Athenians of the 5th century BCE stuck on their metaphorical island with a navy capable of taking on all comers, provided they were within a few miles of the Piraeus and no further. It is a strategy that would see an island – Athens or Australia – already inherently incapable of self-sufficiency and reliant on overseas trade, unable to defend any of its interests further than its immediate littoral. This is precisely the wrong strategy for Australia and the wrong future for the RAN.

**Military Operations and Trade protection**

Combat operations are the *raison d’etre* of navies, be it combat operations at or from the sea. This was true of the Athenian and Spartan navies during the Peloponnesian War, and the stated mission of the RAN is still ‘To Fight and Win at Sea’. In all future scenarios, this will remain true for the defence of Australia to succeed. The only real question is how this will be done.

Australia is a maritime nation, reliant on the sea and the vital sea lines of communication that cross it from around the globe. This is two-way traffic: imports of vital oil and refined petroleum products, as well as a vast array of other manufactured goods, and exports of a variety of bulk goods, from iron ore through to wheat. Simple geography dictates that these imports and exports will cross the seas to a large extent, especially bulk cargo. Therefore, Australia’s sea lines of communication are a major vulnerability as far as Australia’s prosperity and even survival go.

In the highly likely scenario where a future conflict threatens Australia’s maritime trade, far before the actual territory of Australia itself is threatened, then the RAN would be at the forefront of any response. The response will be dependent on the threat, which need not be a conflict with a superpower such as China. Australian trade passes through many parts of the world subject to security threats: from the always tense Strait of Hormuz to the potential piracy hotspots of East Africa and the Malacca Straits. Here it is worth pointing out a fundamental fallacy in the idea that a fleet can protect Australia with nothing more than submarines and fast attack craft. Submarines do not protect shipping: they sink it, or through Intelligence, Surveillance, Reconnaissance (ISR) operations, allow for the targeting of shipping by air or surface units. Against a swarm of fast attack craft targeting shipping, as happened with the British tanker detained by Iran recently, a submarine would be all but useless: likewise, against a more severe threat by fixed and rotary-wing aircraft or land-based missile batteries.

Similarly, even a modest threat posed by pirates and speedboats would be beyond the ability of a submarine to defend against. Moreover, considering the vast distances these hotspots are from Australia, a patrol boat-type vessel could not do and this work and thus it would require a frigate or large ocean-going cutter or Offshore Patrol Vessel-type of a ship, armed to deal with surface and air threats at the very least. Of course, unless Australian got into the business of building self-sufficient overseas bases, this would require allied cooperation – probably the USA whom White says we cannot count on in the future – or a serious amount of logistics support in the form of several large and capable replenishment vessels. Against a superpower or peer (relative to Australia) competitor, the protection of shipping will require a RAN equipped to deal with surface, sub-surface, and air threats.

Closer to home, it is doubtful that submarines will have much use against the other critical threat to Australian shipping: mines. In the year 2016-16, a mere ten ports in Australia accounted for 88% of all seaborne export cargo loaded. Located in the east, west, and
north of Australia, these ports would require a rapid reaction force of deployable mine warfare specialists, be they divers, Uninhabited Underwater Vehicles (UUV), mine warfare vessels, or most likely a combination of all these assets. In most scenarios surface vessels will be required, either as ‘motherships’ for UUVs and divers or in more conventional mine warfare roles of Hunting and Sweeping. The mine warfare threat to Australian ports is not an overt one, but one that could be carried out by any number of means, most of which would not involve obvious minelaying by an enemy combatant and therefore not liable to interception by submarines or Joint Strike Fighters.

Further afield, mining is a potential problem for Australian shipping overseas where cargo is loaded, or through choke-points and other shipping channels: Hormuz, Malacca, Lombok, Sunda, Torres Strait and others. This is not a new consideration, and the RAN has stood ready to deploy a Mine Warfare element overseas since the ‘Tanker War’ and the little known Operation ‘SANDGLASS’. It is hard to imagine a future in which the RAN does not need a mine warfare capability, rapidly deployable within Australia and to vital overseas locations, potentially with the need for logistics and local protection by Australian military assets. These units themselves might need to deploy by air and/or by the sea in amphibious warfare vessels.

Finally, the future of the RAN will almost certainly involve the projection of power ashore. One can think of any number of potential hotspots in the Indo-Pacific that might demand Australia’s attention: to do a ‘Timor 2.0’ in the region due to political, social, economic, or even climactic reasons. There is no need to postulate that the RAN’s LHDs will be used only for goodwill visits, humanitarian relief – no trivial task in itself – or at the extreme end, to launch an amphibious assault against Fiery Cross Reef or the shores of Shanghai or other far-fetched notions. The LHDs are not merely high-value assets that are too costly to protect, but vital to any number of security threats which may arise in the Indo-Pacific region, be it humanitarian and disaster relief or the projection of a more potent force ashore to stabilise a dangerous situation. Unless Australia completely abandons any notions of playing by the ‘rules-based global order’ or of being a good international citizen, this will require the ability to project force from the sea, with a RAN capable of conducting hard and soft power taskings.

At this stage, it will seem as if this essay has been overly critical of submarines. This is not my intent, and indeed the future of the RAN most certainly involves submarines, and in greater numbers than ever. Returning to the opening statement of this section, the core role of navies is and always has been combat operations, a role for which submarines are ideally and almost entirely designed for. Submarines will have a role in the future RAN sinking enemy vessels and providing vital and silent ISR for targeting. They are a strategic asset, capable of wreaking havoc upon an enemy with little to no warning. They are just not suited to being the first and only defence for Australia. The moment that Australia’s first line of defence involves MK 48 heavyweight torpedoes is one of failure and desperation.

**Diplomatic operations**

He [Pericles] displayed their power to the barbarian tribes living around and to their kings and lords the magnitude of their power and the confidence and impunity with which they sailed where they wished, having made all of the sea subject to their control. The idea of using warships as tools of diplomacy has a long history, including the 5th century BCE and the years leading up to the Peloponnesian War. The Royal Australian Navy has been a tool of diplomacy throughout its history; its very creation a signal to the world that Australia intended to be a player in world affairs; independently, and as part of the wider British Empire.
Deployments such as Indo-Pacific Endeavor (IPE) 2019, with the deployment of 1200 personnel, four ships, eight helicopters, a P-8A Poseidon aircraft and a Collins-class submarine visiting seven countries throughout the region, are a powerful use of the RAN and a clear demonstration of Australia’s interest in the region. While less belligerent than Pericles’ cruise, the deployment of RAN units on future IPEs will be a signal to friends and potential foes that Australia is willing and able to make its presence known in the Indo-Pacific. The important point is that this must be a warfighting fleet, capable of fighting and winning at sea. The Athenians cowed potential enemies and reassured friends because all sides knew that Athenian triremes were, first and foremost, warships. A future RAN Hunter class frigate will be a powerful tool of naval diplomacy only if it is seen as a fighting ship and not merely a flight deck for cocktail parties, though even this aspect should not be underestimated. Submarines can fulfil this role in only a minimal manner, with less visible presence and with a far more coercive edge.

It is also of paramount importance to recognise that naval diplomacy is not a second-rate task for the RAN or other navies, but its core business for the longest reaching and most persistent of military-diplomatic arms. Australia had engaged in regional Humanitarian Assistance and Disaster Relief (HADR) since 1918 when HMAS Encounter was dispatched to Tonga in response to the devastating influenza pandemic of 1918-19. Far from being trivial, such operations have real benefits. For instance, the US Navy’s response to the Tsunami in Northern Indonesia, Unified Assistance, saw the US’s popularity in Indonesia rise a full 39% from a desultory 15% in the span of a few weeks. Not for nothing does the RAN (in the form of IPE) and the US Navy (through operations such as Pacific Partnership – in which Australia regularly participates) conduct naval diplomacy. Of note is China’s activity in these types of operations, conducting Humanitarian operations and more overt displays of naval reach: witness the mass consternation and borderline panic at the recent visit of two People’s Liberation Army Navy (PLAN) vessels to Sydney. It is hard to imagine that this was not the reaction they were going for, and once again demonstrates the utility of warships in modern diplomatic operations.

**Constabulary operations**

Perhaps the biggest potential change in the way the RAN will operate is in the constabulary role. Although the ancient evidence is sparse, it appears as if the ancient Athenians and other navies conducted constabulary operations to protect trade from pirates. The RAN and the RAAF have contributed to this role in the Gulf of Aden for many years, helping to maintain ‘good order at sea’. The RAN and broader ADF conduct operations in support of Operation SOLANIA, maritime surveillance within the Pacific Region. This fulfils the constabulary role, as well as a diplomatic one through regional engagement with Australia’s neighbours. In this respect, it can be hard to separate the two concepts, and this was certainly the case in the Peloponnesian War, where the idea of a standing force used for policing was essentially non-existent in the civil realm, let alone a role that militaries might conduct. In this sense, the future of the RAN may see a similar construct, where constabulary operations are not core business, but left to other agencies, in the Australian case, the Australian Border Force. In a less secure future, a prospect of Hugh White’s that certainly should not be dismissed, it is entirely possible that much like the Athenian navy of the 5th century, the RAN will engage in constabulary operations overseas with the primary aim of maintaining ‘good order at sea’ and while being technically a constabulary tasking, it will, in reality, fall within the realm of naval diplomacy. Naval resources, especially personnel, are scarce and so it may be that the RAN shifts focus away from domestic constabulary tasks in order to grow its warfighting force.
Conclusion

The oared, wooden vessels used by 5th century BCE Greek navies do not immediately come to mind when thinking of the future of the RAN, a force that will contain weapons and technology unimagined by Pericles or Brasidas. However, as an understanding of the Peloponnesian War reveals, the core roles of navies have remained little changed over the intervening 2500 years. Navies have always needed to fight and win at sea in order to project power ashore and protect core interests, especially maritime trade: the lifeblood of ancient Athens and modern Australia. Navies are powerful diplomatic tools, reassuring or coercing as need be, often at the same time. Finally, navies are useful in constabulary operations, especially in reinforcing diplomatic aims by helping to maintain good order at sea. The future of the RAN will see these core roles remain. Australia cannot be defended by submarines and aircraft alone, and it will require a balanced naval force: not to appease the wants and egos of Admirals, but because the threats that face Australia are myriad, dispersed, and not always combatable through a periscope. The Athenians lost their war because they could not protect their vital maritime interests in a theatre of war far removed from their homeland. The RAN will need to ensure that it is placed to defend Australia’s interests in ways that the Athenians could not.

Endnotes

2  Space precludes a thorough examination of sea power and the Peloponnesian War. For a more comprehensive work, see: Nash (2018) ‘Sea Power in the Peloponnesian War’.
4  For more on this see: Till (2013): 38-9.
5  With notable aid from Sparta and other Peloponnesian allies.
6  Notwithstanding the Spartan Land army setting up a fort at Decelea, from whence this stage of the war gets its name, though it is more properly the ‘Ionian’ war for the region where it was mostly fought.
10  Although for a good dissection of the problem with White’s conception of Sea Denial, see: https://www.aspistrategist.org.au/is-sea-denial-without-sea-control-a-viable-strategy-for-australia/.
12  A topic of much recent conversation, largely thanks to a report in which Australia’s fuel supply vulnerability was laid bare, and written by former Deputy Chief of the Royal Australian Air Force, Air Vice-Marshal John Blackburn AO (Retd): Australia’s Liquid Fuel Security. A Report for NRMA Motoring and Services, 28 February 2013.
14  Noting that the above Iranian seizure was supported by a helicopter.
Noting that the above Iranian seizure was supported by a helicopter. 


More of which, see below section on Diplomatic Operations.

Plutarch, Life of Pericles, 20.1.


For more on this concept see: Till (2013): 38-9.


Or even standing up a Coast Guard, as has long been mooted in Australia.

Biography:

John Nash was awarded a PhD from the Australian National University (ANU) in July 2019. The title of his thesis is ‘Rulers of the Sea - Maritime Strategy and Sea Power in Ancient Greece 550-321 BC’. He is currently a researcher at the Australian War Memorial working on The Official History of Australian Operations in Iraq and Afghanistan, and Australian Peacekeeping Operations in East Timor.

John is also a Lieutenant in the Royal Australian Naval Reserve, having completed nine years’ fulltime and 6 years’ reserve service as a Maritime Warfare Officer. His most recent publication is an article in the US Naval War College Review (Winter 2018, Vol.71), and before that he published ten naval-related encyclopaedia entries in Sara E. Phang et al., eds., Conflict in Ancient Greece and Rome: The Definitive Political, Social, and Military Encyclopedia (ABC-CLIO, 2016).
With Reference To Any Historical Example, What Are The Implications For The Future Of The Royal Australian Navy?

“Ask a question,” Academician Lin Woong pointed at the Zhong Xiao (Lieutenant Colonel) on the third row of the tiered auditorium with its 450 strong audiences. The unfortunate individual who wore the uniform of the People’s Liberation Army Navy had fidgeted at the wrong moment.

The professor had spoken for an hour, and the Q and A had already lasted thirty minutes, but no-one wanted it to finish. The renowned head of the Department of War Theory and Strategic Research, Professor Lin was a tall and distinguished presence.

His sole presentation to the course titled ‘Psychology in the Strategy of Warfare’ had drawn a full house among the mid-ranking students in the Beijing Academy of Military Science who now waited to hear the offender’s question.

“Esteemed Lin Lao, thank you for granting me that honour.” Standing now, the officer continued: “My question is: why did we not use a tactical nuclear weapon against the Australian task group?”

“A fair question from an eager warrior.” The professor stroked one side of the only visual sign of any personal vanity, his well-developed Fu Manchu moustache. The officer sat back down with relief, and Lin began to expound his answer, effortlessly combining it with the theme of his lecture.

“In English, there is a saying, ‘You do not use a sledgehammer to crack a nut’ here we say, “to kill a chicken you do not need the knife you use to slaughter a cow.” He paused “Let us just step back in time a little to explain my hypothesis.” He paused for thought then continued, “A good example occurred almost exactly 100 years ago next month in fact, on December 10th in 1941. The British Imperialists were dealt a blow which spelled the death knell of their Empire East of Suez.

I am talking about what in those days was unthinkable to us, our neighbours and the world in general: the sinking by the Japanese Air Force of a British battleship and a battlecruiser off...
the coast of the Malayan peninsula in our southern sea. They were the first capital ships to be sunk by air power alone on the high seas. Imagine! Those ships, the King’s ships *Prince of Wales* and *Repulse*, two of the most significant symbols of British power across their global empire, dispatched by slow but highly effective torpedo-carrying aircraft and bombs.

“How could this have happened? Only three days earlier, the Japanese war machine had effectively destroyed a static American fleet from the air in Pearl Harbour and on another front they invaded Malaya almost simultaneously. Within just two months they had captured Malaya and Singapore. A Japanese army only a third as strong as the British forces humiliated them. Our history attests to the effectiveness of those treacherous Japanese forces, but back then, the West ignored how we were being treated. Well, what went wrong for the British navy? Those two ships and their escorting destroyers had placed their confidence in a land-based air force to provide them protection from the air, just as the colonial power had dominated Malays for years by the strength of the British Army on the ground. Why do you think we began to build our fleet of aircraft carriers?

“Because, even if it takes us some time, we Chinese do take on the lessons of history and we learn from the successes and failures of others. It was not just at sea that the British and their intelligence staffs 100 years ago underestimated the Japanese. The whole of the Malayan campaign on land, in the air as well as at sea was a humiliating defeat. Even though they had Japanophiles in their intelligence staff in London, the reality was that a form of military ethnocentrism prevailed in this region of the Empire concerning their assessment of Japan’s military capabilities. They outnumbered the Japanese by almost three to one on the ground, but the British in the whole of Malaya had only 43 Brewster Buffalo fighters. Their air threat against enemy shipping was two squadrons equipped with obsolete Vickers Wildebeest biplane torpedo bombers. The Japanese army alone had an air arm with over 400 aircraft.

“So, Tongzhis, the British had failed. Failed on the intelligence front, failed on the ground, failed in the air and were therefore unable to succeed at sea. Force Z was the name given to the British ships. In command was an admiral who had arrived with his ships in Singapore just six days before the Japanese invaded Malaya. You could say he was a ‘desk admiral’ or just unlucky. Originally, the new aircraft carrier Indomitable would have sailed with the force to Singapore, but she had earlier run aground and was not ready to sail with the flagship, the new battleship HMS *Prince of Wales*, together with the veteran battlecruiser HMS *Repulse*, and their four destroyers.

A sip from a glass of water on the podium, and Lin continued. “The deployment of the ships was a decision made by their wartime Prime Minister Winston Churchill, although, as sometimes happens with politicians, he ignored the warning by his navy chief. Force Z arrived in Singapore just six days before the Japanese landed in Malaya on December 8th 1941. So Admiral Sir Tom Phillips, onboard his flagship, sailed again. He headed toward reported landings around Kuantan on the East of the Malayan peninsular and soon met his fate. Force Z was sighted and shadowed by an enemy submarine and later aircraft. The Riben guizi (Japanese devils) struck at the opportune moment by air with a force of 86 Indochina-based aircraft with bombs and torpedoes. It was said that in those days they also had the world’s best torpedoes. Admiral Phillips went down with his flagship as did his Flag Captain, a man named Leach.

“A German philosopher, Johann Gottlieb Fichte once wrote that “you cannot remove a single grain of sand from its place without changing something throughout all parts of the immeasurable whole”. If I may digress for a moment, the appointment of Captain Leach to HMS *Prince of Wales* affected 40 years later as if he had been one of Ficte’s grains of sand. His son had been in Singapore and due to join the ship until his father...
was made the Captain. After that, he was re-assigned. That son, then a Midshipman or what we call Shao Wei, was forty years later to become the head of the British navy, what before their decline they used to call their ‘First Sea Lord’. It was he, Sir Henry Leach, whom singlehandedly persuaded Britain’s first female Prime Minister to go to war with Argentina and recapture the Malvinas Islands. Imagine if he had perished on board the Prince of Wales! However, the Malvinas War and their subsequent history is perhaps a lesson study for another day.

“Now to come back to the original question asked by my young Zhong Xiao friend. Did the Japanese take the cow knife, or in their case their battle fleet, to slaughter the British Force Z chickens? No. They stood off and used their air power. Moreover, when the opportunity arose to defeat the Australian task group last year, our People’s Liberation Army Navy could have used the lessons of history to do the same, thanks once more, to a degree, to their forces’ lack of airpower. Now, do you know what fate befell Australia’s last aircraft carrier, HMAS Melbourne? No? There is a delicious irony in its final years. In 1985 it was sold for just 1.4 million dollars to our China United Shipbuilding Company and towed here, to China, to Huangpu. What a coup that was for us. The Australians thought they were smart.

“Before they let it go, they removed its electronics, its weapons, and welded its rudders so we could not use it. The beauty was that its aircraft catapult, arresting equipment and the mirror landing system were all untouched. For the next few years, our army’s naval architects and engineers studied everything about them, and as the navy members in the audience know, this led to our first training carrier, Liaoning. Today, thanks to Melbourne, we have our six types 003 nuclear carriers with catapults as well as two training carriers to replace the Liaoning navy museum ship. We did all this while the Australians dithered and dallied about whether to convert their two small amphibious helicopter docks to carry the F35Bs. Now I imagine they wish they had done so!

“This brings me back to consider some elements affecting your course title: ‘Psychology in the Strategy of Warfare’. For many decades, as you have heard from other lectures, China, under the guidance of our leaders and the party has recognised the intricate and intertwining relationship between influence, power and commerce. Unlike the West, we do not invite the political maelstroms that come with a three to the five-year election cycle, yet we are a trading nation and to trade effectively at the scale we need to requires the ability to influence those abroad both subtly, and sometimes less so. The rapid growth in our economy in the last quarter of last century offered us unforeseen opportunities to expand our influence into Asia and Africa. In our very first Defence White Paper, which my father helped to prepare in 1995, we said “peace does not come easily and thus should be doubly treasured” and that Tongzhis remains as true today as it was then.

“Economic prosperity and developing our blue water fleets went hand in hand in the last 50 years. The economic hegemony of the United States was always going to be broken as our policies bore fruit and it was essential that militarily we should not be bullied on our path to the full development of which the Maritime Silk Road was always an essential element. Now, almost 30 years after the revered Xi Jinping introduced the belt and road initiative, it is nearing completion well ahead of the planned 2049 timeline. Crucially, as planned, we exported influence. In the last 30 years, or so over 75 million of our people have settled abroad, throughout Asia, across Africa and even into South America. Supported by the Asian Infrastructure Investment Bank and the industrial complexes that have been set up, through those millions, we can exert economic pressures if and when necessary on so many governments. You remember our success in dividing Europe into the thirties and how the remnants of the EU begged us to prop them up when they entered their depression?
“Of course no-one had anticipated that Donald Trump would be elected twice as the US President at such a crucial time in our expansion. For a while attempts to cripple Asian Infrastructure Investment Bank and to hamper our progress like the Trans-Pacific Partnership Agreement had looked threatening, but party politics in democracies limited their progress and attempts to hold us back all failed. Post-Trump antipathy, US debt and the end of the EU helped, of course as did the willingness of so many leaders in smaller nations to become personally wealthy from their co-operation with us.

“So by 2037, Australia was looking pretty isolated and particularly vulnerable. Their ANZUS treaty was never going to be America’s priority. Look at history – late in two twentieth-century wars, failures in Vietnam, Iraq and Afghanistan – were they going to bail out Australia at the expense of their economic dependence on China? Furthermore, could Australia even bloody our noses? They had followed America into every conflict since Vietnam, and Australian lives had been the unpopular cost. The loss of life onboard their frigate in 2020 after the Iranian swarm attack in the Strait of Hormuz and the US’s lukewarm ‘surgical strikes’ together with a faltering economy had dented Australian public morale.

“A year earlier and despite several Defence White Papers, there had still been debates raging over the shape of their navy. One expert, Hugh White, suggested 24 or 36 submarines should replace the surface fleet. He argued, correctly as it turned out, that Australia might not be able to rely on the United States to come to its aid if it was attacked. He noted Australia had ‘been very fortunate to live under America’s protection for so long and we will sorely miss it when it has gone.’ I liked his prediction, writing in 2019, that there would be a power shift: ‘the direct result of the biggest change in the global distribution of wealth and power in 200 years which has brought to a close the era of Western domination of East Asia which began with Britain’s industrial revolution—and will end with China’s’.

“He rightly assessed that Trump’s isolationist position reflected the views of many Americans who would not support a cold war with us or a war to protect Australia or our Taiwan region. He could not offer a reason why we would want to attack Australia but foresaw that if we reached a position of clear military primacy in the absence of the US, we would be capable of launching a direct attack. He had not considered the asymmetric nature of the attack we were to launch twenty years later. I will just read you a direct quote by this Mr White: ‘We can be sure that if China becomes the leading power in East Asia, and even if its power is exercised prudently and sparingly, the coercive power of its armed forces will always be there behind its diplomacy and soft power as it seeks to influence our decisions and actions. This is how hegemony works’.

“I am just surprised he could not work out why the largest island continent in the world would be such a tempting acquisition for us. Lucky for us, no-one listened to him about increasing their air power. We were never going to worry about submarines, but if they had doubled their air force and had converted the LHDs (Landed Helicopter Docks) or built a carrier or two, then given the distances involved they could perhaps have caused problems. Imagine if the Prince of Wales and Repulse battle group had their modern carrier with them. Their chances of survival would have been significantly increased. The Australian Labor governments of 2025-2031 as the Americans say, talked the talk but did not walk the walk on Defence.

“The last six of the planned 12 Attack class of submarines were cancelled in 2029, and only four were operational by the time our forces landed on Australian soil. Of the 11 escorts, only seven were operational, and our Fiji feint was a successful
attempt to lure the bulk of them away from Australia. With their AEGIS systems and powerful surface to air missiles, they could have protected Sydney, Perth and Darwin. Likewise, imagine if the LHDs had carried F35Bs and they had gained knowledge of our operation while at sea. As it was, the two never became fixed-wing carriers, and yet they carried a brigade headquarters and almost two battalions as well as cavalry units toward Fiji.

“The Australian Navy task group was thousands of kilometres away from home and isolated, so why use our SSN with a nuclear torpedo or a standoff tactical nuclear missile, why seek condemnation from Western propagandists when we could write a different and positive narrative? Much easier to inform the Australian public their navy ships and their embarked forces were our guests and, as they all were, would be flown safely home when we were sure the situation in Australia was secure. The order to surrender to the task group by the Australian Prime Minister was a pragmatic one. With their country lost but at peace and their families and their homes safe, what did they have left to fight for?

“The principal weakness in most western democracies was their desire to adhere to this nebulous structure of the international rule of law. Note that population size seems to have some effect here. The USA and India appear less squeamish on this point, witness the USA often not ratifying international treaties and India’s use of nuclear weapons to end their issues with Pakistan in 2027 surgically. Those two, like ourselves and Russia, still quietly acknowledge ‘might is right’. Indonesia with Papua, and Myanmar with the Rohingya might also be examples of this allergy to international law. Australia however, since it ended its apartheid immigration policy in the late 1960s, became somewhat a slavish adherent to internationalism in its foreign policy which has been to our advantage.

“Some of you may not be aware that there have been Chinese people living in Australia since the first half of the nineteenth century, well over 200 years ago. Chinese immigration was an answer to the shortage of labour in the British colony of New South Wales. By 1973 the well-named ‘white Australia’ policy was officially over and as relationships thawed so did the opportunities for generations of our sleeper agents to live and work innocently in Australia. The first, as has since been unfortunately revealed, arrived in 1992 but it was not until planning for the Australian Assimilation operation began in 2023 that any were activated for more than general data gathering. Soon after the turn of the century, Australia had more than a quarter of a million first and second-generation Chinese living in Sydney, so it was not too difficult to have two or three hundred in the right place at the right time a couple of years ago. Air traffic control and the ports were vital careers but so were elements in the federal police and the armed forces, particularly for intelligence gathering. December 29th was chosen as Assimilation Day after several years of study as the day when Australia would be at its most vulnerable. The regular ‘civilian’ planes landed to disgorge their military passengers and take over the airports; the car transporters offloaded the tanks and APCs, the cruise ship “guests” poured off and commandeered locals’ vehicles and buses – a little bit like the way those damned Japanese stole bicycles to cycle their way to victory on the Malayan peninsula. Within 12 hours it was all over and amazingly, except for those two policemen in Darwin, completely bloodless. Tasmania surrendered 48 hours later, without anyone one other than the Consul General landing there.

“Esteemed comrades, none of this great achievement could have been achieved by a Western democracy. It took nearly 20 years of careful analysis and deliberate multi-agency planning to bring this operation to its successful conclusion. The operational
security implemented across several departments would have been impossible. Equally, the exponential development of space technology which allowed the coordination of limited kinetic ASAT and temporary non-kinetic counterspace operations would have been impossible in previous generations. You can all be proud to have witnessed history being made. I know some of you on this course were among the first to land in Australia, and you should all live to see the continent finally developed to its maximum potential. I might suggest it is also a most convenient stepping stone for our envisaged exploitation of Antarctica. Now, I have time for one more question, but we should avoid one on the continued strategic isolation of the USA as I understand that is the specialist subject of your next presenter.”
Biography:

Lieutenant Commander Watson joined the Royal Australian Navy in 2002 following a career in the Royal Navy. Educated at the Royal Grammar School Lancaster, he is a graduate of the Britannia Royal Naval College, the Royal Naval College, Greenwich and Liverpool University where he gained an honours degree in Political Theory and Institutions.

In July 2011 Chris left the navy family and moved to reside in Tasmania. Before accepting the privilege to re-join and serve once more in Malaysia between 2013 and 2015, Chris had been enjoying travelling, fishing, and stand-up paddleboarding as well as supervising extensive home renovations. He is married to Linh, and they are enjoying their new life together in Lumut, Perak.
THE PAST, PRESENT AND FUTURE OF MARITIME TRADE WARFARE

SBLT Theo Squires RAN

Commerce raiding, also known as guerre de course or maritime trade warfare, has been a feature of conflict since ancient times. Open sea lines of communication (SLOC) are vital to the prosperity and security of coastal nations, as identified in Australia’s 2016 Defence White Paper. 1 63% of Australia’s imports and exports by value are transported by sea, with the majority of these transiting strategic chokepoints in the South China Sea, Strait of Malacca, Indonesian Archipelago and Strait of Hormuz. 2 However, although naval strategy references ‘sea denial’, current thought dismisses the re-emergence of commerce raiding. Analysts suggest that the highly globalised economy, development of land transport routes and small size of modern navies compared to the vast fleets of the last world war make a return to commerce raiding highly unlikely.

Naval strategists before WWI also rejected commerce raiding. Since the 1856 Declaration of Paris agreeing to end privateering, it was largely dismissed. 3 Admiral Alfred von Tirpitz, the father of the German navy, declared in 1897 that “commerce raiding and a transatlantic war against England is so hopeless […] that we must ignore this type of war against England in our plans”. 4 English naval theorist Sir Julian Corbett argued in 1911 against commerce warfare because “no power will incur the odium of sinking a prize with all hands”. 5 These assumptions were shattered with the outbreak of war. Germany sunk 11 million tonnes of Allied shipping in WWI. 6 The Allied food blockade on Germany starved to death 763,000 German civilians by December 1918, directly contributing to Germany’s unconditional surrender. 7 Commerce warfare returned in WWII with gusto. Germany sunk 21.6 million tonnes of Allied shipping, forcing the Allies to adopt large, slow convoys and disrupting war production. In the Pacific, the US waged a highly effective war on Japan’s shipping from 1942-1945, sinking 8.1 million tonnes. 8

Some strategists suggest that short of a return to total war, commerce raiding is unlikely to reappear. However, commerce raiding has occurred since 1945 in regional conflicts such as the Iran-Iraq Tanker War. 9 Further, it occurs in conditions short of war. Privateers were used into
the 19th century to harass other countries without declaring war and committing conventional naval forces. Arguably, Somalian pirates have acted with de facto state sponsorship from their respective warlords, making them modern-day privateers. Most recently, tit-for-tat seizures of oil tankers between the UK and Iran have led the UK and US to increase naval patrols in the Persian Gulf.¹⁰

This essay will examine maritime trade warfare in three contexts: unrestricted warfare, focusing on Germany’s use of auxiliary cruisers in WWII; limited warfare, focusing on the Tanker War; and military operations other than war, focusing on sanctions enforcement against North Korea and Iran. This essay will demonstrate that commerce raiding is an extension of peacetime economic policies, such as trade wars and sanctions, that increase in intensity through to outright warfare. Trade wars between the US and China, and sanctions on Iran, therefore increasing the likelihood of a return to commerce raiding—just as American embargoes on Japan in the 1930s presaged a military campaign against Japanese shipping. Finally, this essay will consider the future of commerce raiding and how the RAN must prepare itself through force structure, doctrine and operations.

**Unrestricted commerce warfare**

Unrestricted commerce warfare is the far end of a spectrum of military-economic strategy targeting the economic lifeblood of another country. In unrestricted commerce warfare, all ships (military and civilian) flagged to the adversary, or neutral shipping carrying goods for the adversary may be targeted to disrupt the adversary’s capacity to continue the war utterly. Historically, this has only occurred in total war scenarios—the two world wars—due to the impact on third-party countries and the difficulty of denying an adversary their SLOCs. However, widespread commerce raiding occurred in both world wars despite the doubts of naval strategists about its feasibility and efficacy, partly because of the adoption of new technologies and tactics including submarines, the use of auxiliary vessels and the proliferation of sea mines. In the 21st century, new technologies such as drones and low-cost anti-ship cruise missiles (ASCMs) may enable commerce raiding in future warfare.

Germany’s use of auxiliary cruisers in WWII is a perfect example of the asymmetric characteristics of maritime trade warfare. Auxiliary cruisers present a model for modern states to conduct maritime trade warfare through unconventional forces, noting today’s smaller navies. Although the U-boats had a greater influence, Germany’s eleven auxiliary cruisers sank or captured 142 Allied ships.¹¹ The auxiliary cruisers had great independence and posed a threat to Allied SLOCs across the seven seas: HSK Kormoran cruised for eleven months before it was finally sunk, while HSK Altantis covered 160,000km in 20 months.¹² This provided Germany with sea denial capabilities beyond the Atlantic, where most German U-boats operated. For a while, the mighty Royal Navy seemed entirely incapable of defending against the raiders, which roved freely—albeit discreetly—through the Commonwealth’s backyard, off the coast of the Atlantic, South Africa and Australia. Famously, Kormoran was even able to sink HMAS Sydney, a modern battle-hardened cruiser, off the coast of Western Australia—such action, however, was not the doctrinal purpose of these raiders.

Kriegsmarine doctrine stated that commerce warfare was to “oblige enemy forces to relieve the homeland … force him to convoy and increase the protection of his shipping even in distant waters” thus “increasing the demands on his forces” and “frighten off neutral shipping from sailing in service of the enemy”.¹³ Doctrine noted that these goals are more important than
the number of ships sunk—the strategic effect is greater than the immediate cost of lost cargoes, sailors and ships.

The Kriegsmarine sought to diminish Allied local superiority by forcing dispersal in pursuit of German raiders. In October 1939, four British and French aircraft carriers, three battleships and sixteen cruisers were tasked with escorting trade and hunting raiders in the South Atlantic, although at the time only two German ships, the cruisers *Admiral Graf Spee* and *Deutschland* were active there.\(^14\) Similarly, *Sydney* withdrew from the Mediterranean in 1941 with orders to escort Australian shipping because of German surface raiders operating in the area.\(^15\) Between August 1940 and November 1941, five surface raiders operated in Australian waters. They sunk or captured 20 merchant vessels near Australia, mined seaways and shelled Nauru, damaging a vital phosphorous plant.\(^16\) Australia was targeted because it was inadequately defended by naval and airpower and because its isolation would force a greater dispersal of Allied forces. Thus, Germany sought, and achieved, a withdrawal of Australian naval units from the European theatre by threatening the homeland.

Auxiliary cruisers disrupted Allied trade beyond their actual ability to sink ships because they forced Allied ships to take less efficient routes. The primary Allied response to commerce raiding was the convoy system. Convoys were safer than sending individual ships, as they were escorted, but they were less efficient because they took longer routes, could go only as fast as the slowest ship, and had to wait in port until enough ships were ready for the convoy to begin.\(^17\) The inefficiency of convoys at the end of the war was 20-30% over individual sailing and higher earlier in the war.\(^18\) Thus, although convoys reduced sinking, they came at a substantial cost. The RAN’s response to increased threat around Australia was the first trans-Tasman convoy, Convoy VK1, in December 1940; coastal convoys followed in 1942.\(^19\) Long before Japanese midget submarines attacked Sydney Harbour in May 1942, the Australian public became aware that the naval threat was not confined to distant shores.

Ultimately, all eleven auxiliary cruisers were sunk or neutralised by 1943 due to improved Allied tactics and technology.\(^20\) However, they present an interesting model for unrestricted maritime trade warfare. Essentially an asymmetric strategy, commerce warfare may be favoured by an adversary seeking to strain the resources of a larger and more capable navy, such as the USN. Auxiliaries such as *Kormoran* were cheap to produce and capable of surface action and mining sea lanes. Modern auxiliaries that could fill the same purpose include fishing vessels, maritime militias and armed merchantmen, perhaps with containerised anti-ship missile systems. Even without achieving a strategic effect against the American economy, which would be almost impossible to blockade by sea effectively, commerce raiders could force dispersal of USN combatants in wartime. Australia would be easier to blockade due to our reliance on relatively few strategic chokepoints and our lack of strategic reserves or domestic production of critical resources.

**Limited commerce warfare**

Commerce raiding also occurs in scenarios short of total war. Historically, European colonial powers engaged privateers from the 16th through 19th centuries to harass the shipping of their rivals, both during and outside of recognised warfare. In 1973, Egypt attempted to stop Iranian oil reaching Israel through using sea mines and naval blockade in the Red Sea—the Yom Kippur war ended before this blockade could have a strategic impact.\(^21\) Another example of limited commerce warfare is the Tanker War in the 1980s. While the Iran-Iraq War involved intense, brutal conflict on land, the campaign at sea was restricted.\(^22\) Due to the impact on third-party countries, the Tanker War still prompted

Maritime trade warfare between Iraq and Iran began in October 1980 when Iraq declared waters along the Iranian coast north of 29.03N a prohibited war zone and began targeting ships bringing military supplies to support the ground war. By 1982, Iraq began targeting Iranian oil exports. Tankers loading or carrying Iranian oil, including tankers belong to third-party countries, were hit with bombs and ASCMs fired by the Iraqi air force. This only occurred in designated areas—primarily around Kharg Island, where tankers were loaded with Iranian oil. In 1984, Iraq escalated the conflict at sea and Iran began retaliating against Iraqi shipping. As both Iraq and Iran were economically dependent on oil exports, oil tankers became the primary target. Other targets included vessels carrying weapons for Iraq, including those passing through Kuwait. Iran used speedboats, sea mines and jets to target shipping. However, even at the height of the Tanker War, only 2% of ships transiting the Persian Gulf were impacted. Most shipping targeted was not flagged to either Iran or Iraq, thus indicating that even in limited maritime trade warfare, third-party shipping may still come under attack.

Military operations other than war

Commerce raiding also occurs in peacetime. Commerce raiding denies the adversary free use of their SLOCs to achieve strategic goals. Sanctions and embargo regimes, such as those against North Korea and Iran over their nuclear programs, serve the same purpose and are often enforced through military operations other than war. Australian warships and aircraft patrol sea lanes near North Korea through Operation ARGOS, the Australian contribution to enforcing UN Security Council Resolutions (UNSCR) against North Korea. Under this regime, suspect vessels are boarded and inspected for violations of the sanctions—reminiscent of ‘prize rules’ in ages past. In 2018, the US seized the North Korean-flagged Wise Honest, a bulk carrier exporting coal in violation of sanctions. This was the first time that the US had seized a North Korean vessel involved in sanctions violation; the ship is now subject to proceedings which may result in its sale by the US government. The seizure of the Wise Honest, North Korea’s second-largest vessel by deadweight, may portend future seizures under the UNSCR sanctions regime. Multi-national military operations other than war have effectively enforced a blockade against North Korea: historically, an enterprise of war.

On 4 July 2019, British Royal Marines and Gibraltar police seized Iranian-owned Panamanian-flagged Grace 1, a supertanker carrying oil to Syria in breach of European Union (EU) sanctions against the country. The supertanker, carrying two million barrels of crude oil worth approximately USD120 million, is the first vessel that has been seized by the EU for violating sanctions against Syria, which have existed since 2011. Iran condemned the seizure as “illegal” and threatened retaliation against British shipping in the Persian Gulf—resulting in the seizure of British-owned Stena Impero on 19 July. This follows a tense year in which Iran has threatened to close the Straits of Hormuz, through which 20% of the world’s oil passes, and allegedly attacked six tankers in the Gulf of Oman in May and June 2019. These actions have not occurred in warfare, yet they recall the attacks on neutral shipping during the 1980s. Due to the relatively small scale of disruption, it could be argued that peacetime commerce ‘warfare’ poses little threat to the global economy or Australian interests. Lloyd’s has increased insurance premiums on shipping in the Gulf but not enough to substantially affect oil prices. Biting American sanctions on Iran are enforced primarily through economic means rather than a military blockade. However, these incidents indicate increased risk to commercial shipping in peacetime and may escalate into warfare in which commerce raiding is almost certain to feature.
The future of commerce warfare

Will commerce warfare make a significant return in future? Naysayers argue that the world has changed in several critical ways since WWII, making a return to that form of commerce warfare highly unlikely. They point to globalisation, the volume of mercantile traffic, the relatively small size of modern navies, the complexity of modern commercial shipping business and the increase in alternative trade infrastructure that is relatively immune to maritime trade warfare. Conversely, proponents point out that naval theorists were sceptical of commerce raiding before WWI and that there exist new trends supporting its return in the future.

The world is deeply globalised, making it impossible to blockade a major power without enormous destruction to the broader global economy. Potential adversaries, the US and China, are closely tied economically—the ongoing trade war reducing but not removing this co-dependence. Countries that are not deeply integrated into the global economy—for example, North Korea—are also unable to conduct large-scale commerce raiding. The size of the global merchant marine has increased from about 57 million deadweight tonnes in 1939, with twelve thousand vessels involved in deep-sea trade, to almost 1.75 billion deadweight tonnes and 90,000 commercial vessels. Meanwhile, navies are vastly smaller than they were in WWII. In the Battle of the Atlantic, Germany lost 783 submarines and some 30,000 submariners. Today, the world’s three largest navies operate only around 60 submarines each—and new submarines take years and billions of dollars to build, making a return to submarine fleets of hundreds unthinkable. Of course, submarines are not the only platform suitable for commerce raiding, as Germany’s use of auxiliary cruisers in WWII demonstrates. Coast guards and maritime militias could be used for the task. Sea mines, coastal batteries, drones and aircraft may all play a role. Nonetheless, maritime trade warfare requires significant resources that are likely to have other tasks during wartime—noting that naval blockades must be sustained to have a strategic impact.

Even with a sufficient force of raiders, determining which merchantmen to target would be difficult. More than half of the world’s merchant traffic is registered under flags of convenience, meaning that ownership is often difficult to determine. Commercial ships carry cargoes destined for multiple countries, and ownership of bulk cargoes can change multiple times while a ship is in transit. The development of trade infrastructure means that vulnerable shipping routes could be bypassed during wartime. China’s investment in the Belt and Road Initiative, such as the China-Pakistan corridor, is partly to give alternative transport routes that avoid strategic chokepoints in South East Asia.

However, trends are indicating a possible return of commerce raiding. Viewed on a spectrum of political-economic competition, commerce raiding may be a natural progression from trade warfare and sanctions regimes between rivals. The trade war between the US and China disrupts the process of globalisation, one of the fundamental restraining factors assumed by commerce-raiding sceptics. Meanwhile, the enforcement of sanctions through military means, such as the seizure of Grace 1, Stena Impero and Wise Honest, challenge a sovereign nation’s right to use its SLOCs, vital to its national security, and may encourage military escalation.

According to the US Naval War College professor and naval theorist Dr Milan Vego, “a blockaded country often resorts to commercial counterblockade”. Iran has threatened to close the Straits of Hormuz numerous times on the basis that if they are unable to trade due to sanctions, others will also have their trade disrupted. Mounting sanctions against
Iran following the collapse of the JCPOA and the tit-for-tat disruptions to shipping since May 2019 are unlikely to result in Iran attempting to close the Straits of Hormuz outright but do present a plausible chain of escalation to widening commerce raiding.

Closer to Australia, another factor supporting the return of maritime trade warfare is the increase in strategic competition in the Indo-Pacific, where many of the world’s strategic chokepoints exist. The Indo-Pacific is experiencing a naval build-up, with half the world’s submarines expected to operate in the region by 2035. Meanwhile, disputes over claims in the South China Sea have already resulted in attempts to deny other claimants use of their exclusive economic zones: for example, stand-offs over hydrocarbon projects and fishery rights.

**RAN responses**

There are only four ships engaged in international trade registered in Australia as of 2015, meaning that commerce raiding is unlikely to affect our shipping. Precisely for this reason, however, Australia must support maritime security for all neutral shipping. The free flow of commerce is vital to our national prosperity and security and is best served by a rules-based global order. This has three main implications for Australia and the RAN.

First, the RAN must prepare for the return of commerce raiding in the future, even if it is unlikely. Future commerce raiding will involve asymmetric threats: mines, submarines and drones. The RAN has only four *Huon*-class minehunters remaining, and a dedicated mine-hunting platform will not replace these; instead, the future *Arufura*-class Offshore Patrol Vessel (OPV) will have mine-hunting as a secondary role. It is vital that mine warfare not be neglected, which is a real risk if the OPVs are used in a constabulary role as the *Armidale*-class patrol boats they also replace are. The RAN must also develop capabilities to respond to emerging threats such as drones, including surface, sub-surface and air, which could be used in future commerce raiding. In addition to surface platforms, which can escort shipping and prosecute raiders, submarines will be a critical deterrent. Given the naval build-up in our region, the Australian government must proceed with building all twelve new *Attack*-class submarines over the next 30 years.

Second, the RAN must develop formal doctrine for maritime trade warfare. As demonstrated, the RAN is already involved at the level of military operations other than war and has conducted maritime security activities, such as counter-piracy and maritime counter-terrorism, for decades. However, the RAN lacks a doctrine that addresses how it will respond to higher-intensity commerce raiding. We cannot adopt allied doctrine, either—the US currently has none for offensive or defensive maritime trade warfare. Contributing to Operation SENTINEL is an opportunity for the RAN to develop formal doctrine in concert with our main security partners, the US and UK. Australia should also consider its position on offensive maritime trade warfare. Some US strategists have recommended blockade against China as a strategy to strangle its economy to force it to the bargaining table—essentially a militarised version of President Trump's current trade war strategy. However, China is Australia's largest trade partner, and our economies depend on the same chokepoints. It is unwise to follow a policy of 'our ally, right or wrong': as the world’s largest producer of oil, the US is less exposed to disruptions to trade than Australia.

Third, the RAN must continue contributing to maritime security globally. The RAN should deploy a vessel in support of the US-led Operation SENTINEL, the naval escorting of shipping in the Persian Gulf. This will signal Australia’s commitment to the free flow of
commerce and deter Iranian policies that threaten neutral shipping. Likewise, the RAN should not withdraw from Operation MANITOU as long as there is a threat to shipping in that operating area, even as the ADF pivots strategically to our nearer region. It is impossible to adequately defend our economic interests without supporting security in the Middle East, noting how much of our trade passes through the Straits of Hormuz, Bab-el-Mandeb and Suez Canal.

Conclusion

Maritime trade warfare has been a feature of many conflicts for hundreds of years due to the importance of SLOCs to a nation’s security and prosperity, yet there is surprisingly little consideration of its future. Instead, it is assumed, as it was before WWI, that commerce raiding is unlikely to occur again. This essay has demonstrated that maritime trade warfare occurs in peacetime, limited war and total war. Several factors, including increasing political-economic competition between the US and China and ongoing disputes with Iran, increase the likelihood of the return of commerce raiding. Its character will be shaped by both existing and emerging technologies, including sea mines, drones and auxiliary vessels. The RAN must develop appropriate force structure, capabilities and doctrine to continue contributing to global maritime security and prepare for the possibility of commerce raiding affecting Australia.
Endnotes


Biography

Sub-Lieutenant Theo Squires completed a Bachelor of Finance at the University of Adelaide before joining the RAN as a Maritime Warfare Officer in 2017. Since deploying on HMAS Darwin in support of Indo-Pacific Endeavour 17, Theo has continued his training in Sydney, Melbourne and Queensland. In the future, Theo looks forward to deploying again and hopes to study a Masters in International Relations or a related field. Outside of work, Theo lives in Sydney and enjoys running, guitar and reading.
The essence of learning from the past paves foundations for thoughts, ideas and decisions that affect the future. As much as this is true for human behaviour, it is also true for global organisations and militaries. The rich history of the Royal Australian Navy (RAN) has sowed the seeds to what has now grown into the high-performance Navy of today. In the Second World War at just eighteen years old, Seaman Edward ‘Teddy’ Sheean strapped his wounded body to a machine gun, shot down two planes and continued to fire until he was beneath the water.¹

Courage and Loyalty are seen in the actions of Teddy, and to this day, the RAN ingrains these values into their Sailors and Officers through initial military training. Chief Petty Officer Jonathon ‘Buck’ Rodgers sang hymns and led a prayer for HMAS Voyager sailors escaping from the forward cafe until he finally said “Well, the waters beaten us” and passed away along with eighty-two of his shipmates. The actions of Chief Rodgers displayed self-sacrifice, composure and excellent decision making in times of crisis which now provide leadership foundations for emerging leaders of the RAN. ²

It is also through historical tragedies such as the HMAS Westralia disaster where four crew tragically lost their lives in a catastrophic engine room fire.³ This event had significant implications on the RAN in lessons of safety, engineering, logistics assurance and adequate training. A plethora of historical events have shaped the Navy of today. However, arguably the most significant modern historical event which has and will continue to have enormous implications for the future of the RAN is not the actions of an individual but the creation and beginning of Indo Pacific Endeavour (IPE).

The Indo-Pacific was a vital topic of the 2016 Defence White Paper, mentioned a staggering 70 times and labelled the third strategic defence interest as a “stable Indo-Pacific region and a rules-based global order”. ⁴ This determination initiated rigorous planning and ultimately the conceptualisation of IPE; which would soon become a history-making event for the RAN and
Australian Defence Force (ADF) only twelve months later. In September 2017 HMAS Adelaide was accompanied throughout an eleven-week deployment by HMA Ships Melbourne, Darwin, Toowoomba, Parramatta, and Sirius. The deployment made history as the largest coordinated task group of such advanced capabilities in over 40 years. 1300 personnel from across the RAN, Army and Royal Australian Air Force executed an immensely successful set of community engagements and exercises in over twelve countries. 5

IPE directly impact the direction of the RAN and its strategic goals in the future. The Chief of Navy, Vice Admiral Michael Noonan, AO, RAN dictates the Navy’s cultural intent as A Thinking Navy, A Fighting Navy, An Australian Navy.6 The inception of the IPE directly affects each facet of the Navy’s Cultural intent which is outlined at depth throughout this essay.

**Implications on a Thinking Navy.**

The implications of the IPE are not only evidenced in tangible outcomes such as humanitarian assistance, disaster relief and cross military training but also in enhanced intellectual capital. Sailors and officers alike have shifted their focus and mindsets from deployments and events happening in the Middle East towards the Indo-Pacific region. Because of IPE 17 and its continuation sailors and officers now discuss, debate and ultimately plan for the next IPE by strategizing about how the RAN can best leverage its assets to achieve strategic objectives across all levels. This change in perspective and thinking has prompted members to understand and engage with aspects of geopolitics and the importance of protecting Australia’s strategic interests. The implication that the IPE has had on achieving a thinking Navy has been critical to shaping the future of RAN leaders mindsets. More than ever sailors are thinking of the bigger picture, their situational awareness has grown beyond task-specific thinking to the why, how and what their contribution is at a strategic level. These decisions and thought processes are the direct results of members being involved in activities with significant importance to the Australian Economy.

Bigger picture thinking has long been a key driver in employee motivation and empowerment across modern organisations. Inspiring Sailors through projecting the bigger picture is highly effective, often employees tend to go the extra mile, feeling compelled to achieve and do more through their organisations’ impact on the world. Inspiration goes hand in hand with productivity when engaged and highly inspired Sailors don’t waste time with indecision because they understand the goals, objectives and strategic intent of the Navy as a whole. IPE provides a collaborative and deeply moving experience for the Sailor, engaging with and seeing first-hand what their impact as an individual and a Navy can be. This behaviour generates a culture of passion, focus and leadership. Importantly, the bigger picture enables innovation, Navy is an advocate of innovation and development through technology, management and processes.

Research by Imperative in their 2019 Workforce Purpose Index Pathways to Fulfillment at Work report claims it is statistically impossible to be fulfilled in life if you aren’t fulfilled at work.7 In their 2015 Workforce Purpose Index, it was also found that 28% of the workforce has a purpose mindset where work remains a key source of meaning in their life and having a positive impact on others and the world is highly important.8 The RAN, through IPE 17 is in a unique position to provide an opportunity to Sailors and Officers in partaking in hands-on roles within humanitarian training and engagement efforts across the Indo Pacific region.

Reports of community engagement consisting of music, dancing, learning and education9 have enriched the modern Sailor and Officer which also offers a human perspective on what began as a fundamentally strategically important event.9
Implications on a Fighting Navy.

IPE 17 was a significant feat for the RAN, as stated for the first time in over 30 years a lethal task group deployed headed by the Landing Helicopter Dock HMAS *Adelaide*. The lethality of the Australian Navy was on full display- it is a fighting Navy. Admiral James Stavridis stresses the importance of inter militarily operations and exercises in his book; *Sea Power: The history and Geopolitics of the World's Ocean* Admiral Stavridis denote that maintaining consistent lines of communication and joint activities increase confidence throughout militaries and enhance prospective cooperation in future events.  

The Thucydides Trap, a dangerous yet relevant theory highlights that when intentions are not understood and sea power is misjudged, it will inevitably lead to armed conflict, such was the case for World War II. In the past 500 years, there have been sixteen cases of a ruling power being threatened by a rising power and of these events twelve ended with war.  

Diplomacy is paramount in avoiding conflict and inadvertently spiralling into the Thucydides Trap. This multinational, multi-service engagement method of building relations within the first IPE assisted in the avoidance of the catastrophic implications of Australia doing nothing at all.

The Indonesian government concurs with this perception. Due to the success of IPE17 and proceeding years, the Indonesian strategy has adopted a shift towards increased comfort in enhancing interoperability engagements across nations, particularly with Australia.

This shift in relations and relationships is significant and paramount in maintaining a force that is lethal as well as cooperative and globally recognised. IPE provides an opportunity to showcase the capabilities that the Australian Navy possess, not just in firepower, sea power and dominance but in collaboration and interoperability. Near region operations such as IPE will remain at the forefront of thought for many members of the RAN, the implications of considering current and future capabilities within a fighting context is vital in the successful sustainment and delivery of future RAN vessels and fighting power.

Implications for an Australian Navy.

A $1.6 trillion-dollar economy depends on an effective Australian Navy. The Australian Navy has diverse and complex international trade marine resources that rely on the freedom of trade routes, shipping lanes, multinational relationships and communication. A vigilant and agile Australian Navy will bring together and strengthen what is a changing and complex region of the world. With professional and empowered Sailors and Officers, the capabilities of the RAN can be tested and demonstrated for the world to see and understand. The implications of IPE on Australia came with commentary and assumptions from foreign countries. China was reported to view IPE as provocative and have since stated their confusion as to the necessity in choice of region.  

Although these relations are still developing, the comments remain a crucial reminder in the importance of transparency and communication on a domestic and global scale.

The Australian public is kept well-informed of international engagements and operations that the Australian Defence Force participates in, this facilitates a sense of interest, excitement and eagerness to understand Australia’s stance and actions taken on the global stage.

Honour, Honesty, Integrity, Courage and Loyalty define what is the Australian Navy of today, this encompasses not only the Sailors and Officers that represent the best of Australian society but the communities and families of which they come from. As an Australian Navy, an overwhelming sense of pride runs through the veins of those that serve and with operations such as IPE these are the individuals that deliver Australia’s greatest capability - people.
Without the maintenance, support and management provided by elite and capable support and technical staff the RAN could not have executed such a highly effective and important operation. IPE was a testament to Defence capability and material worthiness achieved through collaboration across nations and defence industry.

Conclusion

Teddy Sheean, Chief Rodgers - their names live on forever as our ships, establishments, awards and monuments are named after them and other individuals that have forged a legacy that lives on, never to be forgotten. The sacrifices that these maritime brothers and sisters have made has directly been responsible for the culture of the RAN today. In a more modern context, Indo Pacific Endeavour as a historical event has now impacted on the future culture of the RAN and the Australian economy. IPE has shaped the geopolitical space and Australia’s influence within the Indo Pacific region which is arguably one of the most important strategic events of the 21st century.

The RAN has highly skilled sailors and officers that operate in dynamic and complex environments fostering an environment that relies on a thinking Navy. The Chief of Navy has quoted directly that the priority and importance of the RAN contribute to “current and future security and prosperity of Australia”.

IPE provided an opportunity to display the reward of retaining an abundance of high calibre sailors and officers. The sea power and lethality on exhibition denotes an equipped and reliable force which remains and showcases a Fighting Navy. With empowered, proud and highly trained Sailors and Officers, IPE has paved the way for an environment that embodies a thinking, fighting - Australian Navy.
Endnotes


Biography:

Carly Bakes is a reserve Leading Seaman Logistics and Supply Chain sailor. Joining the RAN in 2012, Carly spent the first part of her fulltime career in sustainment and material support positions ashore before enjoying a number of successful short and long-term postings onboard HMA Ships Tobruk, Ballarat, Anzac, Stuart, Adelaide and Canberra. Carly deployed on Operation RENDER SAFE (Solomon Islands) in 2016 and Operation MAZURKA (Egypt, Sinai) in 2019.

Carly has attained a Bachelor of Business – Logistics and Supply Chain Management through Swinburne University of Technology and is currently studying towards a Master of Business Administration. Carly now works within the Defence industry as a Logistics and Supply Chain Manager with a passion for enhancing Australian Industry Capability and strategic supply chain design.
THE THIRD TAIWAN STRAIT CRISIS, IRANIAN ASYMMETRIC DOCTRINE, AND RUSSIAN CORVETTES
LEUT Michael Copland RAN

How I learned to stop worrying and embrace a reimagining of the Royal Australian Navy’s surface fleet.

In March 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 is 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 (RAN). This paper demonstrates 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 with 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 the Chinese government. 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 the Taiwanese government. In

Chinese Navy sailors on board PLA Navy Ship Sanya alongside South China Sea Fleet Navy Base in Zhanjiang.
response, the US Seventh Fleet brought a swift end to the crisis by sending the CBGs USS *Independence* and USS *Nimitz* 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 explicitly designed 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, just over 20 years after the USN demonstrated its unquestionable primacy in the Taiwan Strait, the picture would look starkly different. The ships, submarines, aircraft and weapon systems that China could deploy in its 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 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-watering 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.\(^11\) Clear timelines and objectives have guided this effort, 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 phase where China would aim 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 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.” 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 the 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. 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 China’s focus on achieving technological parity while also attempting to counter traditional Western naval advantages. What in 1996 was a primarily coastal naval force, is now the largest navy in the region, equipped with modern submarines, multi-role surface combatants, supersonic long-range anti-ship cruise missiles, ballistic missile submarines, and aircraft carriers. These new capabilities are strengthened by an increasingly sophisticated intelligence-surveillance and reconnaissance strike complex, a focus on realistic training, and ever-expanding real-world operational experience. 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 distinct 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 achievements both navies have made, notably the increase in amphibious and anti-air warfare capabilities that the RAN has brought into service. Instead, as some commentators are arguing, 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). Within the context of this new threat paradigm, the apparent risks posed by placing more and more combat capability into costly 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. 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 ‘plugin’ 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 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. However, 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.’

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 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 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 does not 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 several new classes of a 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 1,550 nm (2870 km).31 These powerful little ships prove that navies 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 environment32, 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 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 to resource, but would hopefully see those that remain to 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 several 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. Alternatively, 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 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 counter 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.
Endnotes


7 Work and Grant, Beating the Americans, 4.


10 US Defense Intelligence Agency, China Military Power, 24...


13 Work and Grant, Beating the Americans, 4.

14 Work and Grant, Beating the Americans, 5.

15 Work and Grant, Beating the Americans, 5.


Author’s Biography:

Joining the RAN in 2009, Lieutenant Commander Copland is a Naval Intelligence Officer (NIO) who is currently serving in an exchange position with the US Indo-Pacific Command. Having served in a number of positions both at sea and ashore as an NIO, LCDR Copland has operational experience in the Middle East Area of Operations and throughout the Indo-Pacific. LCDR Copland is currently undertaking a Masters of War Studies through the University of New South Wales.
CIVILIANS: THE FULCRUM FOR A MODERN FLEET

LEUT Peter Hunter RAN

“We need to think differently […] by reviewing our basic operating concepts, reimagining the way that Navy should view itself in the twenty-first century, re-examining our assumptions and, most importantly, re-engineering our modus operandi…”

– Vice Admiral Tim Barrett AO CSC RAN

On 3rd September 1939, Australia declared war on Germany and by 1941 was seeking innovative ways to sustain the war effort at sea. This need served as the genesis of two important augmentations to the Royal Australian Navy (RAN): the Women’s Royal Australian Naval Service (WRANS) in April, and the Naval Auxiliary Patrol (NAP) that June. This essay will briefly identify the role played by the services above in supplementing a RAN stretched for resources before identifying similar challenges in the Navy of today. It will then explore the possibility of rectifying this by increasing the use of civilian support across the RAN, such as through the introduction of a modern Australian Fleet Auxiliary.

Spread across the globe, the RAN realised it would need to do everything it could to maximise the availability of her sailors and warships while continuing to maintain a suitable presence on the home front. For this reason, both the WRANS and NAP would target those not eligible to serve in conflict at sea. The Sydney Morning Herald quoted Officer Commanding Sydney Naval Establishments Commodore Muirhead-Gould on the 4th November 1941 as saying the NAP “would not release any member from any other kind of service under the laws of the Commonwealth” and that, while “applications for enrolment were being received from unmarried men under 35 […] these men could be enrolled in the patrol only if they were in reserve occupations or medically unfit”. An article in Hobart’s The Mercury dated 19th November 1941 described the duties of the NAP to be “somewhat similar to those carried out by the Coast Guard Reserve in the United States of America”, including but not limited to “enforcing the Federal laws and other regulations on navigation [and] guarding against acts of or attempts at sabotage”. The NAP would grow in strength to over 3000 reserves before it was decided in early 1944 that they would no longer need such numbers due to a reduced threat to Australian waters.

Members of the WRANS performed myriad roles in support of operations in South Queensland
The WRANS’ early recruits were drawn from the Women’s Emergency Signal Corps, a civilian and self-funded organisation that allowed women to “actively participate in the war effort”. While a similar concept had already been introduced via the Australian Woman’s Armed Service (August 1940) and the Women’s Auxiliary Australian Air Force (March 1941), the WRANS expanded languidly until 24th July 1942, over a year since their inception, where they were instructed by the Navy Office to recruit 580 women to “help with increased wartime demands for naval personnel”. It was thus that those initial wireless telegraph operators would find the WRANS grow to incorporate jobs as varied as cooks, despatch riders, draughtswomen, photographers, sick-bay attendants and salvage workers. Such was their importance in sustaining the efforts of the RAN; the WRANS would continue to fill supporting roles until 1985 when it was incorporated into the permanent naval force.

Today the Australian Navy is undergoing its largest expansion in military capability since World War Two. To support this, officers and sailors are being recruited in considerable quantities. This is perhaps most evident in New Entry Officer Course (NEOC) 60 graduating 164 officers - the largest NEOC in history and almost double the number of NEOC 48 graduates just six years prior. This has been combined with a new focus on retaining the trained force, with initiatives such as the 2019 ‘Royal Australian Navy: Retention Incentive Payment’. The Defence Force Remuneration Tribunal Decision states “the numbers of members leaving the Navy, or being unwilling to return to sea after their initial obligation period, has resulted in workforce ‘hollowness’ in the mid-ranks which is now threatening the ability of Navy to meet government tasking and delivery of capability”. Rear Admiral Mark Hammond RAN, Deputy Chief of Navy, is quoted in the decision above as having stated retention “the only way you are going to be able to do that is […] by having enough people in the system to allow people to take time out, to be able to go and pursue professional development options, to be able to acquit the leave to which they are entitled”. It is therefore evident that the Navy of today has a problem with its available depth of personnel, and like the RAN of 1941 is being prompted to search for new and innovative ways to sustain her efforts at sea.

In determining what form these efforts should take, and thus where the RAN’s finite workforce should be concentrated, its maxim offers a good starting point: To Fight and Win at Sea. Vice Admiral Tim Barrett AO CSC RAN argues in The Navy and The Nation that when it comes to waging war “the defining element is lethality” and thus “lethality at sea is the business of the Navy”. With this in mind, the Australian Navy has been actively maximising its capacity to deliver such lethality by investing in ultra-modern warfighting assets such as LHDs, DDGs and future Hunter class FFGs and Attack class SSGs.

Nevertheless, throughout this expansion, it has continued to retain a presence in the domestic constabulary and auxiliary support roles, with Arafura class OPVs and Supply class AORs due soon into service. Vice Admiral Barrett quotes Vice Admiral Stansfield Turner’s paper in the 1974 March-April edition of The Naval War College Review, wherein he argues the need to “take stock of [their] purpose in life to allocate the diminishing resources available to use in the best possible way”, a task “no less relevant today than it was forty years ago”. As one of the RAN’s most important resources in the modern context is personnel which, while not diminishing, is not growing at a rate suitable to match requirement, it may now be necessary to redistribute that which it has available.

If the RAN is short of the workforce required to fulfil its purpose of fighting and winning at sea, the considerable investment it continues to place by way of trained personnel in areas that do not directly contribute to lethality should be investigated. For example, HMAS Perth, a blue-water asset, sits unused at Henderson due in large part to the unavailability...
of a crew while hundreds of personnel are utilised to perform taskings under Operation RESOLVE. This operation covers approximately ten per cent of the world’s surface with a whole-of-ADF response supplemented by a maritime element of the Australian Border Force (ABF). That is not to say domestic constabulary and supporting roles are any less important – indeed they are integral to meeting the Commonwealth Government’s policy and wider Australian Defence Force’s logistical requirements. While this essay is not able to offer the process by which such a transition would take place, it will suggest that should there be a way to gradually transfer the entirety of such operations to an entity like the ABF, RAN sailors and officers would be freed to serve in other parts of the fleet. Instead, the new Arafura class OPVs require more sailors than their predecessors and will, for the foreseeable future, still perform much the same roles. The argument thus exists for more of these jobs to be performed, vessels crewed - and therefore, such objectives met - by a civilian workforce.

The Royal Navy (RN) is a key example of this in the support they garner from the Royal Fleet Auxiliary, a “uniformed civilian branch [...] staffed by UK merchant sailors”. These crews are then augmented by RN sailors and officers when specialist military functionality is demanded. Their fleet consists of ships such as oil tankers and solid support ships, and even the amphibious Bay class from which HMAS Choules was acquired. However, though the RFA continues to operate their Bay class with crews numbering less than 100 merchant mariners, HMAS Choules will rarely be found at sea with less than 160 full-time RAN sailors and officers embarked. This is not a fault of the RAN, but rather a product of an organisation that has developed a single force to meet requirements ranging from border protection and humanitarian assistance to modern blue-water warfighting. The RFA works the way it does because they are, akin to the Royal Marines and Fleet Air Arm, a separate entity to the Surface Fleet, despite all ultimately falling under the RN banner. Therefore, it can be argued that these organisational shortfalls in workforce placement cannot be fixed within the current structure of the RAN and instead require an alternative, permanent solution.

RAN has been supported by entities such as the NAP and the WRANS, modern, contracted organisations already free up a considerable amount of workforce. Most bases are cleaned, catered and even guarded by civilians, while trainee Maritime Warfare Officers are instructed and assessed by ex-Navy civilians at the HMAS Watson Bridge Simulator. When ships need maintenance or undergo considerable upgrades much of the labour force is drawn from private companies such as Atlantic and Peninsular and such projects are often undertaken in Garden Island’s Thales-managed Captain Cook Graving Dock – the largest of its kind in the Southern Hemisphere. The somewhat modular nature of a base permits this as the ships remain the distinct property of their officers and sailors while much of the additional - often more tedious - workforce requirements are outsourced; to emulate this at sea would require a more holistic solution.

An Australian Fleet Auxiliary could prove an effective answer to the RAN’s workforce problem by recognising that ships which do not directly contribute to lethality do not need to be crewed by officers and sailors trained for such situations. Vessels such as ABFC Ocean Shield and ADV Ocean Protector functioned in many ways as a proof-of-concept when they were brought into service to bridge the RAN’s strategic lift capability before the acquisition of the LHDs. HMAS Choules, MV Sycamore and, when they come online, Supply and Stalwart, could form the core of a new fleet auxiliary that recognises the contribution of such vessels yet appreciates that they do not carry the weaponry to fight modern, over-the-horizon engagements and rarely encounter situations that would place them at risk. Choules, for example, has no organic self-defence capability, her highest calibre weapon - the 7.62mm MAG58 - forces her to rely entirely on other ships when operating in conflict as part of a task group. She, like HMAS Sirius, was
designed for and began life with a civilian crew and therefore does not need Navy workforce to deliver what suitably trained merchant mariners already have.

Furthermore, formally establishing a fleet auxiliary would allow access to a pool of mariners who may not currently be eligible for RAN service. In the RFA model, applicants are presently required to meet merchant mariner medical standards and acquire an ENG1 Medical Certificate in contrast to the military standards set by the RN. If Australia mimicked this, it would increase the number of applicants eligible for service and permit those deemed unsuitable by the permanent force another chance to contribute while also providing an alternative avenue of service for certain members of the RAN being medically separated. Thus, a fleet auxiliary would offer a framework that could allow for service that would not necessitate being trained and qualified as a seagoing member of the RAN.

In conclusion, this is not the first time the RAN has found itself struggling to generate and retain the workforce required to sustain its operations. In World War Two, civilian resources were tapped via organisations such as the NAP and WRANS to undertake largely non-combatant roles. The RN supplements itself with the RFA, and the RAN has demonstrated interoperability with the ABF. It is thus time to meet the requirements of the future by learning from the Navy of the past and recognise that much of what we continue to do with a permanent naval force could be altogether replaced or at least augmented by civilian entities such as the ABF or an Australian Fleet Auxiliary.
Endnotes

10 Christopherson, p. 82.

Biography:

Lieutenant Peter Hunter joined the Royal Australian Navy as a Midshipman Maritime Warfare Officer on 4th February 2013. In 2014 he began reading History, English and Media Studies in the Chief of Defence Force Students Program at the Australian Defence Force Academy, graduating with a Bachelor of Arts (BA) in 2016 and presented with the Chief of Navy Prize. Completing the Junior Warfare Application Course in 2018 he was posted to HMAS Choules as an Officer of the Watch. In 2020 he will join HMAS Bathurst as XO.
Today the Royal Australian Navy (RAN) must assert its power in an increasingly contested maritime environment, and position itself for success in future conflicts. In the years between federation and World War One (WWI), Australia faced similar challenges and overcame them with excellent results. This essay will argue that such an example has significant implications for the modern RAN. In order to understand both historical and contemporary circumstances, it is helpful to think through a theoretical framework, such as neoclassical realism. This identifies that states respond to the pressures placed on them by the international system, but can only act insofar as their domestic structures enable them too. Far from being ‘black boxes’, the internal workings of a state have a significant impact on their interaction with the world around them. Thus particular focus will be placed on the strategic similarities between the two time periods, and key internal factors that influence outward actions.

In light of this, the point will be made that for a state to ensure its security, it must be able to marshal sufficient domestic power to implement strategies and capabilities of enough absolute power, to combat likely threats. In short, the Australian people must support the development, maintenance, and deployment, of the Royal Australian Navy, to meet the challenges posed by a turbulent region. The success of Australia’s first naval buildup was the result of an enormous public push for an Australian Navy, thereby enabling rapid and successful naval development. As the modern RAN expands and seeks similar outcomes, it must reassess its relationship with the Australian community. Navy must treat public support as a critical enabler if it is to excel at its mission and succeed in the future.

HMAS Adelaide off the coast of Eden, NSW as a part of Operation Bushfire Assist.
The Present Outlook

The future of the Indo-Pacific is contested, and Australia, straddling this maritime domain, will have to act with dexterity and resolve in order to ensure its security and prosperity in a shifting regional order. China, Indonesia, and India are all likely to pursue extensive economic and military expansions. Additionally the willingness and capability of the United States to provide dual deterrence in the Asia-Pacific are being called into question, and the exercise of military capability has become central to achieving political and diplomatic goals. There are several potential crises and military contingencies in which the USA may expect Australia to participate. Whether such action is in the national interest remains unclear. Such developments make Australia’s future position increasingly uncertain. Vice Admiral Tim Barrett posits that “the only certainty is change,” consequently the RAN’s strategies and capabilities must position it to overcome “uncertainty and unpredictability, discontinuity and ambiguity.”

Though the future has always been uncertain, in decades past, military planners could rely on the fact that it would take a foreign adversary at least ten years to develop the capabilities necessary to threaten Australia seriously. Therefore the Australian Defence Force (ADF) could focus on lower-level regional operations (such as stabilising the Solomon Islands and intervening in East Timor) and “armed conflicts of choice” such as operations in the Middle East. However, as a result of increasing, and accelerating, capability levels throughout the region the potential warning time for both low and high-level contingencies has shortened. Furthermore “grey-zone” operations by foreign adversaries have the potential to undermine Australian responses to aggression or coercion. As regional actors become more capable of engaging in a high-intensity conflict, Australia will experience a significant reduction in its ability to defend its interests and exercise influence over other states. Even with a security guarantee from the United States, this would be a substantial loss in relative power.

To safeguard the nation’s prosperity and security, and to maintain its relative power, Australia must increase its absolute power. Defence planning has long relied on a “core force and expansion base.” The RAN will now be expected to deal with more strenuous contingencies at much shorter notice. Therefore Navy must be able to deal with “vital non-discretionary tasks” as they occur, and expand rapidly to meet looming threats. This can be achieved through an increase in capability and increasing force projection and presence. As regional navies are rapidly expanding and becoming technologically more proficient, Australia will have to do more to achieve battle-space superiority. Consequently continued use, and rapid acquisition of superior weaponry, platforms, command and control systems, and battle-space intelligence is essential. Navy needs to identify systems that it may need and position itself to acquire and employ them within a short time frame. Given that even America’s military might has been insufficient to deter China from its recent assertive and provocative military activities, many people question whether Australia’s forces will be of much use. It is, therefore, apparent that military capability alone will not provide strategic security. Instead, it is the credible threat, and application, of force that achieves the desired outcome. Since its inception Australia has expected Navy to be ready and willing to deploy to higher risk contingencies to secure Australian interests, whether in partnership with a significant ally or without.

Historical Precedent

In the years following Australia’s federation, power was primarily determined by states’ abilities to coerce and constrain one another with naval force; and the dynamics of power
in the Pacific were shifting quickly. At the turn of the twentieth century, Australia’s security was guaranteed by the Royal Navy. Given that Britain maintained sea control in the Indo-Pacific, the defence of Australia and her strategic interests was considered relatively simple. The only credible threat was from covert surprise attacks on significant ports which could be defended with only a limited number of ships and shore batteries. However, with the emergence of new naval technologies and strategies, this security began to decay. In 1906 the Imperial Japanese Navy annihilated the Russian 2nd and 3rd Pacific Squadrons at the Battle of Tsushima; between 1907 and 1909 the United States’ ‘Great White Fleet’ demonstrated its capability as a modern blue-water naval power; and in the first decade of the new century Germany, France and Holland all consolidated their colonial territories and secured them with their navies. Furthermore, Germany’s enormous naval buildup in the North Sea posed a severe threat to Britain’s maritime dominance and security. Therefore the British Admiralty reneged on the Naval Agreements of 1903 and 1909, which promised Australia broad protection by the Royal Navy, and moved its most significant assets to the theatre in which it faced greatest threat. This meant that there was a significant shift in relative power away from Australia due to the reduction of British firepower in Pacific and Australian waters. Consequently, the safeguarding of Australia’s strategic interests required significant military independence.

Procurement of an Australian Navy began in 1909 and was undertaken with haste. The outcome was that by 1914 the nation possessed a formidable Navy that could exercise dominance over the German Pacific fleet. This primarily guaranteed the security of sea lines of communication, as well as the capture of German colonies when war broke out. Throughout the war, Australia was secure its interests, its region, and its security. When the decision was made to acquire significant Australian naval capability, there had already been extensive debate and consideration as to what kind of assets would be needed. Since federation, senior military officers and Members of Parliament had been advocating for an Australian Navy that, in the absence of a powerful Royal Navy squadron, could keep Australia’s immediate region secure from aggressors, protect Australian shipping on the high seas, and defend crucial ports.

Australia’s naval planning and implementation in the years preceding WWI was driven as much by the public as it was by politicians. Throughout the first decade of nationhood, the debate regarding an Australian Navy was taking place in Australia’s newspapers. However, the broadsheets were not concerned with the extent to which Australia required naval defence and capability; rather, they discussed the most effective methods for ensuring such security. In the decades after federation, Australian’s had a keen sense of being a part of the British Empire, whose power and prosperity was ensured by maritime control. Consequently, the security of Australian ports and waters was a priority for the public and any government who sought re-election. The prevailing cultural view was that an independent nation required an independent Navy. News of Tsushima, the arrival of the American fleet in 1908, and the ‘Dreadnought scare’ were reported widely and made Australians feel that their region was dangerous and contested. The sense of insecurity was exacerbated by the extensive discussion surrounding the Admiralty’s doctrine that British ships on the Australia Station could be called to a European theatre of war, leaving the nation unprotected. These developments elicited a significant public response. The press goaded the New South Wales and Victorian governments to jointly offer the Admiralty the cost of a battleship, the ‘Dreadnought Fund’ from the city of Sydney helped establish the Royal Australian Naval College, and in the 1908 election Labour, who sought to establish an Australian Navy, ousted the Liberal government which had proposed an unpopular reworking of the 1903
Naval Agreement. In the five financial years of the initial naval buildup, defence expenditure measured fully 14.95% of total Commonwealth expenditure, compared to today’s 5.1%. The euphoria that surrounded the 1913 fleet entry into Sydney Harbour highlighted the extent of public support for the newly formed Royal Australian Navy. The advent of the First World War, less than a year later, revealed the importance of this significant national force.

**Tales as Old as Tide**

The initial buildup of Australian naval power gained impetus from three core drivers: strategic necessity, public support, and precise planning. In this paper, the current strategic risks, and approaches to overcoming them, have been discussed at their most basic level. Just as in 1909, they are clear, and urgent challenges that must be addressed to overcome a decline in relative power.

There is, however, a stark contrast between the strategic narratives of 1909 and today. There are five characteristics of successful narratives, all of which were fulfilled in the pursuit of the first Australian fleet. In the prewar years, the need for a navy to uphold Australian security, independence, and nationhood was readily understood and engaged with by the population. This narrative was easily connected to the real world, and it proposed a precise method for succeeding in the above aims. The argument for a navy was more compelling than other courses of action, and it identified the adversaries to overcome. No such narrative exists within the modern Australian imagination. Herein lies the vast difference between the development of Navy now, and 110 years ago. Today, as then, public opinion is an enormous driver in determining the shape, readiness, and deployment, of Australia’s armed forces, but Navy lacks the necessary support to expand and act as a genuinely threatening force. Without a clear understanding of the necessity and capability of the Navy, Australians will not offer the engagement that enables the RAN to achieve its mission.

It is tempting to argue that the current bipartisan approach to defence ensures that policy is formed independently of public opinion; however, research demonstrates otherwise. Across all societies, leaders’ decisions on defence and security are considerably shaped and swayed by public perception. This extends even to significant great power decisions. In recent times Australian governments have cut Defence expenditure to deliver a budget surplus, which was deemed more politically valuable at the time. Defence was the unlucky loser because similar-sized cuts to other areas would have been met with greater public backlash. In a liberal democracy, such as Australia, governments and taxpayers place value on various goods, according to their perception of their own needs. When the human and monetary costs seem high, the public displays reticence to adopt new defence strategies. Likewise when people feel that their security needs are being met, they are unlikely to support higher risks or further expenditure. This becomes problematic when the public disengages with or misunderstands, their security institutions. Today the Indo-Pacific is witnessing a strategic transition, characterised by reduced warning times and increased ambiguity. If the public remains ignorant of strategic necessities, then the Australian government and military will be hamstrung in their preparation for, and responses to future crises. For Navy to fulfil its mission in the future, it must enjoy sustained, positive, engagement with the Australian people.

The clear implication is that public support should be viewed as a Key Enabler for Navy. The 2016 *Defence White Paper* states that “even the most capable platforms and systems
cannot be effective without the enabling capabilities that allow those platforms to operate effectively and be sustained.”

As an instrument of politics by other means, Navy is inherently governed by political realities, and must, heed the maxim that “the will to win and to endure is as important as to possess the more concrete forms of power.”

This requires a fundamental reframing of the way the Navy interacts and engages with the public. As previously outlined, to rapidly acquire and employ new capabilities, and respond to high-risk contingencies at short notice, the RAN needs strong popular and political support. If Australians are apathetic, “funds will not be allocated for defence and recruits will not apply.”

Resolving this is made difficult because the population is primarily concerned with immediate domestic issues. Furthermore, in an information-saturated environment, the role of the Navy in shaping the long term international environment is lost among many other claims for people’s attention.

The Australian public is not well engaged with either the Navy or its mission. The emphasis on the ANZAC legend, and national lore of the outback, contribute to a robust continental ethos. The quip that Australia is “girt by beach”, aptly captures the popular Australian relationship to the sea.

Commentators have noted that it is not the achievements of the broader fleet that grasp the public imagination, instead it is “[i]ncursions into Indonesian waters, cracks in vessels, [and] blown-out construction costs”. The apparent reality is that a “navy looks like an expensive, wasting asset ... until you need it.”

Navy’s research data indicates that the prevailing public view of the RAN is of a costly force on border protection operations.

While Australians are broadly supportive of Navy activity in the South China Sea (though this is declining), key groups markedly differ. University graduates, social professionals and young people generally express less support for Defence. This is crucial because, in the same way, that Navy develops and trains a fighting force to deal with future contingencies, it is these people who will be making judgements and driving policy attitudes in the future.

The notion from senior ranks that Navy’s need for “more and better professional skills” is understood and supported by the community, simply does not match reality. According to a Department of Defence report, many people in Australia “[d]o not feel they received enough information or explanation about the ADF and defence policy.” There is however strong support for intervention in cases of genocide, or a failing state in the region. This demonstrates a ‘last resort’ view military force and a lack of understanding regarding Navy’s ability to achieve diplomatic and strategic goals. Australians acknowledge the importance of defence. However, most people are preoccupied with other priorities.

As Australian forces seek to marshal public engagement to fortify strategic manoeuvrability, foreign actors now have greater capacity and will to manipulate the population for their ends. The outcomes of such interference range from a decline in political support for the ADF during peacetime, through to a resistance to deploy military forces on critical operations. The warning time of severe contingencies has become more limited, so too is the ability of institutions to mobilise popular backing. This is due to general neglect of defensive soft power, and the increasing sophistication cyber technologies that enable adversaries to engage in counter mobilisation.

The Chief of Defence Force, General Angus Campbell, has noted that foreign states engage in “grey- zone” warfare utilising a variety of measures short of war to secure their interests. This means that by the time a conflict erupts, the
Navy and the nation could already be in a losing position. If Australia does not actively work against foreign operations, then the public is likely to be influenced by them. There is, an urgency required in positively mobilising the Australian public, to position Navy to fight and win at sea. This necessitates a change in the relationship between significant security institutions and the public.\textsuperscript{49} In a contested environment Navy must win the hearts and minds of Australians, and must communicate a narrative that engages Australia’s diverse peoples, and builds cohesion among them.\textsuperscript{50}

In conclusion, public support is a pre-condition for establishing and maintaining strategic power. During times of transition and uncertainty, states must be equipped to negate threats and secure their interests. In the Indo-Pacific, this manifests itself in the expansion of naval power. While Australia’s hardware and deployments are vital indicators of power to other states, the credible threat of force, and therefore relative power, rest on domestic circumstances. The naval buildup between 1909 and 1913, which established the Royal Australian Navy and ensured security throughout WWI, occurred during such a time of regional transition. The pace and success of this development were products of a public drive to achieve an independent naval capability. Today the Indo-Pacific is witnessing yet another strategic transition, characterised by reduced warning times and increased ambiguity. To maintain its position in the regional order, Australia must equip Navy with the capability to overcome growing threats and competition. Such an effort requires sustained, positive, engagement with the Australian people, to secure political and professional concord. In recent times the level of public engagement with the military was sufficient to support operational necessities. This is no longer the case. The needs of the ADF have become more significant, and foreign actors contest the ability to garner support. Navy must recognise that an informed and engaged populace is a Key Enabler in the pursuit of its mission. Without it, Navy and the nation could enter the next major crisis with an insurmountable disadvantage. In moving forward with new platforms and capabilities, the RAN should remember its origins and the society that conceived it. Engaged, proactive, supportive, Australians are a pre-condition for delivering a potent and independent Navy.
Endnotes


9 Brabin-Smith, Dibb. “Australia’s Management Of Strategic Risk In The New Era”.

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16 Report of the Committee of Imperial Defence upon a General Scheme of Defence For Australia, 1906, in Documents on Australian International Affairs 1901-1918 edited by Greenwood, Gordon, and Charles Grimshaw. 1977. p133 and The Secretary of State for Foreign Affairs (Sir Edward Grey) on separate Dominion navies and a common foreign policy, 25 May 1911, in Documents on Australian International Affairs 1901-1918. p193

17 Meaney. The Search for Security in the Pacific, 1901-1914. pp1-14, 159-195


21 Evans. A Navy For Australia. pp55-56


24 Greenwood, and Grimshaw. Documents on Australian International Affairs 1901-1918. p125
HISTORICAL IMPLICATIONS FOR THE FUTURE OF THE RAN


29 Layton. “Social Mobilisation in a Contested Environment”


35 Betts, Who Cares About Defence? Attitudes of Australian Voters and Candidates in Federal Elections” p31

36 Layton. “Social Mobilisation in a Contested Environment”


39 Kemp, CMDR RAN, Director Communications and Media - Navy, at HMAS Creswell, February 2019


42 Barrett, The Navy and the Nation, p70


44 Jennings et al., “Guarding against Uncertainty: Australian Attitudes to Defence: Report on Community Consultations.”


46 Layton. “Social Mobilisation in a Contested Environment” p4


48 Campbell. “You May Not Be Interested In War... But War Is Interested In You”.
Biography:

Born in Tamworth in 1997, Acting Sub Lieutenant Noah Learoyd grew up in the rural town of Cooma, New South Wales. From a young age, he was fascinated with sport and military aviation. Not being a skilled cricketer, he gave up on the Baggy Green and turned his attention to becoming a pilot. Initially hoping to fly fast jets with the Royal Australian Airforce (RAAF), he later became convinced that operating a Seahawk off the deck of a destroyer was a much more interesting job.

Upon graduating high school, he worked in the United Kingdom as a sports coach and boarding master, before returning to Australia to study a double degree of International Security and Engineering at the Australian National University. After completing 18 months of study his application to join the Royal Australian Navy as a pilot was accepted, and he was appointed as a Midshipman in January 2019. He is currently undergoing training at No. 1 Flight Training School at RAAF East Sale.
Military Education, The Decline of Rational Debate and the Failure of Strategic Thinking in the Imperial Japanese Navy: 1920-1941

The period of intense mechanisation and modernisation that affected all of the world’s navies during the latter half of the 19th and the first half of the 20th century had possibly its greatest impact in the Imperial Japanese Navy (IJN). Having been shocked into self-consciousness concerning their vulnerability to modern firepower by the arrival of Commodore Matthew Perry’s ‘Black Fleet’ at Edo bay on 8 July 1853, the state of Japan launched itself onto a trajectory of rapid modernisation. Between 1863 and 1920, the Japanese state transformed itself from a forgotten backwater of the medieval world to one of the world’s great technological and industrialised powers. The spearhead of this meteoric rise from obscurity to high power status in just over a half-century was undoubtedly the Imperial Japanese Navy, which by 1923 was universally recognised during the Washington Naval Conference as the world’s third-largest and most powerful maritime force.¹ However, despite the giant technological leaps forward made by the Imperial Japanese Navy during this period, the story of Japan’s and the IJN’s rise to great power status ends in 1945 much as it began during the Perry expedition; with an impotent government being forced to bend to the will of the United States and her allies while a fleet of foreign warships rested at anchor in Tokyo Bay.

¹ Ships form up for the Japanese Self Defence Force International Fleet Review in Sagami Bay.
The IJN’s defeat was the result of a lethal concoction of three ingredients. First, the IJN was guilty of promoting a dangerously incoherent military strategy borne out of a destructive rivalry with the Imperial Japanese Army (IJA). Second, faced with a geostrategic dilemma of their own making, the IJN embraced a flawed operational doctrine that sought to achieve a quick, decisive victory over the United States in a short war. Lastly, the IJN suffered from a myopic view of history that manifested during the 1920s and 1930s as the IJN searched for advantages via tactics and technology to support their strategy. In the process, however, the IJN overlooked strategic lessons of the First World War that, if recognised, should have highlighted the glaring flaws in their approach. Together these elements set in motion the flawed decision making that would lead to Japan’s unconditional surrender in 1945.

The advantageous timing of Japan’s re-entry to the international stage, just as technological advancements in all fields through the industrial revolution were revolutionising naval affairs, meant that Japan was able to derive great benefit from the scientific advancements of others. Emperor Meiji proclaimed in 1868 that to meet the west on equal terms, “... knowledge shall be sought from all over the world, and thus shall be strengthened the foundation of the imperial polity.”2 To professionalise and modernise the IJN, selected junior officers went abroad to study and absorb the knowledge of first-rate European naval powers. Royal Navy officers were seconded to Japan to develop and instruct naval tactics and fighting doctrine. In 1869 a Naval Academy was established and was followed in 1888 with the founding of the Japanese Naval Staff College - only four years after the US Navy founded its War College at Newport. Following changes in the curriculum between 1902-04 away from technical and scientific study to focus on strategy and tactics3, a truly golden age of Japanese naval thought began. Only a few years later, the crushing defeat of the Russian Baltic Fleet by the IJN under Togo at Tsushima not only demonstrated the degree of professionalism and tactical mastery that had been obtained by the IJN in only a few decades of existence but appeared to validate the prioritisation and reforms of the education system for the IJN’s young officer corps.

The legacy of Tsushima would have far-reaching impacts for the operational doctrine of the IJN. Trained in the writings of Mahan, the IJN yearned for a decisive victory at sea that would underline the strategic importance of the battle fleet and thus not only justify the navy’s capital procurement budget but also guarantee an equal voice next to the Army in the development and execution of Japanese strategy. Nevertheless, through the Sino-Japanese War (1894-5) and the first year of the Russo-Japanese War (1904-5), this victory proved elusive.4 In an age not yet conversant with the concepts of sea control and sea denial, the IJN had thus far been unable to point to a decisive engagement as a measure of their independent effectiveness and thus to gain an equal strategic voice with the Emperor.

The post-mortem conducted by naval thinkers, after Tsushima appeared to validate IJN operational doctrine, and reinforced for Japan and the world the apparent primacy of the ‘big-ships, big guns’ approach to maritime strategy. The centrality of the decisive surface fleet engagement became the raison d’etre for the IJN. Moreover, after Tsushima, the IJN, at last, gained equal standing with the IJA in the debates surrounding strategy, operational, doctrine and force structure. Alternative views about the strategic role of Japan’s Navy thereafter were considered threatening to the IJN’s position of parity with the IJA and were thus discouraged and discredited at every opportunity.
With their newly-won strategic voice, the IJN sought to shape a maritime strategy for Japan as a means of securing the Navy’s position of prominence in budgetary and planning matters. While the army was focussed westward on the Empire’s ‘continental lifeline’ in Manchuria, the navy was focused south and eastward on the newly acquired Pacific island mandates and beyond to the Dutch East Indies as a potential future source of oil and other critical resources. Moreover, the demise of Russia as a naval threat in the Far East focused the IJN’s attention on the USN as ‘the only remaining country that had the potential to pose a naval threat to Japan in the Western Pacific’ and ‘its most likely opponent in any future war.’ After Jutland appeared to re-validate the lessons of Tsushima, the IJN accepted strategy of southward expansion, perimeter defence, and decisive fleet engagement to gain mastery of the Western Pacific became canon law. Even if that expansion risked conflict with the United States, Japan believed they had a proven fighting doctrine and the combat experience to challenge for hegemony in the western Pacific successfully. These differing views between the IJA and IJN of Japanese strategic interests were both self-serving and destructive. Nor were they ever rationalised in any Imperial strategic guidance. The failure of the Japanese high command to articulate prioritised strategic interests resulted in the IJN prosecuting an operational doctrine and force structure based on dubious assumptions aiming to promote the IJN’s southern expansion strategy further.

As the IJN set about to build a fleet capable of delivering on this strategy, the Washington Treaty came into force, limiting the ability to build more capital ships. As a result, the IJN refocused its shipbuilding effort on producing aircraft carriers, cruisers, destroyers and submarines of unrivalled quality. They invested heavily in fast, heavily armed destroyers and light cruisers that would conduct high-speed flanking attacks against an advancing US fleet, particularly employing long-range munitions, advanced Type 93 ‘Long Lance’ torpedos and night-attack tactics to erode the adversary’s fighting capacity. The IJN sought to gain a tactical and qualitative edge to overcome the quantitative inferiority that had been forced upon Japan by the treaty limitations.

With this tactically superior fleet, the IJN intended to hold any USN challenge for supremacy in the Western Pacific at such risk as to make the cost of the effort unacceptable, and thereby bring the US to negotiate peace from a position of disadvantage. However, this strategy was based upon a fatal assumption of being able to conclude the War in less than 18 months by forcing the USN into a decisive sea battle. This ‘short-war’ theory had gained precedence in the debates concerning the relevance of the First World War in an Asian context. Some believed that any future great power conflict would necessarily be a total war involving unprecedented industrial and national mobilisation. In contrast, others disregarded total war theory as a European aberration and believed that élan and fighting spirit, not technologically advanced equipment and materiel, were still the critical factors to success in battle. The 1921 Principles of Command published for the army paid lip-service to “the recent great advances in material warfare”. However, they concluded that ‘victory in battle still depended on intangibles like devotion to duty, patriotism, and willingness to sacrifice oneself to achieve objectives’. This theory conformed neatly with traditional Japanese Bushido code of martial beliefs handed down from the Samurai warlords, and thus on the surface appeared to confirm a theory of war in which the Japanese would have a distinct spiritual, indeed a divine, advantage.
time, the communication in official publications and directives about this operational doctrine took on near-religious tones. Catch-phrases like ‘using a few to conquer many’, ‘outranging the enemy’ and ‘fight the enemy on sight’ were enshrined in the tactics of night combat, attrition and the decisive battle.\textsuperscript{13} Central to this dogma of the decisive battle and the various tactics to achieve it was a firmly entrenched belief ‘...that quality \textit{could} overcome quantity.’\textsuperscript{14}

Its own unconscious bias thus victimised the IJN in attempting to derive lessons from the First World War. Analysis of the war in Japanese naval circles focused exclusively on the outcome at Jutland and paid no heed to the ‘...broader strategic, economic, and logistic matters that marked margins of victory and defeat between the war's participants.’\textsuperscript{15} Most critical of these was the near absence of any consideration given to the problems of protecting merchant shipping as a critical vulnerability to Japan's war effort. Despite the enormous losses of shipping and the subsequent financial and economic crisis caused by the German U-boat campaign in the First World War, Japan failed to recognise their increased vulnerability as an island trading nation reliant on imports for most of the natural resources it required to sustain its population and armed forces. ‘[I]t was the great gun duel at Jutland, not the ravages of the U-boat, that had a greater impact upon the thinking of the Japanese naval high command.’\textsuperscript{16} This lack of clarity on the challenges of merchant protection and anti-submarine warfare highlights that a culture of anti-intellectualism had stifled debate and original thought in the IJN by the eve of the Pacific War, creating systemic barriers to informed analysis. The degree to which the IJN became wedded to the decisive battle strategy created a blind spot in their war planning that prevented them from seeing that a concentrated submarine offensive against the logistical lifeline of an island nation could also be decisive.\textsuperscript{17}

The US submarine offensive against Japanese merchant shipping in the Pacific War was a decisive factor in the defeat of the IJN. As Keegan notes, US submarines not only accounted for the destruction of one-third of Japanese warships, they also accounted for two-thirds of the destruction of the Japanese merchant fleet.\textsuperscript{18} Colin Gray similarly argues that the statistics of the Japanese merchant ship losses in the Pacific War ‘...are the statistics of national defeat. [...] Imperial Japan was both extraordinarily vulnerable to attrition of its seaborne commerce and was monumentally irresponsible in its operational handling of that commerce in wartime.’\textsuperscript{19} Despite the long years of the IJN arguing for the ‘southward advance’ few in the navy had given any consideration for how the long lines of communication were to be protected. The advance south was, after all, a strategy based on securing unfettered access to vital strategic resources. Nevertheless, there was a cultural disdain throughout the IJN for the inglorious work of merchant ship protection that had grown as a by-product of the perceived centrality of the big-gun ship battle.\textsuperscript{20} The prevalence of this attitude, and the complete oversight of the strategic lessons around merchant shipping protection and ASW from the First World War, demonstrate the dramatic reversal in the level of the intellectual endeavour of the IJN between Tsushima and Pearl Harbour.

In seeking to derive relevance from the history of the IJN for the future of Australia’s Navy, one is cautioned by the words of many distinguished historians and military professionals. Professor Jay Luvaas, for instance, advises that “...read incautiously and without meticulous attention to context, history is capable of furnishing precedent for nearly any lesson.”\textsuperscript{21} One must guard against the temptation to see templated solutions in single episodes of military history which risk obscuring the subjective circumstances of a given time and place. As
General John Kiszely observes, “…such an approach may distort the clarity of historical vision. … [F]alse insights, unsound conclusions, and erroneous lessons offer themselves everywhere like fools’ gold to the unwary prospector.” Sir Michael Howard also warns of the dangers of the cursory application of military history. ‘One does not, or anyhow should not, study the past to discover the “school solutions” – that is the first “lesson” that professional historians have to drum into the heads of their pupils.’ Hesitantly, this essay attempts to do just that; to find relevance in a singular historical episode to illuminate lessons for the future of the RAN.

Cautionary notes notwithstanding, at the heart of the IJN’s failures in the interwar years was just such a narrow interpretation of the lessons of recent military history. Convinced that Japanese culture was endowed with unique, even divine, martial characteristics that could overcome quantitative military-industrial shortcomings, the IJN between Tsushima and Pearl Harbour became singularly focussed on studying those aspects of the First World War that appeared to substantiate their view of events, particularly as it related to the pre-eminence of the decisive battle between surface fleets as the final arbiter of command of the seas. In this, it is fair to say; the IJN was not alone. However, while the British in particular had come to understand with perilous clarity the vulnerability of their island to economic warfare, the Japanese somehow managed to overlook these lessons.

Despite clear evidence to the contrary, the IJN leadership continued to believe that, as they had in their previous wars against China and Russia, they could fight a limited war for regional objectives. Evans and Peattie describe this failing perfectly; ‘[T]he Japanese navy, despite its decades of “preparation” for war with the United States, failed to appreciate the nature of such a conflict.’ They and others have argued convincingly that Japan did not prepare for war at all but rather prepared for battle. ‘[T]he most serious strategic failing of the Japanese navy was to mistake tactics for strategy and strategy for the conduct of war.’

Clausewitz, writing a century earlier, points to precisely these dangers when he warns:

Now, the first, the grandest, and most decisive act of judgement which the Statesman and General exercises is rightly to understand […] the War in which he engages, not to take it for something, or to wish to make of it something, which […] it is impossible for it to be. This is, therefore, the first, the most comprehensive, of all strategical questions.

Despite the drastically different circumstances of the 1940s vis-à-vis the United States relative to the situation in their wars against China and Russia, and the lessons of recent history concerning modern industrial ‘total’ war, the IJN still believed they could fight a ‘short war’ for limited objectives. Mistaking the character of the war upon which they were embarking was the fatal error in Japanese strategic thinking.

Through the 1920s and 1930s, the IJN went through a subtle but persistent transformation that is critical in understanding the failure of IJN strategy. During this period, the IJN changed from what had been an organisation founded upon a culture of learning and open exchange of ideas, into an organisation characterised by rigid adherence to strategic maxims and fighting doctrine that were judged to have led to victory in the Sino-Japanese and Russo-Japanese wars. Having learned ‘…to understand and then master the principles of Western naval tactics,’ the IJN later became resistant to alternative theories of naval warfare that challenged the pre-eminence of the decisive engagement between battle lines to determine
command of the seas. During this period the IJN succumbed to a type of ‘creeping formalism’ that led to an ‘atrophy of thought’ and ‘strategic orthodoxy’ that stood in stark contrast to the open-minded, academic pursuit of knowledge during the decades before Tsushima. As a result, the IJN during the interwar decades drew incorrect conclusions based on a perfunctory study of the First World War and deliberately cherry-picked evidence in support of a preconceived notion about the nature of future wars.

The study of the degradation of intellectual thought and debate in the IJN during the interwar period is illuminating for the future of the RAN in three important ways. First, we must guard against the allure of seeking tactical answers to strategic problems. The pace at which the technology of warfare has and will continue to evolve will offer tantalising and awe-inspiring advances in robotics, nanotechnology, artificial intelligence, autonomous vehicles, and cyber capability to name only a few. Nevertheless, as Williamson Murray has argued, strategy and policy must lead to tactics and technology, not the other way around. ‘The Germans in their conduct of two world wars, as well as the wretched results of America’s efforts in Vietnam, have made all too clear the results of allowing operational and tactical expediency to drive policy and strategy.’ The temptation will exist for the RAN, as it did for the IJN in the interwar period, to search for the panacea to our strategic woes in these technological developments. It would be professionally indictable for us to neglect to study and understand the emerging ways and means of executing our craft that these advances will offer, but it would be equally criminal to repeat the great offence of the IJN and mistake tactical advances for strategic responses to the challenges of our time. As Murray and Sinnreich highlight, ‘[i]t is the very repetitive quality of many of military history’s worst disasters that can make reading it so depressing.’ This is not an epitaph any professional fighting force would choose.

Secondly, to safeguard the RAN against such shallow interpretations of military history as befell the IJN, the organisation must invest heavily in the strategic, political, historical, cultural and ethical education of its leadership. Joint Professional Military Education (JPME) must continue to be strengthened to encompass these fundamentals in more than a superficial manner. For most, the current ‘just-in-time’ structure of JPME throughout one’s career is likely to suffice. Nonetheless, there is an ongoing and expanding requirement for the RAN to have in its ranks military leaders who are also specialists in these fields, in much the same way that the RAN needs uniformed members with specialist academic qualifications in the scientific, technical and engineering fields. The current strategic climate in the Indo-Pacific is characterised by multiple overlapping geo-strategic interests providing the genuine potential for increased tensions and escalation. This climate of uncertainty will demand more than ever, and certainly, more than was the case in the Indo-Pacific region of the 1920s, highly educated ‘warrior scholars’ who understand both the military and non-military aspects to the strategic challenges they will face. Such specialist training must not, however, be seen as an impediment to one’s future career prospects in the way that it currently is. The stigma that currently envelopes one’s decision about stepping off the career ‘treadmill’ to pursue specialised, doctoral-level education in strategic studies needs to be eradicated. As an agile, adaptive ‘thinking Navy’, the RAN needs to seek ways to promote and support higher learning and remove the potential barriers to this education that may deter aspiring leaders from pursuing as much.
Finally, a culture of learning and open-minded debate must be fostered such that dominant views are prevented from extinguishing divergent opinions. Exposure to and participation in the academic debates in the wider strategic studies community must be encouraged, not stifled. The forthcoming Australian Journal of Defence and Strategic Studies seeks to revive a published and peer-reviewed journal for both ADF members and the wider community to write about and debate the important questions that face Australia today and into the future. It must be given adequate support from all of the services, including Navy, such that this becomes a thriving and intellectually stimulating medium for the support of professional debate and the exchange of ideas. Moreover, Navy will be required to take a leading role in shaping the strategic dialogue of the ADF in the coming years as the maritime domain continues to dominate the strategic narrative and political challenges for Australia for the foreseeable future.

In summary, to continue to develop a navy for Australia that ‘Fights like a thinking Navy, and thinks like a fighting Navy’, and therefore avoid the pitfalls that befell the IJN in the 20s and 30s, we must broaden our field of view from the tactical to the strategic, there must be a renewed emphasis placed on the development of strategic thinkers within the ranks of our aspiring leaders. We must promote and reward discussion, debate and academic endeavours in pursuit of a thinking, fighting, Australian strategy.
Endnotes

10. Drea, Japan’s Imperial Army: Its Rise and Fall, 1853-1945. 146.
11. Drea, Japan’s Imperial Army: Its Rise and Fall, 1853-1945.156.
Biography:

Commander Darin MacDonald joined the Royal Canadian Navy in 1995 and attended the Royal Military College of Canada graduating in May 2000 with a Bachelor of Arts (Honours) in Military and Strategic Studies.

Commander MacDonald served in HMC Ships Preserver, Montreal and St. John’s over the period 2000-2007 as an Officer of the Watch and Anti-submarine Warfare Director. Additionally, CMDR MacDonald completed an overseas exchange position with the RAN in HMAS Darwin in 2002-03 during which time he served in Operations SLIPPER, BASTILLE and FALCONER in the North Arabian Gulf including the Second Gulf War.

Commander MacDonald transferred permanently to the RAN in 2009 and in 2010 he underwent PWO training at HMAS Watson specialising in anti-submarine and surface warfare. He has served in HMA ships Newcastle and Melbourne in PWO roles and Perth and Stuart as Executive Officer. CMDR MacDonald has subsequently returned to the Middle East Area of Operations twice serving in Melbourne’s OP SLIPPER deployment in 2012 and Perth’s OP MANITOU deployment in 2016.

Commander MacDonald completed Australian Command and Staff College in 2018 where he completed the Art of War Advanced Masters in Defence and Strategic Studies and graduated as the Synnot Prize Winner as the top Naval student for 2018. Commander MacDonald is currently serving as the Deputy Director Sea Combat at Maritime Warfare Centre. He has been married to his wife Leonie since 2003 and has an eight-year-old daughter, Emily, and a four-year-old son, Owen.
IMPLICATIONS FOR THE ROYAL AUSTRALIAN NAVY OF THE SECOND WORLD WAR IN AUSTRALIA’S REGION

Mr Robert Moyse

Introduction

In the Second World War, the Japanese took over one-sixth of the world’s surface in a little over six months with comparatively modest forces. Central to this economy of force was their mastery of archipelagic warfare, which confounded the allies initially, but ultimately the fragility of Japanese grand and military strategy proved fatal. For Australia, there is more to be learned from the Japanese offensive than the Allied counteroffensive, as its scale and force densities were closer to those of today and Japan was the weaker protagonist, as Australia might be in a future conflict. Furthermore, Japan, like Australia, depended on sea communication. The essay will examine what happened in the war, what lessons arose, what has changed and, finally, the implications for the RAN. It is framed on the assumption that in future it may not be in America’s interest to intervene on Australia’s behalf. Therefore Australia must be prepared to defend its sovereignty as far as possible. It avoids specific force structure prescriptions but aims instead to identify the strategic level lessons for the RAN upon which future concepts, force posture and force structure must be founded.

What Occurred?

Japan, concerned about secure access to oil, settled on a plan to seize the oilfields of Malaya, Burma and the Dutch East Indies. This would result in a war against materially stronger opponents. The Japanese strategy employed surprise and speed to take the oil-producing areas after which they anticipated the US fleet would advance across the Pacific seeking decisive battle. The Japanese would establish a bastion of island bases, from which they would erode the US Fleet using island and carrier-based aircraft and submarines, before a defeating its remnants in the decisive fleet battle. The campaign would start with simultaneous surprise blows against the European and American colonial powers.
Documentaries visualise the offensive as a tide spreading from north to south. In reality, it was geographically sequential, but more like a series of near concurrent spot fires erupting in the Allied rear. Rabaul and Ambon were taken before Singapore was assaulted, Palembang before Singapore fell and Darwin was bombed just four days later.

24 January – Rabaul taken
30 January – Ambon landings
3 February – Ambon secured
8 February – Singapore assaulted
12 February – Palembang falls
15 February – Singapore falls
18 February – Bali landings
19 February – Darwin bombed
20 February – Timor landings

Japanese success depended on air superiority. The Navy had fewer than four hundred serviceable Zero fighters, yet they generated air superiority at will. Many Naval aircraft were carrier-based, but they also took airfields sea deep into enemy territory, so could concentrate combined land and sea-based airpower. This highlights three of the most critical characteristics of archipelagic warfare.

Firstly, unlike land warfare, archipelagic warfare need not be geographically sequential. Secondly, the only land that matters is that which affects war at sea. Thirdly, this demands an integrated archipelagic campaign. In contrast, Australia archipelagic defence was poorly integrated. The Army garrisoned key islands, but RAAF commitment was limited because of concern over the Navy’s ability to supply fuel and soon withdrawn; thus, the garrisons proved liabilities.

The Battle of Midway deprived Japan of four of her six fleet carriers. Losses among highly trained naval aircrew were irreplaceable. Subsequently, the Navy relied increasingly on land-based airpower but had lost the freedom to shift supply between airfields. Japanese defence was stubborn but lacked the élan, economy and tight coordination of their offensive. They failed to prioritise protecting internal sea lines of communication within their bastion, prioritising attacking US military assets instead, which is ironic considering vulnerability to commerce interdiction was the reason she went to war.

The bastion was permeable to US submarines which eventually destroyed much of the Japanese merchant fleet. The US airdropped mines also proved effective at closing key Japanese ports for critical time windows. Consequently, Japanese forces suffered worsening shortages of fuel, degrading their ability to concentrate force. Furthermore, they frequently held back powerful elements of the fleet for the anticipated decisive battle.

The three-year-long Allied counteroffensive was attritional and reliant on material preponderance, therefore contains fewer lessons for resource-constrained Australia.

What Were the Lessons?

It is often assumed that Japan, materially weaker than her opponents, could never have won, but the same logic says North Vietnam could never have defeated the United States. Ho Chi Minh recognised that American public opinion was the centre of gravity, and therefore sought a political decision whereas Imperial Japan sought a purely military decision.
The first lesson then is that weaker powers must employ an asymmetric grand strategy to which military strategy is subordinated. If Japan could have played the liberating anti-colonialist role better to US public opinion, it is just conceivable that its military strategy could have made the grand strategy work. A divided USA is a very different opponent to a united one. In seeking short-term military advantage at Pearl Harbor, Japan mobilised American patriotic fervour more successfully than the US Government could have, condemning itself to an unequal war. Bushido culture ensured the relationship between Japanese grand strategy and military strategy was inverted, leading to an unattainable strategy.

Japan also lacked unity of purpose. The Navy sought to secure the oil supplies to the South, whereas the Army sought expansion in China. No one was in charge overall, and priorities between the competing theatres were never coordinated.

At the operational level, Japanese success arose from coordinating sea, land and air power in integrated archipelagic warfare. Airpower could dominate surface forces, but much of it depended on land bases. These had to be taken from the sea and likewise supplied. Sea control depended on airpower, completing the triangle of interdependence. The relationship between the carrier and land-based airpower was mostly mobility versus resilience. Early in the war, when most archipelagic airfields were weakly defended, land-based airpower could be strategically quite mobile. Later, once land force densities increased, rapid mobility of airpower on a significant scale could only be provided by carriers which could advance and retire and concentrate and disperse as required. Immobile Japanese archipelagic land bases were often crippled by US submarines and mines at places and times critical to forthcoming battles. Coordinating all these relationships to win the contest to seek and find, evade and deceive and strike and bypass is the essence of archipelagic warfare.

What remains and what has changed?

History does not repeat itself, but it often rhymes. Populations, littoral urbanisation, social interconnectivity and surveillance have all increased. Indonesia and China have replaced Imperial Japan as Australia’s most likely potential opponents. China’s approach routes to Australia are similar to Imperial Japan’s, whereas Indonesia lies directly across Australia’s main lines of communication. The region remains essentially archipelagic, so the triangle of interdependence still broadly applies, but anti-access and area denial technology (A2AD) has reduced the need for large, resource-intensive, easily found airfields. Even small islands can hide threats to maritime and air forces. The exploitation of archipelagic islands to dominate the sea is now easier for a force capable of small dispersed scale amphibious operations.

Furthermore, the character of conflict has changed since 1945. In the post-Westphalian “Western” conception, an enemy was defeated once his military centre of gravity collapsed. In ancient Chinese conception, the opponent’s mind was the centre of gravity; he was defeated when he perceived it so. His mind could be manipulated by means other than war to induce defeat. According to Confucian philosophy, this contest occurs on two levels - morality and power. Each side attempts to convince key audiences of the rightness of its position (morality) and the cost and benefits of support or opposition (power). The Chinese Communist Party’s highest priority is its continuing rule; therefore, its narrative is prioritised for domestic audiences. It emphasises its power and righteousness in reclaiming Chinese dignity and purportedly ancient maritime territory within the “Nine-Dash Line”.

Chinese “comprehensive national power” spans the spectrum of strategic competition without hard boundaries and comprises everything that can exert influence. It is centrally directed by the United Front Work Department of the Party. The boards of all Chinese businesses, State or commercial, include United Front members who set policy. The United Front employs three complementary tiers of maritime power.
At the lowest level, the People’s Maritime Militia comprises paramilitary crews presenting as commercial fishermen. These also corral non-militia fishing boats to boost numbers when required.

The second tier comprises the Ministry of Public Security and the Ministry of Natural Resources, including the Coast Guard. These exist to enforce Chinese law in sovereign maritime territories, so using them to protect Militia activities conforms to the rhetoric that the disputed areas are Chinese territory. This force is well equipped for confrontation short of war, with a range of robust gun-armed vessels of up to 12000 tons. Intimidation and ramming Coast Guard ships can be superior to expensive naval combatants, as the Royal Navy learned in the 1970s “Cod War”.12

The third tier, the People’s Liberation Army – Navy (PLA-N), is never far away, ensuring that the opposition does not escalate beyond the capability of the Chinese Coast Guard. Their combatants do not need to be technologically superior to their US or Australian counterparts to achieve this. Their power of intimidation lies as much in the flag they fly as in their sensors and weapons.

Chinese commercial maritime enterprises enter disputed areas as if they were Chinese sovereign territory, thereby seizing the initiative and placing the onus of responsibility on the victim. This three-tier technique seen in the South China Sea could be employed to weaken Australia’s strategic position in the South Pacific.13 Activities below the threshold of war can shape the strategic situation to make the outcome of subsequent conflict a foregone conclusion as, for example, Hitler did to Czechoslovakia in 1938.

Sun Tzu advised rulers to keep demands on their opponent less than the cost of resisting, thereby obtaining benefit without the cost of war. What might China want from Australia, and what pain could China inflict at low effort? China could blockade Australian sea trade and supply using ambiguous techniques without needing to put a single sailor or soldier within reach of Australian mainland-based military capabilities. This is the framework in which Australia must compete.

Australia is weaker than China, so must develop an asymmetric grand strategy to which its military strategy must be subordinated. China has serious internal fault lines, many with the potential to fracture, exploitable through a discursive contest. Despite the Party’s attempts at control, information permeates to its domestic audience like US submarines through the Japanese bastion. Like Imperial Japan, China’s actions belie its narrative. Deng Xiaoping’s peaceful rise, once so attractive to China’s neighbours, has lost credibility under Hu Jintao and Xi Jinping. China has clients but few friends. To weaponise this Chinese vulnerability, Australia must develop its narrative. Prime Minister Morrison’s “Pacific Family” rhetoric has struck a chord regionally and could provide the foundations. Provided it is not sacrificed to domestic politics; it could reverse the idea that the Islands are mere strategic pawns and enable Australia to outcompete China in the critical South Pacific.

The most important third party in this equation is Indonesia because it could be a compelling actor either for or against Australia. Conflict with Indonesia could develop from either future aggressive nationalism or a breakdown of national stability. The ways these eventualities could arise are too broad for predictions, save that a concept for archipelagic warfare would be relevant in all cases. Preventing these scenarios from developing is a far better course than dealing with the consequences.
What implications for the RAN?

The ADF is structured for conventional warfighting which, as discussed above, China neither needs nor intends to partake in. This has three implications. Firstly, the RAN must contribute more forcefully to the development of grand strategy and military strategy, as it will be directed and bound by them. Secondly, it must develop techniques to counter China’s United Front. Thirdly, to do this, it must address its personnel shortages. These are expanded upon below.

Little consideration has been given to how Australia would counter Chinese use of ambiguous techniques for a distant blockade. Despite a purportedly maritime military strategy, Australian force structure considerations always gravitate towards land-centric scenarios, typically stabilisation operations in New Guinea. Serious maritime challenges are written off to the US alliance. The RAN must develop compelling arguments against what is effectively an offshore continental strategy in New Guinea that could absorb the entire Australian Army to little effect, other than making it easy to bypass and develop arguments for an integrated maritime archipelagic concept, along the lines of the Japanese. It must also correct its weakest link, which is capacity rather than capability. The military strategy must be dictated by Grand strategy but the latter informed by the former in an iterative relationship.

The ADF’s fighting power remains important even below the threshold of war, for the same reason as the PLA’s – credible deterrence. Concepts for credible deterrence as a sovereign Australian joint force are different from those as a junior partner in a US-led task group. The Australian Services have habitually structured more for interoperability with their US counterparts than with each other, declaratory policy notwithstanding. Consequently, the ADF is less than the sum of its parts. When the RAN is operating independently of the USN at any distance from Australia, fast air support is unlikely. Manoeuvre by sea has not been a priority for the Army; consequently, its weight and logistic hunger have grown to the point where landing site options are highly predictable. Predictable landings have a terrible history. The RAAF is habituated to well-equipped bases with long runways, provided, protected and supplied by the US, or allies like the UAE. In their absence, with no true expeditionary capability, it is confined to established Australian mainland bases of limited relevance to the problem at hand.

Taking lead responsibility for the South-West Pacific, rather than plugging into a US task group, would better serve both the alliance and Australia’s sovereign needs and align with the US and Australian strengths. Excellence in archipelagic warfare, akin to the Japanese early in the war, is the essential requirement for meeting Australia’s military-strategic needs. That requires land forces structured to dominate the maritime domain from ashore with relatively small footprints, not logistically hungry forces needing 8000-foot runways. Naval forces should be structured to insert landing forces with A2AD systems at critical points, then rapidly extract them and reinsert them elsewhere as required, operating in a mutually supporting pattern to prevent them being isolated and bypassed. If the Pacific step-up works, many of these operations might be permissive. Where they are not, it does not imply opposed landings. There are more than 22000 islands in the archipelago, most of which are undefended, and many of which are sparsely populated. Ambitions to dominate densely populated urbanised landmasses are inessential to a maritime strategy and beyond Australia’s means.
Mutual support will require, among other things, increased emphasis on offensive mine warfare. Defensively, the RAN must address the vulnerability of its two main fleet bases. Both are vulnerable to submarines and mining, and serious consideration needs to be given to defences and wider dispersal, including the use of low-cost mini-ports, currently becoming commercially accessible.

Indonesia dominates Australia’s vital lines of communication, but Australia is of decreasing political and economic importance to Indonesia. Conversely, Australian and Indonesian military capabilities are remarkably complementary, and a little imagination would go a long way in changing the Indonesian Navy’s (TNI-AL) perception, which is important politically as well as militarily. Human relationships matter strategically. Understanding and promoting the areas in which the RAN can benefit the TNI-AL would be a good investment.

Australia can also learn from Indonesia. If any nation should understand archipelagic warfare, it is Indonesia. TNI-AL is well equipped for shallow water coastal and riverine operations, which Australia is not. Much of TNI’s best thinking on this subject resides with the Marines (KORMAR), yet this branch of the TNI gets the least attention from Australia. The Australian Army largely ignores it because it belongs to the Navy and the RAN ignores it because it is a marine corps, which speaks volumes about the durability of service-stovepipes four years after the First Principles Review. Getting KORMAR and Australian amphibious forces closer would benefit both.

Competing against Chinese three-tier methods in expensive high-end surface warships is folly; therefore, lower cost robust 2nd tier vessels suited to operations below the threshold will be required. Short of war, they can do all that a surface combatant does at a lower cost. Whether they are Navy or not would be a decision for Government, but either way, they will be competing in the same recruiting pool that has proven insufficient for Navy’s existing needs, so, it must address its personnel shortages. In this respect, there are potential synergies with the Pacific Family narrative. In the 1970s the British Army suffered similar personnel shortages and successfully recruited Fijians who turned out to be excellent soldiers and eventually returned to Fiji, with goodwill towards Britain that still exists today.

An older British model may, however, be more useful. For the first half of the 20th-century integration between the Royal Navy and the Dominion Navies was unparalleled. A similar relationship with sovereign Pacific Island Nations could increase the power of both Australia and the Family. To overcome perceptions of neo-colonialism, Australia must offer a robust and sustained net benefit to the Family, including a meaningful voice in decision making. The RAN potentially has a leading role in this in the provision of technology, platforms, training and specialist advice, although this has to be managed carefully to avoid perceptions of militarising the Pacific. Ultimately, the Islands may wish to allow Australia to back up their maritime sovereignty protection operations, in the same way, that the Chinese Coastguard backs the Militia and the PLA-N backs the Coastguard, preventing Chinese escalation dominance.

**Conclusion**

Australia is incapable of militarily defeating a united and determined China or future Indonesia without direct American support which, for various reasons, may not be forthcoming. When Japan went to war in late 1941, it was also incapable of militarily defeating a united and determined America. Its only chance would have been to break American public support for war with a convincing narrative, which it rendered untenable in China. The globalised, interconnected 21st-century strategic narrative is more important than ever, especially for weaker powers like Australia. The RAN must play a lead role in developing any grand
strategic narrative based on influence in our maritime archipelagic region. To support the narrative, it is necessary to be able to counter the United Front’s methods, which demands a second-tier fleet. The RAN’s capacity is limited by personnel, and opening recruiting to Pacific Family members would ameliorate this and support the narrative.

Securing oil supply was the Imperial Japanese Navy’s motivation for war and shortage of it a major factor in its defeat. Australia’s resource supply and trade are potentially vulnerable to distant Chinese blockade by a range of methods short of war or by Indonesian interdiction. If the RAN is to develop the tactical credibility necessary to support Australian grand strategy, it must drive Australian military-strategic level thinking away from centring on resource-intensive land-centric stabilisation operations. Its focus should be mastery of integrated archipelagic warfare with limited temporary commitments ashore, only where relevant to sea control. The ADF does not exist to provide Australian flags in US task groups. The challenges of how to most effectively integrate the elements that make up national and military power are very different from those faced by the Japanese in 1941, but the importance of getting it right is as vital now as it was then.
Endnotes


3 For comparison, the Luftwaffe destroyed 1,489 Russian aircraft on the opening day of Operation BARBAROSSA.


7 Clausewitz said the centre of gravity is “the hub of all power and movement, on which everything depends”. National doctrines vary.

8 Usually attributed to Mark Twain.


14 H. White, How to Defend Australia (LaTrobe University Press, 2019), 7-17.
Biography:

Commander Bob Moyse retired from the permanent Royal Australian Navy (RAN) in 2017 and is currently supporting Military Strategy Branch as a reservist. Prior to joining the RAN in 2001 he served as a Royal Marines Commando for 26-years.

CMDR Moyse He joined the Royal Marines in 1975 and served in Northern Ireland in 1980, 81, 82, 87 and 88 and in Iraq in 1991. He joined the RAN in 2001 and served in Iraq in 2007/08. Most of his RAN service was spent in amphibious capability development and in strategic policy.

His main areas of interest are military strategy and grand strategy, grey zone and hybrid warfare, amphibious warfare and joint operations planning. He holds a Bachelor of Science in Mechanical Engineering and a Master of Defence Studies.
Is China a military threat to the West? Probably not, but only if you think of war in conventional terms.

- Christopher Coker

Introduction

It seems as if warfighting and brutality are ever-present and are natural to human beings – described by evolutionary biologist and theorist E.O. Wilson as ‘humanity’s hereditary curse’. The enduring principles of warfighting enable national security pundits to draw many lessons from the extensive history of human conflict. However, the events of the early 21st century necessitate a reassessment of implicit warfighting concepts such as ‘victory’, along with renewed thinking about how Australia might best achieve ‘victory’ with regards to its strategic interest of regional stabilisation. The relative international peace overseen by the global power of the United States, the Pax Americana, can no longer be relied upon in toto to guarantee the security interests of the Indo-Pacific region. Australia, and in particular the Royal Australian Navy, must prepare to think innovatively with regards to its contribution to the security of the Indo-Pacific, as all indicators suggest that human history is about to experience another significant conflict - characterised by the physiognomies of the 21st century.

The logic of 21st Century Conflict

The academic discussion seeking to explain why two sets of rival powers came to the conflict in 1914 will arguably be never-ending. Political, territorial and economic conflicts, a complex web of alliances and alignments, the interplay between the ideologies of militarism, imperialism and the growth of nationalism, and the power vacuum created by the decline of the Ottoman Empire, are often cited as the major factors. However, at the time, none of the great European powers believed that war was inevitable, rather it was seen as an unintended consequence of the German and Austria-Hungarian empires taking too many

(L-R) United States Chief of Naval Operations, Admiral John Richardson, salutes Australia’s Federation Guard with Chief of the Australian Navy, Vice Admiral Michael Noonan, AO, RAN, at Russell Offices in Canberra.
risks based on misperceptions of the intent of the other European powers. Whatever the causal factor, what cannot remain unheeded is the similarity between the events leading to the First World War and the current relationship between the global superpowers of the 21st century, most notably the United States and China.

The stark difference between the global competition of the United States and China, and the great European powers of the early 20th century, is that the former do not concern themselves with land or resources, but rather ‘rule-making’. Like the early 20th century; the rules-based global order of the early 21st century is being challenged by both populist governments and violent non-state actors; and the national security environment is continually changing, becoming increasingly multifarious and influenced by the seemingly endless advances in technology. Consider the following: The United States has become much more vocal about its concerns relating to the participation of Chinese firms in critical infrastructure in the United States, and in countries that benefit from preferential access to its intelligence. China has responded strongly to actions against its major firms (such as communications multinationals Huawei and ZTE), to the extent that Chinese firms’ participation (or lack thereof) in other countries’ critical infrastructure development is now widely interpreted as one of the many alignment choices between the two global powers. Considerations of national security and strategic interests, as much of the current academic discussion about China’s growing power and influence to modify the *Pax Americana* gradually, are highly reminiscent of the beliefs held in Europe before the First World War.

As outlined in the 2016 Defence White Paper, the Australian government’s fundamental strategic national interests are directly affected by the stability of the Indo-Pacific region and, in this regard, it calls for a further commitment to reinforcing the United States’ efforts to ensuring security in the Indo-Pacific. In recent times, support from the United States to Japan and Australia, as the two most consequential United States’ allies in the region, has ‘sharpened’ in the Indo-Pacific. The United States has taken many practical measures to re-engage with and re-animate its alliances, for example: rebalancing its military presence in the Indo-Pacific region by deploying fighter aircraft to Japan; basing attack submarines in Guam, and positioning a force of United States Marines in Darwin. This rebalancing is not intended to create a pretext for China to overreact. However, it is instead designed to assure the United States’ allies that it will enforce the international rules and norms, if necessary, and remain the preeminent military power in the Indo-Pacific region.

Despite all of the recent measures taken by the United States, all the lessons of history suggest that it needs to share the burdens of global power if the world is to avoid replaying the events of 1914. The United States confronts a twofold challenge – avoiding conflict, while still competing as the preeminent global power, and working together with its allies to adapt the current rules-based global order to reduce the burden of global power on itself. In this regard, now is the opportunity for Australia to push for an Australian / United States co-operative approach to security in the Indo-Pacific. To achieve this, Australia must demonstrate its values to the United States and, most importantly, to the nations of the Indo-Pacific as to why Australia should act in the role as the region’s security guarantor.

**Redefining ‘Victory’**

Consider the following question: how could Australia demonstrate to the nations of the region that it is the preferred security guarantor? It can be argued that Australia has preeminent 21st-century military assets at its disposal in the event of future conflict; however, its theory of victory remains in the industrial age, that is, its ideas about ‘victory’ are inherited from conflicts of the past. Australia must redefine ‘victory’ for the 21st-century context. Lessons can be derived from one of the largest military campaigns of Australia’s last significant
A Values-Based Global Order

It is reiterating the aforementioned question: how could Australia demonstrate that it is the preferred security guarantor for the nations of the Indo-Pacific? Australia could achieve this by leading discussion and gaining agreement on what values should be instilled, promoted and defended within the Indo-Pacific region. A values-based relationship that is founded on mutual respect, innovation, honesty and teamwork; and inspires demonstrable benefits that build and deliver sea power with the other nations of the Indo-Pacific. Rather than legitimising their claims through responsibility and cooperation, China has already demonstrated their disregard and contempt for such values. As commented by Christopher Coker, professor of international relations and author: ‘the only form of a global order that can be sustained over the long-term is one based on values.’ Therefore, for Australia to be ‘victorious’ in regional security, it must place these values before maintaining the status quo in the Indo-Pacific region and must be prepared to defend these values to secure the rules of an international system based on such values.

For the Royal Australian Navy, its role in regional security begins with an unadulterated review of its values, and the intrinsic values of the Australian Defence Force, and how they are ingrained into its engagement into the Indo-Pacific region. The 2017 Foreign Policy White Paper and numerous political media releases have called for ‘increased engagement … in support of a more resilient region’. Several areas within Navy are already involved in regional engagement within the Indo-Pacific, most notably in the form of medical assistance and training. This essay wholeheartedly supports the continuation of these courses of action. It suggests that these mobile training teams could adopt a broader scope that includes many contemporary combat support functions, including but not limited to: maintenance, logistics, engineering and operational contracting. That said, the importance of instilling a values-based relationship far surpasses building the technical skills required...
for the delivery of sea power. Somewhat emblematic of the Victorian era, Navy has the inherent capability to exert and influence the desired values-based cooperative behaviour by its presence alone. Furthermore, values-based relationships need to be instilled at the lowest level, through sailors and junior officers that exemplify the Navy's core values and can apply these values along with the equally critical intangible skills such as critical thinking, emotional intelligence and outcomes-focused leadership, into their dealings with their Indo-Pacific counterparts.

**Conclusion**

The world is on the path to a conflict for which victory cannot be defined by previous conflicts or by what might be considered ‘traditional’ definitions. Competition for strategic influence in the Indo-Pacific region has increased in complexity since the turn of the millennium. In this more complex strategic age, ‘victory’ will be achieved by nations that think laterally and that encourage creative ways to promote their core values with allies and regional partners. This is a time for Navy’s senior leaders to display the courage and innovation they demand of their sailors or risk losing the opportunity for Navy to shape strategic outcomes in support of Australia’s national security interests in the 21st century.

**Endnotes**

3. The 21st century thus far has been characterised by the rise of globalisation and consumerism, a mistrust in government (for example, the United Kingdom’s departure from the European Union or ‘Brexit’), a deepening global concern over terrorism and an increase in the powers of private enterprise.
5. Critical infrastructure refers to systems and assets that are critical to national security, economic security, or public health or safety that the incapacity or destruction of such systems and assets would have a debilitating impact on those matters.
6. For example, ‘The Five Eyes’ is an anglophone intelligence alliance comprising Australia, Canada, New Zealand, the United Kingdom and the United States. These countries are parties to the multilateral UKUSA Agreement, a treaty for joint cooperation in signals intelligence.
10. The Tet Offensive was launched on January 30, 1968 by forces of the Viet Cong and North Vietnamese People’s Army of Vietnam against South Vietnam, the United States and its allies.
12. The goal of the United States in the Vietnam War was not to conquer North Vietnam but rather to ensure the survival of the South Vietnamese government. As all the contested territory was theoretically “held” already, instead the U.S. Army used body counts to show their progress towards victory. The Army’s theory was that, eventually, the Viet Cong and North Vietnamese Army would lose after the attrition warfare.
13. Sri Lanka’s loans of approximately $1 billion from China were used as leverage to give China a controlling
interest in, and ninety-nine-year lease over, the Hambantota Port. As a result, the perception has formed in the international community that Chinese aid and loans are a ‘trap’ to ultimately serve China’s national interests.

14 The Spratly Islands in the South China Sea are a major issue in East Asia, prompting military increases from Vietnam, the Philippines, Japan and South Korea. The issue centres on control of the islands and surrounding waters in the South China Sea, which are one of the world’s primary shipping lanes and source of natural resources.

16 In cyberspace, for example.
In cyberspace, for example.
19 The values of the Australian Defence Force are Professionalism, Loyalty, Integrity, Courage, Loyalty, Innovation and Teamwork.
20 Department of Foreign Affairs and Trade (2017) Foreign Policy White Paper, Commonwealth of Australia, Canberra, p. 44.
22 McCoy, A (2018) 21st Century Gunboat Diplomacy: China and America are spawning a new great-power naval rivalry, War is Boring weblog, 10 April 2018, p. 1
23 Instilling values at the lowest levels ensures that the future senior leaders of Australia’s pacific partners, and indeed the Royal Australian Navy, are embodied with the values, morals and ethics required to operate in the 21st century.

Biography:

Flight Lieutenant Nicholas Packer is a current serving member of the Royal Australian Air Force (RAAF) with experience in Capability Acquisition and Sustainment, Project Management, Operational Logistics, Supply Chain and Inventory Management, Warehousing and Distribution, Procurement and Contracting, Movements and Transportation, Training and Logistics Policy, Planning and Governance.

Nicholas is known for his ability to develop and drive effective teams of logistics professionals to achieve outstanding results. In doing so, Nicholas is not focused on achieving short-term gains, but can process complex issues and make decisions that appreciate geo-political strategy, broader logistics ramifications and longer-term sustainability.

Nicholas is currently posted to RAAF Base East Sale as an instructor at the RAAF Officer Training School mentoring newly commissioned officers through their 17-week ab initio course.
Introduction

As the Royal Australian Navy (RAN) begins the process of acquiring a new generation of submarines, ample discussion must be given to the usefulness of this platform and the challenges it faces. Subs are an integral part of the RAN, and rapid development of Anti-Access and Area Denial (A2AD) technologies will make this increasingly so. Advances in Unmanned Underwater Vehicle (UUV) and Autonomous Underwater Vehicle (AUV) technologies are generating both opportunities and challenges that will frequently affect submarine operations going forward. In this essay, we will discuss the historical salience of Australia’s submarine capability, address the propulsion and technological challenges faced by contemporary submarines, and draw out the implications for the RAN. This will include recommendations for ‘future-proofing’ the Attack-class submarine – a contentious subject that has stimulated vigorous debate in Australia. There is a legitimate concern that by the time this platform is in the water, it will already be obsolete. To avoid this, Defence must be agile in its response to technological advancements.

Australia’s Covert Cold War Submarine Operations in East Asia

On the 20th February 1986, Prime Minister Bob Hawke received a historically significant briefing - integral in securing political support for the replacement of the ageing Oberon-class submarine. Commander Kim Pitt had been invited by Defence Minister Kim Beazley to recount to Hawke what the RAN’s Oberon-class submarines were capable of, by illustrating the achievements of a patrol that had been conducted aboard HMAS Orion the previous year. The patrol focused on Cam Ranh Bay on the east coast of Vietnam - the largest Soviet naval base outside of the United Soviet Socialist Republics (USSR). Hawke was shown clear footage, taken through HMAS Orion’s periscope, of a surfaced Soviet Charlie-class nuclear submarine heading into Cam Ranh Bay. The footage captured sonar and other
fittings mounted along the hull; highly valuable information given one of the only other ways to obtain that intelligence was for a western spy to penetrate dry-docks in the Soviet Union – a difficult and dangerous task.\(^5\) This information, along with other intelligence cooperation activities, significantly amplified Australia’s contribution to the Cold War intelligence collection game - increasing Australia’s value as an alliance partner.\(^6\)

Between 1977 and 1992, about 20 covert patrols were conducted, allowing Australian submarines to produce vital intelligence and assist in the effort to track and identify the Soviet fleet.\(^7\) On another mission, HMAS *Orion* tracked a Soviet Kirov-class nuclear-powered cruiser entering Cam Ranh Bay, and was able to use its communications lines to record the cruiser’s procedures and protocols upon arrival in Vietnam.\(^8\) This was vital information, furthering Western understanding of Soviet naval communications and command and control (C2) systems.\(^9\) These outcomes were used to justify the purchase of 6 *Collins*-class submarines to replace the *Oberon*-class – a vital naval asset to Australia’s national security.\(^10\)

The history of Australia’s covert submarine patrols during the Cold War indicates the vital importance of submarines as an asset in the inventory of the RAN. The unique and highly valuable intelligence dividends generated by the *Oberon*-class demonstrate the importance of maintaining an effective submarine capability. Submarines are highly versatile vessels, and in addition to serving as an intelligence-gathering platform, they also greatly enhance the fighting potential of the wider Australian Defence Force (ADF) - granting Australia a maritime deterrence platform.\(^11\) Information, Surveillance, and Reconnaissance (ISR) missions like those undertaken by HMAS *Orion* are extremely relevant to Australia’s contemporary strategic environment. As regional tensions increase and countries throughout the Indo-Pacific undertake efforts to modernise their military capabilities, the Australian Government may increasingly find itself needing to conduct covert missions to gain intelligence and maintain strong situational awareness within the region.

### A2AD Proliferation: The Increasing Importance of Submarines

The Indo-Pacific strategic environment is changing rapidly as the focal point of international tensions return to Australia’s region.\(^12\) As a result, Australia is facing its most challenging maritime security environment since World War II.\(^13\) Strategic affairs in the Indo-Pacific region will increasingly be determined by the major Asian powers themselves, and much of this will depend on their relationship with one another. Australia cannot afford to trust that this will always be a peaceful process. Just as the *Oberon*-class submarines provided Australia with an invaluable capability to engage as a significant player during the Cold War, Australia’s *Attack*-class future submarines will be significant.

In light of changing regional dynamics, the Australian Government must carefully consider the platforms it seeks to invest in. Although a power rebalances in the Indo-Pacific is undoubtedly taking place, the US is likely to remain a strong force in the region for many decades.\(^14\) However, if, sometime in the future, ANZUS ceases to be the reliable security guarantee for Australia that it has been since 1951, the ADF may need to be able to provide its own fully independent deterrence force.\(^15\) In a region that is undergoing significant military modernisation and build-up of capabilities, Australia cannot afford to lag. Thus, the Australian Government has decided to dedicate substantial funds to the *Hunter*-class Future Frigate, *Hobart*-class Air Warfare Destroyer (AWD) and the French-designed Shortfin Barracuda *Attack*-class Submarine.\(^16\)

Problematically for Australia, investment in A2AD capabilities across the Indo-Pacific will result in the enhanced vulnerability of surface platforms like Frigates and Destroyers.\(^17\) Andrew Davies, a senior fellow at the Australian Strategic Policy Institute (ASPI), has argued...
that large, slow and expensive surface vessel “have little future in the 21st century”. The AWD (alongside the Future Frigate) carries the Australian-made ‘Nulka’ missile decoy system, Anti-Ship Missile Defence upgrade (SEA 1448), SM-2 missiles and even more capable SM-6 missiles - coordinated by the Aegis Combat System. However, these platforms are still at risk of being overwhelmed by anti-ship missiles. As the cost of these missiles is a fraction of the cost of the surface platforms they target, high missile-loss tolerance is acceptable. All it takes is one successful hit, and the RAN will have lost a vessel worth approximately $2 billion to a missile worth around 1,600 times less.

China’s newly improved variant of the DF-21D Anti-Ship Ballistic Missile, as well as the recently commissioned DF-26 Intermediate-Range Ballistic Missile (IRBM) - China’s most advanced IRBM - are prime examples of accelerated A2AD development in the Indo-Pacific. The DF-26 ranges out to approximately 4,000 km, which will have a significant deterrent effect. While the deterrence value of these missiles is consequential, developments in supersonic and hypersonic missile technology will further threaten the survivability of surface vessels in the future. The Chinese military has also recently revealed the CM-401 Close Range Ballistic Missile (CRBM), which, according to associated graphics, has ‘porpoising’ or ‘skip-glide’ trajectory - giving it the potential ability to dodge missile defence systems. With an estimated top speed of Mach 6, the CM-401 is a new breed of a supersonic anti-ship missile. Although it has been designated as a CRBM with an acknowledged range of 290 kilometres, there is some debate about whether the Chinese are hiding its true range, which could be as great as 1,000 nautical miles. This missile could also be fitted to Type 055 Renhai-class destroyers, enhancing its utility and expanding China’s A2AD network.

The AWD, alongside Australia’s Future Frigate, is slated to be equipped with Raytheon’s ‘Cooperative Engagement Capability’ (CEC) system, a critical enabler of the U.S. Navy’s Naval ‘Integrated Fire Control-Counter Air’ (NIFC-CA) capability. This ‘sensor-netting system’ provides a state-of-the-art networked ‘battle’ picture and, in combination with the Aegis Combat System and its AN/SPY 1D(V) phased array radar, plus SM-2 and SM-6 missiles will make both the AWD and Future Frigate formidable platforms. While this technology mix will make these platforms highly capable, developments in missile technologies like the CM-401, with its supersonic (and eventually hypersonic) speed and manoeuvrability, will continue to threaten the survivability, and thus high-end war-fighting utility, of surface vessels. Because of this limitation, the AWD and Future Frigates’ most vital high-end war-fighting role will be to work in an interoperable manner with other assets like submarines, which are not vulnerable to the same types of land-based cruise and ballistic missiles as surface vessels are. In light of these developments and the increased vulnerability of surface vessels, submarines will remain an essential part of the RAN’s force, potentially becoming even more important than they were during the Cold War.

By 2030, half of the world’s submarines will be concentrated within our region. Although this is unsurprising, it remains strategically significant nonetheless. In April 2019, Indonesia launched its third Nagapasa-class submarine, with contracts signed for five more and a stated aspiration for ten. Meanwhile, late last year Japan launched its first Soryu-class diesel-electric submarine featuring lithium-ion batteries, with more to come. South Korea is also pursuing lithium-ion powered boats with its second batch of KSS-III attack submarines adopting the technology. This has led submarine historian Derek Woolner and renewable technology commentator David Glynne Jones to argue that in a little over a decade East Asian nations will have acquired highly capable submarines, thanks to improvement in lithium-ion battery technology. Given these developments, Australia must have a highly capable submarine fleet of its own.
A Contentious Debate: Propulsion

The Australian Government’s decision to acquire 12 new submarines to replace the Collins-class, triggered a significant public debate about the proposed design of Australia’s future submarine. The RAN will be expected to operate in the same area of operations as nuclear submarines from at least four other countries. However, because the Attack-class Future Submarine will be a conventionally powered diesel-electric submarine, its nuclear-powered peers in the Indo Pacific region will outmatch it for speed and endurance. This fact, combined with changing strategic circumstances throughout the region, has led politicians, strategists and defence experts to question whether the government should be looking to acquire nuclear-powered submarines.

Because nuclear-powered submarines can essentially operate for as long as the crew has food and water, they would indeed enable the RAN to better transit across, and thus more easily cover, its extensive operating area. However, Australia’s lack of existing nuclear infrastructure, combined with public opposition to developing the sort of indigenous nuclear industry required, means that the nuclear submarine option is both practically and politically unpalatable. Australia’s saving grace may come in the form of advanced battery technology.

Developments in battery technology will increasingly mean conventionally powered diesel-electric submarines become more effective, as advanced batteries will allow for lower indiscretion rates (the time a submarine spends exposed while recharging its batteries). By 2050, battery technology could be advanced enough to allow for conventional submarines to go on fully submerged missions for up to 60-80 days. Combined with Air Independent Propulsion (AIP), the endurance of the submarines could be extended even further, providing a highly capable platform. Battery technology development will also further enable renewable energy power generation, and alongside increasingly improving battery storage capacity, means it is unlikely Australia will ever need to develop a nuclear industry for energy purposes.

As many independent experts have already approved aspects of the Attack-class program and its design, and with large sums of money having already been spent on the project, doing a 180-degree turn towards nuclear propulsion for the future submarine would be a fruitless exercise.

Challenge: Increasing Detection Capabilities

Although submarines will undoubtedly remain a potent platform going forward, technological developments will increasingly make it difficult for submarines to operate freely. Anti-Submarine Warfare (ASW) sensor and detection technologies are improving rapidly, namely due to advances in ‘big data’ analytics. The result is that there now exists the capacity to process and compute the data required for exploiting these new detection techniques. Developments in Unmanned Underwater Vehicles (UUVs) - relatively small, remote-controlled or semi-autonomous – and larger Autonomous Underwater Vehicles (AUVs) (included into the UUV category unless directly highlighted), as well as Autonomous Surface Vessel (ASV) technologies, are also set to threaten submarines by improving detection capabilities. ‘Wave Gliders’, small autonomous systems that draw energy from the world around them, also pose a unique challenge. Capable of travelling vast distances, these ASVs can be configured to monitor the environment around them, listening for submersibles over an extended period. Set up in an array, these platforms provide actors with the potential to screen a given area, greatly enhancing the situational awareness of a force.
ASVs carrying advanced sensors will likely increase the distance at which crewed submarines must operate. Such technologies may threaten the ability of submarines to conduct ‘brown water’ operations such as Close Target Reconnaissance (CTR) - like that done by Commander Pitt in HMAS Orion, inserting special forces or positioning near an adversaries’ coastline to launch a tactical land strike. Just as the development of new technologies poses a challenge to the operation of submarines, these same technologies also provide a range of opportunities. The adoption of unmanned systems provides a lower-risk solution for the continued conduct of covert operations.

**Opportunity: UUVs**

With future technological developments potentially restricting large submarines to ‘blue water’ operations, the RAN must find a way to maintain its ability to conduct ISR. Integration of UUVs into the force may provide a solution. Around the world, UUV technologies have been developing rapidly, with autonomous and semi-autonomous systems being utilised to complete a range of tasks. Many of these technologies are dual-use, capable of serving in both civilian and military roles. Key examples of this are Kongsberg’s AUV Remus 100, of which the RAN has several, and Lockheed Martin’s Marlin AUV. The Remus 100 is capable of undertaking intricate sonar and oceanographic surveys over large areas, with uses ranging from pipeline surveying and environmental assessments to mine countermeasure operations and surveillance. The Marlin is designed to complete subsea infrastructure surveys and inspections and carries 3D imaging sonar, cameras and lighting - technologies that can be easily translated across to the military domain. These vehicles could be used to complete tasks like those undertaken by HMAS Orion during the Cold War, photographing vessels and monitoring key transit routes and ports.

UUVs can be used to augment the RAN’s existing force, enabling it to meet future challenges. The increased number of submarines within our region is problematic for the RAN. No matter how suitable a vessel is, it cannot be in two places at once. Thus, the RAN will be hard-pressed to keep tabs on the movement of submarines throughout the region. There are numerous navigable straits throughout Southeast Asia that funnel seaborne traffic through the archipelago. While this restricts the movement of potential opponents, there remains significant territory for the RAN to cover. These chokepoints pose both a challenge and opportunity for the RAN, primarily to its ability to sustain its presence throughout the region.

*Major Shipping Routes Through Australia’s Northern Approaches.*
The RAN faces restrictions in its ability to fund and crew a larger submarine fleet. Substantial debate exists over the ability of the RAN to man the 12 new Attack-class submarines. In July 2018, Australia’s submarine workforce stood at some 780 people, just enough to maintain the Collins-class fleet. Substantial work will have to be done to expand the number of Australia’s submariners and support staff if we are to crew HMAS Attack and the boats that follow properly. The Collins-class is Australia’s most expensive platform to sustain, estimated at $566 million (not including capability upgrades) for the financial year 2019-2020. In addition to their $4 billion initial purchase price, the Attack-class will cost substantially more to sustain due to the increased number of boats and their relative complexity. It is here that autonomous systems provide a solution. Integration of AUVs to supplement Australia’s submarine fleet can offer a cost-effective way of expanding the presence and efficiency of the RAN while reducing the challenges associated with raising, training and sustaining a highly skilled submarine workforce.

Both the United States Navy (USN) and Royal Navy (RN) are adopting large AUVs. This presents Australia with the opportunity to further integrate itself with both navies by jointly developing autonomous and semi-autonomous capabilities and operating procedures. The USN has ordered five ‘Orca’ variants of Boeing’s Echo Voyager. Fully autonomous and capable of independently launching smaller UUVs, the ‘Orca’ could greatly enhance the RAN’s surveillance capabilities. Able to operate for months at a time using a hybrid rechargeable power source, a similar platform would enable the RAN to chart a course and send the AUV on its way, freeing up manned submarines to do other vital tasks. The integration of larger AUVs would also enable the RAN to expand its force, generating greater coverage for less money and reducing its sensitivity to losses. As highlighted by Marcus Hellyer, ASPI’s Senior Analyst in defence economics, UUVs can compensate for the weaknesses of manned platforms and, being designed to complete a specific task, do it cheaper. With this in mind, these technologies offer a range of opportunities for altering the ways the RAN undertakes operations.

Uses of UUV Technology on the Battlefield

UUVs have a range of uses, many of which will be highly valuable to the combined efforts of the ADF. As identified earlier, developments in A2AD technologies are creating a ‘maritime no mans land’ that will impose severe costs on any that try to cross it. Thus, submersibles will become even more integral to the conduct of ISR and pre-landing operations. However, with detection capabilities continuing to advance, the risks of lingering off an enemy port, like HMAS Orion at Cam Ranh Bay, will rise to perhaps unacceptable levels. The type of tasks that need to be conducted for these operations has not changed; however, the way they are undertaken must. UUVs provide a potential solution. The ability to send a small UUV into contested or unfamiliar waters instead of a traditional manned platform allows for the conduct of dangerous operations, without imposing additional risk onto Australia’s service personnel. The development of UUVs equipped with magnetic and ground-penetrating radar, sonar and recording equipment provide ways of completing a variety of ISR and pre-landing operations. These vehicles can be used to explore beaches, ports and waterways, hunting for mines and other obstructions, mapping reefs and coastlines and collecting imagery, unseen by observers and greatly enhancing the situational awareness of the RAN and wider ADF. However, while having the ability to bring clarity, UUVs can also add significant uncertainty to the battlespace.
UUVs will enhance the complexity of the modern battlespace. Driven by their size, relative autonomy, and potential for operating in high-risk areas, UUVs, in combination with other autonomous systems like Unmanned Aerial Vehicles (UAVs), will be used to create entropy on the battlefield. Just as technologies like armoured vehicles and aeroplanes began as vulnerable, poorly integrated, and often unreliable tools of war, autonomous and semi-autonomous systems, while novel, are developing rapidly. Over three decades, between the First and Second World Wars, armoured vehicles and aeroplanes had developed into highly capable fighting machines, significantly changing the nature of the modern battlefield. There is little reason to believe that this will not be the case with autonomous systems. Used to mine ports, lie in wait for convoys, or act as mobile sensors, UUVs will enable actors to target a force’s critical vulnerabilities – supply ships, naval infrastructure, propulsion systems on vessels – and generate uncertainty around operations. Not knowing where UUVs may be located or what actions it may be undertaking, will force actors to be extremely cautious - adding another dynamic to the battlefield.

**UUV-Submarine Integration**

The best way for the RAN to ensure the strategic utility of submarines into the future is to build vessels with the capacity to launch UUVs. Despite progress in A2AD technology, submarines will remain relevant to Australia’s force posture. Being hard to detect will always be preferable. Of the RAN’s existing craft, submarines remain the most survivable. While developments in A2AD and detection technologies do not make them obsolete; they do alter the way submarines might go about completing their missions. As highlighted above, UUVs provide excellent capability for operating in high-risk environments. Thus, manned submarines can be used as a form of ‘mothership’ – posturing offshore to launch UUVs and UAVs to conduct surveillance and detection missions, while maintaining their blue water role. The French are already doing this with their nuclear powered Barracuda-Class variant and, thus, Australia should look to leverage the relationship to access this capability. Australia’s Attack-class submarine must be designed to be able to launch multiple UUVs. Like the proposed role of the loyal wingman, deploying forward of the F35, which plays a system of systems coordination role, submarine-launched UUVs will enable the more vulnerable and valuable Attack-class to remain further afield. The ability to use submarines as ‘mother subs’ allows for the covert deployment of specialised UUVs. Without the need to travel extended distances, the size of UUVs can be kept to a minimum, enhancing their ability to avoid detection. Eventually, AUV technology may develop to the point where they can operate from forwarding bases, much like current submarines, instead of being launched by ‘mother subs’. However, in the meantime, Australia’s Attack-class submarine should be designed and built with the ability to launch UUVs - as a contingency that ensures they have the best chance of remaining relevant in the face of fast technological advancements. To future proof the RAN, and assist it to be a potent regional Navy going forward, the Department of Defence must integrate UUVs into Australia’s submarine fleet.

**Conclusion**

The RAN’s future submarine must have the ability to launch and recover UUVs. As A2AD weapons develop, the value of submarines increases. As the world turns to watch developments in the Indo-Pacific, Australia must have the capability to protect its interests and maintain an edge over its neighbours. Just as HMAS Orion and the remainder of the RAN’s Oberon-class fleet were key instruments in ensuring Australia was capable and aware of developments within our region, the new Attack-class must be able to meet our future strategic environment and needs. Developing technologies like autonomous systems
and lithium-ion batteries will change the way navies around the world go about conducting operations. Although the development of highly sophisticated AUVs - capable of launching from ports in Australia and independently travelling to their destination - proficient enough to replace manned submarines is still a way off, UUV technology cannot be ignored. Semi-autonomous UUV technology is advancing rapidly, and Australia’s next generation of manned submarines must have the capacity to act as a ‘mother sub’; launching and recovering semi-autonomous and eventually fully autonomous UUVs. This will significantly enhance the RAN’s ability to work around A2AD systems, minimising the risk to its crews and facilitating the continued conduct of ‘brown water’ ISR operations.
Endnotes


5 Barker, “Cold War exploits of Australia’s secret submarines.”


7 Barker, “Cold War exploits of Australia’s secret submarines.”


10 Barker, “Cold War exploits of Australia’s secret submarines.”


22. *Although the Chinese do not publish their official costs, based on their cheap manufacturing base it is projected that a Chinese anti-ship ballistic missile could cost as little as a US Harpoon missile, at roughly $1.2 million per unit.* * See: Lague, “China’s missiles are seen as a new, potent threat to American aircraft carriers, and the US is scrambling to close the gap.”


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60 Bureau of Transport and Regional Economics, Australian Maritime Trade: 2000-01 to 2004-05 (Canberra: Department of Transport and Regional Services, 2007), 11.


63 Malcom Davis, Drone subs may alter the rules (Canberra: Weekend Australian, May 25, 2019).

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Authors’ Biographies:

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Patrick McMillan holds a Master of Strategic Studies from the Australian National University and is a former research intern of the Australian Army Research Centre. He has a passion for history and enjoys undertaking critical analysis of the Australian Defence Force’s capabilities, placing them within the broader strategic context of the region. This has included the work he completed whilst at the AARC – investigating the Australian Army’s CLEAR capability – and more recent work on maintaining the Royal Australian Navy’s covert capabilities. His wider research interests include the conduct of Australian operations in Borneo during 1945, the strategic implications of climate change, autonomous systems, and regional tensions within the Asia-Pacific.
TRIAL BY FIRE - THE 1866 BATTLE OF LISSA AND THE IMPLICATIONS FOR THE FUTURE OF THE RAN

Mr Scott Richardson

The Battle of Lissa was a fleet engagement fought off the Adriatic island of Lissa (now Vis) between the Royal Italian Navy and that of the Austrian Empire in 1866. The battle saw the unexpected defeat of the Italian fleet and the Kingdom of Italy learning hard lessons from the unforgiving teacher that is armed conflict. One may well ask what possible implications an engagement fought at the dawn of the ironclad era in the narrow confines of the Adriatic could have for the 2019 Royal Australian Navy? This, would be to ignore several lessons which the battle offers the current and future Royal Australian Navy, insights that this essay will explore. This essay will contend that despite the passage of years, the Battle of Lissa continues to hold implications worthy of examination and reflection, lessons about the importance of leadership, training, and learning. Lessons from the past, which remain timely and relevant for the future.

The Battle of Lissa took place on the 20th of July 1866 and was fought between two forces utilising cutting edge technologies during an era of rapid technological innovation which outpaced traditional strategic and operational thinking. The two fleets present at Lissa numbered twelve Italian and seven Austrian ironclad warships as well as several older wooden ships. The entire ironclad force consisted of new ships constructed rapidly at great expense which incorporated some of the latest designs and technology of the day. The twelve Italian, and seven Austrian ironclads all being launched between 1861 and 1865. This rapid innovation had been spurred on by the beginning of the ironclad era with the launch of the revolutionary French ironclad Gloire in 1859, and the famous clash between the USS Monitor and CSS Virginia at Hampton Roads in 1862.
The Austrian fleet at Lissa faced several disadvantages that should have left its chance of securing victory slim. It was outnumbered, and the construction of many of its ships had been rushed, with some having to put to sea without their full planned armament.\textsuperscript{3} The Austrian ships and crews also suffered from pre-war neglect\textsuperscript{4}, and in technical terms appeared outclassed by the warships available to Italy. The Italian fleet at Lissa, as well as having a numerical advantage, could deliver double the weight of shot of the Austrian fleet and had a significantly higher number of more modern rifled guns, compared to the obsolete smoothbore guns which largely equipped the Austrian fleet.\textsuperscript{5} The Italian fleet, on paper at least, also included ships of the latest designs sourced from foreign yards, including French and American built ships, as well as the iron-hulled British built turreted ram ironclad \textit{Affondatore}. This made the Kingdom of Italy’s navy one of the most modern afloat in 1866. All was not as it appeared; however, many of the new technologies such as iron armour, rifled guns, and steam engines were unfamiliar, and Italian crew training and leadership were not to prove the equal of their Austrian opponents.

Just like the Royal Italian Navy of 1866, the Royal Australian Navy of 2019 also finds itself in a time of growth, development, and rapid technological innovation. The Royal Australian Navy of the future is likely to find itself remaining in an era of increasing technical sophistication and complexity. Ships are growing larger, more capable, and becoming genuinely multirole in the battlespace, including the electromagnetic sphere. The Royal Australian Navy has a proud history as a force that has punched above its strategic weight, of professionalism and seamanship in the face of adversity, in short as a fighting navy. The current rush to technical excellence is occurring at a time where practical war experience and the ability to analyse the impacts of new technology on naval warfighting is sparingly available. Also, many of the rapidly developing technologies, and even well-established naval systems remain mostly unproven in a fleet action, a trial by fire.

Large-scale naval actions between peer competitors are rare in recent history outside of the battles of the Second World War, and these are as far removed in time and technology to us today as the Battle of Lissa was to those who fought in the Second World War. The late 20th and early 21st Centuries have seen the proliferation of accurate long-range ‘smart’ weaponry, integrated battle management systems and advanced sensors to the point where these are becoming commonplace across navies globally. As the Royal Australian Navy looks to the future, acquires its next generation of warships, and trains its next generation of sailors and leaders, it is worth pausing to remember that there has never been a peer on peer conflict in recent decades, since the dawning of the age of mutual precision. New training technologies like virtual simulation, bespoke physical training environments, and complex exercises have been developed to enable the effective utilisation of these complex systems, however, what will happen in a naval conflict utilising today’s plethora of technologies thankfully remains to a degree subjective.

This was the situation in which the Italian fleet found itself on the 20th of July 1866 off the Island of Lissa. To make matters worse for the Italian fleet, many of its advantages had already been squandered before the battle was even joined. Clear intelligence on the movements of the Austrian fleet had been ignored by the Italian commander, Admiral Count Carlo di Persano, leaving the Italian fleet unaware of Austrian movements and unprepared.\textsuperscript{6} The impact of this was compounded as the fleet was also divided, ships being deployed to support an attempt to seize the island by a series of amphibious assaults.\textsuperscript{7} The softening up of the island’s defences, having commenced two days before the arrival of the Austrian fleet \textsuperscript{8}, also harmed the Italian fleet. When the Austrian fleet was sighted, the Italian commander could only call upon ten of his twelve ironclads, with one that had been damaged from shore batteries (\textit{Formidabile}) busy transferring casualties to a hospital ship, and another (\textit{Terribile}) having engine troubles, both taking no active part in the battle.\textsuperscript{9}
The Italian fleet hastily formed into a line of battle, but detailed planning for a fleet action had primarily been neglected, and “beyond this crude order of battle there was no plan, and none of the [Italian] captains knew the intentions of the commander-in-chief.” In contrast, the plan of the Austrian fleet commander, Admiral Wilhelm von Tegetthoff, was simple and well understood. He had briefed his captains on his intended plan, and that once they engaged that they were to close with the enemy and ‘ram everything grey’. The Italian ships being painted grey compared to the black of the Austrian ships. To compound earlier errors as the Austrian fleet bore down upon him, Admiral Persano decided to shift his flag from his current flagship, Re d’Italia, to Affondatore (which had only joined the fleet the day before the battle) while Italian line of battle was still forming without informing his captains. This decision resulted in confusion, and the resultant slowing of ships to allow the transfer to take place also caused the Italian line to become even more disorganised and opened a gap between the vanguard and middle divisions that the Austrians were to exploit fully.

Seizing the initiative Admiral Tegetthoff had formed his fleets into three consecutive wedge formations, ironclads in the vanguard, and advanced on the enemy. With echoes of Nelson at Trafalgar, Admiral Tegetthoff allowed his ‘T’ to be crossed and braving a storm of Italian fire the Austrian fleet split the partly formed Italian line of battle through the gap opened by Admiral Persano’s blundering and forced a general melee.

What followed was a clear demonstration of the differences between the two opposing forces. The Austrians utilised superior seamanship, tactics, and individual daring and initiative to outfight, outmanoeuvre and out sail their numerically and technologically superior opponents. During the melee, which devolved into several smaller engagements, the Austrian ships managed to avoid all Italian attempts to ram and demonstrated an aggressive desire to close with the enemy. One obsolete Austrian wooden battleship (Kaiser) engaged four Italian ironclads singlehandedly, including ramming one, albeit ineffectually. Despite at times bitter close-quarters fighting obscured by dense smoke and supreme bravery and sacrifice on both sides, at the end of the battle the Italian fleet withdrew from Lissa in disarray, the Italian attempt to seize the island in tatters. Italian casualties amounted to the loss of two ironclads sunk, four badly damaged, and 619 men killed and 39 wounded. The Italian defeat so total that Admiral Persano was disgraced, and later convicted of, “incapacity and negligence, as well as disobedience to orders.” By contrast, Admiral Tegetthoff was lauded as a national hero in Austria, and total Austrian casualties numbered only 39 men killed, and 149 wounded. So, with the navy of the Kingdom of Italy defeated and scattered, and the forces of the Austrian Empire triumphant, what implications can we draw for the future of the Royal Australian Navy?

Firstly, the impact of superior Austrian leadership, seamanship and tactics were decisive, despite the numerical odds. This being mirrored by the failure of Italian leadership, tactics and training. This was recognised in the decades after the shock Italian defeat at Lissa, one professional naval officer describing the Italian defeat as an example of,

“...how a want of discipline, inattention to drills in naval tactics and gunnery, and a disregard for the most elementary principles of the science of war must inevitably lead to disaster”.

The Battle of Lissa demonstrated clearly that leading in technology is not enough to dominate the battlespace, and that maintaining the culture of a fighting navy provides significant advantages that must not be lost or subordinated in the race to achieve technical supremacy. To this end, the future Royal Australian Navy must strive to reinforce and reinvigorate the traditional skills and philosophy of naval warfare, such as adept and flexible leadership, decentralised command, and seamanship combined with the ethos of
the profession of arms. These must be retained, even as new skills are required, weapons evolve, and change continues its relentless advance. This will not be an easy task, even for an organisation as steeped in tradition as a navy. The society the Royal Australian Navy has to recruit from is changing, and Australia has never possessed a great maritime culture to draw upon, this despite undeniably being a naval power and a nation dependent upon the sea. This is a challenge that the future Royal Australian Navy must identify and commit resources to address if it is to avoid losing the winning qualities is requires to face the challenges of the future.

Secondly, the Italian experience at the Battle of Lissa demonstrated that technology means nothing without the training and skills to use it effectively. As one observer of the Italian debacle at Lissa noted dryly, “…the Italian minister [of Defence], seemed to consider buying ships enough, and teaching anyone how to use them a needless expense.” The future Royal Australian Navy must continue to prioritise the capability of its people and build success upon the foundation of its human capability. Training and individual acumen cannot be substituted for by technology, and the Battle of Lissa shows clearly that technology without a finely-honed human element to wield it is no guarantor of victory. Training and polished skills are especially critical in the context of naval conflict as warlike experience amongst naval personnel is generally rare, one naval historian noting,

“…it must be kept in mind that navies do not have the same level of experience of combat to hone their tactics that armies do. This has led to a tendency to let the qualities of naval weapon systems dictate the nature of naval tactics.”

The future Royal Australian Navy will operate one of the youngest and most modern fleets in the world by the time the next generation of Hunter class frigates and Attack class submarines enter service. Having the right people with the right skills and innovative approaches able to apply varied and advanced technologies in fluid warlike situations where threats can come from multiple avenues may prove to be the critical determinant between victory and defeat. This was a lesson dearly purchased by Royal Italian Navy at the Battle of Lissa and one that Royal Australian Navy would be wise to heed.

Thirdly, the aftermath of the Battle of Lissa also demonstrates the difficulties that the future Royal Australian Navy will face as it considers how to best respond to emerging threats and effectively integrate cutting edge technologies. Both naval architects and experienced naval officers concluded the Battle of Lissa, a common lesson taken away was that “the ram and the locomotive torpedo are both likely to play an important part in naval battles of the future.” With the benefits of a century and a half of hindsight, we can see that the torpedo evolved into a deadly and versatile weapon that played a role in every subsequent major naval conflict, while the naval ram was quickly outpaced by advances in both warship speed and the range at which effective gunnery could be conducted. The naval ram being later dubbed, “…a dogma which prevailed for half a century and which never had any real substance in fact.” The focus on the ram by a generation of naval experts shows the allure of ideas, and that ideas must be tested, and re-tested, lest scare resources and effort be wasted pursuing technological dead ends and preparing for the wrong battle.

The future Royal Australian Navy must endeavour not only to be a centre of technical and maritime warfare expertise, but it must also strive to be a thinking navy as well as a fighting navy. It should seek to encourage open and robust discourse and debate in areas relevant to naval warfare, strategy, tactics, ship design, technology, history, and related disciplines. The discussion should be promoted both within the Navy and broader Australian Defence
Force, and military professionals should engage the public at large and academia. As a national institution, the future Royal Australian Navy must have an academic weight that matches its strategic weight and support future thinking to support the future navy.

This essay has sought to highlight three key implications from the Battle of Lissa for the future Royal Australian Navy. Firstly, the importance of maintaining and nurturing the core qualities and culture of a fighting navy, secondly that investment in technology requires equal or greater investment in human capability, and thirdly the challenges of the future will require a navy that thinks as well as it fights. The Battle of Lissa may seem distant to the modern naval battlespace and its sophisticated technology, but as this essay has sought to demonstrate, its relevance and implications remain as relevant today as they were after the smoke settled on the 20th of July 1866. Perhaps the ongoing relevance of the Battle of Lissa is best stated by the successor of the Royal Italian Navy, the modern Italian Navy, the Marina Militare, which describes the failure at Lissa as being caused by an, “...Italian Navy [which] lacked a cohesive national officer corps, homogeneous crews, an[sic] appropriate training to experiment the new naval doctrines required to operate with the new types of vessels: the ironclads.” To this author, the implications for the future Royal Australian Navy are clear.
Endnotes


Biography:

Scott Richardson joined the Department of Defence in 2012 through the Defence Graduate Program. He was initially placed in Contestability Division, and has spent time in Audit and Fraud Control Division and in Capability Acquisition and Sustainment Group, where he is currently Staff Officer to Head of Aerospace Systems Division.

He holds an undergraduate double degree in International Studies from the University of Adelaide. He is interested in Defence capability, international relations, and military history and technology.
ARTIFICIAL INTELLIGENCE AND ITS IMPLICATIONS ON FUTURE SUBMARINE WARFARE

ABML-P Olivia Saunders

This essay will discuss artificial intelligence (AI) and its effect on developing unmanned systems, as well as their potential to implicate future submarine operations (SUBOPS) in the Royal Australian Navy (RAN). This essay will reveal the historical findings and developments of AI, the current use of unmanned systems within the Australian Defence Force (ADF), note the advancements of AI, detail the requirements for further maturing and the advantages that may potentially be obtained through the use of AI during programmed SUBOPS by the RAN. This discussion will be concentrating on the below water domain and its operations.

AI has tended to be viewed as a new age; however, it was in the 1950s when computing first came into being where the concept was initially explored. Alan Turing, a man who explored the unknown, was a computing pioneer and AI theorist. He was the first to question “can machines think?” and in doing so, suggested the idea to create a test called ‘The Imitation Game.’ This is now known to be the ‘Turing Test’ and was created to pinpoint if machines did, in fact, have the intelligence that was in question. This test entailed a combination of a person and a computer, with an interrogator asking a series of questions to decipher which of the two contestants was the person and which was the machine. Turing’s overarching notion has been a profound influence on the advancement of AI. Simple examples of AI being used would be popular apps like Siri and Google Now.

Today’s AI advancement is incredible, with the ability to collect and organise large amounts of information, detect irregular patterns and make decisions autonomously beyond human capabilities. The research into AI and its maturing have made it easier for people and businesses to perform faster and accurately. On a bigger scale, AI has played a crucial role in enhancing surveillance and reconnaissance, unmanned underwater systems (UUVs)
are prime examples. These systems have been proven to enhance capability and provide convenience, either for commercial purposes (e.g. hydrography and oceanographic research) or for Defence capability as this technology has had substantial growth in military power and their assets.

The ADF already employs unmanned automated systems. The RAN in particular employ three, and these are the ‘Double Eagle MK.11’, mine disposal underwater system, a ‘Scan Eagle’ used for operational evaluations, as well as the ‘S-100 Camcopter’, carrying multiple payloads with an operational window of six hours at a time. These systems play a crucial role in achieving Australia’s maritime goals. The use and continual development of AI enhance the RAN’s ability to provide its capability for the government and allow the ADF to push past the normalities of warfare while adding versatility to military assets. The research of AI will implicate the future of the RAN, more so in the unmanned realm.

The RAN’s transition from Collins-class submarines to diesel-electric Short Finn Barracudas is said to be the largest, most complex project in defence history. This transition will have a total lead time of 16 to 30 years and already is a significant milestone in the submarine domain; however, relative to peer competitors, we are behind. Russia’s unveiling of the world’s first nuclear-armed unmanned submarine, ‘Poseidon’, as well as the United States building four unmanned submarines to be known as ‘Orca’, demonstrates that the future of underwater development is heading towards greater heights than ever predicted. It is evident that UUV’s will be deployed for combat operations and, will add to the complexity of the maritime environment and battlespace. The advancements of AI will alter the future of submarine warfare and the way SUBOPS will be conducted.

UUVs currently is seen in the role of remotely piloted tasks, those which attract deep and hazardous operations (e.g. mine hunting). With the developments of AI and remote automation, their role is evolving to more offensive patterns. These systems are more or less disposable and can operate in dangerous waters while also mitigating risks that traditional attract. For example, the United States newly contracted Orca could pretend to be a full-size submarine, waiting for enemy submarines to take a shot while their manned Virginia Class nuclear-powered attack submarine sits back, waiting to ambush. The Orca could take on dangerous missions that traditional submarines could not, and perform in higher-risk operations to track enemy submarines and gather intelligence on their opponents. UUVs will imitate the standard operation procedures of traditional submarines and their stealth abilities.

Traditional submarines have had a strong impact on naval capability and will continue to be a strategic asset. However, the future of submarine warfare is falling into the advancement of sensors and their ability to detect. The rapid development of AI and automation renders current and future underwater weapons at higher risk of detection. A key objective would be to develop submarines and systems that can operate and update at a faster capacity and in the most cost-efficient manner, as this will be vital to the naval domain. The challenge posed by the continuous advancement of weaponry means a decrease of putting forces to work in an offensive operational environment due to higher risks posed by the advancement of sensors (anti-warfare).

Defence will require a more substantial capacity to defend and deter any potential conflict that may be posed in the future. With the risk of being detected, operations will need to stand further away from these areas. Deterrence may be increased by utilising UUVs in these high-risk environments as they can play a crucial role in promoting presence, and maintaining Australia’s interests in the SUBOPS domain. With our future submarines
operating on a forward an up threat strategy and capability taking on offensive operations, UUVs can enhance these operating abilities and mitigate risk to uniformed members.

Maintenance of traditional submarines falls under the ‘usage and update cycle’ (UUC). This is a long term maintenance plan that is executed after a full ten-year cycle. This work entails a fundamental refit that requires the submarine to be taken out of operation for -two years, and have the back end of the submarine entirely cut-off to enable more convenient access to the generators and motor.

Traditional submarines also require mid-cycle dockings that are usually conducted out of the water, and these tend to have a lead time of up to six months. Navy’s goal is to sustain our assets and maintain a strong presence in our region. Keeping these goals is crucial, and the strategic possibilities available from unmanned systems allow upgrades to be conducted quicker and faster with a series of plug-in and play modular components. This is a more cost-effective outcome in comparison to traditional submarines that attract higher costs and long lead times while being refitted.

The future Short Finn Barracuda submarines employ a more considerable demand on personnel, and this effects the higher demand on habitability space on the platform to cater to uniformed members. The necessities for passengers then compromise this space. Historically the uniformed submarined workforce has tended to fall under limitations and constraints when resolving recruitment and retention. Retention is an essential contributor to both sustaining our current workforce and growing it to the desired level over the next four years and beyond. If the required time frames do not meet these goals, there is potential that the new future platforms will not reach their full capacity by 2050. The strength of the workforce has been under a microscope and has had many approaches to resolve these ongoing issues. Defence strategies for submarine workforce growth had been a critical component in achieving its mission to ‘fight and win at sea’.

The indicators are that UUVs would not employ similar capacity gaps posed by traditional submarines. Personnel will still need to be acquired, however, not under the same tensions. With the introduction of UUVs in Navy, an additional skilled category could be employed into the submarine force. These systems could improve both availability and capability to our uniformed members. The UUV could deter the workforce pressure of being in an unfavourable environment, and instead, allow availability for the workforce to conduct shift work while also having the capacity to go home at the end of the day. The investment of these systems could allow the submarine workforce to afford a unique skillset to operate new platforms. These UUV’s place substantial effect on the workforce, while still maintaining a presence in our underwater region.

The submarine workforce plays a crucial role in enabling a strong deterrent in our waters as well as maintaining Navy’s purpose for submarine capability. Traditional submarines will still be a necessity to Defence and its future operations, although the ability to match traditional submarines with UUVs would enhance the quality and quantity of power in our region. This combination opens new opportunities to further submarine warfare and RAN’s assets. The UUV’s could provide surveillance and acquire intelligence while the traditional submarines focus on operational tasking to improve their capability in the maritime domain. These systems allow the submarine workforce to enhance their skills and perform at the highest level to provide a strong deterrence in our region. With the combination of both systems, there is a more robust capability to meet future challenges.
These systems still require improvement, with some experts arguing that underwater drone technology is still at an underdeveloped stage. These systems are facing challenges in autonomous operations and communication issues.\textsuperscript{13} Due to the density of the water, it is difficult for UUVs to complete complex tasks that require real-time decision-making as data passes very slowly through the water. Their limitations in the ocean will still require substantial strengthening due to them being an untethered system. Improvements into their AI needs further maturity, which is crucial for their future development to adapt to situations intelligently. If these limitations are targeted and developed over time, the need for operators to intervene would no longer be needed, and their tasks can be carried out through autonomous technology. The primary need for energy storage, navigation, sensing and control is the main development targeted to enable a strong power under the water. Investing in the continual development of unmanned technologies is an essential step towards improving future assets.

To conclude, it is evident that the investment of AI will implicate the future of SUBOPS, UUVs will soon be deployed into combat operations, and add to the complexity of the maritime environment and its battlespace. Future RAN operations will be significantly impacted as their challenges will be dictated by the development of AI and its further research into UUV’s. However, these drones do have a long way to go. There will need to be research into further maturing; however, AI is and will continue to be a historical gain to defence and will indefinitely implicate the future of submarine warfare, and the Royal Australian Navy.
Endnotes


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Biography:

Olivia was born and raised in Perth and completed year 12 in 2015. She enlisted in April 2016 as a general entry Navy gap year member. Following recruit school, Olivia embarked on a two month posting onboard HMAS Adelaide. She then posted to HMAS Cairns and immersed herself in the Personnel Office, where she elected to follow the path of Maritime Logistics Personnel Operator. Olivia was awarded Student of Merit following her category training at HMAS Cerberus.

Olivia posted to Headquarters Joint Operations Command (HQJOC) and currently works within a Tri-Service environment. During her time at HQJOC, she conducted a short term replacement as an Executive Assistant to Chief of Staff at Navy Headquarters. Olivia has recently been assigned onto a seagoing platform as an Able Seaman onboard HMAS Adelaide in June 2020. Her longer-term ambition is to transfer over and commission as a Human Resources Management Officer.
‘The strong do what they can, and the weak suffer what they must. These words of the Athenian delegation in Thucydides’ Melian Dialogue left no room for negotiation. Athens had invaded Melos, and her delegates made a simple offer: surrender or suffer. They chose the latter, resulting in death, enslavement and subjugation. Melos fell because, in the face of an expanding, increasingly aggressive superpower, she had failed to understand the importance of a navy. She paid the price. A similar situation, and the same pitfalls, confront Australia today. This allows Melos to serve as a model for what Australia and the Royal Australian Navy (RAN) should do under such circumstances. Melos shows that a strong navy versatile enough to project military, diplomatic and cultural power is crucial for Australia’s survival and success. By learning from Melos’ mistakes, the RAN can navigate a successful course in the choppy waters ahead to ensure that Australia is not on the wrong side of a negotiation.

The Historical Background

Athens emerged from the victory over Persia (480 BC) like a phoenix from the ashes. Her city had been destroyed, and her coffers were depleted. Nevertheless, she was perceived as the leader of the Greek resistance to the Persian invasion and, after the Persians abandoned Greece, set up the Delian League (named after the island of Delos where the treasury was based) as its hegemon. This alliance would pool together navies and resources to take the fight to the Persians. Members swore to have the same friends and enemies and dropped iron into the sea as a symbol of their enduring partnership.

Sparta and her Peloponnesian League refused to be a part of this. Athens’ new alliance was born.

Over time, the hegemony evolved into an empire. In the years that followed, Athens experienced unrivalled growth in population, trade and wealth (boosted by the silver mines at Laurion).
Prodigious shipbuilding followed on top of the already significant navy Athens possessed from the Persian Wars. Her supreme dominance over the League was soon evident. Two events made clear the change from alliance to an empire. The first occurred in 465 BC when Athens established the colony of Amphipolis. Thasos, a member of the League, worried that her silver mines were threatened. She abandoned the alliance. In response, Athens besieged Thasos. After Thasos surrendered, walls were torn down, taxes were imposed, and ships were confiscated. No mercy was given to an ‘ally’. The second was the decision to move the treasury from Delos to Athens in 454 BC. Not only symbolically important, but this also gave Athens full access to the vast wealth of the League. It would be this wealth that would fund the extraordinary building projects under Pericles and the relentless expansion of the Athenian navy. In time, Athens replaced the contribution of ships with taxes alone, confiscating the navies of her subjects and adding them to her own, while also imposing cleruchies (colonies) of Athenian citizens across her Empire to tighten her grip. Any ally that sought to leave the League was quickly brought back in line. By the mid-5th century, the League had transformed into the Athenian Empire.

Sparta grew nervous. During the Persian Wars, Athens and Sparta were uneasy partners. After the conflict’s conclusion, they were clear rivals. Athens’ rapid expansion, and Sparta’s fear of it, were the reasons why the Peloponnesian War began: ‘The growth of the power of Athens, and the alarm which this inspired in Sparta, made the war inevitable’. After a conflict with Corinth in which Athens flexed her muscles and violated peace agreements between the two states, Sparta could tolerate her rival’s expansion no more. War was declared in 431 BC.

Melos And Athens

Melos is a small island not far from the Greek mainland. Dorians (the same ethnic group that inhabited Sparta) settled there in around the 10th century BC. Consequently, she had cultural and ethnic links to Sparta as well as economic: one inscription shows that during the Peloponnesian War Melos made contributions of silver to the Spartan war effort. However, Melos retained independence by pursuing a rather vague foreign policy. She neither entered the Peloponnesian League nor declared war on Athens. She was a prosperous island: she struck her coinage, had her script and exported terracotta reliefs. In short, the 5th century had been kind to Melos.

The outbreak of the war changed all that. In 416 BC, Athens invaded Melos. Athens had already ravaged her land in 426 BC, though the island managed to avoid subjugation. Why did Athens invade again? By 416 BC, Melos was the last island in the Aegean not under Athens’ control. Full dominance of the sea would have been attractive to the Athenian leadership, and Melos’ proximity to Sparta offered military advantages. Her wealth and resources were much needed at this stage in the war, especially as Athens geared up for the impending Sicilian Expedition. Moreover, the contributions made by Melos to Sparta would have aggravated Athens. So it was that in the summer of 416 BC Athens landed with 3420 men transported by a fleet of 38 ships. After the rejection of the ultimatum of the Athenian delegation, the island’s city was besieged. Eventually, Melos succumbed through betrayal. The aftermath was brutal: men in their military prime were deported, the women and children were sold into slavery, and an Athenian garrison was established. Melos lost her freedom and prosperity at a single stroke.

Several factors may be attributed to Melos’ downfall, but the most important was her failure to build a strong navy. Thucydides sets out the results of such myopia. He states: ‘The Athenians made an
expedition against the island of Melos with... ships of their own’ and then move straight on to ‘the generals, encamping in their territory... sent envoys to negotiate’.

The message is clear: at sea, the Melians put up no resistance. They had neglected to defend their shores. There was no navy to engage the Athenian fleet; if there was, Thucydides did not wish to waste ink over it. This allowed the Athenians to land and set up a position on Melos unhindered. What is worse, the Melians had not even learnt from their own mistakes. After Athens ravaged their land in 426 BC, for the next decade, they failed to take any action. Moreover, it is important to remember that Melos was a strong trading island. Safe passage for her ships would have been critical for her prosperity, and, shockingly, she put her trade at risk by neglecting to provide maritime protection for her trading vessels. However, at no time is this more important than when under siege. At such a point, supplies must continue to enter the city. Otherwise, capitulation is inevitable. Thucydides, however, provides no mention of the Melians being able to secure any food or water by the sea – how could they without a navy? The only provisions they did get hold of were through risky sorties. With no supplies getting in by boat, surrender was a question of when not if. Melos had lost before the Athenians had even landed.

Melos’ failure to construct an adequate navy has other ramifications. It would have been clear that this invasion was forthcoming. We have seen how Athens relentlessly grew in stature in the Aegean, shifting from a leader of an alliance to head of an empire. Melos would have witnessed this over the past 60 years. Indeed, she is closely situated to the island of Naxos, the first member of the alliance to rebel against Athens in 471 BC, a rebellion that was swiftly and brutally crushed. She would also no doubt have been aware of the revolt of Thasos and the Samian War (440-439 BC, when the island of Samos broke away from the empire). At the outbreak of the Peloponnesian War, the gravity of the situation would have been obvious. However, Melos failed to read this and to understand the consequences. As such, she could not see the importance of using a navy as a diplomatic tool, able to forge naval alliances to counterbalance the Athenian hegemony. Strength is found in numbers: Melos’ navy may not have been able to have resisted the might of Athens alone, but it can certainly be argued that united with Athens’ enemies, it might have stood a chance. Indeed, this may be the reason why Thucydides had the Athenian delegation emphasise that any hope the Melians might have had in Spartan assistance was in vain. The failure of Sparta, Melos and other allies to build a presence at sea made it impossible for Sparta to come to Melos’ aid. Athens had been allowed to take control of the Aegean, and this put Melos at their mercy.

Melos’ botched foreign policy contributed to her downfall, but its failure is due to her naval policy. Melos was likely trying to avoid direct conflict with either side in order to maintain her safety and independence. On the one hand, she helped her Spartan cousins by providing monetary aid, hoping to maintain any relationship and a possible understanding of protection she might have had, while on the other she remained officially ‘neutral’ in order not to antagonise Athens. However, with no navy Melos did not have the strength to navigate between the warring powers successfully. She could not deter aggression from Sparta or engage in dialogue with the city as a respectable power, nor could she encourage Sparta or her allies to participate collectively in a naval protective alliance. Only after 426 BC did Melos become ‘openly hostile’ to Athens, as Thucydides puts it, and abandon her neutral stance. Nevertheless, by then, it was too late. She had failed to secure the Spartan protection she needed and left herself open to invasion. With no bite, any foreign policy that tries to get the best of both worlds is doomed to fail. One must have teeth.

Finally, we must understand why a few of her citizens betrayed Melos: ‘some treachery taking place inside, the Melians surrendered’.

It is notable that when the Athenian
delegation arrived, the Council of Melos refused to allow them to speak in the presence of the demos (common people). The historian de Ste Croix argues that this is evidence of the Peloponnesian War’s conflict of ideas: Athens supported democracy (rule of the demos), Sparta oligarchy (rule of the few). Thus, the rulers of Melos did not want to give the Athenians any opportunity to rile up support among the demos. However, the Melian leaders failed in the end to preserve popular support; the people wanted democracy, not the Council. The government of Melos lost not just the siege, but the hearts of its citizens. The absence of a navy explains this. For any island state, a navy was more than just a means of defence. It was a part of your identity, independence and manhood. Athens took away the navies of her subject states not just so that she became the only power at sea, but also to crush any sense of individuality. In Classical Greece, a navy was a cultural weapon as well as a defensive one. With no navy, Melos contributed to her downfall. She lost the ideological war.

We must now juxtapose this historical example with the current geopolitical situation. By linking the two, we can move on to understand the insights Melos provides for the future of the RAN.

From Melos To Australia

A growing population, a rapidly expanding economy, an insatiable desire for resources: not 5th century BC Athens, but 21st century China. The statistics are alarming, and like Athens, this growth is reflected in the Chinese navy. In 2015, the U.S Office of Naval Intelligence released a report on the development of China’s navy, stating ‘in the next decade, China will complete its transition from a coastal navy to a navy capable of conducting multiple missions around the world’. The report showed the expansion of numerous aspects, from submarines to aircraft carriers. China knows that a strong navy is central to the foundation of a hegemony.

This hegemony is already taking root, and the navy is a central part of it. China is beginning to assert herself abroad as a way of advancing security interests. Instead of the cleruchies of Athens stretched across the Aegean, we get military bases across the southern hemisphere, with one in Djibouti and several others in the pipeline. Nevertheless, like cleruchies, there are millions of Chinese people who settled and working all over the globe. China has asserted that she will step in to protect these expatriates when necessary. In China’s immediate neighbourhood, her actions in the South China Sea have her neighbours permanently on edge, and she regularly flouts the rule of law for her interests.

Finally, China’s growing reach into the Pacific, Australia’s backyard, gives cause for concern and shows no signs of stopping. The methods used may seem new: providing loans which plunge islands into debt (like Tonga) or supporting rogue regimes (like Fiji), but they are not far removed from Athens’ subtle transition from jointly contributing tribute and ships with her allies as part of the Delian League, to imposing taxation and the confiscation of their navies under the Empire. Athens was able to do this because of her navy. China is demonstrating that the fundamentals of international relations have not changed.

Observers often point to the similarities between Sparta’s fear of Athens’ growth and America’s fear of China’s. Melos tried to navigate between the two and failed. Australia faces the same conundrum. Australia and China continue to grow as trading partners and their cultural ties intensify. However, getting too close to presents risks. The alliance between Australia and the USA remains paramount. Melos’ links to Sparta went back aeons, to the foundation of the island itself - so Australia’s ties with the USA are born out of bonds historical and cultural as well as military and economic. However, relying on past ties
in an uncertain political world is reckless. Australia is between a rock and a hard place. She will need to do a better job than Melos did.

Finally, Australia’s independence faces challenges from within. The report commissioned by Mr Turnbull under his premiership and subsequent laws he proposed exposed Chinese interference in Australia, from buying off politicians to influencing education establishments. China is trying to achieve her political ends by other means and to shape Australians’ view of the People’s Republic. Australia may not be under a military siege-like Melos, but she is under a cultural one. In this battle of ideas, Australia cannot afford to take for granted popular support for her liberties and values. The leaders of Melos learnt what it means to lose their people’s backing the hard way.

The situations faced by Melos and Australia have much in common. Thus, the former can serve as a model for the latter. It will be apparent that the importance of the navy for Australia today is no less than it was for Melos then, and that an understanding of what Melos got wrong can help to illuminate what the RAN should get right. What was at stake in 416 BC is the same today: security, freedom and survival.

**Implications For The Future Of The RAN**

Firstly, the RAN must be capable of performing its primary function: defending Australia’s shores. Melos was incapable of this as a result of her failure to build a navy or at least an adequate one.

Fortunately, Australia already has a sophisticated navy, and it is promising that new ships will enter service in the years to come. However, it is not enough. Athens invaded Melos with a substantial force. They took no chances. It is safe to say that if Australia faced a similar threat, her enemy would not pull any punches. The RAN must get the basics right. That means building more frigates, destroyers, patrol vessels, submarines and maritime aircraft on top of those already in the pipeline. It means getting those ships manned, primed and out on the water as soon as possible – waiting until the

The 2050s for the submarine development programme to finish is not good enough. It means stepping up recruitment to run this fleet, both regular and reserve. The current personnel figure of 16,000 is too low. Finally, it means expanding the RAN’s cyber capabilities and intelligence operations to deal with the challenges of modern warfare. The RAN needs to make sure that no force can get away with what Athens achieved: landing unopposed.

Australia heavily relies on international trade for the servicing of her economy. Melos played a risky game in failing to take steps to defend the trade so critical for her survival, and she paid the price under siege. Australia cannot make the same gamble. This means the RAN will have to continue to be active throughout the Pacific and further afield, defending international law and asserting freedom of navigation in coalition with allies such as the US and the UK. Indeed, the RAN must now become one of the leading players in defending trade on the world’s seas. By acting now, the RAN can develop expertise and relationships that will serve Australia in the future. If it is left too late, Australia could find herself under the thumb like Melos.

Thirdly, Australia must use the RAN to form or strengthen alliances with nations equally nervous about China’s expansion. Even with increased defence spending, Australia, like Melos, is comparatively small. However, unlike Melos, Australia must use her navy to ensure that she is not the last one standing in the Pacific, left to take on her enemies alone. The RAN must be a diplomatic as well as a military force. Large scale exercises such as Talisman Sabre must continue, and the recent announcement of a new Pacific Force shows Australia is heading in the right direction. However, the RAN needs to go further. It should
seek to form formal coalitions with Pacific navies, leading the way in Australia’s conduct in her sphere of influence. It should also be at the forefront of a push to forge and reinforce relationships further afield that are based on shared values and shared interests. This will contribute to the RAN’s military potency, but it will also prevent one nation from ruling the seas like Athens. In this way, the RAN must be more than just a projection of hard power; it must also be a vital tool of soft power.

This ties in with the RAN’s future role in Australia’s foreign policy. Melos did not get this right. No navy meant she was not taken seriously on the world stage by the major players and could not react to the shifting situation. As Australia seeks to develop her relations with China while preserving her crucial alliance with the USA, a strong RAN will be critical in ensuring Australia is treated with respect by both sides. Nevertheless, this does not just mean having numerous ships. It also means the RAN’s personnel should be expert in China and US relations, it is central in the shaping of Australian foreign policy, and it is fully integrated with the key decision-making bodies of the Australian foreign office. To achieve this, the RAN must focus on recruiting the brightest graduates and provide unparalleled, modern training to its sailors. The navy should be more than just an arm of war; it should inform and help to direct Australia’s foreign policy objectives. This, alongside the need for the RAN to act as a tool of diplomacy, reveals that in the future, the navy will need brainpower as well as firepower.

Finally, the RAN must get stuck into the war of ideas. Having no navy meant that Melos was susceptible to treachery; a critical part of her identity was missing. While the modern navy may not hold such an important cultural position today, that does not mean it cannot play its part. The RAN defends not just Australia’s territory, but the values and liberties that lie behind that territory. To further this objective, it must be present and active in the lives of those it protects: it should speak up for such values in schools, universities, the media and online; integrate into the Australian public sphere by expanding the cadet forces, offering educational programmes and providing insight days on bases and ships; and provide support for institutions that find themselves facing Chinese subterfuge. Ultimately, it must cement itself in the minds of ordinary Australians to show what it does and why it does it. This will be new territory for the RAN, but Melos teaches us that we cannot take the support of the population for granted. As Australian society is besieged, the RAN’s fight will not just be at sea, but at home.

Thucydides wrote of his history ‘if it is judged useful by those who want an exact knowledge of the past as an aid to the interpretation of the future, which in the course of human things must resemble if not reflect it, I shall be content’. From his account, we learn of the disastrous mistakes Melos made when faced with the threat of an expansionist and aggressive Athens. We have seen that Australia faces a situation that resembles this if not reflects. Melos’ failure to provide an adequate navy provides a pertinent lesson in the importance of maritime defence. This has not changed. The RAN must grow and adapt to ensure that it can defend Australia’s shores, to protect her trade, to forge and strengthen alliances based on shared interests, to help direct a successful foreign policy, and to stand up for the values it shields at home and abroad. It must be a navy of brain and brawn. In the end, it will be the RAN and its future that will determine whether Australia suffers what she must.
Endnotes

1 Thucydides, ‘History of the Peloponnesian War’, 5.89.1.
3 Thucydides, ‘History of the Peloponnesian War’, 1.96.
7 Thucydides, ‘History of the Peloponnesian War’, 1.23.
8 Inscription IG V 1, 1, ‘The Melians gave to the Lacedaemonians [Spartans] 20 minas of silver.’.
10 Thucydides, ‘History of the Peloponnesian War’, 5.84.1.
11 Thucydides, ‘History of the Peloponnesian War’, 5.84.1-3.
12 Thucydides, ‘History of the Peloponnesian War’, 5.109.1, the Athenians ask: ‘is it likely that now we are masters of the sea they [the Spartans] will cross over to an island?’.
13 Thucydides, ‘History of the Peloponnesian War’, 5.84.2.
14 Thucydides, ‘History of the Peloponnesian War’, 5.84.2.
15 Thucydides, ‘History of the Peloponnesian War’, 5.116.3.
23 Thucydides, ‘History of the Peloponnesian War’, 1.22.4.

Biography

Roger Maxwell Strachan studied Classics at the University of Cambridge and was a scholar of Churchill College. He then went on to complete a law conversion course and is now a trainee solicitor in corporate law at Freshfields Bruckhaus Deringer in London.

Roger is interested in British and Commonwealth relations and the future of the Commonwealth after Brexit.