

PhD Proposal – Peter James Leavy u6030100
National Security College – Australian National University

- **To what extent has the Royal Australian Navy acted consistently with the Post Modern Navy model proposed by Geoffrey Till?**
- **To what extent does Till’s “Post Modern” Navy model provide a useful guide for Australia's contemporary maritime security interests?**

This research proposal focuses on the role of the Royal Australian Navy in protecting and promoting Australia’s national interests in the contemporary geo-strategic environment, using the theories of “Modern” and “Post Modern” navies proposed by Geoffrey Till.

Contents and Structure

1. Introduction
2. Research Question
3. Tentative Chapter Plan
4. Methodology
5. Theories of War and Naval Power
6. Mahan and Corbett - The Foundations of Modern Naval Strategy
7. Hill and Till - Post Modern and Medium Power Navies
8. The Royal Australian Navy and Contemporary Security Challenges
9. Conclusion

1. Introduction

The rise of China and the inevitable shift of global power East is fundamentally changing the global world order. For 500 years Europe and, latterly, the United States, has dominated global affairs. In the aftermath of World War 2 the United States led the establishment of global institutions and norms that have largely shaped today’s world. For the last 70 years this order has facilitated seven decades of relative peace and seen significant improvements in living standards for millions of people across the globe.

However, the US hegemony that has underpinned this world order is now waning as other states - most notably China, but also India, Japan and a resurgent Russia - rise in relative power. Compounding this trend is growing nationalistic sentiment in many countries, (including the United States) which, along with growing fiscal concerns are further eroding US hegemony.

Technological advances have also revolutionised the way militaries operate. At the end of the Cold War military activity (and thinking) was primarily along three environmental domains: maritime, land and air. Satellite communications and navigation systems were in their infancy, whereas today they are ubiquitous in both civil and military life. The IT revolution and the globalisation of supply chains have further complicated national security with cyber threats now able to impact all aspects of military operations along with critical infrastructure and the daily lives of citizens.

Since the end of the Cold War, with a period of US hegemony at sea, many western navies concentrated on the “softer” aspects of naval power such as humanitarian aid, disaster relief, diplomacy and maritime security operations without the expectation of having to fight at sea. As western dominance at sea has now become increasingly challenged, the need to be prepared to fight *at* sea, as opposed to fighting *from* the sea, has re-emerged. This is reflected in strategic documents in both the United States and Australia.¹ In response to these developments, the Australian Defence Force is acquiring a range of military capabilities – at substantial cost – that are similar to those fielded by the United States; a situation that has not, except in some niche capabilities, been the case since World War 2.

Australia’s population and economic size will mean the country will not be a driving factor in how events unfold between major powers such as the US and China. However, Australia is a substantial middle power and the Australian Defence Force is recognised as highly capable and technologically advanced, albeit lacking in numbers to enable unilateral action in a resort to high-end combat operations. Australia’s maritime forces can be a significant addition to a coalition of the likeminded and a valuable contributor of combat power, even if the Australian Defence Force is too small to ‘go it alone.’

My research will focus specifically on the role of the Royal Australian Navy in safeguarding and promoting Australian interests in an era that is seeing a return to great power competition. To achieve this, I will utilise Geoffrey Till’s theories on “Post-Modern” and “Modern” navies, informed by Richard Hill’s concept of “Medium Power” navies.

The first serious writings on naval strategy and theory emerged in the early twentieth century based on a historical analysis of British sea power. Alfred Thayer Mahan and Sir Julian Corbett developed the core theories of maritime and naval power that in some respects still remain relevant today. Throughout the twentieth century a number of writers refined the theories of Mahan and Corbett with two, Geoffrey Till and Richard Hill, offering models that may be useful for analysing Australia’s contemporary situation.

Professor Geoffrey Till has proposed the concepts of “Modern” and “Post Modern” navies, each of which reflect their country’s attitude and approach to globalisation. His basic

¹ US National Security Strategy, National Defense Strategy and Australian Defence White Paper 2016 and Foreign Policy White Paper 2017

premise is that Modern States and navies are focused on achieving traditional national objectives largely in isolation, whereas Post-Modern States and navies see their own interests as best protected through supporting the global system of norms, rules and laws. Post Modern navies, by extension, are therefore employed more in support of the global trading system rather than their own nation's direct interests. Rather than viewing Sea Control as the ability to use the oceans for their own use, they view the purpose of Sea Control as securing the oceans for *everyone's* use.

For much of its history, Australia appears to have had many elements of 'Post Modern' thinking in regards to national security strategy. The country's population, economic size and geography mean Australia is severely restricted in the level of strategic influence it can exert in isolation, which has led Australia to frequently work in coalition with strategic partners as the best way to safeguard Australian interests, security and prosperity. The deployment of Australian troops and the Navy in support of the British Empire in both World Wars demonstrates this behaviour – a strong Empire was viewed as the best way to safeguard Australia's interests. This approach continued through the conflicts in Korea, Vietnam and arguably continues today in the Middle East. But the Royal Australian Navy also appears to have strong elements of a what Till would regard as a 'Modern' navy, and these trends may continue, and even expand, as Australia's geo-strategic circumstances change in the face of rising powers, increasing nationalism and a growing anti-globalisation sentiment in some countries.

While my research will focus on Till's theories, Richard Hill also wrote specifically about what he termed "medium power" navies and I intend to also use his framework to help view the Royal Australian Navy in perspective. Hill argues that medium powers cannot do all that they may wish in international affairs, but they do have the ability to protect their political independence and territorial integrity against all but a superpower threat. They tend to work in coalitions and consequently tend to be more Post Modern in character. By Hill's definition, Australia qualifies as a Medium Power Navy.

In many respects, the theories of Hill and Till are interrelated when applied to Australia. While Hill's focus was on the United Kingdom (as a medium power) during the Cold War, the attributes that he felt medium power countries could (and should) strive to achieve may be relevant to Australia. In some ways Hill's theories provide an important underpinning to Till's work and the application of Hill's work to Australia may point in a particular direction in terms of its national priorities.

While Till's (and Hill's) theories are often considered by naval practitioners to be generally applicable to the Royal Australian Navy, their theories have rarely been tested. My research will explore the relevance to Australia of Till's theory of naval power and strategy in the contemporary environment, while also having regard to Hill's writings on the attributes of Medium Power Navies.

2. Research Questions

My research proposal can be summarised in two key questions:

1. To what extent has the Royal Australian Navy acted consistently with the Post Modern Navy model proposed by Geoffrey Till?

2. To what extent does Till's Post Modern Navy model provide a useful guide for Australia's contemporary maritime security interests?

While my focus will be on Till's theories, The key questions will be supported by an exploration of the Medium Power Navy theories proposed by Richard Hill as Hill's work can highlights the specific attributes of Medium Powers attributes that are relevant to Austrlaia's situation.

3. Tentative chapter plan

My current thesis structure consists of the following chapters and relative weightings:

| Chapter | Draft Title | Percentage |
|---------|--|------------|
| 1 | Introduction, Literature Review and Methodology | 15% |
| 2 | Foundation Naval and Maritime Theories (primarily Mahan and Corbett, Casteaux) | 15% |
| 3 | Analysis of Till (Modern / Post Modern Navies) and Hill (Medium Power Navies) theories | 20% |
| 4 | How should the Royal Australian Navy act in accordance with Till's Post Modern theory? | 20% |
| 5 | Assessment of how the RAN does act and why | 15% |
| 6 | Conclusion and Recommendations | 15% |

4. Methodology

Scientific research is an iterative process of observation, rationalisation and validation.² Using this broad model, both Till and Hill have undertaken the observation and rationalisation phases and have developed theories to explain the use of naval power under circumstances that may resemble those applicable to Australia. The broad aim of this

² Bhattacharjee. A., 2012, *Social Science Research: Principles, Methods and Practices*, Creative Commons Attribution (University of South Florida), pp 20

research is to undertake the ‘validation’ aspect as applied to the RAN in contemporary circumstances and, from the insights gained in this analysis to identify any shortfalls in either Australia’s naval strategy or in the theories used.

While grounded in a historical understanding of Sea Power and its evolution, the core of this research is contemporary in nature. This presents challenges in analysing and understanding aspects of the research questions that are, themselves, changing. Consequently, I will use a mix of quantitative and qualitative research methods to explore my questions. I expect the qualitative focus to be dominant, however, as decisions on the level of national resource devoted to naval power and the use of that power involve decisions taken by governments and consequently are heavily dependent upon human perceptions. My ‘unit of analysis’² will be the Royal Australian Navy as that is the key entity under study.

My research will begin with the underpinnings of modern naval strategic thinking which flow from the foundation works by Mahan and Corbett in the early 20th century. While these two theorists focused on major power interactions, their core concepts of sea power are both enduring and form the basis for the more contemporary theories. This phase will be largely a literature review, with some historical analysis of how relevant the theories have been, and how the key concepts have stood the test of time.

From the fundamentals of Sea Power theory, I will narrow my research first to Hill’s generic theories applicable to the Royal Australian Navy as a medium power navy and to the more contemporary theories of Till which address the increase in globalisation and a rules-based, liberal world order. This phase will consist of a literature review, including the writings of other naval theorists (particularly non-western authors), official government documents, think tank assessments and reports in addition to the academic literature. This phase will also include historical and case study methods to examine how the Royal Australian Navy actually operated against the theories of Hill and Till during the Cold War and post-Cold War periods against how the theory predicted the Navy should have acted.

The next phase will be to establish the contemporary geo-strategic and political changes that are impacting Australia, and how these impacts have changed the nature of naval force employment more generally. This will be achieved through an analysis of contemporary naval developments, force structure and force employment over the last two decades. While a wide ranging review will inform global trends of relevance to the RAN, the majority of effort in this phase will be devoted to the navies of the US and China (as the naval actors whose actions will impact Australia the greatest) and Australia (as the unit of analysis).

The final phase of analysis will be to evaluate the core aspects of Australia’s national interest that the Navy has supported, and will need to support in the future, and evaluate them through the lens of Till’s Post Modern Navy model. Depending on the outcomes of this analysis, recommendations may be made to better tailor this theory to Australia’s unique

circumstances which will, in turn, allow for a greater understanding amongst policy makers on how to best use Australia's naval power.

While this research concerns naval strategy and not international relations *per se*, the application of naval strategy necessarily occurs within an international context and is designed to impact relations with other countries. To the extent that research questions are affected by broader issues of international relations, I will analyse those issues using a standard neoclassical realist paradigm.

In addition to official documents, naval histories and contemporary research on the changing geo-strategic situation, I also intend conducting semi-structured interviews and/or surveys with senior RAN and military officers, along with key national security officials and (where appropriate) intelligence officers to obtain their views on the contemporary role of the RAN in Australia's security. This aspect will be necessarily subjective in nature but will provide valuable insights into the thinking of the officials charged with tasking naval operations. Interviews with key allied officers, primarily from the United States, on their views of the Royal Australian Navy's role from their perspective will also be undertaken, noting their views may be less candid than those of Australian officials.

5. Theories of War and Naval Power

In general, the principles behind the environmental theories of warfare (continental, maritime, air and guerrilla) have tended to endure even as the technologies used and the tactics employed in support those principles have changed markedly. However, each of the environmental theories has generally been isolated from the others which saw little need for one theory to interact with another domain. There are some exceptions - amphibious operations use both maritime and land forces, for example - but in general maritime theories of war applied at sea, continental and guerrilla theories applied on land and air theories applied in the air, with those theatres of operation historically quite distinct.

Early theories of war evolved from European experiences of land wars between geographically close countries. Supply and reinforcement routes were over land and there was little need for direct naval support. Naval and land battles may have been part of a wider national campaign, but they were fought largely independently even if the timing and effects created were designed to complement each other. Consequently, the theories developed for each environmental domain were largely independent. It was not until World War 2 that the three environmental domains of warfare were truly integrated into a holistic war effort, rather than being discrete elements fought largely independently.

The first substantial studies of the theory of warfare were conducted in the 19th century with Napoleonic Wars as the backdrop. The most famous thesis is arguably "*On War*" by Prussian

General, Carl Von Clausewitz, (published posthumously in 1832) but the works of Swiss General Antoine-Henri Jomini (1779-1869) are also insightful. These works laid the foundation for the study of armed conflict and made clear that war was only useful when it served a national purpose and the benefits to be gained outweighed the risk or losses of not going to war.

Clausewitz was the first to place value on the moral aspects of a conflict, rather than just on the material nature of the objectives. He was writing at a time when states were placing the full force of their resources into the war effort and he saw this ‘Napoleonic’ way of war as fundamentally different to the wars of the 17th and 18th centuries which were generally fought by armies as proxies on behalf of their nation state.³

Clausewitz drew a distinction between wars designed to overthrow the enemy and those where the objective was limited to “..occupy some of his frontier districts so that we can annex them or use them for bargaining at the peace negotiation.”⁴ Corbett’s analysis of Clausewitz, viewed through the maritime lens, subsequently described these two categories as Unlimited and Limited Wars respectively with the difference being the value the proponents place on their objectives and hence what risks they will take, and what costs they will bear, in order to attain those objectives.⁵ Unlimited Wars are those where a state feels that the objectives are so important that its full resources are devoted to their achievement and they will continue to fight to the level of their endurance to achieve their political aim. As a consequence, in order to win it is necessary to completely destroy an opponent’s ability to wage war and consequently fighting was focused on his military capacity. If a state is not confident of being able to destroy the opponent’s military capability in an Unlimited War, then it is bad policy to embark on that war. Limited Wars, by contrast, are those where the proponents fight to achieve their objective, but where there is a limit to the resources and costs they are willing to incur. The political objectives of a limited war have a point after which the further allocation of resources is no longer worth the objective, even if it is eventually won.

Given the land-centric experiences and views of both Clausewitz and Jomini, their writings did not directly address naval conflict. The foundational studies of the theories of naval warfare were provided by US Rear Admiral Alfred Thayer Mahan around the turn of the 20th century, which were later built upon by British historian Sir Julian Corbett. The theories of naval warfare and strategy evolved over the 20th century with key western naval theorists and historians including Herbert Richmond, John Hattendorf, Richard Hill, Nicholas Rodger, Geoffrey Till, Eric Grove and, in Australia, James Goldrick, John Reeve and David Stevens.

³ Corbett, J.S., (1911), *Some Principles of Maritime Strategy*, originally published by Longmans, Green and Co, London and New York, reproduced unabridged by Dover Publications (2004), New York, pp 41-42

⁴ Clausewitz, C., *On War*, Edited and Translated by Howard and Paret, 1989 Edition, Princeton University Press, New Jersey, Kindle Edition, pp 69 of 733

⁵ Corbett, J.S., (1911), pp 41-42

French Admiral, Raoul Castex wrote extensively throughout the middle of the 20th century, including a five volume series on naval warfare with a focus on manoeuvre warfare⁶ and Soviet Admiral Sergey Gorskov published valuable contributions from the Soviet Navy's perspective during the Cold War period.⁷ From a regional perspective, Indian diplomat and scholar K.M. Panikkar along with Indian naval officers K. Raja Menon and C.R. Mohan have written widely on the Indian Ocean.

Over the last two decades, Chinese writers have also made valuable contributions in support of China's emerging maritime power. Xu Qiyu, Zhang Wenmu, and Li Jian have been translated into English along with a number of Chinese historians who have laid the historical basis for China's expanding maritime claims. Xu Qiyu has argued that rather than Sea Power being a driving force in world history (as Mahan argues), it was instead the result of technological developments that enabled Sea Power to thrive over the last three centuries. With the advent of aircraft, satellite capabilities, the IT revolution, precision guided weapons and cyber capabilities, Xu argues that Sea Power is no longer the dominant factor in ensuring economic success or national security; it is just one of a range of factors.⁸ Zhang Wenmu has written of China's need for Sea Power to ensure access to both overseas markets and resources to keep the domestic economy growing. He argues that both Britain and the US did exactly that and asserts that China must now do the same as a natural part of the country's maturation.⁹

6. Mahan and Corbett – The Foundation of Modern Naval Strategy

As noted, the foundation for modern naval thinking was initially laid by Mahan and Corbett, with their concepts being widely studied and refined around the world. An understanding of their works is critical in placing subsequent theories and concepts in perspective. Mahan made the first substantial attempt to understand the enduring attributes of naval warfare and propose theories that underpin them. His works heavily influenced naval officers and policy makers in both Germany and Japan as well as in the United States and other western nations. His most famous book, "*The Influence of Sea Power Upon History, 1660-1783*" was published in 1890. It is important to appreciate that this book is not a history of sea power, but of the influence sea power has had upon history in general.

Mahan explored European naval policy, maritime warfare and international relations, with a focus on understanding how Britain had come to dominate world affairs, although his insights

⁶ "Theories Strategiques", summarised in Kiesling, E., (2017), *Strategic Theories*, US Naval Institute Press, Annapolis

⁷ Gorskov, S.G., (1980), *The Sea Power of the State*, Permagon Press, Oxford

⁸ Xu, Q., (2003), Misconceptions and Reflections on Sea Power, *Strategy and Management*, 2003, No 5, pp 15-22, translated by China Maritime Studies Institute, US Naval War College

⁹ Zhang, W., (2003), Economic Globalisation and Chinese Sea Power, *Strategy and Management*, 2003, No 1, pp 86-94, translated by China Maritime Studies Institute, US Naval War College

are just as applicable to earlier European maritime powers. Mahan believed that the core responsibility of a navy was to seek out and destroy an enemy's navy in times of war as only by doing so could command of the sea be guaranteed. This has led to Mahan having a reputation for advocating large fleets of powerful battleships seeking decisive fleet actions.

Mahan saw three aspects to national prosperity. First was a strong maritime based economy including shipping, associated industries and supporting colonies. Second was a strong Navy to protect that maritime economy. His final consideration was a nation's capacity to develop and sustain its sea power which was dependent upon what he termed six 'principle conditions'; geographical position, physical conformation, extent of territory, number of population, character of the people and character of the government.¹⁰

Jon Sumida has highlighted that these concepts were not all original and consequently Mahan's book "...fell upon a reading public well-primed to accept a coherent presentation of certain large issues."¹¹ Sumida also contends that despite Mahan's six conditions being seen as forming the core of his political-economic arguments, his key aim was influencing the US government to provide appropriate State support for naval development. Mahan was concerned that isolationist sentiments within the United States could hinder the building and maintenance of the strong naval enterprise that he felt was necessary to protect the country's economic prosperity and security, especially in a world where international tensions between global powers was increasing.¹² Gough has similarly described Mahan as a "*propagandist of sea power*"¹³, while acknowledging the enduring importance of his work.

Mahan's concepts in *The Influence of Sea Power Upon History* were drawn primarily from his study of the Anglo-French conflicts of the seventeenth and eighteenth centuries. He concluded that Britain's island geography meant she did not need to maintain a large army and could focus her national strategy on maritime power. By contrast, geography forced France to maintain a substantial army which diverted resources from maritime endeavours. He attributed Britain's rise to dominate world affairs to the deft use of all elements of British sea power and concluded that Britain's experience was instructive for the United States.¹⁴

Mahan also evaluated the American War of Independence where Britain deviated from her normal maritime based strategy to one of committing to a large land conflict, at a great distance, which stretched the British sea lines of communication. At the time, France felt reasonably secure in Europe and could invest in a strong maritime strategy that capitalised on French and allied ports in the West Indies and North America to reduce her sea lines of

¹⁰ Mahan, T., (1890), *The Influence of Sea Power upon History 1660-1783*, Little Brown, Boston, pp 26-89

¹¹ Sumida, J., (1997), *Inventing Grand Strategy and Teaching Command: The Classic Works of Alfred Thayer Mahan Reconsidered*, Woodrow Wilson Centre Press, Washington DC, pp 28-30

¹² Mahan, T., (1890), pp 83-84 and Sumida, J., (1997), pp 30

¹³ Gough B.M., (1988), *Maritime Strategy: The Legacies of Mahan and Corbett as Philosophers of Sea Power*, *The RUSI Journal*: Winter 1988; 133, 4, pp 57

¹⁴ Mahan, T., (1890), pp 76

communication.¹⁵ By deduction, Mahan concludes that when Britain deviated from its traditional maritime strategy in favour of a continental strategy it failed, while the French capitalised on favourable conditions to prosecute a maritime based strategy to great effect. Mahan's overall conclusion, however, is that this case study serves to advance his thesis - that sea power is the main determinant of economic prosperity and national security.

Mahan's core argument was based on the importance of maritime shipping, but he was also writing at a time of rapid technological developments with the shift from sail to steam and, during the later stages of his life, wireless radio allowing communications with ships at sea. He recognised that other technological advances, particularly railroads, had revolutionised the transport of goods over land, but concluded that ships remained vital for external trade.¹⁶ Understandably, he did not foresee the fundamental changes to naval warfare that submarines, torpedoes and mines would bring and consequently believed that a *guerre de course* was unlikely to be decisive - a view that many believe was dispelled by the U-Boat campaigns of both World Wars.

These technological changes were also identified by British Geographer, Sir Halford Mackinder, who offered a view almost diametrically opposed to that of Mahan. In his seminal 1904 paper titled *The Geographical Pivot of History*,¹⁷ he argued that historically the European 'heartland' had been central to world affairs, only to have lost that position during what he termed the 'Columbian Era' of the previous four centuries. He argues that during this period maritime European nations, benefiting from the industrial revolution, developed overseas trading systems that saw them dominate global affairs, but that the conditions that led to this were rapidly changing. He believed that significant improvements in terrestrial lines of communication, enabled by railways, roads, automated transport and new communications systems, would enable the quick and cheap movement of goods and people through the Eurasian landmass, significantly reducing the importance of the oceans.

Mahan was well read both in the United States and abroad, and his ideas were very influential, particularly with US President Theodore Roosevelt. His articulation and reasoning of the benefits of sea power and a strong navy resonated and laid the foundation for the United States to become the dominant naval power after World War 2. While many view Mahan as an advocate of major fleet actions aiming to destroy an enemy's navy, in reality his thinking was more nuanced. Certainly, he viewed the ability to dominate and destroy an enemy fleet as critical, but he acknowledged that was only one method of gaining and maintaining Sea Control. The key was to gain and maintain the ability to use the ocean and where necessary deny that use to an adversary - the modern definition of "Sea Control". Decisive battles that drove an enemy from the ocean were just one method to achieve this,

¹⁵ Mahan, T., (1890), pp 78

¹⁶ Mahan, T., (1890), pp 25-26

¹⁷ Mackinder HJ (1904), 'The Geographical Pivot of History (1904)', paper presented to the Royal Geographical Society on 25 Jan 1904. Reprinted in *The Geographical Journal*, Vol 170, No 4, Dec 2004 pp 289-321

although it was also the most permanent solution and was what, in Mahan's view, Fleets should be designed and trained to do.

Corbett

British historian Sir Julian Corbett built on Mahan's work but focused on the ability to use the sea - access to Sea Lines of Communication - as the core requirement for a maritime force. His most famous book, *Some Principles of Maritime Strategy* was published in 1911 and was taken from lectures he had presented at the Royal Naval College. Corbett highlighted the value of Limited War and Strategic Defence, and the need to use maritime power as part of an over-arching campaign to force an enemy to bend to your will. He was not against major decisive battles at sea, but did not see them as the *raison d'être* for a Navy; the ability to maintain the use of the sea for both trade and to project force was. He acknowledged that wars could only be won on land, where people live and studied the importance of the Navy's ability to transport and support the Army. It was Corbett who famously wrote that:

*“Since men live upon the land and not upon the sea, great issues between nations at war have always been decided - except in the rarest cases - either by what your army can do against your enemy's territory and national life, or else by the fear of what the fleet makes it possible for your army to do.”*¹⁸

Corbett studied Clausewitz extensively and adapted many of the Prussian's theories to a maritime context. He drew the distinction between the 'offensive' and 'defensive' nature of wars and expanded on the Clausewitzian notion of Limited and Unlimited Wars, articulating those concepts in the maritime domain.

Corbett highlighted that Clausewitz based his thinking on large, continental states that were usually in close proximity and in this respect differed fundamentally from the maritime case. Clausewitz's view of limited objectives did not include overseas territories which were relatively insignificant in the continental wars of his experience. The Clausewitzian view of Limited Wars usually involved attempting to acquire part of an enemy's territory that may not have been worth risking the State to gain, but were often of much greater importance to the defending State who was willing to embark on an Unlimited War to defend it. Furthermore, close proximity usually allowed a defending state to devote their entire effort to that defence. Hence, Corbett believed that the Clausewitz concept of Unlimited and Limited Wars was more a matter of degree than substance.¹⁹

Corbett expanded the concept to deal with global empires that necessarily had a strong maritime flavour. Possessions that lie overseas do not have the same strategic importance as

¹⁸ Corbett, J.S., (1911), pp 13

¹⁹ Corbett, J.S., (1911), pp 51-52

the homeland and are not usually worth devoting the full resources of the State to their defence. They can be isolated by naval action alone. Furthermore, global empires have forces geographically dispersed so a threat to one interest could not always have the full force of the State allocated to its defence. This brings a new construct to the concept of Limited Wars; one where choice and capacity were markedly different to those of the land-centric European campaigns that formed Clausewitz's thinking. In Corbett's view, Limited Wars can only be fought between nations separated by the sea and in conditions where the state embarking on a Limited War is able to control the sea to the extent needed to ensure homeland defence.²⁰

In Corbett's construct of Limited War, absolute strength is not the key. Rather it is how much force one can bring to bear at the decisive point.²¹ He expanded on the concept of a "Fleet in Being" where a weaker force avoids a major battle that they would likely lose in order to retain the ability to contest control of the sea in the future. Dominant naval powers have traditionally sought a major battle in which to eliminate an opponent's naval power and guarantee command of the sea (Mahan's thinking), free of any possibility of further interference in their activities. Weaker powers, providing they maintain sufficient capability to disrupt activities at sea, can retain significant influence simply by existing and maintaining themselves as a credible force that cannot be ignored. Consequently, they must continue to factor into an adversary's thinking whereas if they engaged in battle and lost, they would not.²² The concepts of Limited War and the Fleet-In-Being are evident in the maritime dimensions of most of Britain's maritime conflicts throughout the 18th and 19th centuries where Britain is seeking to avoid an existential war by managing power balances on the Continent.

Corbett stressed that military and naval battles are not ends in themselves; they are the means to pressure the citizens of a state by impacting their quality of life. He draws a distinction between the lines of communication over land and at sea. An army's lines of communication are primarily about the supply routes and retreat lines for the Army itself, whereas maritime lines of communication include the trade flow for the entire nation and so the impact on national life can be felt very quickly by their disruption. Sea lines of communication are part of the global commons and not "owned" by any one country as is the case on land. In many cases, competing maritime states are using the same lines of communication - defending their own interests and attacking an opponents' in the same waterspace. By contrast, land-based lines of communication are part of a territory that is "owned" and must be physically defended. Sea lines of communication are concerned with the use of the sea, rather than ownership.

²⁰ Corbett, J.S., (1911), pp 55

²¹ Corbett, J.S., (1911), pp 55

²² Corbett, J.S., (1911), pp 214-5

Corbett also articulates his concept of “War Limited by Contingent”; sending part of one’s force to support an ally.²³ Usually the donor nation will place conditions in the use of their forces which gives that nation a degree of influence in how the conflict is prosecuted. Corbett cites examples of Britain sending its Army to support European allies in their continental conflicts, safe in the knowledge that Britain was unable to be invaded due to the maritime supremacy she enjoyed. The changing nature of Britain’s European alliances shows how this concept was flexibly used to support Britain’s interests as global circumstances changed. The concept of “War Limited by Contingent” has relevance in the Australian experience and its application and success will form a dedicated strand of my research.

Finally, Corbett drew a distinction between “Securing” and “Exercising” Command of the Sea. Securing Sea Control refers to the fight at sea to gain Sea Control, while Exercising Sea Control is the projection of power from the sea once Sea Control is obtained. While he used the term “Command”, today “Sea Control” is the preferred term, recognising that it is unlikely that true Command at Sea - the uncontested ability to use the oceans in an absolute sense - will ever be gained. The sea will always be contested and the best one can hope for is the ability to dominate in a particular area, for a particular time, in order to further one’s own interests. That is, ‘Sea Control’ is a relative term that is more appropriate to contemporary circumstances than the absolute term ‘Command of the Sea’.

Since the end of the Cold War the western alliance has not been seriously challenged at sea and consequently has had Sea Control by default for the last three decades. This has been the norm for 30 years and is the only environment that most current serving naval officers have experienced throughout their careers. This situation is rapidly changing with the US Navy recognising a return to great power competition now requires them to re-focus on the ability to fight *for* Sea Control, rather than assuming it as a given.²⁴

Like Mahan, Corbett was writing at a time when technological developments like mines, torpedoes and submarines were fundamentally changing the ways in which naval battles were fought. Corbett, writing later than Mahan, better understood the impact of these technologies and believed that they would turn tactics in favour of the defender, making it harder for an offensive or invasion force to achieve their goal. Consequently, the idea of a Fleet in Being gained further appeal as by merely having a capable force (especially submarines) meant an opponent had to factor them into his calculus.

Many of the concepts articulated by Corbett, such as Limited War at sea, Wars Limited by Contingent, and Securing and Exercising Command of the Sea [Sea Control] remain directly relevant to contemporary Australian naval strategy.

²³ Corbett, J.S., (1911), pp 58

²⁴ US Navy, 2017, *Surface Force Strategy: Return to Sea Control*, available at http://www.public.navy.mil/surfor/Documents/Surface_Forces_Strategy.pdf (Accessed 12 Oct 2017)

7. Hill and Till – Post Modern and Medium Power Navies

Throughout the 20th century most writing on the theories of naval warfare concentrated on the dynamic between global powers and so did not directly address countries like Australia. Two foremost contemporary naval strategists that are of relevance to Australia are Richard Hill and Geoffrey Till.

Richard Hill

Richard Hill, a retired Royal Navy Rear Admiral, published “*Maritime Strategy for Medium Powers*” in 1986 which was the first substantial work looking at what role of what he called a “medium power” navy played.

Although the concept of medium power navies specifically relates to the application of naval power, it has some similarities with the broader concept of “middle powers” in international relations. John Ravenhill suggests that the category encompasses all those nations that are not either superpowers or small powers; an idea that is necessarily subjective. The concept of a superpower is relatively uncontested (requiring superiority across the economic, military and technology domains) but the distinction between middle and small powers is more problematic. He defines a middle power according to the “five Cs”: Capacity, Concentration, Creativity, Coalition Building and Credibility.²⁵ Ravenhill’s middle powers do not have sufficient hard power to unilaterally pursue initiatives and instead rely on intellectual leadership and brokerage to develop and garner support for creative solutions. They rely on the force of ideas rather than hard power. Their inability to force their will on others can also enhance their credibility as they are seen as being part of a negotiated, rather than imposed, outcome and are therefore usually viewed as less threatening to others.

Carl Ungerer has analysed the ‘middle power’ concept in Australia’s foreign policy, based on the assumption that middle powers have a desire to work through coalitions and multilateral institutions, adhere to international norms and the rule-of-law and have a pro-active approach to diplomatic, military and economic measures in support of desired outcomes. He concludes that the middle power concept has been a broadly consistent element of Australia’s diplomatic practice since the end of World War 2, acknowledging that it has, at times, been more prominent than others.²⁶

Hill focuses on what he calls ‘medium power’ navies. Hill’s *Maritime Strategy for Medium Powers* was published at a time when the US was approaching President Reagan’s goal of a 600-ship navy and the Soviet naval power was at its peak. Hill focused on the British Royal

²⁵ Ravenhill, J., (1989), Cycles of Middle Power Activism: Constraint and Choice in Australian and Canadian Foreign Policies, *Australian Journal of International Affairs*, Vol 52, Issue 3 (Nov 1989), pp 309-327

²⁶ Ungerer, C., (2007), The “Middle Power” Concept in Australian Foreign Policy, *Australian Journal of Politics and History*, Vol 53, No 4, pp 538-551

Navy which he placed at the top end of what he called the medium power category, along with France. At that time, China was a declared nuclear state but had yet to undergo the economic transformation that has propelled it towards the global power it is becoming today.

Hill defined national power as the “*ability to influence events.*”²⁷ The three constituent elements of national power in Hill’s model are economic, intellectual and military with all three linked, particularly in maritime affairs. While states use their available power in myriad ways to further their own interests, the two key attributes that define a nation state are territorial integrity and political independence and these must be seen as the primary interests of any state.

While Hill viewed territorial integrity and political independence as universal core national interests, he also identified the notion of “betterment”, a concept whereby the majority of governments wish to see those they govern flourish and their lives improve.²⁸ According to Hill, most liberal democratic nations view the purpose of government as providing support and services that individuals do not have the power to provide for themselves but from which they all benefit (such as militaries, national infrastructure, health systems etc) while authoritarian regimes need to see their people’s lives improve in order to maintain their ruling elites’ legitimacy. In other words, in a democracy the government serves the interests of the people - the very essence of “betterment” - whereas in authoritarian regimes the people serve the government. While both have almost opposite reasoning for wanting their people to flourish, the end outcome is that they do.

Hill drew three distinct categories of national power. At the top he had superpowers who, at the time, were the United States and Soviet Union. They were the dominant actors in world affairs and had the ability to influence events globally and protect their interests. Both superpowers had the requisite military, economic and intellectual power bases to bring a coordinated series of measures to bear on a problem and had, in the absence of intervention from the other superpower, the ability to dictate terms to most other nations should they chose.

At the other end of the spectrum are ‘small powers’ which are characterised by relative weakness and an inability to act independently. They rely on outside agencies (such as the United Nations) or other States or collective groupings to protect their core interests of territorial integrity and political independence. Good examples are many of the Pacific Island nations. Although weak in both economic and military terms, small powers can have a diplomatic impact out of proportion to their relative size under the constitution of the United Nations which gives each nation in the world a single, and equivalent, vote. Some small nations are able to use this to advantage by effectively trading diplomatic recognition in return for support from another, more powerful nation.

²⁷ Hill, Richard (1986), *Maritime Strategy for Medium Powers*, Naval Institute Press, Annapolis, pp 7

²⁸ Hill, Richard (1986), pp 13

The most difficult category to define and quantify is those states that fall between superpowers and small nations – what Hill calls medium powers. The cross-over from a small power to a medium power will always be subjective, but Hill identifies a range of factors that can qualify a state as a medium power. They will be able to protect their core vital interests of territorial integrity and political independence against all but a superpower threat. They will be able to pursue other key objectives of betterment for their people, both in economic and quality of life gains and in international status and prestige, but will not be able to do all that a superpower can do. They will, therefore, need to be careful where they apply their resources to ensure a coordinated approach to gain as much for their populations as they can, mindful that they cannot do all they would wish for. Medium powers must concentrate only on those issues of most importance to them.

A medium power will often work in concert with allies and partners, but will also regard itself as having sufficient global weight to be largely in charge of its own destiny if required. In short, Hill states that:

“...the medium power will try to create and keep under national control enough means of power to initiate and sustain coercive actions whose outcome will be the preservation of its vital interests.”²⁹

Hill’s concepts were aimed primarily at Britain’s place in the world during the Cold War, a period of great power competition. As Australia develops a more capable navy during a re-emergence of great power competition, its value as a key ally, not only of the United States but also of other likeminded nations, will likely increase. This potentially gives the country greater influence in alliances and this concept will form another key aspect of my research.

Geoffrey Till

Soon after publication the Cold War ended and the United States became the sole global superpower; a position they enjoyed for over two decades and which enabled military supremacy in a conventional sense. Geoffrey Till has written extensively on Sea Power in the post-Cold War era, including four editions of his book, *“SeaPower: A Guide for the Twenty-First Century”*. Till evolves maritime theories to incorporate two significant and related factors fundamentally changing world affairs and international relations: the information age, and globalisation. Till details four enduring attributes of the oceans that ensure its importance to mankind. They are the sea as: 1) a resource; 2) a medium of transport, 3) a medium of information and 4) as a medium of domination.³⁰

²⁹ Hill, R., (1986), pp 21

³⁰ Till, G., (2013), pp 5

Till argues that globalisation is a central tenant of the twenty first century geo-strategic environment. He acknowledges that there are “believers” who see globalisation bringing peace, stability and mutual security together with an increased sense of international community. But there are also those that see globalisation as undermining their way of life, independence and beliefs.³¹

Till proposes three broad categories of navies: Pre-Modern, Modern and Post Modern³². Each reflects their nation’s attitude and approach to globalisation. It is worth making a few comments on Till’s terminology. Till appears to use the term “Post Modern Navy” as a convenient label denoting the navy’s role in supporting the international order and does not appear to use it in connection with the “postmodern” philosophical movement associated with philosophers such as Michel Foucault. Further, while the terms Pre-Modern, Modern and Post Modern have clear chronological connotations (e.g. suggesting that one type develops after or from the other), Till makes it clear that navies can show characteristics of different classifications at the same time. The apparent display of ‘Post Modern’ characteristics by the Royal Australian Navy from the early 20th century is an interesting question that will be discussed later.

Till’s Pre-Modern construct covers navies from relatively weak states that are generally agriculturally based and lack the capacity to generate any economic surpluses to re-invest in development. These states are often termed weak or failing states and their navies are capable of little more than limited constabulary activities. For the purposes of this research, Pre-Modern navies will not be discussed further.

Modern States are those that evolved under the Westphalian model of a discrete nation state, usually driven by a realist philosophy and consequently focussing on the primacy of national self-interest and driven by competition between states. They are countries that have evolved into self-sustaining and modern economic entities shaped by industrial mass production and will often be wary of the adverse implications of globalisation on their own security and prosperity. Modern States are more concerned for the direct protection of their own territory and national interests and less on “the system” as a whole.

Modern Navies are shaped by the nations state they serve and consequently will be focused more on the tradition Sea Control capabilities (in the Mahanian sense) of being optimised to defeat rival fleets. Consequently, they tend to build capabilities and force structures based on the threat that other countries could present. Their role in maintaining good order at sea focus on protecting their own territory and the resources in their Exclusive Economic Zones. While being prepared to protect their nation’s interests abroad, they are more focused on the direct protection of their own citizens, interests, ships and resources than on supporting collaborative efforts to do the same more widely.

³¹ Till, G., (2013), pp 27

³² Till, G., (2013), pp 27-28

Post Modern states, by contrast, are shaped by globalisation and the information age. They tend to support openness, mutual dependence and collaboration. While all states ultimately focus on their own interests, Post Modern states place a greater priority on international institutions and accepted norms than Modern states do. They recognise the benefits of cooperation and tend to act more in support of global systems and norms as the mechanisms through which to pursue their interests collectively than in independently acting purely for national benefits. Sea Control exercised by Post Modern Navies is aimed at protecting the trading system as a whole and not just one's own national interests. Sea Control activities tend to be more focused in littoral areas than in open ocean areas, recognising that most maritime threats emanate from the land; piracy being a typical example. Consequently, Post Modern navies face a wide array of Grey Zone³³ and non-conventional naval threats, similar in scope to counterinsurgency activities by armies - operating among a mix of friend, foe and neutral actors in a contested environment where it is hard to distinguish exactly what the threats look like. Under a Post Modern construct, Till likens the term Sea Control to "Supervision"³⁴ where states contribute to a collective effort to police the global maritime commons.

Expeditionary Operations under the Post Modern model are more likely to be highly politicised, of relatively short duration and often pursued with a view that preventing or dealing with a crisis at a distance is better than dealing with the consequences at home. They are often not military in nature (such as Humanitarian Assistance and Disaster Relief) and can be used as part of a wider effort at liberal interventionism to defend what is seen as the global 'system'. Since the end of the Cold War, when the US-led western alliance has not faced a peer competitor at sea, expeditionary operations have focused more on operations *from* the sea than operations *at* sea.³⁵

As noted previously, Till highlights that no navy is purely Modern or Post Modern; they all have attributes of both and sit along a spectrum between the two theoretical constructs. His distinction is where a State lies on that spectrum. He stresses that the labels are not value judgements. Modern navies are not bad and Post Modern good; rather the distinction is reflective of each state's attitude towards globalisation.³⁶ The application of these concepts to Australia, which is highly reliant on trade (and would generally support globalisation), while also facing more traditional security threats, will be explored in detail.

³³ "Grey Zone" activities are a mix of conventional military and para-military and/or civilian units acting to pursue an objective, but operating at a level below which would trigger another State would use military force to oppose. Examples include using fishing vessels, coast guard vessels and propaganda to harass an adversary or prevent a lawful transit. The aim is to incrementally advance one's interests but avoid direct military opposition.

³⁴ Till, G., (2013), pp 36

³⁵ Till, G., (2013), pp 37

³⁶ Till, G., (2013), pp 28

Till's categorisation of navies may have some analogies with developments in the nature of states. Michael Wesley has written of a 'new bipolarity' evolving as the rise of China and India, a resurgent Russia, increasing nationalistic tendencies and a growing backlash to globalisation all impact the global strategic environment. He argues that there is a growing divide in the world amongst those states that support international institutions, protocols and norms and those that are increasingly focused on their own national goals and interests.³⁷ This may be analogous to Geoffrey Till's concepts of "Modern" and "Post Modern" navies.³⁸ In both Wesley and Till's characterisations, the world is dividing into those nations (and by extension navies), that are focused on their own national self-interest and those that seek collaboration and cooperation to work together for the common good, capitalising on the benefits of globalisation.

8. The Royal Australian Navy and Contemporary Security Challenges

The last decade has seen the return of major power strategic competition and the increasing power and influence of Modern Navies in both China and Russia. When Till first published his first edition of *Seapower* in 2003 there were strong arguments that the world's major western navies were trending towards his category of Post Modern navies. However, we might now be seeing the division foreshadowed by Wesley into pro-globalisation, liberal democratic states with Post Modern tendencies increasingly in competition with nationalistic and largely self-serving Realist States with powerful Modern Navies. Recent trends, such as the Brexit vote in Britain, the election of Donald Trump in the United States on a platform of "America First", and the rise in nationalist movements in many democratic countries all indicate that this split may grow.

Wesley describes the increasing tensions between liberal, democratic states seeking strong international institutions and norms, and emerging countries focused on their own goals and national rejuvenation and who see such institutions as often being a hindrance. He concludes that there is little chance that those who wish to follow rules can induce others to comply if they do not wish too which will lead to their eventual abandoning the rules, at least in some situations. This will see a reversion back to a true realist approach to international security.³⁹

While the United States is likely to remain Australia's key strategic partner for the foreseeable future, this split, coupled with the potential reduction in United States' engagement in global affairs under President Trump, could also point to the need for a more Modern approach in the employment of the Royal Australian Navy, where Australia acts independently in support of its own interests.

³⁷ Wesley, M., (2012), The New Bipolarity, *The American Interest*, Vol 8, No 3, 12 December 2012 (<https://www.the-american-interest.com/2012/12/12/the-new-bipolarity/>)

³⁸ Till, G., (2013), *Seapower: A Guide for the Twenty-First Century (Third Edition)*, Routledge, London

³⁹ Wesley, M., (2012), The New Bipolarity, *The American Interest*, Vol 8, No 3, 12 December 2012 (<https://www.the-american-interest.com/2012/12/12/the-new-bipolarity/>)

Chinese analyst, Liu Mingfu, has argued that over the last 100 years the world has moved through three phases of international competition; from the “hot” wars of the early 20th century (a ‘duel’ where the loser dies), to the Cold War (a ‘boxing match’ where the loser survives) and is now moving into what he describes as ‘track and field competition’ where two sides compete to the benefit of both.⁴⁰ He presents the case that China’s rise is peaceful, and will benefit the world while returning China to its rightful place as the world’s leader, but not as a hegemonic power as the US has been. He argues, at times unconvincingly, that China needs US ‘competition’ as a peer nation to spur China’s continual improvement, although at other times overtly states that “*China’s development goal isn’t just to be the king of Asia, China wants to become king of the world.*”⁴¹

While Mingu presents the case that China’s rise will be peaceful and will complement US power without any desire to influence or control other nations, the reality of Chinese developments paints a different picture. This trend can be seen playing out today in the South China Sea. Notwithstanding the fact that China has ratified the UN Law of the Sea Convention, China persists with a claim to a “9-Dash Line” which encompasses over 80% of the South China Sea and within which they have built and militarised artificial islands.

The issues at play in the South and East China Seas are indicative of the challenges China presents to the global world order. Some argue that China is using the current global institutions, protocols and norms only to the extent that they suit China’s national interest and is increasingly ignoring working against those that don’t. As China’s global power increases, and they view the power of the United States decline relatively, this trend can be expected to continue.

As noted previously, the other major fundamental change faced by all navies has been technological. When Hill published *Maritime Strategy for Medium Powers* in 1986 precision guided weapons were in their infancy, as was satellite communications and navigation. Naval task forces were still essential independent entities that relied on organic capabilities to find, track and engage an enemy, albeit with greater ranges from sensors and greater lethality in weapons. Satellite derived intelligence was available to supplement the on-scene commander’s situational awareness, but most of the key information required to find, track and engage a target was organic. The last twenty years have seen an explosion in computing power, miniaturisation and networked command, control and communications systems that have revolutionised the way naval (and the military more widely) operate.

While ships, aircraft and submarines have been the key entities in naval warfare, the networks that tie these units together are now more important than any individual node. Space based

⁴⁰ Mingfu, L., (2015), *The China Dream: Great Power Thinking and Strategic Posture n the Post-American Era*, Beijing Mediatime Books, New York, Kindle Edition, location 1191 of 6771

⁴¹ Mingfu, L., (2015), Kindle Edition, location 2569 of 6771

sensors produce huge quantities of information that has military utility, much of it commercially available. Electronic networks link sensors on different platforms, both at sea and ashore, together to fuse the raw data that each produces so that small objects that neither would detect independently are now detected collaboratively. Similarly, electronic networks now link weapons grade targeting data so that the unit firing a weapon can rely exclusively on targeting and fire control information provided externally. The impact of technology, particularly when working in coalitions where units from multiple nations are electronically linked and working within the same networks, but may have different national objectives, is another key strand to this research.

While the RAN and USN have operated together almost continuously since World War 2, the last 25 years has seen a significant increase in the level of interoperability, training and confidence in the US Navy to give RAN officers key leadership positions both in exercises and operations. Australia responded within days of Iraq's invasion of Kuwait in 1991, dispatching warships to the Middle East, and has retained a constant presence in the region since. The RAN has senior officers embedded throughout key US military commands, including the Indo-Pacific Command Headquarters, Pacific Fleet Headquarters and the forward deployed 7th Fleet based in Japan, as well as permanent 1-Star representation in the Pentagon.

The capabilities the RAN has fielded since World War 2, and in particular during the post-Cold War period when the US was globally dominant have represented a good balance between cost and capability, being suitable for the circumstances of the time and the envisaged roles. However, the backdrop for the last 25 years has been one of virtual US dominance at sea and in the air. Should major combat operations have been required, most Australian naval capabilities, although capable by world standards, have been a generation behind those of the United States. The RAN offered high quality people and adequate capabilities for low to mid-level operations, but has not had capabilities on par with the United States in terms of high-end war fighting.

This is rapidly changing. The Royal Australian Navy and Royal Australian Air Force now either have, or are planning to acquire, a range of capabilities that are similar to those fielded by the US military. These include a substantial amphibious capability, the Super Hornet fighter and Growler Electronic Attack aircraft (only Australia and the US will have the Growler), the F-35 Joint Strike Fighter, the Poseidon P-8 Maritime Patrol and associated Triton Unmanned Aerial System, the MH-60R Seahawk combat helicopter, the AEGIS Combat System on surface warships and the US variants of highly capable subsurface, surface and air weapons. In short, the Australian Defence Force is rapidly transforming to a fifth generation fighting force with a range of capabilities similar – and in many cases identical to - those of the US. This is happening at the same time that the US military is beset with budget issues, ageing equipment (particularly aircraft) and a lack of numbers of ships and units to meet their growing needs.

These combined trends mean Australia is increasingly well placed to be able to meaningfully contribute, should the Australian government choose, to US led combat operations if the global security situation deteriorates to that point. Not since World War 2 have RAN ships had the same level of high end capability that US ships have. A return to this situation, at a time when US resources are increasingly stretched, potentially provides Australia with greater influence in our strategic relationship. Understanding how these changes can be used to advance Australia's interests is a key theme to be explored.

While exploring the Post Modern aspects of the RAN under changing geo-political and strategic circumstances is one critical element of this research, there is also another aspect worth exploration. As increasing nationalism becomes more prevalent in many countries, there is likely a growing need for the RAN to also be able to act independently if necessary. While the Australian government is increasingly focused on supporting the rules based, liberal international order, the reality is the chances of having to act independently is increasing. From Till's perspective, this translates to an increasing chance of *needing* to act as a Modern navy despite an increasing *desire* for a Post Modern approach. How these two outlooks need to evolve in the contemporary environment is a key aspect of this research.

9. Conclusion

In times of a rapidly changing global environment, increasing military capabilities globally, a greater focus on the rules based global world order by the Australia government and increasing challenges to the United States, it is timely to analyse what role the new Royal Australian Navy can play to help safeguard and promote Australia's national interests. History has shown that over-reliance on a great-power friend to come to Australia's aid in times of crisis cannot be guaranteed, especially if that friend is also challenged. How to best deal with this reality in the maritime domain is the core of this research.

As a medium power, Australia needs to understand the optimum role her Navy can play in safeguarding the national interest. The models provided by Richard Hill on Medium Power navies and Geoffrey Till on Post Modern navies both offer different, but interrelated, perspectives on the theoretical underpinnings of the Royal Australian Navy. As the context in which the RAN operates is changing in ways not experienced by Australia before, the utility of Till's Modern and Post Modern navy models to inform policy and force development choices is the key reason for this research. Given the level of national resource being committed to modernise and expand the Royal Australian Navy, a better understanding of how the navy should operate in the contemporary environment is of vital importance.