New Zealand
DEFENCE
FORCE
Te Ope Kātua O Aotearoa

NEW ZEALAND DEFENCE FORCE

MARITIME DOCTRINE

A FORCE FOR
NEW ZEALAND

NAVY

NEW ZEALAND DEFENCE FORCE **MARITIME DOCTRINE**


H.M.N.Z.S. PHI
NAVY

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FORCE
Te Ope Kātua O Aotearoa

NEW ZEALAND DEFENCE FORCE

MARITIME DOCTRINE

FIRST EDITION

New Zealand Defence Force Maritime Doctrine is issued for use by the Royal New Zealand Navy and is effective forthwith for guidance in defence doctrine.

CUSTODIAN
Chief of Navy
Headquarters New Zealand Defence Force

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FOREWORD

By Chief of Defence Force

The NZDF is a professional combat force. We train and equip our sailors, soldiers, and airmen to operate in the most demanding conditions to secure New Zealand's interests.

The operational and support units of the Navy, Army, and Air Force combine to form an integrated Defence Force that can work alongside other government agencies and international partners contributing to national resilience and security.

In addition to our personnel and equipment, we require sound advice to guide how we operate - whether on humanitarian operations, disaster relief or in combat. Doctrine provides this but it does not stand alone and requires training, experience, and judgement in its application.

New Zealand Defence Force Maritime Doctrine provides the guidance for deploying armed forces to, and from, the sea. It recognises the collective strength of a joint approach to maritime operations as articulated in our New Zealand Defence Doctrine. It is also the story of why New Zealand has a Navy, its bi-cultural foundations, and what makes the RNZN a world class Navy for a large maritime nation.

I commend the New Zealand Defence Force Maritime Doctrine for enhancing the doctrinal underpinnings of an integrated Defence Force able to meet current and future security challenges

K. R. Short
Air Marshal
Chief of Defence Force

FOREWORD

By Chief Of Navy

I am pleased to present this updated version of the *New Zealand Defence Force Maritime Doctrine*. It is now 20 years since the first version of *Maritime Doctrine for the RNZN* was released and in that time the RNZN has undergone many changes to meet the challenges of the changing international security environment.

This new edition of *New Zealand Defence Force Maritime Doctrine* sets out the fundamental principles that underlie what we do as a Navy – and how and why – including what the New Zealand government requires of us. It explains the context within which we operate: the sea, our heritage, ethos and values, our lessons from the past, and how all of these elements come together to enable us to exercise maritime power as an integral and effective part of the New Zealand Defence Force.

If we are going to be a world class navy for a large maritime nation then we need to have a sense of ourselves, an understanding of the challenges, and a belief in that journey. This doctrine is a paving stone in that journey. I have taken the opportunity to reflect on the foundations and heritage of the Royal New Zealand Navy for it is unique amongst the navies of the world in two important respects. In building our naval traditions we have been able to draw on the great seafaring traditions of our two founding peoples: the Māori of New Zealand and our British forebears. To that foundation we have been able to add the seafaring traditions of others who have settled here, especially the Polynesian peoples who have contributed so much to New Zealand society.

Other ways in which we are unique are the sheer size and extent of our maritime domain, our distance from markets, and the finite national maritime resources which we are able to bring to bear in carrying out our tasks. Operating in the maritime domain[1] requires us to be able to work alongside

1. The maritime domain is the series of jurisdictional zones that surrounds the coast of a state. It includes territorial seas and the Exclusive Economic Zone (EEZ).

our sister services, other New Zealand government and non-government agencies, and our partners in other defence forces throughout the region and beyond. Only by working with friends and partners are we able to confront the maritime security issues common to us all. This publication helps explain the various ways in which we do that.

With security challenges increasing globally we need to develop the national resources that we can bring to the task. One of the important opportunities identified in this publication is developing the resources of our maritime domain more fully, so that New Zealand can fulfil its potential to become a recognised maritime power, not just in the South Pacific, but in the wider Asia-Pacific and Indian Ocean.

I hope that all service and civilian personnel of the RNZN will read this publication carefully and discuss its contents with friends and colleagues. I also hope that it will be useful to those in our sister services and other government and non-government agencies and bodies who operate alongside us in the maritime domain. Our partner navies and the other forces who work with us on combined and joint operations[2] should find much that is of use to them here in the planning and conduct of operations involving the RNZN.

RADM John Martin, ONZM
Chief of Navy
Royal New Zealand Navy

2. A combined operation is conducted by forces from two or more allied nations acting together. A joint operation is conducted by a force composed of two or more elements of the Navy, Army, and Air Force operating under a single joint force commander.

PREFACE

SCOPE

New Zealand Defence Force Maritime Doctrine is designed to:

- Provide an historical account of the origins and development of the Royal New Zealand Navy (RNZN);
- Explain the principles and foundational documents that have shaped the RNZN;
- Describe the maritime environment and its significance for New Zealand;
- Define the elements of Maritime Power and how it is exercised;
- Describe the RNZN's roles and operational forces;
- Detail the Operational Tenets and Warfighting ethos of the RNZN; and
- Explain the unique heritage, values, and culture of the RNZN.

PURPOSE

With New Zealand's large maritime profile, maritime security is fundamental to national security.[3]

New Zealand Defence Doctrine (NZDDP-D)[4] provides the fundamental joint principles that guide the employment of the Royal New Zealand Navy, New Zealand Army and Royal New Zealand Air Force in support of military objectives. *New Zealand Defence Force Maritime Doctrine* is the RNZN's equivalent capstone doctrine publication. Although it focusses on naval activities in the maritime domain, it is aligned with and to some degree derived from *New Zealand Defence Force Doctrine*. *New Zealand Defence Force Maritime Doctrine* refreshes and updates the first Royal New Zealand Navy doctrine publication.[5] Like its predecessor it is designed to explain

3. *Strategic Defence Policy Statement 2018*. New Zealand Ministry of Defence.

4. The most recent version of *New Zealand Defence Force Doctrine* is NZDDP-D 4th edition, published in November 2017.

5. Maritime Doctrine for the RNZN, 1997.

the strategic requirement for the RNZN and to convey a series of lessons, principles, and concepts about how best to conduct military operations in the maritime domain.

Doctrine reflects best practice derived by validating theory through experience and reflection. Doctrine changes as technology and operational settings evolve but it does not change quickly and the guidance contained in this publication is supported by a range of historical examples. And even when doctrine fully reflects current best practice, it requires judgement in application. This means that naval personnel and others employed in maritime operations[6] must be capable of individual initiative as well as physical and moral courage. The study of doctrine, the development of organisational culture, and the application of mission command within the rules of engagement[7] will assist in circumstances not covered by explicit orders.

Doctrine is not dogma. Strategic environments change – sometimes with great rapidity. Received wisdom only ever goes so far. Good doctrine therefore should prompt as many questions as it answers; it should encourage readers to undertake their own exploration. It should be prospective and future facing as much as it is objective and historical. Readers of this edition of New Zealand Defence Force Maritime Doctrine are therefore urged to approach the guidance and lessons suggested here with a strongly questioning mind-set. Doctrine is not a destination. It is a journey that should involve the reader in discussion and debate.

As many of the principles outlined in this doctrine as possible have been illustrated with historical examples. This is to aid comprehension of the principle in question, but there is a greater lesson to be drawn from each example: people like ourselves have been faced with what must have seemed at the time to be almost insurmountable challenges – and they have prevailed. New Zealanders are the main players or heavily involved in every example used. The study of historical narratives, particular those written from first-hand experience, is one of the best ways to learn about the application of doctrine.

6. An action performed by forces on, under or over the sea to gain or exploit control of the sea or to deny its use to the enemy. (AAP—06)

7. Directives issued by a competent military authority that specify the circumstances and limitations under which forces will initiate and/or continue combat engagement with other forces encountered. Also called ROE.

READERSHIP

This publication is for all members of the Royal New Zealand Navy, New Zealand Army, Royal New Zealand Air Force, Joint Planning staff and coalition partners planning and conducting exercises and military operations in the maritime domain. It is intended to be read by the New Zealand public, government agencies, international partners, and anyone who has professional or academic interest in maritime affairs.

ACKNOWLEDGEMENTS

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- Allied Administrative Publication 06 (AAP—06) *NATO Glossary of Terms and Definitions, 2017*, NATO Terminology Office, Brussels, Belgium.
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- *Australian Maritime Operations—2017*. Sea Power Centre Australia, Royal Australian Navy
- *Foundations of Australian Military Doctrine* (ADDP-D) – 2012. Strategic Policy Division, Defence Publishing Service
- Joint Doctrine Publication (JDP) 0—10, *UK Maritime Power* (5th Edition) 2017, Ministry of Defence, London, United Kingdom.
- JP 1-02 Department of *Defence Dictionary of Military and Associated Terms,* 2016, Department of Defence, Washington D.C., United States

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OUR STORY

CHAPTER 01

OUR STORY

If we want to know who we are, we must know where we have come from.

INTRODUCTION

Although the Royal New Zealand Navy (RNZN) was officially established on 1 October 1941, its story begins well before then. Its roots lie in the great seafaring traditions of its two founding peoples: the Māori and the British.

POLYNESIAN AND MAORI SEAFARING TRADITIONS

Situated in a zone of prevailing westerly winds far to the south, New Zealand presented a significant challenge to the early Polynesian explorers who had no maps or navigational instruments. Māori oral tradition recalls their Polynesian ancestor the great navigator Kupe and the migrations over time from Hawaiki (East Polynesia) in large double-hulled *waka* (canoe). Historians cite the carriage of sufficient numbers of people, plants, and animals sufficient to set up communities as evidence that the migrations were deliberate. The Polynesians proceeded by stages: stopping at smaller islands along the way to rest, explore, and replenish stores they arrived in Aotearoa (New Zealand) in the late 13th century. Waka named *Aotea, Kurahaupō, Mātaatua, Tainui, Tokomaru, Te Arawa* and *Tākitimu* link the Māori people with their ancestors in Polynesia. Many Māori trace their ancestry through the names of these canoes and where they arrived in New Zealand.

The language they brought with them still has many familiar names and terms in common usage throughout the Pacific including *moana* for sea, *motu* meaning island, and the name of the god of the sea *Tangaroa*. These linguistic coincidences indicate common tradition, culture, and connections throughout Oceania.

Voyages were mapped by back-sighting: lining up known star paths with notable features of the landscape such as mountains, outcrops of rock, and prominent trees. Established routes were preserved in memory or recorded in song. Perhaps the greatest skill of the early navigators was their ability to read the night sky. The rising and setting points of the brightest and most distinctive stars and planets were gauged with the help of sophisticated star compasses, which were also used to chart the winds. When skies were too overcast for navigators to use the sun, the moon, planets, or stars, courses could be gauged according to ocean swells. Pathways of whales and migratory birds may have helped in the search for and discovery of new lands. Although the principles of traditional Polynesian navigation were simple, its practice was refined with generations of experience.

The earliest crossings were probably made on rafts and in dugout canoes. Latter journeys were made in outrigger canoes, to which sails were also added for greater speed as were steering paddles for controlling direction. The stability and speed of these canoes allowed navigators to sail across long stretches of open sea between relatively distant islands, especially with the advent of double-hulled canoes. Long-distance canoes were about 20 metres long and were crewed by five to fifteen people. The vessels took to sea with sizable provisions of food and water. The great voyages across the Pacific and to the extremities of the Polynesian triangle – Hawaii in the north, Easter Island or Rapanui in the east, and New Zealand to the deep southwest – had probably come to an end about 1500 AD.[8]

8. See 'Pacific Migrations' *Te Ara – the Encyclopaedia of New Zealand* http://www.TeAra.govt.nz

EUROPEAN NAVAL EXPLORATION

The rivalry amongst the seafaring nations of Europe to discover *Terra Australis Incognita* – the rumoured great southern continent believed to lie to the west of South America and somewhat south of latitude 40° degrees – initiated a series of exploratory voyages from the fifteenth century onwards into the South Pacific. Opportunities for trade and scientific exploration were uppermost in the minds of the backers of these expeditions. Although results were mixed, the voyages of Abel Tasman and James Cook in particular were to have far reaching consequences for New Zealand.

Abel Tasman

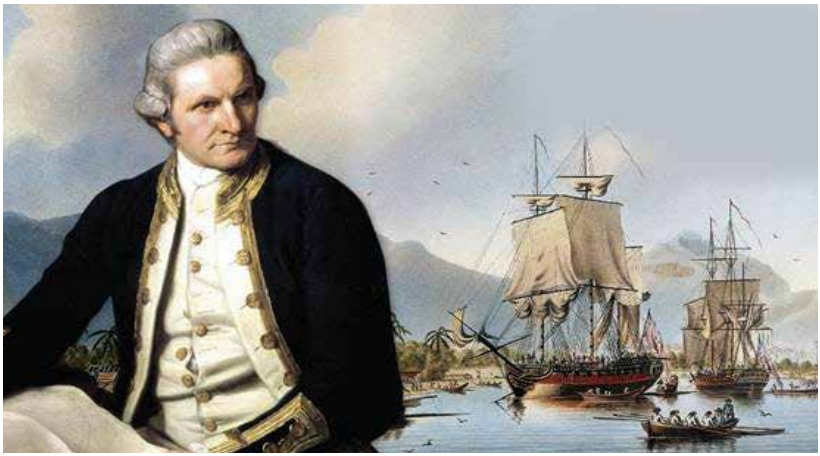
In 1642 Tasman located part of the west coast of the South Island of New Zealand near Punakaiki. Although several of his men were killed in an encounter with the inhabitants of what is now known as Golden Bay, or Taitapu, at the northern end of the South Island, Tasman and his navigators charted the coast from near Cape Foulwind north to the Three Kings Islands. Tasman continued his voyage north but thought that the land he found could extend much further to the east. Believing the land to be off the coast of Tierra del Fuego he named it *Staten Landt*. It later appeared on maps as *Nova Zeelandia* (Latin) and *Niew Zeeland* (Dutch). More than 120 years would elapse before another European visited these islands.[9]

Abel Janszoon Tasman – Dutch seafarer, explorer and merchant 1603-1659

9. Salmond, Anne. *Two Worlds: First Meetings between Māori and Europeans 1642-1772*, Viking, Auckland, 1991, pp 67-84.

Lieutenant James Cook, Royal Navy

HM Bark ENDEAVOUR under the command of Lieutenant Cook RN departed England on 25 August 1768 with a party of scientists, astronomers, botanists, and artists. Joseph Banks of the Royal Society was their leader. Apart from observing the transit of Venus, Cook's secret orders were to search for *Terra Australis Incognita*, the undiscovered southern continent.[10] His instructions were that once observations of Venus were completed he was to:



'...proceed to the southward in order to make discovery of the Continent above-mentioned until you arrive in the latitude of 40° degrees unless you sooner fall in with it. But not having discover'd it or any evident signs of it in that Run, you are to proceed in search of it to the Westward between the Latitude before mentioned and the Latitude of 35° degrees until you discover it or fall in with the Eastern side of the land discover'd by Tasman and now called New Zealand.'[11]

10. Blainey, Geoffrey, *Sea of Dangers – Captain Cook and his Rivals*. Viking, Penguin Books, London 2008, pp15-16.

11. Aughton, Peter, *ENDEAVOUR, Captain Cook's First Great Voyage*, Phoenix, 1999, p 115.

ENDEAVOUR eventually made its way to Tahiti where Cook became acquainted with Tupaia, a Tohunga (high priest) navigator from Taputapuatea in Ra'iatea located about 500 miles to the west.[12] During ENDEAVOUR's visit, Tupaia acquired some use of English and Joseph Banks and others also learned some Tahitian. Cook had not initially wanted to carry another person in his ship but Joseph Banks prevailed on him to do so and offered to pay his way. This proved to be a fortunate arrangement. As far as can be reasonably established this was the first time a Polynesian of high standing had voyaged in a European ship. Tupaia sailed westwards with Cook to visit Ra'iatea and the Society Islands where he navigated ENDEAVOUR through tricky waters with great skill and dexterity. Cook thus took a greater interest in his knowledge and questioned him extensively about the great southern continent and how he acquired such seafaring prowess. Tupaia assured him that the great southern continent did not exist and instead told Cook about the islands to the west of Tahiti. Cook subsequently plotted 74 islands on their bearings from Tahiti based on Tupaia's information.

After completing astronomical observations of Venus, Cook prepared to leave Tahiti and concentrate on finding the so-called Terra Australis Incognita. In accordance with his instructions he sailed in a generally southwest direction after leaving the Society Islands and on 6th October 1769 Nicholas Young, a cabin boy, sighted mountainous land to the westwards.[13] Thus began Cook's remarkable voyage around New Zealand, which he charted with astonishing accuracy.[14] To the amazement of Cook and his companions, Tupaia could communicate with the Māori people they encountered. Marred by skirmishes the early meetings were not propitious but as ENDEAVOUR voyaged along the east coast matters improved, especially in Tolaga Bay (Uawa) where Tupaia became a great favourite of the local people. Some thought he was a great Ariki or chief and that ENDEAVOUR was his own ship. Children in the bay were named after him and he was remembered long after Cook's visit.

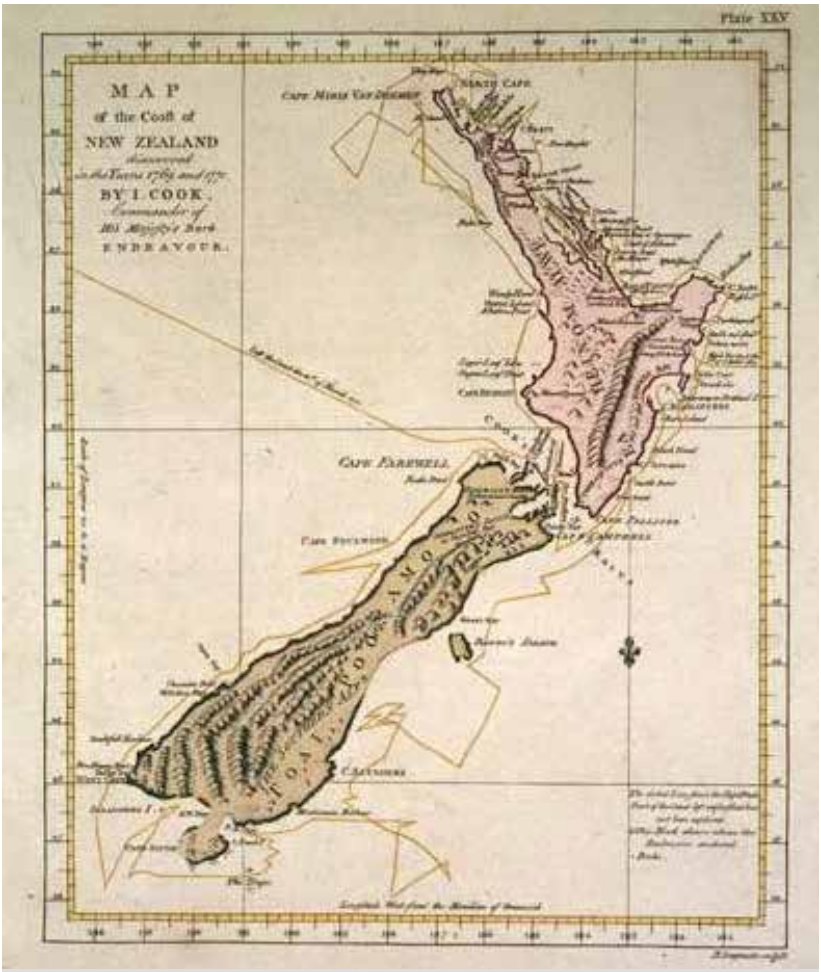
As Cook voyaged around the two main islands of New Zealand, he established beyond doubt that the land Tasman had sighted over 120 years earlier was not the great southern continent. He sailed across the Tasman Sea to what is now known as Botany Bay and charted the east coast of Australia northwards before sailing back to England via Torres Strait and Batavia. During his

12. Howe, K.R., (Ed.). *Vaka Moana – Voyages of the Ancestors*, Auckland Museum, Auckland, 2006, p 259.

13. Aughton, Op. cit., p 119.

14. At the same time Jean de Surville a French naval officer in command of *Saint Jean-Baptiste* was also off the coast of New Zealand at one stage passed within 60 nautical miles of ENDEAVOUR without either being aware of the other. Up until 1840 when New Zealand became a British colony there were several French expeditions.

two subsequent voyages, which ranged deep into the Southern Ocean, he disproved the existence of the so-called Terra Australis Incognita but did not quite sight the great continent of Antarctica. All the same, Cook had put New Zealand firmly on the map – and firmly in the minds of European colonialists.



Cook's map of New Zealand, 1773.

Captain William Hobson

In August 1839 Captain William Hobson left London with instructions to establish a British Colony in New Zealand. After being sworn in as Lieutenant Governor in New South Wales he arrived at Waitangi in the Bay of Islands in January 1840 to conduct negotiations with Māori Chiefs to voluntarily transfer sovereignty to the British Crown.[15] Hobson's directions from Lord Normanby, Secretary for the Colonies in the British Government, included fine sentiments about treating the indigenous people with great courtesy and sensitivity, which may have emanated from Lord Morton's instructions to Lieutenant Cook more than sixty years previously. The resulting Treaty signed on the 6th February 1840 is the founding document of New Zealand.

Captain Hobson departed Waitangi a few days after the signing ceremonies and sailed south to the Waitemata Harbour to found the new capital which he named Auckland after George Eden, Lord Auckland and Viceroy of India and later to become the First Sea Lord. He quickly recognised the merits of the harbour: in September that year '...the barque *Platina* arrived carrying the

15. Michael King explains many of the finer points of these discussions in his *History of New Zealand*, VIKING, Auckland, 2004, pp 38-60.

materials for the Governor's home and two days later an official party landed at Point Britomart, where the flag was raised, salutes fired and Her Majesty's health drunk.'[16] Captain Hobson also despatched Lieutenant Robert Snow to the North Shore with instructions to take charge of the growing naval facilities at the Sandspit. A replica of the original flagstaff and a cairn mark this place at the Windsor Reserve in Devonport. The naval base shifted west towards Stanley Point (named after Captain Edward Stanley, commanding officer of HMS CALLIOPE) where it has gradually grown in size and capability. Captain William Hobson therefore can take credit for not only founding the city of Auckland but also the RNZN's home.[17]

THE END OF EXPLORATION AND THE NEED FOR SECURITY

Tasman and Cook were only two of many navigators during the great period of European exploration in the Pacific, which ultimately led to European colonisation. Māori knowledge and practice of traditional navigation declined after Europeans colonised the Pacific. Canoes were replaced with European ships and some colonial governments introduced regulations restricting free movement between different administrative territories. Even so, New Zealand's waters during this time were largely unpoliced. Concerted efforts to protect New Zealand's maritime interests only began in the 1860s, but the genesis of the modern RNZN can be dated from 1887, when the British and colonial governments of Australia and New Zealand came together to address naval requirements in the South Pacific. An Australasian Auxiliary Squadron was created to bolster local naval strength and this arrangement was more or less maintained until the passage of the Naval Defence Act in 1913.[18]

16. Howard, Grant, *The Navy in New Zealand*, A.H. & A.W. Reed Wellington, 1981, p 5.

17. Ibid. p 6.

18 The material in this chapter is derived from The Royal New Zealand Navy section of the New Zealand government website "New Zealand History: Nga korero ipurangi o Aotearoa": https://nzhistory.govt.nz/war/royal-new-zealand-navy.

THE FIRST WORLD WAR

HMS PHILOMEL at the Devonport Naval Base 1940's

HMS PHILOMEL was the first ship commissioned into New Zealand Naval Forces, but shortly after when New Zealand found itself at war on 5 August 1914, PHILOMEL was returned to Royal Navy control and used to escort the expeditionary force dispatched to German Samoa. It later accompanied the New Zealand Expeditionary Force on its passage to Suez. After operating briefly in the eastern Mediterranean, it was assigned gunboat duties in the Persian Gulf. The battlecruiser HMS NEW ZEALAND, which had been paid for by New Zealand, took part in all the main engagements between the British and German fleets during the war, including the Battle of Jutland on 31 May 1916. In all, about 500 New Zealanders served in the Royal Navy during the First World War, one of whom, LTCDR William Sanders, was awarded a Victoria Cross. Sanders is the only New Zealander to win a VC in a naval action.

THE INTER-WAR PERIOD

Many significant events occurred in the years immediately following the end of the First World War. The lessons learned in that conflict swayed opinion towards creating a local navy. A few years after the visit of Lord Jellicoe (commander of the British Grand Fleet at Jutland and later New Zealand's Governor General), the New Zealand Division of the Royal Navy was created in 1921, with its small staff headquartered at the new Navy Office in Wellington. In the same year the cruiser HMS CHATHAM, a replacement for the decommissioned HMS PHILOMEL, arrived in New Zealand. A few years later, the CHATHAM, in turn, was replaced by two D-class oil-burning cruisers, HMS DUNEDIN and DIOMEDE, greatly enhancing the strength of New Zealand's fledgling navy. 1925 saw the establishment of a New Zealand volunteer naval reserve, which numbered 670 personnel by the time the Second World War broke out in 1939. Also during the interwar period, the existing naval facilities at Devonport, including the Calliope Dock, became the New Zealand division's base. PHILOMEL moved north to the base, where it became a longstanding feature as a non-seagoing depot. The naval forces were significantly upgraded with the arrival of the LEANDER-class cruisers, HMS ACHILLES and LEANDER, which had been borrowed from the Royal Navy.

THE SECOND WORLD WAR

New Zealand's refurbished naval forces were called into action on the outbreak of war in 1939. On 1 October 1941 an order-in-council changed the name of the New Zealand Division of the Royal Navy to the Royal New Zealand Navy. The ACHILLES and LEANDER, its most powerful ships, both saw action during the Second World War. ACHILLES took part in the Battle of River Plate and LEANDER patrolled the South Pacific, the Middle East, the Indian Ocean (where it sank an Italian raider), and the Mediterranean. As well as crewing New Zealand Division ships, hundreds of New Zealanders served as naval aviators and thousands of New Zealand sailors served on Royal Navy vessels. Many were involved in the Battle of the Atlantic and the D-Day landings at Normandy on 6 June. The heaviest loss of New Zealanders at sea occurred with the sinking of HMS NEPTUNE in the Mediterranean off the coast of Libya: 150 New Zealand sailors were killed.

New Zealand sailors and ships, particularly mine-sweeper and other smaller vessels, also saw action in the Pacific. When ACHILLES was badly damaged during a Japanese air raid off Guadalcanal in January 1943, 13 men were killed; in July 1943, when LEANDER was torpedoed during the Battle of Kolombangara 26 men lost their lives. The Solomons campaign also involved a significant New Zealand naval effort. Later, a number of New Zealand ships and personnel took part in the final operations against Japan. HMNZS GAMBIA was present in Tokyo Bay when Japan formally surrendered aboard USS MISSOURI.

The RNZN was also involved in local defence measures at home. The armed merchant cruiser HMS MONOWAI patrolled local waters to fend off intrusions by German armed merchant raiders. The only loss of New Zealand naval personnel to enemy action in New Zealand waters in two world wars took place in May 1941 when five sailors died when the minesweeper HMS PURIRI sank after hitting a mine. All in all, around 10,000 men served in the RNZN and RNZNVR during the Second World War; 573 lost their lives.

HMNZS ACHILLES

HMS NEPTUNE

ENDURING INTERESTS, CHANGING PERSPECTIVES

After the Second World War the RNZN was based on two cruisers supplemented by six frigates. Cold War[19] calculations saw these forces readied for the defence of Egypt and the Suez Canal in the event of war with the Soviet Union. As it turned out during 1950-53 the RNZN was drawn into another Cold War theatre: Korea. New Zealand sustained its naval contribution throughout the war; all six frigates served tours as part of a British squadron under United Nations' command. About 1300 RNZN personnel served in the Korean War; two lost their lives. The RNZN also operated elsewhere in South Asia: for some time a frigate was stationed at Singapore; and other frigates occasionally took part in shore bombardments during the Malayan Emergency 1948-1960. The RNZN contribution to the New Zealand effort in Vietnam was almost exclusively limited to medics.

Since the end of the Cold War in 1989, the RNZN has been heavily engaged on peacekeeping operations, such as crewing river and coastal patrols in Cambodia in the 1990s. The RNZN was also involved in policing UN resolutions relating to Iraq in the Arabian Gulf as part of the Multinational Interception Force in 1995—96 and was part of the New Zealand forces deployed to East Timor as part of the International Force East Timor (INTERFET) in 1999. The RNZN can also been called upon to provide Emergency domestic assistance, such as to earthquake-battered Christchurch in 2011 and Kaikoura in 2017; to protect sovereignty, data cables, and Sea Lines of Communication (SLOC);[20] and to counter smuggling, drug and people trafficking. The RNZN also supports national resilience; building international relationships, supporting allies and partners, conducting maritime surveillance, Search and Rescue (SAR) and fisheries protection.

19. A state of hostility between countries short of outright war. From 1947 until 1990 a state of Cold War existed between the Eastern Bloc led by the Union of Soviet Socialist Republics (USSR) and the Western Bloc led by the United States of America and NATO. Communism fell in Europe in 1989 and the USSR collapsed in 1991.

20. Sea lines of communication (SLOC) are the most efficient navigable routes followed by shipping from their points of departure to their destinations. SLOC may refer in military operations to the maritime supply routes between operational forces and their supporting bases. The term is also used to describe the major commercial shipping routes of the world. SLOC should not be considered in the same way as lines of communication on land. *Australian Maritime Doctrine 2010*

CONCLUSION

The historical process that resulted in the RNZN as we know it now has its roots in Māori and British seafaring traditions. It has been forged, tested, and strengthened by war. But peacetime roles have also shaped the RNZN and what it stands for. No doubt the RNZN will continue to evolve and change into the future, but by maintaining awareness of and respect for our beginnings and traditions we honour those who have come before us and gain strength from lessons learned along the way.

CHAPTER
01 | OUR STORY SUMMARY POINTS

He aha te mea nui o te ao
– What is the most important thing in the world?

He tāngata, he tāngata, he tāngata
- It is the people, the people, the people.

- If we want to know who we are, we must know where we have come from.
- Our roots lie in the great seafaring traditions of our two founding peoples: the Māori and the British.
- Māori oral tradition recalls their Polynesian ancestor the great navigator Kupe and the migrations from Hawaiki in large double hulled waka beginning around the 13th century.
- Around the 15th century Europeans, in hope of expanding trade and scientific knowledge, ventured into the pacific in search of Terra Australis Incognita – a great southern continent.
- In 1642 Abel Tasman and Lieutenant James Cook in 1768 sighted Aotearoa, made charts, and met local Māori.
- Lieutenant Cook was aided by Tupaia, a skilled navigator from Tahiti who was able to converse with Māori.
- In 1839 Captain William Hobson was sent from London with instructions to establish a colony in New Zealand. In 1840 he commenced negotiations with Māori Chiefs on what became the Treaty of Waitangi.
- In 1887 the British and Colonial governments of Australia and New Zealand formed the Australasian Auxiliary Squadron to bolster local naval strength.
- In 1913 the Naval Defence Act was passed.
- In 1914 HMS PHILOMEL became the first ship commissioned into the New Zealand naval forces.

CHAPTER 01

OUR STORY
SUMMARY POINTS

- The battlecruiser HMS NEW ZEALAND, which had been paid for by New Zealand, took part in all the main engagements between the British and German fleets during the First World War, including the Battle of Jutland on 31 May 1916.
- During the Second World War an order-in-council in 1941 changed the name of the New Zealand Division of the Royal Navy to the Royal New Zealand Navy.
- The cruisers ACHILLES and LEANDER saw extensive service throughout the Second World War, from 1939 when ACHILLES took part in the Battle of the River Plate, including the Mediterranean campaigns, the Indian Ocean, and the Solomon Islands where both suffered heavy action damage and loss of life. ACHILLES later took part in the Okinawa campaign with the British Pacific Fleet.
- Thousands of New Zealand sailors served in ships and submarines of the Royal Navy, and in the Fleet Air Arm in which New Zealand pilots and observers were particularly prominent.
- The heaviest loss of New Zealanders at sea occurred with the sinking of HMS NEPTUNE in the Mediterranean off the coast of Libya: 150 New Zealand sailors were killed.
- All six New Zealand frigates saw service during the Korean War.
- Since the end of the Cold War in 1989, the RNZN has been heavily engaged on peacekeeping operations, protecting national sovereignty, and contributing to national resilience, well-being, and prosperity.


NAVY
NEW ZEALAND
NAVY

CHAPTER

02

OUR PRINCIPLES & FOUNDATIONS

CHAPTER 02

OUR PRINCIPLES & FOUNDATIONS

Paradoxically, peace is ultimately sustained by, and dependent upon, the willingness of states to use force to preserve it, as well as restore it when lost. NZDDP-D

INTRODUCTION

The Royal New Zealand Navy (RNZN) derives much of its uniqueness from the historical process which led to it being the modern navy it is today. But it has also been shaped by a number of foundational documents. This chapter provides an overview of: the Treaty of Waitangi (Te Tiriti o Waitangi in Te Reo Māori); the Defence Act 1990; New Zealand Defence Policy,[21] and *New Zealand Defence Force Doctrine* (NZDDP—D). Along with strategic guidance, these documents determine the kind of Navy and Defence Force that serve New Zealand's interests.

21. The government periodically issues and undertakes a range of policy analysis including, but not limited to, formal Defence White Papers, Defence Assessments and other policy statements.

THE TREATY OF WAITANGI *(TE TIRITI O WAITANGI)*

Very few documents have been invested with as much significance for New Zealand as the Treaty of Waitangi, which is widely regarded as New Zealand's founding document. In this context, however, consideration is limited to its constitutional significance for New Zealand and as a source of values that inform how the RNZN sees itself and the wider world. The latter will be dealt with in Chapter Seven of this publication. For now it is important readers understand the centrality of the Treaty in New Zealand's political and social context.

Te Tiriti o Waitangi was signed on 6 February 1840 on behalf of the British Crown by Captain William Hobson Royal Navy and Māori chiefs from the North Island of New Zealand. Many other Māori chiefs subsequently signed it, too. Māori considered it a sacred pact with the Queen of England, as Defender of the Faith, much like the covenants of the Old Testament Bible.[22] On the British side it was an attempt to reflect an agreement between the Crown and Māori to establish a colony.

The Treaty has had a controversial history, especially in the period between the New Zealand Wars of 1860 and the early 1870s, during which it was largely ignored by many colonists and New Zealand governments of the day. Perspectives on the Treaty slowly began to change, however, and in 1975 the Treaty of Waitangi Act was passed setting up a Waitangi Tribunal, which from 1985 was empowered to hear historical (pre-1992) claims by Māori against the Crown. In more recent times *Te Tiriti o Waitangi* has come to be seen as the foundational document in New Zealand's social and political arrangements.

22. *Te Kawenata o Waitangi* (the Covenant of Waitangi)

THE DEFENCE ACT 1990

The Defence Act 1990 and subsequent amendments is the legal foundation for the NZDF and the individual services including the RNZN. The Act reaffirms the historical prerogative of the Crown to raise and maintain armed forces and the principle of ministerial authority over the armed forces.[23] The Act provides for armed forces to be employed for the following purposes:

- the defence of New Zealand, and of any area for the defence of which New Zealand is responsible under any Act;
- the protection of the interests of New Zealand, whether in New Zealand or elsewhere;
- the contribution of forces under collective security treaties, agreements, or arrangements;
- the contribution of forces to, or for any of the purposes of, the United Nations, or in association with other organisations or States and in accordance with the principles of the Charter of the United Nations;
- the provision of assistance to the civil power either in New Zealand or elsewhere in time of emergency; and
- the provision of any public service.

The Act sets out the constitutional position of the armed forces. It also defines terms and conditions of service, the relationship of the Chief of Defence Force to Chiefs of Service and their respective responsibilities, and the responsibilities of the Ministry of Defence and the NZDF. The Defence Act 1990 sets out an expansive rather than restrictive view of New Zealand's potential requirements and possible uses for its armed forces.

23. Control by the executive arm of government.

NEW ZEALAND DEFENCE POLICY

The Defence Act does not offer precise guidance on strategy, policy, particular employment contexts, national security objectives, or defence capabilities. For guidance on these matters the government periodically undertakes and issues a range of policy analysis. The results are articulated in formal Defence White Papers, Defence Assessments, and other policy statements. These articulate a government's priorities, commitments, and how they may wish to achieve their objectives and the resources required to do so. Defence policy also falls within wider security sector policy as articulated by the Department of Prime Minister and Cabinet (DPMC).[24] Wider security sector policy provides the national context of the security sector, with an all-hazards approach, within which Defence Policy nests.[25] The execution of policy within the Defence Force is guided by a series of approved plans that are reported on annually into an accountability framework.[26]

24. Department of the Prime Minister and Cabinet (DPMC) website www.dpmc.govt.nz.

25. *National Security System Handbook* – DPMC.

26. Defence Capability Plan, Defence Capital Plan, NZDF Four Year Plan, NZDF and Single Service Annual Plans.

Formal policy documents outline the Government's direction for the Defence Force. *The Defence Strategic Policy Statement 2018*, for example, outlines the principles that underpin the Government's expectations of the New Zealand Defence Force:[27]

- Defend New Zealand's sovereignty and territory, and contribute to protecting New Zealand's critical lines of communication;[28]
- Contribute to national, community, and environmental wellbeing and resilience, and all-of-government security objectives;
- Meet New Zealand's commitments to its allies and partners;
- Support New Zealand's civilian presence in the Ross Dependency of Antarctica, and work with other agencies to monitor and respond to activity in the Southern Ocean;
- Conduct a broad range of operations in the South Pacific, including leading operations when necessary, to protect and promote regional peace, security and resilience;
- Make a credible contribution in support of peace and security in the Asia-Pacific region, including in support of regional security arrangements;
- Protect New Zealand's wider interests by contributing to international peace and security and the international rules-based order;
- Contribute to advancing New Zealand's international relationships;
- Work with other agencies to monitor and understand New Zealand's strategic environment; and
- Be prepared to respond to sudden shifts in the strategic environment.

Whilst the general principles underpinning New Zealand's defence policy remain mostly constant, policy responds to changes in government, strategic situation, economy, environment, and geopolitics.

27. *Strategic Defence Policy Statement 2018*. New Zealand Ministry of Defence.

28. Lines of communication are all the land, water, and air routes that connect a country with its external partners and markets, or connect a military force with one or more bases of operations, and along which materiel, supplies and personnel move.

NEW ZEALAND DEFENCE FORCE DOCTRINE NZDDP—D

New Zealand Defence Force Doctrine (NZDDP—D)[29] provides the fundamental principles that guide the employment of the New Zealand Navy, Army, and Air Force in support of military objectives. New Zealand Defence Force Maritime Doctrine takes as its starting point the broad guidance laid out in NZDDP—D. This philosophy is derived from the NZDF's distinctive war-fighting culture, which is based on its experiences across the full spectrum of military operations in all corners of the world. Three principles in NZDDP—D are especially relevant to this publication:

- **Modern warfare is expeditionary.**[30] New Zealand's geographic location means NZDF operations are very likely to be expeditionary and at sometimes vast distances from New Zealand. Although the RNZN is capable of performing a range of roles on behalf of government, it has always been a blue water expeditionary war-fighting service. The ships of RNZN deploy into blue water.[31]

29. *New Zealand Defence Force Doctrine* NZDDP—D (4th Ed.) was published in November 2017.

30. Expeditionary operations can be initiated at short notice and consist of forward deployed or rapidly deployable self-sustaining forces tailored to achieve a clearly stated objective in a foreign country.

31. The terms Blue Water and Brown Water refer to a navy's ability to operate across the spectrum of maritime environments. In this context 'blue water' refers to maritime forces able to operate on the open oceans or high seas. Brown water refers to maritime forces that are limited in their operations to a state's coastal waters, ports and harbours, and inland rivers and estuaries, respectively. (Joint Doctrine Publication (JDP) 0—10, UK Maritime Power (5th Edition) 2017)

- **Operational success depends on joint and integrated forces.**[32] Diversity is one of the strengths of current service cultures and it needs to be maintained. But the NZDF also sees operational success as enhanced by working towards a jointly-focused and integrated Defence Force capable of conducting combined and joint operations with synchronised operational and tactical level objectives. Emphasis should continue to be placed on joint training and exercises along with cross-service familiarity with doctrine, operational philosophies and procedures.
- **There is a proven need for individual initiative on the part of commanders.** NZDDP—D stresses that developing sound military doctrine has as much to do with challenging conventional wisdom as it does with codifying established practice. Commanders at every level should rely on their judgement, apply what they have learned, and depart from the established route when circumstances demand it. The NZDF encourages judicious and innovative departures from its doctrine. This allows commanders to seize initiative and gain advantage by adopting unorthodox or imaginative courses of action as opportunities arise.

The RNZN incorporates all three of these tenets in developing its own Maritime Doctrine: the maintenance of blue water expeditionary warfare capabilities; the combined and joint approach to warfighting by the NZDF; and the need for innovation, initiative, and enterprise on the part of commanders and all levels of naval personnel.

32. Effective military operations at the strategic and operational levels require military force elements from all Services to operate in an integrated fashion. The integrated approach allows the value of a joint force to become more than merely the sum of its parts.

STRATEGIC GUIDANCE

Whilst New Zealand does not face a direct conventional military threat, its ability to protect and advance its security interests faces challenges in the evolving strategic environment. This includes maritime threats and incidents. Towards the extreme end of the spectrum of such maritime threats is the possibility of closure to one or more of New Zealand's data or sea lines of communication. Given many of New Zealand's sea lines are shared with other countries in the region, the necessary response would almost certainly be shared with partner governments and navies. The size, value, and challenges associated with managing New Zealand's large maritime domain demand the means and ability to conduct surveillance, deterrence, and law enforcement. As foreign and domestic commercial activity in the maritime domain increases, incidents requiring a multi-agency[33] response enabled or led by the RNZN are more likely to occur. The RNZN and its sister Services need to be fully interoperable with the navies, air forces, and other agencies involved in combined and joint maritime operations.

CONCLUSION

A number of foundational documents inform the roles laid down for New Zealand's armed forces including its naval forces. New Zealand's constitutional basis, the prerogatives in the Defence Act, priorities expressed in policy, best practice captured in doctrine, and strategic guidance all inform the kind of navy New Zealand needs. When the ships of the RNZN deploy they do so into the deep oceans which surround New Zealand and make up its EEZ, its Search and Rescue (SAR) area of responsibility, and its wider maritime domain. New Zealand is a large maritime nation and the RNZN is a blue water expeditionary war-fighting service.

33. Activities or operations in which multiple agencies, including national, international and non-state organisations and other actors, participate in the same or overlapping areas with varying degrees of interagency cooperation.

CHAPTER 02

OUR PRINCIPLES & FOUNDATIONS SUMMARY POINTS

Always to islanders danger / Is what comes over the sea – Allen Curnow "Landfall in Unknown Seas" (1942).

- The Royal New Zealand Navy derives much of its uniqueness from the historical journey which has led it to becoming the modern navy it is today.
- *Te Tiriti o Waitangi* (the Treaty of Waitangi) was signed on 6 February 1840; it is widely regarded as New Zealand's founding document.
- The Defence Act 1990 and subsequent amendments is the legal foundation for the NZDF and the individual services including the RNZN. The Act reaffirms the historical prerogative of the Crown to raise and maintain armed forces and the principle of ministerial authority over the armed forces.
- The Defence Act does not offer precise guidance on strategy, policy, particular employment contexts, national security objectives, or defence capabilities. For guidance on these matters the government periodically undertakes and issues a range of policy analysis.
- Policy and strategy are fluid: the general principles underpinning New Zealand's defence policy remain mostly constant, but policy responds to changes in government, the strategic situation, economy, environment, and geopolitics.
- *New Zealand Defence Force Doctrine* (NZDDP—D) provides the fundamental principles that guide the employment of the New Zealand Navy, Army, and Air Force in support of military objectives.
- The RNZN and its sister services need to be fully interoperable with other agencies and the armed services of our partners involved in combined and joint maritime operations.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CHAPTER

03

WHERE WE WORK

CHAPTER 03
WHERE WE WORK

‘The sea is where we go to work and our business is advancing New Zealand’s interests from the sea.’[34]

INTRODUCTION

The Royal New Zealand Navy (RNZN) is a seagoing combat-oriented service with a long and proud operational history. Even so, the people who serve in the RNZN will be better at what they do if they understand the maritime environment in which they operate. Some aspects of this maritime context, such as the nature of the sea and the facts of physical geography, are enduring. Others evolve, such as the nature and size of the maritime economy and seaborne trade, technology, and geostrategic factors. New Zealand’s maritime environment is intimately linked to New Zealand society and the economy. Developing and maintaining maritime domain awareness is a fundamental objective for the RNZN. This chapter provides information for readers to understand the nature and significance of New Zealand’s maritime domain.

34. Chief of Navy RADM A.J.O. Martin ONZM

THE ENDURING NATURE OF THE SEA

'The Sea and Gales of Winds and Fogs and Shoals remain all as they were in the time of Noah, and they are the great educators of the Sailor! These foes of his are set in motion by God Almighty, and to fight the enemy is but a small matter in contrast therewith!'[35]

The sea is fundamental to the New Zealand way of life. Few New Zealanders live far from it. New Zealanders value their maritime heritage and their opportunities to enjoy the rivers, lakes, and beaches on its extensive coastline. Recreational boating and fishing are pastimes enjoyed by many New Zealanders. The sea also dominated traditional Polynesian and Māori life for many practical reasons. But even then it maintained its mystery and allure. Water's mutability and usefulness led Māori to see it as an energy possessing myriad characteristics, shapes, and natures. It could be calm or refreshing, feminine or masculine – and, despite its generosity, it could be extremely dangerous. Some of these traditional categories include:

- waikino – dangerous water, sometimes inclement seas or swollen rivers;
- waitapu – sacred water, waters used for ceremonial purposes;
- waimāori – pure water, water rich in mauri, used for cleansing and for ceremonial purposes;
- waitai – sea water, saline water;
- waimanawa-whenua – water from under the land; and
- waikarakia – water for ritual purposes

35. Admiral Sir John Fisher, First Sea Lord, British Admiralty. *Some Notes by Lord Fisher for his Friends. In private circulation.* London 1919. Paraphrased to suit the contemporary context.

NEW ZEALAND'S MARITIME DOMAIN

New Zealand is surrounded by the Pacific Ocean – a name that belies its many moods. Its vastness and sometimes wild weather present challenges to even the most prudent and experienced mariners. Extremes of weather range from the doldrums to cyclones and from sub-zero temperatures to humid sweltering heat. Underwater volcanic activity and tectonic plate shifts present additional perils. The weather in the Southern Ocean is even more dramatic. The procession of sub-Antarctic low pressure systems driving eastwards over the Southern Ocean brings cold winds and rain to Tasmania, Fiordland, and Chile. These storms raise some of the highest seas on the planet, making the Southern Ocean an extreme environment for ships and sailors to operate in. This unforgiving environment is where the RNZN does much of its work – and its waters have proven to be a great school for its sailors.

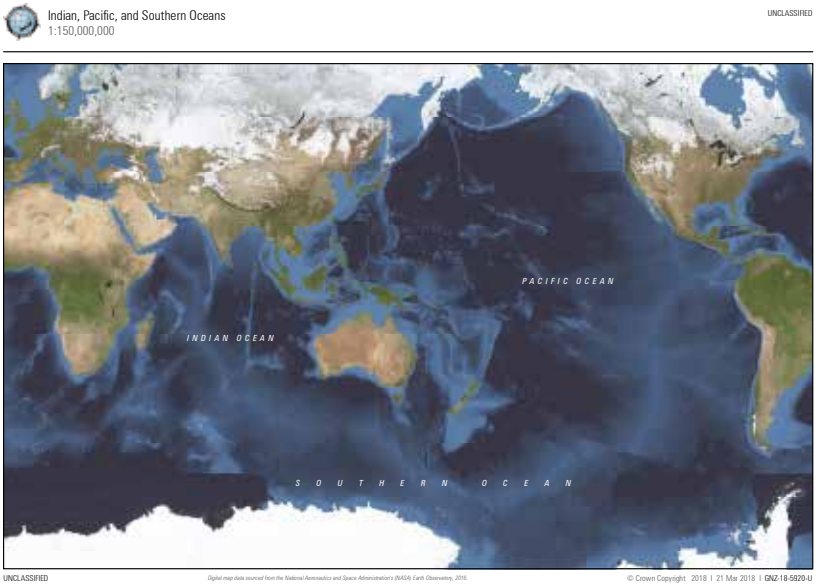

Figure 1. New Zealand and the junction of the Southern and Pacific Oceans

Our maritime neighbourhood is also crucial for the global environment and for our own weather. The oceans are the heat engine driving the earth's climate. The Tasman Sea is dominated by the East Australian Current which brings tropical water down from the Coral Sea, close to the east Australian coast. This warm water flows across the Tasman Sea towards the north of the North Island but with reduced definition and velocity. At the North Cape the current splits: part flows south down the North Island's west coast and part flows south-east past Auckland and into the Bay of Plenty. Relatively warm water from the west also meets the South Island and flows north westerly, past Otago and up to the Chatham Rise. These currents give New Zealand its temperate climate.

Extremes of weather account for the wide range of sea states found in New Zealand's maritime regions: seas can quickly rise to the extremes of the eight to nine metre seas found in the Southern Ocean and in Cook Strait strong winds and the channelling effect of the land can create steep, high seas leading to widespread disruption and cancellation of shipping. The South Pacific tropics spawn cyclones, which have been exacerbated by the effects of climate change and are becoming more frequent. These cyclones wreak devastation on many of New Zealand's Pacific Island neighbours and to eastern Australia. Even after they downgrade to storms, these weather features can still bring severe flooding and damaging winds, which destroy crops, infrastructure, and homes. These climactic impacts adversely affect human security by destroying infrastructure and livelihoods, causing food and water shortages, and increasing vector-borne and bacterial diseases. Resultant disasters can be beyond the capacity of some states to remediate, which in turn displaces people, causes unrest, and exacerbates emigration.

THE SIZE AND EXTENT OF NEW ZEALAND'S MARITIME DOMAIN

The New Zealand maritime domain[36] is the oceanic area within which it has responsibilities for the defence of its territories, protection of its resources, and support to Pacific partners; and where it has significant national interests, such as in the Southern Ocean and Ross Sea in Antarctica. New Zealand's large Search and Rescue (SAR) Area of Responsibility[37] is another one of these often overlapping constituent zones (see Figure 2).

36. Maritime Domain is used in a sense particular to the RNZN in this publication.

37. In accordance with the International Maritime Organisation (IMO) International Convention on Maritime Search and Rescue.

South West Pacific Maritime Boundaries
Including NAVAREA XIV and the New Zealand Search and Rescue Area

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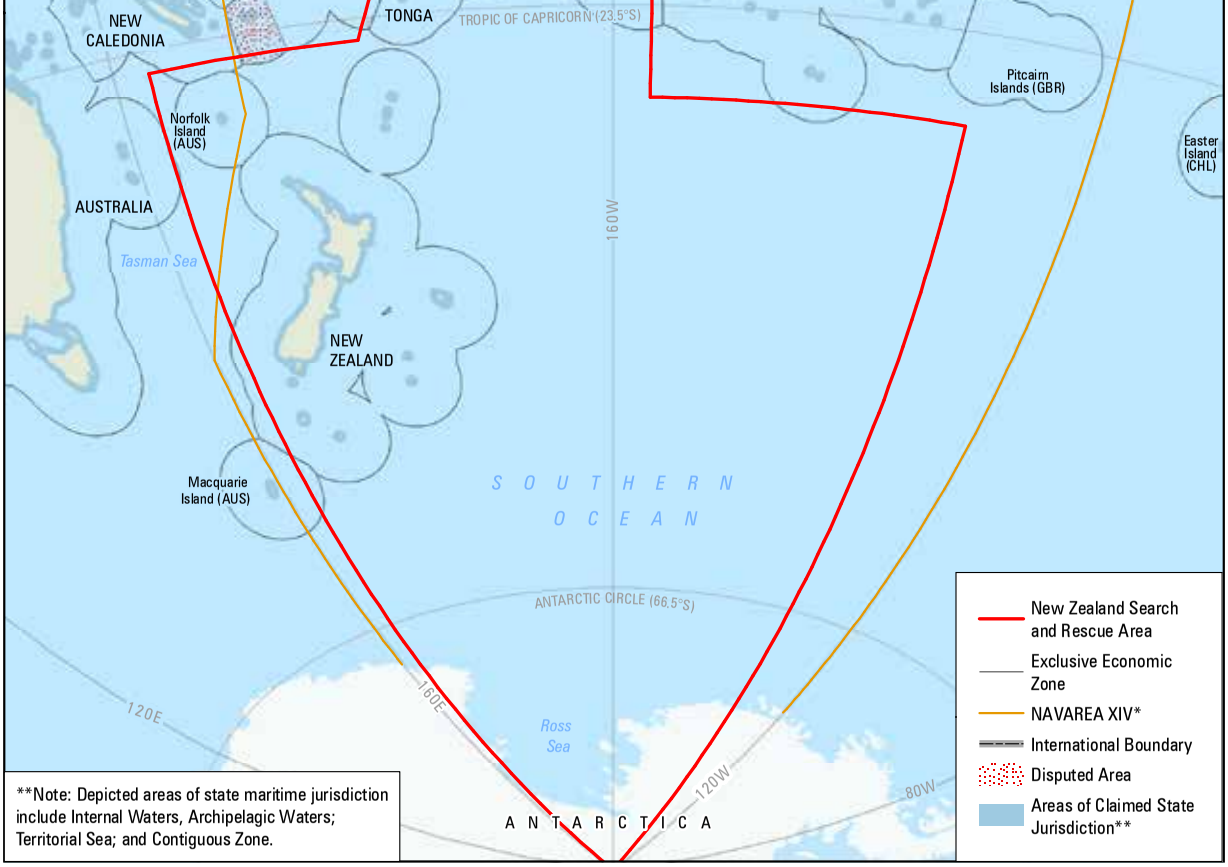

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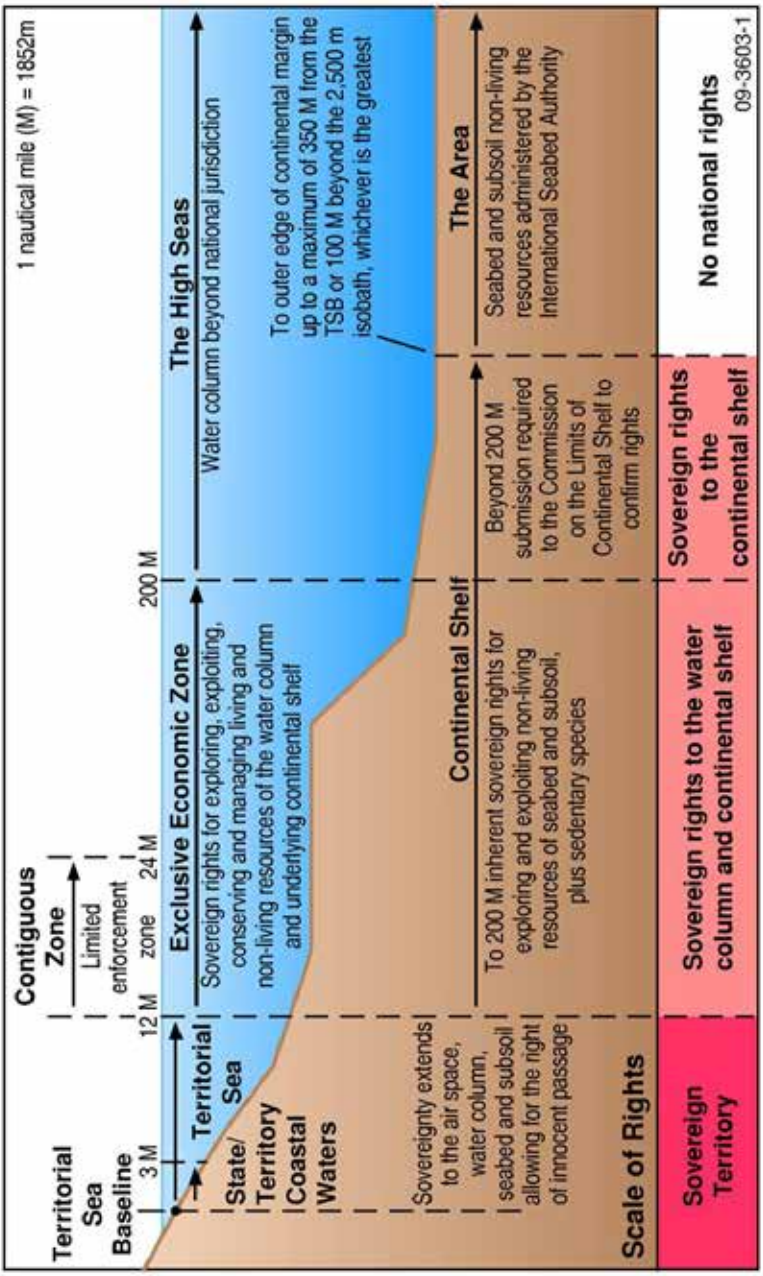
Map projection: Lambert Azimuthal Equal Area. Datum: World Geodetic System 1984 (WGS84). Map data sourced and derived from © Collins Bartholomew Ltd. (2017). Maritime limits and claims sourced from Global GIS Data Services LLC. Copyright © 1998-2016.
**Note: NAVAREA XIV is New Zealand's World-Wide Navigational Warning Service Area.*

Figure 2. The New Zealand EEZ and Search and Rescue (SAR) area of responsibility

New Zealand's maritime domain incorporates a number of defined zones (Figure 3.):

- The territorial sea, out to 12 Nautical miles or 22.2 km from shore, from all our islands and territories. The territorial sea is subject to New Zealand laws and jurisdiction.
- The contiguous zone, which is a belt of water adjacent to the territorial sea, the outer limits of which do not exceed 24 nautical miles (44.5 km) from the shore. This zone is important in border protection as it allows for states to conduct a range of enforcement activities outside of the 12 nautical mile limit.
- The Exclusive Economic Zone (EEZ) extends from all islands and territories out to 200 Nautical miles or 370 km from shore, New Zealand can regulate economic activities in this zone.



Graphic courtesy of Commonwealth of Australia (Geoscience Australia) 2018

Figure 3. Maritime Boundary Definitions: Under UNCLOS there are a number of maritime zones defined generally by their distance from land, but more precisely, as their distance from the Territorial Sea Baseline (TSB).

New Zealand's maritime domain extends well beyond the principal islands that make up the main landmass of New Zealand: the Kermadec Islands to the north, the Campbell and Auckland Islands to the south, and the Chatham and Antipodes Islands to the east all serve to significantly extend New Zealand's EEZ, which measures 4,083,744 square kilometres in area.[38] Some 15 times the area of New Zealand's land mass, it is one of the largest in the world and one which represents a significant present and future source of economic wealth.[39] New Zealand also has claims to a large Extended Continental Shelf (ECS), within which it has the right to utilise seabed mineral and other resources that may be critical to its wellbeing and national life in the years ahead. This extends New Zealand's direct protection responsibilities still further (see Figure 4).

It is easy to underestimate the physical extent of New Zealand's maritime domain. The distances encountered when deploying to the Realm states and territories for which New Zealand has defence and other responsibilities are very significant. The relative size of the maritime domain, including the area for which New Zealand accepts SAR responsibilities, is shown on figure 5.

38. Excluding the EEZ's of other territories in the New Zealand Realm, namely the Cook Islands, Niue and Tokelau, and that of the Ross Dependency.

39. Exclusive Economic Zone (EEZ) is a sea zone prescribed by the United Nations Convention on the Law of the Sea. States having EEZs have special rights regarding exploration and the use of marine resources including energy production from water and wind.

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New Zealand: Maritime Limits and Boundaries Including Extended Continental Shelf

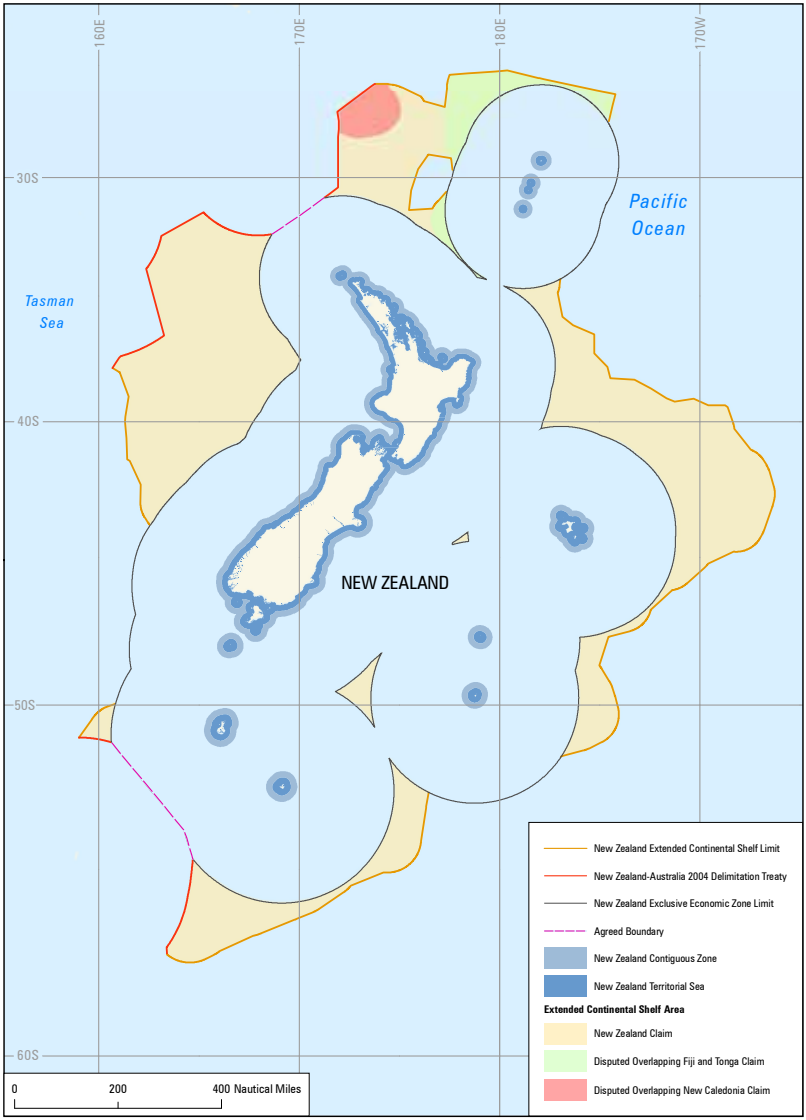

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Figure 4. This map shows the boundaries for the Exclusive Economic Zone and Extended Continental Shelf boundaries submitted to the Commission on the Limits of the Continental Shelf and the New Zealand and Australia Maritime Treaty. Boundary delimitation negotiations with Fiji and Tonga are still to be completed.

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This map depicts the Maritime Search and Rescue Areas as submitted by member countries to the International Maritime Organ Search and Rescue (SAR) Services' circular (SAR.8/Circ.4) released on 1 December 2012. Please note that there may have bee boundaries have not been made available through the IMO. Country boundaries sourced from Collins Bartholomew World Explo

*nization (IMO). The areas were sourced from the 'Availablity of
en changes made to SAR regions since this date but updated
rer Database 2015, © Collins Bartholomew Ltd.*

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Figure 5.

New Zealand's approximately 30 million square kilometre SAR area is superimposed over the North American continent.

NEW ZEALAND TRADE AND THE 'BLUE ECONOMY'

The ocean is the primary medium on which goods come and go to market and beneath which information is sent and received. Almost all of the nation's goods imports and exports are carried to and from New Zealand by internationally owned container-carrying ships operating to very tight schedules.[40] The value of this cargo is immense and it amounts to a massive proportion of global supply chains. New Zealand's trade links to the rest of the world provide goods and services that underpin its way of life (see Figure 6).

Photo courtesy of Ports of Auckland Ltd

40. World Bank and UN Department of Economic and Social Affairs. 2017. *The Potential of the Blue Economy: Increasing Long-term Benefits of the Sustainable Use of Marine Resources for Small Island Developing States and Coastal Least Developed Countries.* World Bank. Washington DC.

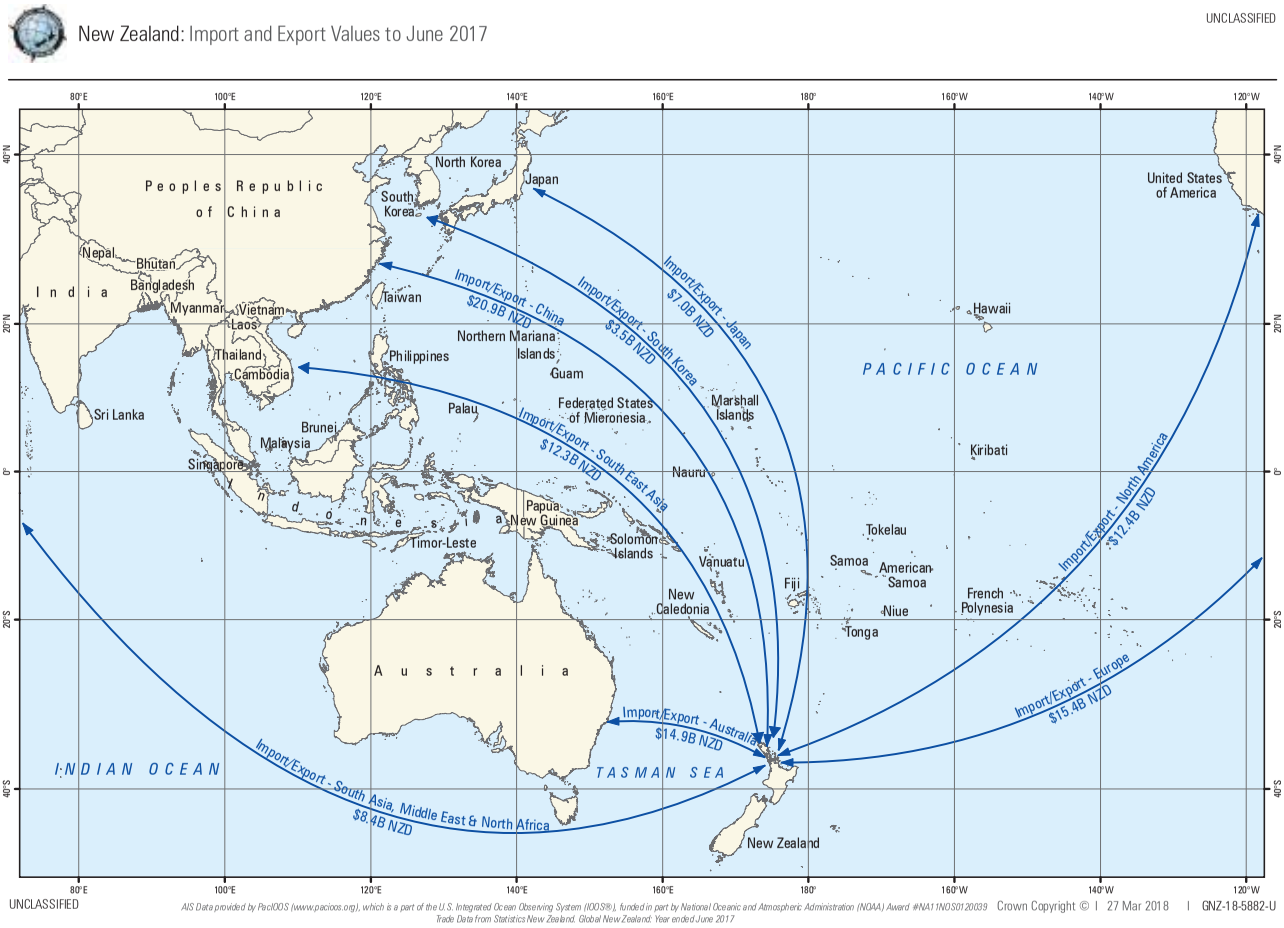


Figure 6. New Zealand Merchandise Trade

Any disruption to shipping would have serious consequences to the national economy. More than 90% of New Zealand's trade in goods by value and 99% by volume is transported in ships (over 5000 visits to 13 commercial ports in 2017); every year 49 million tonnes of imports and exports worth $75 billion are exchanged through New Zealand ports.[41] New Zealand's trade with some 240 nations and territories accounts for 60% of its total economic activity. Over 1500 local commercial vessels, from very small fishing boats to the Cook Strait ferries, use the sea each year. The cruise ship industry continues to grow: it brings in over 220 000 people and contributes over $400 million to the national economy. Furthermore, operations of the oil and gas industry within the EEZ equates to $2 billion and 3700 jobs annually, with future potential from current production of up to $3.2 billion in royalties and jobs.[42]

Free and unfettered access to the global maritime commons[43] will continue to be integral to New Zealand's development and economic prosperity, making the safety and security of sea lines of communication world-wide a vital national interest. New Zealand's top export partners 2016-17 are shown in Figure 7.

41. www.transport.govt.nz/sea/

42. Ministry of Business Innovation and Employment, *Economic contribution and potential of New Zealand's oil and gas industry, August 2012*. Retrieved from www.mbie.govt.nz

43. Those parts of the global seas and oceans that fall outside of national jurisdiction.

Figure 7: New Zealand's top export partners 2016-17

The vast proportion of New Zealand merchandise trade, both imports and exports, is handled by sea rather than air (see Figure 8). Because of the growing move to ever larger ships and the limitations in geography (draft and size) of New Zealand's principal ports and harbours, New Zealand may become a secondary destination for many shipping companies, with goods in and out of New Zealand needing to be transhipped in regional hubs such as Singapore and Sydney. This will impose additional costs and time for New Zealand's importers and exporters. So long as New Zealand's SLOC remain open, trade will flow; but any degradation of the security or commercial viability of New Zealand's SLOC and those of its partners would have significant implications for the economic prosperity of New Zealand.

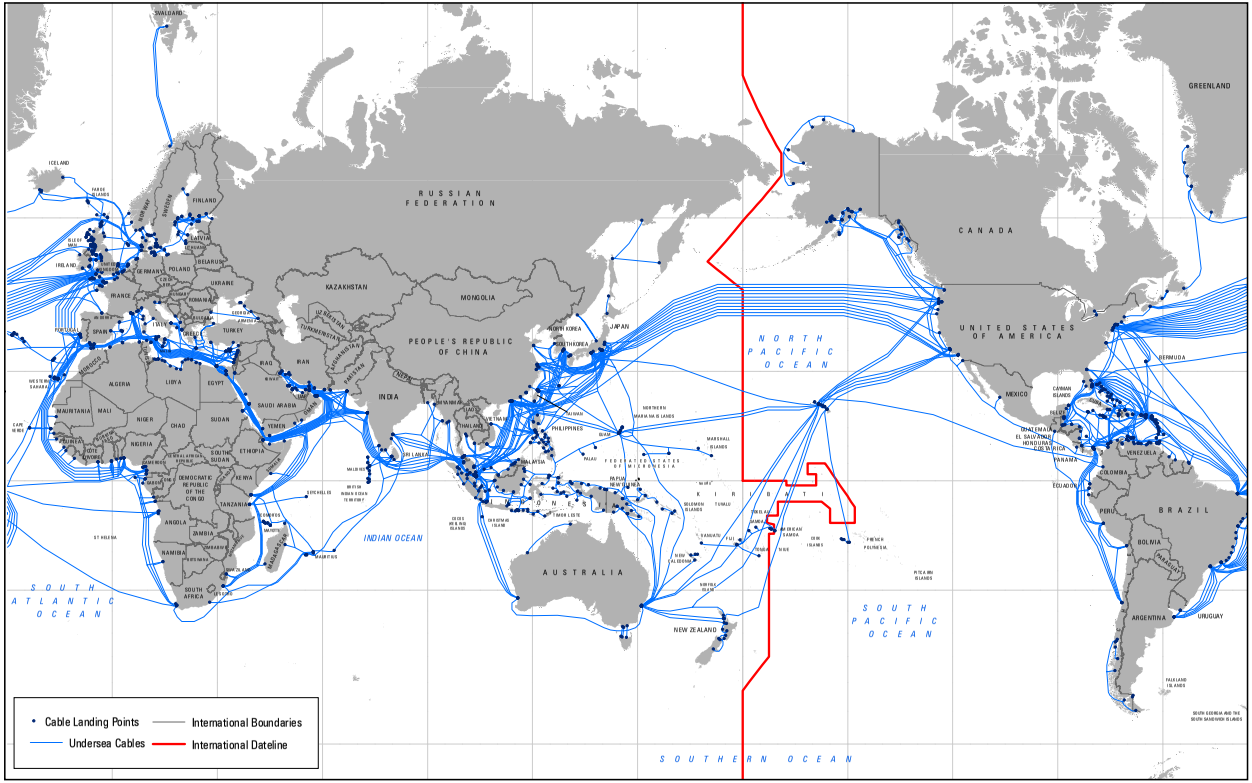
Figure 8. Sea versus air distribution of cargo in and out of New Zealand

The sea as a stock resource provides 600 000 tonnes of seafood per annum for New Zealand. Exports amount to 288 000 tonnes, which generates $1.79 billion dollars in export income.[44] Commercial fishing throughout the EEZ and into the Southern Ocean is well established: 123 different species are commercially fished. With careful management of the fishery and the curtailment of Illegal, Unreported and Unregulated (IUU)[45] fishing there is believed to be room for significant further growth in the industry. However, the nation's established fisheries require a robust management regime to ensure their sustainability for future generations. A multi-agency approach to regulating marine welfare from all forms of pollution (including acoustic) and over exploitation is evolving.

New Zealand is connected to the rest of the world by a network of undersea fibre optic cables that carry the global internet traffic necessary for any modern economy. There are three main components to New Zealand's offshore internet and telephone cables. A new $100 million trans-Tasman cable has also recently been laid between Raglan and Sydney (the Tasman Global Access cable) by a consortium involving Spark, Vodafone and Telstra. A third trans-Pacific fibre optic cable is also in the process of being laid. Known as the Hawaiki cable and costing $500 million, this is a 7000 km cable with a 43 terabit ($43x10^{12}$ bit) capacity that will link New Zealand and Australia with the United States and help meet New Zealand's demand for internet capacity, which is currently growing at 45% per year and accelerating. An Act was passed in 1966 and again in 1996 which made it an offence under New Zealand law to do anything that might damage or interfere with undersea cables and pipelines (the New Zealand Submarine Cables and Pipelines Protection Act). This Act establishes 11 Cable Protection Zones around New Zealand that ban anchoring and most types of fishing that could result in damage. The Ministry of Transport is responsible for prosecutions under this Act. A map showing the approximate location of undersea telecommunication and internet cables is shown at Figure 9.

44. www.seafoodnewzealand.org.nz. Figures cited are for the 2016 calendar year.

45. Illegal, unreported and unregulated (IUU) fishing undermines national and regional efforts to conserve and sustainably manage fish stocks. IUU fishing often targets high value species making them vulnerable to collapse and threatening marine biodiversity. IUU fishing disadvantages those fishing legally and in accordance with their licences jeopardising livelihoods and food security.



Map Projection: World Mercator;Map data sourced from © Collins Bartholomew Ltd (2017), Cable data sourced from © 2017 TeleGeography, Inc. Creative Commons BY, SA, NC

Figure 9. Global distribution of undersea cables

THE MARITIME POLITICAL ECONOMY OF THE ASIA PACIFIC

The Asia Pacific is a watery hemisphere that includes the world's most populous nations: India, China, and the archipelagic states of Indonesia, Malaysia, the Philippines and Japan. A very large percentage of the world's maritime commerce continuously flows through strategically important waterways within the region. Opening into the Indian and Pacific Oceans, these are the busiest sea lanes in the world for the commercial exchange of commodities, capital, manufactures, and services. For example, huge quantities of oil from the Persian Gulf are conveyed through them to Northeast Asia. Many differing cultures, religions, ideologies, and political systems compete, struggle to survive, and seek to expand their interests in the Asia Pacific. The economies of Japan, China, and the Republic of Korea rely on passage through the Pacific to maintain and grow their economic wellbeing.

Exponential growth and developments in communications technology overlay the physical and geographic aspects of the region. The legitimate interests of states and peoples are advanced by open communications technology. However, these same technologies and services also enable cyber and financial crime, terrorism, and trafficking in people, weapons and drugs. The actions of criminal or terrorist state and non-state actors at sea and ashore can threaten marine resources, sea lanes, and restrict the free movement of people, maritime trade, and communications. Advances in technology continue to enhance transfer, storage, retrieval, and manipulation of data. These developments have led to a number of potential advantages in the military context but they are also creating corresponding new vulnerabilities to networked technologies such as the internet, industrial control systems, and global positioning satellites.

GEOSTRATEGIC FACTORS

Non-traditional players are vying for strategic influence in the wider Pacific. Diversified competition; the shift in economic power and influence to Asia; the growing global demand for energy, food, and water; and vulnerabilities associated with increasing dependence on technology and information networks: all have consequences for New Zealand and its friends and partners. Competition for influence, competition for power, competition for resources, competition for wealth, and competition between ideas show signs of becoming more problematic. Demand for resources, transnational crime, pressure from demographic trends, and increasing living standards are straining the ability of governments to meet the needs and expectations of people in many states. The impacts of climate change are being felt acutely in the Pacific as well as in New Zealand. This will necessitate more HADR and stability operations in the region and greater need to plan for and respond to civil defence emergencies resulting from severe weather and the impacts of climate change at home.

Radical demographic shifts are likely to produce unexpected geopolitical consequences. By 2030 Asia is expected to have surpassed North America and Europe combined in terms of global power, military spending, and technological investment. World population is projected to increase from 7.6 billion to 8.3 billion by 2030, to 9.8 billion by 2050 and to 11.2 billion by 2100.[46] Global demand for energy, food and water is projected to increase significantly along with population growth, rising living standards, and levels of consumption. This demand, alongside static or falling agricultural productivity in some areas, will lead to greater resource scarcity. Whether increasing competitive pressures will lead to competition or collaboration between powers remains to be seen.

The littoral regions of continents and nations are increasingly urbanised. Three quarters of the world's population live less than 320 kilometres from the sea. Eighty per cent of capital cities and nearly all major centres of international trade, finance, transport, communications, industry, and military power are in littoral regions. It is also the area through which most trade is conducted, the area where major trade routes intersect, and the area in which large reserves of offshore energy and mineral resources are located. Because of this density of human activity in littoral regions, these are where global threats to security—current and future—are likely to emanate from.

46. UN Department of Economic and Social Affairs - Population Division figures released 21 June 2017.

They not only carry high volumes of maritime traffic but are extremely cluttered electronically. This makes naval operations complicated and susceptible to land-based air defences and anti-ship cruise missiles.

The maintenance of New Zealand's sea lines of communication and the protection of its maritime resources are important national security objectives. But while the immediate area of responsibility for ocean and sea bed resources is well defined (EEZ and the Continental Shelf) and able to be monitored, the trade routes and sea lines of communication transiting the global littoral are beyond the capacity of any single nation to secure. New Zealand benefits from good relationships with many partners across the globe. New Zealanders are also fortunate to live in a very good neighbourhood. Australia is New Zealand's closest neighbour, closest regional partner, closest defence ally, and closest friend. New Zealand is also strongly connected to our Pacific Island neighbours, with which it shares not only geography but also close cultural ties and vibrant Pasifika communities.[47] However, non-traditional actors from outside the region are showing increasing presence and activity in the South Pacific. The ability to operate with coalition partners to support free and unfettered access to the world's SLOC will continue to be a capability required by New Zealand.

CONCLUSION

New Zealand's maritime domain is vast and characterised by extremes of climate. It is also intimately linked to national well-being and prosperity but many New Zealanders take for granted the free passage of merchant ships which bring in imports and export our products. The busiest highways in the world for the exchange of data, commodities, capital, manufactures, and services are within the Asia-Pacific and Indian Ocean region. It is crucial to New Zealand's national interests, as well as those of our regional friends and partners, that we meaningfully contribute to maintaining access to these trade routes and sea and data lines of communications as well as the security of our maritime resources.

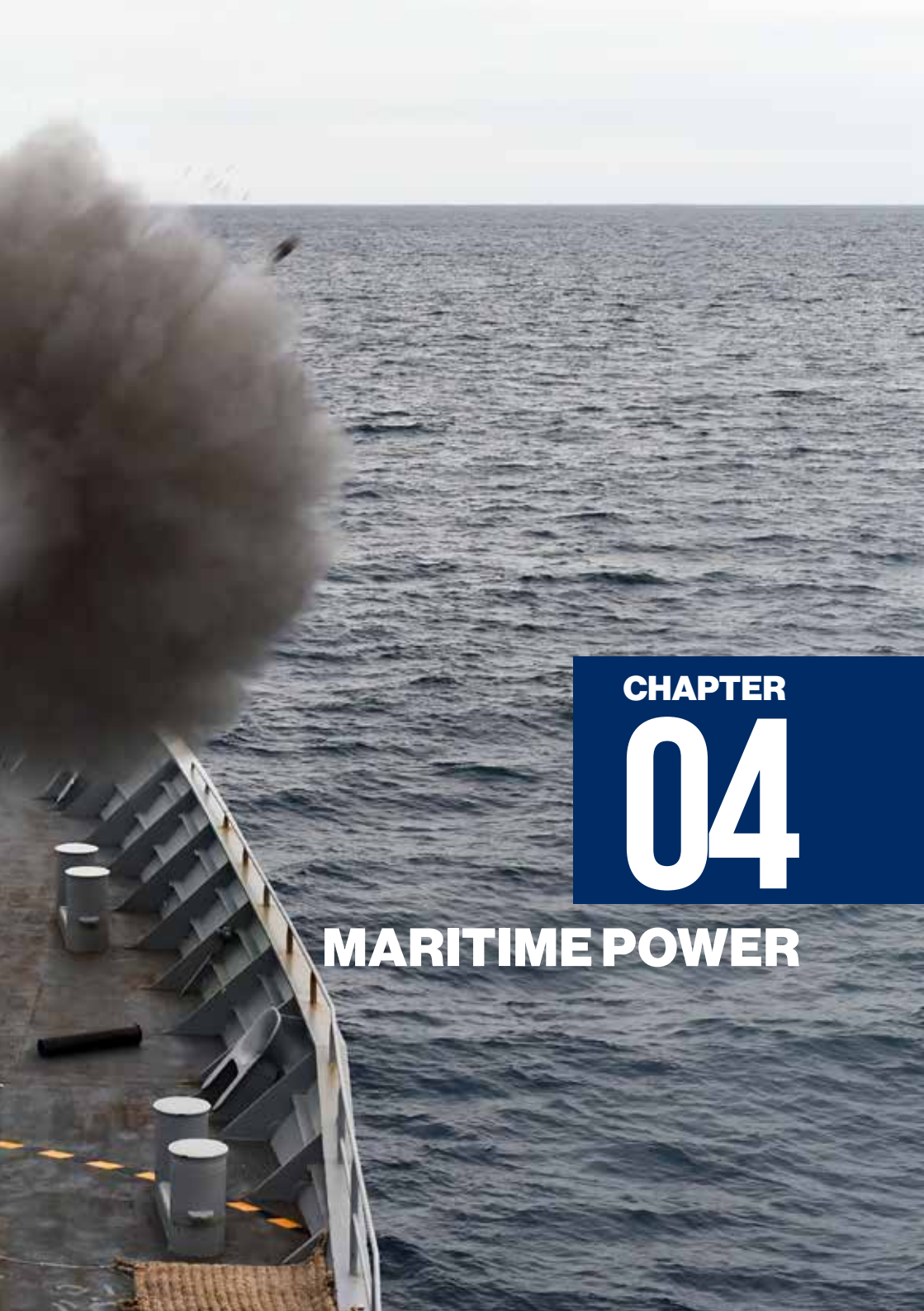
47. Pasifika is a term which describes people from the Pacific region and their descendants now resident in New Zealand.

CHAPTER 03

WHERE WE WORK
SUMMARY POINTS

For whoever commands the sea commands the trade; whoever commands the trade of the world commands the riches of the world, and consequently the world itself – Sir Walter Raleigh.

- The sea is fundamental to New Zealand's well-being and prosperity.
- The sea is the workplace of the RNZN. It is a harsh, unrelenting, and dangerous environment – it is the great educator our sailors.
- Developing and maintaining maritime domain awareness is a fundamental objective for the RNZN.
- The New Zealand maritime domain is that oceanic area within which it has responsibilities for the defence of its territories, protection of its resources, and support for Pacific partners; and where it has significant national interests, such as in the Southern Ocean and Ross Sea in Antarctica.
- New Zealand's EEZ is one of the largest in the world and it is a significant present and future source of economic wealth.
- The ocean is the primary medium by which goods come and go to market and beneath which information is sent and received via sea bed cables
- Almost 99% of New Zealand's trade by volume is moved by sea.
- Global demand for energy, food, and fresh water is projected to increase significantly – this demand may lead to friction within and between states and deteriorating security in littoral regions and along SLOC.
- The maintenance of SLOC, cables, and the protection of maritime resources are among New Zealand's primary national security objectives. The RNZN contributes to coalition operations to counter piracy and keep sea and data lines of communication open.



CHAPTER

04

MARITIME POWER

CHAPTER 04

MARITIME POWER

There is a tendency to think that New Zealand, because of its distance from the rest of the world, is immune from serious threats to security and well-being. Unfortunately that is not the case.

Intelligence and Security in a Free Society, February 2016

INTRODUCTION

A nation's maritime power is made up of many elements.[48] These include the value of maritime trade, the extent to which its legislative framework provides protection to the marine environment and resources (thus enabling enforcement of that protection), and the degree to which the public understands the impact of the sea and maritime trade on their livelihoods. It also comprises elements of air and land forces, border and resource protection agencies, police, ship building capacity, maritime training, and the port infrastructure and merchant shipping by which trade is carried to market. The Royal New Zealand Navy (RNZN) is an indispensable part of New Zealand's maritime power. This chapter explores the nature and application of maritime power and how the RNZN exercises it on New Zealand's behalf.

48. Maritime Power Definition in JDP 0-10 5th Edition, para 1.2 Dated October 2017

MARITIME STRATEGY

Sea power was first used in its own right by nations whose primary focus was on the benefits accruing from the use of the sea. Before the development of road and rail networks and aircraft, sea forces had the relative advantage of speed, endurance, and reach.[49] Furthermore, the sea was the only means of extra-territorial travel and trade. Admiral A.T. Mahan (1840-1914), an American sea power theorist, argued that great powers need to be great sea powers. Sea power for Mahan meant commercial and naval strength.[50] He identified the following as prerequisites for being a sea power:

- extensive sea frontiers and easy access to major trade routes;
- a high concentration of people relative to the length of the coastline;
- a high proportion of people relying on the sea for a living;
- an open and benign attitude toward commerce and colonies, i.e. not acquisitive and avaricious; and
- government policies that stimulate shipbuilding, develop markets, and support a progressive naval policy.

Mahan saw naval power as the most important element of sea power because it was the means by which command of the sea could be exerted and exercised. There were three principal elements of naval power in Mahan's view:

- the advantages that geography gave a country to contest sea lines of communication (SLOC);
- the number of bases across the world for the maintenance of deployed forces; and
- the fleet itself—how numerous, how capable, and how well led and trained it is.

Mahan derived the principle of using concentrated forces at decisive points in a battle from land warfare, arguing that a fleet should predominately be used offensively and aggressively. Blockade and destroying merchant shipping to achieve economic strangulation of the enemy were deemed subsidiary elements of naval war fighting strategy. But despite Mahan's confidence in the

49. The ability to operate for extended periods at considerable distance from shore support. (AMD)

50. *See Mahan on Naval Warfare*, Alfred Thayer Mahan, Little, Brown and Co., Boston 1941. Also Dover Publications Inc., Mineola, New York 2004.

universality and timelessness of his principles, modern submarines, aircraft, cyber, and advanced weapons capable of being fired from great distances have made decisive sea battles extremely unlikely.

Sir Julian Corbett (1854-1922), instead of transposing land warfare principles to the oceans, emphasised the fundamental differences between the two domains.[51] Corbett distinguished between maritime and naval strategies: maritime strategy decides the role of the fleet in relation to the land war; naval strategy concerns fleet movement. Mahan and Corbett also had different ideas about command of the sea, which to Mahan was total and absolute—in effect it is possessed by one side or the other. Corbett saw command of the sea as being a discrete and relative function: it could be general or local, permanent or transitory. He also emphasised the notion of protecting commerce by using convoys and establishing defended lanes and staging areas, both of which Mahan would have considered subsidiary activities.

Of course, maritime strategy continued to evolve. During the Cold War deterrence had to be maintained, which required powerful opposing fleets to operate below the warfighting threshold. The Soviet Union Admiral Gorshkov's *The Sea Power of the State*[52] stressed the unique claim of naval forces for advancing national policies and ambitions overseas in peacetime. But for naval forces to be effective, they needed to achieve an optimum combination of platforms with the weapons and sensors required to fulfil naval tasks – the so-called 'balanced force.' Such a fleet needed to be at constant readiness because of the increasing importance of an accurate and likely decisive first salvo in an engagement.

Contemporary maritime strategist Geoffrey Till[53] links the development of navies to the nature of the state they serve and to differing attitudes towards sovereignty, globalisation, and roles of armed forces. Till suggests some states are competitive towards other states and seek to secure the sea for their exclusive use. Their navies are configured for competition between states likely to lead to conflict. Other states, however, have embraced the concepts of openness and cooperation associated with globalisation. Their navies are more cooperative and collaborative: they work together against threats to the international system for the mutual security and economic benefit of all states.

51. See *Principles of Maritime Strategy*, Julian Corbett, Longman Green and Co, London and New York, 1911. Also Dover Publications Inc., Mineola, New York 2004.

52. Gorshkov, Sergey. *The Seapower of the State*. Pergamon Press. Oxford, UK. 1976

53. Till, G. *Seapower - A Guide for the Twenty First Century*, 3rd Ed., Routledge, London and New York, 2013.

MILITARY MARITIME POWER

The RNZN performs the missions required by government by carrying out the classical functions of military maritime power[54] in ways adapted to New Zealand's needs and capabilities. These functions are described below, together with contemporary and historical examples.

Decisive Battle

Mahan's notion of command of the sea – for him the primary purpose of the Navy – meant total control of the ocean rather than a particular area needed for one's own purposes. Decisive battle was sought by the stronger navy to conclusively defeat the opponent's fleet. This absolute approach influenced Japanese thinking in the years leading up to the Second World War. The Imperial Japanese Navy was one of the first navies in the world to recognize the strategic importance of aircraft carriers: at the beginning of World War II it had the most powerful carrier fleet in the world. Japanese admirals were admirers of Admiral Mahan's strategic doctrine and consequently put all their emphasis on the decisive fleet battle. They ignored the vulnerability of their logistics and supply system (thus departing from an almost universally applicable principle of war) and refused to use 'defensive' tactics like convoys to protect their merchant ships, transports, and tankers, many of which were subsequently systematically destroyed by American submarines.

Some contemporary strategists consider a 'decisive battle' in the sense of Nelson's victory at the Battle of The Nile in 1798 unlikely. Even so, there are struggles and battles at sea which have some of the characteristics of a decisive battle, such as the British campaign to reclaim the Falkland Islands following Argentinian annexation in 1982. Other examples include the fights at sea during the Indo-Pakistan War of 1971 and the Arab Israeli War of 1973. The possibility of significant battles and campaigns at sea in the future cannot be discounted.[55]

> **Example 1:** Battle of Leyte Gulf. On 20 October 1944 General Douglas MacArthur launched an amphibious assault on the island of Leyte. This assault was part of the campaign to regain the Philippines and sever Japanese supply lines. The Imperial Japanese Navy (IJN) responded by mobilising almost all its remaining naval combat forces in an effort to defeat decisively a combined Australian and American fleet. The IJN was heavily defeated in a series of engagements between 23 and 26 October

54 Maritime Power Definition (Military aspects) in JDP 0-10 5th Edition, para 1.3 Dated October 2017

55. Till, G., Ibid, pp 158-71

and it was never again able to assemble a combat capable fleet. Defeat at sea allowed further amphibious landings of US troops, and US air and sea superiority restricted resupply of Japanese troops ashore leading to eventual defeat. The remaining IJN combat capable ships were unable to receive supplies of fuel from the Japanese mainland and were confined to port for the remainder of the war.

Sea Control

Total control of the sea was once referred to as command of the sea. Nowadays the worldwide growth in navies has led to the adoption of the concept of 'sea control', whereby a maritime force establishes conditions that allow freedom of action in a particular part of the sea, at a particular time, to the required degree and, if necessary, to deny its use to an adversary (whether an enemy combatant, a pirate, illegal fisher, or criminal). Sea control requires command of the surface and subsurface environments (including the seabed), the air above the area in which sea control is required, the electromagnetic environment, and potentially areas of the land that dominate the sea.[56] New Zealand regularly contributes force elements to coalition task forces that exert control over the sea in maritime security operations, including frigates, command staff, and maritime patrol aircraft. Being prepared and ready to contribute a surface combatant to a coalition task force engaged in sea control during conflicts is at the heart of the RNZN's outputs.

The level of sea control required, and indeed the level that is achievable, will depend upon the threat and the mission. Where sea control is not contested, the force achieves it by default and can focus on delivering maritime manoeuvre or military maritime power projection.[57] Gaining the necessary level of sea control early and retaining it is a major component of any maritime operation.

Sea control can be achieved by a combination of sea-based, land-based, and cyber and electromagnetic activities and capabilities. Cyber warfare will be the most existentially challenging to naval forces. A warship represents the cyber complexity of a small-to-large city and only naval platforms present as vast a cyber-attack surface with such inherent cyber fragility.[58] The large

56. Allied Joint Publication (AJP)-3.3.3, *Allied Joint Doctrine for Air Maritime Coordination*, Edition A, Version 1, page 3.4.

57. Power projection in and from the maritime environment, including a broad spectrum of offensive military operations to destroy enemy forces or logistic support or to prevent enemy forces from approaching within enemy weapons' range of friendly forces. (JP 1—02)

58. LT Tyson B Meadors, USN. *First Gain the Victory: Six Initial Strategic Considerations for Naval Cyber Forces.*

electronic signature of warships and their 'system of systems within a system' characteristics make them vulnerable to cyber-attack, and cyber defence is a capability in which the Navy will have a vital interest.

> **Example:** 'Sea control is the fundamental capability of the Navy. There is no forward presence on the sea without control of the sea. There is no power projection from the sea without control of the sea. There is no initiation or support of littoral warfare from the sea without control of the seas between the United States and the engaged littoral. Sea control is absolutely necessary, the thing without which all other naval missions, and most national missions precariously risk catastrophic failure. It is impossible to over emphasise this point'. Admiral Reason USN 1998.[59]

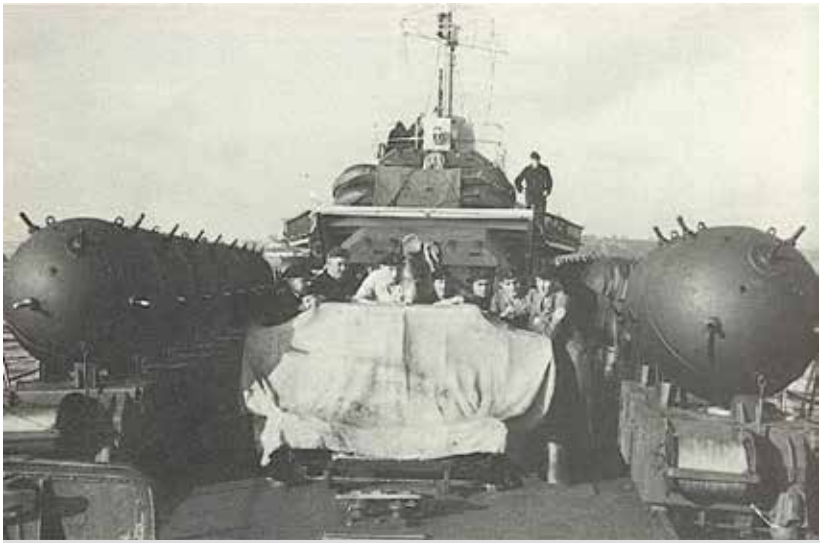
Blockade

Blockade has been a fundamental naval task for centuries and has at times proven one of the most efficient ways to exert pressure on an adversary. The intention of blockade is to prevent movement of shipping and especially to limit the movement of warships from their harbours. It involves denying an enemy access to or from their ports (a close blockade) or denying access to a sea area through which their ships must pass in order to reach the enemy's territory (a distant blockade). The term 'blockade' has a clear legal meaning and in this context is traditionally associated with operations directed against the enemy's economy. The UN Charter refers to blockade as an action that may be taken by the Security Council to restore international peace and security. However, modern embargo operations of the sort approved by the UN Security Council do not usually invoke this traditional form of blockade. Today the expression is more likely to be applied to an operation directed against the enemy's armed forces.[60] It is an effective means of disrupting maritime commerce and reducing the freedom of operation of naval forces by denying areas to them. Historians generally agree that the maritime commerce blockade of Germany in the North Sea during the First World War helped to undermine the will of the German people to continue to prosecute the war. This technique of preventing maritime commerce is not unknown in New Zealand. Ships were sunk by mines laid in New Zealand waters by German raiders in both world wars.

59. Till, G, Op. cit., p 155.

60. *Australian Maritime Doctrine 2010*

Example 1: During WWII RMS *Niagara* struck two mines and sank off Whangarei on 19 June 1940. The mines were part of a 228 mine barrage laid by the German Raider *Orion* a few days earlier. The loss of the *Niagara* and the finding of mines were the first indications that an enemy ship was operating in the New Zealand area. All sailings from New Zealand ports were stopped until mine sweepers could conduct searches to harbour approaches.[61] HMS PURIRI was subsequently lost to a mine the next year while undertaking mine clearance in the Hauraki Gulf. Losses to mines in WWI included the SS *Port Kembla* off Farewell Spit and SS *Wimmera* off Three Kings Islands.



EMC moored contact mines being laid by a German destroyer in 1940

61. S.D. Waters, op. cit., pp 121-2.

RNZN frigate in the Arabian Gulf

Example 2: The Multi-National Interception Force, Persian Gulf 1995-99.[62] The United Nations imposed extensive financial and trade embargoes on Iraq after it invaded Kuwait on 2 August 1990. Enforcement became a multi-national operation under the direction of the US Fifth Fleet. Ships from 15 countries served together to help enforce sanctions, intercept, inspect, and impound vessels' cargoes and crews carrying freight to or from Iraq. Maritime operations included queries and boardings of all types of commercial vessels entering or exiting Iraqi port facilities, including cargo dhows and passenger ferries. In Aqaba, Jordan, a shore-based team enforced sanctions on Iraq-bound cargoes. The RNZN contributed a specialist boarding team and the following ships to assist United Nations sanction enforcement operations in the Persian Gulf:

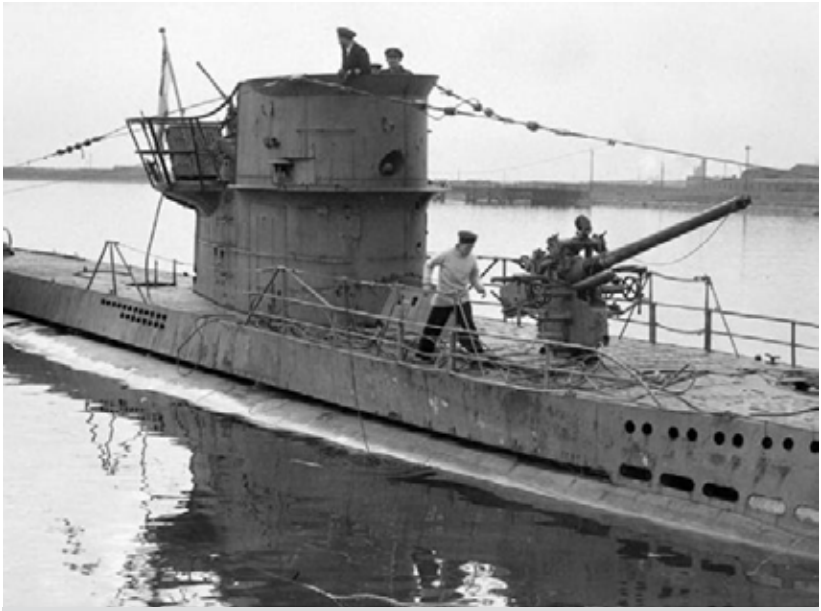
- HMNZS WELLINGTON (F69), October 1995-January 1996;
- HMNZS CANTERBURY (F421), September-November 1996;
- Specialist Boarding Team, December 1998-March 1999; and
- HMNZS TE KAHA (F77), October-December 1999.

62. Maritime interception operations — Efforts to monitor, query, and board merchant vessels in international waters to enforce sanctions against other nations such as those in support of United Nations Security Council Resolutions and/or prevent the transport of restricted goods. Also called MIO. (US DoD JP 3-03)

Sea Denial

Sea denial is exercised when one party denies another the ability to control a maritime area without either wishing or being able to control that area itself. It can take many forms: attacking an adversary's merchant ships so as to disrupt its economy is only one type of sea denial. This can be applied symmetrically, as when the *Kriegsmarine* attempted to interrupt the flow of shipping to Britain across the North Atlantic in the Second World War; or asymmetrically, such as terrorist threats to shipping passing through choke points like the Straits of Hormuz. Sea control and sea denial can be applied concurrently: a force may defend its own nation's or alliance's merchant shipping while attacking that of an adversary.

> **Example:** During WWII, Germany sought to deprive Britain of the means of survival by using the U Boat arm of the *Kriegsmarine* to attack merchant shipping crossing the Atlantic to Britain, denying Britain the use of the Atlantic to keep herself supplied. Hitler did not need to use the Atlantic for his own purposes, at least not at that stage of the war.



In one month alone, German U boats sunk 103 allied ships

EXERCISING MARITIME POWER

New Zealand uses maritime power to pursue a number of strategic objectives, but maintaining national security and prosperity are fundamental to the RNZN mission. National security allows New Zealanders to go about their daily business confidently, free from fear, and able to make the most of opportunities to advance their way of life. The NZDF works with a range of other government agencies to protect and advance national security. The RNZN – along with the wider NZDF – also works alongside other agencies to support New Zealand's economic prosperity. New Zealand's economic prosperity depends upon open air, space, electronic, and SLOC. State conflict, piracy, or natural disaster could all adversely affect it.

Freedom of navigation, freedom of the high seas,[63] and 'good order at sea' are integral components of international law. Freedom of navigation is the term given to the rights and freedoms of all states and that apply to all forms of transit on, over, and under the high seas.

63. UNCLOS Article 87.

It facilitates global maritime trade and is therefore vital to the security and economic stability of New Zealand. The high seas are open to all states whether coastal or landlocked. Good order at sea is aligned to the constabulary roles of the RNZN (see Chapter 6). Being able to ensure good order at sea is crucial to freedom of navigation as well as for deterring and countering illegal fishing, resource theft, people trafficking, drug and weapon smuggling, and marine pollution. Not all coastal states have the capacity to ensure good order at sea and are therefore dependent on regional or coalition partners. Such matters impinge on specialist legal areas which need to be considered in the planning and execution of all maritime operations, especially those involving deployment into areas where freedom of navigation or of the high seas may be in dispute. In some instances specialist legal advice for commanding officers may need to be directly on hand.

The basic freedoms of the high seas were first codified in the UN Convention on the Law of the Sea 1958 which was superseded by the United Nations Convention on the Law of the Sea (UNCLOS III) in 1982. Article 69 of the latter Convention provides all states, coastal as well as land-locked, with certain freedoms including freedom of the high seas (expressed in Article 87), freedom of navigation, freedom of overflight, freedom to lay cables and pipelines (subject to Part VI of the Treaty), and freedom to construct artificial islands and other installations (also subject to Part VI of the Treaty). It is these freedoms that the RNZN seeks to exercise and maintain by working alongside partners including other nation's defence forces in the region and further afield.

CONCLUSION

Naval theorists such as Mahan, Corbett, Gorshkov, and Till pondered the nature and significance of sea power – and arrived at very different conclusions. But however one understands maritime power, exercising it is vital for New Zealand secure its interests at sea. To this end, the RNZN undertakes the missions required by government by performing the classical functions of military maritime power – decisive battle, sea control, blockade, and sea denial – in ways adapted to New Zealand's requirements and capabilities. By effectively performing these functions, the RNZN is a crucial component of New Zealand's maritime power.

CHAPTER 04

MARITIME POWER SUMMARY POINTS

The sea should be open to all states for exploration and trade. Hugo Grotius. *Mare Liberum* (1609).

- Maritime power comprises elements of air and land forces, border and resource protection agencies, police, ship building capacity, maritime training, and the port infrastructure and merchant shipping by which trade is carried to market and the extent to which the public understands the impact of the sea and maritime trade on their livelihoods.
- In performing the missions required by government, the RNZN carries out the classical functions of military maritime power in ways adapted to New Zealand's needs and capabilities.
- Decisive battle is sought by the stronger navy to conclusively defeat their opponent's fleet. The dilemma is that the weaker force will act vigorously to avoid a decisive encounter. The more the stronger force concentrates for a decisive battle, the easier it may become to elude, while also being weakened in other arenas—thereby providing opportunities for the weaker navy to exploit.
- The concept of 'sea control' concerns the conditions that allow freedom of action in a particular part of the sea, at a particular time, to the required degree and, if necessary, deny its use to an adversary.
- The intention of blockade is to prevent movement of shipping and especially to limit the movement of warships from their harbours.
- Sea denial is exercised when one party denies another the ability to control a maritime area without either wishing or being able to control that area itself.
- Article 69 of the United Nations Convention on the Law of the Sea (UNCLOS III) provides for all states, coastal as well as land-locked, certain freedoms including freedom of the high seas and freedom of navigation.


NEW ZEALAND
TE KAHA

CHAPTER

05

WHAT WE DO

CHAPTER 05
WHAT WE DO

‘Our global inter-connectedness means our security is increasingly linked to the security in other countries. Meaning security is not island shaped.’

Howard Broad, Deputy Chief Executive Intelligence and Security Group. [64]

Photo courtesy of Ports of Auckland Ltd

64. Broad, Howard, Deputy Chief Executive Intelligence and Security Group, DPMC. 'National Security System in 2016.' Massey University National Security Conference, 30 August 2016

INTRODUCTION

The New Zealand government maintains armed forces to defend New Zealand and protect its interests; to contribute forces to collective security, coalition or UN-mandated operations; and to provide assistance to the civil power or for any other public service.[65] These forces, including New Zealand's naval forces,[66] are trained and equipped to fight. All operational capabilities are primarily for *fighting and prevailing in a wide variety of operational settings*. They are also trained and equipped to conduct HADR operations; peace enforcement,[67] peace keeping[68] and peace building[69] operations; border protection operations; and capacity building. But the ability to fight is the basis for all other operational capabilities. This is the principle from which the New Zealand Defence Force (NZDF) – and the Royal New Zealand Navy (RNZN) – derives all operational doctrine. This chapter explains the various roles the RNZN performs to meet New Zealand's security and stability requirements in the maritime domain.

65. *Defence Act 1990* section 5.

66. A list of New Zealand's naval forces is set out in the *Defence Act 1990 section* 11(3). It includes the Royal New Zealand Navy, the Royal New Zealand Naval Reserve, the Royal New Zealand Naval Volunteer Reserve and 'such additional naval forces as may be raised by the Governor General in times of war or other like emergency.'

67. Peace Enforcement: a peace support operation conducted to maintain a cease-fire or a peace agreement where the level of consent and compliance is uncertain and the threat of disruption is high. A Peace Support Force must be capable of applying credible coercive force and must apply the provisions of the peace agreement impartially.

68. Peace Keeping: a peace support operation following an agreement or ceasefire that has established a permissive environment where the level of consent and compliance is high, and the threat of disruption is low. The use of force by peacekeepers is normally limited to self-defence.

69. Peace Building: a peace support operation employing complementary diplomatic, civil and, when necessary, military means, to address the underlying causes of conflict and longer-term needs of the people. It requires a commitment to a long-term process and may run concurrently with other types of peace support operations.

LEVELS OF MILITARY OPERATIONS

The framework for command and analysis of military operations has three levels: strategic, operational, and tactical. The strategic is further divided into two levels: the national strategic refers to the domestic and international political dimension and the mobilisation of military and non-military resources to meet the Government's national strategic aim; the military strategic concerns planning and directing the use of armed force. The NZDF also contributes to achieving the government's strategic objectives by raising, training, and maintaining operationally prepared forces and carrying out government-directed campaigns and operations. Military strategy is the focus of Headquarters NZDF. The operational level is the responsibility of Headquarters Joint Forces New Zealand (HQ JFNZ) and is the level where campaigns and major operations are planned and commanded. Battles, engagements, and actions comprise the tactical level.

THE UNIQUE CHARACTERISTICS OF NAVAL FORCES

Naval, land, and air forces all have indispensable and complementary capabilities. A naval force offers a joint force a unique range of self-protection capabilities – particularly against asymmetric attack – and it can respond immediately to a political decision to withdraw without leaving difficult-to-extract land-based personnel and materiel. Although naval forces cannot deploy with the speed of airborne forces, their readiness characteristics are such that for many types of operation they can be immediately deployed without a lengthy mounting (preparation) period. Flexibility conferred by the freedom of the high seas is perhaps the most significant advantage provided by naval forces for the conduct of joint operations. Provided the capability to transport, sustain, and land forces over the shore is available, this freedom creates a land-to-maritime synergy of unique value to government in New Zealand's area of immediate strategic interest and in supporting UN led interventions in the region and beyond.

PRESERVING ACCESS TO THE HIGH SEAS

The Law of the Sea makes the high seas accessible to all. Provided states' rights to exercise specific types of control over Exclusive Economic Zones and contiguous zones[70] is respected, a naval force (including a land force embarked in ships) can position itself close to an area of interest[71] without the need for basing or overflight rights. Its influence on events can be subtly calibrated by how closely it positions itself to the area of interest and by the posture it adopts. It can be overt (demonstrating capability and resolve by exercising its capabilities) or covert (minimising its impact by avoiding any overt demonstrations and maintaining careful control over electronic emissions). With afloat replenishment support, it can be maintained on station for lengthy periods – almost indefinitely provided the force structure allows for sufficient relief forces.

70. In a zone contiguous to the territorial sea, not extending beyond 24 nautical miles of the territorial sea baseline, a State may exercise control necessary to prevent and punish infringement of its, customs, fiscal, immigration or sanitary laws and regulations within its territory or territorial sea.

71. The area of concern to a commander relative to the objectives of current or planned operations, including their areas of influence, operations and/or responsibility, and areas adjacent thereto. (AAP—06)

ROLES

The RNZN is a blue water expeditionary warfighting service. As such, the RNZN applies military maritime power by performing the following interrelated and interdependent roles:[72]

- Combat operations at sea;
- Combat operations from the sea;
- Constabulary operations;
- Safety and assistance operations; and
- Naval diplomacy.

Figure 10: The Roles of the RNZN[73]

72. The provision of safety and assistance is a core role of the RNZN, but one which derives from the ability to conduct combat and constabulary roles.

73. Maritime Power definition (military aspects) in JDP 0-10 5th Edition, para 1.3 dated October 2017

The RNZN's frigates contribute to all the roles depicted in the pentagon above, but many of the associated tasks are more effectively and economically performed by specialised ships and units (for example military hydrography,[74] amphibious operations, mine clearance and countermeasures, and local fishery inspection patrols).[75] Correspondingly, all ships gather intelligence and collect or verify information wherever they are operating and regardless of their mission. The RNZN must be flexible and adaptive to respond to new and unforeseen challenges.

Underpinning all of these roles are the unique characteristics of naval forces that enable them to influence and shape political events ashore:

- Exerting presence to reassure and indicate intent;
- Loitering, if necessary for prolonged periods in areas of sensitivity and interest;
- Poising as a deterrent or coercive force; and
- Persisting to demonstrate resilience and commitment.

74. ADFP 2.3.1 *Rapid Environmental Assessment and New Zealand Supplement*

75. For an authoritative background to the subject of Military Hydrography see Strutton, Bill, and Pearson, Michael, *The Secret Invaders*, Hodder and Stoughton, London, 1958.

Combat Operations at Sea

Subsets of broad sea control and sea denial operations include:

Patrol.[76]

Patrol involves employing a detachment of ground, sea, or air forces sent out for the purpose of gathering information or carrying out a destructive, harassing, mopping up, or security mission. Patrols in the EEZ demonstrate sovereignty. They offer confidence and assurance to the nation, friends and allies when conducted in areas of mutual interest.

Intelligence, Surveillance, and Reconnaissance (ISR).

ISR is prioritised integration, coordination, and synchronisation of capabilities and activities to acquire, process, and disseminate information and intelligence to support the planning and execution of operations. NZDF ISR also includes target acquisition.[77] Gathering ISR data can be specifically directed or collected opportunistically. The effectiveness of ISR operations generally depends on the ability to distribute information collected to the forces that need it, which include centres afloat and ashore where it can be processed and merged with other information to create a Common Operational Picture (COP).[78]

Maritime Strike and Interdiction.[79]

Strike is an attack which is intended to damage, seize, neutralise, or destroy an objective.[80] Interdiction encompasses a broader range of activities designed to interrupt an adversary's ability to exercise sea control or sea denial activities. These methods may be employed against an adversary's combat, logistics, and shipping either for direct effects or to meet an operational or tactical aim. Proficiency in these operations demands regularly exercising both as single units and as part of a maritime or joint task force. The capability to interdict is not confined to warfighting operations: it may also include supporting Police, Customs, fishery, and quarantine officers.

76. AAP—06 (2016)

77. JDP 3—00

78. A single identical display of relevant information shared by more than one command. A common operational picture facilitates collaborative planning and assists all echelons to achieve situational awareness.

79. *Australian Maritime Doctrine*: RAN Doctrine 1-2010. Sea Power Centre – Australia 102

80. AAP—06 (2016).

Barrier Operations and Layered Defence.

Barrier operations concentrate forces to deny an adversary access to or use of a geographic area. Layered defence calls for combining units to provide overlapping surveillance and protection. It includes screening of high value assets such as capital and mission essential ships and the routeing of convoys.[81] This is one of the most established roles in maritime strategy.

Protection of Shipping.

Both the global economy and national way of life depend on the free movement of goods by sea: protection of the free movement of trade is one the RNZN's most vital roles. Direct threats to shipping, both symmetric (such as the deliberate targeting of tanker traffic during the Iran-Iraq war) and asymmetric (such as piracy against shipping off the Horn of Africa, East Africa, Malacca Straits, and elsewhere) have necessitated the direct protection (escort) of shipping by naval forces. Worldwide economic dependence on seaborne trade is such that disrupting or threatening shipping is an option which both state and non-state adversaries would pursue if such actions were not expected to be met by overwhelming naval force from those states that adhere to an international rules-based order. Indeed, the deterrence provided by the standing naval forces of the United States, NATO, and nations such as New Zealand has been so effective that the safety of shipping from attack is often taken for granted. The safety of shipping and thus worldwide economic stability requires perpetual vigilance and maintenance of readiness and combat effectiveness.

But naval combat forces do not deter all threats to shipping. Piracy remains a significant problem, as does the threat of terrorist attacks against shipping. Piracy usually emerges in littoral regions where governance is weak or conflict and poverty are endemic.

Photo courtesy of Ports of Auckland Ltd

81. *Australian Maritime Doctrine*: Op. cit., p 103-104

An active naval presence supported by effective surveillance along with command and control is generally needed to minimise it. Experience in the Malacca Straits shows that piracy diminishes significantly when such measures are in place. However, terrorists may be ideologically committed to the point where deterrence is ineffective. Nor can it be assumed that piracy, armed robbery at sea,[82] and terrorist attacks on shipping will continue to be characterised by the low order technologies generally in evidence today. Drug traffickers have evolved increasingly sophisticated means of defeating law enforcement, including low observable (stealth) technology, unmanned aerial vehicles, semi-submersible vehicles, and submarines. If the stakes become high enough, criminals and terrorists could evolve equally sophisticated means of attacking shipping. For example, fighters in Yemen have attacked shipping in the Red Sea using surface-to-surface guided missiles. Protection of shipping from non-state actors could in future require the high-end naval combat capabilities we have typically associated with inter-state conflict.

Maritime Trade Operations (MTO).

MTO, which were once known as Naval Control of Shipping, manages and organises shipping routeing it to avoid known threats and by arranging direct protection by naval escorts. MTO Shipping Coordination Teams can be deployed to support multinational maritime shipping coordination centres.

82. Some states categorise incidents that occur in territorial waters as armed robbery while incidents that occur on the high seas is piracy.

Combat Operations from the Sea

Combat operations from the sea range from lower-order missions that 'promote stability, prevent crises, and combat terrorism' to 'harder tasks to deter, dissuade and if necessary defeat potential adversaries.'[83] The higher end of operations requires a complete set of combat capabilities with which to engage an adversary in either offensive or defensive postures. They include generating effects to influence operations on the land either directly or by protecting forces that are providing support to land operations, such as amphibious shipping and Mine Counter Measures (MCM) forces. The Naval Combat Force can conduct anti-submarine warfare, provide local area air defence to other shipping, use naval gunfire to support land operations, and contribute to joint force situational awareness through ISR operations. Such operations take place across littoral areas where land meets the sea. Combat operations from the sea include:

Sealift.[84]

These operations use ships to transport land forces into theatre via established port facilities or by Logistics Over the Shore (LOTS) using amphibious capabilities in the absence of port facilities or if they are too

83. Till, G., Op. cit., pp 346-7.

84. *Australian Maritime Doctrine*: Op. cit., pp 106.

remote from the objective to be useful. The most cost-effective sealift utilises Defence-owned shipping or hired commercial shipping, which is the only practicable method of deploying at scale, even to land-locked countries. An amphibious force will normally include chartered shipping to complement the lift provided by specialist amphibious shipping. Chartered shipping used for projecting a land force from the sea85 may include transport for personnel (passenger vessels), vehicles (roll-on/roll-off ferries), hospital ships, container ships, water ships, tankers, and specialist lift shipping, such as semi-submersibles to transport additional landing craft.

Amphibious Operations.

Amphibious operations are often equated to large scale and opposed landings such as those carried out during the Second World War. New Zealand does not aspire to this level of capability but it does have amphibious capability in HMNZS CANTERBURY. Most amphibious operations are deliberately conducted in areas where the landing is likely to be unopposed. This avoids excessive casualties (economy of effort) and uses surprise and manoeuvre to outflank a land-based adversary.

Amphibious ships are designed to transport and put ashore land forces by landing craft and/or helicopter. Amphibious ships have a large radius of action, purpose-designed facilities to embark and disembark troops and their equipment, and some capacity to logistically support other warships. They have considerable sealift capacity for transporting general stores and materiel as well as limited capacity to sustain operations ashore. It is also possible for amphibious ships to provide sea basing of logistics support.[86]

Mine Counter Measures and Rapid Environmental Assessment.

These capabilities enable maritime forces freedom of manoeuvre to operate in the littoral and project forces ashore. This is achieved by understanding the physical environment along with locating and if required neutralising mine threats and obstacles. Specialist personnel and underwater sensors can be configured to operational requirements. These can range from overt data gathering with a focus of safety of surface navigation through to discreet underwater reconnaissance of beaches prior to amphibious operations.

The ability to carry out combat operations from the sea anywhere in the Asia-Pacific or further afield is a fundamental operational tenet of the RNZN. The examples below illustrate the varied nature of combat operations from the sea.

85. UK JDP 0-10 (5th Edition)

86. *Australian Maritime Doctrine*: RAN Doctrine 1-2010. Sea Power Centre – Australia.

Example 1: During the Korean War the RNZN's highly versatile Loch Class Frigates engaged in several combat operations from the sea. One was at Nampo in North Korea to disable enemy gun positions at Sogon-Ni. Under cover of a bombardment provided by HMNZS ROTOITI's guns, a naval landing party including two Able Seamen, Norman Scoles and Edward Button, managed to take the enemy gun position with relative ease in a flanking attack. The assault group scaled a cliff, disarmed the position and took two soldiers prisoner. Scoles and Button were each awarded the Distinguished Service Medal for their conduct during a subsequent operation involving close action with the enemy, during which 19 year old Able Seaman Robert Marchioni was killed by machine gun fire – the last time the RNZN lost a sailor in combat.

Example 2: During Exercise JOINT VENTURE in the Cook Islands in 1986 a New Zealand joint force landed force elements from Rarotonga onto another island in the group. Units taking part included the frigates HMNZS CANTERBURY and WAIKATO in a naval gunfire support role with the Task Force Commander embarked and directing the operation. Four Royal New Zealand Air Force (RNZAF) A4 Skyhawk strike aircraft provided Combat Air Patrol and Ground Support to the troops landed by two C130 Hercules. Other elements included HMNZS TUI in an ISR role as well as RNZAF Andover transport aircraft and Iroquois helicopters for support duties. The Army provided Special Air Service (SAS) and assault troops plus logistic efforts to sustain the force ashore.

Example 3: The biennial Exercise SOUTHERN KATIPO is New Zealand's largest military exercise. In the scenario New Zealand forces lead a coalition of Pacific Island Forum Member States' forces in a littoral operation to counter political instability and unrest. Army units together with their heavy equipment are transported in the logistic support ship HMNZS CANTERBURY and landed from the sea; others are inserted by the Air Force. Naval vessels patrol the coast and offer support to the Air and Army forces ashore. Participants include military elements from the United States, France, Britain, Canada, Australia, and Tonga. Papua New Guinea, Fiji, Brunei, Malaysia, and Timor Leste have also taken part.

Constabulary

Navies perform a range of functions short of actual combat in support of what is sometimes described as 'good order at sea.' These are known as constabulary operations. Although combat capabilities are not essential for constabulary operations, they may be needed to lend credibility to law enforcement, and on occasion, defeat an armed opponent. Core skills and capabilities needed for combat (such as ISR) and highly trained and motivated values-driven people accustomed to adversity and to the sea are also required. Some countries, such as the United States, maintain separate coast guard services to perform constabulary functions. In smaller countries like New Zealand it is generally more efficient to assign constabulary functions to their respective naval forces.

Naval personnel can be assigned to either combat or constabulary roles with relative ease, but ships specifically acquired for constabulary roles are likely to be markedly different from those intended for combat. Constabulary roles can be performed effectively by combat platforms such as frigates although performing them efficiently usually requires purpose-built ships, as the capabilities of a combat platform will almost always exceed those required for constabulary operations. Combat platforms are more expensive to acquire and operate than ships designed for constabulary functions. Employing them for such activities leads to degradation in readiness due to skill wastage and

consumption of structural and component life. However, combat platforms are often deployed for constabulary operations such as sanctions enforcement, drug interdiction, and anti-piracy operations if the operational area is particularly unstable or if adjacent theatres could require combat capabilities.

Constabulary operations include the following:

- Fisheries protection;
- Offshore oil and gas installation protection;
- Environmental protection;
- Border protection;
- Wildlife protection;
- Sovereignty patrols;
- Sanctions enforcement; and
- Peace support or monitoring operations.

Constabulary operations can be conducted in support of New Zealand government agencies including Police, the Ministry for Primary Industries, New Zealand Customs, and the Department of Conservation. Indeed, a substantial part of the RNZN's effort and output delivery to government is the provision of services to other agencies. Naval assets are seldom placed under the direct authority of these agencies in the same way that they may be assigned to a military commander, but they do operate in support of agencies to achieve aims set by them. The RNZN is normally tasked for constabulary operations via the National Maritime Coordination Centre (NMCC), which ensures naval tasking is prioritised to best effect given the competing demands of the various government agencies. Partnership is critical to success when supporting other agencies and naval personnel at all levels must work to achieve this. Efforts must be made to adapt, where possible, to other agencies' ways of operating; if this is not possible, compromise should be sought.

Constabulary operations are also conducted to support other governments, notably those of Pacific partner nations. The same principles of cooperation in partnership applicable to the support of other New Zealand agencies apply equally to working with the agencies of other governments, with the added dimension of respect for local cultural perspectives. Partnership based on sound relationships is as important in peace support operations as it is for multi-agency work, if not more so, and could well be complicated by having to work with unfamiliar partners, or by command and control arrangements more attuned to political necessity than operational efficiency. Such operations invariably require tact and sensitivity in addition to very careful attention to ISR and the building of situational awareness.

Experience must be captured, analysed, and applied to the next operation. As in all types of maritime operations, study and planning are the keys to success. The RNZN strives to be a partner of choice for other agencies and governments to achieve the best possible outcome for New Zealand.

Example: The practice of Illegal, Unreported, and Unregulated (IUU) fishing in the Ross Sea has caused headaches for regulatory authorities and *bona fide* owners of fishing quota for many years. As part of a multi-agency operation (including the Ministry of Foreign Affairs and Trade and the Ministry of Primary Industries), HMNZS WELLINGTON intercepted two fishing vessels in January 2015 unlawfully fishing for Toothfish in the Southern Ocean and collected extensive video and photographic evidence of their activities. A report from WELLINGTON noted that '...we caught them fishing (and) using the element of surprise and tenacious tactics...gathered evidence...to eventually bring these guys to justice'.[87] In an excellent example of international cooperation the two ships were detained: one in Thailand and another in Malaysia some time later. The masters and crews forfeited their catch and suffered financial penalties including fines. The syndicate linked to these vessels and others faced criminal proceedings from the Spanish Government.[88]

87. See *Navy Today*, Issue 186, February 2015, pp 4-7.

88. See *Professional Skipper Magazine*, March/April 2015 pp 70-71.

Stability, Safety, and Assistance Operations

Stability, Safety, and Assistance Operations involve a range of functions that the RNZN is called upon to perform because the capabilities needed for its primary functions are useful for other important tasks, such as stability operations, HADR, and SAR. Safety and assistance operations are an extremely important part of the service the RNZN provides to New Zealand: by helping to create a safe, stable, and peaceful region such operations directly contribute to peace and security.

Stability Operations.

New Zealand defence and security policy is partly premised on rules-based international order. Upholding democratic principles and the rule of law is further considered a prerequisite for regional stability, security, and prosperity. Threats to global and regional stability occasionally develop, such as armed insurgencies which seek to overthrow legitimate governments or breakdowns in law and order leading to life-threatening levels of criminality. The New Zealand government may elect to deploy the NZDF to address such situations. Stability operations aim to restore conditions in which legitimate local authorities can resume direct responsibility for law and order. These authorities must be supported and their authority visibly upheld. Such operations may be carried out under a United Nations mandate or on request for assistance from the sovereign government, as with the Regional Assistance Mission to the Solomon Islands (RAMSI) in the early 2000s. Stability operations involve the following:

HMNZS TE MANA and TE KAHA in Honiara, Sept 2000

- NZDF forces will be subject to the direction of the Ministry of Foreign Affairs and Trade Head of Mission;
- They will invariably be joint operations. Naval forces will play an essential role in providing sealift, manoeuvre in the battlespace, offensive action from the sea, and command and control platforms;
- Although it is conceivable that the NZDF may be called upon to conduct stabilisation operations without support, they will usually be carried out in partnership with Australia (with either nation as lead);
- Conditions are highly fluid so commanders must establish close relationships with the Head of Mission and cooperating forces to build a layered situational understanding; and
- simultaneous humanitarian operations are invariably required to relieve suffering caused by instability.

Example 1: In 1961 the frigate HMNZS PUKAKI deployed to the then Gilbert Islands with a 100 man landing party embarked as a contingency measure for restoring order following civil disturbances on Ocean Island. The presence of this force, which was prepared to intervene if called on by the civil authorities, was known ashore and contributed to the resolution of the crisis. This was not the first such expedition to Ocean Island. In 1925 HMS LABURNUM, a Royal Navy sloop deployed to the New Zealand Station and at the direction of the New Zealand Naval Board, landed a small armed force from its ship's company to restore order after a race riot between Chinese and Gilbertese employees of the British Phosphate Commission. The show of force was sufficient to end the employees' confrontation.[89]

Example 2: The RNZN was part of the New Zealand forces deployed to East Timor as part of the International Force in East Timor (INTERFET) in 1999. HMNZS TE KAHA operated with the INTERFET force for several days before departing for the Persian Gulf to meet other international commitments. She was replaced by HMNZS CANTERBURY. Four patrols of 16, 20, 21 and 20 days duration were undertaken in the area of operations and maritime approaches to East Timor. Twenty days were spent as guard ship for Dili with another fifteen days spent guarding Suai on the South Western border. [90]

89. *Maritime Doctrine for the RNZN*, 1997.

90. http://navymuseum.co.nz/hmnzs-canterburys-deployment-to-east-timor

Humanitarian Assistance and Disaster Relief.

Rising temperatures, rising sea levels, and other changes in weather patterns resulting from climate change are having serious impacts in New Zealand and the wider South Pacific. Climate change is also increasing the frequency and intensity of tropical cyclones, flood, drought, and bush fires. The region is also prone to earthquakes and volcanic activity. The NZDF is expected to be able to respond by mounting Humanitarian Assistance and Disaster Relief (HADR) operations. Key elements are:

- Provide support for the local authorities to restore conditions in which the population can go about their daily lives in safety with adequate food, water, shelter, and medical support;
- Relationships are crucial and must be based on trust, long term contact, and mutual respect;
- An MFAT Head of Mission has primacy in directing New Zealand operations, which may include other agencies in addition to the Defence Force. NZDF commanders will be responsive to the Head of Mission;
- Such operations are almost always joint: the RNZN provides sealift and intra-theatre manoeuvre capabilities including rotary wing tactical air lift;
- Naval assets may be first on the scene and must be prepared to support follow up forces with situational awareness and planning information;
- Naval assets may offer NZDF commanders and the Head of Mission the most capable command and control platform available;
- Independent New Zealand relief operations are possible but large scale operations will likely be combined in nature. Combined command and control arrangements may be created or NZDF forces may be assigned discrete independent tasks, in which case effective liaison with adjacent national forces will be essential; and
- Natural disasters can expose fragility in local governance, particularly where life is threatened by health risks and lack of food and shelter. NZDF forces may be required to support local forces in maintaining security whereby the operation will take on the characteristics of a stability operation.

Example 1: Humanitarian and Disaster Relief Operation Tropical Cyclone Winston 2016. The cyclone hit the Fijian Islands on 20 February 2016 causing widespread damage. An RNZAF P-3K2 Orion flew an aerial surveillance mission over the cyclone-hit areas the next day and over the following week RNZAF Hercules aircraft transported a total of 120 tonnes of aid supplies. An RNZAF B757 flew in Army engineers and urgently needed water containers on 24 February. HMNZS WELLINGTON arrived four days later with relief supplies and more personnel. For the next three weeks WELLINGTON operated off the Northern Lau group of islands; it delivered 70 tonnes of aid and surveyed a safe passage and anchorage for the multi-role vessel HMNZS CANTERBURY. On 3 March CANTERBURY arrived carrying 106 tonnes of relief supplies, an RNZN Seasprite helicopter, and two RNZAF NH90 helicopters, plus 45 Army vehicles along with their supporting personnel. The NH90s were flown off at Suva before CANTERBURY moved to anchor at the Lau group. CANTERBURY off-loaded the Army vehicles and delivered 380 tonnes of relief supplies and construction materials.

Fijian locals watch from the shore as HMNZS CANTERBURY unloads supplies to the cyclone ravaged island group

Example 2: Christchurch Earthquake. Disaster relief is not always a service New Zealand provides to others. At 12.51 pm on Tuesday 22 February 2011 Christchurch was struck by a magnitude 6.3 earthquake. Although it was of a lower magnitude than the previous large quake in September 2010, the later quake's epicentre was shallower and closer to the city centre. It struck when the city was full of workers and its effect

was immediate and devastating: one hundred and eighty-five people were killed and the Prime Minister declared a national state of emergency. Over one thousand troops – including 129 personnel from the Singapore Armed Forces – were in the area for a major NZDF exercise at the time of the earthquake and HMNZS CANTERBURY was alongside at her home port in nearby Lyttleton. These soldiers and sailors were amongst the first on the scene to assist in the rescue effort led by Civil Defence, and emergency and health services. CANTERBURY provided vital sustainment and logistic support to the rescue efforts as well as critical communications during the first confused hours after the earthquake. The NZDF response to the Christchurch earthquake of February 2011 was one of the largest domestic deployments in the history of the NZDF. The RNZN's contribution included providing four ships – CANTERBURY, OTAGO, RESOLUTION, and PUKAKI – and it proved to be invaluable. Reservists from HMNZS PEGASUS assisted in rescue efforts at the collapsed CTV building where 115 people died. Lieutenant Commander Kevin Carr RNZN was awarded the New Zealand Bravery Medal for his efforts at the scene.

Example 3: 2016 Kaikoura Earthquake: At 12.02am on Monday 14 November 2016 a magnitude 7.8 earthquake struck near Kaikoura on the east coast of the South Island. As many as twenty faults ruptured causing landslides, subsidence, and a seven metre high tsunami. Two people died and more than fifty were injured. The town was cut off from road and rail access; the sea floor around the town was dramatically altered, which curtailed the operation of commercial fishing and tourist boats. Kaikoura was in a similar situation to Napier's in 1931 and a combination of air and sea assets of the NZDF was required to conduct a recovery and relief operation. By Wednesday 16 November, crews were loading people onto HMNZS CANTERBURY and over 700 tourists and locals had been evacuated from the town by helicopters and via ship by the end of the day.

The vehicle deck on HMNZS CANTERBURY doubles as emergency accommodation for Kaikoura Earthquake evacuees

At the time of the quake a multinational fleet was assembling in Auckland to mark the RNZN's 75th Anniversary and a number of nations offered their assistance. The force that operated off Kaikoura ultimately consisted of HMNZ Ships CANTERBURY, TE KAHA, ENDEAVOUR, and WELLINGTON; HMCS VANCOUVER from Canada; HMAS DARWIN from Australia; and USS SAMPSON from the United States. Aerial reconnaissance was supported by a USN P-3 Orion from the United States and a JMSDF P-1 maritime patrol aircraft from Japan. Helicopters from the warships ran supplies ashore and helped conduct the evacuation. Teams of sailors from all the ships operated ashore, distributed essential supplies, and assisted with the clean-up. It was the first time since 1984 that Royal New Zealand Navy, Royal Canadian Navy, Royal Australian Navy, and United States Navy vessels had operated in New Zealand waters but because they exercised together regularly overseas in the previous years they were able to come together during the crisis to rapidly deliver effect ashore in Kaikoura.

Search and Rescue.

Naval vessels are highly effective Search and Rescue (SAR) platforms due their requirements for combat and constabulary operations including range, endurance, seakeeping,[91] ISR, command and control,[92] and aviation capabilities.

Example: In June 1994 a race involving 60 cruising yachts sailed from Auckland to Tonga and into a rapidly developing Force 12 storm. The storm raged unabated for four days across more than 243 000 square miles of sea. Nine yachts broadcast distress signals and required assistance. During a period of 72 hours and in the midst of the full fury of the storm, 21 people were rescued from seven disabled or sinking yachts by ships coming to their aid. One yacht managed to survive and continued to Tonga. One was lost with all hands. RNZAF P-3 Orion and merchant seamen from freighters involved in the rescue reported that surface winds were in excess of 90 knots. They also observed mountainous seas with waves in excess of 100 feet high.[93] HMNZS MONOWAI, making its way from Auckland to survey grounds in the Pacific, received instructions to assist with the rescue. She rescued eight survivors from three disabled craft. These operations demanded outstanding seamanship by her Commanding Officer and ship's company. A Pacific Class Rigid Hull Inflatable Boat (RHIB) was launched in extreme sea conditions; its crew were outstanding

91. The dynamic characteristics of a ship surviving and operating in various conditions of swell, wave height, wave length and wind.

92. The process and means for the exercise of authority over, and lawful direction of, assigned forces.

93. Duder, Tessa, (Ed.). *Salt beneath the skin*, Harper Collins, Auckland, 1999, pp 178 – 192.

in its efforts and succeeded in rescuing survivors from one yacht including its injured skipper. Commander Larry Robbins, MONOWAI's Commanding Officer, was awarded the OBE. *Te Waka Huia o Te Taua Moana o Aotearoa* – The National Museum of the Royal New Zealand Navy holds a detailed account of the rescues.[94]

Environmental Protection.

The marine ecosystem is vulnerable to the impact of environmental disasters. Events such as oil spills must be contained as quickly as possible. The RNZN does not maintain the capability to deal with large-scale pollution events at sea, but it does have a role in establishing the extent of disaster, securing the scene, collecting evidence, and providing other agencies with command and control platforms. Oil pollution events such as the grounding of an oil tanker usually have a SAR component and naval ships may be the first responders or the first government asset on the scene.

Example: On 5 October 2011 the 47,000-tonne container ship *Rena* ran onto the Astrolabe Reef in calm waters 12 nautical miles off the Tauranga coast. This incident led to New Zealand's worst environmental maritime disaster. Within two days of the disaster, Operation RENA was in full swing. HMNZS MANAWANUI had just returned to Devonport Naval Base after weeks of training at sea but she sailed for Tauranga before midnight on 7 October. HMNZS ROTOITI followed the next morning. HMNZS ENDEAVOUR joined the operations on 9 October and was immediately set up as a command post. HMNZS PUKAKI arrived three days later. A SH-2G Seasprite helicopter ferried salvors to the wrecked ship and made reconnaissance runs in the initial stages of the operation. It also provided SAR contingency when the salvors worked through the night. Two severe cracks ran across *Rena*'s hull and regular bouts of stormy weather left the ship listing 20 degrees to starboard. Her cargo included approximately 1,368 shipping containers; at least 22 contained hazardous substances. Some 350 tonnes of heavy oil from the ship's damaged fuel tanks leaked into the sea in the first weeks and at least 88 containers fell overboard. The slick quickly reached the popular beach at Mount Maunganui, prompting residents to join around 150 Defence Force personnel in clean-up operations.

94. See HMNZS MONOWAI SAR Operation June 1994, RNZN Museum Torpedo Bay, Devonport, Auckland.

A RNZN Seasprite surveys the listing container ship, *Rena*

On 11 October heavy swells threatened *Rena's* precarious perch atop the reef, leaving it listing around five degrees to starboard. Oil released from a rupture to one of *Rena's* main fuel tanks coated the waters. The ship's cracked hull groaned under the immense strain and the containers on its stern looked like they were about to tumble into the sea. A mayday call came at 0930 from *Rena's* salvage master: ROTOITI, TAUPO, and ENDEAVOUR quickly dispatched five Rigid Hull Inflatable Boats alongside *Rena's* port beam to evacuate her remaining crew. With the containers looking menacingly close to toppling over, it took under an hour for RNZN sailors to battle rough seas and complete an extremely risky operation to rescue the remaining 24 people on board. The evacuation doubtless averted a possible tragedy. Operation RENA began to be scaled back on 19 October as the commercial salvage operation gained momentum. Around 350 Defence Force personnel, including 130 sailors and the RNZN's Mine Countermeasures Team, had been involved. Another 150 defence personnel were on standby. Lieutenant Layamon Bakewell RNZN, ROTOITI's Commanding Officer, was awarded the Distinguished Service Decoration for his actions on 11 October.

HMNZS TE KAHA in Istanbul

Naval Diplomacy

The fundamental aim of naval diplomacy is influencing other people's behaviour. It can be used in many different ways to convey messages but also to influence events. The effectiveness of naval diplomacy resides in the potential combat power of a naval force.[95] Naval diplomacy techniques include coercion, which is the threatened use of lethal force to modify and change behaviour; participation in bi-lateral or multi-lateral exercises such as RIMPAC;[96] attending training and command and staff courses fleet reviews and port visits. A fleet review offers opportunities to build relations with partner navies and the spectacle afforded by a large number of warships conveys to the wider public the role played by the RNZN in national life. For example, the fleet gathered at Auckland in 2016 for the RNZN's 75th Anniversary illustrated the cordial relations enjoyed between New Zealand and 23 other nations represented either by ships or senior officers.

Naval diplomacy can also be used to signal support for a partner nation by visiting its ports and exercising with its forces. Port visits are usually supported by local New Zealand diplomatic staff and include key leadership engagement, cultural exchanges, and sporting competitions. They provide the New Zealand government opportunities to affirm cordial relations with partner states and navies and with opportunities to develop friendly relations

95. Till, G., Op. cit., p 242.

96. Held biennially, RIMPAC (Rim of the Pacific) is the world's largest international maritime warfare exercise.

with other states. Similarly, contributing to a coalition presence in a region of conflict or potential conflict can signal support for collective security measures under the aegis of the United Nations (UN). In fact there is a diplomatic element to all peacetime deployments regardless of the task or mission of the force deployed. The deployment of HMNZS TE KAHA and TE MANA to conduct UN sanctioned operations to deny the use of SLOC to Al Qaeda signalled New Zealand's commitment to the international rule of law and its support for the legitimate governments of the region. HMNZS HAWEA deployed to Fiji in 2017 and HMNZS TAUPO in 2018 for Resource and Border Protection Operations but also served to support the regeneration of Fiji's military capability through integrated on-board training in maritime patrol operations.

Example: Bougainville is an island province of Papua New Guinea where a civil conflict had grown steadily worse during the 1980s. By 1990 a humanitarian crisis was looming; the New Zealand government offered to host peace talks. Three warships were involved in facilitating negotiations. WELLINGTON embarked the Papua New Guinea government delegation whilst WAIKATO embarked the secessionists of the Bougainville Revolutionary Army. The talks were hosted on board ENDEAVOUR. The seaborne venues gave each side confidence that there would be no physical threats to either of the delegations. The talks were successful and led to the so-called 'Endeavour Accords'. Unfortunately the security situation on Bougainville deteriorated further and broke down four years later. A new South Pacific Peacekeeping Force deployed to the island. Regrettably that mission proved unsuccessful.

New Zealand Army soldier interacts with Bougainville children

In 1997 the New Zealand Government initiated another set of talks hosted at the New Zealand Army Camp at Burnham. The initial result was an agreement for two New Zealand ships to return the Bougainville delegation during July to pick up Papua New Guinean government prisoners of war. CANTERBURY and ENDEAVOUR conducted this mission successfully. This helped build confidence in the peace process and a truce was signed on October 1997. The next month CANTERBURY – supported by ENDEAVOUR, MANAWANUI, and Royal Australian Navy landing craft – inserted the unarmed Peace Monitoring Group (PMG) at Kieta Harbour.

CANTERBURY provided a visible reminder of armed force in the event the truce broke down as well as a potential safe haven for the unarmed PMG if they had had to evacuate. In the event a truce was established and the frigate's sailors assisted PMG troops with an array of civil assistance tasks in and around Kieta. The ships also provided mobility to the PMG troops as the mission extended its reach around the island. MANAWANUI undertook various harbour and beach surveys and her divers attempted to move a wreck – a relic of the conflict. CANTERBURY and ENDEAVOUR were withdrawn in December 1997 but MANAWANUI stayed on in direct support to the Peace Monitors until April 1998. The peace mission lasted 5½ more years and MANAWANUI returned to Bougainville for several short deployments in rotation with RAN ships.[97]

97. *Navy Today*, Issue 80, August 2003, Wellington.

OPERATIONAL FORCES

The roles of the RNZN are carried out by the following forces.

The Naval Combat Force

The Naval Combat Force comprises two ANZAC Class frigates with embarked helicopters able to conduct sea control operations within a coalition or multi-national naval task force. This capability provides combat power for protecting military and civil assets and influencing operations at sea and from the sea. It provides escort protection to shipping. The ANZAC frigates and their integrated combat systems are maritime force elements capable of operating across the spectrum of maritime operations: from constabulary and humanitarian tasks to combat roles. They have an armament fit that allows them to operate in medium to high threat situations and to engage land, air, and sea targets. Their Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) systems are interoperable with combined and coalition forces and their embarked helicopters provide extended reach, surveillance, and air-delivered weapon capabilities. These ships have a global reach and their size and endurance allow them to carry out operational tasks in blue water, territorial waters, and littoral environments.[98]

98. Territorial Sea/Waters are waters adjacent to a state over which it exercises sovereignty, subject to the right of innocent passage. Every state has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from the baselines. (ADDP 06.4)

The Naval Support Force

The Naval Support Force has a sustainment element and a projection element.

- The Maritime Sustainment element of the force is the ship (or ships) that transports fuels and other liquids and stores, primarily to sustain deployed naval forces. Logistic support afloat provides direct organic replenishment of fighting units and it is required for any operation in which a maritime force must be sustained at distance from shore bases. HMNZS AOTEAROA, the next generation of such capability, will permit deployment anywhere in the world to support maritime operations. An embarked helicopter will allow for the rapid transfer of operational supplies. Ice-strengthening will provide an important Antarctic support capability for McMurdo Station and Scott Base as well as for monitoring activity in the Southern Ocean.
- The Maritime Projection element delivers Logistics over the Shore and Sealift. It also provides means of manoeuvre for land forces in the maritime space by transporting them to an objective and supporting them when landed. CANTERBURY also has medical facilities and capability to provide command and control sufficient for a New Zealand-led operation within the Southwest Pacific. She also embarks medium utility and naval helicopters for different roles and can support other government agencies in a variety of missions including HADR.

The Naval Patrol Force

The Naval Patrol Force comprises two Offshore Patrol Vessels (OPV) and four Inshore Patrol Vessels (IPV). These vessels conduct constabulary tasks. The Naval Patrol capability is guided by ISR provided by the National Maritime Co-ordination Centre. The Naval Patrol Force is a key component of the Whole of Government provisions for ensuring good order at sea in New Zealand's immediate areas of interest. While IPV are mainly deployed within the EEZ, they also can deploy for operations around neighbouring Pacific Island nations. OPV can conduct presence and deterrence activities, and patrol to the limits of New Zealand's maritime domain, including the Southern Ocean and Antarctica.

The Littoral Warfare Force

The RNZN deploys specialists into littoral environments. These force elements enable manoeuvre of naval forces and other shipping along with manoeuvre from the sea for land units. This is achieved through the integration of naval divers, military hydrographers, and other trained personnel to conduct mine-counter-measures, rapid environment assessment, and specific military diving activities such as underwater search and recovery as well as maritime explosive ordnance disposal. The Littoral Warfare Force operates independently or as part of a larger amphibious joint landing force and either from the sea or ashore.

Maritime Aviation

Maritime aviation provides the NZDF with the capability to conduct a range of military maritime power roles either in concert with the RNZN, other government agencies or in support of partners. Helicopters are an indispensable part of most maritime operations. They are an integral part of the frigates' weapon systems but can also perform a variety of surveillance and support tasks from other platforms within the fleet.

P-8A Poseidon Maritime Patrol Aircraft – replacement for the P3 Orion

Naval aviation is jointly enabled: RNZAF personnel provide maintenance and support; RNZN personnel provide aircrew. The RNZAF's medium lift NH90 helicopters can operate from naval platforms in support of civil emergencies, counter-terrorism, special operations, and amphibious lodgements. The RNZAF P-3K2 Orion Maritime Patrol Aircraft operated by No. 5 Squadron can operate domestically or be deployed to combined joint operations in surveillance and anti-submarine roles.[99] The New Zealand Defence Force (NZDF) also operates Remotely Piloted Aircraft Systems (RPAS), which are utilised by the RNZN to support Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) at sea.

99. The 3K2 Orion will be replaced under the Future Air Surveillance Capability project and the majority of its roles will be undertaken by the Boeing P-8 Poseidon due 2023.

Maritime Area Surveillance Forces

Maritime Patrol Aircraft are highly capable maritime surveillance and warfare platforms in their own right. Operating in conjunction with naval surface forces, they provide greatly extended surveillance and combat capability against surface targets and submarines. Surveillance in the EEZ typically entails wide-area monitoring of fishing vessels, commercial and container vessels, recreational power craft, and yachts. Surveillance is looking for patterns and changes to those patterns. The absence of anyone or anything in an area under surveillance is as important as their presence because it establishes the pattern that should be expected for that area being watched. Commercial vessels can be tracked by satellite monitoring of their Automatic Identification System (AIS) and by other space based systems. Under certain conditions vessels can be tracked by their radar and communication systems. Information collected is fused to develop a Common Operating Picture (COP), which is shared with New Zealand government agencies who work together to interdict smugglers of drugs, weapons, and illegal immigrants as well as people-traffickers and to conduct SAR.

RNZAF P-3K2 Orion Maritime Patrol Aircraft provide the bulk of maritime airborne surveillance of New Zealand's exclusive economic zone, the Pacific region, and the Southern Ocean. The P-3K2 Orion has various sensors to detect threats underwater, on the surface of the water, and in the air. With its 15 hour endurance and suite of weapons, the Orion provides an optimal land-based maritime patrol capability that can also support littoral and land operations.[100]

Airborne and space based surveillance is augmented by ships conducting maritime surface surveillance. All naval ships are fitted with a range of intelligence, surveillance, and reconnaissance (ISR) sensors that can bring increased fidelity to the Common Operating Picture (COP). The capability of those sensors varies from platform to platform; units of the naval combat force are the most fully equipped.

100. *Air Power Terminology*, RNZAF Edition, Version 1, 2018.

PERSONNEL

The nation's naval forces are composed of Regular Force supplemented by the Royal New Zealand Naval Reserve, the Royal New Zealand Naval Volunteer Reserve, and civilian staff. Trained personnel are a capability in their own right. The RNZN can provide:

- Deployable Command Teams;
- Maritime Trade Operations Staff; and
- Naval personnel for land based and land focussed operations.

THE WAY THE RNZN OPERATES

The RNZN operates singly or in concert with other RNZN units; as part of an NZDF deployment with embarked army units and naval helicopters supported by RNZAF Maritime Patrol Aircraft; or as part of a much larger multi-national Coalition Maritime Task Force comprising ships and aircraft from different countries. When the RNZN deploys groups of ships or large numbers of people for exercises and operations there will be a senior officer to whom more junior leaders can refer pressing issues and who can be used as a sounding board. However, very often ships operate alone. A frigate deployed for coalition operations is usually the only RNZN major fleet unit on station, even though it may be part of a very large force. An OPV deployed for Southern Ocean patrol, or an IPV deployed to support partner nations in the Pacific, may be operating entirely alone. Our Commanding Officers and the leaders at all levels who support them must be resilient and adaptable to a very high degree to cope with this isolation; in this they are greatly aided by an understanding of our doctrine and the ways in which it can be applied.

CONCLUSION

New Zealand's naval forces are primarily trained and equipped for fighting and prevailing in a wide variety of operational settings, but they can also perform a wide range of non-combat activities. Flexibility inherent in the freedom of the high seas also allows the RNZN to make a unique contribution to joint operations. The RNZN provides the New Zealand government with a range of options and capabilities to meet its international obligations and national-strategic goals.

CHAPTER 05

WHAT WE DO
SUMMARY POINTS

The ability to fight and the necessity to prevail is the basis of all operational capabilities in the RNZN. It is also the basic principle from which all NZDF and RNZN doctrine is derived. NZDDP-D

- The RNZN is trained and equipped to conduct HADR operations; peace enforcement, peace keeping, and peace building operations; border protection operations; and capacity building.
- The New Zealand government maintains armed forces to defend New Zealand and protect its interests; to contribute forces to collective security, coalition or UN-mandated operations; and to provide assistance for any other public service.
- The RNZN applies naval power by performing the following five roles:
  - Combat operations at sea;
  - Combat operations from the sea;
  - Constabulary operations;
  - Safety and assistance operations; and
  - Naval Diplomacy.
- The roles of the RNZN are carried out by the following Forces:
  - Naval Combat;
  - Naval Support;
  - Naval Patrol;
  - Littoral Warfare;
  - Maritime Aviation; and
  - Maritime Area Surveillance.
- The RNZN operates across a range of configurations: singly or in concert with other RNZN units; as part of an NZDF deployment with embarked army units and naval helicopters supported by RNZAF Maritime Patrol Aircraft; or as part of a much larger multi-national Coalition Maritime Task Force comprised of a number of ships and aircraft from different countries.

CHAPTER

06

HOW WE WORK

CHAPTER 06
HOW WE WORK

The New Zealand Sailor's Creed

I am a sailor of the Royal New Zealand Navy
Te Taua Moana o Aotearoa
I represent the proud heritage of those who have gone before me
I serve to protect our people and our whanau
with integrity and mana
I will follow those above me and lead those below me
I embody the navy's Core Values - Courage, Commitment,
Comradeship and will challenge those who do not
He heremana ahau, I am a sailor

INTRODUCTION

The chapter explains the Royal New Zealand Navy's (RNZN) approach to doing what it does. The topics covered in this chapter are:

- RNZN Operational Tenets;
- The Warfighting Ethos of the RNZN;
- Leadership;
- The Principles of War;
- Combined, Joint and Collective Efforts;
- Command Philosophy;
- Manoeuvrist Approach;
- Pragmatism;
- The Will to Fight and Prevail.

A range of historical examples are again offered to underscore the enduring nature of the RNZN's approach to warfighting and other operations as well as to respect the legacy and contribution the New Zealand Defence Force (NZDF) and other government agencies have made to New Zealand's prosperity and security.

OPERATIONAL TENETS

The RNZN performs its roles in accordance with the NZDF's operational tenets.[101] These tenets, which are underpinned by the NZDF's warfighting ethos, are shown in figure 11.

Figure 11: NZDF Operational tenets

The Joint Effect

Successful military operations demand an integrated approach, often as a combined, joint, multi-agency or multi-national force. The synergy of an NZDF Joint Force if properly applied will achieve military objectives beyond those of any individual element. The Royal New Zealand Navy, New Zealand Army and Royal New Zealand Air Force contribute the individual capabilities of their service to achieve the joint effect to deliver the government's security aims.

101. *New Zealand Defence Force Doctrine* DDP-D 4th edition 2017, Chapter 4, p 55.

The Principles of War

There are time-tested principles for the conduct of armed conflict – as well as military operations more generally – and these should inform all military strategic and operational decisions. Their application requires training, judgement, and experience. The principles of war maintain relevance, applicability, and relative importance even as methods, techniques, and weapons of war change. Selection and maintenance of the aim is the source from which the other nine emerge— but they are all necessary components of successful strategy and tactics. These principles apply to maritime operations as much as they do to land campaigns.

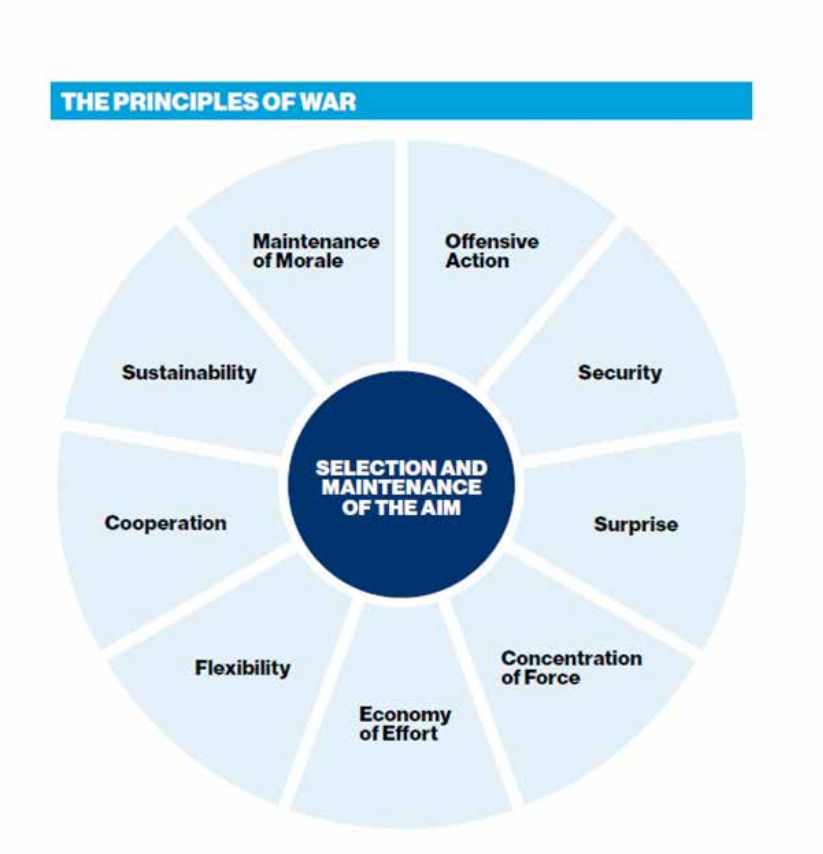


Figure 12: The Principles of War

Selection and Maintenance of the Aim.

It is essential to select carefully and clearly define the aim. Once the aim is decided, all efforts are directed to attaining it until a changed situation calls for re-appreciation and potentially a new aim. A clearly expressed aim that is understood by all who have a part in achieving it is a great unifying force and is at the core of mission command. In this respect, the NZDF's relative size can be considered an opportunity: it is small and agile enough to be able to communicate our aims to every person in our organisation, including the aims of particular missions. The Stores Accountants at the Navy Supply Depot should understand that the mission of the frigate deployed to the Horn of Africa is to defeat piracy and prevent people smuggling. If they do, they will see that their work in despatching stores for operational defect (OPDEF) rectification is vital to the ship achieving its mission, rather than a specific task to be completed as soon as possible in a prescribed way. They may then be motivated identify and arrive at better ways of getting stores to where they need to go.

> **Example:** A particular engagement of direct importance to New Zealand at the time was the Battle of Midway from 4 until 7 June 1942, just six months after Pearl Harbour. With a Japanese aircraft carrier strike force detached to support the Imperial Japanese Army attack on the Aleutian islands the Imperial Japanese Navy, which had sought a decisive battle, further weakened its posture by dividing its remaining carrier forces into groups that operated beyond mutual supporting distance from each other and reduced their concentration of force. The carrier striking force, *Kido Butai*, was therefore vulnerable to the American counter-attack. The US Navy took a calculated risk by concentrating its available aircraft carriers to strike a major blow at the enemy. At a critical point in the battle with the Japanese command vacillating, the US Navy attack aircraft caught the Japanese aircraft on deck being re-roled and refuelled. Ultimately the loss of four Japanese fleet carriers, against the loss of one US carrier, proved decisive in preventing the invasion of Midway Island. Perhaps more importantly, it removed the key tactical advantage of the Imperial Japanese Navy: its multi-carrier task force. The outcome of this battle was that the possibility of a Japanese invasion of New Zealand diminished significantly.[102]

102. S.D. Waters, *Official History of the Royal New Zealand Navy 1939-45*, War History Branch, Wellington, 1956, p 226.

Maintenance of Morale.

Operational success often depends more on morale than on advantages in materiel. Numbers, armament, and physical resources cannot compensate for lack of courage, cohesion, energy, determination, endurance, skill, and a warfighting ethos, all of which spring from determination to succeed. The welfare and care of personnel is also a critical component of good morale and reliant on organic welfare support and chaplaincy services. The development and subsequent maintenance of the qualities of morale are therefore essential to success in war.

> **Example:** Morale was high amongst New Zealand sailors on HMS ACHILLES at the Battle of the River Plate. This made a significant contribution to the performance of the ship in battle conditions. Petty Officer McKenzie of A-turret recorded: 'this was the first time that we were firing, just the same as we had been taught to fire, and all that sort of thing. We ... knew there was some big B..... out there who was trying to blow us right out of the water. I suppose there was a little apprehension and that sort of thing, but I can't say that I felt any fear really, and I don't think anybody else did. [It] got the adrenalin flowing though.'[103]

HMS ACHILLES A Turret crew

103. Kelly Ana Morey, *Service from the Sea*, Viking – Penguin Books Ltd., London, 2008, p 87.

Offensive Action.

To gain and retain the initiative it is usually necessary to undertake offensive action. In most circumstances doing so is essential to the achievement of operational objectives. It enables commanders and their forces to exploit opportunities which capitalise on an adversary's weaknesses to seize and hold the initiative. Until the initiative is seized and the offensive taken, success is unlikely.

> **Example:** On the night of 29—30 January 1943, two minesweepers, HMNZ Ships KIWI *and* MOA,[104] were on patrol northwest of Guadalcanal in the Solomon Islands and detected the heavily armed Japanese submarine I-1. KIWI *and* MOA engaged the submarine with depth charges, gunfire, and small arms; KIWI also rammed it on three separate occasions.[105] I-1 eventually ran aground on a reef as it tried to make its escape. Many years later the five inch forward gun from the submarine was salvaged and restored by Kauri Point Armament Depot where it was found to be still loaded. The gun is now on display at *Te Waka Huia o Te Taua Moana o Aotearoa* – National Museum of the Royal New Zealand Navy.[106]

Official War Artist, Russell Clark, depicts HMNZS KIWI attacking the Japanese submarine I-1

104. The commanding officer of MOA was LTCDR Peter Phipps. In 1960, Sir Peter Phipps KBE, DSC and Bar, VRD, became the first RNZN officer to reach flag rank as Chief of Naval Staff, and, in 1963, Chief of Defence Staff.

105. S.D. Waters, Op. cit., pp 307 – 9.

106. Kelly Ana Morey, Op, cit., p 157.

Security.

Adequate security is essential for obtaining freedom of action to launch a bold offensive in pursuit of the selected aim. This entails adequate protection of high value assets and protection of information and communication systems. Security does not imply undue caution and avoidance of risks: bold action is essential to success in warfighting. Security is also often closely linked to the achievement of surprise.

> **Example:** In May 1941 the German U-boat 110 was forced to the surface after a concerted depth charge attack. Her Captain observed three destroyers and ordered all hands to abandon ship. The submarine was subsequently boarded by a small party led by Sub Lieutenant David Balme from HMS BULLDOG. They retrieved signal books and a device that looked like a typewriter—in fact an Enigma encrypting machine. The codebreakers at Bletchley Park were able to use it to break German communications security and provide the means to listen to the German Commander in Chief's messages to his U-Boats. This gave the Royal Navy time to re-route convoys across the Atlantic. Admiral Doenitz suspected that his secure system had been compromised and asked Vice-Admiral Erhard Maertens to investigate. Eventually Maertens wrote back to Doenitz reassuring him that, '...the acute disquiet about the compromise of our Secret Operation cannot be justified. Our cipher does not appear to be broken.' Doenitz accepted Maerten's conclusion but with deepening puzzlement.[107]

HMS BULLDOG lowering its whale boat to board U110

SLT David Balme

> German encrypted communications remained largely compromised throughout the remainder of the war and the British High Command went to great lengths conceal their access. Maintaining this security was critical to the Allies' successful exploitation of the Enigma decoding. Only a few people knew of the capability and the decrypted information was closely controlled. At times commanders made the difficult decision of allowing German attacks to go ahead rather than risk revealing to the Germans that their encrypted communications had been broken.

107. Dimbleby, Jonathan, *The Battle for the Atlantic – How the Allies Won the War*, Penguin Books, London 2015.

Surprise.

Surprise is an effective and powerful influence on combat operations and its psychological effect can be immense. Every endeavour should be made to surprise an adversary and to guard against being surprised.[108] Achieving surprise can bring results out of all proportion to the efforts expended; in some operations, when other factors are unfavourable, surprise may be essential to success.

Example 1: The Japanese attack on the United States Fleet in Pearl Harbour on 7 December 1941 is probably the most striking example of using surprise. Admiral Isoroku Yamamoto, the architect of the Japanese plan, had realised that aircraft carriers were more capable of inflicting decisive blows on the enemy than were battleships. His views were confirmed by the Battle of Taranto on 13 November 1940 where Britain's Fleet Air Arm aircraft launched from the aircraft carrier HMS ILLUSTRIOUS inflicted heavy losses on the Italian fleet. To maintain secrecy Admiral Yamamoto only confided the plan to his trusted colleague Admiral Takejiro Ohnishi. He also put the Imperial Japanese Navy to sea on a series of fleet exercises to prevent speculation.[109] And yet despite the use of surprise the attack on Pearl Harbour was not a decisive blow for the Japanese: the American aircraft carriers were at sea and therefore able to fight another day.[110]

Japanese aircraft prepare to depart the carrier *Shokaku* for the first wave of strikes against the US Naval Base at Pearl Harbour

Example 2: Surprise was an element in the success of Operation CHROMITE, a UN amphibious landing at Inchon during the Korean War. General MacArthur's forces caught the enemy off balance by striking deep behind North Korean lines. UN forces eventually retook Seoul, the South Korean capital, and changed the entire course of the war.

108. The reader's attention is drawn to John Keegan's *Intelligence in War*, Pimlico, London 2004.

109. Hoyt, Edwin. P., *Yamamoto – The Man Who Planned the Attack on Pearl Harbour,* Lyons Press, Guilford, Connecticut, 1990, p 108 and 117

110. Ibid. pp 135-6.

Concentration of Force.

Success on combat operations often requires concentration of superior force and materiel at the decisive time and place. Concentration does not necessarily imply a massing of forces; it often means having them so disposed as to be able to unite to deliver the decisive blow or to counter an adversary's strikes.

> **Example:** Convoy escorts[111] in the early stages of the Battle of the Atlantic would often be weakened by orders from Western Approaches Command to detach ships of the escort for various tasks, many of which 'were little more than wild goose chases based on stale information about the presence of U boats.'[112] This practice ceased after strong objections and escort groups were allowed to remain concentrated around the convoys to which they were assigned, thereby maximising the likelihood of defeating mass U Boat 'wolf pack' attacks.

Economy of effort.

Economy of effort means balanced employment of forces and judicious expenditure of resources to achieve effective concentration at the decisive time and place. Economy of effort acknowledges the need for a degree of redundancy in wartime to allow for attrition but it is opposed to a wasteful allocation of resources that does not maximise the contribution of those resources to the achievement or maintenance of the aim.

> **Example:** In 2016 HMNZS WELLINGTON deployed to the South Pacific to conduct defence diplomacy, assist with monitoring and education of fishing vessels, and develop knowledge of fisheries in the area. These activities supported the aims and objectives of the Government of New Zealand, the Forum Fisheries Agency, and the Quadrilateral Defence Co-ordination group. The ship embarked a New Zealand Ministry of Primary Industries officer along with fisheries officers from Vanuatu, the Solomon Islands, and Nauru to conduct boarding operations during patrols of their respective EEZ. In a single deployment WELLINGTON and her crew were able to assist other agencies successfully complete multiple tasks on behalf of the New Zealand government.

111. Warships and/or aircraft assembled and organised to provide protection to a single ship or convoy for the purpose of passage together.

112. Macintyre D.G.F.W, *U Boat Killer, Cassell,* London, 1956

Flexibility.

Military operations demand a high degree of flexibility. Initial plans often require altering to meet changing situations and unexpected developments. Sound decision making processes require flexibility of mind, which is enhanced by practice, discipline, and accurate staff work. Suppleness and agility to move and concentrate forces rapidly and economically at decisive places and times maximises effectiveness.

> **Example:** On 14 November 2016 a magnitude 7.8 earthquake struck near Kaikoura on the east coast of the South Island. Ships from Australia, Canada, the United States, and New Zealand had been involved in two separate combat exercises off Auckland prior to marking the RNZN's 75th Anniversary. Within 24 hours they had detached and were steaming south to join up and deliver much needed HADR to the people of Kaikoura. Such flexibility is an inherent characteristic of naval forces and it is essential to how the RNZN plans and operates.

Cooperation.

Cooperation allows coordination of all units to achieve the maximum combined effort. Cooperation occurs when Commanders pro-actively seek to understand and support the objectives of fellow Commanders working to achieve the same aim. The effectiveness of a force is multiplied when this occurs. Mission success is also facilitated by close cooperation with other government and non-governmental agencies. Coincidence of objectives, doctrine, and resources usually result in synergies and force-multiplication.

> **Example:** The commanding officer of HMNZS TE KAHA and his command team struck up close relationships with their counterparts in the Dutch frigate HNLMS *Van Nes* during operations in the Arabian Sea in late 2002. The two ships shared experience and worked together effectively on escort and interdiction operations.[113] When TE KAHA was relieved on station by HMNZS TE MANA, *Van Nes* arranged a rendezvous with TE MANA to continue what came to be known as the "New Zealand/Old Zealand" relationship. TE MANA did the same for *Van Nes's* relief, HNLMS *Karel Doorman*, when she arrived on station. Dutch and New Zealand ships leveraged this cooperation and the mutual understanding by continuing to work together on escort and interdiction operations whenever possible

Sustainability.

Intelligent logistics, well-trained and equipped personnel, and efficient administrative arrangements are crucial to success. They should be designed to give the commander maximum freedom of action in carrying out the plan. Logistics and administrative organisations should be kept as simple as possible with component commanders having a degree of control over logistics and administration within their sphere of command corresponding to their responsibilities for the operational plan.

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113. Actions to divert, disrupt, delay, or destroy the enemy before they can affect friendly forces. (AMD)

The principle of sustainability in the maritime context is best considered as an element of maritime power itself,[114] especially a base at which all the materiel necessary to equip a ship and prepare seafarers for sea is located. It should include logistic, repair, and maintenance facilities for the ships and their systems. Other such facilities include barracks, hospitals, and training institutions necessary to enhance and support the warfighting and operational abilities, especially of those who go to sea.

Prior to development of replenishment at sea, naval forces had to return to fixed bases to replenish fuel, ammunition, and other stores. The advent of tankers and stores ships that could re-supply ships underway and at forward anchorages improved operational and tactical flexibility, allowing commanders greater choice in where to operate and where to strike while also enhancing combat effectiveness. Given constraints on fleet size brought about by the cost of capability, replenishment at sea capability is arguably an even more important force multiplier than ever before.

> **Example:** For the first three months of Operation STABILISE, in East Timor 1999-2000 HMAS SUCCESS and HMNZS ENDEAVOUR were the only source of the diesel and aviation fuel used by the INTERFET forces ashore. Moreover, with East Timor having few roads and airfields, and these often impassable or unusable in the monsoon season, seaborne resupply to regional centres was the only viable solution for supporting widely dispersed troops during the consolidation and sustainment phases of the campaign. ENDEAVOUR played a vital strategic role as the only available tanker to bring aviation fuel for the helicopter force, diesel for land force vehicles, and fuel for the INTERFET ships into theatre. This meant ENDEAVOUR shuttled between Singapore, Cairns and Darwin as she undertook several missions to pick up and deliver the urgently needed fuel. Later, during its second deployment to East Timor, ENDEAVOUR became the afloat logistics command ship, at Dili harbour.

HMNZS AOTEAROA – the RNZN replacement for ENDEAVOUR

114. Maritime Power Definition (Military aspects) in JDP 0-10 5th Edition, para 1.3 Dated October 2017

Command Philosophy

RNZN Command Philosophy[115] is based on what is known as mission command. In essence, mission command is about a Commander giving subordinates an aim the resources, and where necessary guidance as to how it is to be achieved, and letting them get on with it. It provides subordinates with the flexibility to develop their own plans using their intimate knowledge of the capabilities of their own people and equipment, and gives them the latitude to use initiative to adapt to changing circumstances without reference to higher authority and the delay and confusion that this causes. It also relieves superior Commanders of responsibility for preparing and issuing masses of detailed orders allowing for every contingency and every environmental factor. Subordinates are able to study the tasks allotted to them in detail together with the environment in which they are expected to operate, and develop their own plans. Above all, mission command capitalises on the talent, experience, and leadership qualities of subordinates. The confidence of superiors in their subordinates demands a special relationship to achieve the goal.

> **Example:** The escort commanders of Second World War convoys were given a mission – the safe and timely arrival of the convoy – and the resources (not always adequate) to achieve it. They were supported by operational intelligence and given a route to follow, but they were free to apply tactical doctrine and judgement as they saw fit to achieve the mission. They could detach escort ships on independent search operations, alter the route of the convoy to avoid threats, and order the screening, search and attack tactics that in their view best met the needs of the tactical situation. These officers were mainly junior commanders – sometimes even Lieutenant Commanders – but they were responsible for the safety of up to 60 merchant ships. The scope they were given enabled them to maximise the capabilities of the ships in their escort groups, which allowed for varying levels of experience and capability (which the escort commander understood better than the higher staffs), and to react quickly and effectively to threats. This command philosophy has been central to naval operations since the earliest times. It was brought to a high pitch by Lord Nelson, who secured victory at the Battle of Trafalgar by ensuring that his Captains understood his overall plan and trusting them to get on with it. As a principle it is as fundamental to naval success in the age of the communications satellite as it was in Nelson's day.

115. *New Zealand Defence Force Doctrine*, Op. cit., p 51.

The Manoeuvrist Approach

The manoeuvrist approach uses indirect methods to overcome the adversary's will to fight.[116] Doing the unexpected and original is combined with ruthless determination to succeed.[117] Objectives are achieved through dislocating and disrupting an adversary by taking the initiative and applying pressure at times and places the adversary least expects.

> **Example:** During the Second World War General MacArthur and Admiral Chester Nimitz USN used amphibious capability during the Pacific Campaigns to leapfrog strong Japanese positions rather than confront them directly in head-on attritional battle. The Japanese garrisons were isolated from supporting formations and their sources of supply. This is a classic illustration of the manoeuvrist approach and of the value of amphibious capability in applying it.

Flexibility and Pragmatism

The RNZN does not and will not have forces tailored to every contingency that it might face. When faced with the unexpected it must be flexible and pragmatic to a greater extent than larger and better resourced forces. When presented with a task or mission for which it is not fully prepared or trained, it has to work out a way to rapidly address its shortfalls, thinking laterally where necessary to do so.

Pragmatism in a naval context is about a flexible common-sense approach to problem solving.[118] The requirement for pragmatism in problem solving does not give naval leaders free rein to ignore established guidelines: these allow proper control over resources, the safety of people, and compliance with the intent of leaders. Even so, no doctrine or set of rules and procedures can ever allow for every conceivable contingency. Personnel must be able to recognise situations that require an innovative approach.

> **Example:** In 2002—04 HMNZ Ships TE KAHA and TE MANA were regularly deployed to the Middle East for Operation ENDURING FREEDOM against Al Qaeda and the Taliban. These operations called for advanced skills in high value unit choke point[119] escort and in maritime

116. Ibid. p 49.

117. Recall Lord Fisher's 3 R's and 3 H's. Ruthless, relentless, remorseless. And: Hit first, hit hard, keep on hitting.

118. *New Zealand Defence Force Doctrine*, DDP-D 4th edition, Chapter 4, p 54.

119. Relatively narrow shipping lanes which are vulnerable to closure by force.

interdiction operations. The core skills needed for these functions were well embedded in naval individual and collective training, but they needed to be geared to operational requirements. The approach adopted was pragmatic: rather than waste time developing procedures, the RNZN adopted US Coast Guard doctrine for boarding operations and utilised Royal Australian Navy (RAN) training packages. Boarding equipment was acquired without lengthy evaluations from the same sources of supply as the RAN. Following these deployments, the ship's defensive capabilities were enhanced with more effective close-range weapons and platform systems were upgraded to cope with extremes of temperature encountered in the area of operations. The inherent flexibility of platforms and people were pragmatically exploited so that the RNZN could adapt to the unique requirements of the operation.

HMNZS TE MANA on station in the Gulf of Oman

THE WARFIGHTING ETHOS OF THE RNZN

Warfighting in support of national interests is the most important function military forces may have to perform. Every member of the NZDF must be prepared to fight for whatever legitimate cause the New Zealand Government is pursuing through military endeavour. The RNZN and the NZDF subscribe to a warfighting ethos. It must be remembered that "warfighting is about the deliberate application of lethal force, usually by two sides against each other, but increasingly in more complex patterns. Because of the destructive nature of warfighting, those involved are forced to endure a constant threat to their lives and well-being. They will themselves be attempting to create and amplify the same fear in the minds of their adversary." Moreover, "warfighting is likely to be demanding and frightening for the individuals involved. Fear and uncertainty are likely to be commonplace, even within the minds of those most conditioned to cope with its challenges. The bravest men and women may be frightened; it is their ability to carry on despite their fears that is the measure of their courage. Importantly, by its very nature, military activity is about confronting risk and managing it. It is emphatically never about avoiding risk; the military profession is not one for those who are risk averse."[120] The RNZN accepts these risks and challenges and applies its warfighting ethos to overcome them.

Example: On 22 May 1941, Chief Petty Officer Henry Booth, a New Zealander from Panmure in Auckland, was action quartermaster of the cruiser HMS FIJI off Crete in the lower steering position. As recorded in his citation, '... he performed his duties without fault throughout the long and trying action which ended with the loss of the ship. Rudder orders were frequent and often drowned by the noise of gunfire and bomb explosions. He made no mistake and remained cheerful, even when the ship was listing 25° degrees, lighting was failing and near compartments flooded. His performance was one that demanded physical and mental endurance of a high order'. His conduct and fine leadership were an inspiration to those about him. He was awarded the Distinguished Service Medal. Sadly he was killed in the St Nazaire raid in France on 28 March 1942.[121]

HMS FIJI in battle off Crete

120. *New Zealand Defence Doctrine* (NZDDP-D 4th Edition) November 2017.

121. S.D. Waters, *Official History of the Royal New Zealand Navy 1939-45*, War History Branch, Wellington, 1956, pp 486-7.

THE WILL TO FIGHT AND PREVAIL

The will to fight and prevail has carried the ships and people of the RNZN through many trials in war and peace. It was as critical to operations in the heat and stress of the Solomon Islands Campaign in 1942 as it was in the epic search and rescue operation carried out by HMNZS MONOWAI during the Queen's Birthday Storm in June 1994.[122] It is instilled in naval personnel during initial training and subsequent leadership development programmes and by naval leaders at all levels during daily business at sea and ashore. It is central to every task that is undertaken.

LAW OF ARMED CONFLICT

The NZDF is bound to conduct its operations in accordance with the Law of Armed Conflict (LOAC) by international and domestic law as well as Defence Force Orders.[123] Although the exact nature of future technologies may not have been encapsulated in law at the time of writing, New Zealand takes the position that the law can be applied by analogy, which is reflected in the way the NZDF trains and prepares its forces for operations. Although there is often significant emphasis on the increasing lethality and destructiveness of weapons and the potential for higher humanitarian costs in future armed conflicts, there is also the potential for future technologies to increase the ability of armed forces to apply effects with distinction and proportionality. As the maritime domain is platform-based and states look to gain or maintain their competitive advantage in this domain, it is likely that many of these future technologies will be applied there. It would be prudent for all personnel to develop a sound understanding not just of maritime doctrine and capabilities but also of the law applicable to them.

122. The crews of three yachts *Ramtha, Pilot and Silver Shadow*, were rescued.

123. DM69 (2 ed) Volume 4, *Manual of Armed Forces Law*, Law of Armed Conflict.

LEADERSHIP IN THE RNZN

A key tenet of the RNZN's warfighting ethos is the ability of individuals to lead in the most trying circumstances. Although operational success provides the quickest and most effective boost to morale for those at war, outstanding leadership can seize opportunities and sustain high morale when all other factors are against it. The following components of leadership are adopted from *New Zealand Defence Force Doctrine* and applied in the Royal New Zealand Navy:[124]

Live the Ethos and Values. Naval leadership is based on leading by example through internalising and modelling the organisational values of Courage, Commitment, and Comradeship and instilling these within others.

Think Smart. Effective leaders add value by dealing with complexity to provide clarity for their team, by thinking ahead, being innovative and adaptive, and considering both the positive and negative consequences of their decisions.

Influence Others. Leaders in the RNZN must build and maintain effective trust-based relationships with a wide variety of people, including 'followers', peers, and other leaders across and outside the organisation.

Develop Teams. Good leaders create, focus, and maintain effective teams, which form the basic building blocks of the RNZN and wider NZDF and are critical enablers to mission success.

Develop Positive Culture. Leaders set the conditions for the growth and development of their teams. The effectiveness of the RNZN depends on leaders remaining positive, being inclusive, and taking responsibility for team performance and unit morale.

Mission Focus. The RNZN has a well-defined mission to advance New Zealand's interests from the sea. Effective leaders paint a clear picture of the future for their followers, ensure objectives are achieved, hold people accountable, and provide meaning and purpose to allocated tasks.

124. Joint Doctrine Publication 0-10 (JDP0-10), *British Maritime Doctrine*, para 3.7. October 2017.

COLLABORATION

New Zealand engages in a range of defence relationships as a core component of its international network of relationships. Training, exercising, and operating together builds capability and trust with new partners and strengthens bonds with existing partners. There is no closer defence partner than Australia, with whom New Zealand shares a special historical relationship which is expressed in the Australia/New Zealand Closer Defence Relations instigated in 1991. New Zealand is a member of the Five Power Defence Arrangements (FPDA) alongside Malaysia, Singapore, Australia and the United Kingdom. The FPDA provides for a range of training and exercise opportunities. Over forty years these exercises have contributed to a level of trust which allowed the member states to successfully partner together on international operations.

The importance of partnerships for the NZDF and the RNZN becomes clear when considering New Zealand's resources against the scale of the tasks which it undertakes. Partnerships are based on relationships, both organisational and human. There must be simple and robust processes in place that enable the RNZN to work with other NZDF forces, with other nations' forces, with other government agencies, and with anyone else whose cooperation is important to the ability to advance New Zealand's interests at and from the sea. These processes must be tested and evaluated in exercises to ensure that they work when needed. When working with partners, the RNZN must continue to build confidence and trust by being capable, professional, committed, and reliable. RNZN personnel must show genuine understanding and interest in regional concerns and the different cultures, and where necessary, show a willingness to adapt. Working with the RNZN must be a rewarding experience for partners. What is learned from working with partners must be captured and studied; this applies to their culture and outlook as much as it does their processes.

CONCLUSION

The RNZN achieves military success by performing its roles in accordance with the NZDF's operational tenets. Especially significant amongst these are the principles of warfare: broad precepts for the conduct of armed conflict, the application of which, like all doctrine, requires training, judgement, and experience. All these principles are underpinned by the NZDF's warfighting ethos.

CHAPTER 06

HOW WE WORK
SUMMARY POINTS

We today face an ever more contested and competitive world, characterised by rapid change, with the rules-based international order that for so long has underpinned our security and prosperity coming under increasing pressure. Australia—New Zealand Joint statement on Closer Defence Relations (March 2018)

- The RNZN performs its roles in accordance with the NZDF's operational tenets:
  - o The Joint Effect
  - o The Principles of War
  - o The Manoeuvrist Approach
  - o Command Philosophy
  - o Flexibility and Pragmatism
- Successful military operations demand an integrated approach, often as a combined, joint, multi-agency or multi-national force.
- The Principles of War are broad precepts for the conduct of armed conflict as well as military operations more generally. Their application requires training, judgement, and experience. The principles of war maintain relevance, applicability, and relative importance even as methods, techniques, and weapons of war change.
- Selection and maintenance of the aim is principle from which the other nine emerge:
  - o Offensive Action
  - o Security
  - o Surprise
  - o Concentration of Force
  - o Economy of Effort
  - o Flexibility
  - o Cooperation
  - o Sustainability
  - o Maintenance of Morale

CHAPTER 06

HOW WE WORK
SUMMARY POINTS

- RNZN Command Philosophy derives from mission command: commanders' giving subordinates an aim, resources, and necessary guidance, and letting them get on with it.
- The manoeuvrist approach uses indirect methods to overcome the adversary's will to fight. Doing the unexpected and original is combined with ruthless determination to succeed.
- The RNZN does not and will not have forces tailored to every contingency that it might face. When faced with the unexpected it must be flexible and pragmatic to a greater extent than larger and better resourced forces.
- The RNZN is committed to a warfighting ethos. Every sailor must be prepared to fight for whatever legitimate cause the New Zealand Government is pursuing through military endeavour.
- The NZDF is bound to conduct its operations in accordance with the Law of Armed Conflict by international and domestic law as well as Defence Force Orders.
- A key tenet of the RNZN's warfighting ethos is the ability of individuals to lead in the most trying circumstances.
- The conduct of warfighting in support of national interests is the most important function military forces may have to perform.

CHAPTER

07

HERITAGE, VALUES, AND CULTURE

CHAPTER 07

HERITAGE, VALUES, AND CULTURE

Nāku te rourou nau te rourou ka ora ai te iwi. With your basket and my basket the people will live. [125]

INTRODUCTION

This chapter presents the ethos, principles, and values that inform the generation and application of military maritime power by the Royal New Zealand Navy (RNZN). It explains the synergy created by the blending of the accumulated nautical knowledge and wisdom of two great seafaring peoples: the Māori and the British. Each has its beginning in daring and the will to put to sea to seek new lands, to trade, to settle, and even for sheer curiosity. Each had different tools and materials with which to build and sustain their ships. They used their unique techniques to navigate and to find their respective ways across vast tracts of ocean. Much has been written about the meeting of the two peoples in New Zealand, their interactions, inter-marriage, misunderstandings, conflicts, their achievements. The heritage, values, and culture of the RNZN draw equally from these two traditions.

125. Whakatauki (Māori proverb). Refers to cooperation and the combination of resources to get ahead.

BICULTURAL PARTNERSHIP

New Zealand culture is founded on the unique partnership between the Crown and Māori, which is not meant to exclude multi-culturalism but to recognise biculturalism first.[126] The NZDF recognises that fighting spirit and operational effectiveness is enhanced by accepting its military and bicultural heritage and applying Māori practices and customs. It defines who we are as an organisation and as sailors. Therefore the RNZN has formulated a policy that guides it and Māori within the RNZN towards achieving a bicultural partnership that represents and respects both Naval and Māori cultural interests.

126. *Defence Force Order (Navy)*, Chapter 2, Section 2, RNZN Bicultural Partnership.

MĀORI HERITAGE

The Māori heritage of the RNZN makes it quite distinct from other navies, including the Royal Navy from which it is most directly descended. As explained in the first chapter, Māori tradition and heritage in the RNZN goes back to the early years of the last century and has continued ever since. The importance of this tradition to the New Zealand naval story was strikingly demonstrated by Captain Lionel Halsey wearing a *piupiu*[127] and *hei-tiki*[128] when he took HMS NEW ZEALAND into action at the Battle of Heligoland Bight on 28 August 1914 and again at the Battle of Dogger Bank on 24 January 1915. Captain John Green did the same at the Battle of Jutland on 31 May 1916. HMS NEW ZEALAND escaped from all three actions virtually unscathed and was thereafter regarded by her crew as 'a lucky ship', many whom attributed their good fortune to the powers of protection afforded by the wearing of the *piupiu* and *hei-tiki*.[129] Today the Chief of Navy wears a *kahu huruhuru* (feathered cloak) on official occasions as his symbol of command.

127. Short kilt made from strips of flax.

128. Small figure carved from pounamu (greenstone) worn around the neck.

129. Admiral K. F. Wilson (retd). *The Compleat Guide to HMS NEW ZEALAND*. Quarterdeck Limited, Devonport, 2017.

The Source of Partnership: Te Tiriti o Waitangi (The Treaty of Waitangi)

Te Tiriti o Waitangi (The Treaty of Waitangi) is the source of two principles that directly inform the RNZN's biculturalism: partnership and reciprocity. The landmark case *New Zealand Māori Council vs Attorney General* 1987 concluded 'the Treaty signifies a partnership between the races' and each partner has to act towards the other 'with the utmost good faith which is the characteristic obligation of partnership.' Partnership is reciprocal as it involves fundamental exchanges for mutual advantage and benefits. Māori ceded to the Crown the kāwanatanga (governance) of the country in return for a guarantee that their *tino rangatiratanga* (full authority) over their land, people, and *taonga*[130] (treasures) would be protected. Māori also ceded the right of pre-emption over their lands on the basis that this would be exercised in a protective manner and in their own interests, so that settlement could proceed in a fair and mutually advantageous manner. Partnership also instilled the sense of obligation and responsibility of citizenship that motivated Māori to defend their country in two world wars.

The RNZN's bicultural policy is based on partnership,[131] participation,[132] and protection.[133]

- Partnership is based on mutual good faith, co-operation and respect. The RNZN and Māori[134] will behave toward one another with utmost good faith: upholding discipline, maintaining honesty of purpose, and making an honest effort to ascertain facts and recognise the obligations and entitlements of both parties in all deliberations.
- Participation is enabling stake holders to share and take part. Active and equitable participation at all levels is encouraged to ensure that RNZN and Māori interests are represented.
- Protection is afforded to the interests of both parties: RNZN culture (customs, values and traditions), and Māori *taonga* (language, custom, and culture). Naval and Māori *tikanga* will be respected and honoured.

130. Prized possessions, treasures - can be material or spiritual and includes traditions; those things of value to a person that have been handed down through the generations.

131. Two parties working together towards a common goal or goals where the interests of both parties are acknowledged.

132. A sharing relationship between two parties who jointly take part in seeking solutions where the interests of both parties are represented.

133. Preservation; keeping from harm or injury; the interests of both parties are respected and upheld.

134. In the guiding principle statements of RNZN bicultural policy the term Māori means Māori people in the RNZN.

Realising Partnership: Te Taua Moana o Aotearoa – RNZN Marae

One of the unique features of the Royal New Zealand Navy is *Te Taua Moana Marae*. It is a meeting place in the naval base where all new entrants are ceremonially welcomed in accordance with *tikanga* Māori[135]. Throughout their naval careers it will be where they meet others on an informal basis or from time to time to gather for special and ceremonial occasions. All distinguished visitors to the naval base are welcomed onto the marae with *pōwhiri.*[136] The marae community is not confined to naval personnel but extends to their whanau (families and familial networks). Others who are connected to the RNZN are also welcomed with pōwhiri including naval contractors and those from the community who support the Navy. Past sailors have a special place as do the children of those serving away at sea or abroad. *Te Taua Moana* Marae helps cement the RNZN's culture and the aspirations of all its members together. The RNZN has its own haka,[137] also known as *Te Taua Moana*, which reflects the history and culture of our people with the sea. It is performed by members of the RNZN on special occasions such as the arrival home of a ship from a long deployment. Ships also have *kapa haka*[138] groups drawn from all the ship's company which perform Māori songs and dances when ships depart on or return from major deployments, at ceremonial welcomes to visitors, and during port visits overseas. These cultural performances instil pride in New Zealand's bicultural heritage and the unique contribution it makes to the RNZN.

135. Custom; the way things are done.

136. Formal ceremony whereby hosts welcome visitors onto their Marae.

137. Ceremonial challenge traditionally performed by Māori to visitors to determine the peaceful purpose or otherwise of their visit.

138. Performing arts group which showcases Māori cultural heritage in song and dance.

A Live Tradition: Māori Ceremonial Blessing on the Commissioning of Ships in the RNZN

The bicultural partnership is further demonstrated when christening ships. In *Te Ao Māori* (the Māori world) all things possess a life-force or *mauri*. When a ship is commissioned into the RNZN a *mauri* laying ceremony is conducted to give the ship its life-force. Every member of the ship's company and all those who serve in the ship throughout her commissioned life therefore add to the ship's *mauri*. The mauri service consists of two parts. The first is the laying of a taonga, typically a suitable piece of *pounamu* (greenstone) that will possess the life-force. Secondly, *karakia* (prayers) by *kaumātua* (Māori elders) and chaplains are given as they walk through the new ship. If possible the *mauri* laying is usually conducted during the early stages of the ship's construction. In some cases, however, this has been done when the ship first arrives at the Devonport Naval Base or as soon as possible afterwards and when the *kaumātua* are available to conduct the service. A *mauri* lifting ceremony is also conducted when a ship decommissions and pays-off. This ceremony will consist of *karakia* (prayers) undertaken by *kaumātua* and chaplains and is the reverse of the *mauri* laying ceremony.

ROYAL NAVY HERITAGE

There is an intimate link between the history of the Royal Navy (RN) and the history of New Zealand. The location of the Devonport Naval Base in Auckland, the ethos, uniform, traditions, and customs of the RNZN all derive from the RN. And whilst the birthday of the RNZN is marked from 1 October 1941, its heritage and legacy stretches back to 1769 when one of the most prominent and influential Royal Naval figures in New Zealand's history, Lieutenant James Cook, sighted New Zealand. Details of this tradition have been given at length in Chapter 1, but it is important to acknowledge many of the customs and shipboard practices of the RNZN have been inherited from the RN.

The contemporary RNZN has inherited the historical relationship the British Navy, particularly William Hobson, had with Māori. This inheritance is exemplified by the important charter given to the RNZN at Waitangi[139]. On 6 February, 1990 at the 150th anniversary of the Treaty of Waitangi, a charter was presented to the RNZN that conferred on it '... the right and privilege, without further permission being obtained, of marching at all times with drums beating, bands playing, colours flying, bayonets fixed and swords drawn through the lands of the Tai Tokerau, especially the Treaty Grounds'. It cemented a relationship between the Navy and the Tai Tokerau which pre-dated nationhood. This honour bestowed upon the Navy extends special privileges to naval visitors in the Far North.[140]

139. A charter is a formal statement of the rights of a country's people, or of an organisation or a particular social group, that is agreed or demanded from a ruler or government.

140. *Te Waka Huia O Te Taua Moana O Aotearoa* – The National Museum of the Royal New Zealand Navy.

THE VALUES OF THE RNZN

These two strands, Māori and British, are entwined to form the strong Service culture that informs the way the RNZN goes about it business. Success in combat favours those who have the moral strength to fight and prevail. Quality and numbers of equipment are important, but the training, determination and teamwork of the people forming a ship's company, or making up a unit, are paramount. The moral component of fighting power depends on good morale (stated earlier under the Principles of War) and the conviction that our purpose is morally and ethically sound. The moral component promotes an offensive spirit and a determination to achieve the aim.[141] The moral component can therefore be summarised as the ideals for which citizens are prepared to fight, individually and collectively.

The RNZN's core values are represented by behaviours that provide guidance for the way personnel carry out everyday work. The behaviours are worded for an individual, but also apply to teams and the organisation. The RNZN's core values are Courage, Commitment, and Comradeship. They are characteristics that help to define who we are as individuals and as a service. It is a testament to these values that they remain enduring since their formalisation in 1998, and have become part of the everyday language of the RNZN. Now in the 21st Century and with the development of New Zealand's joint warfighting ethos, these values are shared across the wider New Zealand Defence Force (NZDF). The NZDF is also committed to developing a strong and inclusive workforce in which all NZDF members are able to participate, compete and be rewarded fairly regardless of their gender, ethnicity, disability, sexual orientation, age, beliefs/opinions, or family circumstances. All members of the NZDF are required to behave according to the NZDF values and standards, particularly those related to fairness and non-discriminatory behaviour – at all times and in all places.

141. *New Zealand Defence Doctrine Op.* cit. p 55.

Courage

To be brave enough to do what one believes to be right:

- Accepting responsibility for what needs to be done;
- Doing the job despite adverse or hostile conditions;
- Being accountable for personal actions; and
- Accepting and providing honest feedback.

LTCDR George 'Mac' Macdonald

Example: Lieutenant Commander George 'Mac' Macdonald joined the RNZNVR before the war and in 1939 he was posted as a rating to be a gunner aboard a Defensively Equipped Merchant Ship. In late 1940 he was posted to HMS KING ALFRED, the Royal Navy's wartime training school for junior officers. As a Midshipman he volunteered for Coastal Forces. During operations off the enemy-occupied Dutch coast in 1942, his ship MTB 31 was hit by German gunfire and set on fire, wounding the commanding officer and others. Macdonald was instrumental in leading the successful damage control effort to save the ship. His courage and determination were recognised with the award of the Distinguished Service Cross. In 1943 he was appointed to command MTB 241 and as Senior Officer of the 21st MTB Flotilla, Macdonald led his flotilla through nine different actions in 1943. His courage and leadership earned him a Bar to his DSC. A second Bar was awarded just a year later after more actions and several successful minelaying operations, including an action where his own boat was sunk and he transferred to another to continue to lead his force. After a complex action during September 1944, in which the forces under his command chased an enemy merchant ship into port and then intercepted another convoy and sank two more ships, he was awarded the Distinguished Service Order. After several more actions, Lieutenant Commander Macdonald was twice mentioned in Despatches. He remains our most decorated naval officer.[142]

142. Kelly Ana Morey, Op. cit., pp 125-6.

Commitment

Personnel should be committed to achieve to the best of one's ability.

- Setting challenging goals and taking steps to achieve them;
- Meeting the needs of customers and the team;
- Contributing to individual, team and organisational improvement;
- Carrying out duties, including those which are difficult or unpleasant, to the best of one's ability;
- Promoting the RNZN in a positive way; and
- Working in partnership with the RNZN for mutual benefit.

CDR William Smith

Example: Lieutenant William J.L. Smith RNZNVR served for more than twelve months in midget submarines. He was the First Lieutenant (second in command) of XE3, which under the command of Lieutenant Ian Fraser RNR made a successful attack on the Japanese heavy cruiser Takao in Johore Strait on 31 July 1945. During the mission the submarine became trapped under the enemy cruiser as the tide ebbed. The tide began to flood but the ship's diver, Acting Leading Seaman James Magennis, managed to open the hatch sufficiently to leave the submarine and attach limpet mines to the bottom of the target. The submarine then attempted to deposit the side cargoes of explosive on the sea floor but they would not detach. Magennis then left the craft a second time and managed to lever the charges off the side of the ship. The submarine then made a successful escape. Lieutenant Smith was awarded the Distinguished Service Order for his role in handling his ship in an extremely perilous 80 mile underwater operation in heavily guarded enemy waters. LT Fraser and ALS Magennis were both awarded the Victoria Cross and the Senior Engine-room Artificer, Charles Reed, was awarded the Distinguished Service Medal. Lieutenant Smith continued his service after the cessation of hostilities and became the RNZN's Hydrographer. The CDR William Smith Building in the Devonport Naval Base is named after him. [143] [144]

143. S.D. Waters, Op. cit., pp 505-6.

144. See Fraser, Ian, FROGMAN VC, Beacon Books, London, 1958 for the complete story of this remarkable attack by the commanding officer of Midget Submarine XE3

Comradeship

Comrade is companionship with those who share the mission in the immediate tactical sense and RNZN-wide and NZDF-wide:

- Encouraging, supporting and helping all in the RNZN family and in the wider community;
- Sharing knowledge and skills;
- Respecting different ideas, feelings and perspectives;
- Supporting naval social, sporting and cultural activities; and
- Helping everyone get a fair go.

Stoker First Class William Dale, AM

Example: HMNZS ACHILLES spent more than fourteen months in Portsmouth Dockyard refitting and rearming. On 22 June 1943 a violent explosion occurred in one of her main fuel tanks killing and injuring many dockyard hands. The blast caused considerable damage to the ship and distorted decks and bulkheads. A number of workers were trapped. Some dockyard men owed their lives to the initiative and cold courage of three ratings, who went below regardless of their own safety and worked to the limit of their endurance. Stoker First Class William Dale RNZNVR was subsequently awarded the Albert Medal and Engine-room Artificer William Vaughan RN and Stoker First Class Ernest Valentine RNZNVR were mentioned in despatches. According to the official history, 'finding that all smoke apparatus was in use by others, Stoker Dale tied a handkerchief over his mouth and made a difficult descent through three decks into a smoke filled space. The compartment was badly collapsed and in the darkness its condition was quite unknown to Dale. Without hesitation he got to work and passed up four injured men who were in various stages of collapse. They afterwards affirmed that they could not have got out without help. Having 'surfaced for a short breather', Dale then went down into the fuel tank in which the explosions had taken place. He groped his way in the darkness through debris and thick smoke, and with great difficulty wriggled through the distorted manhole tank top. The twisted, vertical steel ladder was far short of the bottom of the tank but he trusted to luck and landed safely. With equal courage a dockyard worker named Rogers descended and assisted Dale in rescuing two injured men who were hauled up by ropes.' Stoker First Class William Dale was the only member of the New Zealand Armed Forces to receive the rare decoration of the Albert Medal during World War II.

NZDF CULTURE

The NZDF's contemporary culture has developed from the shared values of the Royal New Zealand Navy, the Royal New Zealand Air Force, and the New Zealand Army: commitment, loyalty, integrity, and professionalism. These military values lead to the tenets from which the NZDF builds an organisation that is united, professionally trained, competent, and appropriately equipped.

Culture is inescapable. Everyone is *encultured.*[145] RNZN personnel at every level need to practice cultural awareness, particularly in joint, combined, and coalition operations. Whether cultural differences matter and end up being critical to outcomes depends on context. Cultural factors can be worked on and even changed, but in a crisis culture reverts to type. Culture can be an important factor in three different settings:

- You are placed in command of an organisation whose strategic culture is plainly defective or sub-optimal;
- You are commanding a force with joint and/or combined elements comprising different strategic cultures; or
- Your adversary is behaving in ways that seem to you to be irrational but which could well be rational when seen through a different cultural lens.

Cultural differences are often at the root of operational difficulties of many types. But when they are, the solution is often to be found through cultural awareness, which is something that can only come through empathy, self-awareness, and wide operational experience. Readers of this publication are encouraged to think about how these factors can have positive or negative impacts at all levels of command.

145. "New Zealanders, when they went to war, found it easier to meet the moral plane of the opposing soldier... they looked on war as a game, and a game to New Zealander's is something they play to win, against the other side, and the referee" *Report on Experience.* pg. 42 John Mulgan. OUP 1947. John Mulgan was a New Zealand literary figure who served with the Royal West Kent Regiment in North Africa in the Second World War and with the SOE in Greece.

CONCLUSION

Long and diverse strands of seafaring origins from Great Britain and the Royal Navy and of Māori, Polynesian and Oceanic provenance dating from the 13th century have been woven together to create a unique Navy – the Royal New Zealand Navy. The RNZN is proud of its rich nautical heritage, and believes its operational effeftiveness is strengthened by embacing biculturalism.

CHAPTER 07

HERITAGE, VALUES & CULTURE
SUMMARY POINTS

Since its earliest beginnings, the RNZN has drawn on the great seafaring traditions of its two founding peoples: the Māori and the British.

- New Zealand culture is founded on the unique partnership between the Crown and Māori, which is not meant to exclude multi-culturalism but to recognise biculturalism first.
- The NZDF recognises that fighting spirit and operational effectiveness is enhanced by accepting its military and bicultural heritage and applying Māori practices and customs. It defines who we are as an organisation and as sailors.
- Māori tradition and heritage in the RNZN goes back to the early years of the last century and has continued ever since.
- *Te Tiriti o Waitangi* (The Treaty of Waitangi) is the source of two principles that directly inform the RNZN's biculturalism: partnership and reciprocity.
- There is an intimate link between the history of the Royal Navy and the history of New Zealand which derives from the early explorations of Lieutenant James Cook RN, Captain William Hobson RN (New Zealand's first Governor and signatory to the Treaty of Waitangi), and the role the RN played for many years of guaranteeing New Zealand's maritime security.
- Two strands, Māori and British, are entwined to form the strong Service culture that informs the way the RNZN goes about its business.
- Success in combat favours those who have the moral strength to fight and prevail.
- The RNZN's core values are represented by behaviours that provide guidance for the way personnel carry out everyday work: Courage, Commitment, Comradeship.

AFTERWORD

If we are going to be a world class navy for a large maritime nation then we need to have sense of ourselves, an understanding of the challenges and a belief in that journey. This doctrine is a paving stone in that journey.[146]

New Zealand is committed to collective security, the United Nations Charter, the international rules-based order, and respect for national sovereignty. Allied to this commitment is hope for a cooperative approach to benefiting from the world's wealth and resources – but hope is not enough. This is why New Zealand invests in its military. The Royal New Zealand Navy, New Zealand Army and Royal New Zealand Air Force contribute their service capabilities to joint effects so that the New Zealand Defence Force can contribute to achieving the government's security aims.

Much has been written over the centuries about the application of military force at sea, including the ways in which it can be used to deter conflict, reach a decision, and influence events on land. Although the shape and particulars of the RNZN may adjust to meet the priorities of government, the basic tenets of maritime power, roles, and strategy do not radically change. But true wisdom derives from self-knowledge and awareness of our own environment and circumstances. New Zealand therefore must explicitly situate maritime doctrine in its own context. Doctrine derived from our lived experience provides tried and tested know-how: relatable authoritative guidance which allows for innovation and flexibility.

Doctrine has often tended to be very much focussed of conducting operations – the warfighter's domain. However, when properly applied and communicated, its reach and value are much greater. The principles of war are as important and as useful to the Logistician as they are to the Principal Warfare Officer (PWO) on a ship. It is hoped that *New Zealand Defence Force Maritime Doctrine* has not only explained and reinforced those principles, but that it has also helped readers to understand the historical, cultural, legal, policy and geographic factors that shape the Royal New Zealand Navy and its mission of *Advancing New Zealand's Interests from the Sea.*

146. Chief of Navy RADM A.J.O. Martin ONZM

GLOSSARY

Any entry not referenced has been defined by the Directorate of Seapower and Warfare for this publication.

Aim (Military)
A single unambiguous military purpose that must be established before a plan can be developed at any level of command for a military operation.

Amphibious (AAP—06)
A military operation launched from the sea by a naval and landing force embarked in ships or craft, with the principal purpose of projecting the landing force ashore tactically into an environment ranging from permissive to hostile.

Area of Interest (AAP—06)
The area of concern to a commander relative to the objectives of current or planned operations, including their areas of influence, operations and/or responsibility, and areas adjacent thereto.

Armed Conflict (JDP 0—01)
Armed conflict is a situation in which violence or military force is threatened or used. Generally, it is a contest between two opposing sides, each seeking to impose its will on the other, however, intra-state conflict may involve several factions.

Blue Water and Brown Water
These terms refer to a navy's ability to operate across the spectrum of maritime environments. In this context 'blue water' refers to maritime forces able to operate on the open oceans or high seas. Brown water refers to maritime forces that are limited in their operations to a state's coastal waters, ports and harbours, and inland rivers and estuaries, respectively.

Biculturalism (DFO(N))
The formal recognition of the partnership between the NZDF and Māori. This is reflected in a culture which recognises the mutual obligations and responsibilities arising from the principles of Te Tiriti o Waitangi.

Capstone Doctrine (ADDP—D)
The single, doctrine publication that sits at the apex of the doctrine hierarchy, and from which all other doctrine is derived.

Chapter VII of the Charter of the United Nations

Provides the framework within which the Security Council may take enforcement action. It allows the Council to 'determine the existence of any threat to peace, breach of the peace, or act of aggression' and to make recommendations or to resort to non-military and military action to 'maintain or restore international peace and security'.

Choke Points (*Australian Maritime Operations* 2017)

Relatively narrow shipping lanes which are vulnerable to closure by force. Not limited to: the Panama Canal, Strait of Gibraltar, Suez Canal, Bab el Mandeb, Strait of Hormuz, Lombok, Sunda, and Malacca Straits, Bering Strait, and the English Channel. Because of the density of shipping around some coastal areas they may also 'choke' ships together such as the Cape of Good Hope, and the Horn of Africa across the Indian Ocean to the Malacca Strait.

Coalition Operation (ADFP 04.1.1)

An operation conducted by forces of two or more nations, which may not be allies, acting together for the accomplishment of a single mission.

Collective Security (ADDP—D)

Where a group of sovereign states form a general system of organisation designed to deal with peace as an indivisible entity, and therefore a threat to the peace anywhere is of common concern to the entire group of states, which must agree in advance both to react to such a threat and how to react against it.

Command (NZDDP—00.1)

The authority that a commander in a military Service lawfully exercises over subordinates by virtue of their rank or assignment. Command includes the authority and responsibility for effectively using available resources and for planning the employment of, organising, directing, coordinating and controlling military forces for the accomplishment of assigned missions. It also includes responsibility for health, welfare, morale and discipline of assigned personnel.

Note: It comprises three closely inter-related elements: leadership, decision-making (including risk assessment) and control.

Combined Maritime Force

A military force composed of elements of two or more allied nations Combined Joint Task Force (adapted from AJP-3 (A)) A Combined Joint Task Force (CJTF) is a combined (multinational) and joint (multi-Service) deployable task force, tailored to the mission, and formed for the full range of the NZDF's military missions. A CJTF consists of three layers: the CJTF headquarters, subordinate component Headquarters if required, and forces assigned for the mission.

Constabulary Operations (*Australian Maritime Operations* 2017)

The use of military forces to uphold a national or international law, mandate or regime in a manner in which minimum violence is only used in the enforcement as a last resort and after evidence of a breach or intent to defy has been established beyond reasonable doubt. The level and type of violence that is permitted will frequently be specified in the law, mandate or regime that is being enforced. Also known as policing.

Command and Control (ADDP 00.1)

The process and means for the exercise of authority over, and lawful direction of, assigned forces.

Common Operational Picture (JP 1—02)

A single identical display of relevant information shared by more than one command. A common operational picture facilitates collaborative planning and assists all echelons to achieve situational awareness. Also called COP.

Customary International Law (ICRC)

Customary international law is made up of rules that come from "a general practice accepted as law" and that exist independent of treaty law. Customary international law is of crucial importance because it fills gaps left by treaty law and so strengthens the protection offered to victims.

Cybersecurity (NZISM)

Measures relating to the confidentiality, availability and integrity of information that is processed, stored, and communicated by electronic or similar means (also known as Defensive Cyber Operations). See http://doctrine/Cyberspace.htm

Defence White Paper

Defence White Papers provide the foundation for New Zealand's security. White Papers provide Defence with the direction it needs to effectively prioritise the roles and tasks it undertakes, both at home and overseas, and guide the modernisation of many of the Defence Force's military capabilities.

Deterrence (*Australian Maritime Operations* 2017)

Persuade an actor that the consequences of a course of action would outweigh potential gains. (ADFP 5.0.1)

Doctrine (ADFP 04.1.1)

Fundamental principles by which military forces or elements thereof guide their actions in support of national objectives. It is authoritative, but requires judgment in application.

Electronic Warfare (ADDP 3.5)

Military action to exploit the electromagnetic spectrum, encompassing: the search for, interception and identification of electromagnetic emissions; the employment of electromagnetic energy including directed energy, to reduce or prevent hostile use of the electromagnetic spectrum; and actions to ensure its effective use by friendly forces.

Exclusive Economic Zone (ADFP 06.1.2)

An area beyond and adjacent to the territorial sea, subject to the specific legal regime established in Part V of the United Nations Convention on the Law of the Sea, 1982, under which the rights and jurisdiction of the coastal state, and the rights and freedoms of other states, are governed by the relevant provisions. The EEZ shall not extend beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured.

Expeditionary Forces (AAP—06)

The projection of military power over extended lines of communications into a distant operational area to accomplish a specific objective. The New Zealand Defence Force must be sufficiently self-reliant that it can conduct independent operations in and around New Zealand and from Antarctica to the South Pacific.

Fog of War (BR 1806)

Uncertainty and confusion generated in wartime by a combination of limited, incomplete, inaccurate and contradictory information, deliberate deception and the mayhem and stress caused by combat.

Freedom of the High Seas (Australian Maritime Operations 2017)

The right of aircraft, ships and submarines to travel freely respectively above, on or beneath the high seas.

Freedom of Navigation JDP 0-10

Freedom of navigation is the term given to the rights and freedoms of all states and that apply to all forms of transit on, over and under the high seas. It facilitates global maritime trade and is vital to the security and economic stability of New Zealand.

Frigate (*Australian Maritime Operations* 2017)

Escort vessel designed to provide air, surface and undersea defence to naval forces and convoys. It is capable, if required, of conducting sustained independent operations to achieve a variety of missions.

High Seas (UNCLOS)

All parts of the sea, which are not included in the territorial seas or internal waters of States. All states have the freedom to navigate or conduct other activities, subject to certain restrictions, on the high seas. Where states have declared other zones beyond the territorial sea, the traditional high seas freedoms are affected by the rights that coastal states can exercise in such zones.

Humanitarian Assistance (AAP—06)

As part of an operation, the use of available military resources to assist or complement the efforts of responsible civil actors in the operational area or specialized civil humanitarian organizations in fulfilling their primary responsibility to alleviate human suffering.

Humanitarian Assistance and Disaster Relief Operations (Campaigns and Operations, NZDDP—3.0 second edition)

Operations where the primary mission of a deployed force is to relieve human suffering. HADR operations are conducted in an entirely benign posture (except for essential force protection) and are normally in support of the coordinating humanitarian agency.

Hybrid Warfare (*Australian Maritime Operations* 2017)

This concept involves the use, by an adversary, of insurgent techniques, non-military forces (i.e. police or customs officers) or non-uniformed forces in military operations, and the use of social networks and information warfare to spread propaganda and inflammatory rumours to cause destabilisation; thus causing uncertainty in the so called grey zones of conflict. This has and continues to occur in land operations but indications are this may spill over in to maritime operations.

Information Warfare

The integrated use of fires, information activities and related capabilities informed by information exploitation, to achieve information superiority.

Innocent Passage (ADDP 06.4)

Innocent passage entitles a warship to traverse another State's territorial seas 'continuously and expeditiously'. Passage is innocent as long as it is not prejudicial to the peace, good order or security of the coastal or island State.

Joint (NZ Supplement to AAP—06)

Connotes activities, operations and organisations in which elements of at least two services from the same nation participate.

Joint Effect (NZDDP—D)

Effective military operations at the strategic and operational levels require military force elements from all Services to operate in an integrated fashion. The integrated approach allows the value of a joint force to become more than merely the sum of its parts.

Law of Armed Conflict (ADFP 04.1.1 (101))

The international law regulating the conduct of States and combatants engaged in armed hostilities. Often termed 'law of war'.

Lead Nation (JDP 3—00 (3rd Edition))

Forces generated under a 'lead nation' are commanded by an officer from that nation, from his own Joint Force Headquarters (augmented with Liaison Officers, and potentially staff officers, from across the multinational force). The lead nation is responsible for planning and executing the operation, to which others contribute National Contingents and National Contingent Commanders.

Lift (AMD)

The capability to move resources between two points.

Lines of Communication (*Australian Maritime Operations* 2017)

All the land, water, and air routes that connect an operating military force with one or more bases of operations, and along which supplies and reinforcements move. Also all the land, water, and air routes that connect a country with its external partners and markets.

Littoral (*Australian Maritime Operations* 2017)

The areas to seaward of the coast which are susceptible to influence or support from the land and the areas inland from the coast which are susceptible to influence or support from the sea.

Manoeuvrist Approach (JDP 0—01)

The manoeuvrist approach seeks to shatter the enemy's cohesion through a series of actions orchestrated to a single purpose that creates a turbulent and rapidly deteriorating situation with which the enemy cannot cope. The manoeuvrist approach focuses commanders at every level on exploiting enemy weaknesses, avoiding enemy strength, and protecting friendly vulnerabilities.

Maritime Domain (Campaigns and Operations, NZDDP—3.0 second edition)

The maritime domain includes blue water (open ocean), green water (over continental shelves, archipelagos, and coasts), brown water (inshore areas and estuaries), and the sub-surface domain. BR 1806 defines the maritime domain as the series of jurisdictional zones that surrounds the coast of a state. It includes territorial seas and the Exclusive Economic Zone (EEZ).

Maritime Domain Awareness (JP 1—02)

The effective understanding of anything associated with the maritime domain that could impact the security, safety, economy, or environment of a nation.

Maritime Interception Operations (US DoD JP 3—03)

Efforts to monitor, query, and board merchant vessels in international waters to enforce sanctions against other nations such as those in support of United Nations Security Council Resolutions and/or prevent the transport of restricted goods. Also called MIO.

Maritime Operation (AAP—06)

An action performed by forces on, under or over the sea to gain or exploit control of the sea or to deny its use to the enemy.

Maritime Power Projection (JP 1—02)

Power projection in and from the maritime environment, including a broad spectrum of offensive military operations to destroy enemy forces or logistic support or to prevent enemy forces from approaching within enemy weapons' range of friendly forces. Maritime power projection may be accomplished by amphibious assault operations, attack of targets ashore, or support of sea control operations.

Middle East

Syria, Israel, Turkey, Iran, Saudi Arabia, United Arab Emirates, Syria, Iraq, Palestine, Lebanon, Qatar, Yemen.

Military Operations (NZDDP—D)

There are three levels accepted as providing a framework for command and analysis of military operations: the strategic level, the operational level, and the tactical level. These three levels of war provide clear building blocks for military operations. The national level covers the political area both domestically and internationally and considers the mobilisation of military and non-military resources to meet the Government's national strategic aim. The NZDF contributes to achieving the Government's strategic objectives by raising, training, and maintaining operationally prepared forces and carrying out government-directed campaigns and operations. Military strategy is the focus of Headquarters NZDF and the Ministry of Defence. The operational level is undertaken by the Commander Joint Forces New Zealand (COMJFNZ) and is the level where campaigns and major operations are planned, while the tactical level is where these campaigns and operations take place through battles, engagements, and actions.

Multi-agency (JDP 01 (2nd Edition))

Activities or operations in which multiple agencies, including national, international and non-state organisations and other actors, participate in the same or overlapping areas with varying degrees of interagency cooperation.

Naval Gunfire Support (*Australian Maritime Operations* 2017)

Gunfire provided by surface combatants in direct support to operations ashore.

North East Asia

China, Mongolia, Russian Far-East, Japan, Republic of Korea, Democratic People's Republic of Korea.

OODA Loop (NZDDP—D)

Observe, Orient, Decide, Act. Often described as Boyd's 'OODA Loop'— 'getting inside an adversary's decision-making cycle' can allow a commander to achieve superior operational tempo.

Operational Level of War (ADFP 04.1.1)

The operational level of war is concerned with the planning and conduct of campaigns. It is at this level that military strategy is implemented by assigning missions, tasks, and resources to tactical operations.

Operation (ADFP 04.1.1)

1. A military action or the carrying out of a strategic, tactical, Service, training, or administrative military mission.

2. The process of carrying on combat, including movement, supply, attack, defence, and manoeuvres needed to gain the objectives of any battle or campaign.

Peace Building (ADDP 3.8 *Peace Operations*)

A peace support operation employing complementary diplomatic, civil and, when necessary, military means, to address the underlying causes of conflict and longer-term needs of the people. It requires a commitment to a long-term process and may run concurrently with other types of peace support operations.

Peace Enforcement (ADDP 3.8 *Peace Operations*)

A peace support operation conducted to maintain a cease-fire or a peace agreement where the level of consent and compliance is uncertain and the threat of disruption is high. A Peace Support Force must be capable of applying credible coercive force and must apply the provisions of the peace agreement impartially.

Peace Keeping (ADDP 3.8 *Peace Operations*)

A peace support operation following an agreement or ceasefire that has established a permissive environment where the level of consent and compliance is high, and the threat of disruption is low. The use of force by peacekeepers is normally limited to self-defence.

Peace Making (ADDP 3.8 *Peace Operations*)

A peace support operation, conducted after the initiation of a conflict to secure a ceasefire or peaceful settlement, that involves primarily diplomatic action supported, when necessary, by direct or indirect use of military assets.

Polynesia

Comprised of thousands of islands but principally Hawaii, Samoa, Niue, Cook Islands, Tonga, Tuvalu, Tokelau, New Zealand and Easter Island.

Preparedness (NZDDP—D)

The measurement of how ready and how sustainable forces are to undertake military operations. Note: it describes the combined outcome of readiness and sustainability.

Reach (*Australian Maritime Doctrine*)

The ability to operate for extended periods at considerable distance from shore support.

Reconnaissance (RECON, RECCE) (NATO)

A mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or potential enemy, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area.

Resilience

Resilience is the overarching term used to describe activities and structures that ensure Government can continue to function and deliver essential public services in time of national crisis. As an agency of state that maintains disciplined forces and fleets of vehicles, ships, and aircraft available at short notice, the New Zealand Defence Force supports national resilience as a critical part of the whole-of-government response to a range of incidents.

Rules of Engagement (ADFP 04.1.1)

Directives issued by a competent military authority that specify the circumstances and limitations under which forces will initiate and/or continue combat engagement with other forces encountered. Also called ROE.

Sea Basing (*Australian Maritime Operations* 2017)

In amphibious operations, a technique of basing certain land force support functions aboard ship which decreases shore based presence.

Seakeeping (*Australian Maritime Operations* 2017)

The dynamic characteristics of a ship surviving and operating in various conditions of swell, wave height, wave length and wind.

Sea Lines of Communications (*Australian Maritime Doctrine* 2010)

Sea lines of communication (SLOC) are the most efficient navigable routes followed by shipping from their points of departure to their destinations. SLOC may refer in military operations to the maritime supply routes between operational forces and their supporting bases. The term is also used to describe the major commercial shipping routes of the world. SLOC should not be considered in the same way as lines of communication on land.

South East Asia

Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, Viet Nam

Spectrum of Conflict

The full range of levels of violence from stable peace up to and including general war. Often displayed graphically relating military tasks and types of operation to levels of violence, and sometimes also to probability of occurrence.

Stability and Support Operations (NZDDP—D)

Stability and support operations impose security and control over an area while employing military capabilities to restore services and support civilian agencies.

Sustainment (NZDDP—4.0)

The provision of personnel, logistic and other support required to maintain and prolong operations or combat until successful accomplishment of the mission or the national objective.

Surveillance (NATO Encyclopaedia 2017).

The systematic observation of aerospace, surface or subsurface areas, places, persons, or things, by visual, aural, electronic, photographic, or other means (NZDDP-D). Surveillance enables the flow of continuous, comprehensive and detailed information to promote situational awareness, and facilitate the decision making process.

Strategic Level of Conflict (ADFP 04.1.1)

The strategic level of conflict is that level of war that is concerned with the art and science of employing national power.

Tactical Level of Conflict (ADFP 04.1.1)

The tactical level of conflict is concerned with the planning and conduct of battle and is characterised by the application of concentrated force and offensive action to gain objectives.

Territorial Sea/Waters (ADDP 06.4)

An area of waters adjacent to a state over which it exercises sovereignty, subject to the right of innocent passage. Every state has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from the baselines.

UNCLOS (Oceans and Law of the Sea – United Nations Division for Ocean Affairs and Law of the Sea)

United Nations Convention on the Law of the Sea, sometimes referred to as Law of the Sea Convention or Law of the Sea Treaty. UNCLOS lays down a comprehensive regime of law and order in the world's oceans and seas establishing rules governing uses of the oceans and their resources.

War (NZDDP—D)

War is the armed hostilities between two nations. It aims to defeat the enemy's military forces that support and sustain the enemy's political structure and will to fight.

Warfare (NZ Supplement to AAP—06)

Warfare is the application of lethal force using a range of combat techniques and military capabilities. It is the 'how' of waging war.

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‘I fear the man of a single book’.
Saint Thomas Aquinas

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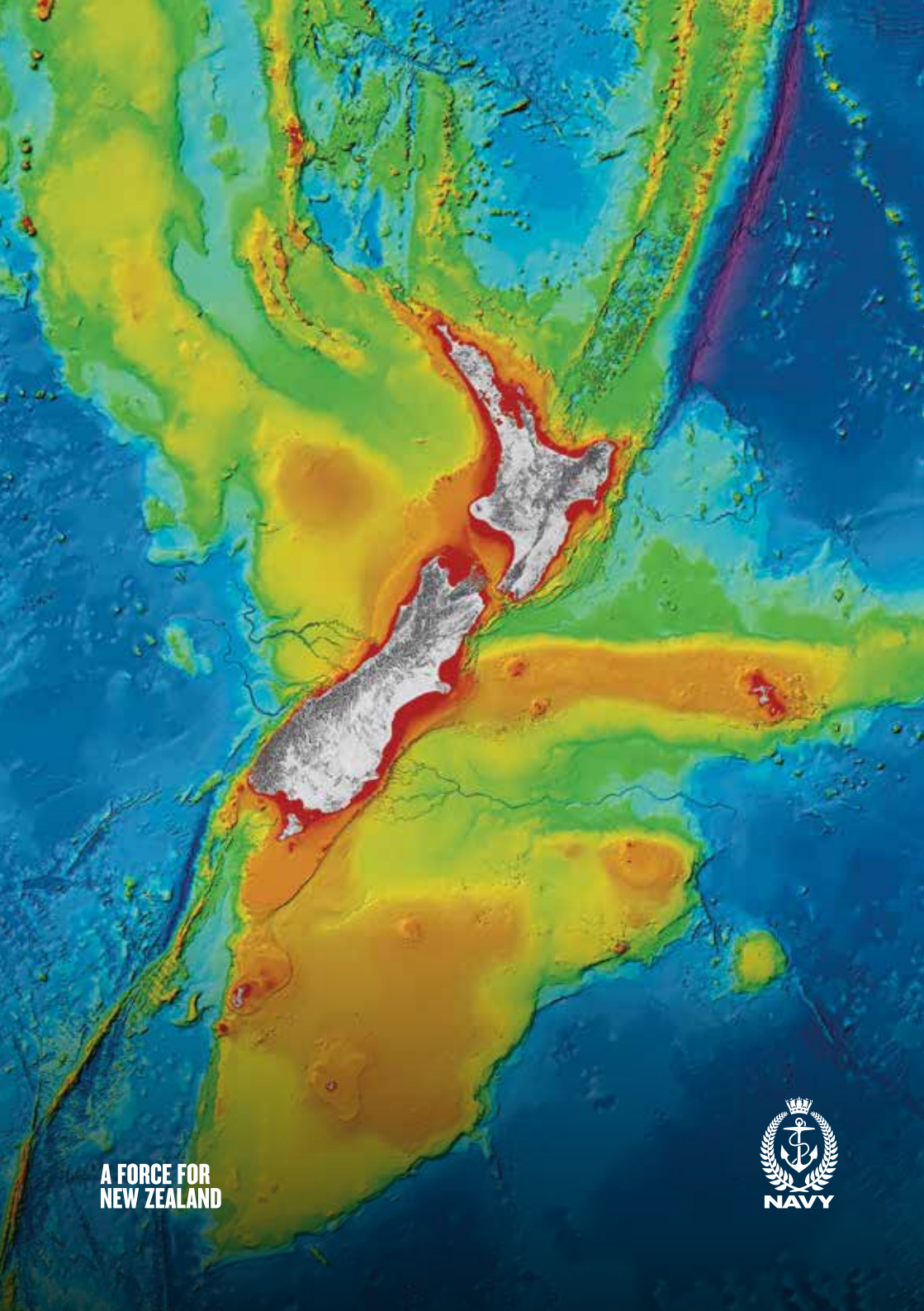
A FORCE FOR
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