

JOURNAL OF THE ROYAL NEW ZEALAND AIR FORCE

RNZAF 85TH ANNIVERSARY EDITION

**A COLLECTION OF
AIR POWER PAPERS, ESSAYS,
ARTICLES, AND BOOK REVIEWS**



**JOURNAL OF
THE ROYAL
NEW ZEALAND
AIR FORCE**

VOLUME 7 – NUMBER 1 – 2022



**A COLLECTION OF
AIR POWER PAPERS, ESSAYS,
ARTICLES AND BOOK REVIEWS**

JOURNAL OF THE ROYAL NEW ZEALAND AIR FORCE

VOLUME 7 - NUMBER 1 - 2022

A COLLECTION OF AIR POWER PAPERS, ESSAYS, ARTICLES AND BOOK REVIEWS

The *Journal of the Royal New Zealand Air Force* - otherwise known as the *RNZAF Journal* - is an official Royal New Zealand Air Force publication produced by the RNZAF Air Power Centre (APC). The *RNZAF Journal* is the professional journal of the Royal New Zealand Air Force, consisting of academically credible articles on air power, intending to serve as an academic forum for the presentation and stimulation of critical thinking, debate and education on air power. The *RNZAF Journal* contains a broad collection of air power papers, essays, articles and book reviews intended to promote and enhance air-mindedness, encourage professional mastery and stimulate debate and discussion about air power at all levels.

The submission of papers, essays, articles and book reviews is open to anyone. Submissions must be relevant to the employment or sustainment of air power. Challenges to conventional thinking and accepted norms are encouraged, as are innovative recommendations or conclusions.

JOURNAL SUBMISSIONS

The APC will formally call for papers, essays, articles and book reviews for the journal from February of each year. Submissions close August of the same year, however, submissions can be emailed at any time to ohapc@nzdf.mil.nz.

Papers, essays and articles should not exceed 5,000 words, and shorter submissions are encouraged. Submissions should be in Microsoft Word format using Chicago referencing with footnotes.

The use of supporting charts and photographs are acceptable, but may be subject to copyright confirmation before being reproduced within the *RNZAF Journal*. Submissions must only contain unclassified material.

Reviews of air power related books, either contemporary or historical, should consist of approximately 300 to 500 words.

To obtain further information on journal submissions, contact the APC at:

Address: **Air Power Centre
RNZAF Base Ohakea
Private Bag 11033
Palmerston North
New Zealand**

Email: **ohapc@nzdf.mil.nz**

Phone: **+64 6 3515781**

ISSN 2538-0656 (Print)
ISSN 2538-0664 (Online)

DESIGN AND PRODUCTION

RNZAF Publications Information and Drawing Support
Jewelina Finnigan
Casey Longstreth
Emily Brill-Holland

AUTHOR ASSISTANCE

APC staff can assist authors at any stage with topic selection, general or specific advice, guidance and direction. Authors are encouraged to liaise with the APC before submitting completed works.

ACKNOWLEDGEMENT

The APC formally acknowledges that copyright permission has been granted to reproduce articles and images for this journal edition.

Any errors in the reproduced articles are unintentional and are the responsibility of the APC.

DISCLAIMER

The views and opinions expressed or implied within the *RNZAF Journal* are those of the Author and do not necessarily reflect those of the New Zealand Defence Force or the New Zealand Government.

All rights reserved. The information in this journal should not be reproduced without the permission of the Editor.

AIR SCHOOL TO THE SKIES
PARTICIPANTS ON BOARD
AN NH90 AT RNZAF BASE
WOODBOURNE



CONTENTS

8 **INTRODUCTION TO THE JOURNAL OF THE ROYAL NEW ZEALAND AIR FORCE**

12 **EDITOR'S NOTE**
Brian Oliver

16 **APPENDIX:**
The Use of Aircraft in the Defence of New Zealand
Sir Henry Wigram

28 **ADDENDUM TO 'APPENDIX':**
The Use of Aircraft in the Defence of New Zealand
Dr. Dominick A. Pisano

34 **THE ORIGINS OF ROYAL NEW ZEALAND AIR FORCE MARITIME OPERATIONS:**
An Overview to 1942
Dr. John Moremon



44 **NOMONHAN 1939:**
The Undeclared War That Preceded WWII
W/O John Phillips

62 **JUSTIFYING A CORE CAPABILITY:**
What Can be Learned from the 1998 Air Combat Capability Policy Study
MAJ Chris Shaw

80 **QUOTAS VS. CULTURE:**
Why Cultural Intelligence, not Quotas, is Vital to Delivering the New Zealand Defence Force's Functional Imperative
WGCDR Stu Pearce

104 **CHINA'S GREY-ZONE ACTIVITIES:**
Concepts and Possible Responses
Dr. Peter Layton

124 **BOOK REVIEW - BILLY MITCHELL'S WAR WITH THE NAVY:**
The Interwar Rivalry Over Air Power
Dr. Ryan Wadle

INTRODUCTION TO THE JOURNAL OF THE ROYAL NEW ZEALAND AIR FORCE

VOLUME 7 – NUMBER 1 – 2022

INTRODUCTION TO THE 2022 EDITION OF THE JOURNAL OF THE ROYAL NEW ZEALAND AIR FORCE

April 1st 2022 marks the 85th anniversary of the creation of the Royal New Zealand Air Force. Such a significant milestone would normally be worthy of celebration, and while a number of appearances and events were planned, the current situation with the pandemic has seen all associated public events cancelled. However, in a small way this publication serves to remind people of the role Air Power has played throughout its short history and will continue to play in events globally and in New Zealand.

The *Royal New Zealand Air Force Journal* – in the fifth edition of its modern iteration – is an adaptation and continuation of the *Journal of the Officers' School*, produced by the Royal New Zealand Air Force of 1959. At the time, it was designed to assist the professional development of officers' but it was short-lived. Today, the need for ongoing professional military education

is vital for the development of all personnel, not just officers. All airmen require, at the very least, a working knowledge and understanding of air power to ensure the success of military air operations. Therefore, the RNZAF Journal was resurrected to create a platform for learning. Drawing from history and contemporary warfare, as well as peering into the future, to further our understanding of the application of air power.

CONCEPT OF THE JOURNAL OF THE ROYAL NEW ZEALAND AIR FORCE

The official title of the resurrected *RNZAF Journal* is the *Journal of the Royal New Zealand Air Force*, and it will continue in the spirit of the original journal by providing topical articles covering a range of air power related subjects. These will include, but are not limited to: RNZAF operations, air warfare, humanitarian assistance, technology, capabilities, training, strategy, theory and security. Articles will be sought and drawn primarily from New Zealand Defence Force personnel, academics and interested civilians. Relevant reprints from companion journals and other relevant sources may be published from time to time.

The *RNZAF Journal* is intended to promote and enhance air-mindedness, encourage professional mastery and generate discussions about air power. The journal serves as a forum for the presentation and stimulation of critical thinking, debate and education about air power. It is hoped, above all, that the articles are engaging and perhaps even draw the casual service reader into further personal study. Whether the reader

is researching or simply seeking entertainment, we welcome you all equally.

The *RNZAF Journal* is designed as a means for anyone - no matter who they are - to present and/or digest ideas, views and analysis of air power matters through researched and reasoned papers, essays and articles. Material published in the *RNZAF Journal* may challenge current thinking, policy and conventions. The opinions and conclusions are exclusively those of the authors, and not necessarily those of the New Zealand Defence Force or the New Zealand Government.

EX NOCTURNAL REACH IS A WOODBOURNE BASED EXERCISE WHICH AIMS TO TEST AND DEVELOP THE NIGHT FLYING CAPABILITY OF THE RNZAF.



EDITOR'S NOTE

BRIAN OLIVER | DEPUTY EDITOR RNZAF JOURNAL

The Air Power Centre is delighted to publish the 2022 edition of the Journal of the Royal New Zealand Air Force in this our 85th year of serving the people of New Zealand. The Journal presents a diverse range of articles by an equally diverse range of people, while also acknowledging the efforts of contributors who were not published. This 2022 collection of air power essays and a book review contains a good balance of topics in a more or less chronological order, covering over one hundred years of aviation history, beginning with New Zealand's own Air Power visionary, Sir Henry Wigram, and concluding with a glimpse of what the short-term future might hold, and what contribution the RNZAF could make, in an increasingly competitive Sino-West relationship. We feel sure there is something for every aviation enthusiast here, and we look forward to any feedback you may have, be it comments on articles or suggestions for future topics. Please note that all articles were written or prepared for publication in 2021 but due to circumstances beyond the editor's control this was not possible. This may affect some narratives.

In 1921, New Zealand aviation enthusiast Henry Wigram sponsored an essay competition that he hoped would kindle interest in the use of aircraft in the defence of New Zealand. This 2022 edition of the journal opens by celebrating the one-hundredth anniversary of this event by reprinting the appendix written by Wigram that accompanied the published winning essays. Wigram's

evaluation of the times is of historical interest and his comments on the vulnerability of island nations are as relevant today as they were a hundred years ago.

The second essay by Dr. John Moremon notes that while the RNZAF looks ahead to bringing the P-8A into service, it is timely to reflect on the place of maritime patrol in RNZAF history. The RNZAF has been responsible for maritime patrol to some degree for virtually its entire existence. This article considers the origins of RNZAF maritime patrol up to the mid-point of the Second World War, by which time the capability requirement was well-proven and the role firmly established.

The third essay by Warrent Officer John Phillips relates the little known story of a brief and brutal territorial war that occurred between Russia and Japan over a four-month period immediately prior to the Second World War. What became known as the Nomonhan Incident took place on a relatively short stretch of the border that separated Outer Mongolia and Manchukuo (Manchuria), the exact location of which was disputed. Events soon escalated, Russia began pouring in reinforcements, and after some initial setbacks for the Russian forces they gradually came to dominate the battle through a combination of preponderance of forces and increasing combat experience. While the Nomonhan Incident was mostly a ground war, the history and activities of both air arms are described to understand how Japan, with the sixth most powerful

air arm in the world at the time, failed to neutralise Russia's air arm and forces.

Our fourth essay looks at one of the most controversial decisions in recent New Zealand military history. The disbandment of the Air Combat Force in 2001 sent shockwaves through the Defence community and puzzlement with our defence partners. This essay by Major Chris Shaw looks beyond the strategic ramifications and explores the process that shaped that decision. This is not a purely academic or historical exercise either, as in the coming decade the New Zealand Government will face another critical decision on a core military capability, as the Royal New Zealand Navy's two Anzac-class frigates near the end of their useful lives. The political decision surrounding the frigate replacement will likely share strong parallels with the air combat force debate at the turn of the century, and Shaw contends that lessons from that era might better inform future military advice and decision-making.

Our penultimate essay takes a look at the challenge faced by the military, and the NZDF in particular, of diversity in the workforce. This essay by Wing Commander Stu Pearce, who is a long-time advocate for inclusive diversity and was one of the founders of the NZDF's OverWatch group, provides a deep and thoughtful analysis of the history of inclusion and diversity in the NZDF and also critiques the current approach. The discussion centres on "quotas" versus "culture", which is further expanded into "demographic diversity" versus "identity diversity". In other words, it is put forward that demographic diversity masks the true utility of "diversity" writ large. This is a well-argued and researched essay and brings

measured reason and rationality to what at times is a highly controversial subject.

Our final essay gives us an analysis of the much-discussed, and much-misunderstood, grey-zone activities. Written by the distinguished Australian academic/strategist and author Dr. Peter Layton, it traces the origin of such activities back to Sun Tzu who famously advised that 'ultimate excellence lies not in winning every battle but in defeating the enemy without ever fighting.' The focus is on China and their approach and how the "West" might respond. Layton, though, argues that China's ongoing grey-zone activities are now generating their own countervailing forces, as they force countries to respond, reorienting their defence-force structures accordingly and, most worryingly for China, beginning to come together to act collectively. The essay concludes with a proposal of what future role the RNZAF might take in this aspect of military and strategic competition.

To close the journal we have a review of a book with thematic links to Wigram's appendix, that examines the exploits of Brigadier General William "Billy" Mitchell, one of the most fascinating military figures of the previous century and the primary figure in the fight between the United States Army and Navy for control over aviation. Written by Thomas Wildenberg, *Billy Mitchell's War with the Navy: The Interwar Rivalry over Air Power* not only explores the efforts of Mitchell to leverage primacy for continental defence away from the Navy but also gives an insight into the man and what drove him. Reviewer Dr. Ryan Wadle concludes that the book provides a fresh perspective on a topic familiar to aviation enthusiasts.

This issue of the *RNZAF Journal* spans the historical, the contemporary and a potential role for the RNZAF in the future. It is hoped that readers find the articles interesting, informative and challenging. That is the point of the *RNZAF Journal* - it should make us think and reflect. By studying warfare, and in particular, air operations in support of warfare, we can increase our individual - and collective - understanding to that of our peers. But the journal is only as good as its contributions, and to ensure it holds its place as a valued publication, we encourage writers to put pen to paper and share their thoughts and ideas; the Air Power Centre would love to hear from you.

B. OLIVER
Deputy Editor

GRADUATION
PARADE FOR 20/1
WINGS COURSE



APPENDIX: THE USE OF AIRCRAFT IN THE DEFENCE OF NEW ZEALAND

SIR HENRY WIGRAM

The following text under the title “Appendix: The Use of Aircraft in the Defence of New Zealand” is an appendix by Sir Henry Wigram to the winning essays in an essay competition, originally published in 1921.

THE CENTENARY OF HENRY WIGRAM’S ESSAY COMPETITION ON ‘THE USE OF AIRCRAFT IN THE DEFENCE OF NEW ZEALAND’

2021 marks one hundred years since aviation enthusiast Henry Wigram¹ sponsored an essay competition designed to ‘rouse interest in the subject’ of the use of aircraft in the defence of New Zealand.² The competition was conducted with the support of the Minister of Defence, Sir Henton Rhodes, who appointed the heads of the three services, the Army, the Navy, and Air Force to be the judging committee. Wigram was delighted with the appointments and reasoned that New Zealanders would be suitably encouraged to submit essays knowing that those with the most

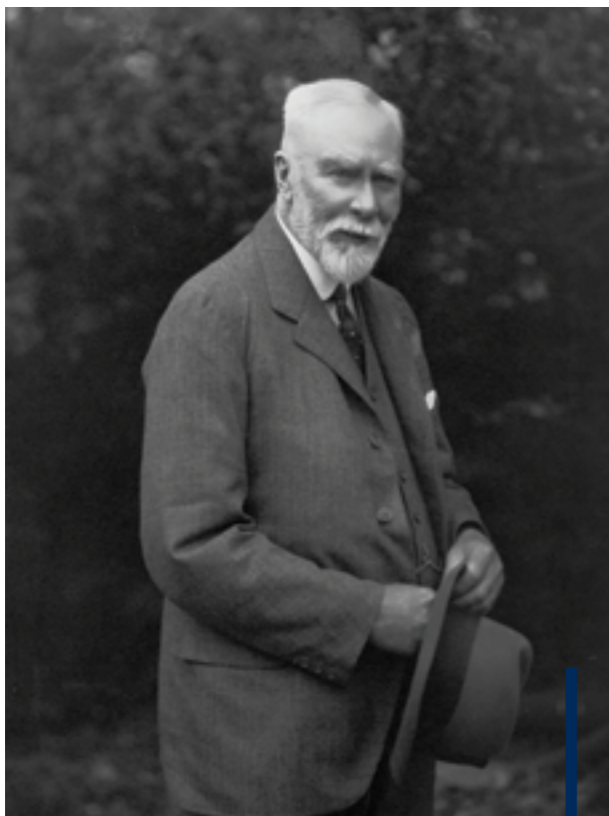
- 1 For more information on Henry Wigram and his involvement in New Zealand aviation refer to *The RNZAF Journal 2020* edition, 14-28.
- 2 Henry Wigram, in his foreword to the publication of the three winning essays, published by the *Lyttelton Times*, 26 Aug 1921.

influence to enact their ideas were assessing their work. Many essays were received, with ninety-nine being forwarded to Captain Wilkes, the Secretary of the Air Board, for judging. For those who wish to read the top two winning essays, they were re-published by the Air Power Centre in the *RNZAF Journal*, Vol 3, of 2017.

In this volume of the *RNZAF Journal*, the Air Power Centre is marking the centenary of Wigram’s essay competition by re-publishing his appendix to the published winning essays. Here, he outlines his thoughts on aerial defence, and we can see that he was an avid follower of the advancements in military aviation, that he was cautious of applying the lessons of the First World War to the New Zealand geographical context and that the Pacific Ocean may be the ‘storm centre’ where the ‘three empires meet’ to fight the next great war.

Wigram saw the benefits of having an effective Air Force in the defence of New Zealand by noting the vulnerability of island nations to naval raiders, the relative ease of establishing sea blockades to disrupt shipping lanes, and how New Zealand escaped many of those dangers with the assistance of the Japanese navy. But, the world at the time was rapidly changing, and he was worried that the United States or Japan could use Pacific islands as stepping stones to reach New Zealand, and therefore we should be prudent to prepare against such disasters. It should be remembered that, at that time, rising empires were jostling for territory within the Pacific Ocean.

Air power continued to advance during the 1920s, and Wigram was following developments with keen interest. A month prior to publishing his appendix to the winning essays, he read of General William “Billy”



PORTRAIT OF SIR HENRY WIGRAM FROM THE RNZAF MUSEUM COLLECTION

Mitchell’s success in sinking the German battleship *Ostfriesland* during a naval test. Battleships were finally becoming vulnerable to air attack, and Wigram fully understood its implications to our maritime nation. This feat inspired a great debate that raged over successive decades with Mitchell, Trenchard, and Slessor arguing on the supremacy of air power over sea power.³

³ See Mitchell’s *Winged Defense*; and Trenchard and Slessor, *On the Supremacy of Air Power over Sea Power*.

One hundred years on, his three core themes remain as relevant today as they were then, and we should pause to reflect on Wigram’s evaluation of the time and perhaps use his themes as a lens to view events unfolding today and our Air Force’s configuration and role in responding to them.

*The endnotes in the Appendix were inserted by the editor to clarify terms and events that are likely to be unfamiliar to some readers, otherwise it is a faithful transcript, Ed.

APPENDIX: THE USE OF AIRCRAFT IN THE DEFENCE OF NEW ZEALAND

BEFORE inviting the competition I have from time to time expressed my own views on the subject, some of which have not been touched upon by the Essays printed above. Anxious as I am to present the case for the Aerial Defence as fully as possible, I do not think I need apologise for printing the summary of my views:-

The progress made in aviation during recent years has brought with it problems for solution and possibilities for achievement. To Great Britain is offered the possibility of linking up her distant territories by a mail service measured by hours or days. On the other hand, the British Isles are no longer islands, and have a frontier to be defended like other European countries. Also, her supremacy at sea is threatened from another element. Those countries which possess vast territories—the United States, Canada, the Commonwealth of Australia and India—offer attractive fields for commercial aviation, and to India aircraft may present a means of more effective control over the turbulent tribesmen on her frontier. To Egypt, aviation

may mean the establishment there of an important junction of the air routes of the world. To Japan, with her capacity for organisation, the further domination of the Chinese Empire.

But we in New Zealand have no “magnificent distances.” We have already fairly good inter-communications by land and sea, so that aerial services can only effect a saving of hours. We have neither the dense population nor the volume of mail matter to warrant a heavy expenditure in catering for a mail and passenger service. Moreover, a Government which already controls its railways, post, telegraph and telephone services is not likely to allow the control of aviation to fall permanently into private hands. Aviation, therefore, offers slight attraction to private enterprise: on the other hand, as I shall endeavour to show, it does offer possibilities for defence which are not shared by any other country.

Where are we to start the enquiry? Should we seek out the lessons taught by the Great War? If so, we might come to the conclusion that no defence is required. For during the years of warfare the coasts of New Zealand remained inviolate, no landing was effected, not a shot was fired nor bomb dropped. The solitary act of enemy aggression was the cruise of the “Wolfe” along our coasts, laying mines.¹ But it has to be remembered that the enemy nations were all in the northern hemisphere, twelve thousand miles away, that their fleets were safely blockaded in their ports, that their cruisers had to run the gauntlet before getting to the open sea, and then to replenish their fuel supply before they could reach this distant outpost. As a matter of fact, the few that succeeded in breaking the blockade found more profitable employment in raiding the “lanes of commerce” than on an unproductive attack on our

distant islands. The critical moment occurred at the outbreak of hostilities, when a few German cruisers were at large in the Pacific, but thanks partly to the assistance of the Japanese navy in policing the southern seas, we escaped even that danger.

WAR IN THE PACIFIC

We are told that the next great war may have for its storm centre the Pacific Ocean, where “three empires meet.” It is not our business to rely upon the “unthinkableness” of the war with either of our late Allies. We don’t expect our houses to be burnt or our chauffeurs to break their necks, but as prudent people we insure against such disasters. I only refer to the United States and Japan because, as far as we can see at present, they are the only nations by whom we COULD be attacked. Both of these powers are many thousands [of] miles away, even if they made use of the Sandwichⁱⁱ and Marshall Islands respectively as jumping off bases. It is very unlikely that at the beginning of such a war the enemy’s bases could be blockaded, and we might at the start have to face a numerous fleet of raiding cruisers at large upon the ocean instead of the dozen or so of Emdens, Schnadhorsts, etc., with which the great war opened, and these raiders could return to their bases to coal and refit.

THE BRITISH NAVY

It may be thought that the British Navy, in which we are shareholders, would protect us, but the function of the Navy is to seek out and destroy the enemy fleet as its first business, and secondly to protect the trade routes and so prevent a defeat by starvation. It is doubtful whether even the *Chatham*ⁱⁱⁱ would remain to guard our shores.

PROBABLE FORM OF ATTACK ON NEW ZEALAND

What would be the nature of the attack to which we might be subjected? So long as the British Navy rode the seas, no enemy could afford to detach a battle fleet to attack us: it would have other and more pressing business to attend to. But a visit from a raider, or squadron of raiders, would be probable. The distance from any possible base is too great, in the present condition of aviation, for an attack by air or seaplanes, but it is tolerably certain that each raider would carry planes to its full capacity.

AIR SHIPS TOO VULNERABLE FOR USE AGAINST US

I think we may rule out any attack by lighter-than-air ships, on account of their extreme vulnerability. The lessons of the later Zeppelin raids go to show that air ships are useless for war purposes, though they may have a future in the carriage of mails and passengers.

Of the 83 Zeppelins in commission during the war, 66 are accounted for as follows—

- + 34 shot down and destroyed;
- + 2 accidentally destroyed in entering or leaving hangars;
- + 13 caught fire accidentally;
- + 10 destroyed through emergency landing;
- + 4 stranded and destroyed through failure of engines;
- + 1 destroyed by lightning;
- + 1 broke loose from moorings and disappeared entirely; and
- + 1 fell into the North Sea.

The ‘Flieger’, from which the above figures are quoted, further stated that the German authorities decided to give them up as a bad job for military purposes before the war ended.

OUR POSITION IF WE HAVE NO AIRCRAFT

The utmost we may have to face, then, is an attack by a squadron of armed raiders carrying a small fleet of seaplanes. What would be our position if we had no aircraft to meet them? We might have no warning of the enemy’s approach until the squadron appeared off one of our coastal cities and began to shell the city and set fire to the shipping. If our coastal defences were strong enough to prevent this, the squadron could stand off twenty miles [32 km] and send her seaplanes to do the work by bombing the city and firing the shipping, and how are we going to stop them?

THE NEED OF SCOUTS

If we have no scouting aeroplanes, as already suggested, the enemy attack might find us unwarned and unprepared. The lesson of the ‘Wolfe’ should not be forgotten; we know from the evidence of prisoners confined in her that it was her practice to send up a seaplane every morning to scan the ocean. In clear weather the seaplane could command a view for a radius of 100 miles [160 km] and warn her parent ship of the approach of shipping. That is why the cruise of the “Wolfe” along our coasts remained undiscovered. A scouting machine is hard enough to pick up when flying high at even a few miles distance, and would be quite invisible from the deck of a ship even twenty miles [32 km] away, while the ship would be clearly seen by the scout at four or five times that distance. I do not want to stress the point unduly, but I want to make it

clear that scouting planes are essential to guard against a surprise attack.

THE ADVANTAGE OF DEFENCE OVER ATTACK IN THE AIR

The enemy aeroplanes, as we have seen, could only be such as the enemy cruisers could carry, and as each plane takes up a considerable space on deck, they could not be very numerous. There is a very general consensus of opinion that the only defence against an aerial attack is by defeating it in its own element; in other words, by securing the command of the air.

Therefore, next after the scouts we need a fleet of fighting machines, whose primary function would be to prevent the enemy planes from rising or to drive them down before they could do damage.

With equal strength of fighting craft, the advantage would be greatly in favour of the defence. An enemy ‘lame duck’ would probably fall in the sea, or if she made the shore would be captured or destroyed and her pilot made a prisoner. It is surely obvious that the defending machines, based on a chain of aerodromes along the coast, and able to return to any of them, would have an enormous advantage over seaplanes, which would have to return to their parent ship to replenish their petrol and ammunition supply and might reach the parent ship only to find her undergoing an aerial attack.

* I have no accurate information, but by way of illustration will assume that a cruiser costing half a million could accommodate ten seaplanes on her deck in addition to her armament. The capital cost of bringing each seaplane against us would be £50,000, plus the cost of the ocean voyage of the cruiser. If a vessel specially built as a seaplane carrier were employed, the number of aircraft carried might be much greater, but the “carrier” would have to be escorted by armed cruisers. The cost to us of hangar accommodation for our defensive machines may be estimated at £500 per machine, just one-hundredth part of the capital cost of the carriers.

But there should be no necessity to base our estimates on ‘equal strength’; it should be within the power of our Government to provide a fleet of fighters SUPERIOR to anything which could probably be brought against us. As I shall show presently, the extreme mobility of an air fleet is an important factor, seeing that the whole New Zealand fleet could be concentrated on the threatened point of attack in a few hours. And there is the additional factor that the cost of defence by air is infinitesimal compared with the sister services by land and sea. *

I admit that my figures are hypothetical, but even if divided by four, say the cruiser costs but a quarter of a million and can carry twenty machines, they are sufficiently impressive.

AIRCRAFT VS CRUISERS OR EVEN CAPITAL SHIPS

Assuming, then, that we could drive down the enemy aircraft and gain the command of the air, could we follow up the advantage by attacking the enemy cruisers? Here again the experiences of the Great War are of rather a negative character. I cannot recall a single instance of an armed cruiser being sunk or damaged seriously by bombs dropped from an aeroplane. But the war came to an end at a most critical time in the history of aviation. Several wonderful inventions were on the verge of being launched and it is rumoured that some of them have since been developed and are likely to revolutionise the science of aerial fighting.

TORPEDO CARRYING AIRCRAFT

This is one of the inventions which was almost ready for adoption at the time of the Armistice. The initial difficulty was to prevent the torpedo, launched from the air, from diving too deep to be effective. I have talked with an eye-witness of a trial where two torpedoes stuck in the mud at the bottom, but I hear that this difficulty has been surmounted. I have heard since from reliable sources of successful trials that the 14-inch torpedo is a complete success and the 18-inch is being experimented with. But I prefer not to base my argument on authorities whose names I am not at liberty to quote, and will call as a witness Mr C. G. Grey, the Editor of the 'Aeroplane', who is an accepted authority on the subject. Mr Grey, in a published letter, described a trial attack made by a squadron of airplanes from Gosport, near Portsmouth, on a British Fleet anchored in Portland Heads. The torpedo carriers were preceded by two bombers which flew at about ten thousand feet and were neither seen nor heard by the fleet. Instead of dropping bombs, the bombers dropped a string of smoke balls about a mile to windward of the fleet. Before the smoke cleared away and before the fleet had a chance to use a gun, the torpedo machines came through the smoke down wind at about 130 miles [210 km] per hour, so low down that no naval gun had a chance of hitting any of them. Six out of the eight torpedo carriers secured direct hits, each of which would have sunk its ship, or at any rate, put it out of action. Mr. Grey comments as follows—

“It is practically certain that given an adequate force of torpedo aircraft, no hostile fleet could get within 100 miles [160 km] of any coast so defended.”

* The threat of the Capital Ship from the air is parallel to that from beneath the surface of the sea. Like the submarine, and perhaps even more than the submarine, the air-craft will be greatly “developed.” So also will the methods of counteracting its activity. It will not be roofed harbours or penthouse-covered ships that will be needed so much as **counteracting forces of aircraft of our own**. What we have already seen of the achievement of British airmen must make us reasonably confident of the result of trusting our offensive defence in the air to them.—Sir Cyprian Bridge.

It may be contended that Mr. Grey is biased in favour of air force, therefore, I will quote the opinion of Admiral Sir Cyprian Bridge, in an article which appeared in the last February number of the “Nineteenth Century”. Sir Cyprian was writing in DEFENCE of the continued employment of ‘capital ships’ and the main part of his argument was to set out the methods by which the submarine danger could be met. The Admiral then proceeded to discuss the risk of attack from the air. In one short paragraph he dismissed the subject, contending that for protection from the air, the capital ship must rely upon the air service and could do so with reasonable confidence. *

Coming from such a source as this is a singular admission of the power of aircraft even against capital ships.

I understand that the Commonwealth Government has adopted a squadron of torpedo carriers as part of its defensive armament, which goes to show that the aerial torpedo has passed out of its experimental stage. The cost is said to be about £1,500 per machine. They are flown and controlled by a single pilot.

(I have read somewhere, and I think on the authority of Air Marshal Sir E. L. Ellington, Director-General of Supply and Research, that a new invention has also passed the experimental stage, whereby a torpedo carrier can be flown without a pilot and directed by wireless from a distance).

CONCERNING BOMB DROPPERS

The success of bomb droppers against capital ships or cruisers at sea has not yet been demonstrated. The difficulty of hitting a comparatively small target from an unstable platform in rapid motion has not been surmounted. It is one thing to bomb a large and stationary land target, a munition dump, a railway yard, a factory, etc, but the problem of hitting a ship moving rapidly and manoeuvring is a different story. Improvements are being made in ‘bombing sights’ which may help the bombers and it may be that a helicopter, enabling the bomber to stand still in the air, will presently be discovered. Mr Brennan, the inventor of the mono-rail railway, depending on the gyroscope, is at work on the problem and the Home Government has sufficient faith in the chance of his success to finance his experiments, and according to a recent cable message, an Austrian inventor has produced a helicopter which has undergone a successful trial. I think I have made out a prima facie claim for the use of aircraft for our defence. We claim here to be a progressive people, yet in this subject we are lagging far behind our competitors.

AIRCRAFT USEFUL FOR DEFENCE ONLY, NOT ATTACK

I know that the Government is hampered by a strong section of the community which objects to the expenditure on armament, but many pacifists would withdraw their opposition if it were pointed out to them that the establishment was for defence only, as the distances of possible enemy bases would effectually prevent the use of our aircraft for attack; also that the number of pilots employed would be very limited compared with those employed for a citizen army and the risk of human life proportionally reduced; our first

line of defence being represented by, say, 500 pilots, whose services, if successful, might avoid the need for our land forces from coming into action at all.

DELAY DANGEROUS

I suggest that prompt action is desirable. It will probably take at least two years to organise a system of Aerial Defence. Not only have the machines, scouts, fighters, torpedo carriers and bombers to be imported, together with their armament and accessories, but the central aerial stations have to be formed and the aerial routes to be laid out and, more important still, the personnel, pilots and mechanical staff to be selected and trained.

NEW INVENTIONS IN AVIATION

One can hardly pick up one of the magazines devoted to aviation without coming across some wonderful new invention which revolutionises past methods. Aviation is, in fact, the arm of the immediate future, and until we have organised an Air Force, we shall not be in a position to take advantage of the discoveries which appear to be imminent and may, at any time, be privately communicated to the Government by the Research Department of the Royal Air Force.

A CLEAN SLATE ON WHICH TO WRITE

The delay of our Government in taking up aviation has one counter balancing advantage; the Air Board has a virgin soil to cultivate and can profit by the example of more enterprising countries and avoid their mistakes; it has, in fact, a glorious opportunity of providing the country with a well-thought-out and comprehensive modern scheme.

AIR ROUTES AND CENTRAL STATIONS

Probably among the first subjects to engage the attention of the Air Board will be the provision of Air Routes, a main trunk line connecting the North Cape with the Bluff, with lateral lines to the East and West Coasts, the routes to be provided with a string of emergency landing grounds, each supplied with telephonic communication. On these lines of communication would be situated the Central Air Stations with their building and repairing shops.

An aerial photographic survey of the country might be a useful preliminary to the selection of routes and sites.

MOBILISATION OF AIR FLEET

Supposing that we had only two main Air Stations, situated about the centre of each island. No part of the coast line would be distant more than 300 miles [482 km] from one of them, and the chief cities, the probable points of attack, considerably less. This means that within three hours of receipt of a warning from a scout, the fleet of the island threatened could be at the seat of danger, to be reinforced, if necessary, from the other island a few hours later.

SUPPLY OF PETROL

An air fleet is entirely dependent on its petrol supply and, unfortunately, petrol is not included in the products of New Zealand. At the outbreak of a Pacific War, it is possible that the lines of sea communication might be interrupted and it is further possible that the demand for petrol by the belligerent nations might be so great as to leave none available for export here. I suggest that the Air Board should build tanks and lay in

large stocks against such an emergency. I am told that alcohol can be used as a substitute for petrol. I do not know if this is the case but I throw it out as a suggestion to the Air Board, as under proper safeguards it should be possible for the Government to lay down a plant for its manufacture.

OTHER MATERIAL NECESSARY FOR AVIATION

What I have said about petrol applies, though perhaps in a lesser degree, to many other commodities, such as lubricating oil, dope, fabric, aeroplanes and their engines, etc. Our aim should be to make ourselves independent, as far as possible, of imported articles.

THE TRAINING OF PILOTS AND AIRCRAFT MECHANICS

I have heard it estimated that it costs about £4,000 to turn out a first-class war pilot. I do not suppose any accurate estimate is possible; the account would have to be debited with the cost of partially training of men who ultimately prove unsuitable and with the machines crashed in training. The war pilot must have gone through a long course of tuition. He has to fly his machine single handed; he must therefore be a competent mechanic, an expert machine gunner, a navigator; he must understand wireless and signalling and many other things, besides possessing the necessary physical qualities of the highest standard. We have here in the Dominion a number of trained pilots, returned men who have graduated in actual warfare; I don't know how many, but the two New Zealand schools have sent Home several hundreds who had taken the Aero Club certificate, and who went Home to undergo further training before being sent to the Front. Many of these

passed their Home training with credit and have now returned. In addition to those locally trained, there are a number of New Zealanders who went Home on their own account and were trained there. It is estimated that to keep a pilot really efficient he must have a month's 'refresher course' at least once a year. There are at present perhaps a dozen pilots flying at the private aerodromes but none of the others are taking up refresher courses, nor are there any new ones coming on. It takes a long time to make an efficient pilot and the best peace-time training can hardly come to the efficiency gained by actual war-time experience. Surely it would be sound policy for the country to keep its experienced pilots efficient and to start training new men to follow on?

The same arguments apply, in a lesser degree, to the training of aircraft mechanics, engineers and 'riggers'. I say 'in a lesser degree' because we have a wealth of motor mechanics to draw from who would soon pick up the working of aerial engines.

THE ENCOURAGEMENT OF PRIVATE ENTERPRISE

There are various ways in which the Air Board might enlist the assistance of private enterprise in aviation. The duty might be remitted, or even a subsidy granted to importers of aircraft suitable for defence purposes, such machines being liable to be commandeered in case of national emergency, at a fair valuation. Pilots engaged in commercial work might be given a retaining fee if joining the Air Force Reserve. A bonus might be offered to engineering firms who laid down a plant for the manufacture of planes or aerial engines. And, as already done, a subsidy might be paid for the carriage of aerial mails.

Since the above was written, I have had the opportunity of reading the Essays and certain new developments have taken place, on which I should like to comment.

Dealing first with the Essayists, I do not appear to have fully appreciated the horrible nature of an attack by air on one of our cities or shipping in port. I had not referred to poison gas, nor to a dreadful invention made in the United States, known as the 'rain of death', a few drops of which are said to be fatal. The greater number of the writers appear to think that, in the absence of aerial defence, we should be absolutely at the mercy of even a few enemy aeroplanes. Several stress the point that the probability is that in the next war, an attack from the air will PRECEDE any formal declaration, and that, failing a screen of aerial scouts, we might be caught utterly unprepared.

I claimed that our aeroplanes could only be used for defensive purposes but several of the writers think they could usefully accompany a convoy of troopships. I do not think that in a war in the Pacific we are likely to send many troopships away—our men will be required for home defence—though I admit we might have to send a garrison to the Cook and other islands and to our mandate of Samoa. But this, I claim, is defence.

Another writer stresses the use of mines to protect our coasts and claims that aircraft will be required to watch the mined areas and see that they are not interfered with by mine sweepers, and several emphasise the value of aircraft for spotting submarines and either destroying them or following them up till a surface ship can be put on their track, claiming that a submarine, once discovered by a group of seaplanes, is doomed. Others discuss the use in peace time, which might be made of aircraft. An instance is given of pilots formerly

employed in spotting submarines now engaged in spotting shoals of fish on the North American coasts.

FLYING BOATS

A wonderful story of the cruise of a flying boat appeared in the *Sydney Morning Herald* of July 5. A flying boat, as most people know, differs from a seaplane in that the latter is merely provided with floats to enable it to alight on smooth water, while the flying boat is a real boat, capable of navigating stormy seas and of rising at will into the air. The flying boat in question was the *Seagull*, the property of Mr. Hordern, of Sydney, who has shown great interest in aviation. It could carry two passengers or an equivalent weight in bombs; it has a speed of 55 miles [89 km] per hour, and could remain four hours in the air, and it cruised for months along the Australian coasts, taking aerial photographs of the coast line. It has as a consort motor launch which carries its stores and fuel.

The possibility of an attack in force by a fleet of flying boats opens up a new source of danger. They would be accompanied by one or more mother ships, whose function would merely be to carry supplies, as the flying boats could cruise under their own power.

The *Seagull* was only about 29 feet [8.84 m] in length, and weighed, when loaded, two tons, but there can be little doubt that larger flying boats will be built, capable of carrying heavy bombs or torpedoes, and with greater air speed. Their handicap will probably be the difficulty of speed and climbing power, seeing they have so much dead weight to lift, and they should be an easy prey to fast flying fighting planes. It seems to me that the possibility of having such craft to meet is another reason for providing ourselves with plenty of fighting scouts.

AEROPLANES V. BATTLESHIPS

I have already referred to this question but according to a Press Association cable, dated July 22, the United States Government has made a practical experiment. The following is the message—

“Tests carried out off the Virginia coast demonstrated the value of airplanes against naval craft, and convincingly proved the ability of aerial bombers to sink Dreadnoughts. Six planes dropped six one-ton bombs upon the German battleship Ostfriesland, sinking the vessel in twenty-five minutes.”

The use of bombs weighing a ton each must be something in the nature of a record. I understand that five hundredweight^{iv} bombs were about the heaviest used during the war.

CONCLUSION

I have only to add that I have endeavoured to place the question of providing Aerial Defence before my readers fairly and without any attempt to exaggerate its importance, and I have refrained from any discussion of detail, which must necessarily be the work of the officers of the Defence Department.

HENRY F. WIGRAM

i SMS Wolf was a German commerce raider that laid mines off North Cape and Cape Farewell in June 1917.

ii The name given to the Hawai’ian Islands by James Cook in 1778.

iii HMS Chatham was a light cruiser commissioned into the New Zealand Naval Forces on the 1st October 1920.

iv Approximately 250kg.



ADDENDUM TO “APPENDIX: THE USE OF AIRCRAFT IN THE DEFENCE OF NEW ZEALAND”

DR. DOMINICK A. PISANO | SMITHSONIAN NATIONAL AIR
AND SPACE MUSEUM

Dr. Dominick A. Pisano is a former author and researcher at the Smithsonian National Air and Space Museum. Pisano earned a BA from Pennsylvania State University, an MS from Catholic University, and a PhD in American Civilization from George Washington University. He retired in 2015 and is now a curator emeritus.

AUTHOR
BIO

INTRODUCTION

As Wigram notes at the end of his Appendix, the aeroplanes versus battleships saga took on a new twist just one month prior to the publication of the essays. The following article was written by Dominick Pisano and was first published on the Smithsonian National Air and Space Museum website on 21 July 2011 and is reproduced in accordance with the institute’s terms of non-commercial usage. In accordance with those terms, a link to the original piece is included at the end of the article.

GENERAL WILLIAM “BILLY” MITCHELL AND THE SINKING OF THE *OSTFRIESLAND*: A CONSIDERATION

21 July 2011¹ marked the ninetieth anniversary of the sinking of the captured German battleship *Ostfriesland* by the First Provisional Air Brigade of the U.S. Army Air Service. This unit was commanded by Brig. General William “Billy” Mitchell, one of the most controversial figures in the history of air power in the United States. Mitchell was air power’s most prominent American proponent in the 1920s, often to the chagrin of the regular Army leadership. Although commonly perceived as a one-time affair, the sinking of the *Ostfriesland* was in fact the culmination of a series of bombing tests conducted by the U.S. Navy and the Air Service from May to July 1921. Mitchell’s advocates and promoters have pointed to the sinking of the *Ostfriesland* as being a significant milestone in the history of American air power. Nevertheless, the historical context that surrounds it remains a matter of some controversy to this day.

SERVICE IN THE FIRST WORLD WAR AND IMMEDIATE POSTWAR YEARS

Mitchell was a decorated veteran airman who had commanded the American air combat units in France during the First World War. As such he was responsible for aerial operations in the St. Mihiel salient during the war, and he had been, according to his most prominent biographer, Alfred Hurley (*Billy Mitchell, Crusader for Air Power*), strongly influenced by the ideas of the British General Hugh “Boom” Trenchard, head of the Royal

¹ 100th Anniversary in 2021, ed.

Flying Corps, and later of the Royal Air Force (RAF), regarding aircraft as offensive weapons. On Mitchell's return to the United States, he fully expected to be named chief of the Air Service. Instead the post went to Charles T. Menoher, a distinguished WWI infantry commander and protégé of General John J. "Black Jack" Pershing, Commander of the American Expeditionary Forces during the war, and now Chief of Staff of the U.S. Army. Mitchell nevertheless was undeterred in his attempt to take his arguments in favor of air power to congressional leaders and the public. His ultimate goal was a completely independent air force much like the RAF within a Department of Aeronautics.

THE COURT MARSHALL OF BILLY MITCHELL 1925
CREDIT: USAF



THE SINKING OF THE OSTFRIESLAND

Mitchell used his influence in Congress to allow the U.S. Air Service to participate in naval bombing tests that took place during the summer months of 1921. The U.S. Navy put tight controls on the tests to restrict Mitchell and the Air Service. The targets were captured German navy ships, including a submarine, the USS *Iowa*, a battleship converted to a radio-controlled fleet target ship, a destroyer (G-102), a German light cruiser *Frankfurt*, and finally, the German battleship *Ostfriesland*. The sinking of the *Ostfriesland* on 21 July, 1921, was the most controversial event of the bombing tests. Ignoring the Navy's restrictions about pressing the attack too vigorously, Mitchell decided to sink the *Ostfriesland* in direct fashion. After an attack by aircraft

carrying 1,000 lb. bombs, his airmen dropped six 2,000 lb. bombs on the battleship, and in a twenty-minute period, the *Ostfriesland* was sent to the bottom of the sea. No direct hits were scored, however. The Navy protested vigorously that their construction experts were not given enough time to examine the ship, but to no avail.

Mitchell had seized the day despite the fact that the *Ostfriesland* was at anchor and unable to manoeuvre [sic] and there was no defensive antiaircraft fire to hinder the aerial attacks. As Alfred Hurley remarks, 'the dispute could not get away from the basic fact which deeply impressed itself on the public's mind, Mitchell had sunk a battleship, as he claimed he could.' The Joint Army Navy Board, which had been created in 1903 by President Theodore Roosevelt to plan combined operations and prevent any difficulties that might arise from interservice rivalries, produced an evaluation of the tests. The Board's report, signed by General Pershing himself, fell far short of Mitchell's recommendations for a separate aerial arm, with responsibility for all aviation within and beyond the United States. Mitchell, as expected, cast aside the recommendations of the Joint Board, and produced his own report, leaked to the press, which said that the problem of aircraft being able to destroy seacraft had been solved, and that there were "no conditions in which seacraft can operate efficiently in which aircraft cannot operate efficiently."

COURT MARTIAL IN 1925

In late 1924, Mitchell gave provocative testimony before the House Select Committee of Inquiry into Operations for the United States Air Service (the Lampert Committee) during which he said 'It is a very serious question whether airpower is auxiliary to the Army and

the Navy, or whether armies and navies are not actually auxiliary to airpower.' In March 1925, Mitchell reverted to his permanent rank of colonel, and was transferred to San Antonio, Texas. This demotion and removal from Washington was seen as punitive and disciplinary, but it did not deter Mitchell from his crusade. On September 3, 1925, the U.S. Navy airship *Shenandoah* (ZR-1) crashed over Ohio. This event came on the heels of another aviation disaster, when the U.S. Navy flying boat PN9 No. 1 was lost at sea in the Pacific Ocean en route from San Francisco to Honolulu. Mitchell was incensed, and he unleashed an attack on the Navy and War Departments for 'incompetency, criminal negligence and almost treasonable administration of the National Defense.' He accused the Coolidge administration and military leaders of giving false, incomplete, or misleading information to Congress, and forcing military airmen to provide false information on the state of military aviation. For the Coolidge administration, this was the last straw. In October 1925, the War Department began proceedings to court martial Mitchell, who was convicted but chose to resign his commission.

ASSESSMENT

So, how significant were Mitchell's crusade for air power and the subsequent sinking of the *Ostfriesland* and its aftermath to the growth of air power and of strategic bombardment theory and practice in particular, and to the creation of an independent air force? Institutional military historians believe Mitchell was important not so much as a theorist, but as a prophet, promoter and martyr. Some, like Alfred Hurley, challenge his methods, admit that he made mistakes, but tend to revere him nonetheless. James J. Cooke (*Billy Mitchell*) is less sympathetic. Cooke writes that 'the warts, and there were many, were ignored.

Writers tended to see Mitchell as they wanted to and made out of him the knight of the air, which despite his many accomplishments he was not.' Rondall R. Rice, author of *The Politics of Air Power: From Confrontation to Cooperation in Army Aviation Civil-Military Relations*, believes Mitchell was clearly insubordinate and deserved to be court-martialed. He is astonished at the adulation Mitchell receives from contemporary Air Force leaders.

What can be said about Mitchell's influence on the development of American strategic bombing theory? Thomas H. Greer, *The Development of Air Doctrine in the Army Air Arm, 1917-1941*, rightfully points out that 'the principal change in the tenor of the arguments over air power, in the period from 1926 [the year in which the Air Corps Act was passed] to 1935, derived from technological advances in aircraft production...'. Another factor that Greer points to is 'technical developments in bomb-sight construction' particularly the Norden Mark XV bombsight, first demonstrated to the Air Corps in October 1931. Doctrine also played a part, and its influence came chiefly from the Air Corps Tactical School (ACTS), established in 1920 at Langley Field, Va. In 1931, the school was moved to Maxwell Field, Alabama. The idea of limited area bombing was being taught at ACTS in 1926. Within a few years this notion was dropped, and the new precision idea, with its related tactics, began to take form. Certainly one factor that affected the evolution of bombardment thought was the general public opposition to mass civilian bombings. Whatever the reasons, the ACTS focused a great deal of attention on high-altitude, daylight precision bombing doctrine, and target selection—"choke points" as they were known—that would cripple the enemy's economy and its ability to wage war.

Of course, all of this theory had yet to be put into practice, but by the late 1930s, the Air Corps had two of the key technological elements in their quest to practice strategic bombing: the Boeing B-17 and the Norden bombsight. An independent United States Air Force would not be created until after World War II (1947) when air power, after many fits and starts, had shown that it could be employed effectively under the right conditions in wartime. Mitchell's ideas about Army and Navy subordination to the air force were never proven. After the Vietnam War, the emphasis, despite continued bitter interservice budget battles, has been on cooperation and coordinated effort.

Original article can be found at <https://airandspace.si.edu/stories/editorial/general-william-“billy”-mitchell-and-sinking-ostfriesland-consideration>.



OBLIQUE AERIAL VIEW OF THE OSTFRIESLAND AFTER IT WAS ATTACKED BY THE U.S. ARMY AIR SERVICE'S FIRST PROVISIONAL AIR BRIGADE, LED BY BRIG. GEN. WILLIAM "BILLY" MITCHELL, ON 21 JULY 1921.



-21648 - OSTFRIESLAND - 840 A.M. - 7/21/21 - MARTIN BOMBER # 26

THE ORIGINS OF ROYAL NEW ZEALAND AIR FORCE MARITIME OPERATIONS: AN OVERVIEW TO 1942

DR. JOHN MOREMON | MASSEY UNIVERSITY, NEW ZEALAND

Dr. John Moremon lectures in defence studies in the School of People, Environment and Planning, Massey University. He was previously a senior researcher (defence and security) for the Australian Parliament and a historian for Australia’s Department of Veterans’ Affairs. He has a BA(Hons) in History from the University of New England and a PhD in Military History/War Studies from the University of New South Wales, Canberra. He was also the RAAF’s Heritage Fellow (Research) for the period 2018-20.

AUTHOR BIO

In the 2018 edition of the *RNZAF Journal*, the author of the current article and co-writer Brian Oliver, of the RNZAF Air Power Studies Centre, observed the significance of the RNZAF’s maritime patrol capability to the defence and security of Aotearoa New Zealand. Maritime patrol is vital to multiagency operations aimed at securing our coastline, exclusive economic zone (EEZ) and regional waters.¹ Air activities include monitoring of shipping with a view to detecting border violations and illegal activities, such as people and drug smuggling; monitoring fisheries; rescues at sea; and assisting neighbouring states with monitoring their own maritime domains. The *Defence White Paper 2016* emphasised that these activities ensure ‘the protection and appropriate use of New Zealand’s natural resources, and that entry to the country is by legitimate means only’.²

At the time of the earlier article, the NZDF was still assessing options for replacing the long-serving

1 Moremon and Oliver, “Air Surveillance Capability”, 71-84.
2 New Zealand Government, *Defence White Paper 2016*, 19.

Lockheed P-3K2 Orion maritime patrol aircraft. The authors noted that selecting a replacement could be expected to be challenging, in part because of the array of missions and the operating radius requirement, ‘as the aircraft will be required to undertake a range of military and civilian roles around New Zealand and further afield’.³ In July 2018 the Government announced that four Boeing P-8A Poseidons would replace the six Orions operated by Whenuapai-based No. 5 Squadron. The Ministry of Defence reported that the P-8A was assessed to be the lowest cost and lowest risk option for New Zealand, being a proven design and utilised by key defence partners. The Ministry pointed out that the procurement would be ‘a once in a generation purchase, with the aircraft expected to be in service for at least 30 years’.⁴

The P-8A project has proceeded at a steady pace. Construction work at Ohakea, which will be the home of No. 5 Squadron when equipped with the P-8A, is progressing, and personnel have been training with the P-8A in the US and Australia. In July 2021, the NZDF reported that an RNZAF crew had completed the first New Zealand tactical flight in a P-8A while training at US Naval Air Station Jacksonville, in Florida.⁵

As the RNZAF looks ahead to the P-8A, it is timely to reflect on the place of maritime patrol in RNZAF history. The RNZAF has been responsible for maritime patrol for virtually its entire existence. This article considers the origins of RNZAF maritime patrol up to the mid-point of the Second World War, by which time the capability requirement was well-proven.

3 Moremon and Oliver, “Air Surveillance Capability”, 3.
4 Ministry of Defence, “Air Surveillance Maritime Patrol”.
5 Sgt. Lindsay, “Kiwis take over”, 18-19.

EARLY HISTORY

The maritime domain has always featured in New Zealand defence planning. Prior to the First World War, British Empire and New Zealand defence planners understood that any threat to New Zealand would involve naval forces. The assumption was that Great Britain would maintain a fleet in the region and dispatch a larger fleet from Europe should a threat against New Zealand or Australia eventuate. Under the imperial agreement, New Zealand was responsible for defence against lesser threats such as raids on coastal shipping lanes and harbours. The 1911 New Zealand Naval Defence Act created the New Zealand Naval Forces as a division of the Royal Navy, and a decade later New Zealand agreed to fund several warships to form the New Zealand Division of the Royal Navy. Meanwhile, the New Zealand Territorial Force was to be mobilised for land defence in the event of an attack.

Before 1914, aircraft were used primarily for reconnaissance. Generally they lacked the range and payload capability to be of much use in the maritime domain, except for short-ranged reconnaissance. The thinking around maritime air power evolved during the First World War, with a series of developments showing that aircraft could play a strong role at sea. In August 1915, Flight Commander Charles Edmonds, of Britain's Royal Naval Air Service (RNAS), conducted the first successful aerial torpedo attack, sinking an Ottoman ferry carrying supplies across the Sea of Marmara. By 1917, the RNAS had also recognised the potential of fighters to assist in protecting fleets from aerial observation and bombing – resulting also in the development of the aircraft carrier.

As hundreds of New Zealanders served in the British flying services, it was inevitable that some would gain

experience in maritime air operations. For instance, on 17 July 1918, Lieutenant Samuel Dawson, of Masterton, participated in the first air strike launched from an aircraft carrier when seven pilots took off in Sopwith Camels from HMS *Furious*, a modified battle cruiser, to raid a German airship base at Tondern, Denmark. New Zealanders also flew anti-submarine patrols and convoy escorts over the English Channel and along the coastlines of Britain and France where U-boats (submarines) posed a threat to shipping. In the war against the U-Boat, maritime aviation proved ‘an important force multiplier to surface anti-submarine forces’.⁶

The war showed that air power could also be important for the defence of New Zealand. Shortly after the war, Sir James Allan, Defence Minister, requested an RAF officer to assess New Zealand's defences and make recommendations in relation to air defences. Group Captain A. V. Bettington, who arrived in 1919, urged the Government to think of defence afresh ‘in three dimensions’ (land, sea, air). The country's long coastline and reliance on shipping for trade made protection of the sea lanes vital. Bettington noted how an air force could assist naval forces to defeat raids against shipping lanes and harbours.⁷ He advocated establishment of an air force comprising seven squadrons: two equipped with flying boats, one with torpedo bombers, one with day bombers, one with night bombers, and one with fighters (necessary for defence against air attacks that could be launched from aircraft carriers). The Government labelled Bettington's plan “impracticable” as the defence budget would not stretch to supporting an air force of this size.⁸

⁶ Abbatiello, *Anti-Submarine Warfare*, 172.

⁷ Moody, “Reflecting”, 55-64.

⁸ Spencer, *British Imperial Air Power*, 26-28.

While a strong air force was not an option, Great Britain gifted New Zealand thirty-four war-surplus aircraft to equip a new air force. Strangely, given the country's geography, none of these were particularly useful for maritime patrols.

ANZAC DAY EVENING CEREMONY AT MENIN GATE TOGETHER WITH THE AUSTRALIAN DEFENCE FORCE, LEPER, BELGIUM 2018.



The modest Air Force at first comprised four officers and two other ranks who served full-time, with approximately one hundred officer and airmen reservists. Most had served in the RNAS, Royal Flying Corps (RFC) or, later, the Royal Air Force (RAF); the RAF was the world's first independent air force, formed by merging the RFC and RNAS on 1 April 1918. The aircraft gifted included Avro 504 trainers, Airco DH.4 and DH.9 bombers, and Bristol F.2B Fighters. When the New Zealand Permanent Air Force (NZPAF) was established in 1923, the two Fighters and two DH.4 bombers were used for harbour patrols.

GEARING UP FOR WAR

Defence expenditure began increasing in the early 1930s, as governments worldwide responded to tensions in Europe and the Asia-Pacific. New Zealand's defence planners took steps to increase the maritime patrol capability. In 1934, the Government approved an order for twelve Vickers Vildebeests from Britain. The Vildebeest was designed in the late 1920s as a torpedo bomber, with the first delivery to the RAF in 1932. It was also available as a “general purpose” aircraft without torpedo gear so that it could be used for patrolling and bombing; an auxiliary fuel tank (in the shape of a torpedo, slung underneath the fuselage) effectively doubled its operating range to about 650 miles (1300 km). The NZPAF chose the general purpose variant. Press reports explained to the public that four aircraft would be based at Hobsonville to patrol over Auckland's harbour and that four would be based at Wigram, Christchurch, to patrol over the harbour there; the remaining aircraft would be held in reserve.⁹

⁹ *The Waikato Times*, “New Planes Ordered”, 5.

In late 1935, the new Labour Government of Prime Minister Michael Savage resolved to strengthen the country's defences, including by establishing an independent air force. This would bring New Zealand into line with most of the other dominions of the British Empire. Australia, Canada and South Africa had formed independent forces some years earlier. Wing Commander T. M. Wilkes, Director of Air Services and Controller of Civil Aviation, requested a senior RAF officer to report on the role and equipment needs of the new service. Group Captain Ralph Cochrane had joined the Royal Navy before the First World War, transferred to the RNAS as an airship pilot and after the formation of the RAF served mostly in land-based squadrons.¹⁰ He readily grasped that New Zealand's air force had a role to play in the maritime domain. He considered that the air force should be prepared to operate not only in the direct defence of New Zealand but further afield, with a forward defence strategy making it possible that air operations would be conducted from islands of the South Pacific. Cochrane recommended that two squadrons be equipped with bombers capable of intercepting warships well before they reached New Zealand's coastal waters and with sufficient range to operate from island bases.¹¹ In doing so, Cochrane was signaling an extension of the Air Force's maritime domain, which previously had been limited to inshore sea lanes and harbour entrances. This meant that an entirely new aircraft was needed.

Cochrane was appointed as the RNZAF's first Chief of Air Staff (CAS). The Air Force was allotted three principal roles: co-operation with land and naval forces for the defence of New Zealand, co-operation with naval forces for the protection of maritime trade,

and training of aircrew and ground staff for both the RNZAF and RAF.¹² In April 1939, a British-Australian-New Zealand defence conference concluded that a war against Germany was likely and that it was possible there would be concurrent wars against Germany and Japan. In either event, trans-Pacific and trans-Tasman trade would be vulnerable. During the First World War, German raiders (armed merchant cruisers) operated in the South Pacific, and after the First World War, Japan was granted possession of former German colonies north of the equator, making it possible to conduct naval operations into the South Pacific.

The New Zealand Government accepted that the RNZAF needed the bombers Cochrane had recommended, both to extend the radius of patrols around New Zealand and to deploy to island bases. It authorised an order for thirty Vickers Wellington bombers from Britain. Unfortunately, the Wellingtons had not been delivered when war broke out in September 1939. They were offered to the RAF to equip a bomber squadron in Britain, which would become the famous No. 75 (New Zealand) Squadron. While the offer was well-received, it left the RNZAF without aircraft for long-range maritime patrols. The RNZAF continued operating obsolescent biplanes, including the Vildebeests and a couple of dozen Blackburn Baffin naval torpedo bombers acquired secondhand from the Royal Navy Fleet Air Arm. The truth was that the RNZAF was woefully ill-prepared for operations in the maritime domain.

EARLY IN THE SECOND WORLD WAR

There was an obvious need for patrols over New Zealand waters following the outbreak of war. Defence planners anticipated that raiders and possibly submarines would be encountered. The RNZAF's first wartime operational sortie was a search by Auckland-based aircrews for a submarine reported to be in the area. No submarine was detected - the report was a false alarm - but the Air Force then organised for regular maritime patrols around the harbour. Henceforth, all shipping entering or leaving Auckland would be given air cover. Most patrols were conducted within a fifty-mile (eighty-kilometre) radius of Auckland. They tended to be uneventful and monotonous, although there was the possibility of a breaching whale being mistaken for a submarine.

After the 2nd New Zealand Division deployed to the Middle East in 1940, New Zealand's home defences were built up as a safeguard in case of a war against Japan. The problem for the RNZAF was that its aircraft, equipment and training were found wanting. Britain supplied several dozen training aircraft for the RNZAF to contribute to the British Commonwealth Air Training Plan, and amongst these were eighty Vildebeests and Vincents - essentially the same aircraft but with no torpedo equipment option - retired from RAF service. Most were used for training, but some Vildebeests and Vincents were engaged in maritime patrols. With only lumbering biplanes for patrols, the RNZAF had little hope of detecting enemy warships. This became a problem in 1940 when German raiders started operating in the region. On the night of 13 June, the raider *Orion* laid mines in the entrance to the Hauraki Gulf, but by daylight it had withdrawn beyond the range of the aircraft. Less than a week later, the SS *Niagara*

struck two mines after leaving Auckland, becoming the first merchant ship sunk in New Zealand waters during the war.

In August 1940, the *Orion* intercepted and sank another merchant ship 400 miles out to sea. The raider returned again in November, this time sinking two merchant ships in New Zealand waters. These episodes confirmed the shortcomings of the RNZAF's maritime patrol aircraft; had Wellingtons been available, the situation would have been different. The *Orion* was able to threaten shipping while remaining outside the operating radius of any RNZAF aircraft. The RNZAF resorted to engaging Tasman Empire Airways (TEA) to conduct patrols using Short Empire flying boats normally used for passenger services.¹³ On one occasion, the *Orion*'s crew spotted an Empire about 500 miles from the New Zealand coastline, but the aircraft crew did not spot the raider.

RNZAF officers understood the need for better aircraft, but Britain controlled procurement at this stage of the war. The British Admiralty, which had a strong interest in protecting merchant shipping, urged the British Air Ministry to release six Lockheed Hudson maritime patrol bombers to New Zealand, but with the Battle of the Atlantic underway the Air Ministry would not oblige. J. M. Ross, official historian of the RNZAF, explained the situation:

“To give full protection to shipping in New Zealand waters, a small striking force as well as reconnaissance aircraft would have been necessary, and the machines just could not be spared [by the Air Ministry]. The risks involved in carrying on with obsolescent aircraft had to be balanced against the

¹⁰ Orange, “Cochrane.”

¹¹ Ross, *The Royal New Zealand Air Force*, 25-26.

¹² New Zealand, *Parliamentary Debates*, 19 July 1939, 563.

¹³ Waters, *The Royal New Zealand Navy*, 138-140.

*urgent needs of other theatres, and the diversion of modern aircraft to New Zealand would not have been justified.*¹⁴

In essence, the RNZAF was a maritime patrol force still lacking maritime patrol capability.

FORWARD DEFENCE

In this same period, New Zealand dispatched a military force to Fiji, which was considered vulnerable in the event Japan entered the war. The RNZAF considered sending Vildebeests and Vincents for maritime patrols, but these aircraft were thought to be unsuitable for service in the tropical islands. Instead a flight of De Havilland Dragon Rapides – biplane airliners impressed into service and converted into navigation and light bombing trainers – were sent. It was with these unarmed aircraft that air patrols around Fiji commenced.¹⁵ Later, several Vincents were also dispatched.

Prime Minister (from April 1940) Peter Fraser pleaded with his British counterpart, British Prime Minister Winston Churchill, for more modern aircraft, to no avail. Fraser informed Churchill that he was ‘keenly disappointed’ at the lack of response, particularly given that his government had willingly handed over the Wellingtons to the RAF. He noted that ‘if only a few [of the Wellingtons] had been delivered here, [it] would have relieved us of our present very grave

anxieties’.¹⁶ Desperate for long-range aircraft, Fraser next approached the Australian Government. The Australians had ordered Short Sunderland flying boats before the war, intending that they be used over the Indian and Pacific Oceans. Still awaiting delivery when the war broke out, the Australians offered the flying boats and their crews to RAF Coastal Command. The Royal Australian Air Force (RAAF) requisitioned two Empire flying boats from Qantas Empire Airways for long-range patrols around Papua and Guinea, but found them ‘unsatisfactory and inefficient’.¹⁷ The Australians then managed to order a dozen Consolidated-Vultee PBV Catalina flying boats from the US. Fraser requested that three be transferred to the RNZAF. However, the Australians had not received their first Catalina – they were delivered over an eight-month period during 1941 – and, not surprisingly, responded that none could be spared.¹⁸

The situation began changing in late 1941 when Britain agreed to supply Hudsons to the Australian, Canadian, New Zealand and South African air forces to boost maritime patrol capabilities. By the time the Pacific War started in December 1941, the RNZAF had thirty-five Vincent biplanes and thirty-six Hudsons for maritime patrols and bombing; it also had secured four antiquated Short Singapore flying boats from the RAF. Most of the aircraft were based in New Zealand, but several Vincents and the Singapores were based in Fiji.¹⁹ The war with Japan would also see the RNZAF receive

further Hudsons, as well as fighters. As the new aircraft were not expected to arrive until March or April of 1942, the RNZAF made plans to use trainers in combat roles, including, potentially, coastal patrols and anti-shiping strikes, in the event of an invasion.²⁰

Long-range maritime patrolling in the South Pacific began with Australian and American use of flying boats. In January 1942, US Navy Patrol Squadron 23 (VP-23) started patrolling between Canton Island and Fiji. Canton-based Catalina crews would complete a 1250-mile (2000 km) first leg by landing at Suva, where RNZAF personnel refueled the aircraft and hosted the crews, before flying north on their return leg. The New Zealanders, meanwhile, utilised Vincents and Singapores around Fiji, while Hudsons patrolled New Zealand waters. In late January 1942, a Japanese submarine fired on a merchant cruiser off Fiji, but did no damage; aerial patrols failed to locate the submarine. Other than an invasion scare in mid-February 1942, there was no further action around Fiji.²¹

RNZAF squadrons in the South Pacific were placed under the control of the USN’s Commander, Aircraft, South Pacific (COMAIRSOPAC). Those in Fiji were allotted to Task Group 63, an air task force that comprised USN, US Marine Corps, the US Army Air Forces and RNZAF land-based and flying boat squadrons and ancillary units. The task force was widely dispersed across New Caledonia, Fiji, Tonga, Samoa and the New Hebrides. The squadrons were responsible for the air defence of island bases and patrolling broad expanses of ocean to protect Allied shipping and attack enemy shipping and bases. To begin with, the New Zealanders played a modest role,

but the maritime patrol capability built up since 1939 was seen as important when the Americans assembled shipping for naval and amphibious operations in the Solomon Islands. Faced with a shortage of patrol aircraft, the Americans requested that several Vincents be transferred from Fiji to New Caledonia; they probably did not understand that these were antiquated biplanes. The RNZAF determined that Hudsons would be more suitable as they had greater range and were better armed. From July 1942, the newly formed No. 9 Squadron began operating from New Caledonia, with the patrol area stretching out to 400 miles [644 kms] north towards the New Hebrides.²² Despite there being no confirmed sightings of Japanese submarines or warships, the experience proved beneficial as it gave the New Zealanders an opportunity to work with their American allies, demonstrate their patrol capabilities, and start practising anti-shiping strikes.²³

The Americans appeared reluctant to utilize RNZAF squadrons further north in the Solomons, but the new CAS, Air Commodore R.V. Goddard, predicted that this situation would change as the Americans experienced shortages of aircraft and manpower. He realised that RNZAF squadrons would be attractive, as the New Zealanders were well-trained and shared with their allies a ‘common language and, in general, common doctrine’; interoperability was achievable given the RNZAF squadrons utilised American-manufactured aircraft and equipment.²⁴ Within a short time of the Guadalcanal landing in August 1942, the Americans, recognising that the New Zealanders provided a niche maritime patrol capability, requested support. The Hudson-equipped No. 3 Squadron

¹⁴ Ross, *Royal New Zealand Air Force*, 70.

¹⁵ Gillespie, *The Pacific*, 19-20; Ross, *Royal New Zealand Air Force*, 71-72.

¹⁶ Governor-General of NZ to Secretary for Dominion Affairs, *Documents Relating to*, 214-215.

¹⁷ Director-General of Supply and Production to Air Board, “Supply of Seven (7) PBV-5 Flying Boats”.

¹⁸ Telegram from Australian Department of Defence Coordination, 17 January 1941.

¹⁹ One of the Singapores was on its delivery flight from Singapore. Ross, *Royal New Zealand Air Force*, 109.

²⁰ *Ibid.*, 109-111.

²¹ *Ibid.*, 125-126.

²² Miller, *Guadalcanal*, 32-33.

²³ Ross, *Royal New Zealand Air Force*, 131-133.

²⁴ Goddard, “Proposals”.

deployed to the New Hebrides, with the Americans entrusting the squadron to patrol shipping lanes leading to and from Guadalcanal.²⁵ The squadron commenced operations from Espiritu Santo in October 1942 and then sent six Hudsons to Guadalcanal for armed maritime reconnaissance sorties. The crews patrolled over shipping lanes used by the Japanese for getting reinforcements to the forward area. A senior RNZAF officer noted that their 'steady and efficient plodding ... really made the reputation here for the RNZAF'.²⁶ Meanwhile, their comrades on Espiritu Santo and back at New Caledonia continued patrolling the sea lanes utilised by American ships, searching for Japanese submarines.

The maritime operations in 1942 were, for the most part, uneventful (except for those based out of Guadalcanal), but they were vitally important. They confirmed that the RNZAF needed a maritime patrol capability. This required aircraft capable of long-range and armed patrols, which the RNZAF lacked until shortly before the war against Japan, when Hudson bombers were delivered. With the need for such capability confirmed and the New Zealanders recognised as having developed proficiency in maritime patrol work, the Americans ensured that in 1943-44 the New Zealanders received newer Ventura bombers, to replace war-weary Hudsons, as well as Catalina flying boats. With these aircraft, maritime patrols over the South Pacific continued through until the war's end, albeit with little chance of action, as American successes pushed the war northwards.

The experience of the RNZAF before the Second World War and in the South Pacific during the war

²⁵ Ross, *Royal New Zealand Air Force*, 137-38.

²⁶ Wallingford to Issit, 4 June 1943.

established that long-range aircraft for operations over the maritime domain are essential for New Zealand's defence. Catalinas continued to be utilised for this until the early 1950s when they were replaced by the next generation of RNZAF maritime patrol aircraft, the Short Sunderland MR.5. These ex-RAF aircraft were in fact late wartime models of the flying boat made famous by the Battle of the Atlantic. They continued plying their trade until the late 1960s, by which time their replacement was badly needed. The next generation of maritime patrol aircraft, the P-3B Orion, was ordered for the RNZAF in 1964 and entered service in 1966. With successive upgrades, the Orions have continued serving, ultimately as the P-3K2, through five and a half decades, during which time their role expanded from anti-submarine patrols and naval support to interagency security of the country's maritime resources. The P-8A represents the next generation - and no doubt the aircraft and its crews will forge a new chapter in the history of RNZAF operations in the maritime domain. This is a history that stretches back to, and indeed beyond, the foundation of the RNZAF.



BIBLIOGRAPHY

- Abbatiello, John. *Anti-Submarine Warfare in World War I: British Naval Aviation and the Defeat of the U-Boats*. London: Routledge, 2005.
- Director-General of Supply and Production to Air Board, "Supply of Seven (7) PBY-5 flying boats," 31 May 1940, A14487, 15/AB/2838, National Archives of Australia, Canberra.
- Gillespie, O. A. *Official History of New Zealand in the Second World War 1939-45: The Pacific*. Wellington: War History Branch, Department of Internal Affairs, 1952.
- Goddard, Air Commodore Victor, CAS, RNZAF, "Proposals for Development for Participation in South Pacific War Operations," 9 October 1942, AIR1, 343/130/19/1 Part 1, Archives New Zealand (ANZ), Wellington.
- Governor-General of NZ to Secretary for Dominion Affairs, London, conveying message from Fraser to Churchill, 4 December 1940, document 191, *Documents Relating to New Zealand's Participation in the Second World War 1939-45*, Vol. III (Wellington: War History Branch, Department of Internal Affairs, 1963): 214-215.
- Lindsay, Sgt. Ace. "Kiwis Take Over the P-8A." *Air Force News* 237 (July 2021): 18-19.
- Miller, John. *Guadalcanal: The First Offensive*. Washington DC, Center of Military History, 1949.
- Ministry of Defence. "Air Surveillance Maritime Patrol: Government Approval." Last modified July 2021. <https://www.defence.govt.nz/what-we-do/delivering-defence-capability/defence-capability-projects/future-air-surveillance-capability/>
- Moody, Simon. "Reflecting on the Bettington Report of 1919 - A Centennial Legacy," *Journal of the Royal New Zealand Air Force* 5, no. 1 (2019): 55-64.
- Moremon, John and Brian Oliver. "Air Surveillance Capability and the Security of the Exclusive Economic Zone", *RNZAF Journal* 4, no. 1, Part B, (2018) 3: 71-84.
- New Zealand Government, *Defence White Paper 2016*. Wellington: Ministry of Defence, 2016.
- New Zealand, *Parliamentary Debates*, New Zealand House of Representatives, 19 July 1939, 563 (Fred Jones, Minister for Defence).
- Orange, Vincent. "Cochrane, Sir Ralph Alexander," *In Dictionary of National Biography*. Oxford University Press, 23 September 2004, doi.org/10.1093/ref:odnb/30945
- Ross, J. M. S. *Official History of the New Zealand in the Second World War 1939-45: Royal New Zealand Air Force*. Wellington: War History Branch, Department of Internal Affairs, 1955.
- Spencer, Alex M. *British Imperial Air Power: The Royal Air Forces and the Defense of Australia and New Zealand between the World Wars*. Purdue University Press, 2020.
- Telegram from Australian Department of Defence Coordination to NZ Prime Minister's Department, 17 January 1941, A2676, 700, National Archives of Australia, Canberra.
- *The Waikato Times*, "New Planes Ordered. 12 Torpedo Bombers," 20 March 1934, 5.
- Wallingford, Air Commodore Sidney, Air Officer Commanding, No. 1 (Islands) Group, RNZAF, to Issit, Air Commodore L. M, Deputy Chief of Air Staff, RNZAF, 4 June 1943, AIR100¼, ANZ, Wellington.
- Waters, S. D. *Official History of New Zealand in the Second World War 1939-45: The Royal New Zealand Navy*. Wellington: Historical Publications Branch, Department of Internal Affairs, 1956.

NOMONHAN 1939: THE UNDECLARED WAR THAT PRECEDED WWII

W/O JOHN PHILLIPS | AIR FORCE OFFICE OF STRATEGY MANAGEMENT

W/O John Phillips has enjoyed a long career as an armament technician including a term of service as the Air Power Training Officer within the Air Power Centre. He recently completed the Advanced Staff Course (Joint) of 2020, graduating with a Master of Strategic Studies from Victoria University, and currently works within the Air Force Office of Strategy Management. His current focus is developing medium term plans and thinking about decarbonising military aviation.

AUTHOR BIO

INTRODUCTION

Immediately prior to the Second World War, a brief and brutal territorial war occurred between Russia and Japan over a four-month period that resulted in nearly 50,000 casualties.¹ Initial air battles between Russian and Japanese air arms on the Manchukuo border resulted in significant Japanese victories.² However, a few months later, and in sharp contrast to previous reports, news emerged that Japan had lost a “war” with Russia in the remote region of Nomonhan.³ Japanese forces became encircled and overwhelmed by a Russian shock force of massed air power, artillery and armour,

supported by an immense logistic chain.⁴ Japanese air power was highly regarded at the time, and their military commanders believed Russian aviation was too weakened by Stalin’s purges and too far away to be of any consequence. Ultimately, Japan lost the war in the air and the war on the ground, with Goldman summing up the Nomonhan Incident as the ‘most important World War II battle that most people have never heard of.’⁵

A confluence of interests characterises the political situation of how two great expansionist powers clashed over a remote border line leading to the Nomonhan Incident. Both were competing for influence in East Asia with China and Mongolia as the significant prizes. Russia supported the independence of China and Outer Mongolia, while Japan wanted control of China and to unite Inner and Outer Mongolia within its expansionist strategy. It is found that Japan’s Kwantung Army based in Manchukuo ignored their government’s intent to not initiate a war with Russia, and they vastly underestimated Russian resolve to win at any cost. Concluding agreements formalised the Nomonhan border, ratified a non-aggression pact with Russia and, several years later, preserved Outer Mongolia as an independent state.⁶ While the Nomonhan Incident is mostly a ground war, the history and activities of both air arms will be described to understand how Japan, with the sixth most powerful air arm in the world, failed to neutralise Russia’s air arm and forces.⁷

- 1 Approximately 23,000 Japanese and 26,000 Russian casualties (Goldman, *Nomonhan 1939*, 136).
- 2 Japan had occupied Manchuria, declaring it “Manchukuo” in 1932. *The Auckland Star* published reports on Japan’s advances in China, and Russia’s bombing within Manchukuo, on 24 June 1939: <https://paperspast.natlib.govt.nz/newspapers/ASI9390624.2.42.2>
- 3 On 24 November 1939, the *Christchurch Press* described how Japan was forced to fight a desperate rear-guard action against Soviet/Mongolian forces: <https://paperspast.natlib.govt.nz/newspapers/CHP19391124.2.44>

- 4 Barber and Henshall, *The Last War of Empires*, 67.
- 5 Goldman, *Nomonhan 1939*, 5.
- 6 The Japanese Constitution: <https://ndl.go.jp/constitution/e/etc/c04.html>.
- 7 Sir Hammerton, ed., *Aerial Wonders of our Time*, 770.

EARLY JAPANESE ARMY AVIATION

Early Japanese aviation was under military control and development from its beginnings, with officers travelling to France and Germany to learn to fly and returning with aircraft to demonstrate the advantages of military aviation. Being keen to test aircraft in battle, they deployed to China during 1914 to carry out air attacks against German and Austrian troops at Tsingtao.⁸

Japan's belief in air power rose steadily with the formation of its first Air Battalion, consisting of three squadrons. Keen to design and build their own military aircraft, their initial attempts were less than satisfactory. Undeterred, they built aircraft under licence using foreign designers to help establish their indigenous aircraft industry. Likewise, their military flying skills were found wanting during a combat deployment to South-East Siberia from 1918 to 1921.⁹ To improve combat effectiveness, French aviation instructors were brought in to teach gunnery, reconnaissance and bombing techniques.¹⁰

By the late 1920s, Army commanders considered that aircraft were best used in the battlefield support role. Development of long-range bombing aircraft and strategic bombing techniques were not pursued, as their primary focus was supporting the occupation of China. Chinese air power was insignificant at the time, which limited the requirement to develop military aviation beyond the needs of that theatre. Although Russia was seen as a significant threat, they thought it highly

unlikely that Russia could move significant aircraft numbers to their Eastern border regions.¹¹ That mistake would prove costly during the Nomonhan Incident.

By 1935, foreign estimates of Japanese front line aircraft strength were between 1,200 and 1,800 aircraft and their pilots were evaluated as being well-trained and disciplined in the face of the enemy;¹² Japan also managing to build a viable indigenous military aircraft manufacturing capability by this time.¹³

EARLY RUSSIAN MILITARY AVIATION

Louis Blériot's 1909 flight across the English Channel inspired Grand Duke Alexander Mikhailovich to exclaim: 'the country that first possesses an aerial fleet will be victorious in any future war.'¹⁴ That flight inspired Russia to build aircraft factories and establish aviation schools. While most factories produced licenced copies of foreign aircraft, Igor Sikorsky pioneered the design of large aircraft types including his Ilya Muromets, which were capable of flying over 1,600 miles [2,575 kms].

During the First World War, Russia fielded several bombers, reconnaissance planes and fighters in Europe. However, the general lack of maintenance skills and the hodgepodge of designs made them virtually unsupportable in the field; this spiralled further downwards during the Bolshevik Revolution of 1917. By

8 Note: Japan was allied with Britain during the First World War, against Germany. Sekigawa, *Pictorial History Of Japanese Military Aviation*, 10-11.

9 Ibid., 11-12.

10 Ibid., 16.

11 Ibid., 28.

12 Sir Hammerton, ed., *Aerial Wonders of our Time*, 769.

13 Pyke, *Blinded by the Sun*.

14 Miller, *The Soviet Air Force at War*, 17-18.



THE TUPOLEV TB-3 RUSSIAN HEAVY BOMBER WAS RESTRICTED TO NIGHT BOMBING RAIDS DUE TO VULNERABILITY TO JAPANESE FIGHTERS DURING DAYTIME.

the 1930s, Russia's military and civil aviation sector had improved considerably, and their primary focus was national defence, by using its bomber fleet to conduct strategic air attacks including attacking staging areas of any invading army.¹⁵

In response to Japan occupying Manchuria in 1932, Russia dispatched officers to the Far Eastern Army Air Force Headquarters to advise on building facilities to

support three brigades of TB-3 bomber aircraft.¹⁶ At the same time, Russia provided the Chinese air arm with fighter aircraft, including the provision of training and support in their struggle against Japanese occupation. Russia was steadily increasing its military presence in its eastern territory in response to Japanese expansion.

15 Mason and Taylor, *Aircraft, Strategy, and Operations of the Soviet Air Force*, 127.

16 T stands for *Tyazhely* (heavy), while B stands for *Bombardirovshchik* (bomber).

During the Spanish Civil War, Russia supported the Republican side where they gained valuable air operations experience. Their aircraft had the flight attributes to dominate opposing air forces at the start of the war until Germany improved the aircraft they supplied to the nationalists, giving them a slight air superiority advantage.¹⁷ Lessons of the Spanish Civil War would be used to prioritise military industrial capacity in the late 1930s.

Shockwaves were sent through the Russian military in 1937 when Stalin ordered the purge of many senior officers and aircraft designers, especially of those who were actively developing Russia's air power strategies and capabilities, including Tupolev, one of their main designers of heavy aircraft at the time.¹⁸ To prepare for the coming war, Stalin prioritised industrial capacity by eliminating capabilities deemed less necessary; heavy bombers were out, fighters and ground attack aircraft were in. Japan saw the purge as a significant vulnerability for Russia, as crucial personnel with experience, vision and leadership were removed en-masse, leaving junior personnel to command and lead many of their air arms.

LAND WARFARE DOCTRINE

It is useful to consider land warfare doctrine of the combatants as both Russian and Japanese air arms were organic within their land force structures. Air power was largely conducted in the land warfare context and tactical in its application.

17 Rougeron, "Summary of 'Les Enseignements Aeriens de la Guerre D'Espagne'", 411-412.

18 Mason and Taylor, *Aircraft*, 127.

Japan was an early adopter of armoured vehicles during the 1920s, heralding a modernisation programme to reduce infantry divisions to free up resources for the army air arm and tank corps. Although the new tank companies were not suited or trained to undertake urban warfare in China, Lieutenant General Yoshikazu Nishi realised that tanks could quicken manoeuvre of the battle group and used them to outflank retreating Chinese forces in Inner Mongolia.¹⁹ They proved their worth in open ground as they increased the tempo of warfare at a faster rate than an infantry force. However, Japanese traditionalists failed to be convinced and reverted to a more familiar infantry-centric doctrine. The debate centred on whether to follow the British theory of using a combined-arms force centred on tanks or the French theory of subordinating armoured vehicles to an infantry-centred force. The Japanese Army favoured the French approach but reduced the armoured component to a semi-motorised force. Aircraft, naval ships, and supporting infantry operations in China were prioritised to fit within budgetary allocations.²⁰ Bravery in the face of the enemy would have to compensate for the lack of armour in the field.

Japanese forces were well-trained, fought with valour and believed in their spiritual superiority.²¹ The samurai ethic of Bushido, a romanticised form of feudal militarism, called on the guiding hand of warring ancestors to fuel combat nerve and fighting spirit.²² While Bushido invoked valour in action, it blinded Japan's commanders to the reality of mechanised warfare in a theatre that favoured tank warfare.

19 Du, "Pride Before the Fall".

20 Drea, *Nomonhan*, 90.

21 Goldman, *Nomonhan 1939*, 121.

22 Huntington, *The Soldier and the State*, 51.

On the Russian side, Vladimir Triandafillov developed the concept of "deep-operations" that called for a massed shock army to carry out continuous operations to overcome enemy resistance. He theorised that concurrent attacks on all operational positions would lead to the fastest possible rupture of the enemy front, followed by encirclement and destruction of enemy forces.²³ Georgii Isserson took these ideas further as he recognised the potential of mechanised forces and air power to be decisive in battle. He too believed that only overwhelming force could be decisive within a strategy of annihilation.²⁴ To Isserson, deep operations are a series of uninterrupted operational actions that merge into a single operation. In effect, he shifted Russian military thinking from an operation being one activity at one location to being a range of operations conducted as a unified strategy.²⁵

Undertaking such a strategy involves massive forces supported by a vast logistic chain. Isserson calculated the minimum size shock force as 350,000 men divided into infantry and cavalry divisions, artillery brigades, mechanised brigades and an air group of bombers, fighters and reconnaissance aircraft. The massive logistics support required to maintain a force of this size was estimated to be thirty-six trains a day, half of which was for ammunition alone.²⁶ The Russians used this doctrine to great effect as they sustained a force of 100,000 soldiers by rail and road during the Nomonhan Incident.

23 Harrison, *Architect of Soviet Victory in World War II*.

24 Brigade Commander Isserson, *The Evolution of Operational Art*, xviii.

25 Ibid., 48.

26 Harrison, *Architect of Soviet Victory*.

TENSIONS RISE IN THE EAST

Japanese agriculture and infrastructure investments flowed into Manchuria after they won the Russo-Japanese War of 1904 and 1905. However, as a result of rising Chinese nationalism, the Japanese within Manchuria were becoming a political and social target, and to protect their financial interests they occupied Manchuria - declaring it "Manchukuo" in 1932.²⁷ Japan, through her newly occupied territory, now had a long land border with Mongolia and Russia. Russia too was expanding its interests towards China, desiring to protect its territorial gains of Outer Manchuria north of the Amur River and Haishenwei, which became Vladivostok.²⁸

The jewel in Japan's crown was the Manchurian railway system, which was key to monopolising Japanese trade with Europe. Ultimately, the railway network was, in the words of Goto Shinpei during 1906, 'military preparedness in civil garb'.²⁹ Russia responded to the implied threat of Japanese railway construction through Manchukuo by building new railways in Siberia and double-tracking the Trans-Siberian Railway.³⁰ Military strength of the Soviet Far East Army grew to sixteen divisions supported by 1,200 tanks and 1,200 aircraft.³¹

Political relations with Russia soured when Japan signed the Anti-Comintern Pact with Germany in 1936, formed in response to the Soviet-Chinese non-aggression

27 *The Japanese Monographs, Number 144, Chapter 1.*

28 The effects of these historical treaties are still reverberating today with the rise of Chinese nationalism and economic power. <https://www.msn.com/en-in/news/india/explained-why-160-year-old-vladivostok-has-a-chinese-connection/ar-BBI6pkRA>.

29 Summers, *The Great Manchurian Plague of 1910-1911*, 44-45.

30 Hoyt, *Japan's War*, Chapter 17.

31 Goldman, *Nomonhan 1939*, 28.



RUSSIAN PILOTS RELAXING BETWEEN SORTIES AUGUST 1939.

treaty, and subsequent weapons transfers to China.³² Joseph Stalin, the Secretary-General of the Communist Party, also entered into a mutual assistance agreement with Outer Mongolia in defence of its territory.³³

32 *The Anti-Comintern (Communist International) Pact.*
33 Drea, *Nomonhan*, 1, and Asiaticus, “Soviet Relations with Japan”, 272.

Japan, for its part, desired to re-unite Inner and Outer Mongolia to block China from Russian influence, and seize resources, such as oil, from Siberia.³⁴

Japan held twenty divisions in reserve for its *Go North* strategy; however, Japan sent most of this force to occupy China, and by 1938, over 1.6 million men were

34 Moses, *Khalkin Gol*, 65-66, and Lattimore, “The Phantom of Mengkukuo”, 421.

bogged down in the country.³⁵ This left the Kwantung Army, Japan’s garrison army of Manchuria, solely responsible for territorial security.

Coox characterised the Kwantung Army as belligerent and often disobedient to the central authority.³⁶ For example, Major Tsuji Masanobu’s policy on settling territorial disputes was to encourage the annihilation of any Russian forces who crossed the border. This policy clashed with orders from the General Staff Headquarters requiring permission to engage in large-scale offensives and that they were not to start a war with Russia, breaking Clausewitz’s dictum that the political and military objective must be aligned.³⁷

Border skirmishes were frequent, and in July 1938 Russian troops occupied border territory at Changkufeng. The Kwantung Army attacked, taking a tactically significant hill, looking to advance towards Vladivostok. But the Russians counterattacked in strength, pushing the Kwantung Army back across the disputed border.³⁸ While the Russians used around one hundred aircraft to support their attack, Japanese leaders refused to authorise the use of aircraft, to prevent escalation of the conflict. The Japanese government called for a ceasefire, which the Russians agreed to as they were concerned about the emerging German threat.³⁹ The Nomonhan Incident occurred in the following year, and the use of aircraft would play a major role in the conflict.

35 Chapter 17 in Hoyt, *Japan’s War.*
36 Coox, *Nomonhan: Japan against Russia*, 1075-1076.
37 Von Clausewitz, *On War*, 81.
38 Peck, *The Almost War of 1938-1939.*
39 Sekigawa, *Pictorial*, 75.

THE NOMONHAN INCIDENT BEGINS

Nomonhan, or Khalkhin Gol to the Russians, is located on a remote Asian steppe bordering Manchukuo (Manchuria) and Outer Mongolia, as shown in Figure 1.⁴⁰ It is a remote grassy plain dissected by a border, which, according to the Kwantung Army, followed the Halha River, whereas the Mongolians marked the border more eastward to intersect with Nomonhan. The disputed border covers an area of approximately 130 x 25 kms and is depicted in Figure 2.

The Nomonhan Incident started when Mongolian cavalrymen entered the disputed border area on 11 May 1939 and were driven out back across the Halha River by the Manchukuoan cavalry. The Mongolians returned two days later and managed to hold their ground, prompting the Kwantung Army to dispatch an infantry regiment to seize the disputed area. In support, Kwantung Headquarters transferred four squadrons of reconnaissance, light bomber and fighter aircraft to Nomonhan.

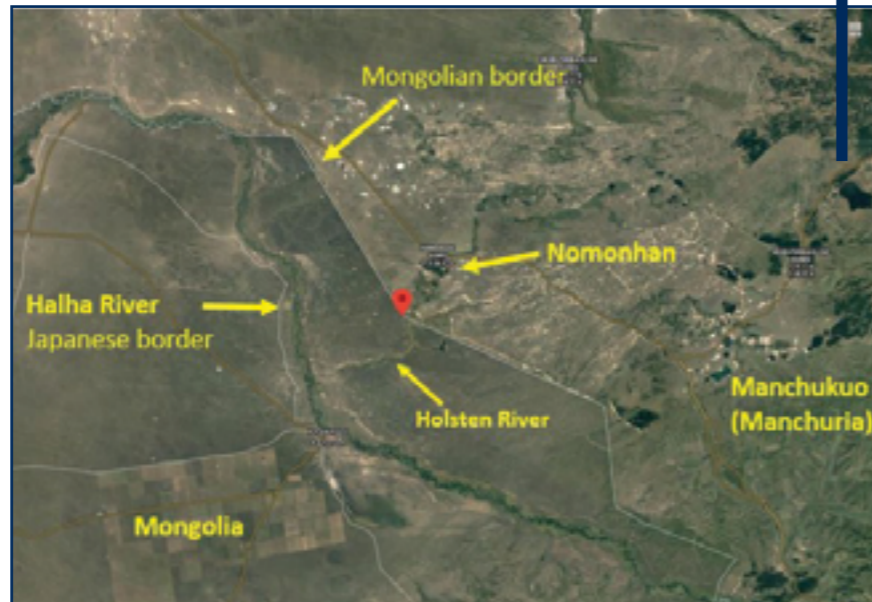
Japanese pilots enjoyed air superiority by flying relatively fast type-97 fighters against their Russian counterparts, who were flying early versions of I-15 and I-16 types. Japanese pilots were better trained as they undertook about 200 flying hours per year, contrasting Russian pilots who flew about fifty to sixty hours with little time spent on combat training.⁴¹

40 For ease of reading, the spelling of Nomonhan and Khalkhin Gol will be used. References cited may use spellings such as: Homonhon, Nomonghan, Nomon-Han-Burd-Obo, Nuomenhan; Halha River, Kalkha River, Khalkh River, Khalkh Gol and Kharkhin Gol.
41 Sekigawa, *Pictorial*, 79, and Nedialkov, *In the Skies of Nomonhan*, 48.



FIGURE 1. GENERAL AREA OF THE NOMONHAN INCIDENT

FIGURE 2. GENERAL BATTLE AREA



Japanese reconnaissance pilots were soon to discover large fleets appearing at airfields in Mongolia, prompting two additional squadrons of fighters to be brought forward to Nomonhan.⁴² Russia was building its forces while biding its time, and a hint of the expansion came on 25 May when Russian aircraft pounded Japanese positions with a loss of forty-two aircraft.⁴³ On 28 May, after an intense battle, the Kwantung regiment would be encircled and annihilated. Surprised by the scale and force of the attack, the Kwantung Army sent its entire 2nd Joint Air Group forward, bolstering aircraft numbers to around 120.

Stunned by the high attrition rate, Russia disengaged from combat to evaluate their tactics and await reinforcements. As the Russian build-up continued apace, they conducted a long-range bombing attack inside Manchukuo, which so alarmed the Kwantung Army they arranged for a large-scale retaliatory attack.⁴⁴ At the political level, both the Japanese and Russian governments lodged protests, desiring to settle the dispute via diplomacy. However, the speed and scale of the fighting made diplomatic negotiations challenging to initiate.⁴⁵

While ground forces were staging, the air arms were kept busy harassing each other's positions. On 22 June, a hundred Russian aircraft crossed the Halha River, with twenty-five being downed during aerial combat to Japan's loss of five. Kwantung Army reconnaissance aircraft noted the continual build-up of Russian aircraft and ordered a strategic strike on Mongolian air bases, an action denied by Army General Headquarters in

42 Zhukov, *Marshal of Victory*.
 43 Sekigawa, *Pictorial*, 75-76.
 44 Coox, "High Command and Field Army", 304.
 45 Saburo, *Affidavit to the International Military Tribunal*, 1.

Tokyo. However, the order was ignored and the attack went ahead with over 100 aircraft flying 300 kilometres into Mongolia, destroying over 200 Russian aircraft.⁴⁶

At that time Japanese aircraft had the advantage in speed, range and manoeuvrability, albeit at the cost of armour and fuel-tank protection. Their aircraft were fitted with oxygen tanks allowing a higher altitude to be flown, and two-way radios for communication between flight commanders, and receivers for junior pilots. In contrast, early Russian aircraft were slow, primitive and lacked stability in flight. Radios and oxygen equipment were not fitted, limiting altitude and communications.

JAPAN'S PHASE TWO

Japan took the initiative with Lieutenant General Komatsubara mobilising two infantry regiments to seize the high-ground north of the Holsten River on 1 July. Concurrently, two Kwantung Army tank regiments accompanied by the battalion attacked Russian positions on the eastern side of the Halha.⁴⁷ The air arm provided close air support to the advancing forces while fending off Russian air attacks. Using experience gained during the Spanish Civil War, the Russians staggered their sorties to provide a persistent presence over the battle front forcing the Japanese into a fatiguing air battle by flying a much higher sortie rate.

General Zhukov fought with mass, firepower and tempo by committing a motorised armoured brigade and a motorised rifle regiment to the fight, a force of 452

46 Note: aircraft losses were often inflated for propaganda purposes. Sekigawa, *Pictorial*, 77-78.
 47 Drea, *Nomonhan*, 4.

vehicles against the Kwantung Army's seventy-four. In response, the Joint Air Group attacked Russian vehicles and artillery positions to compensate for the lack of Japanese heavy artillery, while the Kwantung Army managed to destroy 120 Russian vehicles. Unfortunately for the Japanese air arm, Russian formations kept increasing in size, and by early July, daily Russian air patrols numbered between 100 and 200 aircraft.⁴⁸

Russian aerial reconnaissance was bolstered by creating a specialist squadron, which was located close to the front to maximise time over enemy territory, to the point of being within range of the Japanese light artillery, with a mandate to identify Japanese tactical and operational reserves up to 100 km behind the front line. The squadron was equipped with Tupolev SB-2 reconnaissance aircraft and Polikarpov I-16 tip 10 fighters.⁴⁹ Attacking Japanese reserves and logistic support elements became a focus of Russian air attacks.

Meanwhile, Japanese tank regiments on the east bank of the Halha lost half their vehicles and failed to break the Russian lines. Both the Russian and Japanese forces reinforced their artillery units within the disputed area in preparation for further offensive action. Kwantung forces remained outgunned on the ground, and increasingly outnumbered in the air by a ratio of two to one. The intense fighting quickly became a war of attrition with Japan suffering over 5,000 soldiers killed or wounded during the incident to date.⁵⁰ In the air, the Japanese were winning the fight, but losses on both sides were mounting. Japanese aircraft dropped over 170 tonnes of bombs, and by mid-June they had lost

around 160 aircraft to Russia's loss of around 400.⁵¹ Ultimately, Kwantung forces were overwhelmed and forced to retreat, resulting in a pause in fighting with both sides taking time to consolidate and regroup.

The Russian logistic machine was now in full swing, moving over 55,000 tons of war materiel from the railhead at Borzya. Over 4,000 trucks were used to ferry material day and night over the 1,500 km round trip, including 1,000 fuel trucks to keep vehicles moving.⁵² Aircraft deficiencies were rectified with the delivery of higher specification I-15 and I-16 types sent in quantity to the front, including the arrival of more "Heroes of the Soviet Union" - who were experienced pilots from the Spanish Civil War.⁵³ New aircraft models arrived with improved speed, altitude, manoeuvrability and armament. Russia used the Nomonhan Incident as a proving ground for new designs and tactics, including the use of aerial rockets to attack close formations of aircraft and for ground attacks. The sheer quantity of aircraft available soon exceeded the number required to support the area of operations.

Japanese intelligence vastly underestimated the scale of the build-up; and even if they could report on it, the Kwantung Army was incapable of conceptualising it. To them, it was an incomprehensible effort to move such a quantity of materiel so quickly over such a long distance.⁵⁴ In contrast, the Kwantung Army had difficulties maintaining its logistic lines; food, water, ammunition and artillery all being in short supply. Discipline and morale declined during their routing, and they received little political support as the Japanese

51 Nedialkov, *In the Skies of Nomonhan*, 75.

52 Goldman, *Nomonhan 1939*, 132-133.

53 Zhukov, *Marshall of Victory*.

54 Drea, *Nomonhan*, 71-72, and Bellamy and Lahnstein, "The New Soviet Defense Policy", 25.

48 Sekigawa, *Pictorial*, 78.

49 Nedialkov, *In the Skies of Nomonhan*, 94.

50 Drea, *Nomonhan*, 7.

Government was focused on operations in China, and negotiating a settlement to end the conflict.

To make matters worse for the Kwantung Army, General Zhukov engaged in "*disinformatsiya*" - a concurrent information warfare campaign of deception. Reinforcements were moved at night, false radio messages were transmitted, false leaflets showing incorrect defensive layouts were distributed, and nightly soundings of tank and aircraft engines were blasted over loudspeakers towards Japanese lines.⁵⁵ Two weeks of nightly simulated engine noises were well, as Japanese soldiers did not recognise actual movements of Russian forces when they manoeuvred across the Halha River on 19 August. *Disinformatsiya* included the siting of false airfields and model aircraft, but to offset regular reconnoitring by the high-speed Mitsubishi Ki-15 aerial reconnaissance aircraft, the false airfields had to be regularly re-sited.⁵⁶

THE FINAL OFFENSIVE

The Japanese Army General Staff tried to encourage the Kwantung Army Commander General Ueda to withdraw his forces behind the Russian claimed border so the matter could be solved diplomatically. The message was written in a manner for Ueda to save face, but he was incensed and ignored the message.⁵⁷

During the final massed offensive of August, Zhukov committed three infantry divisions (45,000 soldiers), around 500 tanks, 300 armoured cars, artillery

55 Goldman, *Nomonhan 1939*, 135.

56 Nedialkov, *In the Skies of Nomonhan*, 94.

57 Goldman, *Nomonhan 1939*, 130-31.



SOVIET PILOTS WITH AN I-16 FIGHTER, MONGOLIA AREA, CHINA, AUG 1939.

brigades and 200 aircraft against Komatsubara's 30,000 soldiers and remnants of his armoured battalions.⁵⁸

Zhukov carried out his double envelopment strategy over eleven days, starting on 20 August; refer to Figure 3 for his battle plan depicting the planned movement of forces. It shows a Central Force consisting of a motorised infantry division, an infantry division, and

58 Office of the Chief of Military History United States Army, "Small Wars and Border Problems", 186, and Drea, *Nomonhan*, 9, 75.



FIGURE 3. RUSSIAN PLAN TO ENCIRCLE JAPANESE FORCES 20 AUG 1939. (CREDIT: MOSES/ KUZ'MAN, NA STRAZE MIRONOGO TRUDA, 80.)

an infantry machine gun brigade positioned to fix the Japanese infantry in place. Artillery positions are behind the fixing force. Zhukov's Northern Force, consisting of a Mongolian cavalry division, an infantry regiment, an armoured brigade, two tank brigades, an artillery regiment and an anti-tank brigade, is positioned on the northern area of the Halha River. Zhukov's Southern Force is postured with a Mongolian cavalry division, an infantry division, an armoured brigade, two tank brigades, an artillery regiment and an anti-tank brigade.⁵⁹

The motorised brigades dispatched to the left and right flanks crushed Japanese positions and cut off

59 Goldman, *Nomonhan 1939*, 137-38.

reinforcements as they sped towards Nomonhan, thus completing the envelopment. Fighting was brutal, often leading to hand-to-hand combat. By 23 August, Japanese morale had dropped to its lowest ebb due to the relentless onslaught of shelling, air attacks and ground assaults. Zhukov timed artillery bombardments to occur after bombing attacks, allowing time for aircraft to be rearmed and return to the front. The relentless pounding continued for days, whereupon a Japanese medical officer lamented the lack of air and ground support: 'I can't see the shape of a single friendly tank or plane'.⁶⁰ Japanese flanks were split from the main force cutting off a potential retreat, and their reinforcements were interdicted by the Russian air arm preventing them from getting to the front. Russian SB-2 bombers maintained a constant presence over the battlefield making Japanese efforts to help ground forces almost impossible.

Japan lacked the resources to fight a war of attrition on this scale. Their pilots became exhausted and aircraft losses mounted. Russian aircraft were now more numerous by a ratio of four to one. In the face of the overwhelming quantity of Russian aircraft and ability to generate sorties, on some days with over 700 sorties flown and twenty dogfights taking place, Japanese pilots still managed to stay engaged in the fight.

Further compounding Japan's woes was news on the 24 August that Germany and Russia had signed a non-aggression pact. The reports sent shockwaves through Japan and stunned the Kwantung Army as it now faced the potential for an all-out attack on Manchukuo.⁶¹ This pact gave Stalin breathing space to initiate the main

60 Drea, *Nomonhan*, 76.

61 Moses, *Khalkin Gol*, 82.



KI-27 AIRCRAFT AT AN AIRFIELD IN MONGOLIA AREA, CHINA, 1939.

offensive against Kwantung Army forces.⁶² Stalin rightly feared a two-front war against both Germany and Japan, as pointed out by Major General Khabarovtsev, who stated: 'If the Japanese enter the war on Hitler's side ... our cause is hopeless.'⁶³ This imperative ensured both the political and military aims were matched - the Japanese had to be crushed convincingly as a deterrent for future military actions.

62 Note, Germany invaded Poland on 1 September 1939.

63 Coox, *Nomonhan*, 1079.

Fighting concluded on 31 August with Zhukov declaring the disputed area clear of enemy forces. Japanese forces were annihilated, with only a small body of troops managing to retreat. As Goldman points out, the Kwantung Army acquitted themselves well against overwhelming odds despite their losses.⁶⁴ While the Kwantung Army regrouped and awaited further orders, a ceasefire agreement went into effect on 16 September.

64 Goldman, *Nomonhan 1939*, 148-49.

SUBSEQUENT DIPLOMACY POST-FIGHTING

Colonel Doi, Japan's military attaché in Moscow, sent a message to Tokyo and the Kwantung Army on 3 September stating the intention to conclude a non-aggression pact with Russia. He noted that the Second World War had started and that Russia might contest Manchuria, suggesting that the Kwantung Army retain their resolve and fortify positions near the Nomonhan border as a deterrent. Colonel Doi suggested that if Japan yielded too easily to Russian demands, then it would impair Japanese national prestige and invite Russian contempt, which may inspire them to increase support to China. Japan had to maintain a position of strength in order to negotiate a favourable non-aggression pact. Doi warned that Russia should not be underestimated or antagonised, lest they become "intolerable".⁶⁵ A formal declaration of the cessation of hostilities over Nomonhan was agreed to on 16 September. Further agreements would be concluded for the establishment of a border demarcation commission during November, and Togo and Molotov signed a formal agreement marking the Nomonhan border on 9 June 1940.⁶⁶

Russia's rise to great power status during the Second World War allowed Stalin to subsequently negotiate the fate of Outer Mongolia through the Yalta agreement of 1945, preserving the status of Outer Mongolia as an independent country.⁶⁷

⁶⁵ Office of the Chief of Military History United States Army, *Small Wars and Border Problems*, 447-450.

⁶⁶ Saburo, *Affidavit*, 3.

⁶⁷ The Japanese Constitution, <https://ndl.go.jp/constitution/e/etc/c04.html>.

CONCLUSION

Two expansionist powers were competing for influence and territory in East Asia, and both were preparing for an eventual large-scale attack during the early 1930s. As time progressed, neither side desired war as Japan was bogged down in China, and Russia had its eye on the looming European catastrophe. Neither side reckoned on the belligerent Kwantung Army, who ignored the political objectives of the Japanese Government as much as Russia's resolve to defend its borders and those of its allies.

Japan retained a traditional infantry-centric doctrine, whereas Russia on the other hand, developed a new doctrine to assemble, support and command a massive armour-centric mechanised shock-force. The air doctrine of both sides focused on supporting ground forces and the air-to-air battle. Japan's aircraft and pilots were superior to those of Russia in the early phases of Nomonhan, but the tables turned as Japan's pilots became fatigued and overwhelmed by Russia's preponderance of air power. Japanese air power in turn became increasingly ineffective in the face of enhanced Russian tactics, better aircraft and the rapidly improving skills of the Russian aircrew gained through experience. Zhukov's use of *disinformatsiya* confused and confounded the Kwantung Army to great effect. Ultimately, Japan's Air Group could not maintain air superiority over Nomonhan, and the Kwantung Army could not withstand the overwhelming force massed against it on the ground.

Clausewitz observed that 'war is politics by other means', and his dictum of aligning political and military objectives was maintained by Russia and broken by the Kwantung Army. Stalin had Hitler approaching his doorstep, and he needed breathing space to resolve

Nomonhan with overwhelming force. He knew that Russia could not fight a two-front war and signing a non-aggression pact with Germany would destabilise Japan's Anti-Comintern relationship. In the end, the Kwantung Army were outmanoeuvred both politically and militarily.

BIBLIOGRAPHY

- Asiaticus. "Soviet Relations with Japan", *Pacific Affairs* 14, no 3 (September 1941): 272-86.
- Barber, Laurie and Ken Henshall. *The Last War of Empires: Japan and the Pacific War 1941-1945*. Auckland: Bateman, 1999.
- Bellamy, Christopher and Joseph Lahnstein. "The New Soviet Defense Policy: Khalkhin Gol 1939 as Case Study". *Parameters* 20, no. 1 (1990): 19-32.
- Coox, Alvin. "High Command and Field Army: The Kwantung Army and the Nomonhan Incident, 1939". *Military Affairs* 33, no. 2 (October 1969): 302-12.
- Coox, Alvin. *Nomonhan: Japan Against Russia, 1939*. Redwood City: Stanford University Press, 1985.
- Dancey, Peter. *Soviet Aircraft Industry*. CPI Group, 2015.
- Drea, Edward. *Nomonhan: Japanese-Soviet Tactical Combat, 1939*. Combat Studies Institute, 1981.
- Du, Jiabin. "Pride Before the Fall: Why Japan Failed Tank Warfare". *World War II Magazine*, March/April 2017.
- Dupuy, Trevor. *The Military History of World War Two, 8: Asiatic Land Battles: Expansion of Japan in Asia*. London: Franklin Watts, 1963.
- Friedman, Brett. *On Tactics: A Theory of Victory in Battle*. Maryland: Naval Institute Press, 2017.
- Hammerton, Sir John, ed. *Aerial Wonders of Our Time: Sky Fighters of the East*. London: Amalgamated Press, 1935.
- Goldman, Stuart. *Nomonhan 1939: The Red Army's Victory that Shaped World War II*. Maryland: Naval Institute Press, 2012.



- Harrison, Richard. *Architect of Soviet Victory in World War II: The Life and Theories of G.S. Isserson*. Jefferson: McFarland and Co, 2010.
- Hoyt, Edwin. *Japan's War: the Great Pacific Conflict 1853-1952*. Guild Publishing, 1986.
- Huntington, Samuel. *The Soldier and the State: The Theory of Politics of Civil-Military Relations*. Cambridge: The Belknap Press, 1985.
- Nitobe, Inazo. *Bushido: the Soul of Japan*. Project Gutenberg, Ebook, 2004.
- Isserson, Georgii. *The Evolution of Operational Art*, translated by Bruce Menning. Combat Studies Institute Press, 2013.
- Lattimore, Owen. "The Phantom of Mengkukuo", *Pacific Affairs* 10, no. 4 (December 1937): 420-27.
- Mason, R. A. and John Taylor. *Aircraft, Strategy, and Operations of the Soviet Air Force*. London: Butler and Tanner, 1986.
- Moses, Larry. "Khalkin Gol". *Journal of Asian History* 1, no 1 (1967): 64-85.
- Nedialkov, Dimitar. *In the Skies of Nomonhan: Japan Versus Russia May-September 1939*. Manchester: Crecy Publishing, 2011.
- Office of the Chief of Military History, United States Army. "Small Wars and Border Problems: The Nomonhan Incident", in *Japanese Studies in Manchuria, Vol XI, Part 3, Books B and C*, 1956.
- Otterstedt, Charles. *The Kwantung Army and the Nomonhan Incident: Its Impact on National Security*. US Army War College, 2000.
- Peck, Michael. "The Almost War of 1938-1939: Russia and Japan's Nearly Forgotten Battle". *National Interest*, 29 Sep 2015.
- Rougeron, C. "Summary of 'Les Enseignements Aeriens de la Guerre D'Espagne'", *Royal Air Force Quarterly* 10, 1940.
- Saburo, Ota. *Affidavit to the International Military Tribunal for the Far East, Defense Document Number 1581*, 16 May 1947.
- Sekigawa, Eiichiro. *Pictorial History of Japanese Military Aviation*. London: Ian Allen, 1974.
- Summers, William. *The Great Manchurian Plague of 1910-1911: The Geopolitics of an Epidemic Disease*. New Haven: Yale University Press, 2012.
- *The Japanese Monographs, Number 144, Political Strategy Prior to the Outbreak of War*. Military History Section, Headquarters, US Army Forces Far East, 1951, Chapter 1.
- Von Clausewitz, Carl. *On War*, translated by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1984.
- Wright, Esmond, ed. *History of the World: The Last 500 Years*. Viscount Books, 1985.
- Zhu, De. "On Anti-Japanese Guerrilla War, General Theory", 1938; from *Selected Works of Zhu De*, Beijing: Foreign Languages Press, 1986.
- Zhukov, Georgy. *Marshal of Victory*. Pen and Sword, 2013.

JORDAN MOEKE AND BEN COUPAR
LOWER THE ANTENNA MAST TO
CONDUCT MAINTENANCE AT
RNZAF BASE AUCKLAND.



JUSTIFYING A CORE CAPABILITY: WHAT CAN BE LEARNED FROM THE 1998 AIR COMBAT CAPABILITY POLICY STUDY

MAJ CHRIS SHAW | ROYAL NEW ZEALAND ARMY

MAJ Chris Shaw is an infantry officer in the New Zealand Army. He has served overseas on a number of operational deployments commanding at the force element and task unit level, as well as a non-operational posting as a planner in NATO's Allied Rapid Reaction Corps. MAJ Shaw is a graduate of the New Zealand Command and Staff College, and is currently an instructor at the Army's Tactical School.

AUTHOR BIO

INTRODUCTION

In 2000, the Labour Government initiated a transformative shift in New Zealand's defence policy, cancelling a previously signed lease of twenty-eight F-16A/B fighter aircraft and signalling the imminent disbandment of New Zealand's air combat force. In 2001, this new strategic direction for the New Zealand Defence Force (NZDF) was confirmed, and the previous doctrine of "Self-Reliance in Partnership" was replaced by one that described a 'reconfigured' defence force that prioritised a 'modern, sustainable defence force matched to New Zealand's needs'...without an air combat force.¹ Significantly, this policy shift directly contradicted the recommendations of a 1998 Air Combat Capability Study that had been completed two years prior, which determined that there remained a 'requirement for New Zealand to retain an air combat capability'.²

1 New Zealand Ministry of Defence, *A Modern, Sustainable Defence Force*.
 2 NZ MoD, *Final Report of the Air Combat Capability Policy*, 95.

It is now possible, with the benefit of two decades of hindsight, to evaluate the decision to disband the air combat force against the contradictory policy advice that had been made in the 1998 Air Combat Capability Study. This is not a purely academic or historical exercise, either. In the coming decade, the New Zealand Government will face another critical decision on a core military capability, as the Royal New Zealand Navy's (RNZN) two Anzac-class frigates near the end of their useful life. The political decision surrounding the frigate replacement will likely share strong parallels with the air combat force debate at the turn of the century, and lessons from that era could better inform future military advice and decision-making. To this end, the 1998 Air Combat Capability Study will be analysed and reviewed to see how relevant and useful its recommendations and conclusions were and to see how the NZDF and Ministry of Defence (MoD) could better support future capability studies.

JUSTIFYING THE NEED FOR AN AIR COMBAT FORCE – THE 1997 WHITE PAPER AND THE WHINERAY REPORT

The Defence White Paper of 1997 was released under New Zealand's fourth National Government and confirmed the continuation of the "Self-Reliance in Partnership" strategy. In terms of the Royal New Zealand Air Force (RNZAF), the 1997 White Paper was unequivocal - an air combat force was essential and was a 'key part' of the 'Closer Defence Relationship (CDR) with Australia'.³ At the same time the White Paper

3 NZ MoD, *The Shape of New Zealand's Defence: A White Paper*, 49.

was being drafted, the United States Government had offered a fleet of F-16A/B aircraft to the New Zealand Minister of Defence. In light of this offer, an Air Combat Capability Policy Study was undertaken in 1998, after the White Paper had been released, to assess New Zealand's requirements.⁴ This study is interesting as it constituted the main source of specialist "military advice" that was provided to the Secretary of Defence on the subject. While it was chaired by Sir Wilson Whineray (a former All Black and businessman), the members were predominantly NZDF and MoD staff (with additional representation from Treasury, Ministry of Foreign Affairs and Trade, and the Department of Prime Minister and Cabinet).⁵

The so-called "Whineray Report" confirmed the 'high policy value of an air combat capability in protecting and promoting New Zealand's local, regional and global security interests',⁶ as per the 1997 White Paper. However, the Whineray Report did contradict the White Paper's claim that the current A-4K Skyhawk capability would continue to meet its operational roles for another decade, instead concluding that the Skyhawks were 'less than satisfactory... for New Zealand's security requirements',⁷ and that there was 'less than ten years life remaining in the airframes'.⁸ While the Whineray Report recommended New Zealand purchase a modern multi-role fighter exemplified by the F-16C/D, it also noted the viability of an upgraded older-generation multi-role fighter, such as the F-16A/B fleet that had been offered by the United States.⁹

4 Greener, *Timing is Everything*, 92-94.
 5 NZ MoD, *Final*, i.
 6 *Ibid.*, iii
 7 *Ibid.*, 44.
 8 *Ibid.*, 46.
 9 *Ibid.*, 94.

THE WHINERAY REPORT'S FINDINGS: CONTESTED AND DISREGARDED

The specialist military advice from the Whineray Report would be indirectly contested or contradicted by subsequent government reports within months of its release. An Interim Report of the Foreign Affairs, Defence and Trade Committee (the "Inquiry into Defence Beyond 2000") released in December 1998, would cast doubt over whether an air combat capability was required, noting that 'air combat forces are expensive to retain and operate (fourteen per cent of the NZDF budget), and possibly beyond

NO. 75 SQUADRON IN HAWAII AS PART OF EXERCISE RIMPAC. PILOTS LOOKING INTO THE SKY BESIDE SKYHAWK NZ6205.



New Zealand's economic capacity to keep up to date without detracting from other more necessary military capabilities.¹⁰

While the National Government had initiated the F-16 lease, there was no cross-bench support, and Helen Clark's Labour Government that was elected in December 1999 was not supportive of the deal. After taking power, having already cast doubt on the utility of an air combat force in their pre-election policies, the Clark Government appointed the Chair of the "Defence Beyond 2000" inquiry, former Member of Parliament Derek Quigley, to undertake a review specifically into the F-16A/B lease. Quigley did not advocate disbanding the air combat force, and his exact recommendation was that 'the New Zealand Government consider approaching the US Government with a view to renegotiating the current F-16 package to include a lesser number of aircraft'.¹¹ However, the report also noted that 'savings in operating and capital costs from disbanding the air combat capability could be applied to other more urgent NZDF priorities'.¹²

There would be yet another report, titled "Review of the Options for an Air Combat Capability", released by the Department of Prime Minister and Cabinet in February 2001 that looked into the retention of the overall air combat capability. It concluded that the savings from disbanding the air combat force could 'assist in the rebuilding of the NZDF',¹³ and this option became policy when a Defence White Paper was released in May 2001 confirming that the air combat force would be disbanded.¹⁴

10 Greener, *Timing*, 35.
 11 *Ibid.*, 102.
 12 *Ibid.*
 13 Greener, *Timing*, 104.
 14 *Ibid.*, 105.

This 2001 White Paper was transformational, ending the doctrine of "Self-Reliance in Partnership" and reducing the importance of collective defence with Australia. Instead, the new doctrine promoted what it termed a 'modern, sustainable force matched to New Zealand's needs' and was more global and internationalist in outlook.¹⁵ There was more value, according to this doctrine, in having a Defence Force that could make a meaningful commitment to discretionary international coalitions than maintaining combat capabilities as, '...these days their most likely roles will be in international peacekeeping of some kind'.¹⁶

The Whineray Report had assessed that an air combat force was both viable and necessary for New Zealand's security and strategic objectives. These conclusions came under increasing doubt as subsequent government reports into the subject were released before the new Labour Government realigned New Zealand's defence doctrine and, in doing so, went against the recommendations of the Whineray Report.

NEW ZEALAND'S STRATEGIC OUTCOMES SINCE 2000

It is worth considering whether the security objectives set in the 1997 and 2001 White Papers have been achieved over this time, and whether an air combat force would have been able to further New Zealand's defence and security objectives over this period. While the wording differs between the 1991 and 2001 White Papers, they share common strategic objectives, as the table opposite shows.

15 NZ MoD, *Modern*, 2.
 16 *Ibid.*, 5.

SCOPE OF GOALS	1991 DEFENCE WHITE PAPER “SELF-RELIANCE IN PARTNERSHIP” DOCTRINE NB: NZDF WITH AN AIR COMBAT FORCE	1997 DEFENCE WHITE PAPER “SELF-RELIANCE IN PARTNERSHIP” DOCTRINE NB: NZDF WITH AN AIR COMBAT FORCE	2001 DEFENCE WHITE PAPER “RECONFIGURED AND MODERNISED” DOCTRINE NB: NZDF WITHOUT AN AIR COMBAT FORCE
DOMESTIC	Protection of territory and sovereignty Protection of off-shore resources Protection of nationals Protection of economic interests	Defending New Zealand against low-level threats	A secure New Zealand
REGIONAL	Constitutional obligations and other regional ties Treaty and other security arrangements	Contributing to regional security, [including] key defence relationships with Australia and the FPDA	A strong strategic relationship with Australia Good governance and human rights compliance in the South Pacific A role in SE and NE Asia consistent with New Zealand’s interests and capabilities
GLOBAL	Shared values Orderly conduct of World affairs	Being a good international citizen by playing our part in global collective security efforts, particularly peacekeeping	A global approach committed to the maintenance of human rights, collective security responsibilities (UN Charter), which strengthens New Zealand’s international economic linkages

TABLE 1: IDENTIFIED STRATEGIC “ENDS” OF NEW ZEALAND DEFENCE STRATEGY, 1991-2001

According to the strategic objectives, it is clear that New Zealand’s domestic, regional and global outcomes set in the 1997 and 2001 Defence White Papers have been met. In terms of regional and global security outcomes, New Zealand retains a close relationship with Australia,¹⁷ has strengthened defence ties with the United States - exemplified in the 2012 Washington Declaration¹⁸ - and has remained part of the world’s most powerful intelligence grouping in the Five Eyes.¹⁹ In trade and economic measures, New Zealand has established a number of free trade agreements,²⁰ including notably joining the world’s third-largest free trade agreement block in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).²¹ The only major domestic security incident has been the 2019 Christchurch terror attack, which was an overall aberration: in a global assessment of countries based on internal and external violence, instability and militarisation, New Zealand has consistently been ranked as the second or third most peaceful country in the world since 2008.²²

New Zealand’s interests and wider standing in the Asia-Pacific appear strong overall, with the Lowy Institute’s annual regional power rankings listing New Zealand as the twelfth most powerful nation in the region, ahead of far larger nations such as Vietnam, Taiwan and Pakistan.²³ In terms of military strength, New Zealand was ranked fifteenth out of twenty-five nations, and in terms of defence networks, New Zealand

17 Ayson, *Future Proofing Australia-New Zealand*, 2.
 18 Hoadley, *New Zealand United States Relations*, 65-72.
 19 Rolfe, “Five Eyes: More Than Technical Cooperation, Not Yet an Alliance”.
 20 Cook, “New Zealand Trade Diplomacy”.
 21 New Zealand Foreign Affairs and Trade, “Comprehensive and Progressive Agreement”.
 22 Institute for Economics & Peace, *Global Peace Index 2020*.
 23 Lemahieu and Leng, *Asia Power Index 2020*, 6.

was sixth overall,²⁴ suggesting that New Zealand’s defence and security policies allowed the country to remain operationally and strategically relevant despite the NZDF’s very limited size and capability, reflecting the colloquial term that New Zealand and the NZDF can “punch above its weight”.

This is evidence that New Zealand’s national interests have been achieved over the last twenty years, without the need for an air combat force. An air combat force could, however, have added additional value towards New Zealand’s strategic outcomes, which is worth considering.

LOST OPPORTUNITIES? THE UTILITY AND VALUE AN F-16 FLEET COULD HAVE PROVIDED NEW ZEALAND OVER THE LAST TWENTY YEARS

The only possible requirement for any operational deployment of F-16s over the last two decades would have been to the Middle East, where the NZDF instead deployed land forces (a Provincial Reconstruction Team to Afghanistan, a training team to Iraq) and Special Forces (multiple deployments to Afghanistan) over a number of years. Smaller duration air and naval deployments have also occurred, including P-3K and C-130H detachments working as part of the American-led coalition and RNZN frigates supporting counter-terrorism operations in the Persian Gulf region.²⁵ Since NZDF stability, disaster relief and peacekeeping

24 Ibid (interactive database link: <https://power.lowyinstitute.org/countries/new-zealand/>)
 25 Hoadley, *New Zealand*, 65-73.

efforts regionally and globally would not have seen any use for an air combat force, the counter-ISIL campaign in Iraq and counter-insurgency campaign in Afghanistan represent the only possible instance where an F-16A/B role could have been considered. Would a RNZAF F-16A/B capability have provided additional benefits or options to the New Zealand Government in these theatres?

The Royal Danish Air Force's (RDAF) experience in deploying an F-16A/B detachment is a useful case-study. The RDAF deployed six F-16A/B fighters to Afghanistan between 2001 and 2002, building upon lessons they had learned from participation in the Operation "Allied Force" Kosovo campaign. The F-16A/B aircraft deployed to Afghanistan were upgraded to the "Mid Life Upgrade" (MLU) standard, as Allied Force had indicated the need for modernised and upgraded aircraft - the Danish force had been relegated to a supporting maritime patrol role in the Balkans.²⁶ Based on this, New Zealand's 1980-era F-16A/Bs (that were of Block 10/15 standard, the same as the RDAF F-16s when they deployed to Kosovo) would have required the MLU if they were to operate in a coalition.

The Danes were able to share their Afghanistan deployment costs by combining their detachment in a multi-national F-16A/B unit from neighbouring countries (including Norway, the Netherlands and Belgium), surmounting the complexity, challenge and cost of sustaining a fighter deployment only 'given the cooperation that Denmark received from the partners with which it deployed, none of whom could have sustained such a deployment on their own.'²⁷ The RNZAF would not have been able to share the

burden of any F-16 deployment with neighbouring countries, and would have had to sustain operations at a substantially greater distance. Costs would see the Danish Government decline a request for a second F-16 deployment in 2010.²⁸ The Danish military's budget was double that of the NZDF in 2010 (\$4.5 billion versus \$1.9 billion)²⁹ and even then it considered the costs of a second F-16A/B deployment as prohibitive.³⁰ It would be a similar story with the Danish contribution to the counter-ISIL mission in Iraq from 2014 onwards. Like New Zealand, Denmark deployed a C-130 aircraft to support coalition operations and a training team of almost identical strength to New Zealand's anti-ISIL contribution (around 120 personnel), but unlike the NZDF, the RDAF also deployed a detachment of seven F-16s.³¹ The F-16 deployment stretched the resources of the Danish military, however, and the RDAF chief stated in 2015 that 'we cannot continue to do this.'³²

The RDAF operated an F-16A/B fleet of similar strength to that planned for the RNZAF (thirty-one F-16A/Bs compared to the twenty-eight planned for the RNZAF).³³ The fact that the RDAF had more than double the NZDF's budget, and neighbouring forces to share the burden of an F-16 deployment, yet still struggled to sustain the costs of operating an F-16 detachment in the Middle East, indicates that New Zealand would have been even more fiscally challenged to undertake a similar deployment.

28 Airforce Technology, "Denmark Refuses Afghanistan F-16 Deployment Request".

29 Stockholm International Peace Research Institute, *SIPRI Military Expenditure Database*.

30 Schuab Jr, "Denmark: Defense Woes in the Little US Ally That Could".

31 Ibid.

32 Ibid.

33 Schaub Jr, *Learning*, 5.

26 Schaub Jr, *Learning from the F-16*, 4-12.

27 Ibid., 21-22.



75 SQUADRON ARMOURERS TAKE A BREATHER BETWEEN "ARMING UP" T/A-4K SKYHAWKS - PAYA LEBAR, SINGAPORE, 1992.

In addition to being extremely costly to deploy, the F-16A/B fleet would have proven prohibitively expensive to keep operational. Some of the F-16s that were earmarked for the RNZAF were eventually delivered to the Pakistani Air Force (PAF). In December 2019, Islamabad announced a contract to upgrade the PAF F-16A/Bs to MLU standard, alongside essential

engine and structural maintenance.³⁴ Using Pakistani figures, it can be assessed that the RNZAF would have been looking at around \$1 billion NZD to keep the F-16 fleet operational beyond 2020. Cost-wise, this is twice

34 *Defence Industry Daily*, "Billions to Upgrade and Up-arm Pakistan's F-16s".

as much as the purchase price for the HMNZS *Aotearoa* supply ship, which entered service in the RNZN in 2020.³⁵ In upgrade costs alone, a modern fighter would have prevented the NZDF in achieving its current levels of modernisation without a substantial budget increase; the operating costs required to keep the F-16s flying would have further strained the NZDF's resources, and it is hard to see how the NZDF could have managed its current air, naval and land capabilities alongside the expense of an air combat force.

UNAFFORDABLE AND ULTIMATELY UNNECESSARY – THE F-16 CAPABILITY EVALUATED IN RETROSPECT

In retrospect, there was no strategic need for New Zealand F-16s. The F-16A/B fleet would have likely proven too costly to deploy, and the costs required to operate and maintain it would have prevented the NZDF investing in its other capabilities that have, instead, been used. The resulting political costs of cancelling the F-16 lease have not appeared to meaningfully impact New Zealand-Australian defence relations or New Zealand-American relations. The decision to disband the air combat force did result in vociferous criticism within the Australian press and some restrained but negative comments from senior officers within the Australian defence establishment, but Australian-New Zealand relations, both political and military, were not impacted. Ongoing regional crises in the early and mid-2000s saw Australia and New Zealand form what has been termed an

'indispensable partnership in action',³⁶ with the lack of an air combat force seemingly irrelevant in retrospect. In terms of the New Zealand-American relationship, one study noted that the cancellation of the F-16 deal had no material impact over the long term and that the deployment of other NZDF military capabilities in support of US operations in the Middle East resulted in a marked improvement in international relations:

"Despite... cancelling the F-16 purchase, and terminating the RNZAF combat force of American-built A-4 Skyhawks, New Zealand cooperated closely with the US in other theatres, and the relationship continued to warm. New Zealand proved to be a willing and reliable partner in peacekeeping, peace support operations, and counter-terrorism as well as in diplomatic, economic, and scientific initiatives shared by the US... At the close of the first visit in 2002 Secretary of State Colin Powell escorted Clark to her car and volunteered a memorable remark, that the United States and New Zealand, while no longer [allies], were "very, very, very close friends".³⁷

Even elements in the National Party, who were the architects of the 1997 White Paper and the original F-16A/B lease, would retrospectively agree with the need to disband the air combat force. Secret American cables from the Wikileaks data breach show that the 2006 Minister of Defence Wayne Mapp 'very quietly' supported the decision to disband the air combat force:

"He endorsed Labour's emphasis on a maritime patrol and logistics support role for the Navy and said that the abortive F-16 sale of 1999 was an ill-conceived effort to buy American friendship...

35 Block, "HMNZS *Aotearoa*: Navy's Largest Ever Ship Finally on its Way to New Zealand".

36 Ayson, *Allies but not Friends?*

37 Hoadley, *New Zealand*, 69.

He said he shared, albeit very quietly, Labour's judgment that the F-16s did not make operational sense for the NZDF. They would simply soak up too much funding.³⁸

Evidence and analysis support Wayne Mapp's assessment that the F-16A/B fleet would have offered no additional utility to New Zealand operationally and would have been prohibitively expensive to operate and maintain, let alone deploy. The disbandment of the air combat force coincided with an era in which regional and global crises saw the NZDF undertake significant contributions in Afghanistan, Timor Leste and the Solomon Islands, allowing Wellington to show that New Zealand's lack of an air combat force did not equate to a willingness to avoid international security obligations that were in strong alignment with Canberra and Washington's priorities. Given that New Zealand has performed against all strategic objectives set in 1991 and revised in 1997 and 2001 without the planned F-16 fleet, it can be concluded that the decision to disband the air combat force was justified and by extension, the recommendations made in the Whineray Report were flawed.

WHAT THE WHINERAY REPORT GOT WRONG

It may be unfair to judge policy with the benefit of hindsight, but a retrospective assessment can be informative and instructive and can identify lessons for future use. To this end, it is worth asking what the

38 "National Party Defense Policy Continues Labour Course", US Telegram in *WikiLeaks*.

Whineray Report got wrong in 1998, and what can be learned from the study's shortcomings.

UNCRITICAL POLICY ANALYSIS

Above all, the Whineray Report can be seen as overly focused on equipment types and proposed solutions. While the study claimed to look at the 'policy considerations' behind the air combat force, in reality the study only considered the 1991 and 1997 White Papers over seven pages (two of which were taken up by pictures) across a ninety-six-page report. The Whineray Report summarised the justification for an air combat force but in no way looked at the consequences of *not* having an air combat force. Instead of considering and questioning the need and requirements in any detail, it uncritically outlined and endorsed what the previous White Papers had used as justification.

The Whineray Report endorsed the 1997 White Paper's assessment that New Zealand's air combat force only required a Close Air Support (CAS), Air Interdiction (AI) and Maritime Strike role, which were the exact roles the A-4K was fulfilling at the time.³⁹ It is hard to understand the logic or sweeping statements behind the inclusion of these roles and the exclusion of other air combat roles, as there is no indication of the type

39 These are doctrinal terms for the mission-types an air combat force can undertake. "Maritime Strike" refers to aircraft being used to attack surface ships, "Close Air Support" refers to aircraft being used to attack ground targets in support and in close proximity of friendly troops, and "Air Interdiction" refers to aircraft being used to attack singular or small numbers of tactical ground targets. Note that the doctrinal (cont.) definition of "Air Interdiction" in this report is narrower than that used in current doctrine, with the report indicating that Air Interdiction was different to a strategic strike or strategic bombing role, whereas contemporary doctrine includes such roles under the umbrella of "Air Interdiction". NZ MoD, *Final*, 15-21; and AAP 1000-D, *the Air Power Manual*, 60.

of campaign or military operation an air combat force would be expected to contribute to. Concepts of employment, scenarios or operating environments are not mentioned. This becomes problematic in interpreting later claims around the viability of possible platform options as there is no mention, discussion or assessment of the threat, either from ground, air or naval systems, that New Zealand's air combat force would have been expected to operate against. A concluding "Air Staff Comment" contained as an addendum notes that there are some 'shortcomings in logic', and that 'the operational analysis makes a number of sweeping statements that are left unjustified'.⁴⁰ Statements in the report, such as 'Close Air Support presents a lower level of risk than other roles',⁴¹ are completely dependent on the mission context - is the air combat force conducting CAS and AI against irregular forces possessing only small arms, or against a near-peer force with either a basic or an integrated air defence capability? Without any analysis or articulation of a possible adversary or environment, it is impossible to understand the rationale behind much of the report's analysis and conclusions, as the Air Staff comment from the time makes clear.

Reading between the lines, it appears that a major driving factor in the study was the need to maintain an air combat capability that would be commensurate to that of coalition partners, especially Australia: 'It is... important for New Zealand to have a high utility in contributing to our security relationship with Australia'.⁴² Options are considered against how they would appear to the Australian Defence Force (ADF) - one was noted to have 'significant shortcomings to

40 Ibid., 96.
41 Ibid.
42 Ibid., 70.

support New Zealand's air combat contributions to CDR with Australia, flowing from operational capability deficiencies.⁴³ The air combat capability never identified a context for employment or the anticipated threat environment, but it was clearly being evaluated against the need to be able to work alongside the ADF. Foreign perceptions were not an identified or specified policy requirement but seem to have become a key driving factor in how the study team analysed the RNZAF's air combat requirements.

DRIVEN BY PRECONCEPTIONS

The bias in analysis seems to have been driven by a preconception that a multi-role fighter was the only viable option, and as a result the study team did not seriously consider alternatives. There was no cost-benefit or strength-weakness calculation used, and options were simply discarded outright if deemed insufficient. This zero-sum approach drove the study towards a recommendation that only a modern multi-role fighter was suitable and did not identify the merits that alternative systems could have in meeting some of the policy requirements at potentially far lower cost.

Linked to this, the methodology did not look at capability options as a system but focused on aircraft types. Aircraft are a small part of an air combat capability, and a combat aircraft's hardware-based potential (excluding the human factors of pilot skill, training and doctrine) is an output of the airframe, sensors and weapons.⁴⁴ The Whineray Report focused primarily on the aircraft but never fully addressed the question of aerial weaponry against the policy outcomes. The recommendations were analysed and

43 Ibid.
44 Bronk, *Russian and Chinese Combat Air Trends*, 3-9.

costed according to aircraft alone and did not include a "systems approach" to the solution, covering a wider capability or funding additional weaponry.

Another example can be seen in how the study considered a Harpoon-armed P-3K Orion. Despite it being assessed as the highest-performing option in the maritime strike role, it was discounted as 'the high risks associated with exposing the P-3K to a hostile environment effectively rule it out of the maritime strike role'.⁴⁵ This is not an accurate summary of the P-3K's anti-shipping capabilities and role, as the United States Navy intended to use their Harpoon-equipped P-3 Orion in an anti-shipping role against the Soviet fleet in the Cold War,⁴⁶ which would have been as high-risk an environment as could be imagined for a maritime patrol aircraft. A critical factor in an anti-shipping capability is the missile, and the fact that the Maritime Strike role could have been provided by an in-service platform (especially as the P-3K could have been fitted with more powerful sensors to maximise the Harpoon's range compared to a fighter aircraft and could carry more Harpoons than an F-16)⁴⁷ was disregarded.

It appears that the link between effects and policy outputs were considered less important than an overall impression of how foreign forces would view the RNZAF - 'coalition partners would not see an armed Orion as [a] Maritime Strike asset'⁴⁸ - when justifying why the P-3K was not a suitable alternative to a multi-role fighter. Overall, it appears that the study was heavily influenced by the preconceptions of what an 'air combat capability' looked like and was steered

45 Ibid., 77.
46 Grosick, Massey, & Perersen, *Harpoon Employment in Naval Anti-surface*, 27.
47 NZ MoD, *Final*, 96.
48 Ibid., 83.

towards a like-for-like Skyhawk replacement as a result. Alternative ways effects could be achieved by platforms other than fighter aircraft were not considered according to their own merits. As a result, the analysis was based purely on maximising operational effectiveness, and there was no reflection on the fact that the existing Orion fleet could, for example, provide a limited Maritime Strike capability, likely at a fraction of the cost of a new multi-role fighter fleet.

SUMMARY OF THE STUDY'S SHORTCOMINGS

The Whineray Report claimed that a modern multi-role fighter was needed for New Zealand to meet its defence strategy, and that the strategy requiring an air combat force was justified. As history shows, these recommendations were flawed. The costs of operating and deploying a multi-role fighter were far higher than assessed, and the requirements for a multi-role fighter were overstated. In terms of methodology, the study was dominated by preconceptions and was poorly balanced, failing to critically consider the strategic requirements of New Zealand and the capability options open to the RNZAF. Critically, there was no feedback loop or balancing of ends, ways and means in this study - the ends and ways were established at the start and were reconsidered or informed by the subsequent analysis. The consequences, opportunities and costs of the "means" of the capability didn't feed back into any greater consideration of the ways and policy ends of an air combat capability. As history shows, this resulted in flawed military advice being given to the Secretary of Defence.



THE RADED ANZAC FRIGATE HMNZS TE KAHA, AND HER SISTER SHIP TE MANA, ARE EXPECTED TO REMAIN IN SERVICE UNTIL THE MID-2030S, THOUGH THE PROCESS TO DETERMINE A NAVAL FUTURE SURFACE COMBATANT WILL BEGIN AROUND TEN YEARS BEFORE THIS TIME.



AN ARTIST'S IMPRESSION OF THE HUNTER CLASS FRIGATE, WHICH IS A MODIFIED RN TYPE 26 THAT WILL BE BUILT IN SOUTH AUSTRALIA, IS EXPECTED TO START REPLACING ANZAC FRIGATES IN RAN SERVICE FROM THE MID-2020s - IT IS LIKELY TO BE A PRIME CONTENDER TO REPLACE THE RNZN ANZAC FRIGATES AND WOULD LIKELY HAVE SIGNIFICANT SCOPE FOR TRADE AND MANUFACTURING OFFSETS.

LESSONS FOR THE FUTURE - WHAT CAN BE LEARNED FROM THE WHINERAY REPORT?

Any future capability study should, above all, be **properly linked to its requirements and the analysis balanced between these considerations**. If a report is asked to look into the need for a capability as well as possible capability options, these outcomes should receive equal attention. The Whineray Report uncritically reviewed contemporary policy without considering it in detail or in depth, and the majority of the report looked at equipment and solutions rather than need and justification.

Linked to the above, future studies should **deliberately avoid preconceptions and bias**. While alternatives to a traditional air combat capability were considered, it appears their inclusion was not genuine - they were presented to be compared to different generations of multi-role fighters, which were always the preferred outcome. Read in detail, the report indicates that an armed P-3K would be a capable Maritime Strike platform, but this option was discounted as it didn't meet the AI or CAS requirements.⁴⁹ Earlier in the report long-range surface fires had been discounted as a possible substitute for a CAS and AI role because they didn't meet the requirements for the Maritime Strike role.⁵⁰ A combination of both options (surface fires and an armed P-3) could have provided most of the policy outcomes required by the effects of an air combat fleet, albeit through different means of delivery and potentially at far lower cost. Instead the report followed a linear structure discounting options in isolation,

⁴⁹ Ibid., 77.

⁵⁰ Ibid., 30.

rather than genuinely considering and presenting alternatives for analysis and consideration.

Assumptions need to be stated and critically considered. There were frequent references made to 'threats' but nowhere did it detail the type of threats New Zealand's air combat capability needed to operate against. Instead, the report seemed to justify options based on how they would be perceived by partner forces, especially Australia. This was not part of the policy requirements identified and represented a substantial break in the logic flow inherent to the study, and an outlining of assumptions could have helped identify these gaps.

Likewise, **context is important**. The air combat capability was considered in isolation, and it was never assessed how the air combat capability contributed to policy outcomes alongside other NZDF systems and capabilities. Some discussion was made around the need for air combat forces to train alongside the Navy and Army, but the air combat capability was otherwise considered in isolation - an air combat force was, for example, 'one of the most visible signs' of regional engagement, and therefore an air combat force was needed to meet regional outputs. The fact that a Navy frigate or an infantry company could also represent visible and meaningful engagement was never considered, making many of the justifications for an air combat force superficial and shallow.

The Whineray Report was effectively a zero-sum, black-and-white analysis into a complex system. Capabilities were discounted rather than considered in terms of strengths and weaknesses, creating a singular, linear argument for a modern multi-role fighter. The fact that this fighter would be exponentially more expensive to operate compared to other options was not included

in the recommendations, and the fact that the other options could have provided alternative outcomes at far lower cost was ignored. It is striking that an existing RNZAF capability - the P-3K - that could have been used in the Maritime Strike role was not represented as a viable option for consideration. Instead of looking at a single recommendation, **policy advice for military capability should look at representing the strengths and weaknesses of various options and policies for the Government to consider.** Depending on the terms of reference for any study (which incidentally the Whineray Report did not reference or include) multiple courses of action could be a viable output, providing the Government with a range of options able to meet the assessed policy requirements to a greater or lesser degree.

A systems approach is also needed. The Whineray Report considered the air combat force in isolation, as has been discussed, and never looked at how an air combat force functions as a collection of joint systems inclusive of aspects such as weaponry, rather than focussing exclusively on platforms.

Finally, **future policy studies should demonstrate open-mindedness in their approach and analysis.** The Whineray Report was dominated by linear thinking working towards what could be labelled a preconceived conclusion. A more critical approach could improve the logic flow, but a more creative and open-minded consideration of the capability and subject matter could vastly improve the utility and value of the study's findings. In this regard wargaming could be a very valuable tool to inform policy development and research, with a wide range of options assessed across a variety of situations while keeping questions open and reflective rather than closed and predetermined, as the Whineray Report appears to be guilty of.

CONCLUSION

Looking back over the last twenty years, the decision to disband New Zealand's air combat force appears to be justified. An air combat force would have not added any value to NZDF operations in the Middle East compared to the air, naval and sea military response options that were chosen, and the cost of an air combat force would have forced enormous opportunity costs onto the NZDF and impacted other capabilities that have since been modernised and upgraded. A modern multi-role fighter fleet was simply unaffordable for the NZDF given its resources, and was not necessary for New Zealand's defence and security outcomes. Without an air combat force New Zealand has done very well against its strategic objectives, and it is hard to see how an F-16A/B fleet could have added any additional value to New Zealand's standing both regionally and globally.

In the next decade the RNZN's Frigates will be considered for replacement, and it is likely that the NZDF and MoD will be required to provide advice and analysis to inform the Government's decision on what the future naval surface combatant capability should look like. The shortcomings of the Whineray Report could prove informative in that regard. Dominated by preconceived ideas of what an air combat force should look like and why it was needed, the 1998 study never critically assessed the policy requirements, identified the operational context or properly considered the range of options available, and in doing so failed to identify that the costs of a modern multi-role fighter were simply beyond New Zealand's means and could not be justified.

Learning from the shortcomings of the Whineray Report, future capability studies should be properly balanced against its requirements while preconceptions

and bias should be deliberately avoided. In particular, assumptions should be stated and critically considered throughout the process. Capabilities should be analysed in terms of strengths and weaknesses, and a systems approach is needed for defining, understanding and analysing options, that feeds back and informs the policy requirements, as well. Finally, future policy studies should demonstrate open-mindedness to ensure valid, viable advice is provided that can be relied upon to further New Zealand's national interests.

A NO. 2 SQUADRON A-4 FITTED WITH AIM-9 AND AGM-65 TRAINING MISSILES BANKS TOWARDS A RAN SHIP DURING EXERCISES OFF THE AUSTRALIAN COAST IN 1994.



BIBLIOGRAPHY

- Anrig, Christian. "The Belgian, Danish, Dutch, and Norwegian Experiences" in *Precision and Purpose: Airpower in the Libyan Civil War*, RAND Corporation: New York, 2011.
- Ayson, Robert. *Future Proofing Australia–New Zealand Defence Relations*, Canberra: Lowy Institute, December 2016.
- Ayson, Robert. *Allies but Not Friends? New Zealand and Australia*. Canberra: Lowy Institute, February 2021.
- "Billions to Upgrade and Up–arm Pakistan's F–16s", *Defence Industry Daily*, 18 December 2019. <https://www.defenseindustrydaily.com/51b-proposed-in-sales-upgrades-weapons-for-pakistans-f16s-02396/>
- Block, George. "HMNZS Aotearoa: Navy's Largest Ever Ship Finally on its Way to New Zealand" in *Stuff*, 24 June 2020. <https://www.stuff.co.nz/national/300040365/hmnzs-aotearoa-navys-largest-ever-ship-finally-on-its-way-to-new-zealand#:~:text=HMNZS%20Aotearoa%2C%20which%20will%20be,%2C%20according%20to%20marinetraffic.com>.
- Bronk, Justin. *Russian and Chinese Combat Air Trends: Current and Future Threat Outlook*. London: Royal United Services Institute, October 2020.
- Cook, Malcolm. "New Zealand Trade Diplomacy: 17 out of 20 and Counting", *Incline*, 29 April 2015. <http://www.incline.org.nz/home/new-zealand-trade-diplomacy-17-out-of-20-and-counting>
- "Denmark Refuses Afghanistan F–16 Deployment Request", *Airforce Technology*, 31 August 2010. <https://www.airforce-technology.com/news/news94668-html/>
- Greener, Peter. *Timing is Everything: The Politics and Processes of New Zealand Defence Acquisition Decision Making*. Canberra: Australia National University Press, 2009.
- Grosick, Frederick, Patrick Massey, and Mark Peterson. *Harpoon Employment in Naval Antisurface Warfare*. Alabama: Air War College, 1988.
- Hoadley, Stephen. *New Zealand United States Relations*. Wellington: New Zealand Institute of International Affairs, November 2016.
- Institute for Economics & Peace. *Global Peace Index 2020: Measuring Peace in a Complex World*. Sydney, June 2020. <http://visionofhumanity.org/reports>
- Lemahieu, Herve and Alyssa Leng. *Asia Power Index 2020*. Sydney: Lowy Institute, 2020.
- "National Party Defense Policy Continues Labour Course", US Telegram in *Wikileaks*, 16 October 2007. https://wikileaks.org/plusd/cables/07WELLINGTON763_a.html
- New Zealand Foreign Affairs and Trade. "Comprehensive and Progressive Agreement for Trans–Pacific Partnership (CPTPP)". <https://www.mfat.govt.nz/en/trade/free-trade-agreements/free-trade-agreements-in-force/cptpp/>
- New Zealand Ministry of Defence. *A Modern, Sustainable Defence Force Matched to New Zealand's Needs: Government Defence Statement*. Wellington: Ministry of Defence, 8 May 2001.
- New Zealand Ministry of Defence. *Final Report of the Air Combat Capability Policy Study*. Wellington: Ministry of Defence, October 1998.
- New Zealand Ministry of Defence. *The Shape of New Zealand's Defence: A White Paper*. Wellington: Ministry of Defence, 1997.
- "The Options that Weren't for the RAAF Fighter Fleet" in *Australian Aviation*, 29 March 2018. <https://australianaviation.com.au/2018/03/the-options-that-werent-for-the-raaf-fighter-fleet/>
- Rolfe, Jim. "Five Eyes: More Than Technical Cooperation, Not Yet An Alliance", *Incline*, 3 August 2020. <http://www.incline.org.nz/home/five-eyes-more-than-technical-cooperation-not-yet-an-alliance>
- Schaub Jr, Gary. *Learning from the F–16*. Copenhagen: Center for Militære Studier, Copenhagen University, April 2015.
- Schuab Jr, Gary. "Denmark: Defense Woes in the Little US Ally That Could" in *War on the Rocks*, 6 August 2015. <https://warontherocks.com/2015/08/denmark-defense-woes-in-the-little-u-s-ally-that-could/>
- Stockholm International Peace Research Institute. *SIPRI Military Expenditure Database*. <https://www.sipri.org/databases/milex>
- Trevithick, Joesph. "Navy to Greatly Expand P–8 Poseidon's Mission with new Missiles, Mines, Bombs and Decoys", *The WarZone*, 3 February 2020. <https://www.thedrive.com/the-war-zone/32071/navy-to-greatly-expand-p-8-poseidons-mission-with-new-missiles-mines-bombs-and-decoys>

QUOTAS VS. CULTURE: WHY CULTURAL INTELLIGENCE, NOT QUOTAS, IS VITAL TO DELIVERING THE NEW ZEALAND DEFENCE FORCE'S FUNCTIONAL IMPERATIVE

BY WGCDR STU PEARCE | CO MAINTENANCE WING
ROYAL NEW ZEALAND AIR FORCE BASE, OHĀKEA

WGCDR Stu Pearce is currently serving as CO Maintenance Wing (Ohākea). He is a graduate of the Advanced Command & Staff College having previously served tours as MFC 3 SQN on the NH90 and A109 helicopters as well as the Huey during its retirement from service. He has served multiple staff and command roles in both the RNZAF and RAF. Stu is a long-time advocate for inclusive diversity and was one of the founders of the NZDF's OverWatch group. In 2019, Stu lead the Pride 25 project commemorating twenty-five years of open service following the passing of the 1993 Human Rights Act. Stu is also an advocate for executive health and wellbeing having suffered what he describes as a "mild mid-life crisis" in his early forties and taken up bodybuilding. He has competed at a national level and qualified for the New Zealand team in 2021. He lives in Feilding with his husband Dave and their two dogs.

AUTHOR BIO

In his essay, "Six Tenets for our Air Force", Air Commodore Shaun Sexton¹ discusses how the tenet of Values and Culture supports our Air Force's moral warfighting capacity and our professionalism. A key component of this tenet is the power that is drawn from the diversity of our people. As we are constantly reminded in many of our publications, people are our most important capability and resource. As an organisation, we have put a number of initiatives and work streams in place to ensure that we attract the best people from across the demographic landscape of society. This in an effort to maximise the benefits inherent in the diversity that this brings to the fight.

In the following essay, Wing Commander Stu Pearce discusses the effectiveness of our current diversity initiatives. He argues that we have effectively employed a "demographic diversity" approach to the task, which has the perception of simply meeting category-based quotas. He argues that we should be taking a cultural intelligence (CQ) approach to the development of a diverse and inclusive workforce to be able to fully realise the people-power in the diversity of individuals. This is an important discussion to have if we as an Air Force are going to be able to deliver the most credible effects possible in the future operating environment.

AIR POWER CENTRE

INTRODUCTION

The Air Force, in particular, is oft-maligned with the trope that we value "platforms over people". If we review the content of many Air Power-related publications, and especially doctrine, we find that much of what we read is actually focused on the systems we employ to generate our capabilities and effects. However, there is also a growing and tangible focus on the need to ensure that our workforce is suitably selected, trained and equipped so that those platforms are able to be used in the most effective and efficient manner. It is therefore important that we also cover the various aspects of our people capability, as the key Air Power enabler, in the forum of this journal. What makes our people the best at what they do?

¹ Shaun Sexton, "Six Tenets for our Air Force", *Journal of the Royal New Zealand Air Force* 5, no. 1, Part B. Wellington: NZ Government, 2019, 25.

*“As individuals we can accomplish only so much. We’re limited in our abilities. Our heads contain only so many neurons and axons. Collectively, we face no such constraint. We possess incredible capacity to think differently. These differences can provide seeds of innovation, progress and understanding.”*²

Scott E. Page, Leonid Hurwicz Collegiate Professor of Complex Systems, Political Science, and Economics, University of Michigan.

On 25 August 2016, the New Zealand Defence Force (NZDF) published the initial draft of ‘People 25 - Strategy to 2025’.³ The fact that the definitive version was not released until November 2019 hints at the complexities of developing people-centric strategies. The document aims to lay out the NZDF’s strategy for attracting and retaining the best talent available to meet the NZDF’s current and future challenges. One reason why developing a people-centric strategy to meet future challenges is so difficult is the complexity and ambiguity of the challenges facing New Zealand and its security forces.

Perhaps one of the more nuanced challenges for the NZDF will be attracting and retaining the right talent to meet these challenges head on. Diverse problems require a diverse workforce, but for the Armed Forces, diversity is an often misunderstood and feared term. Certainly the benefits of diversity to a conservative institution such as the NZDF are not often or enthusiastically acknowledged, partly because diversity is seen as a threat to cohesion, and cohesion is key to

the NZDF’s operational effectiveness or “functional imperative”.⁴ So why do we risk jeopardising the NZDF’s functional imperative by pursuing diversity?

Historically, militaries tend to be unrepresentative of the societies they serve.⁵ While society at large has made great strides in empowering and protecting its various and diverse minority groups, militaries are often found lagging. Demands on militaries to accept increasingly diverse people, for example women and ethnic or sexual minorities, have in the past been seen as “social engineering”. The mindset that militaries exist to ‘protect democracy not practice it’⁶ has prevailed, certainly in some corners of the defence establishment. However, a resistance to accepting or reflecting diversity could be a threat to democracy itself. If a democratic nation touts values such as freedom, equality and justice, yet fails to offer equality of opportunity within its armed forces, the legitimacy of the armed forces can be called into question.⁷

Democratic trends, globally as well as domestically, are leading to an explosion in diversity.⁸ Democratic freedoms, whether the freedom of movement, freedom of expression or freedom of self-identification, are increasing the scope and scale of diversity. If institutions hope to attract diverse talent against a backdrop of increasingly shallow recruit pools and tightening labour markets, accommodating diversity isn’t just morally or ethically the right thing to do, it’s a case of diversify or die.⁹

4 Huntington, *The Soldier and the State*.
 5 Leuprecht, “Diversity as Strategy”, 559.
 6 Credit Capt. Frank Ramsey (Gene Hackman), *Crimson Tide*.
 7 Leuprecht, “Diversity as Strategy”, 560.
 8 Ibid., 562.
 9 Ibid.

2 Galdiga, Marten, Polchar, and Sweijis, “LGBT Military Personnel”, 7.
 3 New Zealand Defence Force and the Crown, “People 25 - Strategy to 2025”, 2019.

Studies into the management of diverse workforces have consistently shown a correlation between diversity and organisational success.¹⁰ And while it could be argued militaries are institutions separate to the mainstream, it is becoming evident, as predicted by Morris Janowitz back in the 1960s, that militaries are becoming increasingly similar to any other large scale, bureaucratic, technologically advanced business entity.¹¹ Attracting and managing diverse talent is no less essential for militaries than it is for any other employer. Having an effective strategy for managing that talent is therefore vital to maintain a competitive edge, and in the case of militaries, to assure the functional imperative.

As western militaries evolve to execute an increasingly diverse array of contemporary missions¹² they must also adapt to societal changes leaning towards increased multiculturalism, the significant integration of information age technologies, the increasing prevalence of military civilians, more questioning of ideas and authority, and the emergence of the multi-mission military.¹³

At the time of the release of ‘People 25 - Strategy to 2025’, those first-generation millennials (born in the early 1980s) who had joined the Armed Forces would likely be occupying middle management positions at Major or equivalent level. Latter-day millennials, those born in the late 1990s and early 2000s, will largely be occupying junior-enlisted or junior officer positions. While lacking in political influence by virtue of their rank within a traditionally hierarchical organisation,

10 Richard, “Racial Diversity”, 164-177.
 11 Janowitz, “The Professional Soldier”.
 12 Hajjar, “Emergent Postmodern US Military Culture”, 138.
 13 Ibid., 138.

latter-day millennials will represent the dominant culture by virtue of sheer numbers. Characterised by an elevated tolerance of difference, ethnic diversity and connectedness, millennials are optimistic for the future and subscribe to the belief “anything is possible” and in equality of opportunity.¹⁴ Millennials are therefore more likely to expect employers to adapt to accommodate an increasingly diverse talent pool. Armed forces are not immune to those demands.

RAINBOW WARRIORS

Diversity in the Defence Force supports the democratic ideal of the citizen soldier. If a military claims to uphold democratic values such as freedom and justice, *all* members of society must have equal opportunity to serve. Nevertheless, inherently conservative institutions, such as militaries, while perhaps grudgingly open to change, prefer it to be organic and gradual¹⁵ and have a tendency to resist externally driven *demographic* change.

One area in which the NZDF has demonstrated an ability to evolve and embrace diversity is the successful integration of sexual and gender minorities. Until 1986 in New Zealand, sodomy was a criminal offence under Section 142 of the Crimes Act 1961. It was not unlawful, per se, to be a homosexual, but few practising homosexuals would have appreciated the distinction. Displaying homosexual orientation was apt to get a person into trouble with the law in a number of different ways, whether in the civilian jurisdiction

14 Myers and Sadaghiani, “Millennials in the Workplace”, 225-238.
 15 Leuprecht, “Diversity as Strategy”, 564.



THE PARADE, PART OF THE WELLINGTON PRIDE FESTIVAL, THE NZDF IS MARKING TWENTY-SEVEN YEARS SINCE LGBT+ PERSONNEL WERE WELCOMED TO SERVE OPENLY IN THE NZDF.

(including through the summary jurisdiction of the Police Offence Act 1927 or its replacement the Summary Offence Act 1981), or in the military. Furthermore there was no prohibition on discriminating against homosexuals, with discrimination being commonplace, institutionalised and far-reaching in all sectors of New Zealand at that time, including the Armed Forces.¹⁶

In addition to the Crimes Act offence (which could be prosecuted under military law by virtue of Armed Forces Discipline Act s 74(1)) homosexual activity in the Armed Forces could also result in a charge of Disgraceful and Indecent Conduct (or its predecessor, Disgraceful Conduct of an Unnatural Kind) or Conduct Likely to Prejudice Service Discipline. Homosexuals

¹⁶ Ministry for Culture and Heritage, “Birth of the Gay Movement”.

were also liable to be administratively discharged from the Armed Forces on the basis of incompatible conduct on that basis alone.

In 1986 the Homosexual Law Reform Act abolished the Crimes Act offences relating to homosexuality. Through s 8 of that Act, however, the Armed Forces preserved the ability to prosecute Service members for homosexual acts. The concerns that gave rise to the perceived need to retain homosexual acts as crimes within the Armed Forces were genuinely held at the time and related to what was thought to be a very real potential for unit cohesion, and therefore the *functional imperative*, to be damaged by homosexual behaviour. While during this period only a very few charges arose, the atmosphere within the Armed Forces remained hostile towards homosexual service-people.

In 1993 the issue came in front of Parliament again, with the Human Rights Act. The Act prohibited discrimination on the grounds of (amongst other things) sexual orientation. It also repealed s 8 of the Homosexual Law Reform Act. With immediate effect, homosexual activity was not only decriminalised in the Armed Forces, but was no longer grounds upon which the Armed Forces could discriminate.

The effect was anti-climactic, with none of the perceived problems that were foretold coming to pass. Service members of the three Services continued to do their jobs with professionalism, courage and integrity, just as they had before. The *functional imperative* survived unscathed. A few Service members “came out”, declaring their sexual orientation, but there was no formal need to do so. Most of the unit cohesion arguments proved in the event to be unfounded and any issues that did arise were dealt with by enforcing professionalism.

While discrimination on the grounds of sexual orientation within the NZDF had been outlawed, efforts to genuinely support and empower serving Lesbian, Gay, Bisexual or Transgender (LGBT) personnel were slow to get underway. LGBT diversity was *tolerated* at best but far from embraced. It wasn’t until 2012, with the establishment of OverWatch, a support and advocacy group for the NZDF’s LGBT people, that the NZDF began to experience a sea change in cultural attitudes towards LGBT people. In 2014, the NZDF was identified by the Hague Centre for Strategic Studies (HCSS), a leading Dutch think tank, as the world’s most LGBT-inclusive military - a remarkable transformation from the dark, pre-Homosexual Law Reform days and the hangover of hostility towards homosexuals that lasted well into the 1990s.

Change came for a number of reasons. Most importantly, the NZDF, like other defence organisations, was realising diversity to be a critically important factor for surviving and thriving in the twenty-first century security environment.¹⁷ The ability to recruit personnel based on talent, rather than gender, ethnicity, sexual orientation or gender identity was essential for the NZDF. Far from undermining cohesion, morale and effectiveness, the NZDF was realising diversity and inclusion were force multipliers. Cohesion was improved when people felt safe to communicate openly amongst one another, morale was higher when people felt respected in the workplace, and trust was improved when people were free from suspecting their colleagues had something to hide. To achieve a shift in attitudes and grow a culture of inclusive diversity took effort, resources and, critically, leadership.

¹⁷ Galdiga, Marten, Polchar, Sweijjs, “LGBT Military”, 11.

The visibility of LGBT leaders within Defence broke down barriers, challenged stereotypes and encouraged others to bring their “whole selves” to work. By developing a strategy for growing the *culture* of the organisation, the NZDF delivered more cohesive and effective outputs. It is unlikely, had the NZDF simply embarked on a recruitment campaign to reach out to New Zealand’s LGBT community, that the dominant culture at the time would have accepted the demographic shift in the types of people serving. However, by adopting a strategy for cultural change, the NZDF has successfully evolved its culture from one of overt persecution of LGBT people to become a world leader in LGBT inclusion. Simply pursuing quotas is unlikely to have delivered the same success.

DEMOGRAPHIC DIVERSITY VS. IDENTITY DIVERSITY

Affinity groups within organisations such as the Defence Force provide opportunities for serving minorities such as LGBT people, women, Pacific Islanders, etc., to offer peer to peer support. They also provide a collective pool of expert subject matter opinions and feedback whenever the organisation is looking to develop or release policy. Such groups can also advocate on behalf of their wider community. However, there is a temptation within organisations to assume greater membership of affinity groups and increased numerical representation of designated individuals within the larger organisation as an indicator of greater inclusion within the organisation. The drive for increased numbers as an indicator of organisational diversity, however, is misleading and may be harmful

to the organisation and its members.¹⁸ It is important when discussing the benefits diversity brings to an organisation to look beyond *demographic diversity* and instead consider *identity diversity*.

Demographic diversity pertains to the distinctive characteristics of individuals. However, diversity is best understood in terms of “self” and how individuals perceive themselves and their relationship with the world around them.¹⁹ In this regard, diversity is born of differing world views, belief systems, ethical frameworks and how an individual sees themselves in relation to others.²⁰ This shift from demographic diversity to identity diversity is driven in no small part by the belief that bunching certain groups together, for example men, women, aboriginal people and people with disabilities, while convenient, is based on the underlying assumption there is only one type of man, woman, aboriginal or disabled person. Clearly this isn’t the case. The categories are artificially created, culturally embedded terms,²¹ imposed on the individual, and tell us little about an individual’s ethical framework, world view or belief system. Nevertheless, employers, including militaries, frequently fall back on workplace censuses that provide individuals the opportunity to self-identify if they don’t believe the provided labels fit their sense of self. The challenge here is that individuals who choose not to self-identify are likely to fall into the default belief that they are a part of the dominant group. Such censuses use simplistic categories to reduce individuals to a single defining characteristic and overlook the broad spectrum of

18 Okros, “Rethinking Diversity and Security”, 348.

19 Tajfel and Turner, “An Integrative Theory of Intergroup Conflict”, 33-47.

20 Okros, “Rethinking”, 348.

21 Ibid., 349.

identities associated with that individual’s heritage, tribe, iwi or culture.²²

From an organisational Human Resources perspective there are benefits to a focus on demographic diversity, not least the ability to demonstrate compliance with legislated or policy driven requirements around minority representation. The problem, however, is that demographic diversity masks the true utility of diversity. The implications for militaries and other security agencies are, as Professor Alan Okros puts it to ‘...recognise the direct links between how individuals see themselves and how they engage in abstract reasoning in novel and complex context.’²³

In this sense, diversity refers to the capacity to understand and value differing points of view. Looking beyond individual workplace relationships, and branching out into security situations where multiple, diverse organisations must integrate, interact and interoperate, it is clear *diversity* is a key enabler for success. While conceptually understood, in practice organisations often fail to integrate. The US response to Hurricane Katrina, the SARs crisis and the Boxing Day Tsunami are all examples where multiple agencies have failed to understand or value each other’s point of view.²⁴

For security organisations to achieve inter- or intra-organisational success, an appreciation of diversity as an ability and willingness to see and value another’s point of view is critical. Achieving this will require more than a database of the organisation’s sub-groups or reams of census data detailing numerical representation but little else. Diversity is greater than mere group

22 Ward, “White Normativity”, 563-586.

23 Okros, “Rethinking”, 351.

24 United States Government, *A Failure of Initiative*.

representation in the same way that security is greater than simply the absence of lawlessness. Achieving security objectives requires the conditions within which individuals’ views, perspectives, frames of reference, beliefs, etc., are understood and valued, shared and integrated into the organisation’s decision-making process.²⁵ At an organisational governance level, board diversity tends not to reap optimal performance benefits if the opinions and perspectives of unconventional board members are overruled (consciously or otherwise) by those of the board’s more conventional members.²⁶

Achieving this paradigm shift, however, will not be easy for organisations comfortable with quotas, but without the capacity (or willingness) to see beyond the numbers. The integration of minorities into an organisation, or the integration of departments within the organisation, for example, an integrated Defence Force, is more than just a numbers game. A cultural shift is required. Militaries must move beyond the concept of diversity as an externally driven demographic change and look to diversity as an internally embraced philosophy. This philosophy must be one in which individuals of different identities come together to achieve shared goals, where those differences are valued and understood and where each individual contributes because they *want* to, not because they are *compelled* to. This will require a loosening of the organisational culture such that individuals have a greater degree of control over how they contribute. While some might fear relaxing organisational control over how an individual contributes to outputs will lead to anarchy, the need for flexibility, creativity and innovation, as well as an

25 Okros, “Rethinking Diversity and Security”, 353.

26 Rose, “Does Female Board Representation Influence Firm Performance?” 404-413.

increased need for independent moral and ethical thinking, to achieve integrated security solutions, mean a focus on cultural change is essential.²⁷

THE MIL-CIV RELATIONSHIP - MILITARY LEGITIMACY IN THE TWENTY-FIRST CENTURY

The need for cultural change within militaries is not just essential in order to underpin operational effectiveness and the delivery of integrated security solutions, it is a demand of an increasingly diverse and *aware* civilian populace, specifically in Western societies, where as discussed earlier, failure to keep step with social change is seen as a challenge to the military's social legitimacy. As Victoria Basham writes:

*“As well as placing limitations on the performance and negotiation of identities for individuals, damaging working relationships between personnel, and undermining recruitment and retention aims, failing to re-evaluate military culture in light of social, political and demographic change in wider society threatens to undermine the social legitimacy of the forces.”*²⁸

While militaries grapple with the challenges of evolving culture in line with societal expectations, global institutions, particularly those with a military dimension are also struggling to maintain social legitimacy. Following public allegations of abuses by United Nations (UN) peacekeepers, the UN found its social legitimacy challenged. Far from being a force to help the vulnerable and ‘save succeeding generations

²⁷ Okros, “Rethinking”, 370.

²⁸ Basham, “Harnessing Social Diversity in the British Armed Forces”, 424.



RECRUITS CELEBRATING FROM RECRUITMENT COURSE 21/01 AT RNZAF WOODBOURNE

from the scourge of war’,²⁹ the UN’s credibility was being jeopardised by instances of sexual exploitation and assault (SEA) by UN peacekeepers and of failing the very people the UN Charter set out to protect.

THE UNITED NATIONS EXPERIENCE

In 2000 the UN Security Council issued UNSC1325³⁰ following allegations of misconduct by UN peacekeepers. UNSC1325 required commanders consider how their actions impact the host nation’s women and girls and urged Troop Contributing Countries (TCCs) to implement gender sensitivity training for deployable peacekeepers. Five years later, Prince Zeid Ra’ad Zeid Al-Hussein of Jordan (Prince Zeid) published *A Comprehensive Strategy to Eliminate Future Sexual Exploitation and Abuse in*

²⁹ United Nations, *Charter of the United Nations*.

³⁰ United Nations Security Council (UNSC), *Resolution on Women Peace & Security*.

United Nations Peacekeeping Operations (the “Zeid Report”).³¹ The report was damning. Despite the clear direction laid out in UNSC1325, the Zeid Report found a pervasive culture of sexual exploitation and abuse by UN peacekeepers. The victims of SEA were largely women and girls with whom sex was traded for money, food, and security. However, despite a zero-tolerance approach to SEA, the Zeid Report found ‘zero compliance with zero tolerance’.³²

With the benefit of hindsight, it is perhaps unrealistic to expect cultural change to have immediately followed the release of UNSC1325. In the years leading up to the publication of the resolution, the UN had frequently turned a blind eye to allegations or instances of SEA. In the 1990s, a number of international aid organisations raised concerns about the behaviour of UN peacekeepers in Cambodia.³³ Activity included, amongst other unacceptable behaviours, UN peacekeepers visiting brothels known to employ underage prostitutes. The soldiers believed their rights as military men included the freedom to use prostitutes as well as ‘... to pursue, harass, and assault local women’³⁴ When confronted with these allegations, Yasushi Akashi, head of the UN mission to Cambodia (UNTAC), responded dismissively, ‘boys will be boys’.³⁵

Instances of SEA were found wherever the UN had peacekeepers deployed. Further allegations emerged from Haiti, Bosnia and Herzegovina, the Democratic Republic of Congo, Timor-Leste, Sierra Leone and

³¹ Zeid, *A Comprehensive Strategy*.

³² Clayton and Bone, “Sex Scandal in Congo Threatens to Engulf UN’s Peacekeepers.”

³³ Essa, “Do UN Peacekeepers do More Harm Than Good?”

³⁴ Whitworth, *Men, Militaries, and UN Peacekeeping*.

³⁵ Essa, “Do UN Peacekeepers do More Harm Than Good?”

Liberia.³⁶ The UN Peacekeeping Department’s Conduct and Discipline Team reports that the UN has repatriated thirty-seven peacekeepers for SEA.³⁷ The fighting might have stopped, but peace has not been universally enjoyed, at least not by the most vulnerable members of the “protected” community. Where women have been coerced into trading sex for security, food or aid by UN peacekeepers, numerous children have been born as a result of these encounters. Little data exists as to how many children have been fathered by deployed UN peacekeepers, however, the phenomenon of “peacekeeper babies” has proven sufficiently worrisome that the UN has begun offering DNA testing to help support paternity claims against the UN and ensure victims get the support they need.³⁸

The key to preventing inappropriate behaviour by UN peacekeepers is in understanding and shaping the *culture* of the militaries that contribute to UN missions. This means understanding why military personnel on peacekeeping or other military operations act in ways contrary to the accepted norms of society. Since warfighting is far from civilised, no matter how skilled or well-trained in combat the troops are, behaviours normalised in combat operations can overspill into peacekeeping. Colin S. Gray argues peacekeeping to be ‘a mode of warfare’ and while peacekeeping situations are not quite *of war* they are undoubtedly *warlike*.³⁹ In the immediate post-conflict period, a sense of widespread insecurity exists.⁴⁰ The conflict may have

³⁶ Karim and Beardsley, “Explaining Sexual Exploitation and Abuse in Peacekeeping Missions”.

³⁷ UNSC, “Problem of Sexual Abuse by Peacekeepers Now Openly Recognized”.

³⁸ Saenz, “Peacekeeper Babies an Unintended Consequence of Sending in the UN”.

³⁹ Gray, *Another Bloody Century*, 335.

⁴⁰ Berdal, “Peacebuilding Operations and the Struggle for Legitimacy”, 95-134.

ended but violence, a sense of social weakness and even a lack of basic civic institutions exists. As a consequence of this, ‘distinctions between “war” and “peace”, “conflict” and “post-conflict” tend to be blurred and unclear’.⁴¹ Behaviours adopted and accepted as the norm by war fighters are exhibited when those war fighters are deployed on peacekeeping missions: the combat function remains core to all fighting forces and shapes the role and *culture* of peacekeepers.⁴²

The blurred distinction between the bounds of war and peace can lead to military personnel struggling to reconcile the nuances of their role as *peacekeeper* with that of *war fighter*. Sjoberg and Via suggest effective war-fighting, and therefore “warlike” peacekeeping missions, as described by Gray, require traditionally and socially normalised masculine characteristics of aggressiveness, courage, obedience, patriotism, stoicism and loyalty, which might seem to be at odds with widely subscribed traditional and normalised feminine characteristics.⁴³

Militaries are highly gendered, male-dominated⁴⁴ and with a ‘hegemonic masculine culture’.⁴⁵ A mere four per cent of military peacekeeping troops are female,⁴⁶ a situation which exposes those women who are deployed in peacekeeping roles to elevated degrees of scrutiny, criticism and risk.⁴⁷ Dean Laponge posits the prevailing patriarchal culture of the UN (and

militaries in general) underpins a sense of masculine superiority in which some servicemen feel they possess the right to protect and control ‘people who are less masculine’.⁴⁸ This view is supported by Hudribusch et al,⁴⁹ who, following a study of instances of workplace aggression in the Austrian Armed Forces, argue women are significantly more vulnerable to bullying by their male comrades. Their studies found the division of labour along gender lines, specifically when considering the “hypermasculine” culture of elite combat troops, can lead to exaggerated differentiation between those who meet the desired hegemonic masculine standard and those who fall short, whether women or “insufficient” males.⁵⁰ The “protector masculinity” centres on benign aspects of a military masculinity related to ideas of heroism, chivalry and virtue. A more concerning manifestation of hegemonic masculinity is that of violence, oppression of the weak, misogyny, homophobia and racism.⁵¹

While militaries have moved to increase representation of women within the ranks, with varying degrees of success, a failure to recruit and retain women supports the argument that militaries must focus on identity diversity rather than simply demographic diversity. Simply increasing representation of women could exacerbate the prevalence of workplace aggression and inappropriate behaviour towards women, whether deployed in combat operations or peacekeeping missions.

41 Ibid., 96

42 Coker, *Humane Warfare*, 105-110.

43 Sjoberg and Via, *Gender, War and Militarism*.

44 Sasson-Levy, “Feminism and Military Gender Practices”, 440-465.

45 Connell and Messerschmidt, “Hegemonic Masculinity”, 829-859.

46 Holohan, Kennedy, Smith and Trochowska, *Final Report on Current Practice*.

47 Herbert, *Camouflage isn't Only for Combat*.

48 Laponge, “The Absence of Masculinity in Gender Training for UN Peacekeepers”, 91.

49 Hudribusch, Koeszegi and Zedlacher, “The War Against the Female Soldier?”, 226-251.

50 Fancher, Knudson and Rosen, “Cohesion and the Culture of Hypermasculinity in US Army Units”, 325-352.

51 Whitworth, *Men, Militaries, and UN Peacekeeping*.

Notwithstanding progress made in recent years within contemporary western societies with regards to the acceptance of LGBT people, particularly in military roles,⁵² there remain challenges. The hegemonic masculine culture within armed forces supports the view that morale, cohesion and combat effectiveness are undermined by the presence of homosexuals within the ranks.⁵³ While such attitudes feed a workplace culture aggressive towards LGBT personnel, negative views of homosexuality may also be a factor in instances of SEA by military personnel. In an extreme example, by carrying out a gang rape, the offenders signal to each other that they are “real men” through the complete dominance of their victim and their ability and willingness to force their masculinity on them. While peacekeepers’ views about the inferiority of women can lead to abuses, ‘their views about sexuality - particularly homosexuality - can drive them to commit sexually violent crimes against women’.⁵⁴ While UNSCRI325 has raised the need for TCCs to develop strategies for protecting women and girls during peacekeeping operations, instances of SEA continue to undermine the credibility of the UN and its social legitimacy.

MORE MILITARY WOMEN?

In response to UNSCRI325, Karim and Beardsley suggest two approaches to reducing the rate of SEA on peacekeeping operations. The first recommendation is to increase the proportion of females on peacekeeping missions. The second recommendation is to increase

52 Galdiga, Marten, Polchar and Sweijs, “LGBT Military”, 7.

53 Alexandrou, Bartle and Holmes, *New People Strategies for the British Armed Forces*, 30-31.

54 Winslow, *Gender and Military Sociology*, 5.

the proportion of peacekeepers from more egalitarian nations where there is greater exposure to inclusive attitudes to women and other minorities.⁵⁵

It is assumed the first recommendation would have the benefit of increasing the representation of women in peacekeeping operations and normalising gender equality among peacekeeping troops regardless of gender. However, caution should be exercised when simply increasing representation alone. Bliese et al argue persistent gender norms do not necessarily change with an increase of women.⁵⁶ Furthermore, as minorities within the mission, albeit a larger minority than earlier, women on peacekeeping operations may feel intimidated and less likely to report misconduct should it occur. By increasing the representation of women in peacekeeping roles, the burden to prove suitability for the mission is placed on those women. Men on the other hand are removed from the discussion.⁵⁷ The proposed alternative to focusing on greater numbers of women in peacekeeping roles is to focus on increasing the representation of individuals who value gender equality.

The element of UNSCRI325 that perhaps promises the greatest likelihood of success in reducing instances of SEA on UN Peacekeeping missions, and therefore the social legitimacy of the UN as a whole, is gender mainstreaming. Gender mainstreaming is a strategy which promotes greater gender equality and relies on gender perspectives - knowledge of and valuing women’s perspectives, points of view, ethics and frames of reference. Or, as Alan Okros puts it, *identity diversity*. This might be easier said than done, however. While

55 Karim and Beardsley, “Explaining Sexual Exploitation”, 103.

56 Bliese, et al., “Cohesion & Readiness in Gender Integrated Combat Service Support Units”, 537-553.

57 Karim and Beardsley, “Explaining”, 104.

much has been written about hegemonic masculine cultures within militaries where masculinity is revered while femininity is considered “lesser”, little research has been conducted to understand how military women perceive themselves and their relationships with other military personnel, male or female.⁵⁸

In her 2009 study into female peacekeepers deployed in Bosnia and Kosovo, Liora Sion argues that simply increasing the numbers of women deployed on UN peacekeeping missions might prove problematic for reasons other than those discussed thus far. The overriding challenge being twofold: firstly, women don’t think like men and secondly, not all women think the same.⁵⁹

Much of the research into gender mainstreaming focuses on the unique skills women bring to peacekeeping missions and their suitability for the role of peacekeeper.⁶⁰ Some scholars believe perceived feminine characteristics such as calmness, gentleness and the ability to control violence make them ideal candidates for peacekeeping roles.⁶¹ Others argue that since women often represent the dominant population in peacekeeping environments, female peacekeepers can engage more effectively with the host nation’s civilian populace than their male counterparts.⁶² Others go one further and argue more women on peacekeeping missions would statistically bring down

the likelihood of SEA.⁶³ However, Sion found in her studies of female peacekeepers in Bosnia and Kosovo that since women continued to represent a minority on peacekeeping missions, they lacked the solidarity and kinship enjoyed between their male counterparts. As a result, female peacekeepers continued to find themselves isolated and vulnerable.⁶⁴

The Dutch military, much like many western militaries, the NZDF included, is faced with a growing imperative to justify to the public its legitimacy. As the global War on Terror abates and perceived threats to national security subside, governments seek to deploy their militaries on more benign or *noble* missions such as peacekeeping in humanitarian and disaster relief (HADR) roles.⁶⁵ The perceived lower risk of HADR and other peacekeeping missions gives rise to the view that such missions are more “appropriate” for women to undertake.⁶⁶ There is therefore a public expectation to see greater representation of women on such missions, an expectation likely perceived by the male members of the military as externally driven demographic change rather than a genuine enhancement to mission effectiveness. This change has the potential to serve as a source of resentment towards female peacekeepers, thus amplifying feelings of isolation and vulnerability by women deployed on the mission.

The challenge for female peacekeepers, already a minority in most, if not all UN peacekeeping missions, is that they emphasise a sense of individuality, lack a common feminine identity or solidarity and tend not to seek social support from other deployed

58 Sasson-Levy, “Feminism and Military Gender Practices”, 440-465.

59 Hardly a ground-breaking observation, but nevertheless, one that somehow has eluded scholars in their research. Perhaps men, being supposedly less complex beings are easier to study and understand.

60 Sion, “Can Women Make a Difference? Female Peacekeepers in Bosnia and Kosovo”, 477.

61 Reardon, *Women and Peace*.

62 Carey, “Women and Peace and Security”, 49-68.

63 Enloe, “Gender is Not Enough”, 95-97.

64 Sion, “Can Women Make a Difference?”, 478.

65 Boone, “The Military as a Tribe Amongst Tribes”, 167-186.

66 Sion, “Can Women”, 481.



TE TINI HAUTUTANGA, WARRANT OFFICER OF THE AIR FORCE HANDOVER CEREMONY. OUTGOING WOAF, W/O TONI TATE HANDS OVER THE WOAF CONCH SHELL TO WOAF DESIGNATE W/O KERRY WILLIAMS AT DEFENCE HOUSE.

women.⁶⁷ Some women, conscious of their status as an “invader” into a traditionally masculine environment, seek out opportunities to emphasise to their male counterparts the bad qualities of *other* women by comparing them to the good qualities of men.⁶⁸ In a study of women deployed with Dutch Armed Forces in

67 Ibid., 490.

68 Ibid., 483.

peacekeeping roles in Bosnia and Kosovo, where female peacekeepers numbered less than fifteen percent of the total deployment, Sion found female peacekeepers viewed other women in a negative light and mocked other women they perceived to be stereotypical females. One theory for this is that while men, being of higher social status in military units, tend to seek out predominantly homophilous relationships and *intra*-group interactions, women, being of lower status will seek out *inter*-group relations and place lower value on solidarity or connectedness with other women.⁶⁹

69 Ibarra, “Homophily and Differential Returns”, 422-448.

Cross-gender ties are seen as more likely to support the advancement of women when they are in the minority. However, if the proportion of women, albeit still a minority, increases, the potential to forge coalitions amongst themselves and therefore influence culture also increases. This could lead to a greater sense of solidarity and esteem amongst female peacekeepers.⁷⁰ Therefore, if an increased proportion of the mission share a common view on the positive benefits of gender equality, the masculine hegemony could be challenged and potentially mitigated. As Karim and Beardsley argue, ‘as peacekeeping missions consist of personnel with higher esteem for gender equality, we should observe fewer instances of SEA within those missions’.⁷¹ Critically, neither increasing the representation of women on peacekeeping missions nor increasing the proportion of “enlightened” peacekeepers are mutually exclusive.

GETTING THE JOB DONE

Not all instances of diversity’s impact on cohesion are as pessimistic as perhaps Sion makes out. A study carried out by an anthropologist embedded with Canadian troops deployed to Afghanistan found that issues of phenotype, religion, sexual orientation or gender become irrelevant once the fighting starts and what really counted was whether an individual could “get the job done”.⁷² As Christian Leuprecht points out, there exists a misconception that the relationship between unit cohesion and diversity is one of making what is measurable matter. Reflecting on Alan Okros’s

distinction between demographic diversity and identity diversity, the real challenge for militaries when seeking to harness the full potential of diversity is to determine what matters and find a way to make it measurable. What is measured can then be managed.

The NZDF’s ‘*People 25 - Strategy to 2025*’ document, goes part way to ensuring diversity within the NZDF out to 2025. However, it is limited largely by a focus on increasing representation of individuals from discrete minority groups, rather than focusing on developing cultural competency. For example, the strategy makes reference to New Zealand’s increasing multiculturalism and that, set against an increasingly diverse national backdrop of cultures and ethnicities, ‘New Zealand is a diverse country with a strong representation of Māori, Pasifika and Asian people, and we are committed to increasing our diversity. This includes both ethnic and gender diversity...’.⁷³ As pointed out by Alan Okros earlier, demographic diversity overlooks the vast array of unique characteristics a recruit from, say, Asia, a geopolitical region across which over 2,300 languages are spoken, may possess. Similarly, the term “Pasifika” refers to a melting pot of peoples ten times the population of New Zealand and spread over hundreds of islands. To suggest there is just one type of Pacific Islander is ludicrous.

The same could be said for UNSCR1325. Women make up half of the world’s population. There is clearly more than one type of female personality. With this in mind it is simplistic to suggest increasing female representation on UN peacekeeping missions alone is all that is needed to evolve the culture of UN peacekeeping operations. The UN, with its attempts to tackle SEA, and the NZDF,

with its move to develop a strategy for people, are making what is measurable matter, rather than the more challenging target of finding what matters and measuring that. One way of measuring an organisation’s diversity is to measure *cultural intelligence*.

THE NEED FOR CULTURAL INTELLIGENCE

Karen Davis defines cultural intelligence (CQ) as a meta-competency that facilitates understanding, adaptability and perception within multicultural, ethnic and organisational contexts.⁷⁴ CQ integrates the dimensions of knowledge, cognition, motivation and behaviour, that, combined, reflect an individual’s ability to adapt to new settings and work effectively with people with whom they don’t share a common cultural background or understanding.⁷⁵

CQ relies on the following activities: being aware of our own assumptions, ideas and emotions; noticing what is apparent about the other person and tuning in on their assumptions; using all of the senses to perceive situations; viewing the situation from several perspectives, that is, with an open mind; attending to the context to help understand what is happening; creating new mental maps of other peoples’ personalities and cultural backgrounds to assist us in responding to them; seeking out fresh information to confirm or negate the mental maps; and using empathy to understand the situation from another’s cultural

perspective.⁷⁶ While knowledge of different cultures is an important facet of CQ, motivation and cognitive sensitivity are vital.

Davis argues gender integration into the Canadian Forces (CF) has contributed to the development of CQ within the organisation. While the process was not always easy and challenges were met along the way, exposure to difference has helped CQ emerge as a key competency for operational effectiveness.⁷⁷ However, Davis also argues that adopting a gender-neutral approach, one in which difference is overlooked, undermines the development of CQ. Only through developing an optimum integration of knowledge of difference, motivation and cognitive sensitivity to difference can full CQ and the benefits of diversity be realised.

Reflecting on the NZDF’s own journey with regards to transitioning from the prohibition of homosexuals, through the establishment of the OverWatch organisation, and to the eventual identification of the NZDF as the world’s most LGBT inclusive employer, it’s clear how important CQ was to that process. Kotter’s framework for *Leading Change* (2012) draws on achieving not just a baseline knowledge of the need for change but also an empathy for why change is needed.⁷⁸ In achieving this, a degree of CQ is essential. Organisationally, the NZDF demonstrated not just a knowledge of homosexuality, but the motivation to accept sexual minorities into the organisation and a cognitive sensitivity to the needs of the NZDF’s serving LGBT community.

⁷⁰ Kanter, *Men and Women of the Corporation*.

⁷¹ Karim and Beardsley, “Explaining”, 105.

⁷² Leuprecht, “Diversity as Strategy”, 566.

⁷³ New Zealand Defence Force and the Crown, *NZDF Strategic Plan 2019-2025 (“Plan25”)*, 5.

⁷⁴ Davis, “Sex, Gender and Cultural Intelligence in the Canadian Forces”, 432.

⁷⁵ Ang and Earley, *Cultural Intelligence: Individual Interactions Across Cultures*.

⁷⁶ Thomas, “Domain and Development”, 78-96.

⁷⁷ Davis, “Sex, Gender”, 451.

⁷⁸ Kotter, *Leading Change: Why Transformation Efforts Fail*.

CONCLUSION

The NZDF now has in place its 'People 25 - Strategy to 2025' to 2025. The aim of this strategy is to ensure the NZDF attracts and retains the talent it requires to tackle the security challenges facing New Zealand over the coming decades. However, implementing the strategy remains a complex and lengthy process to get right. One factor in the complexity of developing and implementing a people-centric strategy to meet future challenges is understanding what both the security challenges and the people of the future will look like.

New Zealand exists within an increasingly complex, ambiguous and uncertain geopolitical environment. New Zealand's geographic isolation no longer affords it the security it once did; tensions in South East Asia continue to rise as uncertainty surrounds the motives and long-term aspirations of the region's powers and regional superpowers. Climate change has become a leading cause for concern and is now recognised as a bona fide security issue, and monitoring and maintaining the integrity of New Zealand's territorial sovereignty and security domain, from the Ross Sea to the South Pacific, places increasing strain on the country's armed forces.

But it is not just the security landscape that is changing. Society is changing and becoming increasingly diverse. Migration has changed the visible face of the typical Kiwi, and an increasing acceptance of diversity has seen traditionally conservative and homogeneous institutions such as the Defence Force being increasingly pressured to accommodate the needs of a diverse workforce. Future generations of soldiers, sailors, airmen and airwomen as well as civilian staff will be more connected than ever before, less likely to accept authoritarian direction without challenge, more

technology-savvy and, critically, more diverse than any generation that has gone before. Traditional means of managing diversity will no longer prove sufficient. Nor too will the Defence Force be free to ignore the needs of a diverse workforce.

Diversity is a strategic asset and a vital part of the Defence Force's functional imperative. But the military will need to evolve its perception of what diversity is and what it means to the organisation. Traditionally, the armed forces have fallen back on the concept of *demographic diversity*. Minority groups within the organisation have been segregated into discrete groups - Asians, Women, LGBT people, Māori, and people with disabilities. Far from optimising diverse talent, such an approach could actually prove harmful to both the organisation and the groups of minorities it seeks to protect and integrate. Firstly, demographic diversity emphasises the hegemonic, masculine, white, heterosexist norm, the "us" and places everybody else into a "them" bracket. Far from empowering difference, demographic diversity simply *emphasises* difference, without attributing value and with little to no positive dividend. Furthermore, demographic diversity overlooks the intersectionality and personal identity of individuals. Assumptions are made that all those within one discrete group think the same, act the same and have the same needs and frames of reference. The idea that "Asians", a group of people from across a vast geopolitical region of over 4.4 billion people and 2,300 languages, share the same culture, needs, hopes and dreams seems preposterous. What does this actually tell us about our "Asian" people other than that their heritage stems from the largest and most populous continent on Earth?

Identifying specific minorities and focusing efforts on simply increasing representation within a wider

group can prove problematic. In an attempt to reduce instances of sexual exploitation and abuse (SEA) by UN Peacekeepers deployed on peacekeeping missions, the UN released UNSC1325. UNSC1325 calls on troop-contributing countries to increase the representation of women on peacekeeping missions. There are a number of assumptions supporting this call, the first being that a greater proportion of women on missions will reduce the statistical likelihood of women and girls being the target of exploitation and abuse by male peacekeepers. The second assumption is that women on peacekeeping missions will feel safe enough to challenge instances of inappropriate behaviour and essentially perform a policing role. The third assumption is that women all conform to the same characteristics assigned to the concept of femininity. Bliese et al argue persistent gender norms do not necessarily change with an increase of women. The alternative therefore is to challenge the persistent gender norms themselves.

Within the demographic diversity paradigm there is no place for individual identity or intersectionality. Diversity becomes nothing more than a numbers game. It's understandable why this approach is appealing to institutions such as the Defence Force. Numbers of people of given ethnicities, genders and identities can be measured and, as Christian Leuprecht points out, organisations are prone to making what is measurable matter rather than measuring what matters.

Alan Okros argues what matters is identity diversity - the combination of knowledge of a point of difference and the willingness to value that difference. When the NZDF set out to empower and support its LGBT service-people following years of institutionalised homophobia and state-sanctioned discrimination, it wasn't until an identity diversity approach was adopted that positive change began to be realised. Rather than simply

bunching the NZDF's LGBT community into a singular homogenous group about which little was known but much was assumed, the ground-breaking OverWatch group sought to raise awareness of and, critically, cultural intelligence (CQ) surrounding the welfare needs of individual LGBT people. A strategy for leading change was adopted, and in doing so, OverWatch was able to raise awareness of LGBT culture, educate, demystify language, instil empathy and secure buy-in from across the organisation. The value of supporting LGBT personnel was ultimately realised, with the NZDF being independently identified as a global leader in LGBT inclusion.

The capacity to understand and value differing points of view has benefits not just at the interpersonal level but also when considering inter-agency integration whether considering an integrated Defence Force concept or OGAs and NGOs working together in times of crisis or disaster. The failure of disparate agencies to value the point of view, needs and opinions of partner agencies in response to disasters such as Hurricane Katrina or the SARs outbreak can lead to dysfunction and failure. Organisations therefore need to develop mechanisms to work in increasingly diverse environments and with increasingly diverse people.

While it is straightforward for organisations to capture recruiting data or conduct censuses to provide snapshots of the demographic mix of their workforces, such quantitative data provides little of value to the organisation. A far more successful means of capitalising on a diverse workforce is to pursue identity diversity, to reach out to the workforce with a view to understand each individual's culture, values and frame of reference and seek to value points of difference. However, with an increasingly diverse and intersectional society, attempting to understand

the specific needs, wants and aspirations of every group and subgroup is an impossibility. So what's the solution?

To reap the true benefits of diversity, and thus optimise the armed forces' ability to deliver their functional imperative, militaries must move away from traditional methods of seeing personnel as discrete demographic groups. Instead, militaries must refocus their efforts on growing the organisation's cultural intelligence. Militaries must develop the capacity to perceive, understand and adapt to multicultural, ethnic and/or organisational points of difference. Individuals within the military must be able to demonstrate the ability to adapt to new settings and work effectively with people with whom they don't share a common cultural background or understanding. To achieve this the NZDF should look to its current personnel competency framework and consider expanding it to encompass the various elements of CQ - knowledge, motivation and cognitive sensitivity.

CQ will prove to be an essential attribute for militaries as they face increasingly diverse, ambiguous and complex security challenges. When first contact is made, whether with a potential recruit walking into a careers office, engaging with an enemy combatant, providing aid to a refugee or working alongside an unfamiliar military or government agency, the ability to adapt, understand and act appropriately will be key. Failure to do so could prove disastrous.

BIBLIOGRAPHY

- Alexandrou, A., R. Bartle, and R. Holmes. *New People Strategies for the British Armed Forces*. Oxford: Frank Cass, 2004.
- Ang, S., and A. H. Earley. *Cultural Intelligence: Individual Interactions across Cultures*. Stanford: Stanford University Press, 2003.
- Barnes, S. M., P. M. Gutierrez, J. E. Hanson, B. B. Matarazzo, J. E. Pease, and L. M. Russell. "Suicide Risk among Lesbian, Gay, Bisexual, and Transgender Military Personnel and Veterans: What Does the Literature Tell Us?," *Journal of American Association of Suicidology* 44, no. 2 (April 2014): 200-17.
- Basham, V. M. "Harnessing Social Diversity in the British Armed Forces", *Commonwealth and Comparative Politics* 47, no. 4 (November 2009): 411-29.
- Beardsley, Kyle, and Sabrina Karim. "Explaining Sexual Exploitation and Abuse in Peacekeeping Missions: The Role of Female Peacekeepers and Gender Equality in Contributing Countries". *Journal of Peace and Research* 53, no. 1 (January 2016): 100-15.
- Berdal, M. "Peacebuilding Operations and the Struggle for Legitimacy", *The Adelphi Papers* 49, no. 407 (October 2009): 95-134.
- Bliese, P. D., D. B. Durand, R. R. Halverson, N. L. Harrison, L. N. Rosen, and J. Rothberg. "Cohesion & Readiness in Gender Integrated Combat Service Support Units: The Impact of Women and Gender Ratio", *Armed Forces & Society* 22, no. 4 (1996): 537-53.
- Blossnich, J. R., R. M. Bossarte, and V. M. B. Silenzio. "Suicidal Ideation Among Sexual Minority Veterans: Results From the 2005-2010 Massachusetts Behavioural Risk Factor Surveillance Survey", *American Journal of Public Health* 102, (March 2012): doi:10.2105/AJPH.2011.300565



- Boekhorst, J. A. "The Role of Authentic Leadership in Fostering Workplace Inclusion: A Social Information Processing Perspective", *Human Resource Management* 54, no. 2 (March/April 2015): 241–64.
- Boene, B. "The Military as a Tribe Amongst Tribes", *Handbook of the Sociology of the Military*. New York: Kluwer Academic, 2003.
- Bone, J. and J. Clayton. "Sex Scandal in Congo Threatens to Engulf UN's Peacekeepers", *The Times*, 23 Dec 2004.
- Carey, H. F. "Women and Peace and Security: The Politics of Implementing Gender Sensitivity Norms in Peacekeeping", *International Peacekeeping* 8, no. 2 (2001): 49–68.
- Coker, C. *Humane Warfare*. London: Routledge, 2001.
- Connell, R. W., and J. Messerschmidt. "Hegemonic Masculinity: Rethinking the Concept." *Gender & Society*, 2005.
- Davis, Karen D. "Sex, Gender and Cultural Intelligence in the Canadian Forces", *Commonwealth and Comparative Politics* 47, no. 4 (November 2009): 430–55.
- Enloe, C. "'Gender' is Not Enough, the Need for Feminist Consciousness", *International Affairs* 80, no. 1 (January 2001): 95–97.
- Essa, A. "Do UN Peacekeepers Do More Harm than Good?" *Al Jazeera*, 10 August 2017. <https://www.aljazeera.com/indepth/features/2017/07/peacekeepers-harm-good-170730091925152.html>
- Fancher, P., K. Knudson, and L. Rosen. "Cohesion and the Culture of Hypermasculinity in US Army Units", *Armed Forces & Society* 29, no. 3 (April 2003): 325–51.
- Galdiga, J, P. Marten, L. Polchar, and T. Sweijjs. "LGBT Military Personnel, A Strategy for Vision and Inclusion". The Hague: Hague Centre for Strategic Studies, 2014.
- Gray, C. S. *Another Bloody Century: Future Warfare*. London: Wiedenfield and Nicholson, 2006.
- Hajjar, R. M. "Emergent Postmodern US Military Culture", *Armed Forces & Society* 40, no. 1 (January 2014): 118–45.
- Herbert, M. S. *Camouflage Isn't Only for Combat*. New York: New York University Press, 1998.
- Holohan, A., E. M. Kennedy, R. Smith, and K. Trochowska. *Final Report on Current Practice, Gender and Cultural Competency, SOTA, Gap Analysis and Recommendations*, 2018. https://gap-project.eu/wp-content/uploads/2018/01/D2.2_Knowledge_Current_practice_Gender_and_Cultural_Competency.pdf
- Hudribusch, R., S. Koeszegi, and E. Zedlacher. "The War Against the Female Soldier? The Effect of Masculine Culture on Workplace Aggression", *Armed Forces & Society* 40, no. 2 (April 2014): 226–51.
- Huntington, S. P. *The Soldier and the State: The Theory and Politics of Civil–Military Relations*. Cambridge: Belknap Press, 1957.
- Ibarra, Herminia. "Homophily and Differential Returns: Sex Differences in Network Structure and access in an Advertising Firm", *Administrative Science Quarterly* 37, no. 3 (September 1992): 422–47.
- Janowitz, M. "The Professional Soldier: A Social and Political Portrait", *The ANNALS of the American Academy of Political and Social Science* 332, no. 1 (September 1960).
- Kanter, R. M. *Men and Women of the Corporation*. New York: Basic Books, 1977.
- Kotter, J. P. "Leading Change: Why Transformation Efforts Fail". Boston: Harvard Business Review Press, 2012.
- Laplonge, D. "The Absence of Masculinity in Gender Training for UN Peacekeepers". *Peace Review: A Journal of Social Justice* 27, no. 1 (March 2015): 91–99.
- Leuprecht, C. "Diversity as Strategy: Democracy's Ultimate Litmus Test", *Commonwealth and Comparative Politics* 47, no. 4 (November 2009): 559–579.
- McDermott, E., K. Roen, and J. Scourfield. "Avoiding Shame: Young LGBT People, Homophobia and Self Destructive Behaviors", *Culture, Health & Sexuality* 10, no. 8 (30 October 2008): 815–829.
- Ministry for Culture and Heritage. "Birth of the Gay Movement", *Homosexual Law Reform*. Last modified 1 July 2014.
- Myers, K. K., K. Sadaghiani. "Millennials in the Workplace: A Communication Perspective for Millennials' Organisational Relationships and Performance", *Journal of Business and Psychology* 25, no. 2 (June 2010): 225–238.
- New Zealand Defence Force and the Crown. *NZDF Strategic Plan 2019–2025 ("Plan25")*, 2019.
- Okros, A. "Rethinking Diversity and Security", *Commonwealth & Comparative Politics* 47, no. 4 (November 2009): 346–373.
- Reardon, B. *Women and Peace: Feminist Visions on Global Security*. Nova Lorque: State University of New York, 1993.
- Richard, O. C. "Racial Diversity, Business Strategy and Firm Performance: A Resourced Based View", *Academy of Management Journal* 43, no. 2 (April 2000): 164–177.
- Rose, C. "Does Female Board Representation Influence Firm Performance?: The Danish Evidence", *Corporate Governance An International Review* 15, no. 2 (March 2007): 404–413.
- Saenz, G. "Peacekeeper Babies an Unintended Consequence of Sending in the UN". *National Post*, 13 June 2015. <http://nationalpost.com/news/world/peacekeeper-babies-an-unintended-consequence-of-sending-in-the-united-nations->
- Sasson-Levy, O. "Feminism and Military Gender Practices: Israeli Women Soldiers in 'Masculine' Roles", *The Sociological Inquiry* 73, no. 3 (June 2003): 440–465.
- Sion, L. "Can Women Make a Difference? Female Peacekeepers in Bosnia and Kosovo", *Commonwealth and Comparative Politics* 47, no. 4 (November 2009): 476–493.
- Sjoberg, L. and Via, S.E. *Gender, War and Militarism: Feminist Perspectives*. Santa Barbara, CA: Praeger, 2010.
- Tajfel, H., and J. C. Turner. "An integrative theory of intergroup conflict", in: W.G. Austin & S. Worchel eds. *The Social Psychology of Inter-group Relations*. Monterey: Brooks & Cole, 1979.
- Thomas, David C. "Domain and development of cultural intelligence: the importance of mindfulness", *Group and Organisation Management* 31, no. 1 (February 2006): 78–99.
- United Nations. *Charter of the United Nations*. San Francisco, 24 October 1945.
- United Nations Security Council, Resolution 1325, "Women, Peace, and Security," 31 October 2000, www.un.org/womenwatch/osagi/wps/.

- UNSC. "Problem of Sexual Abuse by Peacekeepers Now Openly Recognized, Broad Strategy in Place to Address it, Security Council Told". Press release, 23 February 2006. www.un.org/press/en/2006/sc8648.doc.htm
- United States Government. *A Failure of Initiative, Final Report of the Select Bipartisan Committee to investigate the Preparation for and Response to Hurricane Katrina*. Washington DC: US Government Printing Office, 2006.
- Ward, Jane. "White Normativity: The Cultural Dimensions of Whiteness in a Racially Diverse LGBT Organisation", *Sociological Perspectives* 51, no. 3 (September 2008): 563–586.
- Whitworth, S. *Men, Militaries, and UN Peacekeeping: A Gendered Analysis*. Boulder: Lynne Rienner Publishers, 2004.
- Winslow, D. *Gender and Military Sociology*. Stockholm: Swedish National Defence College, 2010.
- Zeid, Al-Hussein Zeid Ra'ad. "A Comprehensive Strategy to Eliminate Future Sexual Exploitation and Abuse in United Nations Peacekeeping Operations", *United Nations General Assembly*. UN Doc. A/59/710, 2005.



NEW ZEALAND ANZAC DAY SERVICE AT NEW ZEALAND BATTLEFIELD MEMORIAL MESEN, BELGIUM, 2018.

CHINA'S GREY-ZONE ACTIVITIES: CONCEPTS AND POSSIBLE RESPONSES

DR. PETER LAYTON

Dr. Peter Layton is a Visiting Fellow at the Griffith Asia Institute, Griffith University, and a RUSI Associate Fellow. He has extensive aviation and defence experience and for his work at the Pentagon on force structure matters was awarded the US Secretary of Defense's Exceptional Public Service Medal. He has a doctorate from the University of New South Wales on grand strategy and has taught on the topic at the US National Defense University. For his academic studies, he was awarded a Fellowship to the European University Institute, Fiesole, Italy. He contributes regularly to the public policy debate on defence and foreign affairs issues and is the author of the book *Grand Strategy*. His papers, articles and posts may be read at <https://peterlayton.academia.edu/research>.

AUTHOR BIO

In recent years a new term has thrust itself into the military lexicon. "Grey-zone" has become verbal shorthand for the type of prickly interactions many Indo-Pacific states have with China. This new kind of fractious interstate relation is equally baffling and disconcerting but fortunately falls short of war. However, the nature of grey-zone activities means defence forces are deeply involved in addressing the challenges they pose. Grey-zones may not feature warfighting but they do involve war-fighters.

This article looks at the grey-zone from a defence viewpoint and mainly at the strategic level.¹ The highest form of strategy is grand strategy, which involves building and applying power. Building and applying power are clearly interdependent, however, this article focuses on applying power. It does not discuss building the power necessary, as that is more of a mobilisation problem.

¹ This article draws on Dr. Peter Layton, *China's Enduring Grey Zone Challenge*, 2021.

The article initially discusses what grey-zone is and, equally crucially, is not, to derive some implications that may be useful when considering responses. The second part discusses some of the conceptual background to China's imaginative and innovative grey-zone actions. These actions happen within a particular intellectual framework and a specific context; they are not some isolated, independent activities. The third section notes some planning issues and suggests some response options while the fourth looks to the future to appreciate how China's grey-zone activities might evolve, potentially positively but possibly negatively. The final section delves into two conceivable grey-zone responses the RNZAF could usefully become involved in.

DEFINING GREY-ZONE

Michael Mazarr comprehensively examined the idea of grey-zone in a seminal 2015 work, *Mastering the Gray Zone*. He considered that grey-zone conflicts involved the purposeful pursuit of political objectives through carefully designed operations; a measured movement towards the objectives rather than seeking decisive results within a specified time period; acting to remain below key escalatory thresholds so as to avoid war; and the use of all the instruments of national power, particularly non-military and non-kinetic tools.²

Readily apparent is that grey-zone activities do not include making war, instead they include actively seeking its avoidance. In so excluding war but also not being peaceful, the grey-zone idea blurs the distinction between the two, creating an undefined middle ground.

² Mazarr, *Mastering the Gray Zone*, 58.

If peace is the “the absence of violence”, the grey-zone idea generates a conceptual puzzle in being neither war nor peace.³ This definitional pedantry highlights that a core aspect of the grey-zone is that aggressors rely on the existing peace being sufficiently resilient for the grey-zone activities to succeed.

Given these broad grey-zone characteristics, several implications become apparent. Grey-zone actions aim to gradually accumulate successes. That is, they are a cumulative strategy, not a sequential strategy, in the classification schema that J.C. Wylie noted in the mid-1960s. A cumulative strategy is what Wylie thought air warfare strategies were: aircraft went out every day, fought small tactical actions and gradually won.⁴ There was no single grand decisive battle like Waterloo or Gettysburg or Kursk, just a day-by-day accumulation of successes until a tipping point was reached.

This also means that grey-zone actions don’t just happen; they are implemented in a carefully-designed campaign plan⁵ controlled by strategic-level commanders. The highest levels of the Communist Party of China (CPC) and PLA command structures are involved. Grey-zone actions are not those of tactical commanders freelancing. This highlights that while Chinese grey-zone operations involve coordinating many non-military entities, they ultimately rely on hard military power provided by the PLA and wielded by the Party. Without the PLA, China’s grey-zone activities would be very different and much less effective.

3 Libiseller and Milevski, “War and Peace”, 105.

4 Wylie, *Military Strategy*, 23-30.

5 Dobbs, Fallon, Fouhy, Marsh, and Melville, *Grey-Zone Activities and the ADF*, 5.



STAND-OFFS IN THE SEA OF JAPAN AND EAST CHINA SEA OCCUR FREQUENTLY.

Importantly, the aim in these grey-zone operations is to avoid and indeed prevent military escalation. The operation at the tactical level must be tightly controlled as the Chinese strategic leadership do not wish to accidentally start a war. It’s a form of carefully scripted brinkmanship.

Grey-zone operations then are appropriate only for a time of resilient peace. If the peace is delicate with all postured and ready to fight, grey-zone operations will be too risky to undertake. Grey-zone relies on a resilient peace that can absorb a grey-zone shock and bounce back, not a fragile peace that can suddenly shatter, starting a war. The implication of this contextual requirement is that the target of grey-zone actions needs to be cooperative. They must be invested in keeping the peace and not wishing to break it; this has implications for deterrence as discussed later.

The grey-zone’s characteristics make it distinctly different to hybrid warfare. Hybrid warfare is a type of war used to try to conclusively win a campaign through the use or threat of violence. This is in sharp contrast to grey-zone’s gradualism built around carefully avoiding

using violence. In broad terms China uses grey-zone while Russia employs hybrid warfare; the two techniques or nations should not be conflated.

While grey-zone activities may be defined and their logic understood, the question arises of why would a country consciously decide to employ them? The use of grey-zone is a deliberate choice, not an accident. The logic behind these activities may be comprehended and insights gained through discussing some pertinent conceptual background. This is especially necessary as contemporary Chinese strategic thinkers can make use of strategic principles devised during the third to fifth century BC by perceived icons of early Chinese military thought such as Sun Tzu, Wu Qi, Sima Rangju, and Sun Bin. These principles have definite differences to the mainstream ideas Western strategic thinkers presently use.

BACKGROUND STRATEGIC THINKING

A recent study of the Chinese way of war argued that the most important concept from early Chinese thinking today is that of gaining strategic advantage over another through purposeful manipulation of the strategic environment. The concept of strategic advantage, or *shi*, ‘is the foundational principle behind almost any PLA action’, Chinese diplomatic activity and geo-strategic manoeuvre.⁶

The term “gaining strategic advantage” is, though, somewhat vague. In more concrete terms, in the grey-zone context, it includes: having the initiative; being

6 Thomas, *The Chinese Way of War*, 2, 5, 45, 77.

in control of the situation when taking all factors into account; an ability to set the agenda of the matter in question; forcing the opponent to always consider your response first before they take actions; the opponent respecting your capabilities and potentially self-policing themselves; and annexing the others’ imagination and so constraining their strategic thinking.

Accordingly, *shi* is a belief held by individuals about the present context rather than a quantifiable material circumstance. Given this, *shi* is dynamic as how the various factors are perceived can change as the situation evolves and countervailing strategies are implemented. *Shi* is then an understanding, by one side, of the current state of the interaction between it and another.

In his book, *A Treatise on Efficacy*, François Jullien, a French philosopher, provides a valuable description of how traditional Chinese strategic thinkers considered strategic advantage could be gained. Underpinning such thought was a view of reality as a process that unfolded.⁷ Time was not leading anywhere specific, it was simply and progressively unfolding, giving one an anticipatory view of the future.⁸ This flow of time, often expressed using water metaphors, could then be purposefully shaped: ‘strategy is always a matter of knowing how to impinge upon the process upstream, in such a way that an effect will then tend to “come” of its own accord.’⁹

This idea is the basis of Sun Tzu’s advice that ‘ultimate excellence lies not in winning every battle but in

7 Jullien, *A Treatise on Efficacy*, 92.

8 Ibid., 189.

9 Ibid., 121.

defeating the enemy without ever fighting.”¹⁰ Battles do not need to be fought and won, as early upstream action means the situation did not evolve in a direction whereby a clash was later needed.

China’s approach aims to work with the flow, or as a colloquial saying has it: ‘the trend is your friend’. The most important perceived trend is that ‘the East is rising, the West is in decline and the tide of history is flowing in China’s favour.’¹¹ This leads Chinese strategists to believe the international system is becoming multipolar, so providing abundant space for China to strategically manoeuvre within. The trend also supports the notion that China’s strongest card, economics, is the dominant force shaping the world today, not military might.¹² This means that major power war is improbable and so a resilient peace can be relied upon as a basis for Chinese actions.

The Chinese strategic construct concept differs from Western strategic thinking in three important ways. Firstly, Chinese strategic thinkers held that situations were constantly evolving. In contrast, the strategy models Western thinkers have devised tend to consider their course as being imposed on a circumstance, at least momentarily “frozen” in time. Secondly, the Chinese ideas were not based on using your agency to reshape the world, but instead exploiting the course the world is already on. In international relations terms, this means that Western strategists privilege agency; Chinese strategists, structure. Lastly, early Chinese strategists effectively sought no defined endpoint. Instead, they suggested intruding on the flow of time to move it

in a favourable direction. Western strategists have a fundamentally different approach in advocating having a carefully considered strategic objective, an “end”.

Chinese strategic thinking is, then, at odds with the traditional Western “balance of power” grand strategies founded on using the threat or application of violence to create a favourable balance. This concept envisages creating a large military force that will deter others taking disagreeable actions. If they persist, military force can then be used to physically stop them. Fighting is at the core of such balance of power constructs, whereas keeping the peace is at the core of grey-zone. Further highlighting the difference between “river of time” and “balance of power” notions, Singapore’s Prime Minister Lee Hsien Loong advised that in managing China: “There will be rough spots...deal with them as issues in a partnership which you want to keep going, not issues which add up to an adversary which you are trying to suppress.”¹³

The Western idea of competition is a different idea again. Competition has overtones of bringing others to your side.¹⁴ If the adversary keeps doing annoying things, however, it’s unclear what the response should be given the lack of an enforcement mechanism. The Chinese strategic concept is agnostic to how many are brought to your side as long as China retains strategic advantage over others, on an individual, bi-lateral basis.

If China’s working with the flow approach is fundamentally different to Western constructs, then a key issue becomes the interaction between China’s

approach and others’ strategies. China’s approach may sidestep them and continue chalking up triumphs.

The “balance of power” and competition grand strategies place stress on deterrence, which is convincing an adversary through threat of punishment or denial not to start a war. The nations using such “balance of power” or competition grand strategies will accordingly be reluctant to start a conflict. Their desired intent is for the status quo to continue; they are not revisionist states. War thus represents a failure of their strategy. Given this, they will self-deter as they wish to avoid a grand strategic failure.

THE CHINESE FISHING FLEET IS THE LARGEST IN THE WORLD.



Equally, China does not want a war. It needs a resilient peace for the grey-zone to work. “Balance of power” or competition grand strategies arguably give China the resilient peace context it needs to operate in the grey-zone.

China’s grey-zone activities are both made possible by the discerned trend of “the tide of history is flowing in China’s favour” and designed to reinforce it. China’s grey-zone strategy is incremental, slowly nibbling away at the edges, making use of diverse military and non-military measures, being careful not to drive others into a major war, controlled at the highest Party levels, and enduring. A pushback by another country may mean a temporary Chinese pullback, but the Party’s grey-zone strategists will be back better than ever, having learned from their short-term reversal. It’s a forever drain on the other, smaller country’s resources.

There are however, some contradictory aspects in China’s schema. Seeking ongoing strategic advantage highlights that there is no end. The river of time flows on and on, meaning that actions required to maintain the desired advantage are similarly forever, with the accompanying implicit high resource burden for China.

Just as importantly, the river model leaves out that in human society, actions tend to inherently lead to counter-actions; in reality the river does not continue unchecked indefinitely. Luttwak termed this ‘the paradoxical logic of strategy’ where successful actions cannot be repeated as the other party adapts in response to ensure the same outcome cannot be gained in this way again.¹⁵

¹⁵ Luttwak, *Strategy*, 7-65.

¹⁰ Sun-tzu, *The Art of War*, 12.

¹¹ Flint and Xiaotong, “Historical-Geopolitical Contexts”, 295-331, 327.

¹² Zhou, “Chinese Scholars View of International Structure”, 23-43.

¹³ Dziejdzic, “Australia and Singapore Commit to Working on ‘Safe and Calibrated’ Travel Bubble”.

¹⁴ Layton, “Trampling the Grass: China-US Leadership Competition”.

China's grey-zone activities are now generating their own countervailing forces. The Party has aggressively contested territory on its borders with India, with Japan in the East China Sea and with ASEAN states in the South China Sea. In adopting this course, China has gained considerable notoriety and the regional influence that formidable belligerence brings. However, it is unclear how effective these activities will be over time.

The ASEAN states bordering the South China Sea, Japan, and India, are becoming increasingly concerned and taking more and more steps to resist these unwanted Chinese intrusions. China's grey-zone activities may now be going against some emerging regional pushback trends that China has unintentionally created. Countries are starting to take actions in response to China's grey-zone actions, reorienting their defence force structures accordingly and, most worryingly for China, beginning to come together to act collectively.

Australia represents an interesting example of this approach. Australia's Defence Strategic Update 2020 determined that the long-standing defence planning assumptions of a long warning time before possible military action must now be revisited given 'grey-zone activities directly or indirectly targeting Australian interests are occurring now.' The Update continues that:

"In the Indo-Pacific, [grey-zone] activities have ranged from militarisation of the South China Sea to active interference, disinformation campaigns and economic coercion. Defence must be better prepared to respond to these activities, including by working

*more closely with other elements of Australia's national power."*¹⁶

Accordingly, Australia's engagement with South East Asian countries and the South Pacific is being deepened and more stress placed on the QUAD, the G-7 and the EU. Debate has started about the US-Australia alliance and the Five Eyes intelligence sharing agreement expanding beyond security into economic matters. Ideas have been floated about possibly taking a broad collective approach where many democracies unite against economic coercion.

However, it is unclear if much of this will work. The military element is effectively balancing; it might not solve the grey-zone issue as discussed earlier. It's also uncertain if Australia would want to get involved in, for example, India's border skirmishes with China; this may be a step too far for most countries.

In the economic arena, countries are talking about supporting Australia, but action is missing. No state wishes to constrain their nation's companies trading with China and generating sizeable export revenue. At the recent China-US summit in Alaska, the Chinese Foreign Ministry spokesperson Hua Chunying nicely captured this tension in tweeting: 'Interesting. The US is now switching from "America First" to "Australia First"?'¹⁷

The success of Australia's pushback strategy is uncertain. Like all engagement grand strategies, it relies on others being willingly involved to the point of taking mutually supporting actions. It's still a work in progress. However, it is also conceptually interesting

¹⁶ Department of Defence, *Defence Strategic Update*, 5.

¹⁷ Greber and Smith, "Leave Australia Out of This: China to US".

in highlighting that a strategy to manage China does not need to focus on China. Moreover, it is a state-level strategy, whereas engagement grand strategies suggest focusing on the sub-state, interest group level.

PLANNING AND RESPONSES

China's grey-zone approach is a shape-shifting chameleon that evolves over time in incremental steps. The response to it might need to be similar but not asymmetrical as traditionally recommended by military strategists. This could mean adopting a measured forward-planning approach that allows iteration step-by-step into the future. In contrast, more conventional planning techniques work backward from an identified end state.

The step-by-step approach replicates China's approach, in being able to proceed carefully and permit changes along the way, so as to avoid triggering a strong response from China. It also means that the Party's leaders and PLA's senior commanders mentally adjust to each step and become accustomed to the new normal before the next one develops. This incremental approach means each pushback does not appear dangerously escalatory or threatening to the Chinese leadership group as it is undertaken.

Each pushback step can also be conceived as sensing the Chinese grey-zone environment and learning more about Chinese thinking, tactics, techniques and procedures. In being iterative, and acknowledging the paradoxical nature of strategy, each step may build from the previous, but could need to change

to succeed. Design thinking might be useful when planning these steps.¹⁸

The specific implementation of the measured forward-planning approach depends on the context. The approach in itself is simply a framework to apply to a problem. In the Chinese grey-zone case, there are several broad planning guidelines that might usefully inform such an application.

First, China's grey-zone actions occur within a deliberately protracted campaign. Countering it using a measured forward planning approach will, by design, be similarly protracted. Such a counter-campaign 'is likely to persist for years, generating occasionally clear advances, frequent reversals, and no final objective outcomes.'¹⁹ Such a potentially drawn-out operation will be taxing for all, not least because of the extra people, funds and equipment required during the long process.

Second, an important part of a successful grey-zone counter may be the capability to respond quickly to new developments. Allowing for a new Chinese grey-zone step to become the accepted normal may make reversing it, or even registering disapproval, problematic. Responding in a timely manner may mean establishing adequate, policy-guided, crisis management mechanisms. Moreover, wishing to be able to react quickly suggests developing and exercising various scenarios before the new grey-zone development occurs, so decision makers and analysts in some future time of crisis can readily access considered possible responses.²⁰

¹⁸ Jackson, "Introduction", 4.

¹⁹ Mazarr, *op. cit.*, 66.

²⁰ Morris, Mazarr, Hornung, Pezard, Binnendijk, and Kepe, *Gaining Competitive Advantage*, 130.

The development of these responses may involve using wargames of varying fidelity. A rigorous procedure of wargaming the reactions of numerous participants can suggest how the situation may evolve and the possible outcomes. Even if this assessment of the future proves inaccurate, such wargaming will allow high-quality analysis of the potential political and military risks associated with each operation.

Third, high quality intelligence is essential. This is quantitative intelligence of the battlespace in terms of detailed information about each participating military unit and civilian entity, but also qualitative intelligence about each of the various actors so as to understand how they will react. Given this, there will be a good understanding of the military and political dynamics shaping the situation as it evolves. This element, though, makes it important to have sufficient intelligence resources, collection systems and skilled analysts available.

Fourth, the approach would be most effective if it was complemented by involving regional actors diplomatically so as to create the political manoeuvre space for timely action.²¹ Broad-based consultations with regional partners would create a favourable political environment and ensure worries over possible unwanted escalation were addressed, public statements were consistent and harmonised and the timing of media messages was coordinated.

Fifth, in addition to diplomacy, selective institution-building may be undertaken to develop mechanisms for resolving grey-zone crises. These may feature military-to-military deconfliction hotlines between all involved -

including China - in areas of grey-zone tensions, so as to help avoid unwanted military escalation and accidents. Institution-building may also incorporate expanded ways to share information among partner armed forces and militaries, an expansion of military-to-military contacts, and formalised systems for passing appropriate real-time intelligence.

Lastly, in matters of force development, investments in grey-zone capabilities should generally acquire a wide range of different means. Being dominant in a single area is likely to be less important than baseline capabilities across many mutually supporting ones. Grey-zone activities, by their nature, can be readily realigned to make a particularly impressive capability of an opponent little use when countering the other's grey-zone actions. A wide range of means is more difficult for unfriendly grey-zone activities to work around and gives greater response flexibility. Moving beyond these guidelines involves moving conceptually lower down the strategy/tactical continuum into the measured forward-planning process.

To achieve success, Chinese grey-zone activities integrate a number of different means across multiple domains. For example, in the South China Sea case, the so-called "cabbage strategy" can include commercial fishing boats, the armed maritime militia, fisheries patrol vessels, Coast Guard ships and naval warships of various types, PLA Navy and PLA Air Force aircraft, and at times oil rig platforms. These may all operate in conjunction with social media campaigns, radio misdirection, cyberwarfare and GPS interference. This array of means when combined are much more formidable in prosecuting a grey-zone action than if used individually.

²¹ Goldenberg, Heras, Thomas, and Matuschak, *Countering Iran in the Gray Zone*, 1.

A tailored approach might accept the robustness of China's combined means approach and not try to deter the grey-zone activity as a whole. Instead, such a concept might aim to disaggregate the collective threat into individual unsupported means, and then counter the identified vulnerable components of China's grey-zone operation as is practical. Such tailored deterrence could be further customised among the various regions in which China is undertaking grey-zone activities. The land border with India, the South China Sea and the Senkaku Islands all feature different types of grey-zone activities, although all these activities strive to advance incrementally. The general ways to tailor the deterrence of grey-zone activities might include:²²

1. **Disaggregating the local grey-zone strategy.** This involves constructing a tailored deterrence tactic targeting specific elements of the local grey-zone campaign. It involves not deterring grey-zone activities as a whole but rather at an individual element or action level, such as Coast Guard vessels, PLAN maritime reconnaissance aircraft or even the GPS interference.
2. **Seeking marginal gains.** Just as the impact of grey-zone activities stems from the cumulative effect of carefully coordinated actions, tailored deterrence aims to tip the balance in small steps. The most viable approach is to seek these marginal gains through targeting accessible vulnerabilities. This may have the greatest impact if it is possible to target those specific assets central to China's local grey-zone campaign.

²² These four sub-paragraphs draw on: *Multinational Capability Development Campaign*, 43-44.

3. **Thinking performatively about the best means to deter.** A deterrence posture may be best built around the defending elements considered *most likely* to be useable in a grey-zone situation, rather than around the *most capable* elements in terms of dispensing punishment. These most capable defending elements may not be credible to Chinese decision-makers as they may hold them unlikely to be used given fears over unwanted escalation. This returns to the idea of declaring redlines, and whether the entity being deterred thinks the retribution promised, if the redlines are crossed, is improbable in this time of resilient peace.

4. **Focusing on the decision-makers involved.** Central to all successful deterrence is understanding those who it is wished to deter. The specific decision-makers at the various levels controlling a local grey-zone activity may have goals, motivations and vulnerabilities that can be discerned and exploited to inform a tailored deterrence strategy. The more these actors can be understood, the more tailored the deterrence measures can be made, and the more effective they will be.

The overall intent of these four steps is to frustrate, undermine, and deny the individual Chinese elements being used in a combined manner in the local grey-zone actions. As frustrations mount up, these may tip the balance away from grey-zone activities being an attractive option for Chinese statecraft.

This approach is not seeking a containment or a rollback of China's grey-zone successes. Instead, it's envisaged simply as a response to an unwanted activity.

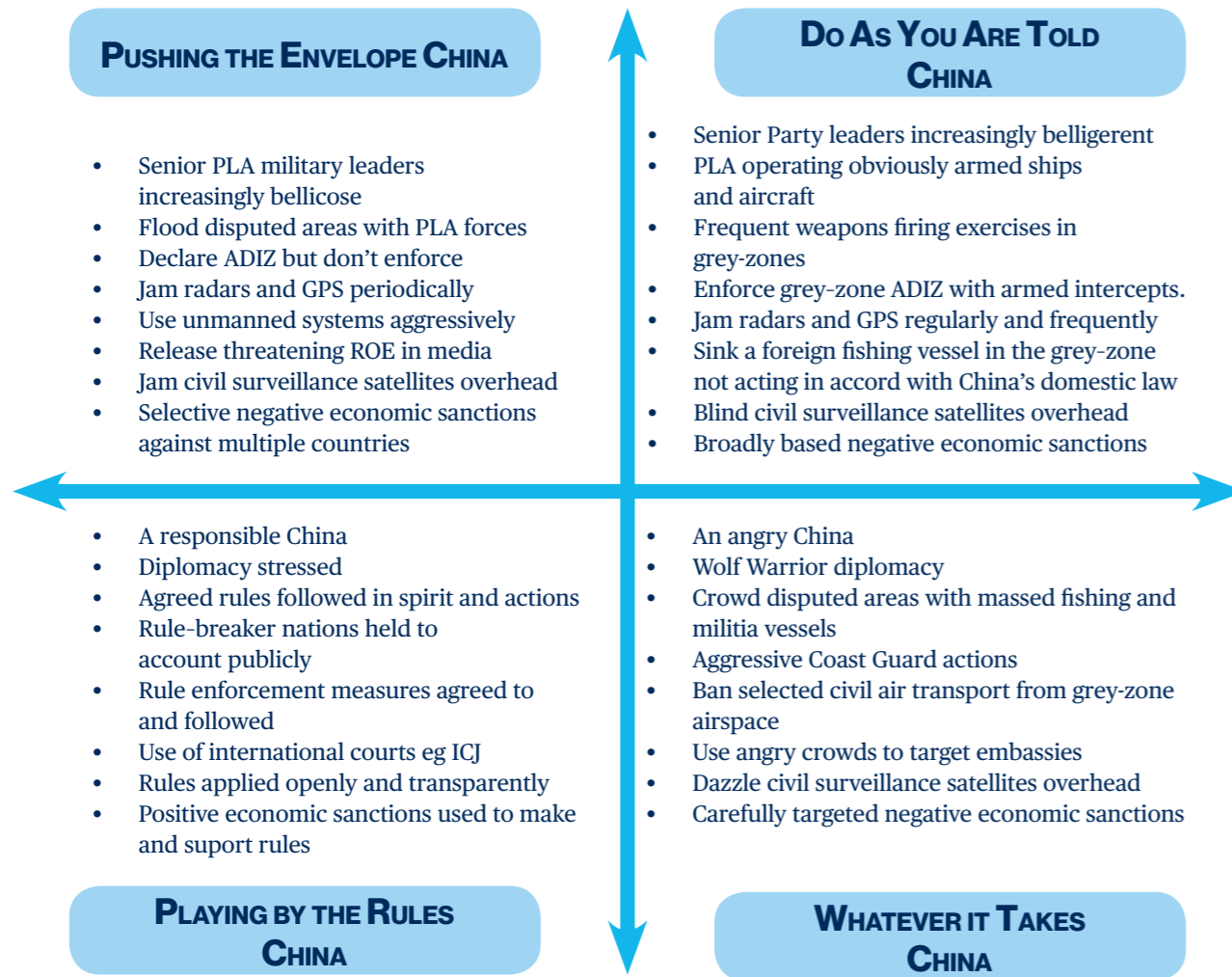


FIGURE 1: CHINA - ALTERNATIVE FUTURES

The onus then shifts to the Party and PLA decision-makers who can stop an activity or choose to escalate. The latter is improbable given China's success relies on peace holding; escalation would send a global signal highlighting a significant Communist Party failure. Nevertheless, any pushback, even verbal complaints, carries real risks and needs carefully managing.

POTENTIAL GREY-ZONE ACTIVITY EVOLUTION

The future is uncertain but not necessarily completely random. In the case of China's grey-zone activities, the nature of such operations means a resilient peace must be maintained. If the future does not feature this, other kinds of military operations will be called for, but not grey-zone ones. Grey-zone activities are both a feature and a product of our time.

In terms of the life cycle of the strategy, Chinese grey-zone activities have arguably reached their Clausewitzian culminating point. The Party's chosen strategy has reached a point where it might have achieved the greatest effects for the effort expended. Beyond this point, greater efforts may well yield diminishing results and bring only marginally greater benefits.

China could sense this and move to another strategy, hopefully abandoning its present course and shifting to a more constructive one. On the other hand, the Party may double down. Chinese grey-zone activities may grow more aggressive and violent, as the recent deaths of Indian soldiers on its border with China suggest.²³

²³ Pubby and Anshuman, "Colonel Babu Got Hit in the Head".

Such considerations can help when thinking about future grey-zone activities, however the construct needs to be much more detailed to be useful. The earlier discussion of grey-zone theory suggests that such actions involve two principal variables. Decision-makers must decide if violent or non-violent actions are to be undertaken, and whether non-military or military instruments are to be used.

Most grey-zone implementations will lie somewhere between those four extremes of violence/non-violence and non-military/military. The four drivers create four possible alternative futures, as shown in Figure 1.

In broad terms, these four futures are:

1. **Playing by the rules China.** An optimistic future of a responsible stakeholder China that abides by the rules it agrees to, in both spirit and actions.
2. **Whatever it takes China.** A deterioration from now, so maybe a near-term prospect. It's an angry China.
3. **Pushing the envelope China.** In this evolved future, China makes much more use of the PLA but in a non-violent way. This is a belligerent China.
4. **Do as you are told China.** This worse-case future is on the limits of grey-zone activities. There is a high risk of the resilient peace breaking down and armed conflict starting. This is a belligerent China.

It's important to recall that Chinese grey-zone activities are not static, isolated events but extend over lengthy

periods, sometimes decades; they are accordingly dynamic and evolving. In this, they may not change for the worse; good developments are as possible as unfortunate ones. However, the broad changes are important to track as these could provide warning of future possible changes and so avoid a strategic surprise. Suitable responses could then be considered in a measured manner and without the time pressures induced by a sudden, unexpected crisis.

RNZAF RESPONSE CONTRIBUTION POSSIBILITIES

China's grey-zone actions are generally conducted distant to New Zealand. Even so, New Zealand may be able to make some meaningful contributions to the overall management of China's grey-zone challenge. This may be particularly so in the South China Sea imbroglio, which has become the poster child for Chinese grey-zone activities.

In the South China Sea, China is undertaking a long-term, carefully planned program of territorial expansionism involving the Paracel Islands, Scarborough Shoal and the Spratly Islands, together with all of the South China Sea lying inside the so-called nine-dash line. This rather imprecise line first appeared on a map published by the pre-communist Kuomintang Government in December 1947. The nine-dash line encompasses more than eighty per cent of the South China Sea and cuts deeply into the Exclusive Economic Zones of Vietnam, Malaysia, Indonesia, Brunei and the Philippines, agreed to under the 1982 United Nations Convention on the Law of the Sea (UNCLOS).²⁴

24 Mastro, "How China is Bending the Rules in the South China Sea".

China's grey-zone activities in the South China Sea are on-going as it tries to both deepen and extend its control over the Sea and its islands. The earlier discussion noted several high-level planning guidelines related to responding to grey-zone activities. The guidelines pertaining to institution building and intelligence are ones where resource-constrained, small-middle power New Zealand could possibly have influence.

Institution building includes developing mechanisms for quickly resolving any unintentional grey-zone crisis at the military working level. Such mechanisms may now be necessary as China begins to operate and base PLA Naval and Air Force aircraft in the South China Sea. The airspace in this area will become more crowded and the possibility of an air incident will increase.

A recent example is a formation flight by some sixteen strategic air transport aircraft across the South China Sea to about sixty nautical miles north of Sarawak State in East Malaysia. The Ilyushin Il-76 and Xian Y-20 aircraft flew in an "in-trail" tactical formation at an altitude of 23,000-27,000 feet.²⁵ While legal under international law, the lack of prior advice to Malaysia that their EEZ would be overflowed by a large military aircraft formation and without that formation contacting the regional air traffic control centres raised flight safety and political concerns. A pair of Royal Malaysian Air Force Hawk light combat aircraft was sent to intercept and visually identify the Chinese formation.²⁶

Incidents such as this if mishandled could lead to an inadvertent crisis and even potentially military escalation. It may be prudent to begin discussions

25 *Global Times*, "PLA aircraft training in South China Sea".
26 Graham, "Aerial Manoeuvres in the South China Sea".



XIAN H-6 ATTACK AIRCRAFT ARE FREQUENT VISITORS TO TAIWAN'S AIRSPACE.

with the PLAAF and PLAN on formal risk management initiatives. These could be expected to take some time to agree on and implement, making an early commencement of talks important.²⁷

Such an initiative could be undertaken under the aegis of the Five Power Defence Arrangement (FPDA) that comprises Australia, Malaysia, New Zealand, Singapore and the United Kingdom. The fifty-year-old FPDA is currently constrained to the Malaysian peninsular and includes maritime and air defence exercises.²⁸

The FPDA as a multilateral organisation would have more weight than any single nation in working with China to devise risk-management procedures and processes. This could include installing a hotline between the FPDA command facilities and similar

27 Independent Commission on Regional Security Architecture, *Preserving the Long Peace in Asia*, 14.
28 Graham, "The Five Power Defence Arrangements at 50: What Next?".

Chinese facilities in the South China Sea, so as to both occasionally trial agreed rules, and if necessary, coordinate responses to an air incident.

There may be some national sensitivities with agreeing risk management rules with China given its island air bases are beyond the Malaysian Peninsular. In that regard, Malaysia has begun military exercises with other countries in East Malaysia, including with the US Marines, and may be more open to discussions on the matter than it has been in previous decades.²⁹

Irrespective, over the next several years Chinese military air operations in the South China Sea are likely to spread west and butt up against Peninsular Malaysia's

29 Ismail, "Reassessing Role in Old Defence Pact".

airspace and thus the FPDA region. While there is time, it would be prudent to begin discussing crisis management procedures with the PLAAF and PLAN before a crisis occurs.

New Zealand, as a key FPDA country, could take the initiative to suggest that FPDA begin talks with China. In this, the FPDA not only has multilateral heft, but also in not representing any particular nation, would not be perceived as unintentionally legitimising China's South China Sea claims by discussing airspace safety matters with it.

The second area where the RNZAF might be involved is in space-based intelligence collection. In 2020 the idea of grey-zone “deterrence by detection” emerged. This concept assumed that countries undertaking grey-zone activities would be deterred if they knew they were under periodic surveillance and that any such actions would be widely and quickly publicised.³⁰ In this, the publicising of detected grey-zone activities would not need to include any conclusions or normative assessments. Simple notification of such activities being underway would be sufficient for the concept to operate.

Such a grey-zone “deterrence by detection” system could be supported through exploiting emerging Space 2.0 technologies, particularly lower-cost space access and nanosats. Companies such as Rocket Lab, now launching from the North Island of New Zealand, suggest the space access possibilities. The company-designed two-stage rocket is constructed using carbon-composites and includes ten engines built using

additive manufacturing; the rocket can insert about 220 kg into orbits of 300-700 km for about \$5 million.³¹

Nanosats, as the name suggests, are small satellites weighing between one and ten kilograms and can provide a cost-effective in-orbit surveillance capability. In March 2021, Rocket Lab launched the experimental M2 CubeSat surveillance satellites developed in a collaboration between UNSW, Canberra Space and the RAAF.³² These ten-kilogram satellites demonstrated several technologies including maritime surveillance systems for ship detection using optical imaging of large surface vessels, and the sensing of ship-borne transmitting Automatic Identification Systems (AIS).³³ Another example is the commercial Kelos Scouting Mission nanosats that use radio frequency sensors to detect, identify and geolocate concealed and covert maritime activity, including vessels that turn their AIS off so as to allow Illegal, Unreported and Unregulated (IUU) fishing activities.³⁴

Such performance at an affordable cost means middle powers are increasingly able to launch and operate their own national space-based systems either alone or in combination with others.³⁵ The NZDF could use Australian or New Zealand developed nanosats or access commercial services to provide data to help build a difficult-to-deceive picture of grey-zone activities underway across the South China Sea. The nanosats would be designed for the specific grey-zone deception activities of most concern and launched into

31 Rocket Lab, *Launch: Payload Users Guide*.
 32 University of New South Wales Canberra, “UNSW Canberra Space”.
 33 Brown et al, “SSA Experiments”.
 34 *Satnews* “Kleos Scouting Mission Smallsats Deployed”.
 35 Layton, “Sustainable Middle Power Military Space Operations”, 31-44.

30 Mahnken, Sharp and Kim, *Deterrence By Detection*, 6.

the optimum orbits, possibly polar. Moreover, as the grey-zone activities evolved over time, new nanosats could be quickly devised and launched.

China's grey-zone activities grind remorselessly on, but in so doing educate all about grey-zone characteristics and create an opposing pushback. As is customary, the paradoxical nature of war applies, in that those impacted by a damaging strategy will over time devise optimised counter-moves.

The future is uncertain, and so prudence would suggest being prepared, both today and tomorrow, for good and bad possibilities. In this, we have perhaps much greater agency than early Chinese strategic thinkers would imagine. New Zealand, while remote to the centres of grey-zone activity, may be able to make some useful contributions to their resolution.

SHANDONG 17 IS THE PLAN'S FIRST DOMESTICALLY BUILT CARRIER AND IS EQUIPPED WITH HIGHLY CAPABLE SHENYANG J-15 FIGHTERS..



BIBLIOGRAPHY

- Ismail, Ahmad Syah Ejaz. "Ensuring Freedom of Navigation", 13 March 2021. <https://www.nst.com.my/opinion/columnists/2021/03/673374/ensuring-freedom-navigation>.
- Ismail, Ahmad Syah Ejaz. "Reassessing Role in Old Defence Pact". *New Straits Times*, 12 March 2021. <https://www.nst.com.my/opinion/columnists/2021/03/673054/reassessing-role-old-defence-pact>.
- Asia Society Policy Institute Independent Commission on Regional Security Architecture. *Preserving the Long Peace in Asia: The Institutional Building Blocks of Long-Term Regional Security*. New York: Asia Society Policy Institute. September 2017.
- Brown, M., B. Smith, C. Capon, R. Abay, M. C. Polo, S. Gehly, G. Bowden., C. Bright, A. Lambert, and R. Boyce. *SSA Experiments for the Australian M2 Formation Flying CubeSat Mission*, presented at *Advanced Maui Optical and Space Surveillance Technologies Conference (AMOS)*, Hawaii, 2020. <https://amostech.com/TechnicalPapers/2020/Space-Based-Assets/Brown.pdf>
- Department of Defence (Australia). *2020 Defence Strategic Update*. Canberra: Commonwealth of Australia. July 2020.
- Dobbs, T., G. Fallon, S. Fouhy, T. Marsh, and M. Melville. *Grey-Zone Activities and the ADF: A Perry Group Report*. Canberra: Australian Defence College, 2020: https://theforge.defence.gov.au/sites/default/files/2020-10/Grey%20Zone_0.pdf
- Dziedzic, S. "Australia and Singapore Commit to Working on 'Safe And Calibrated' Travel Bubble". *ABC News*. 11 June 2021: <https://www.abc.net.au/news/2021-06-11/australia-singapore-travel-bubble-talks/100206972>
- Flint, C, and X. Zhang. "Historical-Geopolitical Contexts and the Transformation of Chinese Foreign Policy". *The Chinese Journal of International Politics* 12, no. 3 (2019): 295-331.
- Graham, E. "Aerial Manoeuvres in the South China Sea". *International Institute for Strategic Studies*. 9 June 2021. <https://www.iiss.org/blogs/analysis/2021/06/aerial-manoevres-south-china-sea>
- Graham, E. "The Five Power Defence Arrangements at 50: What Next?". *International Institute for Strategic Studies*. 10 December 2020. <https://www.iiss.org/blogs/analysis/2020/12/five-power-defence-arrangements>
- Greber, J. and M. Smith. "Leave Australia Out of This: China to US". *Australian Financial Review*. 19 March 2011. <https://www.afr.com/world/north-america/leave-australia-out-of-this-china-to-us-20210319-p57cd4>
- Goldenberg, I., Heras, N.A., Thomas, K., and Matuschak, J. *Countering Iran in the Gray Zone: What the United States Should Learn from Israel's Operations in Syria*. Washington: Center for a New American Security, April 2020.
- Jackson, A. P. "Introduction: What is design thinking and how is it of use to the Australian Defence Force?", in Jackson, A.P. (ed.). *Design Thinking: Applications for the Australian Defence Force*, Joint Studies Paper Series No. 3. Canberra: Department of Defence, 2019: 1-26.
- Jullien, F. *A Treatise on Efficacy: Between Western and Chinese Thinking*, translated by Janet Lloyd. Honolulu: University of Hawaii Press, 2004.
- "Kleos Scouting Mission Smallsats Deployed". *Satnews*. 10 November 2020: <https://news.satnews.com/2020/11/10/kleos-scouting-mission-smallsats-deployed/>
- Layton, P. "Trampling the Grass: China-US Leadership Competition". *Australian Outlook*. 22 November 2018. <https://www.internationalaffairs.org.au/australianoutlook/trampling-grass-china-us-leadership-competition/>
- Layton, P. "Sustainable Middle Power Military Space Operations" in *Project Asteria 2019: Space Debris, Space Traffic Management and Space Sustainability*. Canberra: Air Power Development Centre, 2019: 31-44.
- Layton, P. *China's Enduring Grey Zone Challenge*. Canberra: Air and Space Power Centre, 2021.
- Libiseller, C. and L. Milevski. "War and Peace: Reaffirming the Distinction". *Survival*, 63, no. 1 (2021): 101-112.
- Luttwak, E. N. *Strategy: The Logic of War and Peace*. Cambridge: Belknap Press, 1987.
- Mahnken, T., T. Sharp, and G. B. Kim. *Deterrence by Detection: A Key Role for Unmanned Aircraft Systems in Great Power Competition*. Washington: Center for Strategic and Budgetary Assessments, 2020.
- Mastro, O.S. "How China is bending the rules in the South China Sea". *The Interpreter*. Lowy Institute, 17 February 2021. <https://www.loyyinstitute.org/the-interpreter/how-china-bending-rules-south-china-sea>
- Mazarr, Michael J. *Mastering the Gray Zone*. Carlisle: U.S. Army War College Press, 2015.
- Morris, L.J., M.J. Mazarr, J. W. Hornung, S. Pezard, A. Binnendijk, and M. Kepe. *Gaining Competitive Advantage in the Gray Zone*. Santa Monica: RAND Corporation, 2019.
- Multinational Capability Development Campaign. *Hybrid Warfare: Understanding Deterrence*. MCDC Countering Hybrid Warfare Project, March 2019.
- "PLA Aircraft Training in South China Sea abide by Intl. law Without Entering Others' Airspace". *Global Times*, 3 June 2021. <http://en.people.cn/n3/2021/0603/c90000-9857169.html>
- Rocket Lab. *Payload Users Guide*, version 6.6. Long Beach: Rocket Lab, November 2020. <https://www.rocketlabusa.com/assets/Uploads/Payload-User-Guide-LAUNCH-V6.6.pdf>
- Pubby, M., and K. Anshuman. "Colonel Babu Got Hit in the Head: A Detailed Account of the Brawl at Galwan with Chinese Soldiers". *The Economic Times*, 22 June 2020. <https://economictimes.indiatimes.com/news/defence/indian-soldiers-put-up-a-strong-fight-plain-officer-killed/articleshow/76499852.cms?from=mdr>
- Sun-tzu. *The Art of War*, translated by John Minford. London: Penguin Books, 2005.
- Thomas, T. *The Chinese Way of War: How Has it Changed?*. McLean: MITRE, June 2020.
- "UNSW Canberra Space launches world-leading CubeSat satellites". *UNSW Canberra*, 23 March 2021. <https://www.unsw.adfa.edu.au/unsw-canberra-space-launches-world-leading-cubesat-satellites>

- Wylie, J.C. *Military Strategy: A General Theory of Power Control*. New Brunswick: Rutgers University Press, 1967. Reprinted by Australian Naval Institute Press.
- Zhou, F. "Chinese scholars view of international structure" in Feng, H., He, H. and Yan., X., eds, *Chinese Scholars and Foreign Policy: Debating International Relations*. London: Routledge/Taylor and Francis Group, 2019: 23–43.

PLTOFF ABRAHAM CONDUCTS HIS POST-FLIGHT CHECKS FOLLOWING HIS FIRST SOLO FLIGHT.



BOOK REVIEW – BILLY MITCHELL’S WAR WITH THE NAVY: THE INTERWAR RIVALRY OVER AIR POWER

REVIEWED BY DR. RYAN WADLE | ASSOCIATE PROFESSOR
U.S. NAVAL WAR COLLEGE



PORTRAIT OF BILLY MITCHELL

Over the past two decades, Thomas Wildenberg’s work has helped to radically reshape historians’ understanding of the interwar United States Navy and the process of its transformation. His studies, including *Destined for Glory: Dive Bombing, Midway, and the Evolution of Carrier Airpower* (1998) and *All the Factors of Victory: Admiral Joseph Mason Reeves and the Origins of Carrier Airpower* (2003), have highlighted a number of critical technical, organizational, conceptual, and individual factors that allowed the US Navy to integrate aviation into the fleet. His latest work, *Billy Mitchell’s War with the Navy: The Interwar Rivalry over Air Power*,

shifts gears by giving readers the Navy’s perspective of the interwar development of land-based airpower amid the larger debate over whether seapower or airpower should take primary responsibility for coastal defense. Additionally, Wildenberg ambitiously sets out to correct the historical record about Brigadier General William “Billy” Mitchell, one of the most fascinating military figures of the previous century and the primary figure in the fight between the Army and Navy for control over aviation.

Wildenberg briefly sketches the story of Mitchell’s life and rapid wartime rise through the ranks to become the most prominent and important figure in army aviation by the end of World War I. Wildenberg portrays Mitchell as a gifted leader and motivator who skillfully led the air service through the American campaigns on the Western Front, but who was also petty and petulant and repeatedly clashed with other army leaders, including fellow aviators. After the war’s end, Mitchell used his expertise and political ties to advocate for a significant expansion of aviation’s military roles and missions and the creation of an independent air service. In this quest, Mitchell initially began publicly criticizing the navy’s management of its own aviation arm but expanded these criticisms to claim that modern airpower had rendered naval vessels obsolete. In doing so, he sought to undermine the navy’s status as the nation’s “first line of defense” from foreign threats and to position his envisioned independent air force as the new coast defense service and to receive the appropriations that came with such responsibilities.

Naval leaders, unsurprisingly, pushed back at Mitchell’s criticism while simultaneously finding themselves embroiled in a public firestorm over the efficacy of airpower against surface ships that climaxed with

the Virginia Capes bombing tests of 1921. These tests, which most famously saw Mitchell's airmen sink the old German battleship *Ostfriesland*, only added to Mitchell's public profile, but his critics - including the head of the Navy's Bureau of Aeronautics, Rear Admiral William Adger Moffett - sought to reject the validity of the tests by emphasizing Mitchell's consistent flouting of the rules. From the Navy's perspective, sinking a dilapidated, obsolescent battleship swinging at anchor without escort or anti-aircraft guns offered little conclusive evidence as to the efficacy of airpower against naval vessels. Additional tests in the following years, however, further revealed Mitchell to be intellectually shallow and unwilling or unable to fully operationalize many of the ideas he championed. Mitchell's willingness to ignore convention finally caught up to him in 1925 when his damning criticism of aviation policy in the wake of the crash of the airship *Shenandoah* led to his court-martial even as the Morrow Board finally provided the institutional support - but not Mitchell's goal of air service independence - to further encourage aviation development.

Mitchell's removal from the scene proved personally disastrous as he could no longer use his position to create stunts to attract public attention, but it also failed to completely quell the rivalry between the Army and Navy over coast defense responsibilities. Apart from a few notable exceptions, such as the interception of the Italian liner *Rex* by B-17s in 1938, many of these debates between Army and Navy leaders largely occurred outside the public's view. An agreement between General Douglas MacArthur and Admiral William Pratt in 1931 only temporarily resolved the boundaries between the services. Although the Army Air Corps expended considerable effort and resources to carve out a role in coast defense, Wildenberg uses the total failure of Army Air Force B-17s to sink any Japanese

shipping during the Battle of Midway to demonstrate that the Army's assumptions about the efficacy of heavy bombers in coast defense were fatally flawed.

Billy Mitchell's War with the Navy showcases strengths common to Wildenberg's work, including a keen insight for analyzing how military organizations operationalize new concepts. In this book, however, Wildenberg has shown how the Army Air Corps failed to transform their ideas into a workable concept. He also has a knack for finding hitherto unknown or unseen sources. This is especially important when the historical subject matter is as well-trod as Billy Mitchell. To that end, Wildenberg also thoughtfully includes two appendices based on his thorough research, one of which is a thorough analysis by Captain Alfred W. Johnson of a Mitchell article published in the *Saturday Evening Post* in 1925, and also a detailed historiographical analysis of the previous published works covering Mitchell's life and career.

While Wildenberg fills in many of the gaps and offers a fresh perspective on a seemingly well-worn topic, the many subjects that *Billy Mitchell's War with the Navy* covers do not always mesh well together. Wildenberg clearly lays out the progression of Mitchell's ideas and actions, but the book is not, strictly speaking, a full biography of Mitchell. Similarly, it is not entirely satisfying as a history of the question of coast defense because of the strong emphasis placed upon Mitchell. In fact, Wildenberg strains to tie much of the pre-1925 rivalry to Mitchell even when the links appear tangential at best, such as in his strong but disconnected analysis of Army and Navy participation in air races during the early 1920s. Mitchell's court-martial signals a radical change in the book's tone and focus in its final chapters, which are more reflective of the subtitle, *The Interwar Rivalry over Air Power*. Had Wildenberg given readers a better sense of how many

of Mitchell's peers shared his views or linked Mitchell's advocacy to debates over airpower occurring in professional forums, such as *The Coast Artillery Journal*, the book would feel more cohesive.

In spite of the structural discord, the book has much to offer both lay readers and scholars interested in interservice relations and the development of military and naval aviation. It also has a much broader value as a case study for military professionals wishing to examine organizational disputes over the control of new domains, an important topic as can be seen with the current debates over operations in space and cyberspace. Thankfully, *Billy Mitchell's War with the Navy* can inform these debates by providing a much-needed fresh perspective on a familiar topic.

Dr. Ryan Wadle. Review of *Billy Mitchell's War with the Navy: The Interwar Rivalry over Air Power*, by Thomas Waldenberg. H-War. August, 2015.

This work is licensed under a Creative Commons Attribution-Noncommercial-NoDerivative 3.0 United States License (CC BY-NC-ND 3.0 US).

