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Serving the Nation



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Introduction

Major General Chris Smith DSC, AM, CSC

DEPUTY CHIEF OF ARMY

Last year in his foreword to Volume 19, Number 1 of the *Australian Army Journal*, Chief of Army Lieutenant General Simon Stuart, AO, DSC called on the Army to ‘adapt to war’s changing character’ and transform for littoral manoeuvre operations by sea, land and air from Australia, with enhanced long-range fires.¹ This edition of the *Australian Army Journal* responds to this call. It wrestles with new ideas spanning the past, present and future of land warfare, elucidating how they support the Chief’s vision. This edition includes articles, speeches and book reviews covering land warfare, theoretical concepts for how the Army might respond to changes to warfare, and lessons for strategic thinking.

For my introduction, I hope to situate these papers within the context of the *Defence Strategic Review* (DSR). It is of little utility to repeat here the big-ticket items out of the DSR; they are amply dealt with elsewhere. Rather, the DSR has three important implications for the Army, which I wish to focus on. Firstly, the DSR is the first Australian Government document since the Cold War focused on a specific threat and the prospect of a major war in the region.² Secondly, the DSR commends long-range precision strike as both a threat (with Australia now in range of regional capabilities) and an investment priority (required to threaten an adversary in Australia’s northern approaches). This recommendation is an important nod to the creation of strategic depth in an era defined by reduced strategic warning time. Finally, there is the crucial qualifier applied to Australia’s approach to deterrence: denial.

These three elements of the DSR are of great significance for the Army. They imply a focus on land-based long-range precision strike, land-based

air and missile defence, manoeuvre through littoral spaces, and critically close combat from or through fortified positions. For the first time since perhaps the 1950s or 1960s the Army is elevated to a strategic peer of the Royal Australian Navy and Royal Australian Air Force. Long-range maritime strike through the acquisition of High Mobility Artillery Rocket System (HIMARS) and a suitable anti-ship missile is particularly important because it gives the Army the capability to achieve some degree of sea denial from the land—a point long argued against, and one worth exploring in the context of public commentary about DSR ‘winners’ and ‘losers’, which I expand upon below. Additionally, the Army’s investment in air and missile defence aims to derive success equal to that of the Ukrainian military, which has curtailed Russian air force operations to a marked extent.

The Army now has an explicit role in denying access to places of strategic importance, and forcing an enemy from such places. For the first time since at least the end of the Vietnam War, if not earlier, there are government-endorsed planning scenarios.

Despite these excellent opportunities for the ADF’s land forces, there exist some enduring criticisms of the document as it relates to the Army. The first line of criticism is external, and it relates to the idea of a focused ADF expressed in the DSR. It contends that a future war will be a maritime one, and that investments in capability for land combat are unnecessary and work against the intention of focus. It is a problematic and ultimately reductionist perspective to believe that all Australia’s strategic problems are solvable by having an ADF solely capable of sinking an enemy invasion fleet at sea. It conflates the idea of focus on a threat with focus on one way to deal with that threat. It is an argument that questions the utility of tanks and infantry fighting vehicles for combat.

The other line of criticism, strangely, comes from inside Army. It is more a line of disappointment than of criticism, which dwells too much on the reduction in the infantry fighting vehicles from 450 to 129 as a serious loss. Both lines of criticism or disappointment are flawed—grounded in an oversimplification of the future we are facing, and a selective view of our history.

So how do we visualise the role of land forces in an all-domain integrated ADF? The Battle of Milne Bay during the Second World War is a particularly useful example because it represents well what the DSR authors had in mind. Both General Douglas MacArthur, Supreme Commander South West

Pacific Area, and the Japanese military recognised, almost at the same time, that the eastern tip of New Guinea was critical for exercising control of the Solomon Sea. Fortunately, MacArthur got Australian troops there first, occupying Milne Bay and commencing construction of three airfields. This led to a defensive battle against a Japanese amphibious force hoping to seize the airfields for their own use.³ What resulted was a land battle to protect airfields, and the airfields were only important to the extent that they allowed for air power to control a large part of the Solomon Sea—a battle on land for control of the sea.

That is the vision of all-domain warfare: a battle fought in one domain for an effect in another. It is the vision for land power's integral contribution to an integrated force. It is not new; we're just going to do it with new stuff. The Battle of Guadalcanal was largely the same but the roles were reversed. In that example, the Japanese defended the airfield (Henderson Field), while US Marines and soldiers fought to capture it and then to hold it against strong Japanese counterattacks.⁴ To this end, the focused all-domain ADF needs to be able to both defend *and* attack, and the land force is essential for both.

Indeed, the Pacific War was essentially a war fought in the littoral for control of airfields. For the Japanese, these airfields served as an essential means of defence, and for the Allies they were a way of extending the reach of bombers to the Japanese mainland. If you extend that idea to the present, imagine that land-based missiles offer an additional means to do what air forces and aircraft carriers did in the Second World War. Imagine that Australian offshore territories and nearby regional neighbours offer adversaries an opportunity to position ballistic missiles in range of Australian cities. And imagine that we would want to pre-empt any such attempt, or have the capacity to forcibly remove such a force. I think that is the best expression of the idea of the all-domain force, coupled of course with the new supporting capabilities of space and cyberspace.

If we are lucky, and if we have sufficient warning of an adversary's intention to attack, and if we are called upon by a like-minded and concerned regional country, then pre-positioning land-based long-range missile batteries gives the ADF the capacity to exercise limited sea denial from the land. Land-based missiles have enormous advantages over ship-based missiles and even air-launched missiles. The launchers are incredibly

difficult to find, and if they are struck, losses are limited to only a few missiles, a single launcher and its crew. Comparatively, the loss of a ship could include the loss of up to 50 launch pods, all the munitions to match, and several hundred crew. Needless to say, this advantage provided to Australia through land-based strike is a reason why the government increased its commitment to acquire HIMARS.

Being the first to realise this strategic opportunity is critical. Being on the ground first, however, is not easy, because you can't be present all of the time at all potentially strategic places; it is prudent to be circumspect about assuming that we would be there first. It is not hard to imagine a *fait accompli* attack in our region, one that is grounded in surprise and takes advantage of the great strength of modern defence. Recent history gifts us with lessons from the Argentinian occupation of the Falkland Islands in 1982. Other examples include Russia's occupation of the Donbas and the Crimea in 2014, as well as (to a lesser extent) the Chinese development and occupation of features in the South China Sea.

Those who have read Peter Singer and August Cole's book *Ghost Fleet* will be familiar with the idea of using commercial vessels to hide a surprise invasion.⁵ The employment of a *fait accompli*, in most if not all examples, is to occupy territory without (or with limited) resistance, rapidly set up for defence, and then use the great advantages of the modern defence and the likelihood of stalemate as a bargaining chip for political concessions. So, in this conceivable future, we have to be able to fight.

When we imagine fighting in this future context it is close-quarters fighting through fortified positions in difficult terrain, not the kind of manoeuvre seen in North Africa, the Sinai Peninsula, the Russian steppe, or the Kuwaiti and Iraqi deserts. Applying the regional DSR focus, fighting would look closer to that in Buna and Gona in 1943 or Balikpapan in 1945, or even the clearing of the North Vietnamese Army bunkers in South Vietnam. It would comprise tanks, infantry and engineers in intimate cooperation, similar to the type of warfare experienced in the ongoing Russia-Ukraine War. If we are not already preparing for this future, and making a shift towards this style of warfare, we must start to do so now.

This perspective is also not without criticism. Dissenters from the close-combat logic often argue that if we succeed in deterrence we don't have to fight. That statement is true, but deterrence is not bluff. Deterrence

can be enacted as a function of threatened punishment (such as nuclear deterrence), or by denial (as discussed earlier and as is the preference articulated by the government). Deterrence by denial is akin to the role of NATO armies in Western Europe during the Cold War, or the South Korean and American armies in response to the threat of invasion by North Korea. Deterrence by denial is the idea that a potential aggressor, on seeing the defensive capability and posture of the defender, questions whether they can actually succeed.

In this sense, denial is identical to defence. It is not bluff or bluster. Rather, it is about actual capacity to defend and win in battle. Deterrence by denial is enacted by maintaining the ability to win the resulting battles if attacked and to defend the objective, thereby denying it to the enemy. If the enemy gets the jump on us, we might have to force it from some decisive terrain. In other words, to deny we must practise and prove that we can defend, and also attack.

The underlying challenge to this hefty, but not lofty, task is being able to defend, let alone attack, across the sea in an austere environment. This challenge is true for all capabilities but most significantly for logistics. To achieve deterrence by denial as a land force we require assurance that we can reach the fight, that we can receive reinforcements of personnel and munitions, that we can store excess supplies, and that we can repel attacks and penetrate enemy positions. Critically, though, we need to be able to answer one fundamental question in undertaking these tasks: how do we do it across the sea?

This edition of the *Australian Army Journal* begins with contributions to this question. In his paper *Shallow Waters and Deep Strikes: Loitering Munitions and the Australian Army's Littoral Manoeuvre Concept*, Ash Zimmerlie asks how the Army might apply emerging technology to enhance how it operates in littorals. He explains how littoral manoeuvre and loitering munitions might ensure the future Army is capable of littoral manoeuvre, joint warfare, and strategic deterrence. John Nash seeks to contribute to this conceptual development through his paper *Amphibious Audacity* about the use of littoral manoeuvre in Operation Husky, the Allied invasion of Sicily in 1943. Nash presents lessons for the use of military forces today by exemplifying how 'proper use of the sea grants options to ground forces ... as an operational manoeuvre space to gain advantage over an adversary'.

William Westerman also identifies critical capability elements for Army's employment in the Indo-Pacific in his paper *A Unique Tool?: Exploring the Value of Deployed Military Chaplains in Australia's Region*. He contends that the Army's chaplaincy capability is integral to persistent presence in the region through their ability to build relationships, communicate with local populations and understand cultural nuances. These papers are important contributions to answers about capability investments and the application of land power.

Papers by Hannah Woodford-Smith, Andrew Carr and Albert Palazzo offer theoretical conceptions and assessments on emerging changes to warfare and ways the Army might respond to them. Bridging the gap between capability needs and conceptual thinking, Hannah Woodford-Smith's paper *Defining Land Force Mobilisation* considers the DSR requirement for accelerated preparedness. It introduces the concept of 'force-size effect' and the capability requirements for generating an expanded force. Carr's paper *Owning Time* astutely points out that tempo is about more than just speed. It claims that if tempo is understood based on the characteristics of change, congruence and control, Australia will be better placed to face challenges of strategic competition. In *Climate Change and the Future Character of War*, Palazzo describes a future in which troops will be required to operate in extreme temperatures, in locations with higher disease risks and at the end of increasingly vulnerable supply lines.

Finally, I commend to you the five book reviews in this edition. They cover several matters in relation to the DSR, and they provide insights into key resources that might foster better thinking and awareness within the Army. Dongkeun Lee's review of *The New Age of Naval Power in the Indo-Pacific*, edited by Catherine Grant, Alessio Patalano and James Russell, provides an insight into the 'five factors of influence' that make warfare in the maritime Indo-Pacific so complex. These factors include the capacity to control sea lanes, deploy nuclear deterrence at sea, implement the law of the sea advantageously, control marine resources, and exhibit technological innovation.

Jordan Beavis further explores one of the DSR's key themes in his review of David French's book *Deterrence, Coercion, and Appeasement: British Grand Strategy, 1919–1940*. Beavis suggests that French's dense book is a timely reference on the need for enhancing national strengths and

being transparent with the public on the dangers posed by those that seek to upend the international rules-based order. Nick Bosio's review of the latest edition of *The New Makers of Modern Strategy: From the Ancient World to the Digital Age* highlights the value of the whopping 1,200-page historically grounded account of lessons relevant to contemporary great power competition. He notes that all formation/area libraries should have it available—not as a book to read cover to cover but as one to be perused when seeking inspiration and guidance.

Liam Kane reviews *Armies in Retreat: Chaos, Cohesion, and Consequences*, edited by Timothy Heck and Walker Mills, commending the book as a reminder to relinquish hubris and always prepare for the worst. He observes that the chapters have diverse historic references, leveraging examples from the Peloponnesian War to the Korean War and beyond, and he contends that the book is an important contribution to literature elucidating the civil–military divide. John Nash reviews a similarly historically literate publication by Lawrence Freedman covering the overlap between the civil and military spheres. Nash highlights two important relationships identified in *Command: The Politics of Military Operations from Korea to Ukraine*: the critical and often fraught interaction between military and political leaders, and the need for cooperation between the military and civilians. While not all revelatory, as Nash notes, these lessons are critical to an understanding of our profession of arms.

Similarly, critical to development in light of the DSR are debates generated by key members of our community. Included in this volume are speeches presented by:

- John Blaxland to the Chief of Army Symposium 2023 in Perth on Australian regional engagement
- Nerolie McDonald to the Chief of Army Symposium 2023 in Perth on landing defence partnerships in the Indo-Pacific and beyond
- me to the Synergia Conclave in India on advanced computing and warfare.

This issue of the *Australian Army Journal* represents points of focus, new thinking and optimism as we implement direction from the DSR. Thank you to the authors for contributing to Army's body of professional knowledge.

Endnotes

- 1 LTGEN Simon Stuart, 'Foreword', *Australian Army Journal XIX*, no. 1 (2023): v.
- 2 Commonwealth of Australia, *National Defence: Defence Strategic Review* (Canberra: Department of Defence, 2023).
- 3 See Nicholas Anderson, *The Battle of Milne Bay 1942*, Australian Army Campaigns Series, no. 24 (Newport: Big Sky Publishing, 2018).
- 4 For a narrative of this battle and the broader campaign, see Richard B Frank, *Guadalcanal: The Definitive Account of the Landmark Battle* (New York: Penguin, 1992).
- 5 PW Singer and August Cole, *Ghost Fleet: A Novel of the Next World War* (Boston: Eamon Dolan, 2015).

Owning Time: Tempo in Army's Contribution to Australian Defence Strategy

Andrew Carr

Introduction

Over the last decade, time has become central to the concerns of the Western strategic community. Many policymakers worry that time is no longer on their side in the face of relative decline and the threat from powerful revisionist states. Others highlight the pace of technological and strategic change which, according to one former Chairman of the United States (US) Joint Chiefs of Staff, has 'accelerated the speed of war, making conflict today faster and more complex than at any point in history'.¹ Building on these and other changes, Australia's 2020 *Defence Strategic Update* (DSU), 2023 *National Defence: Defence Strategic Review* (DSR) and 2024 *National Defence Strategy* (NDS) identify the loss of warning time, which 'has major repercussions for Australia's management of strategic risk. It necessitates an urgent call to action'.²

The Australian Army has helped to lead the incorporation of the temporal domain into Australian military thinking, defining itself as an '*Army in Motion*' in response to an environment of '*Accelerated Warfare*'. Specifically, Army has affirmed that 'future advantage will lie with the side who can 'own the time' and best prepare the environment'.³ Army's 'description of "how we respond"' is established as 'owning the speed of initiative to outpace,

out-manoeuve and out-think conventional and unconventional threats'.⁴ That is, advantage is primarily gained through acting faster and consuming less time. This approach mirrors the view of other Western armed forces such as that of the US, where a preference for speed is central to military thinking.⁵ The demand for rapid action has strong merit; however, it carries three risks.

First, this approach is primarily reactive. It seeks to respond to contemporary security dynamics through more efficient practices, rather than seeing the temporal domain as one which has its own dynamics to use for Australian benefit. Second, the emphasis on speed reduces the acceptable range of tactical, operational and strategic actions to a narrow and predictable set of choices, impeding Australia's strategic initiative and allowing others to plan against us. Third, as many in Army and across Defence have already experienced, there is only so much extra pace that can be achieved within an organisation or on a battlefield. Each additional increase is more difficult and costly. Pushing to move ever faster risks burning through talent and exhausting resources, all in an era of competition, well below the threshold and intense demands of a future major war.

In this article I argue that to 'own the time', the Australian Army will have to learn how to operate across the full temporal domain: speeding up when necessary, at other times slowing down, as well as being able to delay and shape how others think and act in time. The current era of 'archipelagic deterrence' for Australia presents a very different temporal challenge to that experienced in the past.⁶ During the 'Defence of Australia' era (1970s to 2000), the challenge was one of 'warning time', recognising that any major threat was decades away, and needing to maintain the core force and expansion base to respond. During the War on Terror (2001–2015), Army needed a rapid response capacity, and so it emphasised battlefield manoeuvre in operations across the Middle East. In the new era of archipelagic deterrence, Army will need a mix of these temporal patterns, demonstrating a capacity for rapid responses to incursions and threats, as well as endurance and resilience for what may be a multi-decade deterrence effort. It will need to be able to clearly demonstrate to the People's Republic of China (PRC), or any other potential adversary, that it will be too difficult, too costly and ultimately too time-consuming to meaningfully threaten Australia and its interests. This paper shows how this effort can be assisted through the concept of tempo.

The idea of tempo is found throughout Army and Australian Defence Force (ADF) doctrine, yet it has either fallen into disfavour or been treated as synonymous with 'speed'. In the 1993 version of Army's *Fundamentals of Land Warfare*, tempo was 'the speed at which an operation can be mounted'. In 2002 it became the 'rhythm or rate of activity relative to the enemy'. By the 2014 version (now entitled *Fundamentals of Land Power*) tempo was reduced to a subset of the concept of 'intensity' alongside the 'degree of violence and technological sophistication employed'.⁷ Despite *Army in Motion* being conceptually grounded in the idea that time is important, there are only two brief references to tempo in the 2019 edition, and zero in 2020.⁸

Tempo, the Italian word for time, is typically used by English speakers to describe the speed of a piece of music and the way musicians play it. Three themes are highlighted here as the structure for this article's analysis. First, tempo requires an adaptiveness to *change*, as performers learn how to recognise and become comfortable with variations in timing. Second, tempo involves *congruence*, where performers develop the ability to modulate the timing and pace of actions to fit the environment and needs of the song. Finally, tempo is about *control*, with elite performers able to shape the timing and pace of the music to achieve a desired effect on the audience.

These three notions of tempo—change, congruence and control—can all help Army build on the work of recent years, such as *Accelerated Warfare*, *Army in Motion* and the 2024 NDS. To develop this argument, the paper is divided into three sections. First, I discuss what it means to live in an accelerated world and suggest ways to better handle *change* in the pace and flow of events. Second, I explore the *congruent* nature of tempo. In this section I argue that the most important temporal orientation involves acting relative to advantages against a specific adversary and within particular environments rather than universally pursuing speed. Finally, I discuss tempo as the capacity to impose *control*. In building on the analysis of the first two sections, I argue that, in the era of archipelagic deterrence, Army should explore ways to both 'buy' and 'deploy' time in support of Australia's defence.⁹

Tempo as Change: Australia in an Accelerated World

While many describe today's environment as an 'accelerated world', scholars have struggled to agree what is meant by this statement.¹⁰ One useful framework comes from the German philosopher Hermann Lübbe who argues that acceleration undermines our ability to use historical experience to explain the present. Within the 'contraction of the present ... the past is defined as that which no longer holds/is no longer valid, while the future denotes that which does not yet hold/is not yet valid. The present, then, is the time span for which ... the horizons of experience and expectation coincide'.¹¹ In other words, we feel rushed because we lack a historical framework within which to embed current actions. Without such a framework, we have to work harder to understand what is going on, how events are linked, and what we should do in response. The idea of tempo as *change* highlights that, to operate successfully in an accelerated era, we need to improve our capacity to make sense of the new pattern of events.

We have all experienced a version of this shift in daily life. It can feel overwhelming the first time we cook a complex new recipe, learn to drive a car, or go skydiving. Events occur too fast to properly respond, and trying to compensate by acting quickly can be a path to error. With experience and instruction, however, the pace of these events becomes easier to handle and our capacity to respond with greater speed and effectiveness significantly improves. A rich scholarly literature on psychology shows that humans can somewhat compensate for reduced decision-making time by employing cognitive strategies—heuristics—that help in making judgements under pressure.¹² When these heuristics are based on institutionalised guidance, such as Army's training and doctrine practised over many years, they can be a powerful tool for enabling rapid yet coherent action.

A feeling of acceleration—that is, a struggle to align the past with the present and project change forward—is normal in periods of strategic upheaval. In 1959 the American strategist Bernard Brodie complained that atomic weapons had introduced an 'utterly unprecedented rate of change' which was 'much too fast to be fully comprehended even by the most agile and fully informed minds among us'.¹³ Once robust intellectual frameworks had been developed for the Cold War, however, the sense of dislocation seemed to moderate. Indeed, some today look back wistfully on the Cold

War as a more stable and less confusing era. How can Army and Australian officials seek to regain a sense of temporal control in the current moment? I suggest three steps: prioritisation, expertise and education.

First, handling change requires prioritisation. By saying 'no' to less important tasks and responsibilities, we can allocate time to that which matters. The 2020 DSU provides a model for prioritisation of strategic effort by specifying: 'The Government has decided that defence planning will focus on Australia's immediate region... That immediate region is Australia's area of most direct strategic interest.'¹⁴ Followed in a disciplined way, this spatial framework helps to lift attention and thus the intellectual burden of Australia's decision-makers from large areas of the world, freeing up time to understand and decide issues related to the immediate region. With deeper knowledge of this region, trends within it become easier to understand and in turn seem less temporally accelerated.

Along with geography, Australia needs greater clarity about what should be Defence's primary concerns. The 2023 DSR usefully highlights that while there are many national security implications from climate change, Army's capacity, training, morale and coherence have been damaged by the heavy reliance on the ADF, and especially Army, to respond to disasters. Therefore, the DSR urges that 'Defence must be the force of last resort for domestic aid'.¹⁵ By better valuing Army's time and saying no to the many 'urgent' tasks, we make space for great focus on the truly 'important' tasks and improve our capacity to undertake them appropriately. As a 2021 report on strategic thinking within Defence and the ADF noted:

One significant view from respondents is that senior leaders and their staff have insufficient time to think deeply about any particular issue ... in the past decade, the Canberra 'battle rhythm' has sped up ... [this] tends to make people good tactical or bureaucratic operators but suboptimal strategists who are poor at anticipating and adapting to different strategic problem sets.¹⁶

A second way we can improve our feeling of control as part of tempo is through expertise. While breadth is often valued in peacetime, the pressures of competition demand depth. Those with more expertise have the experience and knowledge to identify what is truly important and to mitigate feelings of being rushed at someone else's pace. Today the ADF, like many Western armed forces, emphasises themes of adaptation

and innovation, with short postings and rotation cycles that aim to build generalised capacity against an ever-wider variety of scenarios. Similarly, across the Australian Public Service there has been a 'historic undervaluing of subject matter expertise' in the name of generalists who can be easily and quickly moved around.¹⁷ Today's emphasis on flexibility and adaptation risks overwhelming the system as every issue is held to be a possible threat, and every program and armament a potentially necessary future resource. The very act of trying to cover all contingencies eliminates time for thinking about how to focus on what truly matters.

Longer rotation cycles for Army would allow those responsible for 'shaping' operations to better understand and engage with key regional interlocutors in the South Pacific and South-East Asia. Career streams should reflect areas of specialisation, with rewards for those who develop area and language expertise over many years. In a similar vein, there is a need for expertise in strategic concepts and institutional history. Many in the Department of Defence recognise that the organisation lacks corporate memory, and steps are now underway to address this for some areas. Writing in 2015, the journalist Laura Tingle noted:

*Without memory, there is no context or continuity for the making of new decisions. We have little choice but to take these decisions at face value, as the inevitable outcome of current circumstance. The perils of this are manifest.*¹⁸

Third, a comfort with change is built upon education. While tactical-level training can provide a reliable guide to behaviour, it is much harder to shape behaviour at the operational and strategic levels due to the inherent uniqueness of the problem sets. The ADF's Professional Military Education should be re-examined along three lines. First, how can the mainstream curriculum (at institutions such as the Australian Defence Force Academy and the Australian Command and Staff College) be aligned with the primary concerns of contemporary Defence policy, such as operating in littoral environments to Australia's north? Second, at the Defence Strategic Studies Course level, how can potential 'strategists' be better identified and given the space and time to develop their own intellectual breadth and innovations? Strategists are not formed in a classroom. Third and finally, Army should continue its work to encourage a research community within Australia's university sector, bringing together scholars from a

variety of disciplines who work on issues related to Australian security. Regular engagement, opportunities and incentives to grow this community (such as PhD scholarships) will help encourage more civilian attention to creating the intellectual frameworks necessary to help understand and, in turn, reduce the feeling of acceleration felt by Army, ADF and government leaders. The first part of a renewed concept of tempo therefore involves strengthening the Army's comfort with *change*. In the next section, we explore how it can better understand what creates advantages in time.

Tempo as Congruence

Tempo should always be relative to the environment and the adversary. As part of handling change, people inevitably make judgements about the optimal pace given their particular circumstances. To return to the musician metaphor, for example, good performers don't play a piece of music the same way every time. They align how they play to fit the environment within which they are currently performing.

While dreams of rapid action have long fuelled military ambitions, speed became a core ideal of Western armed forces in the late 20th and early 21st century. One of the leading voices for this view was John Boyd, the US Air Force strategist whose ideas such as OODA loops (observe–orient–decide–act) and advocacy of manoeuvre warfare have significantly influenced Western military thought.¹⁹ At the tactical level, more speed is often the best approach. It helps retain the initiative, may introduce friction into an adversary's system, and can be efficient, needing fewer resources to achieve objectives against underprepared adversaries. Even in non-conflict situations, the pace of response to events such as natural disasters has been shown to have long-term benefits in recovery and political stability. As one US Civil War general quipped, 'get there firstest with the mostest'.²⁰ While valuing physical pace, Boyd argued that the real benefit of speed was the mental confusion and friction that can be inflicted on an adversary, impeding the operation of their system.²¹ When commanders and leaders feel overwhelmed by events, friction is at work, harming their capacity to respond.

While pace might seem like a sure-fire approach tactically, its operational and strategic results are decidedly mixed. Paul Brister has recently surveyed the role of speed in the Napoleonic Wars, the First World War, the Second World War, and the US's record after 1945. He observed: 'History suggests tactical speed is most useful in conflicts with minimalist aims that have little impact on the international status quo.' Therefore, he argued, 'we must be less enthralled by the concept of speed, especially at the operational and strategic levels of conflict'.²² Similarly, Professor Thomas A Hughes of the US Air Force has argued: 'Recent history demonstrates the value of rapidity in both combat and war, but it also teaches patience and perseverance.'²³ In many cases over the 20th and early 21st century, the pursuit of absolute speed rebounded, causing militaries to race, prioritising tactical means untied to strategic ends, or becoming stuck in extended attritional conflicts for which they were unprepared.

Adversaries can also recognise and develop counters to an opponent's preference for speed. In a 2001 critique of the emerging 'cult of the quick', Hughes warned that 'in making speed a mandated weapon in its repertoire, the Pentagon makes patience an asymmetric threat in the quivers of those who would wait out an impulsive America'.²⁴ And so it proved. Both state and non-state groups successfully challenged the US in the early 21st century through slow and steady means. Think Russia's cyber-intrusions, China's economic subterfuge and island building, and the Taliban's relentless insurgency. These 'cumulative strategies' space out action over time, seeking 'the less perceptible minute accumulation of little items piling one on top of the other until at some unknown point the mass of accumulated actions may be large enough to be critical'.²⁵ Nor are conflicts temporally static. Pascal Vennesson has shown that the US's firm preference for speed was advantageous in its invasion of Iraq in 2003; however, those same preferences meant that adaptation to the necessary tempo for countering an insurgency was extremely difficult.²⁶ Having a preferred tempo regardless of context is not good strategy.

The core of tempo as *congruence* is that temporal advantage depends on identifying and acting at the right tempo relative to the specific environment and adversary. It then requires the capacity to move between tempos to seize these opportunities. Each type of environment has its own distinct temporal rhythm. For instance, research on urban warfare suggests that it is often punctuated by regular pauses in the form of temporary ceasefires.²⁷ Just as a slothful response to a humanitarian disaster is inexcusable, so too rapid action which lacks patience may be counterproductive in complex circumstance such as peacekeeping or counterinsurgency operations. In a major war, rushing too quickly to find a decisive point may lead to over-extension, waste, and improper diagnosis of the state of the conflict and the capacity of the adversaries. Boyd is today praised as an acolyte of ever more speed, but as those who sat through his 14-hour (or longer) briefings would recall, he insisted speed must be relative:

*I don't care whether you go slow or fast. People say no, we're going to drive fast—no, no. As long as you—I don't care if you're slow, if you can slow him down even slower. It's all relative.*²⁸

Thus far, this article has focused on supporting Army's adaptation to an accelerated world through the notions of *change*, helping us to manage a sped-up world, and through *congruence*, recognising the relative and situational nature of the temporal domain. Mastering these two facets of tempo enables an understanding, akin to that of a musician, of how time affects performance. Now, in the final act, we can explore how to use our knowledge of tempo to achieve advantage.

Tempo as Control

This section posits two ideas. First it proposes that, under the 'Strategy of Denial' framework in the 2024 NDS, Army should lead efforts to 'buy time' before and during any potential conflict. Second, it argues that Australian leaders will need to develop the skills to 'deploy time' by using timing frames to influence the perceptions and judgements of others. In this effort, Army has an important role in support.

Buying Time

As the 2020 DSU noted, Australia is running out of time:

Previous Defence planning has assumed a ten-year strategic warning time for a major conventional attack against Australia. This is no longer an appropriate basis for Defence planning.²⁹

To respond to this changed threat environment, the DSU identified the need for a new deterrence strategy. In the 2023 DSR, a deterrence by denial strategy was endorsed. Denial, as the leading deterrence scholar Patrick Morgan observes:

involves threats, active and passive, designed to make a potential attack appear unlikely to succeed so as to convince the potential attacker to abandon it; plus the use of force to make a real attack unsuccessful causing the attacker to abandon it.³⁰

There are three reasons why Australia needs to 'buy' as much time as possible in order to successfully undertake a strategy of denial.

Before any conflict begins, Australia needs as much time as possible to continue its military modernisation. As the DSR acknowledged, the ADF is not currently 'fit for purpose' for contemporary threats.³¹ So too, many countries in Australia's region are slowly modernising their armed forces, as well as strengthening their economic and governance capacity. This steady development across the Indo-Pacific is a net security benefit to Australia. The more Indonesia, Singapore, Malaysia, Thailand, the Philippines, Vietnam and other countries can defend themselves, the greater the deterrence of external great powers threatening South-East Asia. Building relationships that will enable these modernised and more capable militaries to trust each other and improve cooperation

will also take time and continuity. As *Army in Motion* states, 'A persistent, engaged network of people creates trust, legitimacy and understanding in Australia's geographic areas of interest'.³²

During a conflict, Australia needs to convince its adversary that any military success will be too costly in resources and time. In 1941–1942 after the Australian mainland was attacked, the Australian Army's objective was not to defeat Japan but to make Tokyo's weakly-held desire to knock Australia out of the war too time-consuming and difficult to be pursued.³³ Any threat of invasion was eliminated by 1943 once the US, the United Kingdom and other regional partners were able to draw Japanese attention away from the Australian continent.

In the contemporary strategic environment, as in the Second World War, Australia will likely be a peripheral objective for any major power adversary, especially in conditions of major regional conflict. This means the amount of resources an adversary may devote and the amount of time for which it is willing to sustain operations against Australia will be low compared to other theatres of conflict, although this calculation may be slowly rising as the US makes northern Australia a more integral hub in its Indo-Pacific force posture. Canberra must demonstrate to the PRC that any military operation against Australia will take so long, and be so slow and hard to progress, that it is not worth beginning. We need to figure out how to signal that even a substantive military strike against Australia's people will not force Canberra to try to exit the war, or cause a divorce in its alliance with the US.

Finally and relatedly, Australia will need to buy time to enable its ally the US to contribute forces to support Australian security. In a major regional conflict which sees missile strikes and Chinese naval attacks against Australia, the US may simply not have sufficient resources or capacity to aid Canberra's defence during the early months of the conflict. This is not to question the commitment of Washington DC to the ANZUS alliance. Instead it is simply a recognition that, temporally, allied assistance for the first few months of a conflict may be very limited, potentially only to US forces already in Australia, and those might well be tasked for operations much further north.

The 2024 NDS strategy of denial establishes a very useful framework for Australia and Army to use in seeking to buy time before and during a conflict. Unlike deterrence by punishment models, which require sequential strategic choices (demonstrating a clear link from unwanted adversary actions to a specific and painful response), denial can be developed through cumulative strategic approaches. So long as such operational methods are clearly thought through and communicated, there is benefit from not only preparing for plausible regional contingencies but also demonstrating the size, extent and preparedness of Australian defensive capabilities across its northern approaches. So too, efforts to support the military modernisation among Australia's neighbours will help reinforce the military challenge for any adversary, especially one seeking rapid decisive results in a secondary theatre.

In situations of competition, Army should provide decision-makers with as much time to make informed decisions as possible through its contribution to defence diplomacy and intelligence, surveillance and reconnaissance. By gathering information, shaping regional attitudes, and using forward presence to deter grey-zone style harassment, Army can meaningfully contribute to mitigating the risk of sudden crises requiring an immediate national response. In conflict scenarios, Army will have a significant role in contributing to the integrated air and missile defence system proposed in the NSD, such as through counter-drone and land-based anti-ship strike. It will also have responsibility for impeding land operations by an adversary, whether grey-zone style incursions or major landing operations. By demonstrating the commitment and capacity to act proactively to deny an adversary their objectives, it will help strengthen deterrence and provide time for military modernisation, diplomacy and alliance support to be achieved.

Deterrence is a new challenge in Australian strategic history. Aside from a few ad hoc contributions in the 1950s and 1960s, it was not part of Australian military practice in the 20th century. Especially within a framework of strategic denial, deterrence requires a very different mindset to the Boyd-inspired manoeuvre and rapid deployments in which Army excelled during the War on Terror. In the mid-1960s, the scholar Thomas Schelling observed that deterrence represented a fundamental shift in the tempo of activity from many other forms of military action. Where more traditional military actions to defeat or compel others involve '*initiating* an action',

he argued that deterrence ‘involves setting the stage—by announcement, by rigging the trip-wire, by incurring the obligation—and *waiting*’ (emphasis in original).³⁴

Within this paradigm, Army will still need the capability to undertake rapid responses that deliver significant firepower to achieve specific military objectives. However, Army will also need to foster a culture which embraces doggedness in defence, champions the hardening and resilience of Australian military infrastructure, and supports acquisition and logistics platforms which are built to enable long-term survivability and sustainability rather than launch quick global force projection. As the late strategist Colin Gray recognised, land forces can be the most important military forces for deterrence. This is because they are much more clearly fixed in place, visible in footprint, and more ‘politically entangled’ with the honour and determination of a nation and its sovereign territory than the other technology-heavy services.³⁵ Basing soldiers in Australia’s northern approaches, or in select forward presence roles into the region, demonstrates an Australian deterrence commitment in a way few other military capabilities can achieve, whatever their additional strike power.³⁶ To help ‘buy time’ for Australia, Army, far more than the other services, will need to publicly embrace its role as the bulwark defender of Australia, and a symbol of the nation’s commitment to this solemn task.

Deploying Time

As noted in the first section of this article, whether an era feels confusing or accelerated depends upon the ideas we use to make sense of it. We can deliberately create timing frames to help us navigate new eras and to achieve political or strategic advantage. Political leaders regularly use this insight to support their authority by wrapping their policies in the cloak of the ‘founder’s intent’ or claiming to be on the ‘right side of history’. International politics is often a contest of these timing frames. In 1991, US President George HW Bush declared the start of a ‘new world order’, as demonstrated by the First Gulf War and supported by popular notions of an ‘end of history’. Today, China’s President Xi Jinping emphasises the ‘trend toward a multi-polar world’ while scholars debate ‘power transition’ theories.³⁷ These claims all assert a specific direction and way of understanding the current era—a frame of reference which, if accepted by others, will benefit their state.

Australian leaders should seek to develop timing frames to aid national security. In the 2010s, Australian leaders promoted a geographic frame, the 'Indo-Pacific', the widespread adoption of which has suited our national interests. Now it is time to act temporally.

For example, one very useful timing frame for purposes of deterrence will be efforts to publicly demonstrate the resilience of Australians. This would show a nation determined to protect itself—a nation which can withstand repeated efforts at punishment, whether the threat is financial sanctions, derives from grey-zone incursions, or constitutes a military threat from long-range missiles. Discussions that currently occur within the government and within Army concerning mobilisation should be moved into the public domain as soon as possible to support this aim. Such discourse will not only help to persuade an adversary that Australians would resist aggression; it may also help the public to better swallow the burden of resilience, including additional taxation and expectations of higher levels of civic duty. To support this effort, Army should look for lessons in resilience from overseas. For example, Israel consistently projects an image of firm resilience, and the strong social dynamics demonstrated in Scandinavian countries underpin a strong national resolve to counter threats from larger, more powerful countries. The relationship between the armed forces and the citizen base will need to be carefully examined and potentially rethought for this new strategic era.

Army will also need to consider how its public messaging, such as published doctrine and guidance and the speeches of its leadership, contribute to signalling Australia's resilience and determination to achieve 'deterrence by denial'. The focus during the War on Terror on an identity of an armed force capable of mobility, speed and lethality is still useful, but will need to be complemented with messages that demonstrate the size, resilience and determination of the Australian Army to defend Australia. Aggressors who believe they can achieve a quick victory—such as Russia in February 2022 against Ukraine—may be tempted to launch an attack.³⁸ In the uncertain contemporary strategic environment, Army needs to make clear that it is both able and willing to repel threats across Australia's northern approaches, and to do so in ways that may drag an adversary into a conflict spanning months if not years. That message will, in concert with the necessary growth of capability and alliance coordination that is currently underway, reinforce that any adversary seeking to threaten Australia and its interests will ultimately be denied its objective.

Conclusion

Protecting Australia and its national interests is a challenge of both space and time. Therefore, Australian security strategy must evolve a richer sense of tempo if it is to achieve its goals. During the post-Cold War era, characterised by global struggles, it was appropriate to focus on speed and manoeuvre when confronting non-state actors and remote battlefields. Temporally, the new era of archipelagic deterrence is very different for Australia. A strategy of denial framework requires a much wider use of tempo to help decision-makers adjust to the challenges of strategic competition, and to use the temporal domain to their full advantage. As defined in this paper, tempo offers three guiding concepts: *change*—developing approaches that help slow down events and make them more manageable; *congruence*—recognising the importance of relative rather than absolute speed in our actions; and *control*—seeking ways to use the temporal domain for advantage, such as buying or deploying time.

As Australia prepares for what may be a multi-decade era of strategic uncertainty, a broad and deep sense of how we act in—and across—time must be part of our defence thinking. Works of recent years such as *Accelerated Warfare*, *Army in Motion* and the 2024 NDS provide a rich foundation for such analysis. By restoring the concept of tempo into conceptual decision-making frameworks, and broadening the focus of effort from rapid action to the ability to operate across the entire temporal spectrum, Australia will be better placed to ensure its long-term security.

About the Author

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Amphibious Audacity: Littoral Manoeuvre during the Sicily Campaign, July–August 1943

John Nash

The present expedition was formed in contemplation of a long term of service by land and sea alike, and was furnished with ships and soldiers so as to be ready for either as required.

Thucydides, on the Sicilian expedition of 415 BCE¹

Introduction

When the Allied forces landed on the island of Sicily in the early hours of 10 July 1943, it was the largest amphibious operation of the war to date. Operation Husky saw US, British and Canadian amphibious forces, preceded by airborne forces, land on the southern and eastern coasts of Sicily as the first step towards a second front to penetrate ‘Fortress Europe’.

There were many lessons learned by the Allies during the Sicily campaign, informing planning before they committed to the invasion of the Italian mainland and then France a year later. However, this article is focused on one small aspect of the campaign: the amphibious operations conducted by the US 7th Army in early August as the US and Commonwealth forces raced to capture Messina. Over the course of two weeks, US forces executed three littoral manoeuvre operations along the north coast of Sicily in attempts to cut off retreating German forces and, in turn, speed the main advance of the 7th Army along the coast road and further inland as they pushed east. The three operations conducted by the US forces feature in descriptions of the larger campaign, but their impact is usually judged to have been minimal. This article is not intended as any sort of revisionist account of why

these operations were more significant than has been previously judged by historical study. Rather, it is a short analysis of the first two operations and some lessons that can be taken away. These ‘end runs’, as they were referred to colloquially, were unique operations that had little contemporary parallel in the European theatre of war, and they demonstrated what could be achieved with the use of sea power in the littoral environment.²

Two of the three operations will be examined here: the landing to flank the San Stefano defensive line, and the landing near Brolo. The aim is to examine the effect of the operations and the important lessons that can be gleaned from them, rather than to provide a narrative of the battles. Additionally, there are lessons flowing from the use of naval gunfire support (NGS) during these operations, linked to the overall use of NGS during the campaign. There is also a brief exploration of how the US forces utilised the sea for the supply of logistics over the shore after the initial landings, aiding in their advance along the rough terrain of the northern coast. Finally, there is a short word about the Anzio landing of January 1944, arguably a grander but ill-conceived attempt at an ‘end run’ to speed the Allied advance towards Rome in the face of a seemingly similar strategic problem.

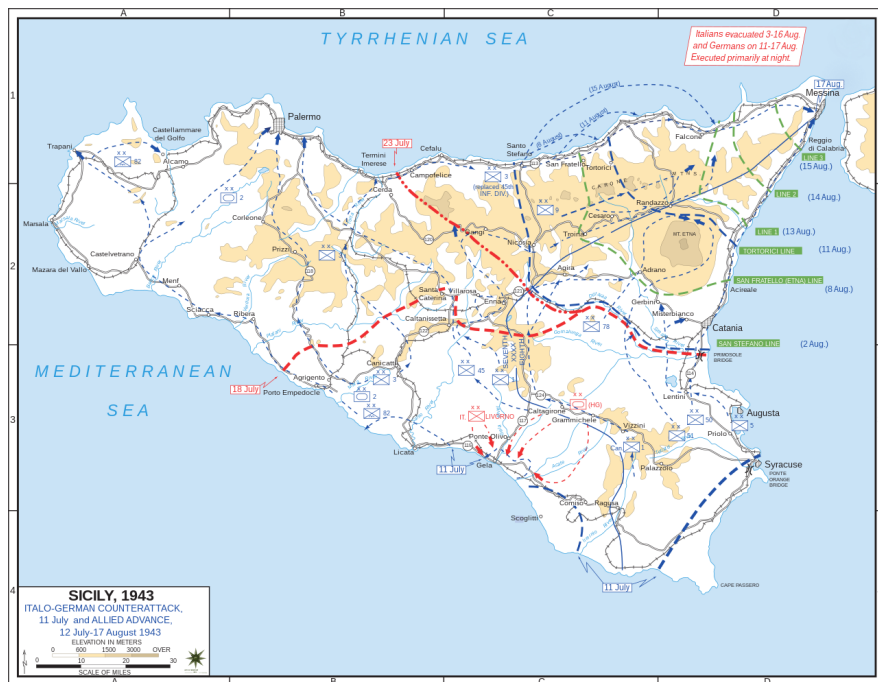


Figure 1. Operation Husky, 11 July–17 August 1943 (Source: US Army, West Point).

Sicily Campaign Overview

The Allied invasion of Sicily was a monumental undertaking, with British and Canadian forces landing on the eastern coast and the Americans landing on the southern coast, in the Gulf of Gela. Both forces were preceded by less than successful airborne landings. The US 7th Army was under the command of Lieutenant General George S Patton, and the British 8th Army under General Sir Bernard Montgomery. The two armies were under the overall command of General Harold Alexander.³ The Allied forces began their landings in the early hours of 10 July 1943, with the British advancing north towards Messina, and the American forces protecting the British left flank while also advancing north-west to capture the important port at Palermo.⁴ The goal was to reach Messina and force the Axis units to retreat off the island or, better still, cut them off from evacuation, trap them, and force a surrender. It was a straightforward enough plan, but one that was bedevilled by the unforgiving terrain of Sicily.

One of the greatest issues surrounding the Sicily campaign was this race to Messina. Much has been made of the rivalry between Patton and Montgomery and the contest over who would reach Messina first. There was no doubt in Patton's mind of the imperative of the US forces reaching Messina ahead of Montgomery. However, it is worth noting the historian Carlo D'Este's observation that this rivalry was 'one of the most misunderstood and historically distorted rivalries of the war'.⁵ For the strategic context of this paper, it is relevant that Patton saw an imperative to beat the British to Messina to prove the fighting capability of the US Army. This was not merely an issue of personal pride, though that factor cannot be ignored; nor was it only Patton on the American side who wished to see the US Army reach Messina first. Rather, it was the result of months of criticism of US forces and their fighting ability by the British. It even reached the point where the BBC broadcast a story claiming that, while the British and Canadians were engaged in the hard fighting in Sicily, US forces were busy eating grapes and swimming in the sea. Not only did this infuriate Patton, Lieutenant General Omar Bradley and other US commanders in Sicily; it angered the supreme US leader in theatre, General Dwight 'Ike' Eisenhower, to the point of writing a letter to British Prime Minister Winston Churchill saying that the BBC were undermining his efforts at creating a unified Anglo-American command in the Mediterranean.⁶ In this sense, the race to Messina had a geostrategic, not just a military-strategic, imperative, for the Americans at least.

On the more military side of the equation, the race to Messina was really about cutting off the German and Italian retreat from the island. Matters of pride and glory might be a good plotline in movies and books, but in Sicily the Allies were presented with an opportunity to trap and capture/destroy a substantial force of German and Italian troops on the island. This included the prized *Hermann Goering Division*, less valuable as a fighting force and more of a potential morale coup if they were to be trapped on the island. Given Allied sea and, to a lesser extent, air control, the only viable evacuation point to the Italian mainland was Messina. This course of action was clear to Patton by 5 August and no doubt added to the sense of haste he injected into operations to reach Messina as soon as possible.⁷ This focus is of little surprise since Patton had twice in his career served as divisional intelligence officer (G-2), a posting actively avoided by many other officers, including Bradley. Moreover, his postings as G-2 also instilled within him a greater interest in joint operations and especially amphibious operations.⁸ That so many Germans would escape Sicily to continue the fight in Italy was a source of great recrimination in later analyses.⁹ The basis for this criticism lies outside the scope of this article, but the key point is that Messina was the primary objective of Allied ground forces in the Sicily campaign. The US 7th Army's amphibious 'end run' operations were designed to speed their advance to Messina.

'General Patton's Navy': the Amphibious 'End Runs'

Having secured the important port of Palermo on the north-west coast of Sicily on 22 July, Patton was eager to head east for Messina. On 23 July General Alexander gave Patton the go-ahead to push east, setting up the well-known race to Messina between Patton and Montgomery. US forces had two roads they could use: Highway 113, which travelled along the coast; and Highway 120, the inland road. Neither route was easy to navigate, with the coast road cut at many points by streams and ridges running perpendicular to the road and creating good defensive positions, and the inland road being 'narrow and crooked, with steep grades and sharp turns'.¹⁰ Worse, mountainous terrain divided the two roads, meaning there was little mutual support except via a few roads that ran laterally north–south.¹¹ Such terrain made the area a defender's dream and an attacker's nightmare, a defining feature of the Sicilian campaign, as the British and Canadians advancing up the east coast could also attest.

To support operations along the north coast, on 27 July the US Naval Commander, Vice Admiral Henry Hewitt, created Task Force 88 (TF 88) under the command of Rear Admiral Lyal Davidson. It would, in effect, become 'Patton's Navy', tasked with four missions: defence of Palermo; naval gunfire support to the 7th Army; provision of amphibious vessels for 'leapfrog' landings behind enemy lines; and logistics support, providing sealift of supplies and vehicles to ease road and rail congestion.¹² The minute German and Italian naval threat to Palermo did not factor much in TF 88's tasking over the following three weeks, and so the naval force operated primarily to support the land force. Importantly, Patton had a good relationship with Hewitt. They were on a first-name basis and Patton was willing to defer to Hewitt and the navy over his own staff when it came to naval and landing matters.¹³ After the capture of Salerno in late July, Patton even offered Hewitt some captured German staff cars as a gift if the navy could help him reach Messina before Montgomery.¹⁴ This close relationship between the land force and the naval force was crucial to the effectiveness of the landing operations to come.

The approval on 23 July for the 7th Army to move east towards Messina saw concurrent efforts by two US divisions under Bradley's II Corps. While Major General Terry Allen's 1st Infantry Division made the inland push along Highway 120, the advance along Highway 113 fell to Major General Lucian Truscott's 3rd Infantry Division. They faced off against Generalmajor Walter Fries's *29th Panzer Grenadier Division*, supported by Italian units. The road itself was physically in good shape and could carry military traffic both ways. It was, however, very easy to block. Truscott therefore decided to make his main advance further inland across the mountains. It was still difficult terrain that favoured a defender, but with more options for manoeuvre than the coast road, which he would still advance along to keep pressure on the Germans from that direction.¹⁵ Thus, unlike Allen's advance inland, Truscott could support his main advance with a move along the coast which, in turn, could be supported by amphibious operations. This was a possibility that both Patton and Bradley had noted as early as 30 July and, as indicated, was one of the four roles for which TF 88 had been created.¹⁶ Soon after, Patton determined that this option should be exercised and agreed to Bradley's request that his II Corps time the landing in coordination with Truscott to allow for an effective link-up between the landing force and 3rd Division's forces advancing along the coast road. The 7th Army planners selected four landing places behind expected enemy

defensive lines in preparation for carrying out an amphibious ‘end run’.¹⁷ The major handicap would be that Admiral Davidson only had enough landing craft to lift one reinforced infantry battalion.¹⁸ Nevertheless, such a force had the potential to cause the Germans trouble as they attempted an orderly withdrawal east towards Messina. It was an eventuality that worried Fries, who knew he could not properly guard against all the landing spots behind his lines and could only ever spare one battalion in reserve against a landing.¹⁹ Unsurprisingly, Fries’s resources would be insufficient to counter the Allies’ superior sea power.

The first ‘end run’ was planned to land just east of the Furiano River in order to flank the German defensive positions at San Fratello. This defensive line had proved tough to crack, and Truscott’s efforts to push through from the inland side made little progress. On 6 August he gave the go-ahead for a landing behind the San Fratello line.²⁰ The force selected by Truscott was Lieutenant Colonel Lyle Bernard’s 2nd Battalion, 30th Infantry, reinforced by two batteries of the 58th Armored Field Artillery Battalion and by 3rd Platoon of A Company, 753rd Tank Battalion.²¹ Having begun their embarkation after noon on the 6th, Bernard’s force had their loading attacked by four German aircraft. Two planes were shot down, but one of the Landing Ship Tanks (LSTs) was damaged. This vessel was critical for the conduct of the operation, so the damage resulted in a postponement of the operation for 24 hours until a replacement vessel could be found.²² The landing operation was rescheduled for the early morning of 8 August. The incident highlighted a sore spot for the navy operating along the north coast: lack of air support. The US Navy official history is blunt in its assessment: ‘Adequate air cover was never provided to the ships operating along the coast.’²³ As if to punctuate this point, the next day while Bernard’s force once again began its embarkation, German aircraft conducted another attack on the landing vessels. They damaged one LST but not enough to prevent its being hastily repaired and the operation going ahead.²⁴ It was a close call and highlighted the vulnerability of amphibious units loading (or unloading) on the beach.

The landing force approached the coast undetected and without incident. The first of Bernard’s troops touched down at 0315 and, an hour later, had all been unloaded, including the vehicles. They achieved complete surprise, but the Germans reacted quickly once they discovered the Americans had landed behind their lines. Soon after, Bernard realised that his force had been landed west of the Rosmarino River rather than east of it, but he adapted to

the situation quickly.²⁵ With the attack of Truscott's forces along the road, the Germans were forced to fight in two directions, trying to breakthrough Bernard's landing force while holding off the coastal road advance of the US 7th Infantry Regiment. Fighting was fierce, and the Germans counter-attacked Bernard's force using two Italian Renault R35 and two German Mark IV tanks in an attempt to open the coast road for their withdrawal. However, the field artillery and medium tank platoon neutralised the threat, destroying both Italian tanks and one German tank.²⁶ Fighting continued into the afternoon, with the 7th Infantry linking up with Bernard's force and capturing a large number of Italians. All but one company of Germans, however, managed to escape east. The landing itself was successful but the operation failed to cut off the German retreat. Scholarly opinion has assessed that the operation caused the Germans to abandon the San Fratello defensive line earlier than expected but was otherwise of little consequence.²⁷ Still, the operation was an effective use of Allied sea power, it put pressure on the German withdrawal, and it validated the concept of amphibious 'end runs' as a means of injecting some mobility into the American advance against tough German opposition.

General Patton was pleased with the San Fratello operation. He wanted deeper strikes in conjunction with airborne drops, hoping to cut off a sizeable German force, if not the entire *29th Panzer Grenadier Division*, still some 120 km from Messina.²⁸ Facing stiff opposition, Patton was in no mood to continue to slug it out along Highway 113 and so he ordered another amphibious landing to flank the German defensive line at the Naso ridge. Patton ordered Bradley to conduct such an operation on the morning of 10 August but, in a repeat of 6 August, the Luftwaffe attacked TF 88 and sank one of the mission-critical LSTs on 10 August.²⁹ The operation was rescheduled for the 11th but the plan became complicated when the 15th Infantry did not advance far enough towards the inland position of the Naso ridge. Because of this, combined with the slow advance of the 7th Infantry along the coast, Truscott wanted to delay the landing by another 24 hours rather than risk these linking-up forces being too far away from the landing force to provide support.³⁰ This led to one of the more controversial incidents of the Sicily campaign, at least in hindsight. Specifically, in various books and histories, and even on screen, Patton and Truscott are recorded as having had it out with one another.³¹ With the slower than expected advance of 15th and 7th Infantry, and knowing that Highway 113 was the main route of retreat for the *29th Panzer Grenadier Division*, Truscott was

very concerned the landing force would be isolated for too long without support and not strong enough to stand in the way of the German retreat.³² By contrast, Patton was insistent that the operation go ahead, a view which caused considerable friction between the two commanders.

With the landing operation confirmed, Bernard's force began loading on the evening of 10 August. The landing force, consisting of nine landing vessels, covered by the cruiser USS *Philadelphia* and six destroyers, arrived off the beach in the early hours of 11 August and began their landings near the town of Brolo.³³ Bernard's infantry battalion was once again supported by medium tanks and combat engineers. An infantry company went in first, followed by the engineers, tasked with clearing the beach of any defences and securing the beachhead for the armour and remaining infantry companies. The fourth wave saw two batteries of self-propelled artillery land and, along with the tanks, provided the main organic fire support elements for the landing force.³⁴ The landings went off without major issue and the entire landing force made it ashore in under two hours, without resistance or loss.³⁵ Again, it did not take long for the Germans to respond. Indeed General Fries had stationed a force in and around the town of Brolo to guard against such a landing, having been worried about a repeat of the San Fratello landings.³⁶ The local German commander, Colonel Fritz Polack, informed General Fries of the situation, who found it alarming, seeing the real possibility that the division's line of retreat could be cut off. In response, Fries ordered Colonel Polack to counterattack the American landing force.³⁷ So alarmed was he that he pulled forces off the main defensive line of the Naso ridge and had them attack east to try to clear Bernard's force from his main line of retreat.³⁸ Clearly the US landing had realised one of Fries's fears: being outmanoeuvred via the sea.

Of critical importance to the support of the landing force was the provision of NGS. The light cruiser *Philadelphia* was armed with fifteen 6-inch guns and eight 5-inch guns, representing the bulk of the afloat firepower, supported initially by six destroyers. The NGS provided was accurate and crucial in supporting the forces ashore. The weight of fire from the ships was enormous, with *Philadelphia* alone expending 1,062 6-inch shells throughout the day.³⁹ However, poor communications between ship and shore meant that, on three occasions, the ships departed the landing zone and had to be recalled by 7th Army HQ soon after each departure.⁴⁰ The main factor was communication, which was inconsistent and constantly

dropped out. Combined with patchy and inconsistent air cover, this meant that the ships were vulnerable to air attack and unwilling to stay on the scene when they ceased receiving calls for fire. Without communication with the troops ashore, the ships were unable to fire on any targets and were thus merely targets for German air attack.⁴¹ Unwilling to wait around for a re-establishment of communication while under threat of air attack, the ships were naturally inclined to retire.

Nevertheless, the NGS provided was critical in supporting the landing force. Even just the appearance of the friendly warships boosted the morale of the troops ashore.⁴² The first time on station saw *Philadelphia* lay accurate fire on Fries's eastbound troop convoy, destroying several vehicles and scattering the infantry.⁴³ The first recall of the ships was a result of the Germans massing for a counterattack with two infantry companies and several tanks. More worryingly, Bernard's request for support surprised Truscott, who was not aware that the TF 88 warships had departed the scene.⁴⁴ Thankfully, TF 88's liaison officer in 7th Army HQ received the urgent request for fire support, and Admiral Davidson sent the cruiser and two destroyers back to Brolo at 31 knots.⁴⁵ The arrival of the three ships coincided with a friendly air strike by 12 A-36s, and this combined firepower helped break up the German attack.⁴⁶ During the final engagement, after TF 88's second recall, one of the officers from the shore party was forced to commandeer a DUKW to physically go out to the ships in order to establish contact. Fortuitously, this effort was successful, and the cruiser once again went to work. This included an interruption as eight German aircraft attacked the ships. The Luftwaffe aircraft caused no damage but lost seven of their number to the ships' anti-aircraft fire and Allied air cover.⁴⁷ Had it not been for the constant breakdowns in communication between ship and shore, and had more friendly air cover been available, the warships could have remained on station the whole day and provided or been ready to provide constant fire support.

Despite the support provided by the Allies' naval and, to a lesser extent, air forces, the Germans were still able to put great pressure on Bernard's small force. As the afternoon turned to evening, Bernard had decided to consolidate his forces on Monte Cipolla and await relief. The 71st *Panzer Grenadier Regiment* took control of the highway and opened an escape route east, and was gone by the early hours of 12 August.⁴⁸ With the Germans speeding east towards Messina and evacuation from Sicily,

a third landing operation was planned and then executed on 16 August. It was to no effect, however, as the US forces advancing along the coast had already overrun the landing zone and so the Regimental Combat Team (RCT) assigned to the landing was met by friendly forces.⁴⁹ Soon after this the US forces reached Messina, with the German forces having successfully evacuated across the Strait of Messina to mainland Italy.

Analyses of the Brolo landing operation see it as of minor consequence, no doubt speeding the German withdrawal and, as seen above, causing German high command some serious anxiety. The landing did not, however, cut off the German retreat, and it inflicted modest but not disproportionate casualties.⁵⁰ Patton's push for the landing operations caused severe tension with both Truscott and the reluctant Bradley, who never liked the idea of the amphibious operations and preferred a slow and steady slog against the German forces. The question then is what would have made these operations more effective, especially the Brolo landing, which did cause the Germans much concern. More than anything, the main lesson agreed on by modern analyses is that the landing force was too small. A reinforced infantry battalion did not have the mass to stop the retreating Germans and thus allowed them to punch through the thin cordon blocking their escape route. Modern scholars agree that a larger force, such as an RCT, would have had a far higher chance of success.⁵¹ It is hard to disagree with this conclusion and it seems clear that a larger landing force would have made the difference. Nevertheless, it is worth noting that, although the third and final operation had nil impact on the campaign, the fact that it consisted of an RCT helps demonstrate that this lesson had been learned. More importantly, the decision to land a larger force was only made because the navy could provide more landing craft at that time. The reason why the San Fratello and Brolo landings were conducted by a reinforced infantry battalion was precisely because that was the largest force that could be lifted by the naval forces available. Notwithstanding this restriction, the core lesson remains. To be effective, such littoral manoeuvre operations require sufficient weight of numbers. In the Sicily examples, this would have been a larger force able to withstand German attempts at a breakthrough.



Figure 2. Lieutenant Colonel Lyle Bernard (right) and Lieutenant General George S Patton (left) near Brolo, 12 or 13 August 1943 (Source: US National Archives and Records Administration, NWDNS-111-SC-246532).

The second core lesson from these littoral manoeuvre operations is the criticality of support for landing forces, during and after landing operations. This includes organic fire support, such as armour and artillery, as well as both naval and air support. A platoon of tanks was included in both landing forces, and they proved invaluable in supporting the infantry units, especially during the San Fratello operation, where they helped neutralise German and Italian armour. Despite possessing some organic artillery support, two batteries of self-propelled guns, the landing force

at Brolo was nevertheless reliant on fire support provided by the cruiser *Philadelphia* and the accompanying destroyers. The self-propelled guns took time to position, and the nature of the terrain limited their movement and placement. Bernard's 81 mm mortars were extremely effective but suffered from the need to be supplied from the beach via mule train over the mountainous terrain. Finally, the landing force was far enough behind the enemy lines that it was at the very extreme range of the 155 mm guns of 3rd Division. These guns could fire on the Germans in Brolo, but the extreme range affected their accuracy.⁵² German air attacks focused on the naval ships rather than Bernard's ground force, and so the issue of organic anti-aircraft support—or a lack thereof—does not come up. Still, it would be another critical factor to consider, given the force was not operating in an environment of friendly air control.

The lack of sufficient friendly air support had two key effects on the landing operations. Firstly, before the operations had even begun, enemy air interdiction damaged the US amphibious vessels at the embarkation zone, causing delays to the first operation and almost delaying the second. The US forces were perhaps lucky that German air power had been so degraded over the previous few weeks and could not mass larger attacks. Secondly, the air attacks on the supporting warships during the Brolo landing caused the ships to break off from providing critical NGS to the troops ashore as they had to defend themselves from the air attack. Again, the US was fortunate that the German air forces could not muster a large enough force to seriously threaten the warships—not to say that it was not a dangerous situation. This is in addition to the obvious impact of poor air support which delivered insufficient sorties to support the forces ashore. Air support was promised by XII Air Support Command, but it could not give timings or even number of planes. Two sorties of 12 A-36s eventually materialised at an important juncture and provided good support. Further air support was promised but again with no detail.⁵³ A third sortie did eventuate, but the seven A-36s had poor situational awareness and two bombs landed on Bernard's command post, causing 19 casualties and knocking out several howitzers.⁵⁴ This deficiency once again highlights the importance of having reliable communications with all supporting forces.

All these lessons on 'amphibious attacks' are neatly summarised in 7th Army's assessment of the campaign. The Deputy Commander, Major General Geoffrey Keyes, wrote to Patton:

*When a parallel flank commanded by the Navy exists, it is very important to use amphibious attacks in rear of the enemy's position. These amphibious attacks should be in a strength at least equivalent to a reinforced combat team, because such a force can land further in rear of the enemy and can be self-sustaining for a period of days. Navy gunfire support is vital.*⁵⁵

The 'end run' operations were imaginative and well planned, and the landing phase was executed almost without fault. The 'almost' refers to the San Fratello landing force being put ashore on the wrong side of the Rosmarino River. Landing on the wrong beach is always a risk in amphibious operations, but in this case, it had minimal effect on the operation's outcome, largely due to the quick reaction of Bernard once he realised they were in the wrong position. Still, it proved to be a valuable lesson for all the force involved, at sea and ashore. Despite their limited effect on the campaign, these operations proved a concept and demonstrated the effect that could be had by solid navy–army 'joint' operations in the littoral.

The British Advance

The efficacy of US amphibious 'end run' operations may be debatable but they provide a useful case study. On the other side of Sicily however, there were no such operations. General Montgomery steadfastly refused to consider conducting similar operations as his forces advanced northwards towards Messina. The most scathing critique of the British non-approach to conducting similar amphibious operations came from the Royal Navy's own Admiral Andrew Cunningham. Both the British and US official naval histories of the war quote him as saying:

*There were doubtless sound military reasons for making no use of this, what to me appeared, priceless asset of sea power, and flexibility of manoeuvre; but it is worth consideration for future occasions whether much time and costly fighting could not be saved by even minor flank attacks, which must necessarily be unsettling to the enemy. It must always be for the General to decide. The Navy only provide the means, and advise on the practicability from the naval angle of the projected operation. It may be that, had I pressed my views more strongly, more could have been done.*⁵⁶

Even more cutting is his brief comment on the American ‘end run’ operations: ‘a striking example of the proper use of sea power’.⁵⁷ While this analysis of the US operations dismissed them as having been of limited value operationally, the overall opinion of contemporaries seems to be that they were worth the effort. Leaving aside the fraught issue of motivation in the race to Messina, these ‘end runs’ were seen by the Allies, and the Germans, as an effective use of sea power. The Royal Navy Official Historian Stephen Roskill came to the careful conclusion that a well-planned and well-resourced landing operation had the potential to cut off the German retreat to Messina.⁵⁸ The landings that were carried out by the US forces demonstrated the potential of using the sea as an operational manoeuvre space.

Support Operations: Naval Gunfire Support and Logistics over the Shore

There are two further maritime aspects of the Sicilian campaign worth mentioning in parallel to the manoeuvre operations. The first, covered partially above, is the provision of NGS, and the second is the provision of logistics over the shore.

NGS played a crucial role during the initial US 7th Army landings in the Gulf of Gela. Detailed analysis of the landings at Gela and subsequent battles are outside the scope of this article, but a summary is needed here. Essentially, the NGS provided by cruisers and destroyers in the Gulf of Gela was crucial in blunting the German and Italian counterattacks on D-Day and D+1. The fire support was accurate, timely and effective, including against German and Italian armour.⁵⁹ Patton praised the NGS as having been ‘outstanding’ and noted that it had been effective even at night, landing on target within the third salvo.⁶⁰ Altogether, on 10 July (D-Day) four warships fired 572 rounds and on 11 July (D+1) 10 ships fired 3,199 rounds—the destroyer USS *Beatty* alone firing 799 rounds of 5-inch ammunition.⁶¹ The effectiveness of the NGS during the initial landings erased any doubt in the minds of Patton and the other army commanders that the navy could provide effective fires ashore. After the capture of Palermo and the US drive east along highways 113 and 120, US warships continued to provide NGS, both in support of troops ashore and against fixed defensive positions.⁶² German movement along Highway 113 itself was hampered by Davidson’s

warships conducting NGS, being more effective than heavy artillery or air strikes. From Santo Stefano east to Cape Orlando, Davidson's ships hampered Fries's withdrawal with NGS.⁶³ Naval firepower had an impact not only in direct support of troops ashore but also independently in hitting targets of opportunity along the ill-defended coast.



Figure 3. US Navy cruiser USS *Brooklyn* (CL-40) providing naval gunfire support to troops ashore during the Husky landings, 10 July 1943. USS *Philadelphia* was of the same class of ship (Source: Brooklyn class) (US Naval History and Heritage Command, ID 80-G-42522).

On the British side, NGS played an important role in supporting the initial landings, but less so during the rest of the campaign. The Royal Navy (RN) forces were equipped with monitors armed with 15-inch guns, capable of delivering devastating fire. During the British and Canadian advances there were approximately 200 calls for fire answered by RN ships.⁶⁴ NGS was used to support the advance north towards Messina, but the results seem to have been disappointing, even with the big guns of the monitors.⁶⁵ In his history, SE Morison is not complimentary of the British NGS effort, finding

it to have been ‘not impressive’.⁶⁶ To be fair, he also acknowledges that the US had better opportunities to prove their NGS capability.⁶⁷ Perhaps a key difference between the US and RN operations is the absence of landings like the US ‘end runs’. These landings forced the Germans to concentrate and left them open to the guns of the fleet. The use of NGS during the campaign is a major focus of Morison’s official history volume, and indeed is described by him as a secondary theme of the book. The revolution in technology and tactics that allowed for more accurate and responsive NGS caused him to remark: ‘Thus the Navy acquired a new function in amphibious warfare; and its development is one of the fascinating and significant things related to this volume.’⁶⁸ This represented an important step forward for combined land-sea operations in the littoral.

Had the efficacy of the new NGS capability been apparent beforehand, perhaps the Allied naval forces would have been less reluctant to aggressively patrol the Strait of Messina. Conventional wisdom was derived from the oft-quoted line by Admiral Horatio Nelson that a ship was a fool to fight a fort. James Holland refers to this pithy saying when concluding that the Allies would have been foolish to push into the Strait of Messina, guarded by hundreds of shore batteries.⁶⁹ Interestingly, Morison notes at the very beginning of his volume on the campaign: ‘I cannot recall that enemy coastal batteries in the Mediterranean registered a hit on any Allied naval vessel larger than an LST, or more than a mile from shore.’⁷⁰ In this respect, the Sicily campaign is one more chapter in the war of concepts and doctrine on whether ships or shore-based systems have the upper hand. As in most complex issues of maritime operations, the answer no doubt lies in the context of the situation, rather than bold assertions of technological supremacy or obsolescence.

Less glamorous, but no less important, was the use of naval assets for logistics support over the shore during the American advance east towards Messina. Once a firm foothold had been established on the island, the movement of supplies from the beachhead and, once opened, the ports became an important logistical effort. Although Palermo was open to deep-draught vessels and thus a great volume of supplies, there was still the issue of getting said supplies to the front. As outlined above, the terrible state of road and rail transportation made this very difficult. By employing smaller naval craft to lift supplies along the coast onto beaches much closer to the front, advancing US forces were kept supplied and in the

fight. This enabled US forces to continually place pressure on the retreating Germans. So critical was this enabler that Eisenhower, in his ‘Commander-in-Chief’s Dispatch’ on the Sicilian campaign, wrote that ‘the movement of essential supplies by sea direct to the advancing armies materially hastened the end of the campaign’.⁷¹ Stephen Roskill made the observation that a key enabler of success in the operation was the introduction of the new American capability, the DUKW. This new capability enabled the Allied forces to sustain operations over the beach instead of relying on the early capture of a port.⁷² While it could never match the output of a port facility, it nevertheless enabled better logistics over the shore, including in the above use of resupply along the coast.

Not just supplies but whole combat formations were also moved using sealift. In preparation for the first amphibious operation near San Fratello, on 4 August the 7th RCT and attached corps artillery was loaded onto navy landing craft and shuttled east along the coast for pre-positioning.⁷³ As the Germans continued their withdrawal towards Messina they ensured the destruction of the roads and bridges behind them to slow the US advance. On 13 August as the US forces advanced past Cape Calava they used LCTs to load infantry and artillery and go around the damaged road at the Calava tunnel—damage that took 24 hours to repair.⁷⁴ Thus the US forces were able to keep up an advance despite the damaged road.

Sicilian Legacy—Anzio, the Grand ‘End Run’?

A natural question arising from a study of the Sicily amphibious operations is how much they influenced Operation Shingle, the landing at Anzio on 22 January 1944. On the face of it, the Allies were in a similar position. Harsh terrain that heavily favoured the defender was slowing the Allied advance north through mainland Italy, the enemy positions were exposed to a flanking attack from the sea, and the Allies maintained sea control in the Italian littoral. In September–October 1943, Allied thinking indeed turned towards an amphibious operation as a potential means of breaking through the German defences at the ‘Gustav Line’ and continuing the advance towards Rome.⁷⁵ In the words of Morison, ‘Why not exploit their sea power to effect one or more ‘end runs’—amphibious landings behind the enemy’s right flank, to divert his strength and cut off his routes from Germany.’⁷⁶ General Alexander’s thinking clearly illustrates that the Anzio landing was

designed to pull German forces away from their main defensive line and allow for an Allied breakthrough.⁷⁷ Planning for such an operation would be constantly overshadowed by the demands of operations Overlord and Anvil, the two amphibious operations to invade northern and southern France, respectively. In a similar vein to the Sicilian operations, the key limiting factor in these (and any) amphibious operations was the availability of suitable vessels and landing craft for an initial lodgement and subsequent sustainment. Unlike in the Sicilian operations, a meet-up between the landing force and the relief force was not expected to occur on the same day, so more robust logistics would be required at Anzio.

Nevertheless, if the rationale behind Anzio seemed to follow that of the 7th Army's Sicilian manoeuvres of early August 1943, it was only in the broadest sense and without proper consideration of lessons that should have been learned. In the first place, German forces in Sicily had been withdrawing and the idea of the operations had been to cut off retreating Germans. On the mainland, Anzio was devised as a means of outflanking a static defensive line, against a strong German force that had significant reserves in place.⁷⁸ More importantly, during the Brolo operation both Truscott and Bradley had been hesitant to go ahead with the landing because they considered that the main force advance along the coast was too far from the beachhead, putting the amphibious force at risk of being overwhelmed. At Anzio, this main body (US 5th Army) was much further from the beachhead and was essentially stalled in its own advance. It was for this reason that Morison's final judgement was that Operation Shingle was 'doomed by its very nature to drag along for months'.⁷⁹ It is hard to dispute his contention that such an operation should have been conducted closer to the 5th Army's stalled front line where the two fronts would have been mutually supporting.⁸⁰ After the Anzio advance stalled, the British were pushing for postponement or cancellation of Anvil because they saw the need to reserve forces and amphibious assets—enough to lift one entire division—for further 'end runs'.⁸¹ Indeed, the Germans did not view Anzio as much connected tactically to the main Allied advance up the Italian mainland. The Head of Operations staff at Oberkommando der Wehrmacht (OKW), General Alfred Jodl, considered it an independent operation, likely one in a series forcing the Germans to disperse forces to different fronts and weaken their reserves before the long awaited cross-channel invasion.⁸² This might have misread Allied intent, but practically speaking it was fairly accurate.

The second point worth highlighting is that, just as with the two Sicily landings, the Anzio operation was not of sufficient force size to have a decisive impact. It may have seen two divisions landing rather than a reinforced infantry battalion, but the principle of concentration of force remained relevant. In the face of ample German reserves, the landing force was simply not large enough to do more than hold the beachhead and could not be sustained or reinforced rapidly enough to exploit the beachhead. The force was too small and too far away to put pressure on the Gustav Line, and in this sense the Germans seem correct in having judged the Anzio landing as a separate operation to the main Allied push, even if that was not the Allied intent.

In the end, while planning for Anzio may have had the Sicilian ‘end runs’ in mind as a means of breaking a defensive line, it was not so simple in practice. Anzio was not, and could not be under the circumstances, a grand style ‘end run’ like those conducted in Sicily. The 7th Army’s amphibious operations were excellent examples, however imperfect, of the use of the maritime environment as an *operational* manoeuvre space. Good strategy is not simply a matter of scaling up effective operations.

Conclusion

The Sicily campaign of July–August 1943 bears many lessons for those wishing to delve into amphibious operations and questions of littoral manoeuvre. This article has focused on one small aspect of the overall campaign: the amphibious ‘end runs’ conducted by the US 7th Army along the north coast of Sicily. The landings at San Fratello and Brolo sped up the German retreat and had the potential to cut off German formations.

In the end, the forces landed were too small to effectively block the German retreat. This is the first lesson: that such operations need a body of mass sufficient to hold up a retreating enemy and prevent them breaking through a cordon. In the Sicily case, an infantry battalion reinforced by self-propelled guns and a single tank platoon was insufficient for this task. By all accounts, a larger RCT would have provided the required combat power.

The second lesson is the importance of navy–army–air force cooperation. Aside from the obvious lesson that one must have at least working sea control, this in itself is not enough to guarantee success. A landing force

behind enemy lines, or even isolated from other friendly land forces, is vulnerable and, even with organic fire support, still requires external fires. This means naval and air support, and it means solid communications between ground and sea–air forces. Without reliable communication between ships and shore, the supporting warships had to break contact several times lest their bombardments hit friendly forces. In the two examples above, the Allied forces did not have air superiority. Relatively small German air attacks were able to twice disrupt naval forces embarking ground forces, causing one to delay and almost delaying another. During the operations small German air forces were still able to threaten the beachhead and supporting naval units. In the latter case, this necessitated the ships breaking off from the provision of vital NGS support in order to defend themselves from the air attack. That the promised Allied air support came with no detail as to timings or sortie size was of great concern to the land commanders. Even worse, with such poor communication between ground and air forces, unnecessary casualties were suffered by the ground forces on the receiving end of ‘friendly fire’ from the attack aircraft.

Two highlights stand out from these supporting operations. The first is the potential for naval units to provide support ashore, in this case through accurate, timely and effective NGS. Moreover, while a lack of friendly air support saw the ships forced to break off supporting fires, it did at least ensure these hostile aircraft did not attack the forces ashore. The second noteworthy positive was the use of maritime assets for resupply of ground forces. The Sicilian terrain was incredibly rugged and not conducive to moving large amounts of stores from supply areas to the front. Allied sea control allowed for the use of amphibious craft to deliver supplies along the coast close to where they were needed. Oft overlooked, the criticality of logistics needs to be constantly reinforced, and the potential of maritime space to provide an avenue of resupply highlighted.

The Allied campaign in Sicily was a success, despite the large-scale evacuation of German forces. The two amphibious ‘end run’ operations explored in this article were a small but notable part of the campaign. They were an excellent example of how proper use of the sea grants options to ground forces. They remain a prime example of using the sea as an operational manoeuvre space to gain advantage over an adversary.

About the Author

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Endnotes

- 1 Thucydides, *History of the Peloponnesian War*, 6.31.3.
- 2 Space precludes a comparison with the Pacific theatre of war and the many amphibious operations conducted there.
- 3 For a comprehensive order of battle of sea, land, and air forces for the Allies, Italians, and Germans, see James Holland, *Sicily '43: The First Assault on Fortress Europe* (London: Penguin Random House, 2020), pp. 603–632.
- 4 Only after Patton pushed Alexander for this course of action.
- 5 Carlo D'Este, *Bitter Victory: The Battle for Sicily, 1943* (New York: E.P. Dutton, 1988), p. 445.
- 6 For more on this, see D'Este, *Bitter Victory*, pp. 449–450.
- 7 Lieutenant General George Patton, 'Summary of Operations: The Operation', in *Report of Operations of the United States 7th Army in the Sicilian campaign, 10 July – 17 Aug 1943* (1943), p. B-16. Ike Skelton Combined Arms Research Library, Special 940.514273 U56ro, at: cgsc.contentdm.oclc.org/digital/collection/p4013coll8/id/3295.
- 8 Bradley calling those who ended up assigned to intelligence as 'misfits' and the G-2 as a 'dumping ground' and saying, 'I recall how scrupulously I avoided the branding that came with an intelligence assignment in my own career'. James Kelly Morningstar, *Patton's Way: A Radical Theory of War* (Annapolis, MD: Naval Institute Press, 2017), p. 126.
- 9 Witness the title of one of the most influential works on the campaign, Carlo D'Este's *Bitter Victory*. He begins his brutal analysis by saying: 'That Alexander never understood the consequences of the campaign he had so ineptly led typified the unsatisfactory ending to Operation Husky.' See D'Este, *Bitter Victory*, pp. 523–564. More understanding of the Allied concerns that held up a more vigorous naval operation to block the Strait of Messina are the US and RN histories, respectively: Samuel Eliot Morison, *Sicily-Salerno-Anzio January 1943 – June 1944. History of the United States Naval Operations in World War II, Volume Nine* (Edison, NJ: Castle Books, 1954), pp. 220–221; SW Roskill, *The War at Sea 1939–1945, Volume 3, Part 1. History of the Second World War: United Kingdom Military Series* (London: Her Majesty's Stationery Office, 1960), pp. 146–152. James Holland is far kinder in his conclusion, perhaps overly so given the ample opportunities the Allies had to do something more to interdict the German retreat across the strait. See Holland, *Sicily '43*, pp. 577–582. Holland is certainly correct in identifying that overall Husky was a success and did lead to more effective Allied operations afterwards.
- 10 Albert N Garland and Howard McGaw Smyth, *Sicily and the Surrender of Italy. The Mediterranean Theater of Operations. United States Army in World War II* (Washington, DC: US Army Center of Military History, 1993), p. 309.
- 11 *Ibid.*, pp. 309–311.
- 12 Morison, *Sicily-Salerno-Anzio*, p. 191.
- 13 They addressed each other as 'Kent' and 'Georgie' in written correspondence. Rick Atkinson, *The Day of Battle: The War in Sicily and Italy, 1943–1944* (London: Abacus, 2013), pp. 31, 42–43.
- 14 *Ibid.*, p. 143.
- 15 Garland and Smyth, *Sicily and the Surrender of Italy*, p. 348.
- 16 *Ibid.*, pp. 348–349.
- 17 *Ibid.*, p. 349.
- 18 *Ibid.*, p. 349.
- 19 *Ibid.*, p. 357.
- 20 *Ibid.*, p. 360.

- 21 Ibid., p. 352; Lt Colonel G Felber, 'After Action Report 753rd Tank Battalion', Operations of 753rd Tank Battalion (M), in Sicilian Campaign (August 1943), p. 4. Ike Skelton Combined Arms Research Library, at: cgsc.contentdm.oclc.org/digital/collection/p4013coll8/id/3506.
- 22 Garland and Smyth, *Sicily and the Surrender of Italy*, p. 360.
- 23 Morison, *Sicily-Salerno-Anzio*, p. 192.
- 24 Garland and Smyth, *Sicily and the Surrender of Italy*, pp. 361–362.
- 25 Ibid., p. 363.
- 26 Ibid., p. 363.
- 27 Ibid., pp. 363–367. See also D'Este, *Bitter Victory*, pp. 477–479.
- 28 Garland and Smyth, *Sicily and the Surrender of Italy*, p. 380.
- 29 Ibid., pp. 388–389.
- 30 Ibid., pp. 389–390.
- 31 'Object of bitter American controversy' in D'Este's words: D'Este, *Bitter Victory*, pp. 479–480. The incident featured prominently in the 1970 movie *Patton*, down to Patton's quoting of Frederick the Great in urging Truscott 'L'audace, l'audace, toujours l'audace' (audacity, audacity, always audacity).
- 32 Garland and Smyth, *Sicily and the Surrender of Italy*, pp. 389–391.
- 33 One LST, two LCIs and six LCTs carrying LCVPs and DUKWs. Morison, *Sicily-Salerno-Anzio*, p. 192.
- 34 This tank platoon was a different one from that involved in the San Fratello landing a few days earlier, this time from Company B of the 753rd Tank Battalion. See Felber, 'After Action Report 753rd Tank Battalion', p. 4; Garland and Smyth, *Sicily and the Surrender of Italy*, pp. 393–394.
- 35 Garland and Smyth, *Sicily and the Surrender of Italy*, pp. 394–396.
- 36 Ibid., p. 393.
- 37 Ibid., pp. 396–397.
- 38 Ibid., p. 398.
- 39 The destroyers were each armed with four 5-inch guns. Garland and Smyth, *Sicily and the Surrender of Italy*, p. 403, n.6.
- 40 Departed first time 0930 after all pre-arranged targets had been hit and no more calls came in from ashore; recalled at 1200 and arrived back on station 1400. Departed again at 1500 and recalled again an hour later, arriving sometime before 1700. Morison, *Sicily-Salerno-Anzio*, pp. 203–204. The army account has the ships leaving the first time at 1025: Garland and Smyth, *Sicily and the Surrender of Italy*, p. 399.
- 41 See Morison, *Sicily-Salerno-Anzio*, pp. 203–205.
- 42 D'Este, *Bitter Victory*, p. 481.
- 43 'On station' refers to the ship positioned in its assigned area of operations prepared to conduct duty, in this case naval gunfire support. Garland and Smyth, *Sicily and the Surrender of Italy*, pp. 398–399.
- 44 Ibid., pp. 400–401.
- 45 Destroyers *Ludlow* and *Bristol*. Morison, *Sicily-Salerno-Anzio*, p. 203; Garland and Smyth, *Sicily and the Surrender of Italy*, p. 401.
- 46 The A-36 was the ground attack version of the more famous P-51 Mustang. Garland and Smyth, *Sicily and the Surrender of Italy*, p. 401.

- 47 Five claimed by *Philadelphia*, and one each credited to *Ludlow* and a US Army fighter plane. Morison, *Sicily-Salerno-Anzio*, p. 204; Garland and Smyth, *Sicily and the Surrender of Italy*, p. 403.
- 48 Garland and Smyth, *Sicily and the Surrender of Italy*, pp. 403–404.
- 49 *Ibid.*, pp. 407–408, 413–415.
- 50 Suffering approximately the same as the US 3rd Division during the attack. Garland and Smyth, *Sicily and the Surrender of Italy*, p. 405.
- 51 D'Este, *Bitter Victory*, p. 481; Garland and Smyth, *Sicily and the Surrender of Italy*, pp. 404–405; Atkinson, *The Day of Battle*, p. 162; Holland, *Sicily '43*, p. 568.
- 52 Garland and Smyth, *Sicily and the Surrender of Italy*, pp. 400–401.
- 53 *Ibid.*, pp. 401–402.
- 54 *Ibid.*, p. 403.
- 55 Major General G Keyes to Lieutenant General George Patton, 'Summary of Operations: Lessons Learned', *Report of Operations of the United States 7th Army in the Sicilian campaign, 10 July – 17 Aug 1943* (1943), p. C-9. Ike Skelton Combined Arms Research Library, Special 940.514273 U56ro, at: cgsc.contentdm.oclc.org/digital/collection/p4013coll8/id/3295.
- 56 Morison, *Sicily-Salerno-Anzio*, pp. 206–207; Roskill, *The War at Sea 1939–1945*, pp. 142–143.
- 57 Craig Symonds, *World War II at Sea: A Global History* (New York: Oxford University Press, 2018), p. 441.
- 58 Roskill, *The War at Sea 1939–1945*, p. 152.
- 59 See D'Este, *Bitter Victory*, pp. 279–302; Atkinson, *The Day of Battle*, pp. 102–103.
- 60 George S Patton, *War as I Knew It* (New York: Bantam Books, 1980), p. 57.
- 61 Morison, *Sicily-Salerno-Anzio*, p. 113.
- 62 *Ibid.*, p. 197.
- 63 Garland and Smyth, *Sicily and the Surrender of Italy*, p. 352.
- 64 Roskill, *The War at Sea 1939–1945*, p. 138.
- 65 *Ibid.*, p. 143.
- 66 Morison, *Sicily-Salerno-Anzio*, p. 207.
- 67 *Ibid.*, p. 222.
- 68 *Ibid.*, p. xi. While he is writing a volume on the US Navy, given Morison's wide sweep of the naval war he certainly could be taken to mean that all navies now had a new function providing NGS during amphibious operations.
- 69 Holland, *Sicily '43*, p. 572. He does observe that Nelson did not listen to his own advice, attacking the heavily fortified city of Copenhagen.
- 70 Morison, *Sicily-Salerno-Anzio*, pp. xi–xii.
- 71 General Dwight D Eisenhower, 'Allied Force Headquarters. Commander-in-Chief's Dispatch, Sicilian Campaign, 1943' (1943), p. 32. Ike Skelton Combined Arms Research Library, N13457, at: cgsc.contentdm.oclc.org/digital/collection/p4013coll8/id/5501.
- 72 Roskill, *The War at Sea 1939–1945*, p. 115.
- 73 Not all at once, noting the above point that there were insufficient LSTs to lift an RCT in one movement at this time. Patton, 'Summary of Operations: The Operation', p. B-16.
- 74 *Ibid.*, p. B-20.

- 75 For a comprehensive overview of the discussions and planning that followed, see Martin Blumenson, *Salerno to Cassino. The Mediterranean Theater of Operations. United States Army in World War II* (Washington, DC: US Army Center of Military History, 1993), pp. 235–248, 293–304.
- 76 Morison, *Sicily-Salerno-Anzio*, p. 317.
- 77 This was also clear in the thinking of Commander 5th US Army, Lieutenant General Mark Clark. CJC Molony, *The Mediterranean and Middle East, Volume 5: The Campaign in Sicily, 1943 and the Campaign in Italy, 3rd September 1943 to 31st March 1944. History of the Second World War: United Kingdom Military Series* (London: Her Majesty's Stationery Office, 1973), pp. 600, 602.
- 78 Allied intelligence itself was reporting that the Germans had two divisions near Rome, a mere 30 km away, a division within three days' travel time, and another two in northern Italy that could arrive at the beachhead within two weeks. Blumenson, *Salerno to Cassino*, pp. 35–54.
- 79 Morison, *Sicily-Salerno-Anzio*, p. 380. Alexander even asked for a new commander, 'a thruster like George Patton', to take charge at Anzio and help push the attack along. Martin Blumenson, *Patton: The Man Behind the Legend, 1885–1945* (New York: William Morrow, 1985), p. 220.
- 80 Morison, *Sicily-Salerno-Anzio*, p. 381.
- 81 Operation Anvil was later renamed Operation Dragoon. Gordon A Harrison, *Cross-Channel Attack. The European Theater of Operations. United States Army in World War II* (Washington, DC: US Army Center of Military History, 1993), p. 169; Molony, *The Campaign in Sicily 1943 and the Campaign in Italy, 3rd September 1943 to 31st March 1944*, pp. 844–845.
- 82 82 OKW technically was the Armed Forces High Command, but by 1944 in practice was the command responsible for the war outside of the Eastern Front. Forrest C Pogue, *The Supreme Command. The European Theater of Operations. United States Army in World War II* (Washington, DC: US Army Center of Military History, 1989), pp. 175–176; Harrison, *Cross-Channel Attack*, p. 232; Molony, *The Campaign in Sicily 1943 and the Campaign in Italy, 3rd September 1943 to 31st March 1944*, p. 621.

Climate Change and the Future Character of War

Albert Palazzo

Introduction

The results of humanity's addition of greenhouse gases to the atmosphere are now being felt. The atmospheric concentration of carbon dioxide, methane, nitrous oxide and other greenhouse gases has increased alarmingly since the Second World War, and as a consequence the earth is warming, and is doing so at an accelerating rate. Humanity's modification of the atmosphere began in the 18th century with the onset of industrialisation and the burning of fossil fuels. To date, international efforts to stop the emission of these gases have largely been unsuccessful, particularly in the critical high-emitting nations. For all of humanity, the consequences are now unavoidable; climate change has arrived.

Much has been written and reported about climate change, so its onset and effects should come as no surprise.¹ The seas are rising, the ice is melting, storms are becoming more potent and the animals and plants that cannot adapt rapidly enough to new conditions are dying. What may come as a surprise to some, however, is that climate change also represents a major national threat to the security of Australia, as well as to that of other nations. In fact, it is arguable that climate change is the most serious threat the nation has ever faced.

Numerous senior military leaders are alive to the risk that climate change represents to their respective states. In Australia, General Angus Campbell, Chief of the Defence Force, has observed that 'climate change and Australia's national security are inextricably linked'.² A former commander of what was previously known as the United States (US) Pacific Command, Admiral Samuel Locklear, has called climate change the biggest danger in his area of responsibility, a position he reiterated to the United States Senate Committee on Armed Services.³ In the United Kingdom, Rear Admiral Neil Morisetti has declared that no country can afford to ignore the risks to its security from a rising temperature.⁴ These positions are not unusual within the military community. Between 2017 and 2019, more than 35 senior US Department of Defense officials publicly voiced their concerns over the security implications of climate change.⁵ President Biden's Secretary of Defense, Lloyd Austin, has continued the pattern by labelling climate change an 'existential threat'.⁶

In the light of climate change, Australia's military and political leaders, as well as its defence strategists and planners, must re-express and reprioritise how they identify, assess and ameliorate the nation's security risks. The traditional approach is state focused and requires defence planners to assess the threat of a potential adversary state and, with government's agreement, put into place appropriate defence policies that reduce the risk to an acceptable level. For example, in the early years of the 20th century, Australian leaders identified Japan as the most likely threat to its territory and interests.⁷ The 2020 Defence Strategic Update makes it clear that today China occupies that space.⁸ The 2023 *National Defence: Defence Strategic Review* calls the US–China competition 'the defining feature of our region and our time', a conclusion that the 2024 *National Defence Strategy* shares.⁹

As national security thinkers consider future threats, they must now move climate change to the fore, since the greatest and most likely risk warrants the most serious attention.¹⁰ To increase the focus on its danger, this article will first explain why climate change is a national security risk. It will then highlight the consequences for the Australian Defence Force (ADF) and the Australian nation of not addressing the risk. Lastly, it will provide recommendations for what the ADF and the Australian public must do if the nation is to prepare for war in the age of climate change.

Climate Change as a National Security Risk

According to the United Nations, the most useful way to describe climate change in security terms is as a ‘threat multiplier’.¹¹ Climate change causes a worsening of existing conditions, fostering situations in which a state (or sub-state) is no longer able to meet the needs of its people. Under great stress, the people of a state will make decisions that affect the security of their own territory and that of the surrounding region, and possibly the world. For example, climate change affected states might decide to meet the needs of their people by recourse to war or by encouraging people to migrate in mass. The US think tank CNA contends that climate change will exacerbate existing stressors to the point at which they exceed the ability of many governments to manage.¹² The most critical needs are, of course, food and water. Any shortage of these necessities is likely to increase the risk of unrest and destabilisation, which may ultimately lead to societal collapse. Such circumstances fuel a greater willingness among societies to resort to force to safeguard their needs.

For more than a decade, the United Nations and the US Department of Defense have highlighted the likelihood of a more violent future induced by the stressors of climate change. The 2014 report from the Intergovernmental Panel on Climate Change (IPCC) observed that ‘multiple lines of evidence relate climate variability to ... conflict’.¹³ The most recent IPCC report identifies numerous irreversible and interconnected risks resulting from climate change that affect ‘ecosystems, biodiversity and human systems’¹⁴. Moreover, the report’s authors expect climate change effects to interact, causing disruptions to human systems to cascade across regions.¹⁵ In a similar vein, an intelligence report produced by the US National Intelligence Council anticipated that climate change would have ‘significant direct and indirect social, economic, political, and security implications during the next 20 years’.¹⁶ An earlier US report was similarly frank in its conclusions. Its authors stated:

Many countries important to the United States are vulnerable to natural resource shocks that degrade economic development, frustrate attempts to democratize, raise the risk of regime-threatening instability, and aggravate regional tensions. Extreme weather events ... will increasingly disrupt food and energy markets, exacerbating state weakness, forcing human migrations, and triggering riots, civil

disobedience, and vandalism. Criminal or terrorist elements can exploit any of these weaknesses to conduct illicit activity and/or recruitment and training. Social disruptions are magnified in growing urban areas where information technology transmits grievances to larger ... audiences and relatively small events can generate significant effects across regions or the world.¹⁷

While much of the predicted instability and violence is likely to be internal to fragile states, it has the potential to trigger widespread and pervasive regional unrest and migration throughout affected regions, including those in which Australia has a significant national interest. Large parts of the world may even collapse into anarchy along tribal, clan, creed or geographical lines and become ungoverned spaces.¹⁸ As states collapse, Australia may have to contend with widespread regional disturbances and outright conflicts where the rule of law has ceased to exist. Of particular concern is the fact that humanity is only at the start of its climate change journey. If greenhouse gas emissions are not halted quickly, warming will reach more dangerous levels than already exist and will further reduce the availability of resources and the capacity of states to cope.

Assessing the Risk

Prior to industrialisation the quantity of carbon dioxide in the atmosphere averaged less than 280 parts per million. As of April 2024, it had reached 426.57 parts per million. The concentration of other greenhouse gases has also risen; between 1990 and 2019 the Average Greenhouse Gas Index, which factors in all greenhouse gases, had increased by 45 per cent. As of 2023 the Average Greenhouse Gas Index had reached the carbon dioxide equivalent of 523 ppm.¹⁹ To date the global average temperature has risen by more than 1.2°C. A 1.2°C rise may sound trivial, but it represents a massive amount of heat added to the planet's ecosystem. To put it in energy terms, for the oceans alone a 1.2°C temperature rise represents the addition of 217 zettajoules of energy to the earth system.²⁰ Worryingly, it appears likely that humanity will be unable to meet the target of holding to preferably below 1.5°C of warming, which was set by the Paris Agreement of 2015.²¹ Warming of 2°C would be disastrous for many parts of the world, yet a rise by more than this is looking highly probable.

The evidence that climate change is occurring is all around us; observable changes in the environment have become commonplace. Perhaps the most visible evidence that the climate is changing is found in the cryosphere, the part of the planet's surface that is covered by ice. Everywhere, the ice is retreating.²² Each year, on average, the Arctic Ocean ice recedes further, Antarctic ice shelves melt and crash into the sea and mountain glaciers are in retreat. On 14 August 2021 rain—not snow—fell on the highest point of Greenland's vast ice sheet for the first time in its recorded history.²³ More dramatically, in 2016 the surface of a lake in Alaska boiled with methane released by the warming of its previously frozen bottom.²⁴ At the same time as the ice is melting, tropical reefs are dying due to the rising temperature of the water.²⁵ Agriculture too is being affected. In South Australia's Clare Valley, for example, the wine harvest now occurs a month earlier than previous practice because the grapes ripen sooner.²⁶

These visible signs of climate change are not isolated phenomena without significance for humanity. Rather, they are symptoms of a destabilising natural world, holding serious implications for humanity's survival. A major 2019 report from the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) observed that nature is essential to human existence and quality of life.²⁷ Humans like to think of themselves as somehow apart from or superior to the natural world, but the reality is that we are just another one of its elements and entirely dependent on it for our survival. The global ecosystem contributes critical services that humans exploit, including pollination of food crops, nutrient cycling, soil creation and the basic necessities of air and water. These 'gifts' form the bedrock upon which humanity has constructed its civilisation. Indeed, they feed the current global population of over 8 billion people, which will reach 9.7 billion by mid-century.²⁸ The fact remains that civilisation's sustainment and humanity's survival require constant interaction with the natural world.

Humans meet their needs by integrating their production and distribution systems with the numerous services provided by nature. For example, farmers have learned how to exploit the soil, rain and nutrients to optimise their harvest; fishers have learned when and in what quantities a particular fish will be at a particular location, and graziers move their animals in line with the availability of grass and water. Those who grow our food maximise their yields by optimising their interaction with natural systems.²⁹ Their success depends on a stable ecosystem that provides the inputs primary

producers need on a regular and predictable basis. Unfortunately, the changes to the environment that climate change will cause create a less vibrant, predictable and useful ecosystem. A less reliable environment reduces the opportunity for human production systems to leverage natural ones, thereby leading to lower yields of food and other resources.

Climate change places the human need to integrate with the natural world at risk because it adds instability to the environment on which humanity depends. Already, organisations have begun to make changes in risk profiles in order to account for the additional threat that climate change represents. For example, much higher insurance premiums are unavoidable for those whose homes are in danger from storms, floods, coastal inundation or fires, while municipalities are updating building codes to make structures more survivable. The Chief Risk Officer of Insurance Australia Group has called for improvements in the assessment of risk and has stated that otherwise the industry may not survive.³⁰

For most of the world's population, particularly in less wealthy countries, the risks from climate change are existential. This is because there is a correlation between an unstable climate and human misery. According to Stephen Emmott, in his book on feeding a population of 10 billion (a figure which humanity will reach before the end of the century), the global food production system is dependent on a stable and favourable climate.³¹ If human systems are unable to interact efficiently with natural ones, the result will be a decline in production of the resources needed to support the global population. For example, as sea levels rise, salinity increases in hitherto fertile river deltas, such as the Mekong, reducing productivity.

The situation is particularly acute if resource shortages occur in countries that are already unable to produce enough food to meet their needs. Every state has a carrying limit—that is, the capacity of its land and seas to meet the needs of those who live there. If a society was unable to generate adequate resources in the past, a period of starvation and death ensued until population and carrying capacity were again in harmony. For much of human existence societies went through 'boom-and-bust cycles of rapid population growth and starvation'.³²

Today, the international food trading system acts as a safety valve, providing food to those states that cannot meet their own needs. However, this safety valve only exists if there is sufficient surplus in the international

system. As climate change reduces global food yields, the strain on many countries will become extreme. The Syrian Civil War provides a case study on what happens when people are unable to obtain food. A drought, the most severe for which there were records, caused a multi-year crop failure which forced 1.5 million Syrians to abandon their farms. Yields of wheat fell 47 per cent and those of barley 67 per cent, and livestock populations plummeted. Farmers and their families migrated to the nation's cities, and by 2010 internally displaced people made up 20 per cent of Syria's urban population. At a meeting with a UN official the Syrian Minister of Agriculture warned that the economic and social fallout from the drought was 'beyond our capacity as a country to deal with'.³³ The Assad government failed to meet the needs of the displaced people, which directly contributed to the outbreak of the civil war. Facing starvation, desperate people make desperate decisions. As Syria shows, famine-induced instability may lead to challenges to central authority, the break-up of countries along ethnic or religious lines, inter- and intra-state war, and mass migration.³⁴

The ADF in an Age of Climate Change Wars

In this more tumultuous future, the ADF can expect to become involved in wars with greater frequency, if only as peacekeepers separating multiple adversaries. The ADF should also expect to take a larger role domestically as natural disasters become more severe and more common. When he was Chief of Army, General Angus Campbell, in an address to the Australian Strategic Policy Institute, described the future as a more disruptive age.³⁵ What then can the ADF expect its future operations to look like? What will the character of war be when the ever-present feature of the age is climate change disruption, instability and conflict?

On the tactical level, it is likely that little will be different from the present. Combatants will fight with what they have at hand, whether that is a machete, an improvised bomb, a tank or a drone. Tactics will be shaped as always by the interplay between technology, training, doctrine and national preference, set within a framework defined by the political aim. Some adjustments will be required, however. Personnel will have to be able to operate in temperatures that are higher than previously experienced, while platforms optimised for environmental conditions that no longer exist may have to be modified or scrapped. Diseases currently prevalent in the

tropics will expand their ranges, necessitating greater investment in military medicine and prevention. Specialised health units, such as the Malarial Control Units that the Army once possessed, may need to be re-raised.³⁶

The underlying philosophy of war will also be unchanged. It will remain a deliberate decision made by a people to obtain something they want—food, land and safety—that they cannot obtain by other means. The non-aggressor in a war will have to make the same decision that it always has had to make—that is, to submit or resist. War will remain a contest between two or more states (or peoples). Climatic events will create a background of resource shortage and human strife in which deciding for war is increasingly seen as the best option.

It is the social level of war where the important differences lie. For most people, particularly those in the West, war has become an optional affair waged to achieve limited goals. The great wars of the 20th century are now a distant memory. All the veterans of the First World War are gone, and few from the Second World War remain. The horrors of the Thirty Years War of the 17th century are only of interest to historians. For our generation, war's role in shaping human events has taken a back seat to other drivers of social change, such as globalisation, instantaneous communications and ready access to infinite amounts of information via the internet. However, as societies come under strain from climate change and begin to unravel, war will resume its place as one of the great forces for human decision-making.

In response, the ADF will need to prepare for more frequent and larger deployments, even simultaneous ones, waged against people who believe war is the best, if not the only, means to solve an existential crisis. Because of their nature, these struggles are likely to lead to decisions that favour one participant over the other. For some displaced people, mass migration may be the only option. For others, losing will mean death. The fate of entire nations and peoples will again hang in the balance as has so often been the case in the past. War will resume its place as the great decider of which societies endure and which disappear. This is a more violent and decisive future, and one the ADF and Australian society have not experienced since the Second World War. It is also a kind of war that the ADF is not prepared for culturally, intellectually, socially or materially.

Australia and the ADF will have to adapt if the nation is to meet the demands of operating in a more violent and decisive climate change era.

The following considerations are particularly relevant in this regard:

- Wars of existence are about sovereignty—or more crudely survival. Those societies that are unable or unwilling to bear the price of survival will cease to exist. Not everyone will survive
- The ADF will need to get bigger, particularly the Army, and have a reserve that is more employable. The nation's military forces will need greater depth to deploy larger forces on more frequent missions as well as to replace casualties.
- Unlike the optional wars that Australia has participated in since 1945, the coming wars will matter, for Australians as well as for others. Such wars absorb a greater share of the national estate both in people and wealth. For the government, the need to fund more frequent military operations will strain the budget, requiring a monetary reprioritisation.
- Australia will likely not have the luxury of depending on a great power partner to do the heavy lifting or to provide the support and enablers that the ADF presently lacks in sufficient depth. Instead, Australia may have to pay for more self-reliance by providing for all the costs of sovereignty on its own.
- In wars of existence soldiers and civilians die, generally in large numbers. ADF personnel will need to be hardened to killing and to the loss of mates, while Australian civilians will need greater resiliency in the face of mass casualties.
- Wars of existence require the participation of the entire society. The Australian citizenry will no longer be able to contract out their military requirements to a professional organisation. This does not necessarily necessitate a return to conscription, but it will require greater emotional and financial involvement by the public in the nation's wars.
- Wars of existence are financially expensive and wasteful. The funds allocated to security will need to consume a larger share of the nation's wealth.
- ADF members will need to be accustomed to longer deployments, as will their partners and families. Wars of existence are likely to be prolonged.
- In wars of existence, moral values are challenged, particularly if the struggle is lengthy and costly. Australia may have to decide on how big a lifeboat it is willing to provide.

- In a world driven by climate change disruption, robust supply lines will likely not exist. The COVID-driven logistic crisis of 2021–2022 is a warning as to how vulnerable supply chains are when affected by a global disruption. Australia will again suffer from being a minor market at the far end of the supply chain. The current fleet of high-technology platforms may also prove problematic to sustain. A simplification of weaponry will be likely, while the nation will need to improve its sovereign industrial and social capability if it is to produce and sustain the depth of resources required.
- Climate change may create a two-tier world in which some countries maintain current levels of technology, while other areas are unable to sustain them.

Like every country, Australia will be severely challenged by climate change and will not escape unscathed. Yet it is one of the countries better placed to manage a transition to what will be a different world. This is because Australia is an educated, wealthy and technologically advanced society with a cohesive population. Australia's greatest advantage, however, is that it is one of few countries that exports more food calories than it consumes. In fact, Australia typically exports 70 per cent of its agricultural production.³⁷ Therefore, if climate change leads to a reduction in global net food production, Australia has spare capacity to meet domestic requirements. Australia's present overseas customers will bear the consequences of a lessening in food availability. Whether Australia will be able to meet the needs of its own population depends on the ferocity with which climate change disrupts the nation's food production systems, the nation's skill at adapting to a new situation, the policies the government implements, and the ADF's ability to safeguard the nation's resources from external threats.

Australia also has liabilities that will challenge its security in a climate-changed future, however. Perhaps the greatest of these is its culture of dependency. For its entire history, Australia has contracted out much of its sovereignty to a great power protector. The US has provided a credible strategic alliance that has guaranteed Australia's future.³⁸ This may no longer be an option in a world wracked by climate change. The US is likely to have too many worries closer to its homeland to be concerned about a distant friend. The Australian Government therefore needs to make a risk assessment of its protector's availability in a climate-disrupted future or risk disappointment, as occurred when Britain proved unable to meet its

Singapore Strategy guarantee in 1941. Whether the Australian population is ready to meet the cost of being a true sovereign people is yet to be seen, but its willingness to do so will be critical to the nation's future security.

Conclusion

This article has painted a bleak future in which the resort to war is common and outcomes are decisive. There are many scientists, engineers and policy experts working on mitigating the worst of climate change. High-level policy experts, including the Reserve Bank of Australia³⁹ and the Centre for Policy Development,⁴⁰ continue to issue warnings of what is to come. International representatives continue to meet, as they did in Dubai in 2023, striving to find a way to reduce greenhouse gas emissions. Hopefully these efforts will succeed in preventing the worst predictions of climate change from becoming a reality, although nothing humanity does now will be able to prevent some of the consequences outlined here. Indeed, as one author has presciently observed, 'The End of our World Order is Imminent'.⁴¹ A new future is coming, one that we will have to confront and adapt to if Australians are to survive as a people. Let us trust that the ADF and the nation are up to the task.

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A Unique Tool? Exploring the Value of Deployed Military Chaplains in Australia's Region

William Westerman

Introduction

Following the fall of Kabul to the Taliban on 15 August 2021, the Australian Government authorised a non-combatant evacuation operation to ensure Australians and other approved foreign nationals could safely leave Afghanistan. Between 18 and 26 August, the Royal Australian Air Force (RAAF) flew 32 flights to and from Hamid Karzai International Airport, transporting a total of 4168 people. This included 2,984 Afghan visa holders, who were former locally engaged employees and their families now at risk if they remained in their country.¹ Once out of Afghanistan, Australian aircraft flew them to a staging area established at Al Minhad Air Base in the United Arab Emirates, from where they would eventually be flown to Australia. To support this operation, Defence deployed over 300 additional personnel to the Middle East, one of whom was Islamic Imam and Royal Australian Navy (RAN) Chaplain Mogamat Majidi Essa.² As many of those fleeing Afghanistan were Muslims, Essa offered a unique and possibly encouraging presence. For those awaiting flights to Australia, he held Friday prayers (*Salāt al-Jumu'ah*), an important weekly ritual within the Islamic faith, and daily services. 'It was my first Friday prayer I've conducted in the ADF', he remarked at the time. 'Under the circumstances of the congregation,

they were very supportive and happy that we were able to conduct Friday prayer for them.’³

Essa migrated to Australia from South Africa in 2007, joining the RAN in 2016. The Australian National Imams Council had nominated him for the position of chaplain after it had been approached by the Navy’s Chaplaincy Branch, which was seeking to diversify its membership.⁴ In some ways, Essa reflects the modern ADF, or at least what it aspires to be. The Pathway to Change: Evolving Defence Culture 2017–2022 program sought, in part, to build a diverse workforce with an inclusive culture to ‘harness the diverse backgrounds and experiences of those in our teams to deliver a capable and agile joint fighting force’.⁵ In other ways, however, Essa is increasingly out of step with current social trends within the organisation. A recent article in the *Australian Army Journal* noted that in the past two decades the demographic composition of the ADF has changed, such that a majority of its members now profess no religious affiliation.⁶ This situation reflects wider demographic changes in Australia as a whole.

Yet Essa’s role during the evacuations from Afghanistan serves as a reminder not only that religion is still important to many around the world but also that the ADF’s chaplains can offer a unique capability to a deployed force. This article examines the persistence of religion as a global phenomenon, particularly in the Indo-Pacific, and then explores the ways in which chaplains have contributed to military operations and activities beyond their traditional pastoral and sacramental roles. While not all these initiatives were necessarily successful, they nevertheless show how commanders have called upon the religiosity of their chaplains, making creative use of their distinctive position as uniformed ministers of religion. As the place of religious chaplains within a functionally secular organisation like the Australian Army is increasingly questioned, there is merit in considering how a padre’s religiosity could be of value to the land force when deployed overseas, especially to areas where religion is highly influential to a local population.⁷

Religion and the Indo-Pacific

In 2009, Tom Frame, historian and former Anglican Bishop to the ADF, suggested that the majority of Australians appeared to have ‘quietly abandoned religious affiliation or become gently indifferent to religious claims’.⁸ Statistical data supports this observation. For example, the 2021

Census showed that while Christianity was still the most common religion in Australia (43.9 per cent), its adherents had dropped to below 50 per cent of the population for the first time. The number of Muslims had grown to 812,392, although this represented a mere 3.2 per cent of the Australian population. Importantly, a record 38.9 per cent of people reported having 'no religion', up from 30.1 per cent in 2016 and 22.3 per cent in 2011.⁹ The growing ambivalence about religion was captured in other ways. Several recent studies have shown that while Australians agree that respecting religion is important within a multicultural society, most consider religion to be a personal and private matter, and that religious people should 'keep their beliefs to themselves'.¹⁰ Furthermore, when asked about the attributes that defined Australians' sense of identity, religion was placed last, with political beliefs, nationality, gender (particularly for women) and language the primary identity markers.¹¹

While religion might be in decline in Australia, it retains its strong influence abroad. In December 2022 the Pew-Templeton Global Religious Futures project observed that in certain parts of the world, such as South Asia and South-East Asia, religion remained a central facet of life. For instance, 93 per cent of Indonesians and 80 per cent of Indians considered religion very important in daily life, while only 18 per cent of Australians responded similarly.¹² Further, the project found that while the United States, Western Europe, Australia and New Zealand were growing less religious, the vast majority of the world's population was projected to still adhere to a religious worldview. In addition, population growth projections forecast that the percentage of the global population that is religiously unaffiliated will shrink in the decades ahead, such that most of the world's population will likely continue to identify with a religion. It was projected that between 2010 and 2050 the number of Christians—as a share of the global population—would remain constant (31.4 per cent), the number of Muslims would likely increase from 23.2 per cent to 29.7 per cent, the number of Hindus would decline slightly from 15 per cent to 14.9 per cent, and the number of religiously unaffiliated people would decline from 16.4 per cent to 13.2 per cent.¹³

These demographic projections have implications for professional militaries. In 2020, the US Joint Staff released guidance on behalf of the Chairman of the Joint Chiefs of Staff concerning strategic religious affairs. This guidance noted:

Outside of Western Europe and North America, populations that hold to historic religious faiths continue to increase. This growth, coupled with shifting immigration trends, presents important issues for the Joint Force. It challenges our understanding of how religion motivates and influences allies, mission partners, adversaries, and indigenous populations and institutions.¹⁴

The importance of religion as an operational factor was also evident at lower levels. One US academic (and former Marine Corps infantry officer) recalled an exchange during a lecture at the US Naval War College where a student stated that they did not feel comfortable discussing religion overseas. A US Marine Corps colonel with three tours of Iraq interjected, stating that failure to consider religion would be the equivalent of issuing orders without considering the weather: it would be nonsensical and morally irresponsible.¹⁵ While US personnel might have a heightened appreciation for the importance of religion given its influence in their country, this does not invalidate the reflections of those who spent two decades grappling with complex warfighting in a highly religious social and cultural context.

The intersection of religion and military affairs is particularly important when considering the Indo-Pacific, which the 2023 Defence Strategic Review declared to be 'the most important geostrategic region in the world' and the primary area of military interest for Australia's national defence.¹⁶ According to the Global Religious Futures project, not only does the Indo-Pacific region include a large proportion of people with a religious affiliation but also the number of adherents is projected to increase (Table 1). Australia's northern neighbours all have strong and diverse religious cultures. For instance, some 87 percent of Indonesia's population of 263,910,000 were estimated to be Muslims. By 2050, the total population is expected to increase by 33,350,000 and the Muslim population by 27,200,000.¹⁷ Elsewhere, much of Papua New Guinea's population is made up of Protestant Christians, while Timor-Leste is an overwhelmingly Roman Catholic country, albeit that in both there is a syncretistic mix of Christianity and traditional animistic practices in rural areas.¹⁸

Table 1. Indo-Pacific estimated religious composition, 2020 and 2050 (projected)

	2020		2050		Change
	No.	%	No.	%	
Christians	319,830,000	7.21	381,200,000	7.72	+61,370,000
Muslims	1,139,990,000	25.71	1,457,720,000	29.52	+317,730,000
Unaffiliated	887,840,000	20.03	837,790,000	16.97	-50,050,000
Hindus	1,151,920,000	25.98	1,369,600,000	27.74	+217,680,000
Buddhists	499,410,000	11.26	475,840,000	9.64	-23,570,000
Folk Religions	380,970,000	8.59	366,860,000	7.43	-14,110,000
Other Religions	53,220,000	1.20	48,650,000	0.98	-4,570,000
Jews	210,000	<0.01	240,000	<0.01	+30,000
Total	4,433,390,000		4,937,900,000		+504,510,000

Source: Pew Research Center, 'The Future of World Religions: Population Growth Projections, 2010–2050'

There is no future scenario in which the Australian Army will have no need to engage with those in Australia's immediate region—either in the form of bilateral or multilateral defence relationships or in an operational capacity. Accordingly, Army personnel will inevitably interact with those who hold different religious affiliations and differing views on the importance of religion. If, as the demographic projections suggest, religion will remain a feature of the Indo-Pacific for some time, it is only sensible to consider how best to relate to it. The prevalence of religion as a feature of global life makes it difficult to ignore, despite the Australian preference to treat it as a private matter. As argued by John D Carlson, a US religious ethicist and Commander in the US Navy Reserve, the suggestion that the military should have nothing to do with religion is ultimately untenable, because:

*religious belief is simply too important, too enduring, too ineradicable from the way that many human beings live to ignore. That leaves us with another option: engage the complexities of religion in ways that are attentive to the nuances, challenges, and dangers.*¹⁹

If religion is ineradicable, as Carlson suggests, how might the Army's religious component, the Royal Australian Army Chaplains Department, be of value to the land force in ways beyond its traditional focus towards the pastoral and wellbeing support of serving members? The remainder of this article will identify four broad categories of roles that military chaplains have performed in recent decades that go beyond these functions to include faith-based diplomacy, religious advisement, and religious leader engagement in both peace-support operations and counterinsurgency (COIN) operations. In each example, the specific religiosity of military chaplains offered a unique capability to a deployed force on operations, exercises and activities abroad, although not always without risks and caveats.

Faith-Based Diplomacy

In recent years, Australian Army chaplains, and those of other services, have been involved in diplomatic engagement with regional nations. During Operation SOUTH WEST PACIFIC ENGAGEMENT 19, engagement with local religious leaders was instituted as an important component of the operation. Chaplains from the 7th Brigade and others, under the lead of the 1st Division/Deployable Joint Force Headquarters (DJFHQ), engaged with religious leaders in Solomon Islands, Vanuatu and Tonga. It was the view of one chaplain that commanders:

need to appreciate that if they wish to well connect with a village, the first person disembarking from the helicopter needs to be the padre. The padre will meet the local religious leaders, who will then introduce him to the village headman and then the rest will be taken care of.²⁰

While people are potentially prone to overstate their own influence, it is true that many communities in the South Pacific hold to Christian beliefs which they actively practice and, crucially, incorporate into their political and diplomatic discourse.²¹

Chaplains have also been involved in INDO-PACIFIC ENDEAVOUR, the ADF's flagship regional engagement activity. This annual activity sees elements of the RAN, Army and RAAF collaborate with regional counterparts to undertake activities ranging from seminars and tabletop exercises to passage of lines exercises at sea, and humanitarian assistance

and disaster relief coordination activities.²² For instance, as part of Indo-Pacific Endeavour 2022, Chaplain Essa visited the Maldives, Malaysia, Brunei and Indonesia. Harnessing the importance of religion within family, community and national life in those countries, he met religious and other leaders to help build and develop regional partnerships. 'When we take the religious faith of our neighbours seriously', he argued, 'it shows that we take them seriously. It's seen as a real indicator of respect.'²³ Major Sarah Wilkinson, the gender adviser on HMAS *Adelaide*, observed Essa leading evening prayers. 'It was clear to see that our Malaysian and Indonesian guests appreciated religion being taken seriously', she remarked.²⁴

The integration of religion into the conduct of international peacemaking and statecraft is known as faith-based diplomacy.²⁵ It grew in prominence through the 2000s and 2010s, such that in 2015, US Secretary of State John Kerry argued that understanding and engaging with religion was 'one of the most interesting challenges we face in global diplomacy', adding pointedly that 'we ignore the global impact of religion at our peril'.²⁶ While the impetus and opportunity to integrate religion into the broader international diplomatic system began to wane towards the end of the decade, in local contexts, such as the ADF's engagement with regional partners, the practice continued.²⁷ In 2018, Dr Marigold Black, a research fellow at the Australian Army Research Centre, cited the ADF's history of using its chaplains in a diplomatic capacity to question whether faith-based diplomacy needed to be incorporated into the conduct of Australia's foreign relations. In her view:

*While [Australian practitioners] should take care not to compromise Australia's fundamental values and they should pay attention to how those [faith-based] initiatives might be received by allies and future friends, it seems short-sighted not to provide formal and informal diplomatic forces with the most useful, flexible and influential toolkits.*²⁸

As a general observation, Australia's multicultural and pluralist society might give the ADF a comparative advantage over other regional powers, as it can draw from a diverse pool of recruits with religions in common with regional neighbours. Essa's experience suggests the importance of having chaplains (and service men and women in general) of varied faith traditions, particularly Muslims given the demographic composition of the Indo-Pacific.

As one Christian chaplain argued:

*The benefits of appointing representatives from other faith traditions in the current geo-political environment are obvious. A person who shares Australian values, from an Islamic viewpoint for example, would be invaluable in dialogue with Islamic leaders.*²⁹

One modest and practical recommendation concerns the representation of Muslims within the Army. With the anticipated growth of Islam in the Indo-Pacific, and the need to build and sustain military diplomatic ties with Muslim-majority nations in Australia's region, the Army would do well to have a greater number of Muslims and potentially imams in its ranks.

Religious Advisement

Another operational role for chaplains is to support commanders and their staff to appreciate and understand the religious dimension of a local population in which their forces are operating. As doctrine acknowledges, it is no longer realistic for a military force to conduct operations on battlefields devoid of any other actors except the opposing military force.³⁰ Within this context, everything an armed force does, or does not do, may influence local perceptions of the ADF. Doctrine writers have argued:

*These perceptions can be positive or negative, accurate or false, but often result in actions (or reactions) by civil actors and those whom they influence, which have the potential to support or significantly hinder the achievement of the military mission.*³¹

The challenge, therefore, is to understand the local population and civil actors, consider the consequences for them of military presence, posture and activity, and then develop plans which maximise their support and minimise disruption to them.³² Absence of local knowledge was felt when the Army began deploying battlegroups to southern Iraq in 2005. The first rotation, Al Muthanna Task Group 1 (AMTG-1), was led by Lieutenant Colonel Roger Noble. Within his area of operations, religion and religious leaders were highly influential, yet the Australians' understanding about religious groupings and Islam remained low throughout the deployment. A key lesson Noble took from the deployment was the importance of understanding the human terrain.³³

While the task of briefing a commander on any relevant features of a battlespace remains the remit of intelligence officers, some have argued that chaplains are well suited to offer advice on matters relating to local religion. During the 1999 Kosovo War, Supreme Allied Commander Europe, General Wesley Clark, used his senior command chaplain, Rabbi Arnold Resnicoff, as his principal adviser on matters of religion, ethics and morals.³⁴ The Balkan region is well known for its blend of religions and cultures, and adherents to Eastern Orthodoxy, Roman Catholicism and Islam are found among the population. Resnicoff's experience in Kosovo informed his belief that it was 'foolish' to send an intelligence officer to learn about religious and ethnic aspects of a particular area when (he believed) chaplains were more readily suited to this task.³⁵ Canadian Armed Forces chaplain Steven Moore, who had served in Bosnia in 1992 and 1993, argued that, after fulfilling their primary role of sacramental and pastoral support—what he termed the 'Internal Operational Ministry'—chaplains could extend their support on operations to 'External Operational Ministry' activities. In his view, the first such activity was the conduct of 'religious area analysis': determining the basis for what people do and why they do it with respect to religion.³⁶ He posited:

*As credentialed clerics, the advanced theological training of chaplains and additional skills development positioned them to better interpret the nuances of religious belief that often escape detection—something that could be very costly to a mission.*³⁷

The US military has been formally considering the chaplains' role of 'religious advisement' for longer than the ADF. It encompasses the provision of materials, briefings, reports, summaries and counsel to warfighting commanders concerning the role that religion and culture play in a specific theatre of operations. It can require the chaplain to become an expert on matters of local religions and cultural context in order to provide situational awareness of the relevant sensitivities of a place and its inhabitants.³⁸ Despite this formalisation in US military doctrine, questions remain concerning how effective a chaplain can be in this role, especially if they are being asked for advice and information concerning a different faith tradition to their own. While some have argued that chaplains have natural expertise and inclinations in this area as they are familiar with religion, it is by no means clear that the expertise chaplains have in their own religious milieu would naturally translate into locally relevant knowledge.³⁹ Indeed,

not all chaplains offering advice to commanders in Iraq or Afghanistan were successful, and in some instances chaplains knew less about religion in their area of operations than the commander did.⁴⁰

Within Australia's region, particularly Timor-Leste, Papua New Guinea and the islands of the South Pacific, Christian chaplains are on surer footing. For instance, during the 1999 INTERFET deployment, Senior Chaplain Len Eacott (an Anglican) and Catholic padre Graeme Ramsden often briefed Headquarters INTERFET on religious issues, such as the importance of Catholic holy days.⁴¹ More recently, in November 2018 the ADF undertook Operation APEC 18 ASSIST in support of the Asia-Pacific Economic Cooperation meeting being held in Port Moresby. At the time, various Protestant denominations represented 69.4 per cent of the population of Papua New Guinea, and Roman Catholicism a further 27 per cent. Because of his familiarity with the interdenominational nuances of various Christian traditions, during the operational planning phase the 1st Division/DJFHQ chaplain was able to assist the Joint Intelligence Cell in interpreting the religious composition of the city.⁴²

An Australian ambassador who had firsthand experience working alongside the ADF on peacekeeping operations in Timor-Leste argued that an integral element of both diplomacy and peacekeeping was gaining an 'understanding of the culture, the history and the mind-set of the people with whom you are working in order to best reach out to them'.⁴³ While obvious caveats apply regarding the level of knowledge chaplains might have about the religious practices of any given geographic area, when their confessional traditions align, chaplains have proven themselves capable of providing commanders and their staff officers with a valuable perspective on issues to which they might not otherwise have access.

Religious Engagement in Peace-Support Operations

Liaison with local religious leaders and communities is another operational role for chaplains that has emerged over recent decades. In 2002, Dr Douglas M Johnston, an American sailor and scholar who founded the International Center for Religion and Diplomacy, outlined the potential benefits. Specifically, he argued that military chaplains could engage with local religious communities in an operational area to gain more information about the 'religious and cultural nuances at play', pass on

concerns of indigenous leaders about emerging threats to stability, offer a reconciling influence in addressing misunderstandings or differences, and advise commanders on potential religious or cultural implications of their decision-making.⁴⁴ Johnston became a key advocate for what became known as 'Religious Leader Engagement'. Johnston's characterisation is consistent with Moore's concept of the External Operational Ministry, which acknowledges the chaplains' role in engendering trust and establishing cooperation within communities by engaging local and regional religious leaders.⁴⁵

The assumption behind the designation of liaison responsibilities to chaplains stems from the notion that religious leaders wield significant influence in many societies and thus have the potential to aid or disrupt attempts to influence the local population. 'What the Mullah shares at Friday prayers', one Australian chaplain stressed, 'can inflame hatred, mistrust and violence against foreign troops or it can encourage cooperation based on an accurate understanding of the mission and attitudes of those troops and their commanders.'⁴⁶ Indeed, the influence of religious leaders, both overseas and in Australia, was identified by health officials during the COVID-19 pandemic, as they appealed to leaders to support vaccine rollouts in their communities.⁴⁷ Similarly, in a military operational context, gaining the trust of local religious leaders is regarded by many as a means to facilitate better engagement and cooperation within the broader community. Advocates argue that, in their capacity as both clergy and military officers, chaplains can act as intermediaries and bridge-builders in ways that are unachievable by other uniformed personnel. This is because the chaplains' symbolic religious status, authority and theological expertise bring a unique depth and authenticity to their engagements.⁴⁸

While the practice of chaplains engaging with local clergy on operations had prior historical antecedents, it emerged in its modern form during the 1990s, especially amid UN peacekeeping operations in the Balkans following the dissolution of Yugoslavia. In this context, the liaison was predominantly oriented towards supporting post-conflict reconciliation.⁴⁹ In 1993, for instance, chaplains operating as part of the United Nations Protection Force (UNPROFOR) in Bosnia engaged with Croat Roman Catholic, Bosniak Muslim and, later, Serb Orthodox leaders in order to better understand the needs of various communities and, in time, to help build trust and develop common ground between the military forces and

local communities.⁵⁰ The practice was soon incorporated into US joint doctrine, largely as an extension of civil–military affairs. For example, the 1996 iteration of US Joint Publication (JP) 1-05, *Religious Ministry Support for Joint Operations*, stated that chaplains might be required to coordinate with host nation civil or military religious representatives ‘in order to facilitate positive and mutual understanding’.⁵¹ There were, however, debates as to how far this role should extend, with some arguing for an active role for chaplains in religious leader engagement while others preferred that they focus instead on supporting their own forces.⁵²

In the Australian context, local religious engagement was undertaken in East Timor during the INTERFET mission. While standard pastoral care and sacramental responsibilities took up much of their time, many Australian chaplains worked closely with local communities, religious orders, seminaries and parish churches. Chaplains would make regular visits to churches to speak with priests, nuns and village leaders, relaying local concerns and the needs of the peacekeeping forces.⁵³ Chaplains would also assist in the sensitive and important task of body retrievals and burials, as well as preaching or celebrating Mass at Sunday services.⁵⁴ These activities were undertaken despite a perception, among chaplains, of reluctance within Headquarters INTERFET to engage directly with the Timorese church and its officials. ‘It would have given us instant credibility’, Graeme Ramsden later argued, ‘provided access to the largest and best-organised group in Timor, and to Tetum speakers, and overcome a lot of initial communication difficulties.’⁵⁵

Engagement was driven at lower levels where its effects were more keenly felt. For example, a Roman Catholic padre, Glynn Murphy, was with the 2nd Battalion, Royal Australian Regiment at Balibo near the Indonesian border. In the absence of a local priest, Murphy undertook to ring the *Angelus* daily from the church belltower, an action which, in his words, was ‘a constant, stubborn invitation for any refugees hiding in the hills to “come home”’.⁵⁶ Once the local priest returned, services eventually resumed, with hundreds flooding back into the church. The gradual resumption of services in towns within the border districts, usually under INTERFET protection, was an important way to normalise the security situation.⁵⁷ As observed in a 2005 US Air Force research paper that examined the role of military chaplains as peacebuilders, ‘religion is best viewed as a force useful in stability operations rather than an issue to disregard or overcome’.⁵⁸

The impact of Murphy's actions impressed the battalion commander, Lieutenant Colonel Mick Slater. When Slater returned to Timor in 2006 as a brigadier leading the 3rd Brigade on Operation ASTUTE, he requested Murphy (who was then chaplain to DJFHQ in Brisbane) to join him in Dili to engage once again with the local population as part of stabilisation operations. Slater remembered and well understood the importance of Roman Catholic faith in Timorese society and how valuable Australian chaplains could be in achieving his mission. On his return to Dili, Murphy set about reconnecting with the priests and nuns to hear their concerns. Once again, he celebrated Mass alongside Timorese clergy, symbolising that Australia remained a friend of Timor-Leste.⁵⁹

One person who appreciated the valuable role that Army military chaplains played on Operation ASTUTE was the Australian Ambassador in Dili, Margaret Twomey. An experienced diplomat, she recognised that Australian diplomacy and operational activity in response to the 2006 crisis needed to work hand in glove to create space for the Timorese to resolve the issues that had instigated an outburst of intercommunal violence. Once Brigadier Slater's force arrived, its chaplains began to connect with local parishes and clergy. 'I saw the almost immediate deployment of ADF chaplains assume a powerful complement to the initial construct of Operation Astute', she recalled.⁶⁰ She recognised that Timor's overwhelmingly Roman Catholic identity had been an historically unifying force, and that Australian Catholic padres could, by virtue of their status as priests, cross linguistic barriers through the common rituals of church and of prayer. 'The ADF chaplaincy', she reflected, 'while not known to be at the forefront, performed a special role during Operation Astute. One for which I, as a diplomat, am greatly appreciative.'⁶¹

More recently, Army chaplains have engaged with local communities in Fiji on Operation FIJI ASSIST and in Solomon Islands on Operation LILIA.⁶² In nation-building and post-conflict environments such as Timor-Leste, as well as in more recent humanitarian assistance and disaster-relief missions in the South Pacific, religious leader engagement has served as a practical way to learn about the needs of the local population and to facilitate aid and support. It has also offered a military force a means to connect with the community of potentially greater depth and resonance than an ordinary civil-military affairs/civil-military cooperation team. In Timor-Leste, one historian concluded, the status of Australian padres gave them 'unrivalled

acceptance and unparalleled respect in local communities'.⁶³ On Operation FIJI ASSIST, senior members of the ADF task group expressed their surprise that religious leader engagement was able to open doors and provide valuable insights into key people and situations in the area of operations. Formally, the task group Commander Land Forces, Lieutenant Colonel John Venz, observed that religious leader engagement was highly effective in a forward-deployed role.⁶⁴ Within such contexts, it is evident that chaplains undertaking local engagement have much to offer.

Religious Engagement in COIN: a Bridge Too Far?

Following the al-Qaeda terrorist attacks against the United States on 11 September 2001, the US military soon found itself at war in both Afghanistan and Iraq. Once on the ground in an unfamiliar land, among a foreign culture, and charged with undertaking stability operations, some commanders began using their chaplains in religious leader engagement roles to build bridges with local communities. As the missions in both countries slowly evolved into counterinsurgency operations, there was an increasingly pressing need to gain consent from the local population for military activities. This meant that establishing and maintaining positive relations with local populations was a precondition for mission success. Some commanders believed that their chaplains could be used to help resolve misunderstandings, dispel detrimental stereotypes about Western nations and, where possible, solve problems. Such efforts aimed to increase the perceived legitimacy of other coalition efforts, thereby improving local cooperation and inducing greater acceptance of the military presence in any given area.⁶⁵

An early example occurred when the 101st Airborne Division arrived in northern Iraq in May 2003. Its commander, Major General David Petraeus, ordered his chaplains to begin developing relationships with local clerics in the hope of building trust and countering misinformation about US forces.⁶⁶ US Army chaplains thus began meeting local religious leaders and hearing their concerns, many of which concerned local detainees.⁶⁷ Soon, Chaplain John Stutz, working within the division's Civil-Military Operations Centre, became the primary contact person between the public and regional detainees. Among other tasks, he regularly arranged for imams to visit and interview detainees held by the division. He also participated in weekly

meetings with the Council of Imams and the Council of Bishops, where he requested that the religious leaders encourage the local population to return stolen items ransacked from public buildings, including museums. Much to his surprise, over several weeks many items were returned.⁶⁸

Similar activities were conducted in Afghanistan, where religious leaders, particularly at the district and village levels, were regarded as representatives of their community and important powerbrokers, able to legitimate or de-legitimate the Afghan government in Kabul.⁶⁹ Operating in Helmand Province, II Marine Expeditionary Brigade developed a religious leader engagement program using a US Navy Muslim chaplain (specifically deployed for this task) as an 'icebreaker' in discussions with clerics in southern Afghanistan. At a local level, these discussions had a positive effect: engagement in the Golestan District, Farah Province, for instance, opened the way for the local Marine company commander to communicate better with the community and help address their needs by linking them with the government in Kabul.⁷⁰

Religious leader engagement in Afghanistan was not merely the domain of US chaplains. British chaplains undertook tasks similar to those of their American peers, meeting with local populations, distributing articles for use in worship and in Qur'anic study, and taking part in individual and group discussions with local mullahs.⁷¹ In the midst of the Afghanistan campaign, senior clerics from Helmand Province even urged that British imams be deployed to Afghanistan to counter Taliban claims that British Muslims were oppressed and to explain Islam to British soldiers.⁷² Chaplains from Canada, New Zealand and Norway were also to be found supporting the work of Provincial Reconstruction Teams (PRTs).⁷³ One notable Canadian chaplain in Afghanistan, Leslie Dawson, was surprised that her gender did not create obstacles in engaging with local mullahs. At meetings where she was the only woman present, she was often warmly received and asked many questions about her role as a woman and a chaplain.⁷⁴

Anecdotally, many Christian chaplains found that their faith background was not necessarily a barrier to engagement with Islamic leaders, and it was repeatedly demonstrated that chaplains of other faith traditions need not dilute their own confessional positions in order to engage with Muslim leaders.⁷⁵ Some even found that being a religious figure afforded them a degree of status in an environment where clerics were highly regarded,

and some were afforded the same respect as a local mullah.⁷⁶ On other occasions, there were demonstrable benefits to the overt inclusion of military chaplains on operations within Muslim communities. Specifically, it helped counteract perceptions that troops from Western secular nations were devils, infidels or non-believers.⁷⁷ Even small acts of engagement, it was argued, could potentially have a powerful influence in breaking down negative stereotypes about Western militaries and the secular nature of their home countries.⁷⁸

For the ADF in Uruzgan province in southern Afghanistan, several chaplains sought to develop relationships with local and Afghan National Army (ANA) mullahs. While some commanders endorsed the practice (if, at times, cautiously), others retained their chaplains for traditional internal welfare and command support roles. Chaplain Stephen Brooks, who served with Reconstruction Task Force 3 (RTF-3), built up a relationship with the local ANA mullah that culminated in the announcement that the mullah and his representatives (ANA religious officers), if asked, would accompany the PRT and RTF-3 on visits to local communities to spread a message of goodwill about Australian and coalition efforts.⁷⁹ Conversely, the chaplain deployed on RTF-4, Ian Johnson, fulfilled a more orthodox inwards-looking role.⁸⁰

Chaplain John Saunders of Mentoring Task Force 3 (MTF-3) was perhaps the most forward-leading Australian padre in Afghanistan. Having been convinced of the need to engage with local Muslim leaders as part of the battlegroup's mission, he was cautiously given approval to contact ANA mullahs and local communities by his commanding officer, Lieutenant Colonel Chris Smith, and the Combined Team Uruzgan deputy commander, Colonel Dave Smith. His approach was twofold: first, he became a conduit through which Qur'ans from the Australian Islamic community could be gifted to Afghan Muslims, intent on countering misinformation spread by the Taliban that coalition soldiers were 'crusaders' determined to overthrow Islam. In this way, Saunders hoped to demonstrate that Muslims and non-Muslims live in harmony together in Australia. Second, he acted as a mentor to the ANA religious officers (who were more akin to welfare officers), mirroring the mentoring role undertaken by other parts of the battlegroup.⁸¹

By Saunders' account, he was well regarded by the local Uruzgan mullahs, and he became known as the 'Australian mullah'. He was even given an Arabic name, 'Hamza' (meaning 'brave and strong'), due to his efforts

to understand the Muslim faith and his willingness to materially assist them where he could.⁸² Yet while Lieutenant Colonel Smith had endorsed Saunders's initiatives, he was generally unconvinced about their utility in the broader scheme of the Afghanistan campaign. This, it must be noted, reflected his view concerning all attempts to win 'hearts and minds' through various forms of local engagement. While Smith believed that such activities had their place, he did not view them as the decisive element within the campaign against the Afghan insurgency. Instead, he adhered to the view that any success was due to the application of force and violence. If the international forces were unable to prevent the Taliban from killing the local population, then any local engagement and reconstruction work would mean little.⁸³ No amount of local goodwill generated by his chaplain was going to help defeat the Taliban at a strategic level.

When MTF-3 handed over to MTF-4, the mullahs and religious officers were apparently keen to continue the dialogue and mentoring with the incoming Australian chaplain.⁸⁴ For his part, Saunders's successor, Chaplain Martin Johnson, was restricted from continuing the practice of local engagement. Following unrest that arose after reports in February 2012 that US soldiers at Bagram Air Base had burnt Islamic religious material, the Australian contingent became apprehensive about having Qur'ans in its possession. With the commanding officer, Lieutenant Colonel Kahlil Fegan, concerned about safety, Johnson gave a box of Qur'ans to the local mullah, rather than distributing them individually as Saunders had done as he travelled around the area of operations. Johnson continued to engage with local mullahs and was encouraged to do so, although for security he was rarely alone with the mullahs and would always be accompanied by an Australian soldier. Amid concerns about insider (Green-on-Blue) attacks, Johnson stressed to Fegan that he believed the safety and welfare of the troops was dependent upon building sound relationships with the Afghans and he was determined to play a role in that endeavour.⁸⁵

How much the efforts of Australian chaplains contributed to the mission in Uruzgan is hard to measure given their small numbers and the ad hoc way in which they were tasked to engage with the local community. Still, Saunders emerged from his experience in Afghanistan as an advocate for religious leader engagement. In his view, the high levels of religious observance in both Asia and the Pacific meant that the niche capability of chaplaincy would be 'a task force necessity irrespective of the type

of operations in which we find ourselves engaged in the future, be that warfighting or disaster response'.⁸⁶ In this, he was not alone. The wars in Iraq and Afghanistan prompted several chaplains to advocate for the formalisation of religious leader engagement in doctrine and training to better prepare chaplains for similar tasks in future operations.⁸⁷ The most comprehensive effort came from Canadian Armed Forces chaplain Steven Moore, whose doctoral thesis on the religious peacebuilding of chaplains included field research with the Kandahar PRT in 2008.⁸⁸ Other chaplains wrote smaller studies outlining the advantages of using chaplains in more operational roles.⁸⁹

Despite the enthusiasm with which many chaplains made their case, doubts remained over the appropriateness of religious leader engagement in the context of counterinsurgency operations. Most positive reports on the practice came from chaplains themselves: there are few available testimonies from local clerics or their populations to corroborate the effect engagement had on them.⁹⁰ Many examining the practice from an external perspective had reservations. While religious leader engagement might have had demonstrable merit in peace-support operations and post-conflict environments, critics were cautious about its suitability in active conflict zones. A major moral and legal concern is that under Article 24 of the 1949 Geneva Convention, as well as the Geneva Protocols of 1977, chaplains are protected personnel in their function and capacity as ministers of religion, to be respected and protected in all circumstances.⁹¹ They were, therefore, accorded non-combatant status, because, like medical personnel, they were understood to be undertaking humanitarian duties within a force of combatants, not directly undertaking combat themselves (hence they were usually unarmed). This meant that, chaplains were at risk of losing their non-combatant status if they operated in support of psychological operations or leveraged local opinion to gain military advantage.⁹²

While advocates such as Moore argued that religious leader engagement functioned as peacemaking rather than direct support of tactical objectives, this categorisation does not suit Afghanistan and Iraq, where chaplains belonged to a military force actively fighting against insurgents. In this operational environment, gaining the support of the local population afforded the force greater tactical advantage, and it was therefore inevitable that religious leader engagement took on operational characteristics. While seemingly benign, such activities ultimately advanced coalition

military objectives, even if that was not the predominant purpose. In reality, the risk always existed that chaplains could be instrumentalised and that their faith—and the faith of those with whom they engaged—could be exploited for tactical purposes.⁹³ Similarly, chaplains had the potential, either intentionally or unintentionally, to stray into the collection and dissemination of human intelligence while liaising with local religious leaders.⁹⁴

While religious engagement in a counterinsurgency context entailed genuine risks to chaplain safety, perhaps more concerning was the risk posed to those with whom military chaplains liaised. Local leaders who established relationships with military chaplains could readily come be regarded by hostile groups as collaborating with occupying powers and treated accordingly. If nothing else, this risk encouraged chaplains to think deeply and cautiously about the utility of engagement.⁹⁵ The risk also existed that chaplain engagement within local communities could be seen as a front for proselytising particular religious values among target populations. This concern was most pronounced among chaplains from faith traditions, such as evangelical Christianity, who view conversion as a central tenet of their religious practice.⁹⁶

Many of the challenges of implementing religious leader engagement in Iraq and Afghanistan would no doubt be replicated should the Australian Army be required to conduct COIN operations in Australia's region. Last century the Australian Army spent many years fighting insurgencies in South-East Asia, and the conduct of another regional COIN campaign cannot be discounted as a possible future requirement. While the prevalence and importance of religion in the Indo-Pacific might encourage some chaplains to consider the ways in which they could serve in a liaison capacity, commanders would need to weigh the benefits carefully, keeping in mind the risks to all involved.

Institutional Limitations

Regardless of whether a chaplain is operating in a combat or a peacekeeping context, there is inevitable variance among individual capabilities. Not only do chaplains have different levels of inclination to become involved in work beyond ministering to the deployed force, there is no rigorous systemic training for such activities to be anything other than ad hoc and almost totally reliant on individual competence. There is

also a natural limit to how much a single chaplain can achieve. A particular chaplain might establish a good relationship with local clerics, but it becomes incumbent on their successor to have the willingness, aptitude, temperament and comfort to continue the work in order to ensure its ongoing success.⁹⁷ This cannot always be guaranteed.

One of the main criticisms of religious engagement with the local population—one raised by chaplains and commanders alike—is that it takes a chaplain's energy and attention away from their primary pastoral and sacramental responsibilities. Those primary responsibilities are to attend to the spiritual, pastoral, welfare and morale needs of their troops, their officers and the commander. Indeed, this is a key reason why some chaplains have misgivings about the practice.⁹⁸ Some feel they lack the training and experience to engage with local leaders effectively, while others are uncomfortable with security risks, particularly as chaplains are usually unarmed.⁹⁹ From a commander's point of view, even when chaplains have the willingness and capability to perform a local engagement function, it is often preferable to have the padre remain focused internally to ensure that those under their command receive adequate spiritual and welfare support. In an extended discussion in a *Small Wars Journal* forum on this issue, battalion and brigade commanders were often the most hesitant to encourage a widely expanded formal role for the chaplain.¹⁰⁰

Many of the criticisms of religious diplomacy and engagement by military chaplains were addressed by advocates like Johnston and Moore, and then in US joint doctrine (formal Australian consideration of such matters has taken longer to develop). For example, the 2018 US Joint Staff definition of chaplain liaison in support of military engagement is 'any command-directed contact or interaction where the chaplain, as the command's representative, meets with a leader on matters of religion to ameliorate suffering and to promote peace and the benevolent expression of religion'. This definition specified a narrow and focused role that addressed religion in human activity without employing religion to achieve a military objective. Activities were to be command directed, rather than purely on the initiative of the chaplain themselves, and chaplains were to ensure that they did not compromise their non-combatant status, function as intelligence collectors, engage in manipulation and/or deception operations, take the lead in formal negotiations for command outcomes, identify targets for combat operations, or use their engagements as occasions for proselytising.¹⁰¹

Yet as US Military Academy historian Jaqueline E Whitt argued:

Although JP 1-05 mandates that chaplains should take no actions that might jeopardize their special status, there is almost no specific guidance as to what this might mean in practice, in effect, leaving such decisions up to individual chaplains and commanders.¹⁰²

The flurry of discussion within professional military circles on the role of chaplaincy came about at a time when the United States and its allies were fighting two wars in highly religious environments, where religion was key to understanding the conflict. As these wars have receded from view, less has been written on the topic, particularly about the practice of religious leader engagement. While it continues to have its advocates, its efficacy and suitability in kinetic operations remains questionable.

Conclusion

It is said that armies reflect the values of the nation to which they belong. If that is so, religious chaplains are, at least superficially, increasingly out of place in the Australian Army. Yet militaries, and in particular land forces, need to be prepared to operate in the world that *is*—not the one some might wish it to be. Rather than relegating religion to a private and personal matter for individuals, commanders and policymakers would do well to consider how to incorporate religion into operations and activities to advance Australia's interests abroad. Ultimately, it is not important to consider how much value Australians place on religion. The reality is that for many populations beyond our shores, it is a central social institution, particularly within the Indo-Pacific countries with which the Army routinely engages. If the ADF is serious about strengthening engagement with Indo-Pacific partners, incorporating religion into this endeavour in a meaningful way can only support this task.

Over several decades, chaplains have shown how their position as ministers of religion could serve deployed forces on operations beyond their traditional inwards-serving roles. While religious leader engagement in counterinsurgency and genuine warlike operations poses any number of problems for chaplains and their commanders, the use of chaplains to engage with local populations within the context of peacekeeping, peace-support operations and humanitarian assistance and disaster relief

has demonstrable value. Functionally, many of the factors outlined in this article—faith-based diplomacy, religious advisement and religious leader engagement—potentially work in unison on operations.

Nothing in this discussion is intended to detract from a chaplain's core function of tending to the welfare and the spiritual health of their own flock. As Moore argued, this 'has *always been* and must *continue to be* the principal focus of deployed chaplains'.¹⁰³ Nevertheless, this analysis has shown why chaplains need to be capable—and willing—to undertake these expanded roles, preferably trained and well prepared for the functions they are directed to undertake. The fundamental message remains: religion is operationally important for land warfare. As the Army considers the future of the Royal Australian Army Chaplains Department, there is merit in reinforcing how religious chaplains can offer unique tools at a commander's disposal. This article provides the basis for better informed discussion on this topical issue.

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Shallow Waters and Deep Strikes: Loitering Munitions and the Australian Army's Littoral Manoeuvre Concept

Ash Zimmerlie

A 100-year-old bullet-riddled steel landing craft recovered from Gallipoli is one of the first items seen by visitors to the Australian War Memorial, furnishing silent testimony to the Australian Army's lengthy amphibious tradition. This heritage includes several division- and corps-level amphibious and littoral operations across the South-West Pacific during the Second World War. However, despite some important capability acquisitions, the recent experience of the Australian Defence Force (ADF) has led to 'amphibious amnesia'—existing force structures and operating concepts are ill-suited to waging high-intensity littoral warfare. Australia's new littoral manoeuvre concept represents an opportunity for the ADF to better support 'whole of government' efforts to shape, deter, and respond to threats in the region.¹ Within the new littoral project, one development option promises a multitude of benefits. Weaponising the Army's future fleet of littoral vessels with loitering munitions will offer operational and tactical flexibility to the joint force, support high-intensity littoral warfare and, for the first time, see the Army play a role in strategic deterrence.

This article proceeds in four parts. First, it outlines the current strategic framework, defines Australia's regional maritime geography and primary operating environment, and highlights the Australian Army's experience in conducting effective large-scale amphibious and littoral operations. Second, it reviews the Australian Army's watercraft replacement program and the

current discourse surrounding the littoral manoeuvre concept, assessing that there is no technical or doctrinal barrier to weaponising the future fleet. Next, it explores the characteristics and operational use of loitering munitions and surveys their integration into the nascent United States Marine Corps (USMC) organic precision fires (OPF) program. The article then concludes with a simple proposal: that the Army's future watercraft be fitted for such weapons, offsetting critical gaps in ADF capability and providing the joint force with enhanced lethality and protection at the tactical and theatre levels.

Strategic Context and 'Amphibious Amnesia'

Australia's strategic risks are rising as the preponderance of global wealth and power shifts to maritime Asia. The Department of Defence's 2020 *Defence Strategic Update* (DSU) identified the growing threat of China and argued for a significant change in strategy. Australia's primary focus shifted from the Middle East towards the Indo-Pacific—a distinctly maritime operating environment. It narrowed strategic guidance for force structure, prioritising 'credible capability to respond to any challenge ... in the immediate region'.² The 2023 *Defence Strategic Review* (DSR) reaffirmed much of the DSU, defining Australia's 'immediate region' as 'encompassing the north-eastern Indian Ocean through maritime South-East Asia into the Pacific, including our northern approaches'.³ This region is dominated by thousands of islands across vast archipelagos and a growing population concentrated on long coastlines.

Despite the clear maritime focus of both the DSU and the DSR, Professor Michael Evans has observed that a curious paradox of Australian strategic culture is the lack of any significant maritime tradition. Even though the ANZAC sacrifice on the beaches of Gallipoli—the largest amphibious operation of the First World War—looms large in the Australian national identity, Evans argues that neither amphibious campaigning nor a general maritime consciousness has ever come to define strategic thought. Even the numerous division- and corps-level amphibious operations performed in New Guinea, New Britain, Bougainville and Borneo between 1943 and 1945 have not found their way into the national 'strategic psyche'.⁴

Yet, as Russell Parkin argues, in recent decades every time Australia has faced a genuine crisis it has repeatedly deployed its military in an ad hoc reaction rather than as part of a coherent strategic policy. These responses have always required the projection of forces ashore, a task for which such forces are often ill prepared. Sea power can project, protect, and sustain land forces, but only land forces can take and hold territory.⁵

Australia's defence policy is often framed within a 'continental' versus 'expeditionary' framework, a dichotomy that has dominated much of debate since the 1970s. Evans remarked that this debate often oscillates between 'the defence of geography on one hand and the defence of interests on the other'.⁶ In one sense a false dilemma, this dichotomy is nevertheless a useful way to broadly explain Australia's 'ways of war' and its strategic continuity.

'Continentalism', the first way of war, is best represented by the 'Defence of Australia' (DOA) doctrine, a thoroughly geographic conceptualisation of national security best typified by Paul Dibb's contribution to the 1987 Defence White Paper. Dibb interpreted the 2020 DSU as a return to the DOA concept following decades of commitment in the Middle East and Central Asia, but with an important distinction: the contemporary strategic situation is more dangerous and uncertain than the benign regional environment of the 1980s.⁷ Evans, however, argues that this is a conceptually narrow strategic view where the sea is viewed as a 'defensive moat' rather than manoeuvre space.⁸ This approach is focused on defending the northern 'air-sea gap', an unfortunate term which obfuscates the complexity of the littoral and archipelagic region within: a joint land-sea-air operating environment.⁹

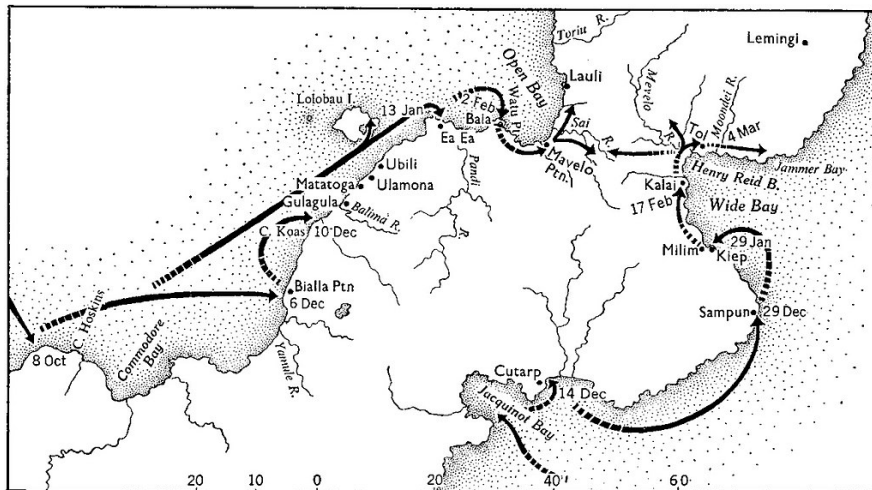
The second way of war involves an expeditionary approach to strategy, which seeks maritime security through alliance with a great naval power. This means paying premiums to a security guarantor through regular deployments of force packages to distant offshore theatres, most recently in Afghanistan and Iraq. Evans points out that the Australian way of war has an 'offshore character', while historian Jeffrey Grey noted that Australia's warfighting approach has always been defined by the high quality of its expeditionary infantry.¹⁰ But this strategy has hitherto meant there has been both minimal requirement and limited opportunity to develop a sovereign maritime tradition.

The maritime manoeuvre potential of a new fleet of Army-operated vessels represents an opportunity for new thinking on operating concepts and force design. But it should be noted that the Army's current strategic focus is not unprecedented. In the Second World War the Australian Army conducted extensive operations across multi-year campaigns, on land and along coastlines, as part of a coalition maritime strategy in the same region defined by the 2023 DSR. Apart from the larger and better-known landings at Lae in 1943 and across Borneo in 1945, Australia conducted dozens of amphibious and littoral operations in the Southwest Pacific Area (SWPA) in the Second World War.

During this period the Australian military developed extensive experience conducting what could now be called 'littoral operations'. In late 1943, under Operation POSTERN, the 9th Division conducted two significant amphibious operations in succession at Lae and Finschhafen, then cleared the coastline of the Huon Peninsula as part of General Douglas MacArthur's CARTWHEEL plan.¹¹ To support POSTERN, US Navy motor torpedo boats (or 'patrol torpedo'—'PT'—boats) blockaded the Huon Gulf and twin Vitiaz and Dampier straits, hunting Japanese transports along the New Guinea littorals.¹²

When the Australian 5th Division arrived in New Britain in October 1944, it used barges to launch a series of two-pronged advances along the north and south coasts towards the neck of the Gazelle Peninsula to fight and contain a Japanese army of nearly 70,000 men, many seasoned veterans, until the end of the war.¹³ In May 1945, under Operation DELUGE, an amphibious 'end-run' enabled Farida Force, a Commando Regimental Combat Team, to envelop and isolate the Japanese positions at Wewak for their destruction by the 6th Division during the Aitape-Wewak campaign.¹⁴

In June 1945 as part of Operation OBOE 6, Brigadier Victor Windeyer's 20th Brigade conducted patrolling operations by using landing craft to move quickly along the various rivers and estuaries along the North Borneo coastline.¹⁵ Place names like Dove Bay, Goodenough Island and Scarlet Beach may not hold as much resonance as Gallipoli, but they nonetheless represent a journey of doctrinal development, innovation, and institutional competence earned by hard-won experience.



Map 1. Australian operations in central New Britain, October 1944 to March 1945 (Source: Australian War Memorial)¹⁶

At one stage, the Army operated a veritable armada of boats and small craft, including trawlers, tugs, lighters, dinghies, barges, landing craft, and the 1,500-ton supply ship *Crusader*. Towards the end of the Second World War, the Army's Water Transport units operated over 2,000 ships and small vessels between Australia, New Guinea, Solomon Islands and Borneo.¹⁷ This stands in stark contrast to the two-dozen watercraft currently in service.

While planners should indeed seek lessons from the past, it is important that the warfighting potential of the new watercraft be optimised for the future. In a critique of US defence policy, Christian Brose lamented procurement incentives that favoured 'better legacy platforms over integrated networks of faster kill chains [and] familiar ways of fighting over new ways of war'.¹⁸ Australian former naval officer Bob Moyse expressed similar sentiments about Australia's force structure debate:

By concentrating on getting better at what they already do well, the army, navy and air force risk missing the point, like whales trying to solve their problems by getting bigger or cheetahs by getting faster.¹⁹

He adds: 'no one has ever won an archipelagic conflict on a single landmass. Archipelagic warfare depends upon manoeuvre of land forces by sea'.²⁰ The Australian Army's littoral manoeuvre programs (Land 8710 and Land 8702) present the opportunity to ensure legacy vessels are not simply replaced with newer ones, and that the future force is capable of littoral manoeuvre, joint warfighting, and strategic deterrence.

Littoral Manoeuvre

The DSU's partner document, the 2020 *Force Structure Plan*, announced the Army's intention to replace its fleet of aged watercraft. Land 8170 Army Littoral Manoeuvre (Phase 1) seeks to replace the Army's dated Landing Craft Mechanised (LCM-8) as well as its Lighter, Amphibious Resupply, Cargo, 5-ton (LARC-V) watercraft. The Littoral Manoeuvre Vessel—Medium (LMV-M) will be replaced with an improved but similar capability. Phase 2 will procure a heavy landing craft to re-establish the capability of the decommissioned Balikpapan-class Landing Craft Heavy (LCH). An LCH is an essential platform to disaggregate a landing force from the large and few Canberra-class Landing Helicopter Dock (LHD) vessels and enhance survivability in a contested maritime domain. Under Project Land 8702, the Army will deliver a littoral and riverine fighting vessel, tentatively termed the Littoral Manoeuvre Vessel—Patrol (LMV-P). The ADF has never fielded an LMV-P type capability, so its requirements are loosely defined. Therefore, great opportunity exists to maximise the project's operational potential.



Figure 1. Concept art for Raytheon-BMT proposed Independent Littoral Manoeuvre Vessel (ILMV). If selected to deliver the Army's Land 8710 Phase 1A program, Raytheon Australia will lead the team to deliver the BMT-designed vessel. The ILMV is one of several proposals for Land 8710 Phase 1A (Source: Australian ILMV design, BMT)²¹



Figure 2. Concept art for the Australian Maritime Alliance (AMA) proposed 'Oboe' design. The Oboe is one of several proposals for Land 8710 Phase 1A (Source: Serco)²²



Figure 3. HMAS *Balikpapan*, East Timor (Source: Defence Image Gallery)²³

Several Australian commentators have offered views on the embryonic littoral manoeuvre concepts. Professor Peter Dean recently called for restructuring the Marine Rotational Force—Darwin from a conventional bilateral training activity to one centered on experimentation and on developing the USMC's emerging littoral operating concepts alongside Australia's own Indo-Pacific focus. He notes that Washington's adoption of 'integrated deterrence' as the 'cornerstone' of its Indo-Pacific Strategy makes the interoperability of its nascent littoral concepts with the ADF essential.²⁴ Furthermore, Dean argues, the US Navy Marine Expeditionary Ship Interdiction System (NMESIS), with its use of the Joint/Naval Strike Missile (NSM), nests neatly with Project Land 8113 Long Range Fires and SEA 4100 Phase 2 Land Based Maritime Strike.²⁵

Will Leben offers a 'radically different force design' and operating concept intended to 'deter without escalation'. Specifically, he presents a model of a dispersed maritime-littoral task group based on Army capabilities and 'latent strike'. He proposes the emplacement of Army command and control (C2); intelligence, surveillance, and reconnaissance (ISR); and strike capabilities within a maritime area of operations (AO) at the onset of a crisis—perhaps as a stay-behind force following a disaster relief operation, as part of a routine training rotation, or as circumstances deteriorate along a 'competition continuum'. 'We need to offer a credible vision of how we could employ joint forces to shape a threat in a maritime setting', he says, 'rather than merely targeting them after they have acted first.'²⁶ Though his draft proposal pre-dated his awareness of its existence, his paper echoes much of the thinking behind the USMC's Expeditionary Advanced Base Operations concept. This is unsurprising given the shared strategic focus and similar operational challenges.

Historian Albert Palazzo calls for new thinking on the purpose of the Army's future watercraft. He points out that to date, the operational usage of the Army's watercraft has been nearly entirely limited to the support of forces ashore, including the movement of personnel, stores and vehicles, typically intra-theatre. 'When the soldiers needed fire support from the sea they had to call upon the navy', he says. 'The Army's watercraft mission was to support the fight, not to undertake it.' He proposes that Land 8710 evolve as a combat as much as a support program, integrating other joint fires projects with the littoral manoeuvre potential of the Army's new boats. 'There is no longer a good operational or technological reason', he adds, 'to treat Army boats solely as support vessels'.²⁷

Other states field fleets of potent small craft. Examples include the Hellenic Navy's Roussen-class fast attack craft, the Norwegian Skjold-class missile corvette, the Finnish Hamina-class missile boat, the Israeli Sea Corps Sa'ar 4.5-class missile boat, and China's Type 022 Houbei stealth missile boat. The Iranian Navy's doctrine includes 'swarming attacks' conducted by small, fast boats hidden among littoral inlets and anchorages. These micro fleets launch concentrated anti-ship missile strikes from dispersed locations that seek to overwhelm an adversary's missile defence system.²⁸ While these vessels are operated by navies, Australian Army personnel or joint crews could equally operate the ADF's future brown-water fleet.

As it is not expected to transport large cargo or vehicles, the Australian Army's LMV-P project presents an opportunity for renewed thinking on the future littoral and riverine capability. A small platform generates unique manoeuvre opportunities. As Palazzo argues, the Army's future watercraft 'will not sail in blue water and do not need long sea legs. Instead, they will hug the shore and hide in coves and swamps or move upriver'.²⁹ Weaponised vessels could be the brown-water equivalent of Julian Corbett's 'flotilla' with a 'battle power' that asymmetrically holds an adversary's vessels and other critical systems at risk.³⁰

The PT boats of the Second World War offer an example of the value of small, agile and well-armed vessels in high-intensity littoral warfare. Their experience suggests that the Army's future watercraft should not duplicate the role performed by the Navy's larger offshore patrol vessels or warships. As the US Naval historian Samuel Eliot Morison explained, PT boats were originally designed to 'sneak up on enemy warships at night and torpedo them', but this turned out to be 'suicidal' at Guadalcanal.³¹ Instead, they found a new purpose and proved indispensable along the coasts of New Guinea, New Britain and the Admiralty Islands.

Because of Allied sea control in adjacent waters, Japan's alongshore barge traffic became its only surface supply line. In the South-West Pacific littorals, PT boats ran nightly patrols in search of enemy barges, denied waterborne transport to the Japanese, inserted and extracted scouting parties, and provided fire support to amphibious operations.³² From 1942 to 1945, expanding from a force of six boats to 15 squadrons, PT boats and their rockets, torpedoes, cannons, and machine-guns left coastlines littered with destroyed barges and starved enemy soldiers.³³

But what types of modern weapons are suitable for littoral watercraft? Apart from direct fire support, Palazzo has campaigned for very long-range precision-fire systems that would allow the Army to adopt its first strategic mission.³⁴ Such systems would undoubtedly require robust joint battle networks for ISR and targeting. Jason Kirkham argues for an Australian 'deep battle' concept to act as a unifying framework to rationalise upcoming long-range systems acquisition.³⁵ Former Commanding Officer School of Artillery Ben Gray cautions against the 'seductive and enticing' allure of a doctrine predicated exclusively on precision systems, a cultural proclivity fueled by wars of choice and a desire for 'quick solutions' and intangible threats. Mass artillery fire, he emphasises, is still necessary to mitigate manoeuvre vulnerabilities.³⁶ For this effect, the Army's Project Land 8116 Protected Mobility Fires will deliver a regiment of self-propelled artillery and, in due course, be augmented by additional High Mobility Artillery Rocket Systems.³⁷ But these are terrestrial capabilities that require lodgement ashore for their effects to be brought to bear.

Loitering munitions offer an alternative: a middle ground that balances precision (strike) with mass (the ability to swarm), cross-echelon networked fire control, and the ability to deploy afloat on future watercraft. There is currently no ADF project to introduce loitering munitions into service—but there should be.

Loitering Munitions

Loitering munitions fit in the niche between cruise missiles and unmanned combat aerial vehicles—both capabilities the ADF either currently fields or is developing.³⁸ Sometimes called 'kamikaze drones' or 'suicide drones', loitering munitions are a low-cost, and thus potentially high-density, unmanned vehicle, armed with explosives and designed to 'loiter' above a target area for an extended period.³⁹ Like a missile, they are a one-time consumable designed to find a target and strike it. Humans can steer them from a control station, they can be autonomously operated with pre-programmed strike authority, or they can be employed with a combination of both.⁴⁰ Their ongoing development envisions the application of swarming methods to overwhelm an adversary's defences.⁴¹ One analyst has called loitering munitions 'a revolution in plain sight ... [one] that will impact the character of warfare more substantially than the introduction of the machine gun'.⁴²

While they have their origins in the Second World War era jet revolution, loitering munitions matured in the 1980s as a specialised weapon to target anti-aircraft systems. Several programs such as the Israeli Aerospace Industries (IAI) Harpy and US AGM-136 Tacit Rainbow integrated anti-radiation sensors into a drone or missile frame. These capabilities were designed to be launched in sufficient numbers to saturate enemy surface-to-air missile areas and trigger activation of radar systems for attack by follow-on aircraft. As aerodynamics, C2, and payload technology have improved, loitering munitions are increasingly used as a substitute for everything from mortars to airstrikes. The Marine Corps, for example, is seeking to directly replace its 120 mm mortar capability with loitering systems.⁴³ Some loitering munitions rely on a human operator to locate and strike targets, whereas others, such as the IAI Harop, can function autonomously.⁴⁴ Loitering munitions have appeared in war zones such as Afghanistan, Yemen and Syria, but it was not until the 2020 Nagorno-Karabakh War that they garnered mainstream attention.⁴⁵

In 2020, in a brief war over the disputed Nagorno-Karabakh region, Azerbaijan overwhelmed the Armenian military with the Harop loitering munition, enjoying success against older ground-based air defence systems. This tactic peeled off an important defensive layer, gave Azerbaijan air supremacy, and allowed it to destroy armoured vehicles and other systems with relative ease.⁴⁶ The Harop provided an almost persistent air threat to Armenian forces with its nine-hour loiter time and top-down anti-tank capability.⁴⁷ With off-the-shelf munitions, Azerbaijan demonstrated, according to one commentator, 'how a modest technological advantage can turn into a major strategic benefit'.⁴⁸

The 2022 Russo-Ukrainian War propelled loitering munitions to notoriety. As of February 2023, the US Department of Defense has supplied Ukraine with 700 AeroVironment Switchblade Tactical Unmanned Aerial Systems (T-UAS) and 700 Aevex Aerospace Phoenix Ghost T-UAS.⁴⁹ Mainstream media outlets have widely promulgated demonstrations of their capabilities.⁵⁰ The Russian military has made extensive use of ZALA Aero Group's Lancet-1, Lancet-3 and KUB-BLA small loitering munitions, with a 1 to 3 kilogram payload and 30 to 40 minute endurance; and the larger Geran-2, which houses a 30 to 50 kilogram warhead. They are routinely recorded destroying Ukrainian air defence and long-range fires platforms.⁵¹

In addition, the conflict has showcased 'suicide' unmanned surface vessels (USVs) and the destruction of naval vessels with aerial loitering munitions, demonstrating the utility of autonomous munitions in the maritime domain.⁵²

Nations with advanced drone programs generally possess sizeable loitering munitions arsenals. China, Russia, Iran, Turkey, Israel, Taiwan, and the United States all have domestic loitering munition production, and several other nations have purchased them from major manufacturers.⁵³

The battlefield events in Ukraine are driving a surge in demand for unmanned systems and the threshold for entry, even for non-state actors, is inexpensive.⁵⁴ At the time of writing, Australia does not yet have a loitering munition program for either domestic production or supply.

In 2021 the USMC contracted the Israeli-made Hero-120 loitering munition for its Organic Precision Fires—Mounted (OPF-M) systems requirement. UVision's contract followed a request from Marine Corps Systems Command (MARCORSYSCOM) for a tactical precision fires system 'capable of attacking targets at ranges exceeding the ranges of weapons system currently in an organic infantry battalion [7 kilometres] and up to 100 kilometers'.⁵⁵

UVision's Hero suite ranges from tactical to strategic systems, but the Hero-120 is the only platform acquired by the USMC so far. UVision advertises the munition as suitable for tactical tasks 'and other strategic missions', and it is the largest of their short-range systems. At 18 kilograms, it carries a 4.5 kilogram warhead, and its electric engine can project it beyond 60 kilometres for about an hour.⁵⁶ UVision's smallest system is the Hero-30, a man-portable TUAS weighing 7.8 kilograms (with launcher), a half-kilogram warhead, a 15 kilometre range, and a 30-minute loiter time. The largest strategic system is the Hero-1250, comparable to the Geran-2 with a 30 to 50-kilogram warhead, a 200 kilometre range, and 10 hours of endurance.



Figure 4. UVision loitering ammunition models Hero-30, Hero-120 and Hero-400EC (Source: Wikimedia Commons)⁵⁷

The OPF-M contract provides for a multi-year program in which UVision will supply the Hero-120 loitering munition to the USMC. UVision pitches Hero-120 as a system that combines surveillance and attack capabilities in a semi-autonomous system, defeats multi-dimensional threats in complex battlespaces, operates in GPS-denied environments, enables transfer of fire control between echelons, and communicates with existing C2 and fire-control systems.⁵⁸ If it proves capable of networking with the Aegis combat system, land-based C2 suites, or other existing battle networks, it will have immediate utility for the ADF.

For the USMC contract, Hero-120 will come with a multi-canister launcher, which is currently configured in eight cells but is modular and can be adapted to four- or six-cell configuration as required. It can be integrated into the USMC's Light Armored Vehicle-Mortar, the 4x4 Joint Light Tactical Vehicle, and the Long-Range Unmanned Surface Vessel.⁵⁹



Figure 5. Long- Range Unmanned Surface Vessel with Multi-Canister Launcher (Source: Defense Visual Information Distribution Service)⁶⁰

This article does not advocate for a specific platform or market solution.⁶¹ However, it highlights the Hero munitions for several reasons. First, Hero-120 presents a model with a promising array of capabilities, including effective operating ranges suitable for the littoral environment. It is a multi-mission system designed for the air, land and sea, and thus represents an example of potential cost efficiencies and cross-domain synergy. UVision advertises its maritime capabilities as 'sea-to-sea' and 'sea-to-shore'.⁶²

Second, the Hero suite spans the range of tactical to strategic systems in payload, ranges, launch platforms, and mobility, representing opportunities for cross-echelon target selection and hand-off in an integrated fire-support network. Any loitering munition acquisition should consider efficiencies in manufacturing, supply chains, and operator training.

Third, Australia's closest ally has selected the Hero-120 system for the USMC OPF-M project, which intends to employ it in distributed maritime operations. Given the maritime nature of Australia's primary operating environment, the ADF and USMC both face similar operational problems.

Weaponising Watercraft

The DSR is explicit on the importance of Australia's regional geography in framing the ADF's military challenge. The littoral manoeuvre concept and watercraft replacement program are acknowledgements of the growing significance of the maritime operating environment. But unarmed, the future vessels will only address half the problem—manoeuvre without fire.

Artillery and mortar fire provide massed but imprecise support to the manoeuvre element, and precision fires have traditionally been the role of manned aviation. Yet in the degraded, distributed, and denied environments of the Indo-Pacific littorals, there is a pressing need for long-range precision fires available to smaller manoeuvre units dislocated from each other and their supporting echelons. This capability becomes crucial if these manoeuvre elements are operating in an adversary's weapon engagement zone, acting as 'stand-in forces' in Marine Corps parlance.⁶³

In a conceivable future war against a peer adversary, it is unwise to assume that elements of the joint force will have ready access to close air support or naval surface fires from large, targetable warships. From 1942 to 1943, following the battles of the Coral Sea, Midway, and the Bismarck Sea, the dispersed Japanese Eighth Area Army in the South-West Pacific increasingly found itself at the mercy of Allied air and sea power, relying on submarines and alongshore barges, mostly moving by night, for reinforcement and resupply.⁶⁴ Similarly, a 'stand-in force' operating forward in the contemporary maritime environment will often be reliant on its organic fire support. Commanders will require a responsive and organic precision strike capability to achieve their tasks and protect their force. Ideally, this capability should be inexpensive, multi-purpose, long range, and electronically resilient.

Fortunately, loitering munitions offer such a capability, as the Marine Corps has recognised. Loitering munitions are cheaper than missiles, low signature, and simple to operate. They combine the benefits of independent fire support with ISR capabilities, and they also allow forces to locate, track, prioritise, hand off, or engage time-sensitive targets. Concentrated munitions launched from dispersed locations in sufficient numbers can overwhelm and dismantle an adversary's anti-access air defence system. The Nagorno-Karabakh, Russo-Ukrainian, and Israel-Hamas wars have all so far failed to produce a suitable response to loitering munitions.⁶⁵ Thus, low-signature distributed stand-in forces

and small littoral vessels can conceivably degrade an opponent's air defence system from within the weapon engagement zone, buying time and space for larger conventional joint assets to enter the battlespace. As one commentator put it: 'Formerly the domain of higher echelon shaping operations, enemy armour and air defense assets can now be swept off the battlefield chessboard by a company-level drone strike.'⁶⁶

The Australian Army should arm its future littoral watercraft with loitering munitions. The best opportunity to do so is at the outset of the littoral manoeuvre watercraft replacement program, before designs are finalised. The Army does not need to develop separate vessels for its various missions. Less the specific requirements of the LMV-P, the same LMV-M hull could provide the base for troop transport, cargo and supply, riverine and coastal patrol, fire support, and C2. The LMV-P itself could house a series of different mission kits or weapon pods. Other militaries field modular weapon kits and containerised systems. As the Marine Corps is demonstrating, the Hero canister launcher can be mounted on various vehicles and vessels. Both Russia and China have developed cruise missile systems disguised in 40-foot shipping containers, giving merchant vessels the ability to strike aircraft carriers and complicate targeting.⁶⁷

Deception aside, the availability of heavier and more advanced munitions with extended range—200 kilometres in the case of the Hero-1250 system—presents the Army with the option to significantly expand its organic operational fires reach. Along with the acquisition of land-based long-range strike capabilities such as the High Mobility Artillery Rocket System and Lockheed Martin's Precision Strike Missile, long-range loitering munitions enable Army to assume responsibility for securing maritime terrain within Australia's northern approaches, acquiring a deterrence role at the strategic level of war. Along with the Royal Australian Air Force (RAAF) and Royal Australian Navy (RAN), the Army's strategic mission could entail contesting an adversary's manoeuvre across a theatre-sized battlespace—the vast littoral region to Australia's north and north-east.⁶⁸ These long-range weapon systems could be ground-based, flown in by air, or launched from the Army's future watercraft.



Figure 6. Swedish-designed Stridsbåt 90H CB90-class fast assault craft. Rheinmetall and UVision offer the CB90 as a conceptual example for marketing the Hero-120 in the maritime domain (Source: Wikimedia Commons)⁶⁹

There are several operational and strategic advantages to loitering munitions afloat. First, the littoral operations concept is designed to enhance Australian deterrence signalling within a sovereign escalation framework. Currently, the ADF's staging and deployment of a capital ship, such as the Canberra-class LHD, or a larger embarked amphibious task force, represents a significant escalation for Australia. There are limited steps on such an escalation ladder, and further signalling requires substantial commitment of additional forces. The presence of smaller watercraft, on the other hand, lowers diplomatic costs and increases the number of rungs on the ladder. Small patrol boats are likely to be more politically palatable to Indo-Pacific heads of state than are warships.

Second, at the tactical and operational level, the ability of a littoral task force commander to employ a dense array of sensors prior to ground force disembarkation provides essential organic surveillance support to the force. This is the case for large amphibious lodgements, littoral patrolling, or pre-landing force operations. The simultaneous ability to remove threats as they appear, or to prioritise them for higher echelon targeting, enhances that flexibility and security. LMVs could discharge smaller 'kamikaze' USVs—like those purportedly used against the Russian Black Sea Fleet by Ukraine in

2022 or those launched against the Saudi Arabian Navy by Houthi rebels in 2017—for further self-defence or offensive strike capability.⁷⁰ In addition, most loitering munitions feature the ability for the operational commander or system operator to abort a strike mission mid-flight.

Third, the flight endurance of loitering munitions adds a temporal advantage that is significantly different from any other weapon system in operation. Loitering endurance means 'greater range, greater effects density, and greater survivability for the launch platform which can be long gone before the munition it delivered engages its target'.⁷¹ Watercraft possess the advantage of unimpeded manoeuvre, fast powered movement, and the ability to hide in complex terrain afforded by the littoral shore, including coves, estuaries and inlets.

Fourth, the combination of technical simplicity and precision offers the opportunity to push offensive support to lower echelons under permissive fire-control methodologies. This would mean greater organic survivability and lethality—loitering munitions are as much a force-protection system as a fires asset in a denied environment. Human-operated abort options and artificial intelligence enabled autonomous munitions decrease response time, increase strike accuracy, and minimise human error and collateral damage. These characteristics enable commanders to assume greater risk in decentralised fire control. This targeting approach will be essential in any future conflict within the Indo-Pacific, where the 'tyranny of distance' will see distributed forces operating in remote and austere locations without the advantage of immediate on-call fire or air support, even should their communications not be denied by their adversary.⁷²

Fifth, loitering munitions add to the growing mixed arsenal of lethal and capable weapon systems employed by the ADF. When instantaneous protective fires are required, missiles and conventional artillery remain more effective. However, loitering munitions provide a complementary weapon mix by generating a greater proportion of offensive fires and reserving costlier missiles for defensive purposes or larger targets. Weaponised watercraft can bridge gaps in operational fires between joint effects such as naval gunfire support, tactical aviation, and ground-based artillery once it can be brought into action ashore. Under Project Land 4100 Phase 2 (land-based anti-ship system), early designs like the Bushmaster-mounted 'Strikemaster' will be capable of launching twin Kongsberg Naval Strike Missiles (NSMs). A mixed fleet of loitering munition canister launchers and NSMs would form the foundation of a formidable littoral strike network.

Sixth, integrating loitering munitions into the littoral combat team, as a combat program led by the Army, opens the door for further innovations and doctrinal development for land forces. For instance, while large unmanned expeditionary systems will continue to be operated by the Royal Australian Artillery and RAAF at higher altitudes and longer ranges, support companies of the future infantry battalions may generate an armed UAS platoon of smaller tactical munitions—the Hero-30 or -90, for example—designed to operate in direct support of the ground combat element. During an amphibious lodgement, echelons could hand off the targeting data and authorities of these systems depending on the status of the supporting-supported commander. Furthermore, while it takes decades to develop a new manned aircraft, loitering munitions and drones can evolve quickly, as their recent proliferation demonstrates. This is an advantage as threats and countermeasures interact quickly.

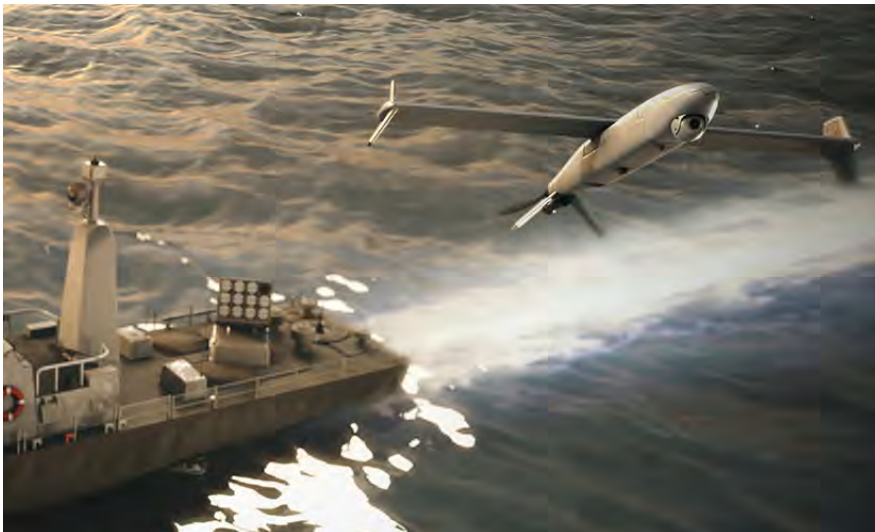


Figure 7. Concept art for the Israeli Sa'ar 4.5 Hetz-subclass missile boat employing Israeli Aerospace Industries (IAI)'s Mini Harop Loitering Munition System from a 12-drone canister launcher (Source: IAI)⁷³

Weaponising littoral manoeuvre watercraft with loitering munitions addresses two critical gaps in ADF capability and culture. It allows the joint force to fight in and from the littorals. The RAN's focus is on large, blue-water vessels with advanced and expensive combat systems, unsuited for work in the littorals. The smallest vessel operated by the RAN

is the Armidale-class patrol boat, which displaces 300 tons.⁷⁴ Its pending replacement capability under Project SEA 1180, the Arafura-class offshore patrol vessel, will be five times larger and will displace between 1,640 and 1,800 tons. The projected 13 Arafura-class vessels will cost around \$4 billion.⁷⁵ The Army's future watercraft need not be so exquisite and irreplaceable. Engagements within and from the littorals will, in part, protect and support these larger naval vessels, freeing their larger weapon systems for decisive surface combat.

Loitering munitions fill a lethality gap between cruise missiles and unmanned combat aerial vehicles. Many loitering munitions are relatively inexpensive, simple to operate, modular, and multi-role. They are capable of operation by dismounted soldiers, from armoured vehicles, or from watercraft, representing a logical investment for the Australian Army, a flexible force that operates across multiple domains. Armed watercraft could be used as a fire-support platform akin to the PT boats of the 1942–1945 South-West Pacific campaign, a precision-strike launchpad, an ISR and C2 node, a strategic deterrent, or merely an armed transport vessel capable of self-defence.

Conclusion

With the capability to conduct intra- and inter-theatre manoeuvre, deliver organic fire support, and distribute ground combat systems and landing force packages, the littoral manoeuvre capability represents a conceptual bridge between two competing 'ways of war'. For the first time since the Second World War, the Australian Army will be capable of effectively operating in the complex archipelagic terrain of the region sometimes dismissed as an 'air-sea gap'.

Loitering munitions present a viable option for arming the future fleet of watercraft, especially the small 'flotilla' vessels of the LMV-P program. Their combination of surveillance and precision strike affords operational flexibility and permissive, decentralised and cross-echelon fire-support methodologies. Along with other long-range precision strike capabilities acquired under Land 8113, the adoption of large loitering munitions will enable the Army to play a role in national defence at the strategic level of war. A prospective littoral operating concept may integrate communications networks with a wide range of munitions that fuse the strike system together at multiple echelons. This could see assets and fire control

allocated down to the deployment of tactical-level littoral combat teams, which will be forward in the theatre, shaping the environment for larger follow-on close combat formations.

Weaponising watercraft with autonomous and semi-autonomous munitions, some capable of strategic strike, will represent a significant expansion of the Australian Army's operational reach. Littoral warfare has a rich history in the Army and in the region, and it is essential that future watercraft are not overlooked for their warfighting potential. The littoral manoeuvre programs must deliver more than just 'bigger whales' and 'faster cheetahs'.

While a full understanding of the impact of loitering munitions on future warfare will not be achieved without further operational experience, wargaming and testing, these systems will undoubtedly compel substantial changes in doctrine, platforms and force design. Weaponised watercraft will drive much of this change. A century hence, one should expect to see them among the War Memorial's displays.

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Defining Land Force Mobilisation

Hannah Woodford-Smith

Australia's strategic environment is deteriorating. The scale, scope, concurrency and intensity of conceived future operational tasks will require some level of land force mobilisation. However, the allocation of resources to, across and between tasks will vary as the strategic context and direction changes. As recognised in the 2023 *Defence Strategic Review* (DSR), this level of uncertainty combined with a reduction in strategic warning time¹ requires Defence to increase preparedness, thereby realising 'tangible enhancement to our warfighting capability and to self-reliance in national defence'.² Specifically, the DSR directs Defence to undertake 'accelerated preparedness' across key interest areas including workforce, supply, infrastructure, distribution and posture.³ For Army, this represents an opportunity to reflect on what is being asked of its land forces by government to ensure it is prepared. It requires Army to consider lessons from the past to foster greater learning and to elucidate what has changed. It also necessitates that Army rebuild capability ahead of future missions. These are not simple tasks; nor are they finite. They are tasks that governments and militaries have got, and could get, wrong. For example, a 2000 parliamentary inquiry into the Australian Army found: 'The Army commenced both World Wars fundamentally unprepared. In neither case was the Army adequately prepared for the nature of the conflict or the scale of its commitment.'⁴ The inquiry went on to note that the cost 'for this inadequate preparation was paid for in Australian lives and reduced national security'.⁵ If Army is to mitigate these very real and devastating risks, while adapting quickly in line with government and Defence guidance,

the organisation must have a clear definition of what future conflict, and therefore mobilisation, means for land forces and how it can prepare in the immediate and long term.

This article intends to inform those tasked with implementing accelerated preparedness so that Army can meaningfully contribute to the integrated force now, and set the conditions required for the future force. It also aims to engage a broader audience across Army on the issue of preparedness and mobilisation, as well as those in the academic community and industry. To do so, the article first examines current understandings of mobilisation, preparedness and scaling. Following an analysis of historic Army commitments and government guidance, it considers the role of land power and highlights possible future strategic scenarios. Next, it reflects on historic mobilisation activities to identify specific challenges and lessons for Army that will enable accelerated preparedness. In doing so, this article presents a mobilisation ecosystem to inform implementation of force structure changes, realise more rapid capability development and focus organisational transformation. These findings therefore support Army's logic-based approach to force design and support higher levels of Defence preparedness.

Part One—Understanding Preparedness, Mobilisation and Scaling

Preparedness and mobilisation have become topics of sharp focus in public discussions following the series of national emergencies in Australia from 2019 and in light of the Russia-Ukraine War. According to the Australian Government, the Defence response to the 2019–2020 national bushfire emergency (Operation BUSHFIRE ASSIST 2019–2020) was the 'largest ever mobilisation of the ADF in response to a domestic disaster'.⁶ Approximately 6,500 Australian Defence Force (ADF) members provided support to emergency services across Australia; parts of the Defence estate were repurposed as shelters and joint task force command centres; and Defence assets supported firefighting efforts and rescue operations and transported emergency supplies.⁷ This operation also represented the first ever 'call-out' of the Reserves authorised under the *Defence Act 1903*, whereby members serving part time were obliged to render full-time service for the duration of the order.⁸ On a much larger scale, Ukraine, Russia and the international

community have mobilised national resources and defence elements to further their objectives in the war—attaining success through mass as much as battlefield superiority (through people, capability and financial resources).⁹

In light of these recent events, several security commentators have called on Australia to reflect on its future mobilisation and preparedness needs, with some going as far as requesting planners to ‘get cracking’.¹⁰ Answering these calls and the rapidly changing strategic environment, the DSR terms of reference included direction to ‘outline the investments required to support Defence preparedness, and mobilisation needs to 2032–33’.¹¹ It also stated: ‘The Review will make recommendations in relation to Defence force structure, force posture, and preparedness over the period 2023–24 to 2032–33’.¹² The DSR outcomes were deliberately ambitious, with some taking immediate effect. Mobilisation, however, is absent from the list of substantive transformation efforts and from the debate following release of the review. On the other hand, preparedness is considered at length in the DSR, with the document outlining that Defence requires ‘accelerated preparedness’ covering force posture, capability acquisition and a reprioritisation of funding in line with strategic threats.¹³ The reason for the disparity in consideration of mobilisation compared to preparedness in the government’s preeminent strategic document is unclear. Indeed, it invites the question: why is government asking Defence to prepare, but not mobilise?

The answer is a simple one, grounded in the definitional delineation. The term ‘mobilisation’ is generally used to refer to a whole-of-government response to a an immediate (or realised) threat of national significance—as exemplified by both Operation BUSHFIRE ASSIST 2019–2020 nationally and the Russia-Ukraine War internationally. At times, mobilisation may be limited to Defence in practice. At other times, mobilisation may require whole-of-government support. In both instances, however, mobilisation reflects a national endeavour. In the Australian context, mobilisation for Defence is the activity, or process, of transition between preparedness and the conduct of a specific military operation. It is the shift from the force-in-being (FIB) at a minimum level of capability MLOC to an operational level of capability (OLOC).¹⁴ In this context, the decision to mobilise is taken by government, and is given effect by Defence. The ability to respond, however, is based on whether Defence is prepared to do so. Preparedness therefore is the measure that determines whether Defence has the sustained capacity to meet the conceivable operational

demand and to accomplish government-directed tasks within a specified time. Underpinning this measure are considerations of 'readiness' (ability to respond within a specified time) and 'sustainment' (ability to continue meeting directed tasks).¹⁵ Within this concept, any attempt to achieve the DSR-directed accelerated preparedness requires consideration of the circumstances in which the Australian Government may require Defence and/or national mobilisation to be given effect.

Notably absent from discussions surrounding mobilisation requirements and Defence preparedness activities is the concept of scaling or scalability. Such an omission may again have definitional origins. Force expansion is generally the term used in tandem with mobilisation¹⁶—for good reason. To transition ADF elements to OLOC requires some (and variable) increases in military capability, known as force expansion.¹⁷ Similar to the distinction between mobilisation and preparedness, scalability is a measure for its counterpart concept: force expansion. Most frequently referenced in relation to technology and engineering practices,¹⁸ scalability is the ability to deliver acceptable performance as demand grows. For Defence, performance can be measured in terms of organisational outcomes as well as the delivery of military power. Accordingly, Defence will be required to scale when there is increased demand due to operational commitments that strain or exceed the capacity of the FIB. In this context, it is important that Defence leverages technology. Critically, technology can have a force multiplier effect because it can enhance conventional platforms/workforce and, in some instances, replace the need for them entirely. For example, in 2021, Army's Robotic and Autonomous Systems Implementation & Coordination Office demonstrated that 'the autonomous leader-follower trucks, that can drive in convoys, reduc[e] the number of drivers required—generating "logistic mass"'.¹⁹ These advancements underscore the disruptive nature of technologies and the need to consider the generation of land power in new ways. To do so, this article introduces the notion of 'force-size effect'.

Traditionally, operational demand for land power was assessed based on capability inputs (conventional force compositions). However, as demonstrated above, there are now new ways to achieve a strategic effect or mission that are independent of force structure, size or geographic disposition. This situation shifts force analysis/design from a linear evaluation of capability-to-task (force structures and platforms to achieve a specific operational task) to more innovative thinking about all ways

available to achieve the desired output (effect). Applied to the analysis of future force design, the concept of force-size effect can help clarify the size a force needs to be to generate the military power necessary to meet the operational demand. Force-size effect is the level of military power required to meet operational demand based on the known and measurable effect of current capability, also referred to as the FIB. This is a nuanced way to analyse force multipliers in force design. Continuing the previous illustration, employment of autonomous systems may enable Army to enhance the resident land power capability of the FIB by 1.5 times—generating a force-size effect of $FIB \times 1.5$. Conceiving solutions using force-size effect enables Army to mitigate or reduce risks related to the key transformation pillars in the DSR, such as workforce, infrastructure, materiel and force posture, in a resource-constrained environment. Finally, in delineating these terms, Army has an excellent opportunity to qualitatively improve contributions to the integrated force for future operations. Indeed, it is the responsibility of Army to generate land power (preparedness) to meet government-directed Defence objectives in support of Australia's national interests (mobilisation) at the rate required (scaling).

By conceptualising operational requirements in terms of force-size effect, decision-makers can leverage asymmetric opportunities presented by advancements such as technology or integration with partners. This opportunity can become critical in periods of heightened operational tempo. For example, the international responses to Operation BUSHFIRE ASSIST 2019–2020 and the Russia-Ukraine War highlight the international aspects of mobilisation and the opportunities presented by force integration—particularly for enhancing military power. When Australia faced a national bushfire emergency, the governments of Canada, Fiji, Vanuatu, Indonesia, Japan, New Zealand, Papua New Guinea, Singapore and the United States all pledged aid and resources in support. This assistance included 450 military personnel. Equally, when Ukraine faced an existential threat from Russia, 41 countries provided some form of humanitarian, financial and/or military support. This assistance amounted to a massive €143.6 billion between 24 January 2022 and 15 January 2023 and 'made a real difference on the battlefield, and helped the people of Ukraine defend their country from Russian attacks and advances'.²⁰ Demonstrating the surge in effort achievable through integration, such commitments will continue to have a powerful influence on the outcomes of crises.

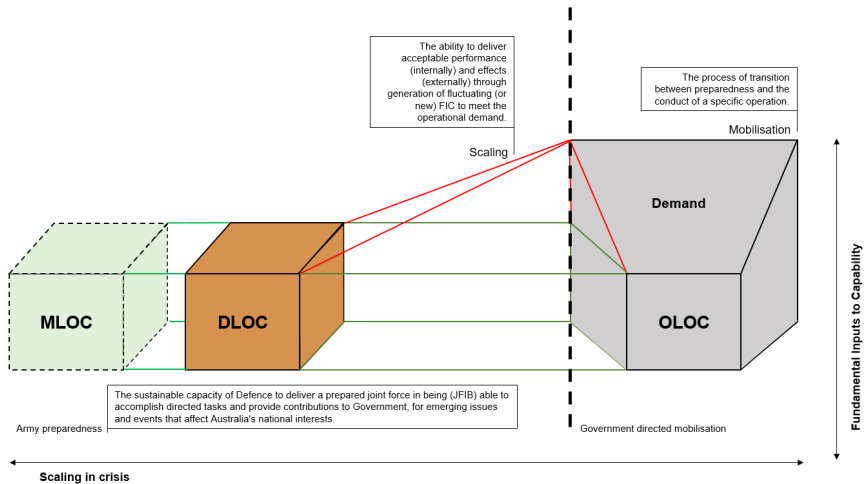


Figure 1. Understanding preparedness, mobilisation and scaling

Part Two—The Role of Future Land Forces in Conceivable Operational Scenarios

In both Operation BUSHFIRE ASSIST 2019–2020 and the Russia-Ukraine War, mobilisation occurred as the result of iterative planning and preparation. In fact, their execution was the culmination of decades of threat analysis, combined with decisions concerning strategic priorities, resources, skill, force structure and facilities. In line with these factors, governments conducted real-world testing and adopted transformation initiatives. This type of planning makes the unprecedented (marginally) predictable, enabling governments to be prepared, to be ready. However, with collapsing strategic warning time and a rapidly changing strategic environment, Australia is confronted by the need to push preparedness beyond current time horizons and to quicken capability development cycles.²¹ Such a shift in thinking requires assessing a future defined by high levels of uncertainty and high stakes for miscalculation. In this future, Australia is confronted by the very real 'prospect of major conflict in the region that directly threatens our national interest'.²² To be 'ready' for this prospect requires contemplation of historical mobilisation case studies to understand what has changed and identify lessons learnt. In his 2020 paper considering Australian national mobilisation, Peter Layton highlights the intellectual benefits of considering past case studies and alternative

future scenarios to resolve issues of strategic uncertainty.²³ Layton asserts that this combined approach to mobilisation policymaking and planning reduces uncertainty by projecting the known past onto conceivable futures—mitigating the risks of depending on history repeating itself, while subsuming the wisdom of the past into new approaches and processes.²⁴ For Army specifically, mobilisation scenarios reflect three types of historical military commitments, outlined below. In each scenario, land power was mobilised and expanded differently to mitigate variations in operational demand, making considerations of preparedness and scaling similarly distinct.

- **Large-scale, prolonged, conventional warfighting (World Wars).** Maintenance of readiness forces, requiring mass expansion that levered Universal Service. In the most extreme case, during World War II, the Australian Government met the operational demand with an Army that was 13 times the size of the standing Army prior to mobilisation (FIB x 13). Notably, due to a drain on the domestic industrial base, Army conducted a period of demobilisation in 1943 that reduced the force to 366,000 personnel across six divisions by 1945.²⁵
- **Limited conventional warfighting (Korea and Vietnam).** Maintenance of readiness forces, requiring expansion to meet deficiencies in the FIB that leveraged National Service. At the peak of this, during the Vietnam War, the Australian Government met the operational demand with an Army that was 1.5 times the size of the standing Army prior to mobilisation (FIB x 1.5), but found it difficult to field a single battalion for operations.²⁶
- **Contingent commitments (INTERFET / Middle East / domestic emergencies).** Remediation of readiness shortfalls, requiring changes to preparedness rather than surge or expansion. In 2006, at the peak of Army's commitment to Afghanistan and Iraq, the Australian Government increased the land force by raising two additional infantry battlegroups and essential enablers. This initiative was known as the 'Enhanced Land Force'. Most other changes occurred within a revised preparedness system that introduced the 'raise, train, sustain' model, and integrated Reserve Forces.²⁷

These scenarios represent historic consistencies for land power contributions to national mobilisation efforts.²⁸ Across these commitments, there is also commonality among mission-specific land domain tasks. Specifically, Army has generally required:

- **Field forces for contributions to regional contingencies and allied operational commitments.** A ready force capable of deploying on operations across the spectrum of conflict, domestically and internationally, as required. These forces have been deployed for (broadly) warfighting, humanitarian assistance and disaster relief (HADR), and maintenance of security and stability in regionally relevant locations, known as theatre gateways.
- **Garrison forces for defence of Australia tasks.** These are forces ready to deploy for defence of Australia tasks, vital asset protection, civil defence, route security, administration and training. These forces have provided coastal and anti-aircraft defence, security for internment camps, emergency manning for offshore establishments, and security for Army establishments, as well as for declared prohibited, protected and controlled areas.
- **A training and maintenance organisation to sustain Australian and partner forces.** This capability entails a robust support system that underpins field and garrison forces as well as other allied forces. Historically, it has delivered arrangements for increased administration and training of the force, construction of additional works, and acquisition of stores, weaponry, supplies and vehicles by purchase or impressment.²⁹

Though brief, this overview offers a baseline for conceivable future scenarios and land force tasks. Its relevance, however, is not absolute. Any consideration of historical case studies should be tempered by consideration of the unique characteristics of the contemporary security environment. While history is important, over-reliance on it risks neglecting the value of predictive analysis concerning the future operating environment and stymieing efforts to understand ‘the art of the possible’ (in terms of both the nature of the challenges and the available courses of action in response). Therefore, this article combines historical analysis with future-focused analysis. Consistencies between current Australian Government guidance and Australia’s history of national mobilisation demonstrate three possible scenarios requiring the deployment of land capability. These are: (1) HADR tasks domestically and overseas; (2) regional security/stability operations; and (3) major conflict in the region.³⁰ Government does not present dates alongside these possibilities; nor does history forecast time horizons for them. The DSR instead outlines three time periods that foreshadow critical planning horizons:

- **2023–2025**—Enhanced FIB (for matters which must be addressed urgently and as an immediate priority)
- **2026–2030**—accelerated acquisition to the Objective Integrated Force
- **2031 and beyond**—delivery of the Future Integrated Force.³¹

With the multifaceted lessons on mobilisation and preparedness presented by Operation BUSHFIRE ASSIST 2019–2020 and the Russia-Ukraine War, there is a last and critical takeaway for futures analysts and planners: strategic risks, and the mission-specific tasks outlined above, will almost certainly entail some level of concurrency. Both climate change and shifts in the international system have become central components of the current and future operating environment and represent key risks in fatiguing a limited national security capability. They represent concurrent challenges at both the strategic and operational levels. For example, the DSR is unequivocally a maritime-focused strategy, but it has reinvigorated a focus on ‘national defence’ achieved by ‘deterrence through denial’.³² Australia must therefore balance tensions between defending its sovereign territory, and doing so far from its shore before a threat is realised. For Army, concurrent tasking is already consuming readiness at rates unsustainable for long-term preparedness—especially for specialist capabilities and platforms.³³ These challenges reveal the complexity of maintaining a small and capable defence force that can address, or avoid, a range of concurrent strategic risks. It also reveals the need to plan the capability of future land forces³⁴ to meet the most dangerous anticipated strategic risk faced by Australia: the prospect of major conflict in the region that directly threatens our national interest.³⁵

Part Three—Army’s Mobilisation Challenge

Every time Australia has contributed to a major conflict it has mobilised its land forces. Army’s history of mobilisation demonstrates the organisation is capable of rapidly moving from a low preparedness base to a significantly expanded and operationally relevant force. However, doing so has required Army to scale on demand, while in conflict, with limited resources. To meet these challenges, Army has leveraged an effective and scalable training system, a balanced force structure and its geographic disposition.

In wartime, training has always been essential to the generation of Army’s scaled workforce³⁶ as well as to assure combat proficiency.³⁷

For example, in World War II, increasing the size of the land force depended on recruitment and the generation of trained personnel. At this time, the establishment of divisions (other than the original Citizen Militia Force (CMF) divisions) occurred when required and when an acceptable force strength could be achieved. New divisions were therefore raised initially in 'embryonic' form, grown from a core base of officers and senior non-commissioned officers. These core personnel were then able to train recruits directly after enlistment, in location.³⁸ This expansion occurred in parallel to a fluctuating training continuum where time spent in training was commensurate with an increase in risk tolerance (i.e., when the threat was higher and operational demand increased, training times were reduced). Further, in wartime locations experiencing relatively low operational tempo and low threats of attrition, specialised training, as well as battalion/brigade/division level exercises, was conducted forward in theatre and using coalition-run facilities. For instance, as Japan advanced closer to Australia's shores, Army required a degree of self-sufficiency in its training continuum and this triggered an exponential expansion in the number and range of training areas/courses/schools domestically. By 1943, a well-developed training continuum enabled the preparation of formations prior to their departure from Australia and insertion into theatre.³⁹ In this way, the force generation system was capable of rapidly expanding the force to a small corps of highly efficient officers trained in staff work, a high-quality military college, and a citizen militia.⁴⁰

Army's force structure and composition has proven itself to be similarly responsive to operational demand. For example, prior to World War II, no 'wartime establishment' existed and the 80,000 CMF accounted for approximately 40 per cent of the wartime establishment—largely based on those structures used in World War I.⁴¹ This situation soon changed, however, with the mobilised structure (inclusive of the expanded workforce) increasing during the war years to over double the size of the previous standing Army. Based on Australia's wartime experience, Lieutenant-General Sir John Lavarack subsequently recommended that government should strive for an Army with an establishment two to three times its realised size (FIB x 2 or FIB x 3). Wartime experience also demonstrated the value in expanding recruitment opportunities to a broader cross-section of the Australian population. During World War II, Army recruited (for the first time) significant numbers of Papuans to form the Papuan Infantry Battalions and the New Guinea Infantry Battalions.⁴² Army also approved recruitment

of women into an auxiliary force, the Australian Women's Army Service (AWAS).⁴³ The number of women in the AWAS increased commensurate with national mobilisation, rising to an establishment of 18,000 by the end of the war.⁴⁴ Towards the end of the war, other service restrictions were also eased. For example, by 1945, women could serve in major Army headquarters in New Guinea.⁴⁵ The capacity to shift Army's force structure to meet operational demand and the threat posed represents an essential quality required of the contemporary Army, which demands flexibility as it seeks to manage a growing and expanded force. Generating mechanisms to achieve structural, dispositional and procedural flexibility will therefore be essential to preparing for any scenario that may require mobilisation of land forces in the future.

The division is the unit of action that has most commonly been used by Army in wartime. In World War I, for example, divisions were seen as essential by the military leadership to ensure Australia 'might fight as an undivided unit of the British Army', fearing that without doing so Army's brigades 'might be attached to different divisions, and the unity of the force [would] thus be destroyed'.⁴⁶ For both the British and Australian armies, the division originally consisted of three brigades (of four battalions) and other supporting units. By 1940, however, the Australian Army had directed that each infantry battalion comprise a company of reinforcements—thereby ensuring that units were responsible for training their own reinforcements.⁴⁷ In 1943, the Australian divisional structure was changed from the British model to a smaller, more mechanised organisation appropriate for operations in the jungle.⁴⁸ Jungle divisions reflected a shift in strategic direction for Australia, with offensive forces limited to tropical areas. This force composition meant that any redeployment to a non-tropical theatre would necessitate another restructure of the divisional standard.⁴⁹ Reflecting on Army's predilection towards divisions as a minimum unit of force helps inform future planning. Specifically, natural assumptions around force structure based on historical precedent will need to be tested against the contemporary practice of Australia's partners, as well as the real demands of the conceivable tasks and the regions into which Army may be deployed in the future.

Relevant to issues of force composition is the matter of geography. During the two world wars, divisions were aligned to Australia's state and territory boundaries. It was believed (and proven) that raising units on a geographic basis would help generate cohesion within force elements associated with

the areas of their origin and their operational tasks.⁵⁰ The only exception to this principle was for specialist trades such as artillery, medical corps and engineers.⁵¹ Notably, Army oriented its geographic disposition to Northern Australia towards the end of World War II, a disposition that was reaffirmed in the 1987 Defence White Paper. The White Paper established that an increased military presence in this part of Australia would ensure Army achieved greater familiarity and experience within its most likely area of operation, as well as improving its ability to rapidly respond to contingencies.⁵² Consequently, Army's geographic disposition remains intimately tied to the establishment (preparation) of relationships—through communities, individuals and areas of operation—necessary for land forces to operate in the future.

The lessons from this very simple and deliberately reductionist overview of Army's history of mobilisation are plentiful. However, this article draws specific attention to only those takeaways that may aid planners and commentators to mitigate future land force mobilisation challenges—those requirements that the organisation can implement now to fulfil the urgent call for accelerated preparedness. The first is simple and an academic cop-out: it is a call to continue this campaign of learning. From this brief investigation into Army's past, we now have a theory of success to overcome challenges presented by mobilisation. Army has only been successful at mobilising when it was adequately prepared to be relevant to the community, credible in its role, sustainable and efficient, integrated, and flexible in structure and readiness to meet shifting threats. In particular, it fostered geographically relevant civil–military partnerships that enhanced coordination and efficacy in meeting Army needs in both response and scaling. Army also maximised and reinforced relationships internal to the land force that were consistent with those of the joint force, allies and partners. Army was able to do so by leveraging the minimum force required based on a pre-established force structure aligned to warfighting needs. Similarly, Army established and maintained capabilities that supported the breadth of tasks and theatres. Therefore, this article calls for renewed research and debate on these specific mechanisms that enabled Army to move from a low base of preparedness to an operationally relevant force.

The second lesson is confirmation of the focal role of Army's expertise and workforce generation system (i.e. the training system) in preparing the integrated force. Following the Cold War, government acknowledged that force expansion was only truly applicable to Army.⁵³ Other groups and

services are only able to marginally increase force strength. Indeed, long lead times to acquire additional capability create dependencies on the units already on the establishments and equipment they already have; whereas Army can more rapidly expand, significantly increasing force strength through trained personnel, with equipment and most munitions quickly mobilised through domestic production or from overseas suppliers. In this way, ‘the establishment of existing equipment was not the determinant of the force’s ultimate size’ but rather ‘the key factor was [Army’s] maintenance in peacetime of the necessary range of military skills, tactics, command and control, and operational procedures that the force would require for a major conflict’.⁵⁴ Put succinctly, ‘the ability of the force to retain its existing knowledge base and to absorb advances in the military art were the primary controlling factors in the army’s expansion plans’.⁵⁵ In this way, Army is the primary source of expertise in planning large-scale combat operations and the raising and training of large military organisations.

Finally, generating an expanded land force is dependent on an ecosystem of considerations ranging from the operating environment down to those mechanisms that generate expanded capability (see Figure 2). Each element influences preparedness for the Army-in-Being and FIB and the mechanisms required to implement adjustments within extant resourcing and government guidance. Adaptations across the Fundamental Input to Capability (FIC), governance systems, and management of varied recruitment/service obligations will most substantively influence Army’s ability to generate land power at an increased rate.

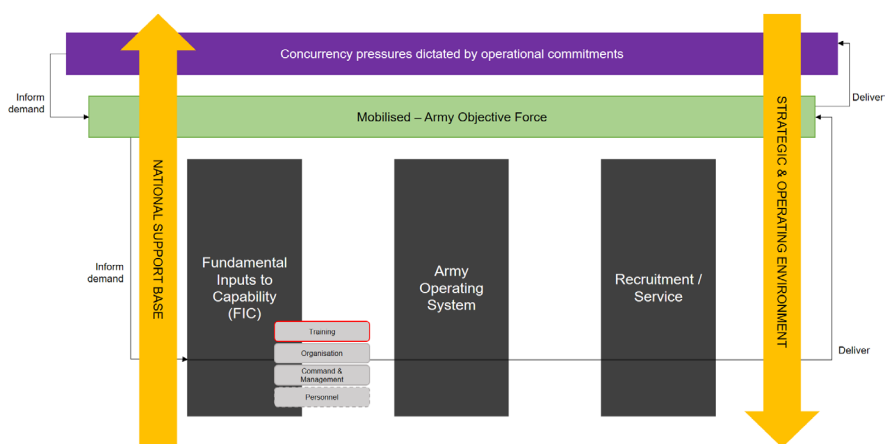


Figure 2. Army’s mobilisation ecosystem

Generating an expanded land force depends on integrating, coordinating and managing the various FIC, delivered in varied quantities, characteristics and time scales.⁵⁶ These are integral to managing the implementation of changes to land capability, particularly for personnel, training, major systems, facilities and equipment. However, Army has historically focused on those FIC with the greatest impact that are also within the remit of Chief of Army as Capability Manager, due to dependency on Defence or government support for large-scale capability changes. Today, these include training, command and management, major (or in some instances minor) project systems, organisation and personnel. Such changes to the FIC during large-scale combat have often necessitated quicker decision-making cycles and enhanced prioritisation. In response to overriding operational demands, Army has pared back its administrative overheads to include only those that are essential to the facilitation of large-scale combat operations. In parallel, Army has delegated decision-making responsibility to lower levels of command and fostered stronger relationships with other government departments in order to reduce the burden of bureaucracy on the ADF.⁵⁷ While this is impressive when achieved in wartime, if Army is to truly adapt to today's rapidly evolving security threats, its operating systems need to be optimised for simplicity and efficiency before conflict occurs.

While efficient systems are important, ultimately the achievement of preparedness requires adequate and consistent resourcing. Interwar armies are generally constrained in recruitment and retention. In particular, Army's funded force strength is influenced by changing employment practices, employee aspirations and expectations, as well as demographic factors such as age, ethnicity and health.⁵⁸ Further, Army's traditional recruitment pool and capability investments are impacted by budgetary pressures and societal expectations regarding the role of the military.⁵⁹ To overcome such issues, Army may need to evaluate preparedness initiatives that resolve or mitigate current force issues (such as hollowness), establish and protect an expansion base, and are executed within extant processes and funding. All of the changes proposed in this article are complex and require changes to systems that evolved out of historical and cultural necessity. Changes will not be easy, and reticence to make them will be rife. Nevertheless, the Australian Government has called for these changes, and for their implementation to be accelerated. Army must therefore continue to push for their adoption so land forces are prepared for the fight tonight, while the organisation concurrently sets the conditions for tomorrow.

Conclusion

The 2023 DSR has called for accelerated preparedness. To contribute to this undertaking, Army must improve its capability to fulfil and maintain its responsibilities for national defence while delivering an expansion base for prolonged and concurrent missions. In future, this may require Army to deliver land power at a rate greater than the FIB. To be effective in doing so, Army must remain relevant to the community, credible in its role, sustainable, efficient, integrated, and flexible in structure and readiness to meet shifting threats. Opportunities to realise these characteristics require capability options that resolve current force issues and support expansion within extant resources and processes. In particular, Army can best accelerate its preparedness by adapting the training system, leveraging autonomy and providing essential and transferrable expertise for large-scale combat operations. If these mechanisms are adopted holistically and conceptually, Army will enable the integrated force to mobilise successfully for the conduct of future operations, as and when directed by government.

About the Author

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Advanced Computing and Warfare

Chris Smith

**Speech given at the Synergia Conclave, Bangalore, India,
18 November 2023**

[Editorial note: This speech has been edited and condensed for clarity.]

I am going to discuss the ways advanced computing might change warfare, and the ways it might not. My aim is to recommend where advanced computing applications are likely to get the biggest return on investment. In order to avoid the trap of prediction, I intend to look at the past—particularly the recent past—to give us some sense of how best to focus the application of advanced computing to warfare so that we are best prepared for the future, whatever it might be. After all, the future is irreducibly unknowable.

My address is principally a caution for those who think that the potential of advanced computing in warfare is greatest in the area of command and control—specifically improved decision-making. My thesis is that war is a practical phenomenon. It is about doing more than it is a cognitive endeavor. Therefore, applications for advanced computing—that enable better doing—are likely to have a more substantive influence on future warfare than applications that enable better command and control.

To frame my address a little, I will use the term advanced computing to refer to a range of things, including AI, machine learning, quantum computing and the like. In this respect, I should note that I come to this topic as an army officer with expertise in warfare rather than expertise in computing. I also avoid the subject of cyber warfare. I do so because there

are essentially only three war-related things you can do in cyberspace: espionage, sabotage and subterfuge, and of course their counters. While these things have been features of war from the very beginning, they have never been particularly decisive. That tendency is unlikely to change just because those things now take place predominantly in cyberspace. So I am steering clear of cyber.

Let us begin our exploration by casting our minds back to the 1990s. It was the decade of Fukuyama's 'end of history'. At the beginning of the decade, in the process of liberating Kuwait, America's rejuvenated post-Vietnam army and air force had virtually annihilated Saddam Hussein's army. To some, the American success was evidence that developments in precision munitions and information technologies had changed the very nature of war. It seemed that the side able to take full advantage of the new information systems could succeed in battle and win wars with reduced risk to the safety of its troops. It inspired the theory of network-centric warfare.

At the time, net-centric theorists like Vice Chairman of the American Joint Chiefs of Staff Admiral William Owens made bold claims, including that technology could enable US military forces in the future to lift the 'fog of war' itself. He claimed: 'Battlefield dominant awareness—the ability to see and understand everything on the battlefield—might be possible.' He also observed that:

When you look at areas such as information warfare, intelligence, surveillance, reconnaissance and command and control, you see a system of systems coming together that will allow us to dominate battlefield awareness for years to come ... it suggests we will dissipate the 'fog of war'.

To some extent, Owens's prediction was true. It is probably fair to say that the US did dominate in those fields for at least the next decade. Indeed, the reconnaissance strike systems that Owens anticipated have certainly come to play a significant role in contemporary warfare. In Ukraine, for example, the battlefield is so saturated with sensors, particularly drones, that almost nothing can take place unobserved. Those sensors are linked up with digital command and control systems and responsive long-range fires. Concentrations of troops are easily discovered and, once discovered, they are just as easily and quickly destroyed. Also, advanced sensors, coupled with autonomous explosive boats and long-range anti-ship missiles, have

made Russia's Black Sea fleet largely redundant. Furthermore, local air superiority in the war in Ukraine seems to be as much a function of ground-based air defence systems as it is a traditional function of airplanes.

Despite these advances, or perhaps because of them, the Ukrainian Commander-in-Chief recently observed that the Eastern Ukraine front is in a state of stalemate. Over the summer of 2023, Ukrainian land forces advanced just 17 kilometres at most, and only in a few select places.

Rather than providing decisive advantage to one side or another, the new reconnaissance strike systems have so strengthened 'defence' over the 'offence' in war that the net result seems to be quite disappointing indeed. Its features are trenches, futile attacks, stalemate, indecisiveness, attrition, and long wars with no clear path to victory. The outcomes of advances in the information age appear to be a reversion to early 20th century land warfare. Indeed, the scenes coming out of Eastern Ukraine resemble the Western Front in 1916 and Stalingrad in 1943 rather than some imagined future like science fiction.

The Ukraine war is not the only recent example of this phenomenon. Take for example the war to defeat ISIS in northern Iraq. Even with complete air superiority, and a remarkable overmatch in space and in the electromagnetic spectrum, it took months and thousands of Iraqi infantry before the Iraqis were able to force ISIS back into Syria. The more recent Israeli incursion into Gaza is perhaps a further illustration.

Like the failed promise of air power theory, the predictions of Owens and the other network-centric theorists founder on a few similar flawed assumptions about war. For the air power theorists, the flawed assumptions were that the bomber would always get through and that, having got through, its bombing would have the effect of decisively demoralising the civil population. As for the network-centric theorists, they assumed that the sensors would deliver perfect knowledge and awareness of the battlefield and that, having achieved perfect awareness, it would offer a marked advantage in decision-making quality and speed. These assumptions are flawed in both cases because they derive from a mechanistic sense of the battlefield and war.

Clausewitz observed that war is akin to a duel. It is a physical and dynamic thing—a function of doing rather than thinking. It is something

considerably more complex than simply action, reaction, and counter action. When Admiral Owens made his extraordinary claims about the effect of information technologies on warfare, he had assumed that only his side would have the advantage offered by the network. Like his air power counterparts, he imagined the adversary as largely passive—a collection of targets and nodes to do things to. He hadn't anticipated a future in which both sides could achieve a similar level of technological advancement and battlefield transparency. It is perhaps for these reasons that, despite such extraordinary technical advances in recent decades (particularly informational developments) warfare today (at least warfare on land) still looks much like the wars of the middle and early 20th century.

So what can we learn from the air power and network-centric case studies? What do these examples say about our grand ideas for how advanced computing might improve how we wage war? To answer those questions, let us remind ourselves of some of the grand expectations people have of advanced computing in war. This first quote comes from a 2021 global trends analysis report about the future battlefield, issued by the office of the American Director of National Intelligence. It captures a fairly frequent refrain about future warfare:

The future of warfare is likely to focus less on firepower and more on the power of information and the way it connects a military's forces through the concepts of command, control, communications, computers, intelligence, surveillance, and reconnaissance.

The second quote is from Dr Michael Richardson, an Australian researcher in political violence and emerging technologies at the University of New South Wales:

There is a move towards killing that is intensely predictive ... We will have the technological capacity in many instances to take human decision making out of the [killing] process and to push [computer] predictions to the forefront.

The People's Liberation Army is making similar claims about the effect of advanced computing on future warfare. Chinese strategists claim that artificial intelligence's value for decision-making will cause future warfare to become a competition over which state can produce computers that have the quickest computing capacity. They claim that wartime commanders

will be armed with supercomputers that will come to surpass the decision-making abilities of the humans directing them—what the PLA calls algorithmic warfare. PLA strategists predict that frontline combatants will be gradually phased out and replaced with intelligent swarms of drones that will give operational-level commanders complete control over the battlefield. They expect that over time, the tactical level of warfare will be composed almost entirely of robots, and war will become largely a game. These recent claims are very similar to the claims of Owens and the network-centric theorists in the 1990s. All the claims, both Western and Chinese, are heavily premised on an assumption that knowledge and decision-making are of critical importance in warfare. I think it is a bad assumption to a point. Let me explain.

Reconnaissance strike systems, particularly, are having a profound effect on warfare. In one sense, they have given age-old battlefield features like fortifications, stalemate and attrition new leases on life. For example, artillery and landmines are proving as important as ever in eastern Ukraine. In another sense, they have caused us to ask some hard questions about warfare, including questions about whole domains of warfare. For example, the range and accuracy of modern armed drones and missiles, coupled with ubiquitous sensors, is posing some profound questions about the conduct of war at sea. It is already probably possible to exercise sea denial over vast swathes of the ocean from the land with missiles and drones alone. And we still don't quite fully understand why air power has not been as decisive as expected in Ukraine. Importantly, all these emerging changes to warfare have only a tangential relationship to command control and decision-making.

So let us look specifically at the expectations of advanced computing for command and control and decision-making in warfare. The main expectation is that advanced computing will improve both the quality and the speed of decision making. It promises to sift through enormous amounts of battlefield data in the blink of an eye and, on the basis of that data, come up with plans and solutions for things like attack and defence. It might even be able to predict what an enemy will do, enabling preemption. It promises to take all the tracks of the myriad targets on the battlefield—including ships, planes, radars, headquarters, air defence systems and the like—and (on the basis of an awareness of one's own target priorities, the battlefield situation, the available munitions, and the readiness of the many shooters) apply

the best munition, from the most appropriate weapon system, to the most appropriate target. From these promises comes the grander promise: that these results will offer great battlefield advantage, or even a war-winning advantage, to one side or another. There are two key elements to these claims—and both are doubtful. The first is that advanced computing will deliver the expected change in quality and speed of decision-making and targeting. The second is that, should that change occur, it will have a marked influence on warfare. Let us consider the latter element first.

The idea that improved decision-making enabled by advanced computing will have a marked influence on warfare is based on a common fallacy. That fallacy, as previously mentioned, is to overestimate the importance of cognitive command and control (C2) functions like thinking, knowing and deciding in warfare. Knowing your enemy's intentions and dispositions certainly has its advantages, but knowing what your enemy is doing, and is about to do, is not in itself decisive. What one does about the knowledge of what their enemy is doing, and about to do, is what is decisive. This is because war is about doing. The late British historian John Keegan substantiated this thesis in his seminal book entitled *Intelligence in War*. He used the Battle of Crete in World War II as one of four case studies. In short, having cracked the German Enigma codes, the Commonwealth forces knew the Germans' plans entirely—the size of the forces, where they were landing, what time they were landing, and whether by parachute or amphibious landing. Despite that knowledge, and despite numerical superiority over the German attackers, General Freyberg's defenders lost Crete decisively. The Germans won because of action and intent vice knowledge.

There are other similar cases in war. George McClellan, who famously obtained the campaign plans of Robert E Lee before the Battle of Antietam, failed to incorporate the intelligence into his plan and nearly lost. It was the Union soldiers who staved off disaster at points in the battle like 'Bloody Lane' who ultimately won the day. They did so largely despite their commanding general, not because of him. To that end, can we imagine how the decision-making support of advanced computing could have delivered a different result in Malaya and Singapore in 1942? It seems unlikely. Would it have made the hard-fought battles for the Pacific island atolls any easier? Probably not, because the factors that led to those victories and losses were myriad, and most had little to do with battlefield decision-making.

The point is that knowing and deciding is less than half the battle, and probably significantly less. This feature of war explains, in part, why such a decisive technological advantage over ISIS in Iraq did not translate into a quick and easy victory, for example. The same goes for maritime warfare too. Investing in quicker and quicker decision loops might be pointless if sea denial can be effected from the land. Other innovations, like using many small, cheap, fast and rapidly reproducible boats might constitute the better part of the response to this circumstance. So we should perhaps be circumspect about the effects of advanced computing on the function of command and control. In fact, careless investment in advanced computing in an effort to get some sort of decisive battlefield decision-making advantage actually has some serious risks.

One risk is that risk-averse commanders start to use advanced computing as a crutch for making decisions—to, in effect, subcontract the responsibility for decisions to computer algorithms. It is human nature, particularly in a certain kind of commander. Advanced computing offers an alluring but potentially illusory kind of due diligence. We can imagine how a commander might be reluctant to make battlefield choices that are not consistent with computer-generated options and recommendations, because we can imagine inquiries asking future commanders why they went against the advice of a decision-support algorithm. There is already evidence of this predisposition of commanders to seek certainty or assurance from process and third parties for their decisions.

In a paper authored by Dr Leanne Rees, Colonel Grant Chambers and me a few years ago, we found that the Australian Army was putting too much emphasis on quantifiable, procedural and informational aspects of headquarters and staff functionality. We found that greater and greater investment in these procedural and informational aspects of headquarters produced diminishing returns on investment. Headquarters were not improving despite greater and greater effort and investment in C2 systems. New C2 systems seemed to have no consequence for the effectiveness of headquarters, and headquarters were growing bigger and bigger at the same time. On the flip side, we found that effort put into broadening the battlefield experience base and the expertise of talented individuals for future command was likely to result in markedly better headquarters performance.

The commander's role in a headquarters is profound. We observed that many commanders were tending to become approvers and amenders of staff solutions and staff plans, keeping themselves somewhat at arm's length from the circumstances of the battlefield, and the detail of planning—acting more like staff-course instructors than commanders. We also found that a focus on the staff, information and procedures tended to deprive the commander of firsthand knowledge and experience of the battlefield. It also deprived the headquarters staff of the advantage of the commander's intuition, experience and talent. Another related finding was that talented and experienced commanders tended to rely on only a few pieces of information to make good battlefield decisions, and that it was impossible to know what these few pieces of information might prove to be before the battle commences. This finding corroborated British defence analyst Jim Storr's assertion that decision-making in battle is not information intensive, but information sensitive. In other words, there is little evidence to support the idea that lots and lots of data will lead to better battlefield decisions. Indeed, we found that decisions only needed to be near enough to be good enough.

The reality is that a perfect decision gives very little advantage over a near-enough decision in battle. This proposition is supported by General Erich von Manstein's admonition 'the larger the headquarters, the worse the command'. Regardless of the quality and speed of a recommendation from some advanced algorithm, commanders still need the courage or the nerve to act on that recommendation. The commander must still accept the associated risks, and the commander must accept the associated loss of life and materiel. Knowing what one should do is one thing; having the courage or the nerve to go through with it is entirely another. Again, war is about doing, and it is a social activity.

The second serious risk is cultural. It relates to a correlated risk of developing highly centralised doctrines for command and control to take advantage of advanced computers in decision-making. This risk relates particularly to targeting, and the potential of advanced computing to connect everything up perfectly. The idea is that if you can have an all-knowing computer brain that can see all the targets on the battlefield and has an awareness of the state of all the potential shooters, and if the brain can very quickly and efficiently assign the best shooter to the best target, then logically you don't need to delegate decisions for striking these targets

to subordinates. Such assumptions ignore the strong possibilities that the network won't always function perfectly, that the all-knowing computer brain won't always know everything and, indeed, that it has the potential to be spoofed or to have its data corrupted. If we assume the systems works perfectly, then it brings into question the whole Western theory of delegated command and mission command. Why allow commanders at any level below the supreme commander any autonomy for battlefield decisions if the advanced centralised computer brain can make all the decisions better and faster?

Central Western tenets of command and leadership, including things like initiative, responsibility, degrees of autonomy, bias for action, risk acceptance, and the obligation to disobey orders made irrelevant by circumstances, would all become redundant (even counterproductive) under a system underwritten by an advanced computerised brain. Needless to say, some care is therefore warranted in pursuing a technical solution to the problem of command and control in warfare. An investment in a command and control solution that anticipates a decisive reduction in the fog of war is fraught.

So there you have it. Hopefully I have made a plausible case for some circumspection about the relative merits of advanced computing for battlefield command and control. The bottom line is that war is a practical and dynamic phenomenon. It is about 'doing' more than it is about thinking and deciding. To that end, I think advanced computing applications that enable better doing are likely to have a more substantive influence on future warfare than technologies that enable better decision-making.

Successful armed forces tend to be those that better overcome the new problems created by technological advances. The solutions to overcome the limits of new technologies normally relate to procedural, doctrinal and social adaptations rather than further technological advances. After all, while Napoleon and Frederick the Great are both universally considered to have been geniuses, their genius was much more than their *coup d'oeil* and astute decision-making on the battlefield. To some extent they both preordained their battlefield successes with their focus on institutional factors such as rigorous training, the selection of marshals, the creation of staff schools, new social arrangements, logistics, new doctrines, the *levée en masse*, and many other similar institutional factors. These factors are

the kinds of things that preordain a high quality of **action** in war. As such, applying advanced computing to the problem of ensuring high-quality action is likely to get a greater return on investment than applying it to quicker and better battlefield decision-making.

About the Author

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His operational experience includes Commanding Officer, 2nd Battalion Battle Group, Afghanistan, 2011; Operations Officer, 2nd Battalion Battle Group, Iraq, 2006; United Nations Military Observer, Lebanon and Golan Heights, 2002; and Platoon Commander, United Nations Assistance Mission, Rwanda, 1995. Major General Smith also served as the Commander Landing Force for the newly formed Australian Amphibious Ready Element in 2013.

Australian Regional Engagement: A Historical and Strategic Perspective

Speech to the Chief of Army Symposium 2023, Perth Convention Centre, 30 August 2023.

<https://player.vimeo.com/video/869948529>

John Blaxland

[Editorial note: This speech has been edited and condensed for clarity.]

To help focus our topic today, let us first consider my favourite map. If you haven't seen it before, it is the Royal Australian Air Force (RAAF) planning map centred on Darwin, but spun 45 degrees (Figure 1). It gives you a sense of Australia hanging off Asia, and what Indonesia's President, Joko Widodo, called the maritime fulcrum. When you think about the left-hand side and the right, you've got the Indo and the Pacific. And this is where I'm going to start.



Figure 1. RAAF Planning Map (Source: reproduced by courtesy of the author).

My Army career and my academic writing have informed my opinions. My most recent publication is *Revealing Secrets: an Unofficial History of Australian Signals Intelligence and the Advent of Cyber*, and I also have a chapter in Craig Stockings' book *An Army of Influence*, from which I'll derive some of the points covered in this talk. An opinion I hold firmly, and that I teach my university students, is that—when you are talking to busy people, commanders and executives—it's important to deliver the bottom line up front (BLUF). So here's the BLUF for this presentation.

Government has expectations and determinants for the use of military force abroad. These are proximity and necessity, alliance management and risk tolerance. The closer to the Australian shore you get, the greater the likely force contribution, the greater the risk/casualty tolerance, and the greater the neighbourhood consequences too. Moreover, the closer you are to Australia, the greater the importance of our intellectual investment in this space, and the significance of cultural, linguistic, and historical understanding. Also relevant is the allied expectation of Australian primacy within our region. Conversely, the further away from Australia, the lesser influence these factors exert.

So there is a dialectic in Australia's consciousness of geography and history. Our history was as essentially transplanted from Anglo-Europeans, and our geography is on the edge of Asia. Strategically we have a dialectic of defence of Australia, defence of the region, and alliance priorities. I expand on these points in books including *Strategic Cousins*, *Australian and Canadian Expeditionary Forces and the British and American Empires*; *The Australian Army from Whitlam to Howard*; and *East Timor Intervention*. Using historical examples as a basis for analysis, these publications discuss in some depth the key expectation determinants for the Australian Government when we think about engagement in the region.

When considering what government expects, there are two categories of operations in which the military may be involved. First are operations of choice, and Australia has been involved in those for the last 20 years or so in niche wars such as in Iraq and Afghanistan. Australia's involvement in these conflicts is briefly surveyed in *Niche Wars*, which is available from the ANU Press via free download. Operations of choice tend to be conducted far away from our shores and are not waged against a near or peer competitor. As such, Australia is able to make a discrete contribution that is intimately supported by reach-back to national agencies. This level of assistance is achievable because we have only a relatively small joint task force doing the job, so forces can get gilt-edged support. And we have few, if any, casualties. Indeed, when you think about the last 20 years or so, Australian casualties have numbered around 40. And that is actually a pretty good ratio—right?

The second category of military operations are the so-called operations of necessity, which occur closer to home. They are likely to be waged against a peer—or a near peer—competitor that probably has precision-guided munitions, sophisticated intelligence surveillance target acquisition reconnaissance, and air assets. Such a threat warrants a full spectrum, all-arms ADF capability response that is potentially cyber heavy. Despite the high-threat nature of these types of operations, national reach-back facilities will likely be patchy. Why? Because every Tom, Dick and Harry will want some of it: Army, Navy and Air Force. Such operations are also associated with a higher casualty tolerance. And I say higher casualty tolerance because—as we wrote about in the book *East Timor Intervention*—when John Howard was contemplating the prospect of deploying forces to East Timor, it was with the possibility of significant casualties in mind. He bore that risk on the chin, knowing that it was a risk that had to be managed, but one that Australia was prepared to tolerate. So there you have my BLUF—okay? These are the government expectation determinants, and the capability (or capabilities) that it expects the ADF to deliver, both far away and closer to shore.

I would argue that this a fairly strong model for how Australia has deployed forces—pretty much since the Second World War. Now, when we think about the Second World War, it is good to think back to how we've engaged in the neighbourhood before, and of course the Singapore strategy jumps out as an example. In that instance there was, basically, an approach by the Australian Government that left the battle to the Brits. We didn't try very hard. The strategy was justification for minimal expenditure. Clearly there were problems with that approach, and the strategy did not last the war. By 1941, we had deployed our own forces into the region. Indeed, the 8th Division was spread across the archipelago, with two-thirds sent to Singapore and Malaysia (or Malaya as it was then known). And then the 23rd Brigade split, with battalions sent to Kupang, Ambon and Rabaul. While the 1941–42 allied military campaigns to defend these locations were ultimately unsuccessful, the geographic choices of Kupang, Ambon and Rabaul were actually incredibly compelling because that's where Australia was bombed from subsequently. And guess what? The geostrategic value of this region remains today. But we'll come back to that point later.

Interestingly, when we think about the Pacific theatre of operations during the Second World War, Australians tend to focus on the Kokoda campaign in Papua New Guinea. And to a certain extent, this is General MacArthur's fault. Because he and Admiral Nimitz didn't get along, they divided the Pacific between them, with MacArthur taking responsibility for the Southwest Pacific Area and Nimitz getting the rest. There was therefore a line of operational responsibility drawn basically through the Solomon Islands—and Guadalcanal (where Honiara and Henderson Field are located) was on the Nimitz side of the line. This delineation saw the US Army fight largely alongside Australian troops in Papua New Guinea and has elevated the Kokoda campaign in the Australian national psyche. What many fail to appreciate, however, is that Guadalcanal was the main effort of the Pacific campaign for very compelling reasons. Why, you ask? Because from there, you could cut off the sea lines of communication between Australia and North America. The same situation exists today. And guess who's currently taking a lot of interest in Solomon Islands?

Now, my late great friend and colleague Allan Gyngell talked in his book *Fear of Abandonment* about how Australia has been afraid of being abandoned firstly by Britain after the failed Singapore strategy, and later by the US. This anxiety has shaped how Australia acts in the world. And after the Second World War, unlike after the First World War, Australia actually deployed elements of the three services (what we now know as the ADF) to Japan. These forces were there to operate alongside US occupation forces, to help ensure Australia's interests were represented in the post-war peace arrangements. Those early years laid the foundation for what would follow. This included Indonesian independence and the birth of the People's Republic of China. These were extraordinary events that transformed Australia's outlook on its geography. These developments were followed shortly thereafter by the outbreak of the Korean War in June 1950. We tend to forget that in January 1950, Dean Acheson, the US Secretary of State, went to the National Press Club in Washington DC and declared that US interests extended to the border of Japan—in other words, not to Taiwan or Korea. Five months later, Kim Jong-un's grandpa, Kim Il-sung, invaded the south, taking Acheson's statement as the green light to invade. Weakness invites adventurism. Our involvement in Korea facilitated the signing of the ANZUS Treaty in September 1951.

Reflecting our concern about the Domino Theory, in 1954 Australia joined the Southeast Asian Treaty Organization (SEATO), which was established in an effort to prevent the proliferation of communism in the region. While Australia hoped SEATO would be a little bit like NATO, of course it is not, largely because most of the members are extraterritorial powers, not local ones. Also a party to the SEATO agreement is Pakistan, which back then included Bangladesh, or what was then East Pakistan. And we were obviously concerned about communism. Notably, Indonesia stayed out of it. Just as is the case today, Indonesia preferred to see itself as non-aligned.

The 1960s was a period which tested Australia's capacity to influence events within our region, particularly over the government of Sukarno in Indonesia, without the support of our US ally. During the Konfrontasi between Indonesia and Malaysia from 1963 to 1966, Australia didn't actually do very much other than conduct exercises. Indeed, this period represented a significant formative moment for Australia as it realised the precarious nature of its security relationship with the US at that time. That's because the US wasn't interested in challenging Indonesia by participating in the conflict. Evidently Australia's alliance ties through ANZUS and SEATO were not sufficiently compelling in Washington to sway US policy closer to Australian foreign policy preferences. So the Konfrontasi was a contributing factor to Australia going to Vietnam, to elicit further support for Australia, with the deployment of a brigade-sized 1st Australian Task Force as well as naval and air power capabilities. But, of course, there were limits to the influence Australia was able to exert, and this is an issue that I cover in my book about ASIO, *The Protest Years*. Specifically, I explore the fact that limitations exist to Australian political goodwill towards the use of force if the purpose is not clearly articulated and justified to the Australian people. The lessons from the Vietnam War still resonate today in the need to engage the Australian population about regional issues and regional security concerns. Government needs to keep the Australian people involved and brought along.

Following the Vietnam War, we had the so-called 'Defence of Australia' era. Paul Dibb is regarded as the architect of this policy. In it, he proposed investment in bare bases, in Northern Command, in the Army presence in the north, and in the Regional Force Surveillance Units. While the policy—

and Dibb himself—has understandable detractors, the Defence of Australia construct justified keeping a three-brigade Regular Army. So I think it's worth bearing that in mind. Pre-1960, in the 1950s, we had a one-brigade Regular Army only.

The Defence of Australia policy was, however, squarely challenged in 1987. When Fijian Lieutenant Colonel Sitiveni Rabuka overthrew Prime Minister Timoci Bavadra on the morning of 14 May, Prime Minister Bob Hawke called in defence minister Kim Beazley and the acting foreign minister, Gareth Evans. He said, 'We've got to help Timoci Bavadra' and then the Chief of the Defence Force, General Peter Gration, came in and said, 'Uh, with what?' At the time, providing such support was a ridiculous proposition. Australia was clearly unable to help the Fijian Prime Minister—we could barely launch a non-combatant evacuation operation. This event jolted the Defence of Australia oriented ADF, yet it had little enduring impact on national strategic priorities.

It wasn't until the 1990s that the Australian Government began to see its military personnel as 'ambassador, soldier, teacher, peacekeeper'. A series of non-regional operations conducted by the ADF had the effect of revalidating the Army ethos post-Vietnam in a way that was very slightly touchy-feely, and certainly not too challenging. Notably, these were 'operations of choice' conducted far away, by and large. These missions were followed by some operations of *less* choice closer to home, in Bougainville, in Papua New Guinea, in Irian Jaya—and then again in PNG with the tsunami in 1998, which saw the ADF prepare for a natural disaster, not knowing that the crisis in East Timor would subsequently happen. Not only did the ADF's disaster relief response help bolster regional security; it also honed the force. Working alongside partner nations, it was crucial preparation for what would follow.

The tipping point for the post-Cold War reinvigoration of the ADF was the crisis in East Timor in 1999. My friend and colleague Professor Craig Stockings has written recently about the East Timor crisis in his new book *Born of Fire and Ash*. While many Australians may reflect with pride on the ADF intervention, the Australian military deployment was actually the result of what Hugh White calls a strategic blunder. 'Why a strategic blunder?', you may ask. The reason is that Australia was never supposed to get so offside with Indonesia. The whole idea was to try to invite some kind of

autonomy accord. But of course, President Habibie in Indonesia took John Howard's letter suggesting a path to autonomy the wrong way. The military intervention also tested our alliance with the US. Why? Well, we now know that when, worried about the lack of US engagement in support of Australia over the emerging crisis, Admiral Chris Barrie, the Chief of the Defence Force, got on the phone to the Commander of Pacific Command, Admiral Dennis C Blair, to that point the US hadn't been interested in helping us. Why? Because they were busy in Kosovo. In their view, East Timor was in Australia's backyard, and therefore it was a problem for us to deal with. While the rationale made sense, the optics in Australia around our enduring alliance with the US were such that Prime Minister John Howard considered it critical that the US did something to help. In support of Australia, Admiral Blair got on a plane, went to Auckland where the APEC meeting was being held, and convinced US President Bill Clinton to offer some important diplomatic, financial, communications and logistics support to enable it all to happen. This critical assistance from the US is something that Australia is arguably quite proud of. Yet the US received little credit, and it probably should have.

In parallel to the ADF's operational involvement in the region, it is also worth flagging the enduring nature of Australia's Defence Cooperation Program (DCP). This arrangement, which offers individual and unit training exercises and educational exchanges with the armed forces of Australia's neighbours and partner nations, was 60 years old in 2023. The DCP involves countries across South-East Asia, the South-West Pacific, South Asia and the Middle East. It is a multimillion-dollar program and generates a really interesting collaborative space for military-to-military engagement (Figure 2). As a former Defence attaché, I was actively involved in the DCP and consider it to be a fantastic program.



Figure 2. Brigadier Nerolie McDonald as Defence Attaché in Vietnam (Source: Defence image gallery).

There is also the Five Power Defence Arrangement (FPDA) between Singapore, the UK, Malaysia, Australia and New Zealand. Established in 1971, its original purpose was to keep the UK engaged within the region after they withdrew from 'east of Suez', keeping Singapore, Malaysia, Australia and New Zealand engaged in mainland South-East Asia. The organisation is now 52 years old and we don't talk much about it anymore. But this apparently anachronistic entity keeps working and all of the five countries still get enormous benefit out of it. The Integrated Area Defence System that operates within the FPDA construct has been providing a platform for defensive exercises and activities between the participating nations for years. There's also Rifle Company Butterworth, which involves a company of Australian soldiers on three-month rotations for exercises and training in the training areas of Malaysia and Singapore (Figure 3).



Figure 3. CDF General Angus Campbell (second row) as a lieutenant during his tour with Rifle Company Butterworth (Source: reproduced courtesy of Brad Shaw).

As Australia's sense of urgency around regional engagement has continued to grow, particularly since our East Timor intervention, the introduction into service in 2015 of the first Landing Helicopter Dock (LHD), HMAS *Adelaide*, is a game changer for Australia in the Pacific. In contrast to Australia's experience in responding to the crises in Fiji in the 1980s and again in the early 2000s, the LHD now offers a much more versatile and substantial platform for the government to use in response. It is just extraordinary how LHDs have contributed to our ability to reach out and engage constructively. A leading example is Defence's annual Exercise Indo-Pacific Endeavour, which has run since 2017 and enables constructive and tangible engagement with counterpart defence forces in the neighbourhood. The ADF can now do awesome things with Fiji, Tonga and others in the neighbourhood that were previously beyond our capacity. For example, LHDs have played a pivotal role in Australia's delivery of humanitarian assistance and disaster relief within our region. While LHDs would undoubtedly be vulnerable in open conflict, they nevertheless play a key role in Australia's preventative diplomacy strategy because they contribute

to security, stability and deterrence in 'phase zero', as they call it. And it's these operations short of war that we need to worry about, particularly in a strategic environment characterised by great power competition.

When we think about the Foreign Policy White Paper of 2017, we see that deterrence on our own was recognised as being problematic. So engagement with all and sundry constitutes Australia's 'foreign policy Plan B'. Today that engagement occurs across ASEAN (Association of Southeast Asian Nations), the Pacific Islands Forum, the Indian Ocean Rim Association, the FPDA, and now the Quad and AUKUS as well. On the security side, we're also seeing NATO engagement in the neighbourhood. With respect to economics, Australia is entering free-trade agreements with everybody who'll sign one with us.

The 2023 Defence Strategic Review delivers a strategy for national security that flips Dibbs's Defence of Australia model on its head. Today we no longer seek defence from the region, but defence 'in' and 'with' the region. This means that regional engagement is no longer just a 'nice to have'. It is actually critically important to our security and theirs. So Indonesia and Papua New Guinea are now more important to us than arguably they've been for generations. And the same goes for Solomon Islands as well, despite the fact that Australia retains a geostrategic blind spot towards this part of the world because we weren't part of Nimitz's command in 1942. When we think about the possible requirement to cooperate through the archipelago, however, its strategic significance remains. Specifically, the key advantage of fairly short-range aircraft such as the F-35 is lost unless you can lily-pad through the archipelago in somewhere like Ambon, Kupang and Balikpapan. We know about these places from the events of the Second World War, and while Indonesia has changed politically in the intervening years, the geography hasn't. So it is critical that Australia can collaborate by accessing and operating in the archipelago alongside the TNI (the Indonesian armed forces) and the Papua New Guinea Defence Force.

The implications for the land force are not insignificant. If Australia needs to lily-pad F-35s through the region, it needs an airfield which, I would contend, has to be secure out to about 120 mm mortar range. The task force area to secure such a strategic asset would amount to brigade size. Which begs the question: how many brigades have we got in the regular force? How many of them are ready? Not too many—right? So, if that's what we require, we need to work with the Navy, and probably some commercial roll-on, roll-off vessels, to get there before the stoush—to have

a phase-zero effect, to shape the environment. But, of course, achieving this depends on Indonesian consent and welcome. And what are we doing about making ourselves the best friends of Indonesia? Well, how many of us speak Bahasa? Not too many. By contrast, if I was in the UK asking if you spoke French, and you didn't put your hand up, you'd be embarrassed. What's going on? How have we let this happen?

If we reframe the international security environment in terms of unrestricted competition, guess what it looks like: the real world today. That's where we are. We're in unrestricted competition. It doesn't look quite like war. And that's because we've been looking at it the wrong way. We've conceptualised this unrestricted competition as conflict, as a chess game, where you remove players from the field and you win by capturing the king. By contrast, our strategic competitors are playing Go, where you add pieces to the board and you don't destroy, you don't remove; you flip your adversary. You win them over. And we're getting outplayed. In parallel, we are facing challenges in great power competition; looming environmental catastrophes; and a spectrum of governance challenges, including people smuggling, drug smuggling, the breakdown of law and order, and terrorism. These threats are all accelerated by the fourth industrial revolution. We are dealing not just with a two-dimensional problem, and not just with war and peace, but with unrestricted competition. It's occurring in the sea, air, land, space and cyber. It's also happening in the human space.

So we're talking hardware, software and—guess what—the wetware: the 15 centimetres between your ears. So now we're looking around the region and we're doing a lot of things with Singapore and with Thailand. We already know the enduring value of engagement with these regional partners. For example, I have a bit of a soft spot for Thailand as I'm a graduate of the Thai Army Staff College, and the King of Thailand, Nay Luang, was 10 years ahead of me at Duntroon (Figure 4). Australia has invested considerably in the relationship with Thailand, and it has invested in us. When we were in the 1999 crisis with Indonesia, we needed an ASEAN partner. We reached out to Singapore and Malaysia first, but they were a bit nervous because, understandably, Indonesia was not happy about what was going on. And then the Vice Chief of the Defence Force, Air Vice Marshal Doug Riding, went to Thailand and the Thais volunteered to assist. Indeed, they were the first Southeast Asian volunteers to help us, by providing a joint task force of 1,000 people, and the deputy force commander, General Songkitti Jaggabatara. It was really critical.



Figure 4. The Crown Prince of Thailand, Vajiralongkorn Mahidol at RMC Duntroon in 1972 (Source: National Archives of Australia 33319078).

The lesson from this experience is that we should not take regional relationships for granted. This includes our second-tier relationships. While there is not time to expand on this point, it's important to note that we have extraordinary and mutually beneficial relations with, for example, the Philippines. And we are building stronger ties with Laos, Cambodia and Brunei as well. In Indonesia, of course, we've been playing a game of snakes and ladders. And we've got to stop doing this, be it over beef, boats, spies, clemency, Timor, Papua or Jerusalem. We keep poking Indonesia in the eye and we wonder why they get upset with us. It's really not good enough.

Turning to the Pacific, we are engaged in a serious game of competition. This is an incredibly geostrategic region. While the land mass of the territories may be relatively small, when you add the exclusive economic zones the region is incredibly consequential economically. It is incredibly consequential for the environment, and it is incredibly consequential geostrategically for the future of Australia and the neighbourhood. And yet what do we know about the neighbourhood? Not enough. Thankfully,

in 2022 US President Joe Biden introduced the Pacific Partnership Strategy. Very cleverly, he invited all of those countries that the Chinese Foreign Minister, Wang Yi, had sought to engage with in the Pacific. They all came—even the Solomon Islands Prime Minister, Manasseh Sogavare (Figure 5).

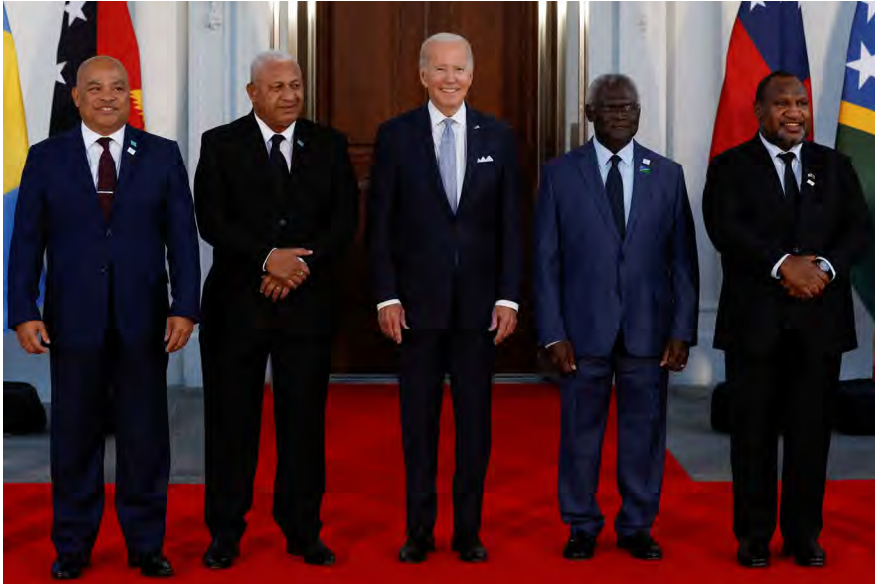


Figure 5. U.S. President Biden with Prime Minister Sogavare and other leaders from the U.S. – Pacific island Country Summit in Washington DC on 29 Sep 2022 (Source: Reuters Pictures RC2BRW9YLZ99).

Regional engagement has got to be done. Today our national security challenges are exacerbated by a range of trends including floods, fires, pandemics, cyber and terrorism. They are all overlapping, leaving Australia with a conundrum the likes of which we have not faced in generations. And while I like to think I am a glass-half-full kind of guy, we have to brace ourselves for impact, ladies and gentlemen, because—to this point—these things have been happening one at a time. If they start happening concurrently, we are in a deep hole. We need to wake up as a nation to the spectrum and the scale of the challenges: looming environmental catastrophe, a spectrum of governance challenges and great power competition, accelerated by the fourth industrial revolution.

Thank you very much.

About the Author

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Landing Defence Partnerships – the Indo-Pacific and Beyond

**Speech to the Chief of Army Symposium 2023,
Perth Convention Centre, 30 August 2023**

Nerolie McDonald

[Editorial note: This speech has been edited and condensed for clarity.]

At the Shangri-La Dialogue last year, the Prime Minister of Australia, Anthony Albanese, and the United States Secretary of Defense, Lloyd Austin, both spoke to the importance of guardrails—that is, simple practical structures to prevent a worst-case scenario. The bases for these guardrails are dialogue, communications, transparency and cultural understanding. Ultimately, defence partnerships with our region are one of our guardrails. We need to build these guardrails with our allies, partners and competitors. But you can't build a strong guardrail in a time of disaster, crisis or war. It is too late.

The time is now to invest in our defence partnerships so that during a time of crisis or conflict we have the necessary relationships, networks and understanding to talk and work together. Regional defence partnerships are essential to achieving Australia's national interests, as well as for the collective security and prosperity for our region. One partnership that exemplifies how a collaboration can strengthen both partners **and** global security is Australia's collaboration with Vietnam in support of the United Nations Mission in South Sudan. I saw it up close when I served as the Australian Defence Attaché to Vietnam and Laos for three years from 2017.

Vietnam is a valuable security partner for Australia, and Australia is a valuable security partner for Vietnam. But we are also very different countries. Our languages are as different as two human languages can be. We have different governance, and we have different priorities. The key to strengthening defence relationships is finding and operationalising our common interests.

When Vietnam decided to take a bigger role in international peacekeeping by operating a field hospital in South Sudan, a common interest crystallised that was right in our lane. Australia has a longstanding commitment to United Nations (UN) peacekeeping and has expertise in establishing and operating field hospitals. The potential for partnership was obvious, but delivering took genuine effort and commitment on both sides.

Vietnam committed its people to extensive training by Australia, including in English language, aeromedical evacuation techniques and UN processes. Trained and certified Vietnam People's Army nurses and doctors deployed on an Australian C-17 flight to South Sudan, where they successfully operated a Level 2 field hospital. Twelve months later I saw them return, the pride of their nation, confident and ready to train another rotation themselves. They had put their Australian training to the test and found it to be world class. They had also built on that training with their own experience. Now they were ready to build the Vietnam People's Army capacity, and to mentor other nations to prepare for their UN deployments.

That is how you build trust. That's what a legacy is. And that is what we mean by building defence relationships. We need all our defence relationships to be as strong as they can be, because our region is being reshaped and our national interests are under pressure.

Strategic Circumstances

Reflecting Australia's 2020 Defence Strategic Update, the 2023 Defence Strategic Review (DSR) and the National Defence Statement 2023 both acknowledged that the pace of strategic change has continued to accelerate. We have all observed that our operating environment is becoming more challenging to predict and manage. There is increasing competition economically, militarily, strategically and diplomatically, alongside a contest of values and narratives. At the same time, the effect of climate change is amplifying these challenges.

Climate change is the greatest threat to the livelihoods, security and wellbeing of the peoples of the Pacific. As the oceans rise and islands disappear, aside from displacing thousands of people, this will create tension around the definitions of sovereignty and exclusive economic zones. As we are all too acutely aware, Australia is also feeling the impact of climate change, and the Australian Defence Force (ADF) will be expected to respond to extreme weather events, in both the short and longer term.

Previous Defence White Papers have tasked Defence to put more effort into building relationships with partners, prioritising international engagement as core business. The government's response to the DSR turbocharges this trend, directing that the deepening of our diplomatic and defence partnerships with partners in the Indo-Pacific is now one of Defence's six immediate priorities.

Partnerships in the Indo-Pacific

For Australia, the Indo-Pacific region not just our geography. It describes our strategic and economic reality, the close partnerships we have with our Indo-Pacific neighbours, and the trade routes which are our economic lifeblood. Maintaining open and inclusive connections to the nations of the Indo-Pacific is crucial because this region will have the greatest impact on our nation's future. Further, the trajectory of that future will be increasingly shaped by the countries that comprise the Indo-Pacific. What this means for Defence is that we have plenty of work to do. More than ever, we need to actively engage in our neighbourhood.

Australia is committed to an Indo-Pacific region that is open, stable, prosperous, and respectful of sovereignty. We aim to foster a region characterised by strategic balance, with regional architecture at its centre. Defence has built and sustained a web of regional relationships and partnerships. Our Defence attaché network consists of over 260 ADF and Australian Public Service (APS) personnel, with over 250 locally engaged staff in 38 countries around the world. We rely on our Defence attachés and overseas Defence members as representatives and 'on-the-ground' experts, shaping and delivering Defence engagement activities alongside our partners.

In the Indo-Pacific, we also have long-term Defence Cooperation Program commitments. Aside from the multitude of long and short training courses partners conduct in Australia, we also have over 120 personnel permanently posted across the region in support of capacity building, English language training, the Pacific Maritime Security Program, and departmental policy and governance programs. Yet another layer of engagement is achieved by the hundreds of ADF and APS personnel who deploy every year to the region to conduct mobile training teams and exercises. We also have Australian alumni throughout the region who are a powerful force multiplier in that they assist their nations in understanding Australia better. These people are all part of our defence international engagement system to grow and foster defence partnership—through shared understanding and awareness, as well as to increase our human, procedural and technical interoperability with the region.

But how do we continue to maintain and (where practical) grow this presence and expertise in a resource-constrained environment? While I don't have all the answers, it is evident that Defence needs to invest in and develop the capabilities of our people. We must also acknowledge that international engagement is not a designated role, but a persistent and enduring effort. The reality is that Defence remains a core contributor to Australia's international engagement architecture, and this includes the strategic dialogue structure.

The Association of Southeast Asian Nations, the Pacific Islands Forum, and the South Pacific Defence Ministers' Meeting are just a few of the numerous regional fora that Defence participates in to promote a rules-based order and a sense of strategic community. Meaningful discussion in these dialogues is critical to developing shared understanding and outcomes benefiting Australia's—and our partners'—security and prosperity. At the strategic level, this means continuing to build support for the governance and regional security structures emerging in the Indo-Pacific system. In parallel, at the operational level, we identify areas of engagement that build partners' and regional capacity to solve real problems. Often our efforts focus on disaster relief and response. Defence also plays a role in managing the tensions expected in an increasingly crowded and competitive strategic environment.

In order to deepen our security partnerships and enhance our footprint, Defence needs to:

- undertake meaningful diplomacy, listening to the region and measuring our actions as proportionate to what we hope to achieve
- through the creation of the Pacific Division, demonstrate the government's commitment to deliver on the Defence Strategic Review's recommendations on the Pacific
- maintain and grow deep people-to-people links based on principles of transparency, openness, and sustained engagement
- consult on our regional priorities through dialogues and regional architecture, including the Pacific Islands Forum and ASEAN.

Army's Role

Today we talk a lot about the importance of listening really carefully to our partners and understanding the nuance of language. In my own case, I learned this lesson as a young cadet in Papua New Guinea (PNG), traversing the steep peaks and plunging valleys of the Finisterre Mountains, in a place known as Shaggy Ridge. You see our Papuan guides at the time taught me that 'lik lik', or 'just a little further' in Pidgin, was their way of saying we actually still have a very, **very** long way to go! More importantly, they taught me about the enduring value of comradeship, perseverance and trust. They also showed me that no mountain is a match for the soldier who keeps getting up every time they fall down.

Today, as Director General Pacific and Timor Leste, I witness the start of the Pacific journey for many of our young soldiers, sailors and aviators. Often this is their first overseas experience. They work hard sharing their expertise in building infrastructure and they train our partners in combat, maritime surveillance and humanitarian techniques. They develop culture awareness through playing sport, sharing of stories over kava and singing songs at church. They learn the 'Pacific way', that consensus is important, that connection to land and water is essential, and that—before undertaking business—we must first take the time to listen and get to know each other. They build long-lasting friendship and understanding, which is a benefit for them and an asset for the ADF. And above all, they learn that partnership is a process you work at together. At the strategic level, these young men and

women are building the guardrails to which our Prime Minister and the US Secretary of Defense referred at Shangri-La.

The benefits to Australia from these partnerships are broad ranging. Our engagement, our mutual respect, and our drive to create connections has seen our partners in the Indo-Pacific reciprocate in times of crisis. During the 2019–20 bushfires, partners from Fiji and PNG, among others, came to Australia's aid. The strengthening in connection and community is what we seek to foster in all the work we do—to support a region capable of meeting the challenges of the future.

The ADF are the face of Australia's engagement with our partners. We are a visible, enduring presence, demonstrating the importance we place on our regional connections. It is the **people** of Defence who create, build and nurture the partnerships and leadership which will prove critical as our region grows ever closer.

Army units are central to many of our engagements. They demonstrate the value of collaborative planning and effects that Defence and the ADF can achieve together with our partners. The work that Army does through support operations and training to work with, and learn from, Indo-Pacific security forces has been instrumental in building regional capacity—ours as well as theirs.

This year's Exercise Puk Puk with the PNG Defence Force (PNGDF) is a case in point. It is an engineering exercise where PNG, Australian and British forces train together, sharing skills and experiences to address PNG's security infrastructure priorities. Exercise Puk Puk is coordinated by the PNGDF, with supplies delivered through our combined maritime capabilities. It is a powerful example of the effects and benefits we can generate together with joint and partnered forces. But I also acknowledge it comes at a cost.

There is a tension between securing personnel for partnership building at the same time as Army focuses on its 'raise–train–sustain' priorities and core warfighting skills, particularly when Army is facing its own workforce challenges. We therefore need to be open to finding new ways to adapt to the greater demands of relationship building on Army, while ensuring they nest with the needs of our partners. When balancing these priorities, it is worth remembering the valuable contribution that international engagement already makes to Army's raise, train, sustain and preparedness priorities.

Closing

I want to leave you with a final example of defence and security partnerships. It is a story of immense shared terror, particularly for Australians. It demonstrates the vital importance of working together to overcome capability gaps.

Imagine, if you will, a group of defence ministers and chiefs of defence forces at a regional conference. The challenge given to them is—karaoke! For the next few hours I witnessed mates helping mates, the strong helping the weak, and our leaders working together in harmony. While the results were hard to listen to, I am sure you will agree that this example truly reflects defence regional partnerships in action!

I am immensely grateful for the incredible work that Army does, under pressure, to build understanding, cooperation and respect with our partners in the region. As members of the military and national security community, you play an important role in building the defence relationship guardrails that are essential in times of disaster, conflict and crisis.

About the Author

Brigadier Nerolie McDonald has been employed in a wide variety of tactical, operational and strategic level intelligence roles within land, training and joint environments. She has also undertaken postings in the disciplines of international policy, capability, strategy, operations and command. Brigadier McDonald has a Bachelor of Arts Honours (Economics) and a Master of Arts (Strategy and Policy) from the University of New South Wales and is a graduate of the Australian Defence Force Academy and the Royal Military College Duntroon.

The New Makers of Modern Strategy: From the Ancient World to the Digital Age (Princeton University Press, 2023, ISBN 9780691204383, 1158 pp)

Book review

Edited by: Hal Brands

Reviewed by: Nick Bosio

Since the early 1950s, one book, *The Makers of Modern Strategy*, has consistently been compulsory reading at staff and war colleges around most of the Western world. Each edition has provided practitioners and scholars with insights into strategy, strategic thinking, and the issues of strategic culture. Furthermore, each version of this influential work follows the advice of renowned military historian Michael Howard: study the topic's context, depth and width. Although Howard's exhortation related to military history, his approach is equally relevant to the challenge of understanding strategy and strategic theory. Specifically, it is important to understand the context of the time; consider the situation as a case study; and look across history to understand the trends, themes, and lessons for today.

The newest edition of the book, *The New Makers of Modern Strategy*, edited by Hal Brands, continues the fine tradition set by earlier editions, bringing forward lessons from the history of strategy to inform contemporary thinking. As Brands highlights in his introduction, every

edition brings something new to our understanding of strategy. With 216 more pages and 17 additional chapters, this new edition has been significantly restructured when compared to its preceding second edition. Nor is this restructuring superficial. While this new book maintains the broadly time-bound sections of previous editions, there is renewed effort to ensure that each section draws out the common themes relevant to contemporary great power competition. Even the naming of sections helps readers relate the analysis of yesteryear to today. Applied history (applying insights grounded in the study of the past to the challenges of today) has been a hallmark of all editions of *The Makers*, and this new book uses the same analytical approach to very good effect.

Almost all chapters draw out lessons by analysing historical case studies and the strategic approaches found within these situations. Such insights either help the reader to understand the issues of the past so they are not repeated, or can directly highlight the links between past approaches and contemporary thinking. A feature of the new book is its greater emphasis on non-European thinking and how it may—or may not—influence the actions of contemporary extremist ideologies or great powers. Chapter 3, ‘Sun Zi and the Search for a Timeless Logic of Strategy’, is an example. Here, Toshi Yoshihara explores Sun Tzu’s theories and their influence on both Western and Eastern ‘thinking’. His conclusion may test some commentators because:

[t]he claim that Chinese military thought is profoundly different from that of its Western counterpart—owing in part to the influence of Sun Zi bingfa and other military classics—reduces Chinese or Eastern strategy to a caricature or, at worst, a stereotype. [pages 89–90]

An underpinning feature of Brands’s edition is its focus on strategic competition and great power actions in a multipolar world. While the first edition, released in 1943, focused on great power war, and the second edition, published in 1986, was born of the Cold War’s bipolar world, this new edition captures insights relating to strategic competition, heightened strategic risk, and the interplay between great, middle and small powers. As Brands outlines in the introduction, this emphasis reflects the strategic environment within which this book is written and published. For example, compared to the compressed discussion in the second edition, this new book provides a more expanded review of 16th and 17th century strategy (Chapters 11 and 12).

Bookended by the Italian Wars of the early 1500s and the Thirty Years War (1616–1648), the examples of strategy during these times illustrate the relevance of this new edition to contemporary challenges for the profession of arms and statecraft. This is because these historical periods remain very relevant today as they were periods characterised by multipolar competition, social upheaval, and changing great power dynamics. How small and middle powers operated to survive and thrive within such a competitive environment provides valuable insights to today's practitioners of strategy, strategic planning and statecraft.

The New Makers of Modern Strategy has much to offer experienced and novice strategic practitioners alike. For example, readers focused on grappling with the fundamental concepts of strategy and strategic theory should start with the introduction, Chapter 1 ('Strategy: The History of an Idea'), Chapter 5 ('The Elusive Meaning and Enduring Relevance of Clausewitz') and Chapter 6 ('Jomini, Modern War, and Strategy'). From there, it may be helpful to turn to chapters relating to the Indo-Pacific. Readers with a particular interest in the rise of China may be tempted to jump to Chapter 39, 'Xi Jinping and the Strategy of China's Restoration', but other chapters provide relevant context and should not be overlooked. For example, Chapter 35, 'Dilemmas of Dominance', outlines the economic, geostrategic and political—both domestic and international—dilemmas that have shaped the US's contemporary strategic posture. It is also worth understanding the challenges of modern war, and the tension between tactical victory and strategic success as explored in Chapter 20, 'The Strategy of Decisive War versus the Strategy of Attrition'. These insights may help readers understand how over-emphasising tactical decisive victory can create strategic risk for the nation. Finally, as outlined above, the insights of the 17th century are relevant to Australia as a middle power in a time of strategic multipolar competition.

The New Makers of Modern Strategy is an invaluable addition to any professional's or scholar's library. It should be made available by all military formation/area libraries. Operational and strategic planners should also be familiar with this work. However, it is not a book that is intended to be read cover to cover. Instead, the illustrative case studies offer a resource to be dived into and reviewed when seeking inspiration and guidance. By showing how people, throughout history, have attempted to understand their strategic environment, the book provides a springboard from which

to frame the problem space of today, and to develop a strategic approach to contemporary challenges. Given that each chapter highlights both the successes and failures of strategy throughout history, *The New Makers of Modern Strategy* offers more than just an edited book of case studies. Instead, it presents a collection of ready-made 'mental models' to help inform contemporary thinking. Readers would be well advised to reflect on the contents of the book, comparing case studies across chapters and reflecting on the relevance of the insights to the Australian context. For junior officers, such insights will provide strategic awareness. For field ranks, these insights will grow strategic thinking. For senior leaders, such knowledge will enhance strategic art. Taken together, these outcomes will help buttress the nation against the challenges posed by a rapidly evolving national and international strategic environment.

About the Reviewer

Colonel Nick Bosio has held a range of command and staff appointments across tactical, campaign and strategic posts, both within Australia and on operations. His experiences include Chief of Campaign Plans for a 3-Star Coalition Headquarters, Commanding Officer of the 6th Engineer Support Regiment, and Deputy Head/Director of Military Strategic Plans. Colonel Bosio holds a Bachelor of Engineering, three Master degrees and a research doctorate (PhD) focusing on military theory, strategic studies, and systems thinking. He is currently an instructor at the Australian War College.

Deterrence, Coercion, and Appeasement: British Grand Strategy, 1919–1940 (London, Oxford University Press, 2022, ISBN 9780192863355, 623 pp)

Book Review

Author of Book: David French

Reviewed by: Jordan Beavis

David French is an illustrious name in British military history. For decades he has made significant contributions to our understanding of British strategy and Britain's Army in both peace and war, in the latter case frequently rebalancing an often stereotyped view of the military force that was once responsible for the land defence of the world's largest empire. In *Deterrence, Coercion, and Appeasement*, French has written his magnum opus. On page after page, French skilfully weaves together decades of analysis and extensive original research on the formulation and implementation of British grand strategy in the 1920s and 1930s. In doing so, he provides a fascinating account of the varied success of the efforts of the British policymaking elite (politicians, civil servants, service chiefs) to establish a stable international order following the First World War, and their failure to maintain it in the face of expansionist aggression in the 1930s.

French's monograph comprises three parts, with each analysing distinct periods in the formulation and implementation of British grand strategy in the interwar period. Part I examines the search for peace and the construction of a new world order in the aftermath of the First World War. By the end of 1918 the British public were weary of war and the Treasury was practically exhausted. With its enemies seemingly vanquished, the empire's bloated wartime forces were demobilised and a 'Ten-Year Rule' was implemented. This rule specified that no major war was considered likely within the next 10 years (a period that was later set on a rolling basis), with faith also placed in the ability of the new League of Nations and collective security to avoid future conflicts. Intermittent internal threats to the empire or the general peace were dealt with by 'adroit diplomacy' and a series of international agreements negotiated to maintain peace, such as the Washington Naval Treaty of 1922 and the 1926 Treaty of Lausanne.

By 1931, however, the benign international order that the British had helped create began to collapse. Part II reviews the period 1931–1936, wherein expansionist Italy under the Fascists and Imperial Japan, as well as the revanchist Nazi Germany, began to represent significant challenges to world stability and imperial defence. In Britain, the National Governments of Prime Ministers Ramsay MacDonald (1931–1935) and Stanley Baldwin (1935–1937) felt their ability to deter such challenges was hamstrung by the need to secure a national economic recovery following the Great Depression and follow (rather than lead) pacifist public opinion. By 1934, however, the poor state of the nation's armed forces had been recognised. A well-conceived draft program was prepared by service chiefs and senior civil servants in 1934 to rectify the worst of the deficiencies and thereby reinvigorate the empire's traditional grand strategy of diplomacy backed by effective military deterrents. This plan, however, was effectively watered down by the Chancellor of the Exchequer, Neville Chamberlain, who then imposed his own uninformed strategic views onto his Cabinet colleagues and ensured Britain would have neither the forces nor the allies necessary to contain German, Italian or Japanese expansion.

Chamberlain's almost ruinous control as Prime Minister over British grand strategy in 1937–1940 is the concern of the book's third and final part. Few individuals in British history are as controversial as Chamberlain. French's analysis of his strategic policymaking is damning in its detail, clearly indicating that many of Chamberlain's decisions not only are

liable to critique with hindsight but also were rightly questioned by many contemporaries for their flawed logic and assumptions. He was hindered by his strong 'self-belief', which in practice amounted to 'an utter certainty in the correctness of his own opinions, even when they were based on little more than ill-considered prejudices'.¹ Chamberlain's ascendancy represented the abandonment of a foundational guideline of British diplomacy, most clearly expressed in Lord Salisbury's dictum of 1927 that 'in coming to an arrangement one must be prepared to give something, the skill consisting in giving relatively unimportant details in order to maintain vital principles'.² Chamberlain did surrender such 'vital principles' in his desire to appease the dictators in 1937–1939, and the force of Cabinet and public opinion saw him adopt a stronger approach following the German annexation of rump Czechoslovakia in March 1939. Yet Chamberlain's public threats of war against Germany were completely undermined by his use of intermediaries to inform Hitler—without the knowledge of his Foreign Secretary or Cabinet—that he was still open to further negotiations on a European settlement. As French clearly illustrates, 'pursuing deterrence in public, and conciliation and appeasement in private, only ensured that both policies would fail'.³

Given heightened geopolitical tensions in the world today, French's book is a timely study of how deterrence, coercion or appeasement can be exercised, and the varied factors that must be considered in implementing each. It offers many lessons to strategic policymakers, especially in regard to utilising national strengths and the need to be transparent to the public on the dangers posed by those that seek to upend the international rules-based order. However, French's dense academic prose, the granularity of his analysis, and the high cost of the book (US\$110) does mean that many general readers will find the book inaccessible. Nor can it be recommended as an introductory text for individuals seeking their first insight into the interwar period; more accessible works are available for this purpose.⁴ Those willing to take the time and effort to come to grips with this excellently researched work, however, will be left pondering the foundations of the West's grand strategies and how the successes and failures of British policymakers in the 1920s and 1930s could be emulated or avoided today.

About the Reviewer

Dr Jordan Beavis is an Academic Research Officer at the Australian Army Research Centre, having formally worked as a Researcher for the Australian War Memorial's Official History of Australian Operations in Iraq and Afghanistan. His research focuses on the militaries of the British Empire/Commonwealth in the interwar period (1919–1939), international engagement, professional military education, and mobilisation.

Endnotes

- 1 David French, *Deterrence, Coercion, and Appeasement: British Grand Strategy, 1919–1940* (London: Oxford University Press, 2022), p. 236.
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- 4 See, for example, Ruth Henig, *The Peace that Never Was: A History of the League of Nations* (London: Haus Publishing, 2019); Jeremy Black, *Avoiding Armageddon: From the Great War to the Fall of France, 1918–40* (London: Bloomsbury, 2012); Tim Bouverie, *Appeasing Hitler: Chamberlain, Churchill and the Road to War* (London: Bodley Head, 2019); Zara Steiner, *The Lights that Failed: European International History 1919–1933* (Oxford: Oxford University Press, 2005); and Zara Steiner, *The Triumph of the Dark: European International History 1933–1939* (Oxford: Oxford University Press, 2010).

***Armies in Retreat: Chaos,
Cohesion, and Consequences*
(Fort Leavenworth, Kansas, Army
University Press, 2023, ISBN
9781940804873, 436 pp)**

Book Review

Edited by: Timothy Heck and Walker Mills

Reviewed by: Liam Kane

When should military leaders break off an engagement with their enemies? What is the difference between a retreat and a rout? What is the significance of retreat? These are some of the questions that the contributors to *Armies in Retreat* seek to answer. The book's editors, Timothy Heck and Walker Mills, were motivated to undertake this project to balance what they see as an overwhelming focus on 'success' or 'victory' in recent studies of large-scale conventional operations.¹ Defeat and retreat are also personal subjects to the editors and many of the book's contributors because of their connections to the war in Afghanistan. For them, the withdrawal of US troops from Afghanistan in 2020–2021, which culminated in the chaotic airlift from Kabul airport in August 2021, was an 'almost personal event'.² In this context, *Armies in Retreat* may serve as a message (perhaps unintended) to the US government and military, and their allies (including Australia), that active planning for the worst possible eventualities requires humility and historical consciousness.

The book's 18 contributors include an admirable range of established and emerging scholars and civilian and military writers, whose biographies are usefully included at the end of the book. That only two women (Catherine Bateson and Aimée Fox) are among the contributors is disappointing and not necessarily reflective of the diverse range of scholars in the field of war studies. The book's chapters cover substantial temporal ground—ranging from the Peloponnesian War to the Korean War and beyond—and are grouped into overarching themes: chaos, cohesion and consequences. Chapters in the chaos section focus mostly on chaotic retreats and routs, whereas those in the cohesion section deal with more orderly withdrawals. The final section (consequences) provides chapters that seek to put defeats and retreats into strategic and political context.

This is a welcome volume, especially for educators in military academies who require quality military history pitched to their students. The book, however, is not immune from constructive critique. The first two sections blur together because retreats (successful or otherwise) usually feature examples of both chaos and cohesion. The last section is more distinct because most of its chapters pertain to non-operational matters. Nonetheless, the final section is something of a grab bag of topics, thematically speaking. Two chapters (14 and 15) focus on defeat rather than retreat; two consider cultural narratives of defeat and retreat (16 and 17); one examines civil–military relations (18); while the last considers offensive cyber operations (19). More substantial interventions by the editors, such as short section introductions, would have helped the reader to better understand the sequencing of the chapters, or at least to gain some insights into the editors' 'back and forth'³ discussions that informed decisions on the book's themes.

The stated aim of the editors is to 'inform leaders'⁴ about defeat and retreat. Some contributing authors offer more explicit lessons than others. A few of them let the narrative largely speak for itself, pointing to general theoretical conclusions and connections to the present. Other chapters that have a strong technical focus (such as Marcin Wilczek's study of Polish mounted units in 1939) would have benefited from being framed more analytically to connect historical cases to wider themes.

US Army doctrine features heavily in *Armies in Retreat*, which is understandable for an Army University Press publication. Most of the authors who refer to doctrine use it to establish an assumption in the manner in which one might draw on Clausewitz or another theorist. Other contributors, however, shift away from this form of analysis and instead employ test historical cases against contemporary doctrine. In his study of the failed British invasion of Holland in 1809, Jason Lancaster argues that because the operations chief architect (Lord Castlereagh) planned the operation by himself without ‘modern planning doctrine’,⁵ the undertaking was bungled. This approach does more to vindicate modern doctrine than to illuminate the intricacies and problems of British planning.

What lessons might leaders take from *Armies in Retreat*? Like any other historical event, each retreat is unique, as Heck and Mills observe.⁶ However, several truisms recur across the chapters. One is that in societies in which militaries are at least nominally subject to civilian authority, the decision to carry out a strategic withdrawal occurs on a civil–military plane. In this light, the British decision to evacuate imperial forces from the Gallipoli peninsula in 1915,⁷ and the German withdrawal from the Demyansk salient on the Eastern Front in 1943,⁸ were both complicated by their political context. Indeed, British Cabinet-style policymaking and the Führer’s centralised command practices respectively presented challenges. A second observation is that well-trained forces which foster strong bonds between officers and men are more likely to fare better in withdrawals than their poorly trained and discordant counterparts. While this is true for any force in any military undertaking, it is especially true for retreats because they are characterised by a particularly volatile mixture of war’s frictions and passions. For example, the heterogeneous and ill-prepared XV International Brigade basically dissolved in the Nationalist offensive in Aragon in 1938 during the Spanish Civil War.⁹ By contrast, cohesion and professionalism among the ranks of the US 1st Marine Division saved it in the intense 1950 Chosin Reservoir campaign during the Korean War.¹⁰ Finally, a retreating army is rarely alone. There is often a force (or forces) in pursuit whose experiences could fill another volume. Further, in large-scale operations conducted in densely populated areas, many civilians fleeing combat, persecution or deprivation (probably all three) will usually mingle

with retreating forces. While withdrawing forces can try to deal with civilians in an ad hoc manner (as was the case in Korea in 1950 when thousands of refugees were evacuated by the US military operated railroad system¹¹), forces in retreat should be prepared for the inevitable complexities of the human terrain.

The editors of and contributors to *Armies in Retreat* ought to be congratulated. This volume is a timely reminder to relinquish hubris and always prepare for the worst.

About the Reviewer

Dr Liam Kane is a Lecturer in Military History and teaches at the Australian Defence College. His research focuses on Australian and United States military history during the Second World War and beyond. His work can be found in scholarly journals such as *War in History* and the *Journal of Military History*.

Endnotes

- 1 Timothy Heck and Walker Mills (eds), *Armies in Retreat: Chaos, Cohesion, and Consequences* (Leavenworth, Kansas: Army University Press, 2023), p. 2.
- 2 Ibid., p. 423.
- 3 Ibid., p. 3.
- 4 Ibid., p. 6.
- 5 Ibid., pp. 310–311.
- 6 Ibid., p. 3.
- 7 Ibid., pp. 377–400.
- 8 Ibid., pp. 179–194.
- 9 Ibid., pp. 55–69.
- 10 Ibid., pp. 217–240.
- 11 Ibid., pp. 241–268.

The New Age of Naval Power in the Indo-Pacific (Georgetown University Press, 2023, ISBN 9781647123383, 360 pp)

Book Review

Edited by: Catherine Grant, Alessio Patalano
and James Russell

Reviewed by: Dongkeun Lee

We are currently witnessing the age of naval power, where the competition between the United States (US) and the People's Republic of China (PRC) primarily unfolds at sea. Notable areas of potential conflict, such as the Taiwan Strait and the South China Sea, underscore the critical role of naval power in shaping geopolitical dynamics. The recent Houthi insurgent attacks in the Red Sea further highlight that maritime conflicts may not be peaceful. Within the international rules-based order, safeguarding key norms like the freedom of navigation (now under threat) is critical, and so understanding the intricacies of Indo-Pacific security becomes crucial to this order.

Catherine L Grant, Alessio Patalano and James A Russell's edited collection *The New Age of Naval Power in the Indo-Pacific*, provides a comprehensive framework of 'five factors of influence' to help explain the complexity of the Indo-Pacific's maritime security. These factors are the

capacity to control sea lanes, deploy nuclear deterrence at sea, implement the law of the sea advantageously, control marine resources, and exhibit technological innovation.¹ These capacities are directly tied to the functions of naval power and are instrumental in negotiating order and stability in the Indo-Pacific.²

The book meticulously examines these factors in 14 chapters, each contributed by different authors, harnessing a wealth of expertise. It is divided into three parts, the first of which delves into the factors of influence. Chapter 2 explores the relevance of maritime geography and strategic competition between the US and China, emphasising how maritime geopolitics shapes the national interests of these superpowers.³ Chapter 3 evaluates the advantageous utilisation of the United Nations Convention on the Law of the Sea (UNCLOS) by the Indo-Pacific states, notably China. It also highlights the relevance of the PRC's growing naval power to the extension of the maritime legal conflict.⁴ Chapter 4 examines the marine resource dimension of Indo-Pacific security, incorporating natural resources and maritime spaces for trade.⁵ Chapter 5 analyses the strategic relevance of nuclear deterrence within the Indo-Pacific region, emphasising the unique role of nuclear navies in maritime geography.⁶ Chapter 6 investigates the impacts of technological innovations on naval power in the Indo-Pacific, underlining the political dynamics associated with acquiring new weapons. Its author, James A Russell, argues that understanding the intentions behind the acquisition of new weapons by key countries is crucial to prevent future wars.⁷

Part II evaluates the historical applications of the five factors of influence. Chapter 7 explores early imperial competition in the Indian Ocean, focusing on the control of sea lanes and technological innovations.⁸ Chapter 8 reviews Alfred Thayer Mahan's book *The Problem of Asia* and its relevance to the successful Anglo-Japanese alliance. This chapter claims that maritime geography was one of the key determining factors shaping strategic interests, and it assesses the Anglo-Japanese alliance as having constituted successful naval diplomacy that facilitated further commercial access to Asia by Britain and Japan.⁹ Chapter 9 investigates the history of East Asia between the First and Second World Wars, highlighting the role of naval power in shaping the international order.¹⁰ Chapter 10 explains the Cold War rivalry between the US and the Soviet Union at sea, providing a foundational understanding of contemporary conflicts. Uniquely, this

chapter also evaluates in detail issues related to international law and marine resources.¹¹ Considering that these two factors have now become key drivers of competition in the Indo-Pacific, Chapter 10's analysis could be regarded as examining a foundation for the contemporary conflict in the region.

Part III analyses the application of the five factors of influence in the contemporary Indo-Pacific. Chapter 11 examines bilateral maritime conflicts among major players, such as China–South Korea, South Korea–Japan, Russia–Japan, and North Korea–South Korea.¹² Chapter 12 delves into the conflicts in the East and South China Seas, where the current international rules-based order is heavily challenged. This chapter examines 'grey-zone' activities undertaken by Indo-Pacific states that use naval power in the East and South China Seas within the UNCLOS framework to achieve military advantage.¹³ Chapter 13 evaluates the Taiwan Strait from a naval power perspective, arguing that the PRC's enhanced navy is changing the balance of power between China and Taiwan. The author of this chapter, Sheryn Lee, further contends that the forceful unification of Taiwan by China would grant Beijing a favourable environment in which to exert naval power in an effort to deny opponents' freedom of navigation.¹⁴ Chapter 14 argues for a nuanced approach to China's presence in the South Pacific in response to the direct threat of climate change. Its author, Rear Admiral James Goldrick (Retd), considers that naval cooperation by the US and its partners with the PRC is both desirable and possible in the South Pacific. In the context of climate action, patrol craft rather than battle groups will be a key element of naval power in the region.¹⁵

The question is then: what lessons can the Australian Army take from this book? First of all, the Army needs to understand that its capabilities can also be part of the five factors of influence, along with naval power. For instance, the Army has already played a significant role through accompanying deployments of the Canberra-class landing helicopter dock (LHD). As part of the Indo-Pacific Endeavour (IPE), LHDs are annually deployed to the Indo-Pacific region, including to the contested regions of the South China Sea. In this way, the IPE serves Australia's national interests by reinforcing the international rules-based order among the Indo-Pacific countries that respect UNCLOS.¹⁶ Specifically, exercising Australian military capabilities within contested regions like the South China Sea underscores the role of UNCLOS in enabling nation states to exert naval power far from their own shores.

Besides IPE, the Australian Army plays a significant role as part of humanitarian and disaster relief (HADR) missions, especially in the South Pacific region. As Goldrick has argued, the South Pacific is facing climate change as one of its key threats, and non-combatant units can play a significant role as influencers.¹⁷ Considering that the South Pacific is Australia's neighbour, the role of influencer is critical to it. The role of naval power as an influencer of technological innovation that can fuel a naval arms race is also emphasised in the book. It is inevitable that the increased presence of Canberra-class LHDs within the South Pacific may be perceived as a threat to other countries with strategic interests in the region, especially China. To counter such perceptions, Australia must clearly demonstrate its commitment to delivering HADR within the South Pacific by being an active participant in international relief efforts.

About the Reviewer

Dongkeun Lee is a PhD candidate at the Strategic and Defence Studies Centre, Australian National University, and a reservist officer of the Republic of Korea Navy. Dongkeun's main research interest is maritime security and geopolitics of the Indo-Pacific region. By investigating the strategy and role of the navies in the region, Dongkeun hopes to increase understanding of the current and future maritime security and geopolitical environment in the Indo-Pacific. His recent works include 'The Japanese Maritime Self-Defense Force: Dream of a Blue Water Navy', in *Handbook of Japanese Security*, edited by Leszek Buszynski.

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- 3 Christopher Twomey, 'Geopolitics and Strategic Geography in Sino-US Competition', in Grant, Patalano and Russell, *The New Age of Naval Power*, pp. 27–30, 35–39.
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- 7 James A Russell, 'Technology, Escalation, and War in the Indo-Pacific', in Grant, Patalano and Russell (eds), *The New Age of Naval Power*, pp. 131–132.
- 8 Ryan Gingeras, 'Asian States and Early Imperial Competition in the Indian Ocean', in Grant, Patalano and Russell (eds), *The New Age of Naval Power*, pp. 139–140.
- 9 Richard Dunley, 'The "Problem of Asia" and Imperial Competition before World War I', in Grant, Patalano and Russell (eds), *The New Age of Naval Power*, pp. 151–152, 166–167.
- 10 Daniel Moran, 'The Far East between the World Wars', in Grant, Patalano and Russell (eds), *The New Age of Naval Power*, pp. 172–175, 182–183.
- 11 Kevin Rowlands, 'Superpower Rivalry and the Strategic Balance in the Cold War', in Grant, Patalano and Russell (eds), *The New Age of Naval Power*, pp. 185–186, 196–199.
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- 13 Alessio Patalano and Julie Marionneau, 'East and South China Seas', in Grant, Patalano and Russell (eds), *The New Age of Naval Power*, pp. 225–239.
- 14 Sheryn Lee, 'The Taiwan Strait', in Grant, Patalano and Russell (eds), *The New Age of Naval Power*, pp. 244–245.
- 15 James Goldrick, 'The South Pacific', in Grant, Patalano and Russell (eds), *The New Age of Naval Power*, pp. 260, 269–270.
- 16 Adam Lockyer, Justin Burke, Yves-Heng Lim and Fred Smith, *The Indo-Pacific Endeavour: Reflections and Proposals for Australia's Premier Naval Diplomacy Activity*, Soundings Papers No. 16 (Canberra: Royal Australian Navy, 2020), at: [webarchive.nla.gov.au/awa/20230924144557/https://www.navy.gov.au/media-room/publications/soundings-papers-indo-pacific-endeavour-reflections-and-proposals-australias-premier-naval-diplomacy-activity](https://www.navy.gov.au/media-room/publications/soundings-papers-indo-pacific-endeavour-reflections-and-proposals-australias-premier-naval-diplomacy-activity).
- 17 Goldrick, 'The South Pacific', pp. 260, 269–270.

Command: The Politics of Military Operations from Korea to Ukraine (Allen Lane, 2022, ISBN 9780241456996, 608 pp)

Book Review

Author: Lawrence Freedman

Reviewed By: John Nash

In his latest book, *Command: The Politics of Military Operations from Korea to Ukraine*, Lawrence Freedman continues his long body of work looking at issues of strategy and command. As the book's title indicates, Freedman examines conflicts ranging from the Korean War to the ongoing Russo-Ukraine war, in the latter case focusing heavily on events in 2014 and the years leading up to the 2022 full-scale Russian invasion. In addition to a solid introduction and thoughtful conclusion, there are 15 chapters. The majority of chapters deal with a discrete conflict or issue (e.g. the Cuban Missile Crisis or Falklands War). Two chapters vary from this format by focusing on a particular leader. Specifically, Chapter 4 looks at the leadership of Ariel Sharon over the course of his military and political careers, and Chapter 8 is concerned with Saddam Hussein. Importantly, the case studies Freedman uses are varied, including Western examples such as the French in Indochina and Algeria, as well as non-Western conflicts like the Pakistan Civil War and conflicts in the Congo, with 'Che' Guevara's failed attempt at an anti-government uprising through to Laurent-

Désiré Kabila's eventual rise to power. As this wide range indicates, Freedman looks beyond command and leadership within Western or democratic systems, also illuminating the issues of war and strategy that bedevil military dictatorships and other non-democratic systems.

Political, social and economic factors—combined with the personalities of leaders and subordinates—mean that war, and by extension war leadership, is never the same. As Freedman observes in his introduction: 'Command, therefore is not a simple matter. It is about much more than handing out orders and ensuring that they are enacted'.¹ Therefore, it is problematic to make assumptions about military effectiveness based solely on the political system of a particular country.

Notwithstanding the inevitable relevance of context and personality to the execution of command, Freedman teases out some universally applicable lessons, both at the political-diplomatic and military operational levels. In his final analysis of the Pakistan Civil War (which led to East Pakistan gaining independence as Bangladesh), Freedman concludes that President (and General) Yahya Khan 'looked to a military rather than a political solution, yet he showed little grasp of what a military solution might require'.² In a similar vein, when examining NATO operations in Kosovo in 1999, Freedman observes that NATO's idea that air operations with no ground commitment was an ideal 'low-risk' and 'low-cost' strategy was evidently flawed, 'although it is not clear why something low-cost signals anything other than low political intent'.³ Both examples evidence the inherent challenges to strategic-level thinking and how it can be easy to over-use, or indeed under-use, military power to achieve an objective. Further highlighting the importance of coordinating military efforts with diplomatic, political and social lines of effort, Freedman determines that the British plans to reconstruct Iraq post 2003 were hampered by an enduring opposition to the Iraq War within the British Foreign Office and Department for International Development. Their resultant reluctance to support reconstruction efforts led politicians to support a military-led rebuilding effort instead.⁴ Unsurprisingly Freedman, a member of the 2003 Iraq Inquiry (Chilcot Inquiry), assesses that the British post-war strategy in southern Iraq was suboptimal.

Operational-level command effects are also explored by Freedman, once again illuminating common themes across time and space. Perhaps his most obvious premise is the need for joint effort. The Pakistani Army fighting in East Pakistan (now Bangladesh) was hampered by its lack of control over air or naval forces to support the ground war.⁵ Similarly, during the 1972 North Vietnamese offensive against the South, the US command chain and lines of responsibility for air operations were far too complex.⁶ The most egregious example of poorly allocated command responsibilities is the case of Argentinian forces during their invasion of the Falklands in 1982. On that occasion, Brigadier Menéndez (commander of the so-called Joint Force of the Malvinas Military Garrison) had three separate commands under him—land, air, sea—all with their own independent logistical and supply organisations.⁷ While the deficiencies in such command arrangements may seem obvious to readers now, Freedman's examples provide case study reminders of why a joint approach is generally a more effective command arrangement than when single services attempt to run their own wars.

The principal, most important and most delicate theme of the book is the issue of politico-military relations. This relationship cuts both ways, with some military commanders accused of being 'too political'. A particularly notable example is Dwight D Eisenhower in the Second World War. Both the US and British political leaderships often accused Eisenhower of being more politician than general, without consideration of the fact that his 'generalship was about preparing and directing large and complex military undertakings, involving various nationalities'.⁸ In reality, an officer exercising such a high level of military responsibility could not avoid encroaching into territory deemed 'political'. Going too far in this direction, however, has real risks. Undue interference in politics is arguably the reason that General MacArthur was fired by President Truman during the Korean War.

The politico-military dichotomy raises the question of when a military officer can or should disobey a direction given by the chain of command. Indeed, a self-proclaimed aim of Freedman's work is to shine a light on this issue.⁹ The corollary of such inquiry, however, is the degree to which politicians should become closely involved in military matters. For example, during the Cuban Missile Crisis President Kennedy was unfairly taken to task for interfering too much in military affairs. A similar accusation was made against both President Nixon and Secretary of State Kissinger during the Vietnam War—fairly. The ability of politicians to resist the temptation to

intrude unnecessarily in military matters is a strong attribute, as is a basic understanding of military problems. One of the more revealing stories told by Freedman is a personal recollection of his interview with Margaret Thatcher. When asked about the main lesson from the Falklands War, she replied: 'Everything takes much longer than you think it should.'¹⁰ It is a lesson that should be heeded today by those who expect military results *right now*. A contemporary example is the unreasonable expectations placed on Ukrainian counter-offensives to make rapid headway against heavily entrenched Russian forces.

In *Command: The Politics of Military Operations from Korea to Ukraine*, Freedman concludes that the answer to effective command in military operations lies in cooperation between the military and civilians:

*If there is a lesson from this book, it is not that the civilians and military must stick to their own spheres of influence, and not interfere in the other's, but that they must engage constantly with each other.*¹¹

While this may not be a revelatory observation, it is a critical one nonetheless.


About the Reviewer

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Endnotes

- 1 Lawrence Freedman, *Command: The Politics of Military Operations from Korea to Ukraine* (Allen Lane, 2022), p. 2.
- 2 Ibid., p. 170.
- 3 Ibid., p. 342.
- 4 Ibid., pp. 445, 460.
- 5 Ibid., p. 155.
- 6 Ibid., p. 182.
- 7 Ibid., pp. 227–228.
- 8 Ibid., p. 6.
- 9 Ibid., p. 29.
- 10 Ibid., p. 245.
- 11 Ibid., p. 515.



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