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The State of the Army Profession



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The State of the Army Profession

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Cover image: A Staff Cadet of the Royal Military College stands at ease during the December 2024 Graduation Parade at the Royal Military College - Duntroon in Canberra. (Source: Defence image gallery).

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FOREWORD FROM THE CHIEF OF ARMY

The Australian Army is a proud institution—shaped by generations of service, sacrifice and adaptation. The challenges of a rapidly evolving strategic environment demand that we reflect on our identity, our legitimacy and our relationship with the nation and society we exist to serve. This edition of the *Australian Army Journal* aligns with the theme of the 2025 Chief of Army's Symposium, 'The Army in Society', and marks a milestone in our ongoing journey of professional renewal and national dialogue.

'The Army in Society' invites us to explore the reciprocal relationship between our Army and the Australian people. We are not apart from society but are rather an institution drawn from it, shaped by it and ultimately accountable to it.

Our legitimacy, strength and future are rooted in the health of this relationship. Therefore, it is our duty to foster a meaningful and enduring national conversation—one that reflects both the soldier's contract of unlimited liability and the nation's reciprocal obligation to care for those who serve and those who have served.

Considerations of the Army's place in society also invites us to deliberate upon our profession. The idea of the Army as a profession—nested in a broader 'profession of arms'—has been under-explored in our national context. While our history and operations are well documented, the deeper intellectual and ethical foundations of our profession deserve sustained attention. This edition of the *Australian Army Journal* is therefore dedicated to teasing out and analysing the various elements of the Army profession.

Over the past year, I have articulated a model for understanding our profession through three interdependent pillars: jurisdiction, expertise and self-regulation. These pillars are not abstract—they are the bedrock of our legitimacy, capability and ethical conduct.

The transformation of the Army since the publication of the Defence Strategic Review in April 2023 has been profound. Transformation is not only about internal change; it must be understood and supported by those we exist to serve. That is why this dialogue matters. It is not enough to modernise; we must also communicate, connect, listen and reflect.

This edition brings together a diverse and thoughtful collection of contributions—from across the services, academia and the public sector—that explore these pillars and the broader theme of the Army in society. From historical analyses of mission command to contemporary reflections on planning, innovation, expertise and ethics, these articles challenge us to think about our profession and its future.

The inclusion of the winning and runner-up articles from the 2025 Chief of Army Essay Competition further demonstrates the intellectual vitality within our ranks. These essays offer practical insights into how the Army profession can be optimised for littoral operations, mobilisation and integration within the ADF.

I commend this edition to all members of the Army, Defence and our broader community. May it inspire debate and action. Dialogue is a necessity, not a luxury, in times of challenge and change. Through the respectful contest of ideas, we strengthen our Army, our society and our shared commitment to the defence of our way of life.

Lieutenant General Simon Stuart AO, DSC

Chief of Army
Australian Army

/ INTRODUCTION¹

Jordan Beavis

Debating the Australian Army Profession

In the long history of the Australian Army, there has been no significant, holistic study of the Australian Army profession, past, present or future.² This is an awkward statement in an introductory article to a special themed edition of the *Australian Army Journal* (AAJ), a publication which for 10 years (2003–2013) bore on its title page the phrase ‘For the Profession of Arms’.³ It is rendered all the more uncomfortable by recalling that the army profession has existed in Australia, in various states of maturity, for 160 years; it was in the 1860s that the colonial governments of Australia began to appoint permanent staff to instruct and administer their volunteer militias.⁴ Sliding this date to 1 March 1901, the birthdate of the Australian Army through the combination of these colonial military forces, scarcely softens the point. It has been 68 years since US political scientist Samuel Huntington published *The Soldier and the State*, which provided the first modern framework for analysing military professionalism; 65 years since Morris Janowitz continued and deepened this analysis in *The Professional Soldier*; and 63 years since Lieutenant-General Sir John Hackett delivered his famous, longitudinal lectures on the ‘profession of arms’ at Trinity College, Cambridge. Many more such dates could be identified, such as the establishment of the Royal Military College, Duntroon (1911) or the creation of the Australian Regular Army (1947). It seems, then, an oversight, if not an outright failure, that no such Australian study has been undertaken on the army profession as a whole, or even a framework for such a study developed. And it is.

This is not to say that the Australian Army’s unique history, its relationship to society and government, its methods of discipline, its culture and ethos, and its significant expertise have gone unstudied. In particular, Army’s history has been well explored. Although there are always new questions to ask or facets to examine, a wide array of studies on Army’s history exist on topics as varied as military strategy, campaigns and battles, unit and corps histories, prisoners of war, gender, sexuality, equipment, innovation, Army and society, biographies, and almost everything in between.⁵ This is a vibrant military history industry, nourished by the efforts of a community of dedicated historians, just as there are dedicated Australian scholars of civil-military relations, military law and military sociology.⁶

What is missing, however, is the combination of these too-often siloed specialisations into a holistic examination of what constitutes the Australian Army profession, its key characteristics and features, how it differs from or relates to the other military professions and the broader ‘profession of arms’, or even a justification for its existence or status as a ‘profession’.⁷ Together, such factors form a *theory of the profession*—a foundation for its application on behalf of society.

This, then, leads to a further question: why? Why has the Australian Army, despite its 124-year existence, neglected investigation into the nature of the unique profession that underlies its considerable capability? Two principal factors stand out. The first is the relationship between the ‘army profession’ and the broader ‘profession of arms’. The term ‘profession of arms’ has a long history, but it gained popularity in the 19th century as a synonym for ‘army’ or ‘military’, or to describe the action of serving such an institution as a commissioned officer.⁸ In his 1810 military dictionary, British Major Charles James claimed the ‘profession of arms’ as the domain of officers, arguing additionally that there was no other profession with so ‘grave’ a responsibility—being ‘charged with defending the state’—and none that required ‘greater knowledge and capacity than the army’.⁹ Across the Atlantic in the United States, the term became tied to the concept of a standing army, namely ‘a body of men exclusively set apart and employed in the profession of arms, as distinguished from militia’.¹⁰ By the 1850s, officership in the British Army, from which the Australian Army draws its heritage and oldest traditions, was seen to be socially on par with the status of the clergy, law and medicine, despite its isolation from these other professions and ‘society as a whole’.¹¹ It was this continuing cultural and social perspective on the military profession in Britain, in its former dominions and in the United States that provided the foundation upon which Hackett popularised the term ‘profession of arms’ for contemporary and subsequent generations through his 1962 lectures at Trinity College, his 1983 book, and a variety of public and professional appearances and writings.¹² This popularisation had its own impact on Australia. In the 1960s, for example, the opportunity to join the ‘profession of arms’ was used as a slogan to support recruitment into the Regular Army. Later, in the 1970s, Army sought institutional reform of its ‘profession of arms’ following many years of operations in the Vietnam War.¹³ Today, the ‘profession of arms’ is no longer the domain of a single service but instead sits within the responsibility of the Chief of the Defence Force. It is used to refer collectively to ‘people practised in the ethical application and exercise of lethal force to defend the rights and interests of the nation’, namely the members of all three services.¹⁴

The term 'army profession' has, comparatively, a much shorter lineage, both internationally and in Australia. The terms 'army' and 'profession' have often been linked and have been used for a similar length of time as 'profession of arms'—and were often synonymous with it.¹⁵ However, the modern concept of the 'army profession' is much younger, being developed in the late 20th century. It has come to the fore as a result of the integration of Western armies, navies and air forces into unified organisations, à la the Australian Defence Force (ADF), the United States Armed Forces or the British Armed Forces. Centralisation of the services can be expressed through a common legislative framework that ties all services into a 'joint' or 'integrated' organisation, such as the Australian *Defence Act 1903* or Title 10 of the United States Code. It can also occur through the establishment of joint bureaucracy or political oversight, such as a single 'Department of Defence' with a single responsible minister, rather than distinct departments of war, navy or air with their own responsible ministers. With such centralisation it is perhaps natural that the 'profession of arms' becomes a term used to bind all services into a joint 'profession' with common values or ethos (important for integrated operations). Yet fundamental differences in the expertise required, manner of regulation, and character of war across the five military domains (land, air, maritime, space and cyber) count against such a combination. Indeed, they have led some to espouse the existence of sub-professions within this broad 'profession of arms', such as the 'army profession', the 'air force profession' or the 'navy/naval profession' (see Figure 1).¹⁶ In 2002, for example, Don M Snider and Gayle L Watkins argued that the United States had 'three military professions: army, maritime, and aerospace', with these being generally but not wholly contained within their own departments, surrounded by the Department of Defense, Congress and the Executive, and existing simultaneously as both professions and government bureaucracies.¹⁷ Yet it has taken 23 years for the Australian Army to consider and adopt such terminology, and it has done so only through the advocacy of Chief of Army Lieutenant General Simon Stuart, rather than through a form of intellectual and academic introspection on what it means to be a member of the Australian Army.

What then is the second reason for the lack of a sustained, holistic study of the Australian Army profession? Ironically, the answer can be found in Army's continued reliance (often without discernment) on international 'profession of arms' literature from two of its closest partners, the United States and Britain. On the whole this situation has benefited the institution: the Australian Army has found utility in the classic words of Huntington, Janowitz and Hackett, and can look further to the work of Sam C Sarkesian, Charles Moskos, James Burk, Jacques van Doorn and a host of contemporary scholars for insight into the nature and character of the military profession in the global West.¹⁸

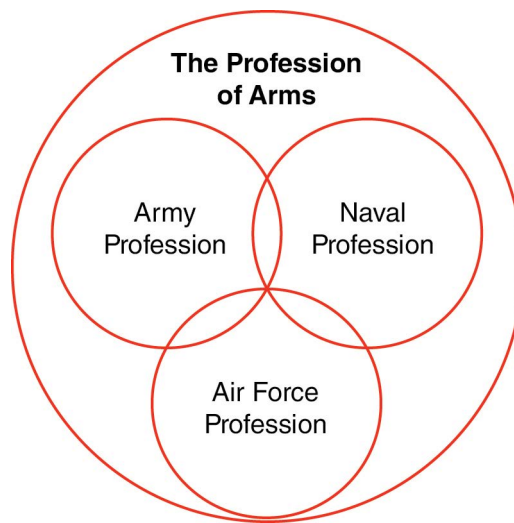


Figure 1. The ADF ‘profession of arms’ and its relationship to the Army profession, the Navy profession and the Air Force profession. While all of these sub-professions exist within the broader profession of arms, they share or differ in aspects of their expertise and regulatory environment. For example, while both Army and Navy operate significant maritime vessels, the Air Force does not. Conversely, both Army and Air Force can undertake airfield defence operations but Navy has not developed such expertise. The Air Force and Navy share joint expertise in conducting offshore maritime surveillance, which is not held by Army.

Yet those seeking to apply these writers’ works to the Australian context can often look past a fundamental factor, namely that these writers and their works are the products of their specific contexts and that their arguments and insights have various degrees of applicability to the Australian Army. Indeed, the nature of professions is such that they operate differently across national boundaries. Factors such as legal and regulatory frameworks, demographics, social and cultural attitudes, and education requirements culminate to render, for example, an Australian lawyer and an American lawyer members of unique professions, despite commonalities in the task being performed.¹⁹ Just as the nature, context and practice of professions such as law or medicine vary across borders, so too do those of the ‘profession of arms’ and the ‘army profession’. It is for this reason that even closely allied militaries pursue interoperability. Interoperability between the Australian Army, the United States Army, the United States Marines, the British Army, the New Zealand Army or any number of other regional partners is necessary owing to often significant differences in doctrine, equipment, standard operating procedures, expertise, methods of self-regulation, and culture. Just as the Australian Army cannot, without serious study and possible changes to methods, organisation, culture or equipment, adopt ‘off the shelf’ a piece of foreign doctrine, neither should it uncritically use overseas

literature on the profession of arms and the army profession when discussing unique aspects of the profession in Australia. Such works can undoubtedly provide insight and inspiration, especially when they discuss the military profession from a broad Western democratic viewpoint. Nevertheless, it should not be assumed that specific case studies or mechanisms are relevant to Australia's unique context. The risk of such a reliance is compounded by the unfortunate fact that Australia lacks a tradition in ADF or academic research around the profession of arms or the army profession; it is a sovereign capability every bit as important to Australian military power as a strong defence industry.

The Contemporary Australian Army Profession

With these considerations in mind, over the last two years, on multiple occasions in 2024 and 2025, Chief of Army Lieutenant General Simon Stuart has provided clear guidance on what he, as the lead steward of the Army profession, views as the key characteristics of the Army profession in Australia.²⁰ Drawing critically upon the work of Huntington, Janowitz, Hackett and Burk, Stuart has identified 'three pillars of the modern Army profession', namely jurisdiction, expertise and self-regulation (see Figure 2). Together, these three pillars form the foundation of Army's considerable capability as the '*integrated force's* experts in land combat'.²¹ The pillars are mutually supporting—the weakening of a single one undermines the viability of the profession and causes it to collapse beneath its own weight. Each requires a brief introduction here.

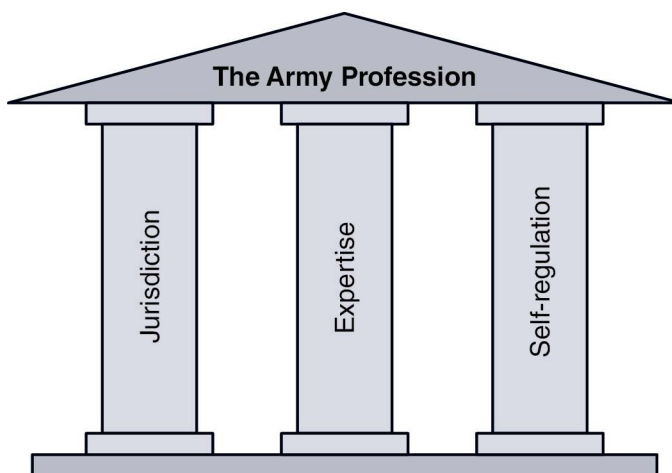


Figure 2. The three pillars, as identified by Lieutenant General Simon Stuart, supporting the modern Army profession

Jurisdiction, as the first pillar of the Army profession, has been defined by Stuart as the ‘unique service we provide to society as its army’. As he rightly noted in November 2025, Army ‘exists only to serve society, and we can only provide our unique service when our society requires and directs us to do so’.²² The name of this pillar is drawn from the work of James Burk, who—drawing upon the theories of noted sociologist Andrew Abbott—argued in 2002 that a profession required a ‘field of endeavour ... for problem solving’.²³ It is this pillar which represents the cooperative relationship between Army and the society from which it is drawn and which it serves. Within extant military profession discourse, jurisdiction is closely related to Huntington’s concept of ‘responsibility’, namely the use of skills and expertise in a manner that benefits society rather than the individual. The concept of jurisdiction does, however, differ in that Huntington saw ‘responsibility’ as being the burden only of officers, whereas to Stuart it permeates across all members of the Army.²⁴ It is erroneous to consider that this pillar is merely a rebranding of civil-military discourse; it goes far beyond that to also include concepts such as social and legal legitimacy, social licence, Army’s interactions with the community, and public perceptions of Army’s role and purpose. As Sam C Sarkesian stated in 1975, ‘the military cannot bestow legitimacy upon itself’, and ‘only when society feels that the military institution and the profession are representative of society, and are responsive and accountable to it ... [can it] achieve a high degree of legitimacy and credibility’.²⁵ Maintaining a relationship with its client and undertaking its tasks in accordance with social expectations is critical for a profession’s existence; failure to do so forces clients to take their problems to someone who will.²⁶

Among the three pillars of the Army profession, that of ‘expertise’ is the most self-explanatory. As Abbott has argued, professions are the means through which industrialised societies structure expertise.²⁷ Army’s capacity to maintain and develop new knowledge is not only fundamental to its status as a profession but also ‘central to our ability to fight and win’.²⁸ Army personnel are expected to be the masters of their field. This is only natural:

Just as a client wants a lawyer who has kept up with the latest court decisions, and a patient wants a surgeon who is skilled in the latest techniques, so too a government wants a military that has made every effort to prepare for a phenomenon as deadly, uncertain, and meaningful as war.²⁹

Within his addresses on this subject, Stuart has identified a range of challenges Army faces in ensuring its expertise is of the standard and breadth to suit the challenges of the modern strategic environment. These range from providing a stronger foundation of military knowledge to Army’s leaders and enhancing professional military education, through to hardwiring adaptation and innovation into Army’s processes, reoccupying the intellectual space of the profession from external commentators, ensuring the sufficiency of its doctrine, and trying to find an institutional ‘balance’ between technology, futurism,

history, philosophy, ethics and strategy.³⁰ Within this pillar, a critical contemporary and future task for Army is to develop expertise in the operation of a range of new systems currently under acquisition, such as large landing craft and self-propelled howitzers. Army's ability to generate, maintain and, where necessary, forget its expertise is—and will remain—an enduring challenge.

The third and final pillar identified is that of self-regulation. Stuart has defined this pillar as Army's 'ability to uphold professional standards in our conduct, both in peace and war'.³¹ Within any professional group there is a need to regulate behaviour to ensure that the institution maintains a positive relationship with its clients and that expertise is applied in an ethical manner. This entails the development and enforcement of a set of ethics and standards of performance, in Janowitz's formulation.³² Stuart has further broadened the scope of this concept, noting that this pillar includes consideration of the Army's 'virtue ethic', its 'philosophy as a fighting force', its professional culture, its system of command and control, its command accountability, and the ability of its individuals to resist the moral 'corruption of war'.³³ This represents a litany of considerations, and researchers could spend entire careers investigating each. Military culture, for example, has come to be regarded as an integral part of the study of military professionalism and it alone encompasses a wide array of influences such as discipline, professional ethos, ceremonies, etiquette, esprit de corps, customs, traditions, rituals and cohesion.³⁴ Soldiers are generally aware that 'at the heart of their profession lies a set of ethical responsibilities that above all else are functional to their purpose',³⁵ but it is an open and pressing question as to how Army's culture and ability to self-regulate might fare in a conventional conflict in the Indo-Pacific. Indeed, according to one scholar, Army is already tackling new intellectual and moral problems that it 'is not currently equipped to overcome'.³⁶

Lieutenant General Stuart's formulation of the three pillars of the Army profession offers a useful framework through which Army personnel (both serving and retired), supported by academics and other stakeholders, can investigate the unique nature and characteristics of the profession in an Australian context. There is a long road ahead in this area of introspection—the surface has only been scratched. As a topic, its breadth and depth militate against easy formulations, conclusions or solutions. Just as an army requires a theory of an army,³⁷ so too does the Australian Army profession require a *theory of the profession* to ensure it remains a world-class capability that serves the needs of society. Development of such a theory should be led by Army's professionals, for it is their responsibility to 'reflect deeply and with scholarly detachment about the needs of their own institution and its claims for social support'.³⁸ If it chooses to not engage in such a critical discussion, Army will suffer and it may find its legitimacy and standing with society so eroded that it becomes impossible to achieve its objectives in the defence of Australia and its interests.³⁹

State of the Army Profession—Australian Army Journal

It is with this context in mind that I am pleased to introduce this latest edition of the *AAJ*, the longest-running military journal in Australia. Since 2023, the Australian Army Research Centre (AARC) has sought to maximise its service to Army through the publication of an annual themed edition of the journal on a key Army research priority, introduced by the AARC's lead researcher for that topic.⁴⁰ In line with Lieutenant General Stuart's direction that there be a focus in 2025 on reviewing the state of the Army profession, the AARC called for the submission of papers on the topic, including soliciting a range of contributions from individuals internal and external to Defence. In response, we have been pleased to receive a range of thought-provoking papers on two pillars of the profession: expertise and self-regulation.⁴¹

In his article David Stahel, a renowned expert on the Eastern Front in the Second World War, explores the unique German origins of *Auftragstaktik*, or 'mission command'. As Stahel notes, the origin and a concise definition of the concept is difficult to pin down and, contrary to common perceptions, mission command was unevenly practised by the German Army in the First and Second World Wars. Yet it is a concept that has been widely adopted by many Western militaries in recent decades, including by the Australian Army. From the intellectual baseline on mission command provided by Stahel, several contributors have provided 'response pieces' to discuss the concept in relation to contemporary Army challenges. In his response, noted historian and national security expert John Blaxland has contributed a history of Army's association with the concept to the early 2000s. Dayton McCarthy, meanwhile, has explored the relevance of mission command (or lack thereof) to domestic security and response operations. In his response, Anthony Duus suggests that mission command is not just a method of command but the Army's usual practice, though it cannot be taken for granted and depends on building trust between superior and subordinates. While variations exist throughout Army, views differ significantly between services regarding the theory and practice of mission command. This reality can prove problematic in integrated commands. Addressing this, in their article, Alistair Cooper and Felicity Petrie explore the relationship between mission command and the concept of command by veto—a useful analysis for any Army or Navy member working within the joint environment. As a final response piece, Andrew Sharpe, retired British Army Major General and currently Director of the UK's Centre for Historical Analysis and Conflict Research, has provided some views on mission command in the British Army, a key AUKUS partner.

A further seven articles are included in this edition. Michael Krause, author of *ADF-I-5 Decision-Making and Planning Processes* (2024), not only provides a brief history of military planning and planning processes in the Australian Army but also offers a deeper understanding of the thinking that lies at the heart of it. In their contribution, Marigold Black and Michael Webster explore a little-studied aspect of warfare: the rapid development and integration of stopgap weapons, and how this relates to an army's ability to innovate and adapt while in contact. In a further contribution touching on the Army's expertise in planning, Aaron Jackson analyses the unique nature of *Decision-Making and Planning Processes* doctrine, providing considerations as to how these processes can be further enhanced. In 'Developing the Army Mind', Chris Wooding explores current approaches to teaching Defence mastery to ADF junior officers, and reforms to be considered to better enhance their intellectual edge and prepare them for the challenges of today and tomorrow. In his contribution, Charles Miller explores the concept of innovation and how it relates to the current state of the military profession in Australia. That the Army requires personnel who are committed to ethical and moral conduct cannot be disputed. Therefore, Renton McRae and Darren Cronshaw argue, in order to prepare for future challenges, Army needs to develop a moral framework to guide the actions of its professionals. Finally, contestability is essential to all matters of empirical knowledge. Concepts and perceptions must be routinely questioned and re-evaluated in light of changing context. In his contribution, Philip Hoglin places his head above the proverbial parapet and asks an important question: does the profession of arms actually exist? It is a first-principles enquiry that should undoubtedly be the source of more discussion and debate.

This 'State of the Army Profession' edition also contains several other valuable contributions. In his standalone essay, Nicholas Bosio provides a contemporary review of Morris Janowitz's *The Professional Soldier*. A key text in the study of the military professions, Janowitz's book is still in use internationally. As it is a 65-year-old work—and one written for the unique context of the US during the Cold War—Bosio rightfully questions the degree to which it should be relied upon in analysing military professionalism in Australia. Another valuable inclusion to this edition is the text of Professor Risa Brooks' Keynote address to the 2025 Chief of Army Symposium; Professor Brooks addressed the symposium as the Army Research Centre's 2025 Keogh Chair, examining key aspects of western civil-military relationships.

In 2025, and for the first time in many years, Army held an essay competition. Respondents were asked to provide a 5,000-word (exclusive of citations, +/- 10 per cent) essay, academically written and styled, responding to three questions related to the ongoing review of the Army profession.⁴² Some 36 eligible responses were received from throughout Army, Navy, Air Force and the Australian Public Service. These responses were assessed, and we are pleased to publish the winning and runner-up entries here.⁴³ The *AAJ* would not be complete without the inclusion of book reviews. Such reviews provide readers with informed assessment of recent literature published within the fields of military history, security studies, military art and science, highlighting not only these works' positive qualities but also where they may be lacking. It is with kind thanks, therefore, that we publish here reviews contributed by Matthew Jones, John Nash, Daniel Phelan, Albert Palazzo, Carl Rhodes, Adam Hepworth and Callum Hamilton.

A final word of thanks in this introduction is essential. An academic journal such the *AAJ* would not be possible without the time and expertise of its peer reviewers. Such reviewers not only help maintain the high standard of the content published within the journal but often do so in addition to contributing articles or fulfilling their regular roles and duties in the military, the public service, broader government, industry, or the academic community. I am therefore pleased to express the AARC's gratitude to them: thank you for your contributions to the *AAJ*.

About the Author

Dr Jordan Beavis is an Academic Research Officer at the Australian Army Research Centre, having formerly 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 My deepest thanks to Dr Andrew Richardson, Dr John Nash, Ms Kim Philpot, Ms Luisa Powell and COL Tony Duus for their intellectual and moral support in preparing this introduction. As usual, any intellectual endeavour such as this would not have been possible without the love, support and distractions of Renee Beavis and Cassandra Beavis.
- 2 This extends to the idea of a distinctly Australian 'profession of arms' which, although discussed within Australian Defence Force Doctrine, has not been explored holistically.
- 3 There is perhaps an opportunity for the Chief of Army to direct the *AAJ* to bear a new such subtitle, potentially either 'For the Army Profession' or 'Journal of the Australian Army Profession', though the second-order effect this may have on external contributions to the journal would need to be considered.
- 4 Craig Wilcox, 'Colonial Military Forces', in Peter Denis et al. (eds), *The Oxford Companion to Australian Military History*, 2nd edition (Oxford University Press, 2008), pp. 143–145. Various colonial militia or volunteer units were formed in Australia prior to the 1860s, though these wholly comprised non-professionals. If we are to consider the presence of the British Army garrison from 1790 to 1870, and a number of men born or raised in Australia who joined the British Army (as either officers or other ranks) in this period, the lineage could be extended further. See Craig Wilcox, *Red Coat Dreaming: How Colonial Australia Embraced the British Army* (Cambridge University Press, 2009), pp. 125–126.
- 5 Some of the best regarded include those produced by the Australian Army History Unit through its series with Cambridge University Press.
- 6 For an example of the latter, see the Military Organisation and Culture Studies research group at <https://militaryculture.org/about/>.
- 7 Intellectual engagement with the Australian 'profession of arms' is more developed than that of the 'Army profession'. For an early example, see RG Funnell, 'The Professional Military Officer in Australia: A Direction for the Future', *Defence Force Journal* 23 (1980): 23–39. More recently, Professor Michael Evans has sought to foster greater discussion of the profession of arms within Australia. See, for example, Michael Evans, 'Revival or Decline? The Australian Profession of Arms in the Twenty-First Century' (presentation), Australian Institute of International Affairs, Canberra, 24 April 2025; Michael Evans, *Vincible Ignorance: Reforming Australian Military Education for the Demands of the Twenty-First Century* (Department of Defence, 2023); Michael Evans, 'A Usable Past: A Contemporary Approach to History for the Western Profession of Arms', *Defense and Security Analysis* 35, no. 2 (2019): 133–146.
- 8 See William Guthrie, *A New Geographical, Historical, and Commercial Grammar; and the Present State of the Several Kingdoms of the World* (J. Knox, 1771), p. 263.
- 9 Charles James, 'Officer', *A New and Enlarged Military Dictionary, in French and English*, Vol. 2, 3rd edition (T. Egerton, Military Library, 1810). Use of the term 'profession of arms' in Australia can be traced to as early as 1816. See 'From the Late London Papers', *The Sydney Gazette and New South Wales Advertiser*, 20 April 1816, p. 2.
- 10 William Darby, *Mnemonika or the Tablet of Memory* (Edward J. Coale, 1829), p. 24.
- 11 Ian FW Beckett, *A British Profession of Arms: The Politics of Command in the Late Victorian Army* (University of Oklahoma Press, 2018), pp. 3–4.
- 12 See John Hackett, *The Profession of Arms: The 1962 Lees Knowles Lectures*, reproduced in *The Profession of Arms: Officer's Call* (Center for Military History, 2007); John Hackett, *The Profession of Arms* (Macmillan, 1983); John Hackett, 'The Profession of Arms', *Proceedings* (United States Naval Institute) 93/4/770 (1967).
- 13 OH Becher, 'The Profession of Arms', *The Canberra Times*, 11 June 1968, p. 12; Senate Standing Committee on Foreign Affairs and Defence, 'Report on the Australian Army' (Government Printer of Australia, November 1974), available at: <https://nla.gov.au/nla.obj-1745313661>. My thanks to Ms Hannah Woodford-Smith for alerting me to the existence of the latter source.
- 14 Australian Defence Force, *ADF-C-0 Australian Military Power*, 2nd edition (Department of Defence, 2024), p. 69.

- 15 See, for example, ABN Churchill, 'The Army as a Profession', *The Journal of the Royal United Service Institution* LIV, no. 384 (1910): 166–198. It is important to consider that, while published in Britain, the *Journal of the Royal United Service Institution* circulated widely throughout the British Empire, including in Australia. See Jordan Beavis, 'A Networked Army: The Australian Military Forces and the other Armies of the Interwar British Commonwealth (1919–1939)', PhD thesis, University of Newcastle, 2021.
- 16 There has also been advocacy in the United States for the development of a 'Space Profession' following the creation of the US Space Force. See Bryan M Titus, 'Establishing a Space Profession within the US Space Force', *Air & Space Power Journal* 32, no. 3 (2020): 10–28.
- 17 Don M Snider and Gayle L Watkins, 'Introduction' in Lloyd J Matthews (ed.), *The Future of the Army Profession* (McGraw-Hill Primis Custom Publishing, 2002), pp. 6–7.
- 18 Meredith Kleykamp has acknowledged Huntington's and Janowitz's contributions as the 'canonical models and theories guiding the understanding of the military profession' but has also argued that the 'utility of these foundational works for understanding and managing the modern military profession may be in decline' owing to significant social and cultural developments in the many years since publication. Meredith Kleykamp, 'Foreword', in Krystal K Hachey, Tamir Libel and Waylon H Dean (eds), *Rethinking Military Professionalism for the Changing Armed Forces* (Springer, 2020), p. vii.
- 19 For an examination of this, utilising the framework of the differing roles of universities in educating members of professions in the United States, Britain, France and Germany, see Andrew Abbott, *The System of Professions: An Essay on the Division of Expert Labor* (University of Chicago Press, 1988), pp. 195–211.
- 20 See Simon Stuart, 'The Human Face of Battle and the State of the Army Profession', speech, Chief of Army Symposium, Melbourne, 12 September 2024, transcript available at: <https://www.army.gov.au/news-and-events/speeches-and-transcripts/2024-09-12/chief-army-symposium-keynote-speech-human-face-battle-state-army-profession>; Simon Stuart, 'The Challenges to the Australian Army Profession', speech, National Security College, Australian National University, Canberra, 25 November 2024, transcript available at: <https://www.army.gov.au/news-and-events/speeches-and-transcripts/2024-11-25/challenges-australian-army-profession>; Simon Stuart, 'Strengthening the Australian Army Profession', speech, Lowy Institute, Sydney, 3 April 2025, transcript available at: <https://www.army.gov.au/news-and-events/speeches-and-transcripts/2025-04-03/strengthening-australian-army-profession>.
- 21 Italics in original. Australian Army, *The Australian Contribution to the National Defence Strategy* (Australian Army, 2024), p. 1. It should also be noted that Army continually provides substantial contributions to wider Defence operations. Significant numbers of Army personnel are employed in Vice Chief of the Defence Force Group, Joint Operations Command, Joint Capabilities Group, Defence People Group, Capability Acquisition and Sustainment Group, Defence Intelligence Group, Defence Science and Technology Group, Guided Weapons and Explosive Ordnance Group, and Strategy, Policy and Industry Group, while Army also provides a range of secondees to other government departments.
- 22 Stuart, 'The Challenges to the Australian Army Profession'. Stuart's first conceptualisation of this pillar was entitled 'service to society'; see Stuart, 'The Human Face of Battle'.
- 23 James Burk, 'Expertise, Jurisdiction, and Legitimacy of the Military Profession', in Lloyd J Matthews (ed.), *The Future of the Army Profession* (McGraw-Hill Primis Custom Publishing, 2002), p. 21. For Abbott's introduction of the concept of professional jurisdiction, see Abbott, *The System of Professions*.
- 24 Samuel P Huntington, *The Soldier and the State* (Belknap/Harvard University Press, 1957), p. 15.
- 25 Sam C Sarkesian, *The Professional Army Officer in a Changing Society* (Nelson-Hall Publishers, 1975), p. 241.
- 26 Abbott, *The System of Professions*, p. 48.
- 27 Ibid., p. 323.
- 28 Stuart, 'Strengthening the Australian Army Profession'.
- 29 Richard H Kohn, 'First Priorities in Military Professionalism', *Orbis* 57, no. 3 (2013): 388–389.
- 30 Stuart, 'The Human Face of Battle'; Stuart, 'The Challenges to the Australian Army Profession'; Stuart, 'Strengthening the Australian Army Profession'.
- 31 Stuart, 'Strengthening the Australian Army Profession'.

- 32 Morris Janowitz, *The Professional Soldier: A Social and Political Portrait* (Free Press, 2017), p. 6.
- 33 'Stuart, 'The Human Face of Battle'; Stuart, 'The Challenges to the Australian Army Profession'.
- 34 Krystal K Hachey, 'Rethinking Military Professionalism: Considering Culture and Gender', in Krystal K Hachey, Tamir Libel and Waylon H Dean (eds), *Rethinking Military Professionalism for the Changing Armed Forces* (Springer, 2020), pp. 4–5.
- 35 Kohn, 'First Priorities in Military Professionalism', p. 381.
- 36 Benjamin Gray, 'Aristotelian Battle Ethics: An Examination of the Utility of Aristotelian Virtue Ethics for the Australian Army at the Tactical Level of War', Masters thesis, UNSW Canberra, 2025, p. 10.
- 37 Stuart, 'Strengthening the Australian Army Profession'.
- 38 James Burk, 'Thinking Through the End of the Cold War', in James Burk (ed.), *The Military in New Times: Adapting Armed Forces to a Turbulent World* (Routledge, 1994), p. 14.
- 39 As Abbott has clearly indicated within his research, a profession's inability to satisfy the requirements of its client, or its inability to adapt as context (technology, social and cultural values) changes can see its failure, degradation or annexation by a competing profession. See Abbott, *The System of Professions*.
- 40 Dr John Nash provided the first such introduction to a themed edition of the *Australian Army Journal* in a littoral manoeuvre themed edition in 2023, while Ms Hannah Woodford-Smith penned the introduction to the 2024 themed edition on 'mobilisation'. See John Nash, 'AAJ Littoral Manoeuvre Collection', *Australian Army Journal* XIX, no. 2 (2023): vii–xvi; Hannah Woodford-Smith, 'Introduction', *Australian Army Journal* XX, no. 3 (2024): 5–14.
- 41 No articles were submitted for consideration on the jurisdiction pillar.
- 42 These were: Q1. How can the Army, as a profession, be optimised for littoral warfare operations? Q2. How can the Army, as a profession, enable rapid mobilisation and expansion for conflict, if required? Q3. How can the Army, as a profession, fully and effectively contribute to the ADF's Integrated Force?
- 43 A collection of top-ranking essays submitted to the competition will be published by the AARC in due course.

/ AUFTRAGSTAKTIK: THE PRUSSIAN-GERMAN ORIGINS AND APPLICATION OF MISSION COMMAND

David Stahel

Introduction

Part of the problem for any military absorbing or adopting a foreign concept or methodology is that the significance and meaning are consciously or unconsciously filtered organisationally and culturally to become at best a hybrid of the original. Imported ideas can also clash with existing culture, while challenging long-established norms, resulting in compromises that pervert the original intention. The Anglo-American world's widespread adoption of the German military concept of *Auftragstaktik*, or 'mission command' as it is better known, stands as a case in point. The term itself is superficially simple to grasp but, as with any complex methodology, the devil is in the detail and here varying interpretations and applied usage quickly enter a nebulous realm of assumption and supposition leading authors and practitioners into a world of choose-your-own-adventure. The intention of this article is threefold. First it establishes the problem with some of the literature on the subject. Then it considers the 19th century origins and meaning of the term in Prussian/German history. Finally, it sets out the research pertaining to the applied use of the concept across German military history (1870–1945).

Gunther E Rothenberg suggested that *Auftragstaktik* was 'a command method stressing decentralised initiative within an overall strategic framework'.¹ As with any good definition, at this level *Auftragstaktik* is made to appear rather simple in theory. This quality has led many theorists, academics and military professionals to extrapolate meanings based on rather simplistic and often highly subjective interpretations of what the term means in detail. Importantly, unpacking longstanding confusion around the term's meaning is less about identifying which conceptual understanding is 'right' or 'wrong'—any such attempt risks assuming my own mastery of the detail and thereby replicating the problem. For the purposes of this article, it is sufficient to state that authors are dealing with a highly

complex concept, perhaps more so than many realise and certainly more than even the best definitions suggest. Indeed, the mass of conflicting accounts seeking to explain *Auftragstaktik* are themselves evidence of the broad, multidimensional construct that underwrites and complicates our understanding. The term inhabits a structural/technical domain that might well be set out on a command chart, but in parallel its success depends upon cultural characteristics that cannot be so easily quantified or represented. As we shall see, another issue in understanding the concept, especially for those seeking a clear reference point, is that the German military's own engagement with *Auftragstaktik* was anything but simple and clear cut. The concept was initially as ambiguous as it was radical, meaning it was by no means universally valued or uniformly implemented, when implemented at all. Rather, throughout German military history the concept has evolved and developed, sometimes differently in parallel areas of the army, making commentary on its characteristics and usage appear even more confused and opaque.

At the most elementary level *Auftragstaktik* is a composite of two German words. There is the '*Auftrag*', which is the 'purpose and objective' (*Zweck und Ziel*) and may be most simply framed by the question 'What should one do?'. The '*taktik*' is in some ways more problematic. While the application of this term is perhaps best understood as 'the manner of execution being left to the commander', the concept is clearly not a 'tactic' as we understand it in English terminology. Instead, it is more a leadership method.² Importantly, *Auftragstaktik* is by no means limited to the tactical level of command; it was always intended to function in parallel as an operational concept.

While authors can generally agree on a basic meaning of *Auftragstaktik*, attempting anything deeper is particularly challenging. Indeed, any such effort is inevitably so problematic that Stephan Leistenschneider has referred to it as 'the "battle" over *Auftragstaktik*' and noted 'unfortunately, too many claims are made without it being possible to determine from where these claims derive their significance'.³ Marco Sigg has referred to the same phenomenon as 'interpretation anarchy'.⁴ Antulio J Echevarria has singled out authors in military publications as being especially problematic, observing:

The term *Auftragstaktik* has been greatly abused in military publications in recent years. Some analysts and historians have upheld it as the key to the German army's long record of success on the battlefield; others maintain that it had no 'official' existence.⁵

Clearly, there is a lot to unpack.

The first use of the term '*Auftragstaktik*' appeared in German military publications during the final decade of the 19th century. Complicating our understanding of its origins, the concept had not always been identified by a single term. Other variants included *Auftragsverfahren* (task system) and *Auftragskampf* (battle task), although how precisely each individual author understood and applied these terms no doubt introduced more than a few shades of grey. As a result, just as the precise parameters of the concept evoke debate and confusion today for the Anglo-American world, this same lack of clarity was reflected in the genesis of the term. Not surprisingly, therefore, the establishment of *Auftragstaktik* was controversial for the German Imperial Army and by no means represented an 'organic' or 'self-evident' development of the Prussian military tradition.⁶ Nor was it a direct outcome of the Scharnhorst military reforms of the early 19th century, although the enlightenment this engendered provided a starting point for future intellectual innovation.⁷ Even after its conception in the latter half of the century, the German military establishment fought a bitter 'paper war' over its merits and application, which according to Leistenschneider rumbled on and failed to find resolution until well into the early part of the 20th century.⁸

There have been three major studies written about *Auftragstaktik* in German, none of which have subsequently appeared in English translation. The first, dating from 1993, written by Dirk Oetting, is the least useful, owing to its discursive approach and lack of theoretical engagement. As Oetting argued, *Auftragstaktik* was 'too complex' to be adapted to 'easy-to-use formulas', so his methodological approach made little attempt to distinguish or differentiate its use or meaning.⁹ The second study, by Leistenschneider, which appeared in 2001, was the first truly scholarly treatment of the subject. It concentrated on establishing the origins of and early conceptual debates on what would become known as *Auftragstaktik*.¹⁰ The success of this research allowed the term to be disentangled from earlier German military techniques and regulations and, as his is the seminal work in the field, Leistenschneider's conclusions will be set out below. The final work to be explored is from Marco Sigg and dates from 2014.¹¹ Sigg's work is also groundbreaking, as he sought to trace the applied use of the concept across German military history from the German wars of unification to the end of World War II. His conclusions offer some fascinating, and sometimes unexpected, perspectives on how *Auftragstaktik* was understood (or misunderstood) in the German military context.

***Auftragstaktik* in the 19th Century**

The genesis of what would eventually be known as *Auftragstaktik* can be traced to 1858, when Prince William took over the regency from the frail Frederick William IV, marking the beginning of Prussia's so-called 'New Era'. The prince immediately instigated a sweeping set of military reforms, which included the appointment of the relatively junior Major-General Albrecht von Roon to head the reorganisation of the army. Roon was a product of the General War School in Berlin (later the Prussian Military Academy) and became a noted military scholar with a passion for efficiency and modernisation. Roon's interest was not just how the army functioned as an institution but how it behaved. In particular, he displayed an interest in peacetime training and sought to break down the army's rigidity by favouring a spirit of independence in both thought and deed.

The transformation of the army began in earnest when the Prince Regent issued his Cabinet Order of 16 December 1858, which was later referred to as the 'Magna Charta of Independence'. Interestingly from a modern standpoint, the emphasis on freedom and autonomy were directly linked to one's enjoyment and wellbeing in the service, which was recognised as a priority. The Cabinet Order read in part:

The inevitable consequence of premature intervention by superiors is that the desire, love and joy of service are not encouraged but prevented, that the necessary training of independence and the development of individuality become impossible, that finally the superiors themselves fall into one-sidedness and, instead of training for higher conditions, remain in the position they held in their last position. It is the duty of the generals ... to vigorously oppose this evil.¹²

The adoption and implementation of this new edict was of course essential for its success, and one must be clear that it was a radical doctrine for its time, especially given the prevailing attitudes in some quarters of the army. Success became dependent upon progressive-minded officers willing to embrace the ethos and spirit of independence. For this there could be no better test case than Prince Friedrich Karl of Prussia, who 15 years earlier had been tutored by Roon and was now the commanding general of the III Army Corps. Friedrich Karl was a dedicated commander whose interest was nothing less than preparing his corps for war. He nevertheless quickly recognised the virtue inherent in the new edict and strove to see it implemented. According to his instructions, the aim was to nurture officers with 'self-activity, decisiveness, acting on one's own responsibility and deliberation'. Implementing the order required an unfamiliar degree of initiative from subordinates, but they seem to have responded positively to the enfranchisement and validation of their abilities.

Friedrich Karl took special interest in studying the new system. He committed his thoughts to paper in an essay titled 'On the origin and development of the Prussian officer spirit, its manifestations and effects'. Here he lauded the autonomy of his subordinates:

In general, it seems to me ... that an unusual sense of independence from above and an acceptance of responsibility has developed in the Prussian officer corps, like in no other army.

He recognised this as a profound change and a 'peculiarity of the Prussian officer corps' which distinguished it on the European stage. 'Where else would you be allowed to do that, but that's how it is.' Friedrich Karl's essay also included a somewhat cryptic reference to one of the more debated concepts in the Prussian military—the ability to question or even disobey orders from above. As Friedrich Karl wrote:

Just as a staff officer once calmly carried out an order he had received, a high-ranking general said to him: 'Sir, the king made you a staff officer so that they should know when to disobey.'

The precise circumstances of this are not explained, but for a 19th century army, especially one with Prussia's pedigree, the idea that this was so casually recounted suggests a remarkable faith in the system that gave rise to it.

Indeed, Friedrich Karl believed that the Roon reforms led to general improvement in the army, and singled out the psychological impact of fostering independence:

This mindset has also had an undeniable influence on our battle tactics. The Prussian officers cannot tolerate being restricted by rules and schemes, as in Russia, Austria and England ... As things stand, we allow the individual's genius to run freer.¹³

Importantly, the extent to which the reforms fostered independence is best measured in the context of the extremely rigid system out of which they arose, a system which in many respects was still in evidence into the 1860s. Prussian officers were not free spirits making their own choices; their training, traditions and insular culture predetermined much of their thinking, leaving a relatively narrow scope for discretionary behaviour. The new edict introduced radical liberalisation that, as Friedrich Karl observed, singled out the Prussian army.

Introduction of the Magna Charta of Independence was particularly timely. The widespread use of breech-loading rifles, which greatly increased the lethality of the modern battlefield, forced the 19th century transition from the column to the rifle squadron. It also underlined the importance of the Prussian army's new-found independence, especially in the middle and lower echelons of command. The testing ground, of course, would be the wars of German unification (1864, 1866 and 1870–71), where relatively young officers demonstrated unprecedented initiative and, in many cases, made a decisive contribution to the combat success of the Prussian forces. On more than a few occasions it was observed that personal initiative compensated for mistakes made by higher leadership. Moreover, it was noted that junior officers tended not to wait long for orders from above, especially if neighbouring units were perceived to be in need of support.¹⁴

Yet while there was clear evidence of success, the Prussian army was far from a model of consistency in its efforts to embrace the new philosophy. In some documented instances, individual commanders had their attempts at initiative actively suppressed by higher command, while in other cases officers had to be encouraged to act independently. An example of the nascent development of such ideas is Lieutenant-General August von Goeben writing on the eve of the battle of Gravelotte in August 1870: 'while it is often said: No step [forward] without an order! I keep telling my subordinate generals: Act independently!'.¹⁵ Even with consistent Prussian victories and the example and advocacy of the great Field Marshal Helmuth von Moltke himself, the willingness to grant subordinates independence, or for them to act on it when authorised, was far from universal.¹⁶ This speaks to the cultural challenge that would become an essential building block of the future *Auftragstaktik* concept. Change had to be 'grown' from within the army through doctrine, training and shared practice. This was important not only to avoid radically divergent responses but to build trust and cohesion within the command.¹⁷ After all, the concept was never intended to be truly 'free'; obedience to the intent had to be maintained at all costs. Thus, those concerned about the endurance of military discipline sometimes assumed a level of independence that extended beyond the stated purpose, which was never intended.

Concerns around the erosion of military discipline were voiced among the so-called 'normal-tacticians' such as General of Infantry Wilhelm von Scherff and Lieutenant-General Albert von Boguslawski. Such questioning was not without merit, as the army's late 19th century professional education and culture found itself caught in the rather indistinct duality of requiring both obedience and freedom. Indeed, by World War II, once *Auftragstaktik* had become firmly established, it was not unusual for higher-level officers to pursue their own operational preferences and decisions on the fabricated

basis of following their orders ‘to destroy the enemy’.¹⁸ Such flagrant abuses, while by no means the only concern of the normal-tacticians, were foreseen as a threat to the army’s cohesion, especially given the complexity of 19th century infantry attacks.¹⁹ Accordingly, the normal-tacticians argued that the scope of discretion within army regulations should be drastically curtailed. Their strong preference was for much more standardised and formulaic procedures to be made binding. One adherent made the case:

With the most excellent senior management, the most intelligent—and ideally trained sub-commanders, the troops would ultimately achieve little if the unit is not used to certain form[ations] and fire control is not firmly regulated ... But in peacetime this knowledge must be created and developed according to precisely defined rules, and the troops must be trained uniformly in the most appropriate forms throughout the entire army.²⁰

Only within these narrow confines could any scope for individuality on the part of the officers be tolerated.

From the point of view of the 19th century normal-tacticians, they were not rejecting lower-level initiative because they could not accept change. It was simply that they could not reconcile the complexity of modern tactical manoeuvre with the proposal to decentralise its implementation. They feared that longstanding received wisdom about bringing mass and firepower to bear on the enemy was being jeopardised. This was not an unreasonable concern and reflects the split over the army’s ability to maintain core functionality. While the progressives sought to enhance tactical and operational responses, the conservatives saw threats to an already highly refined system. The problem for both sides was that a hybrid solution was recognised as completely infeasible, yet that was the default resulting from the rival positions and lack of resolution.

In response to continued debate around the new reforms, the army’s field manual of 1888 brooked no further compromise. It committed the army unambiguously to the principles originally proposed by Roon.²¹ This enshrined new training and educational practices, as well as a new philosophical approach to fostering a cohesive command culture. One manifestation of this was the commitment to root out the ingrained hazing endemic to the cadet schools of the late 19th century. As Jorg Muth observed:

Auftragstaktik had been introduced into the army and, to employ it efficiently, independent thinking and individual responsibility had to be fostered in a new officer type ... The important connection between the introduction of *Auftragstaktik* and the education reforms for officers’ training in the Prussian/German Army has so far been overlooked in historiography.²²

The official change in the German army's training and regulations did not forestall further intensive rounds of debate over what was now being explicitly referred to as *Auftragstaktik*. However, the debate was not strong enough to change the army's direction. It was only with the experiences of the Boer War (1899–1902) and the Russo-Japanese War (1904–1905), which the Germans intensively studied, that *Auftragstaktik* finally prevailed in the theoretical debate and was again incorporated into the army drill regulations for 1906.²³ More research needs to be undertaken to measure the precise role *Auftragstaktik* played in Germany's campaigns of World War I, but one recent study suggests that the demands of trench warfare on the Western Front diminished the practice from 1917 onward.²⁴

***Auftragstaktik* in the 20th Century**

Having explored aspects of Leistenschneider's research to establish the origins of *Auftragstaktik*, it is useful to switch the focus to Sigg's complementary study to discover what the applied experience was and what conclusions we may draw. Not surprisingly, the foundations of German military leadership in the 20th century reflected Clausewitz's theoretical understanding of warfare as well as the imposing example of Moltke the Elder. The Prussian-German military school of thought understood war as a contingent and complex phenomenon. As a result, there could be no scientific 'rules', which is why operations could be planned but their actual course could not be determined in advance. Friction was just too great a factor to overcome, yet this realisation also formed the basis for thinking about military leadership. If war was characterised by chaos and chance, the purpose of military leadership was less to 'control' warfare than to 'direct' it. This perspective drove a need for leaders who could act quickly and effectively, often with less than perfect situational awareness. In concrete terms, the Prussian-German military began assessing officer candidates against a range of factors such as boldness, courage, energy, responsibility and determination. These attributes were also promoted as educational goals in officer training and formed a preferred set of character and personality traits. The value of personal initiative was viewed as crucial to the performance of the entire military organisation; the emphasis on the individual and his priority over technical aspects was foundational to the Prussian-German military school of thought. As Sigg observed: '*Auftragstaktik* must be understood against this background.'²⁵

To maintain its command system in the chaos of battle, the German military established three primary leadership goals. The first simply emphasised the importance of maintaining the ability to lead in war, which underscored the ease with which command and control was interrupted or broke down completely. The second was to champion a system that multiplied one's own capacity for leadership by devolving responsibility downward and enfranchising opportunities at each level. The third anticipated the advent

of friction and sought an organic solution through a culture of instinctive initiative and rapid intervention. Together these objectives were intended to counteract the inevitable gridlock of otherwise rigid command processes and battlefield confusion. Instructively, the Prussian-German emphasis on bold leadership rated passivity or indecision as a more serious mistake than an incorrect action, which meant that doing something was considered less problematic than doing nothing at all.²⁶

While Sigg's research confirmed the priorities of the German military establishment, none of these were especially groundbreaking. Nevertheless, once his study began investigating the behavioural aspect of German military leadership, from the wars of unification through to the world wars, a number of fascinating deductions emerged. Firstly, evidence of *Auftragstaktik* was consistently polarised in the German military experience. While lower tactical levels of command were under-represented, higher operational levels not only showed evidence of the phenomenon but consistently exploited it to go well beyond the parameters of their orders. To this end Sigg's research provided some enlightening insights.

While *Auftragstaktik* had already become an established leadership concept before World War I, this did not forestall a continuing debate that mimicked the old controversy with the 'normal-tacticians'. Indeed, the discussion took on particular vigour in German military magazines during the interwar period as the balance between uniformity and independence again came into question. The catalyst for this was the emergence of new technologies, especially in radiocommunications, which some argued reduced the friction between command levels and therefore reduced the need for independence. Accordingly, *Auftragstaktik* remained a contentious subject, not because officers disputed its virtue but because the question was asked whether the problem it was intended to correct still existed to the same extent. Indeed, Sigg's case study of three German divisions in World War II seemed to confirm that the relative absence of *Auftragstaktik* at the tactical level stemmed from improvements in communications as well as the widespread embrace of the 'leadership from the front' ethos. These together allowed higher levels of command to lead subordinates very closely, providing little scope, or even need, for independent actions.²⁷ Accordingly, *Auftragstaktik*—that is, acting independently *without* prior consultation with a superior—was *an exception, not the rule*, driven by unforeseen circumstances. As one document from the head of training for a reserve army in 1944 put it: 'Deviation from the order 5%, adherence to it 95%.'²⁸

At the other end of the spectrum, the operational dimension revealed a remarkable insistence upon autonomy and freedom of action, even when this departed from, or even contradicted, the intent of the orders issued. This, Sigg observed, stemmed from an unhealthy culture in the higher echelons that resulted from excessive ambition, deep rivalries, overestimation of individual circumstances, resentment towards superior authorities and a consistent exaggeration of offensive capability. The last factor was a constant in all the operations Sigg examined (and accords with much of my own research into German operations on the Eastern Front).²⁹ Yet while Sigg observed this egoistical behaviour, what exactly accounted for such a fractured command culture at the higher levels was, he determined, worthy of further research. Sigg's supposition suggested that it 'may be due to a special "cavalry" or "tank mentality"'.³⁰

Having myself completed a major study of some of Germany's leading panzer generals in World War II, I see Sigg's instinct as broadly sound. However, it does not account for the fact that many more of Germany's generals belonged to the infantry or artillery or were from more minor arms of the army.³¹ My own research suggests that, while there was a very distinctive culture within the *Panzertruppe*, the same should not be assumed for the rest of the army. Instead, the German army as a whole was characterised by a highly aggressive culture that existed on a spectrum and that led to bitter conflicts concerning the conduct of operations among and within different arms of service. Further evidence for this assertion can be found in the level of conflict that occurred between senior commanders within the *Panzertruppe*, who often fought each other for scarce resources, openly attacked rivals in their reports to higher commands and competed for promotions, medals and public recognition.³² Thus, it might be said that there was a direct corollary between the arm of service conducting operations and the degree to which *Auftragstaktik* was effectively achieved at any given time.

High casualties among officers is another factor that Sigg noted was inextricably bound to the German command culture and *Auftragstaktik*. This was not necessarily a result of *Auftragstaktik* alone, because it is impossible to separate from the wider culture of risk acceptance and emphasis on forward command within the German army. Instead, the decentralisation of responsibility exposed officers to greater danger.³³ Of course, the calculus was always focused on reaching a decision that, if successful, would save rather than cost lives. However, trained officers were always a precious and finite resource, meaning the implications of a long war without result would increasingly undermine the army's leadership and performance. A case in point is that only five weeks into Operation Barbarossa the 20th Panzer Division was already reporting officer casualties at a staggering 50 per cent in its infantry brigades, which were noted to be 'severely exhausted'.³⁴

Importantly, 19th century advocates of *Auftragstaktik* (such as General of Infantry Wilhelm von Blume or General of Infantry Sigismund von Schlichting) warned against exaggerating the principle of independence into an absolute law. Rather, they emphasised the importance of the operational situation. Depending on the circumstance, it might be necessary to restrict the subordinate leaders' scope for action. The debate was therefore never a binary choice between independence and conformity. Instead the application of *Auftragstaktik* involved interdependence between different elements to achieve the balance necessary for effective leadership.³⁵ In this context, Sigg identified that a thin line existed between acting beyond one's remit and acting independently in the spirit of the intention. This he acknowledged made it hard to superimpose the model of *Auftragstaktik* onto situations in order to determine what exactly was conformity and where liberties might have been taken. This alluded to the fundamental problem of applying or attributing *Auftragstaktik* to any given situation.

Ultimately, Sigg concluded that 'this leadership principle depended far too much on the respective circumstances or the command situation for there to be a generally valid definition for all combat operations'.³⁶ This assessment mirrors the confusion that remains today over what exactly constitutes mission command. Indeed, it may entitle military professionals to conclude that the unresolved debate is less a reflection of their own failure to understand than a demonstration of the term's inherent complexity, especially in an ever-changing battlespace. At the very least, we may discard the idea that there was ever a golden age of German *Auftragstaktik* with an idealised unity of thought and deed. The best that might be said is that *Auftragstaktik* is in a constant state of tension, oscillating according to battlefield circumstance, the level of command, available communication technologies and the willingness of personalities or command cultures to act or instruct. As Sigg concludes, mixing historical and current leadership principles is problematic, as it threatens to define an older concept by a younger one or, worse still, impose an historical anachronism on a modern force. Rather, the two are best treated as separate entities because they are not the same.

Conclusion

To the German army before 1945, *Auftragstaktik* was devised exclusively on functional-rational criteria. The focus was solely on the military achievements of troop commanders—that is, increasing military effectiveness. By contrast, the modern *Bundeswehr*, like the Australian Army, seeks an entirely different social contract through its emphasis on leadership principles that protect and care for its people and insist on accountability for actions. These considerations suggest value-rational criteria built on ethical, legal, political and social aspects that are fundamental to the ethos of and training for command. As Sigg pointed out: ‘For the *Bundeswehr*, *Auftragstaktik* is the correct leadership principle primarily because it best corresponds to the image of the “citizen in uniform”.’³⁷ At the same time, *Auftragstaktik* may increasingly be defined by a hybrid multinational approach. As Peter Wilson suggested, the increasingly homogenous approach to Western warfare might blur or overstate any national uniqueness. At least in relation to the *Bundeswehr*, he noted: ‘Although much is sometimes made of the German concept of mission tactics, German forces remain within NATO and European Union multilateral structures and guided by their doctrines.’³⁸ While there is clearly value in understanding the historical evolution of Germany’s *Auftragstaktik*, it is less an instructional guide or model for emulation than a complex set of evolving parameters that together determine the independence of command. Like war itself, these are not easily distilled and reproduced, because they are ever changing, but the success of *Auftragstaktik* will always reflect a common command doctrine, good training and education and a positive culture.

About the Author

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/ MISSION COMMAND AT SEA AND COMMAND BY VETO¹

Alastair Cooper and Felicity Petrie

The principle of mission command, though not described as such, was practised by naval forces for centuries, and continues to be into the 21st century.² Exercise of command varies greatly depending on the context, and is highly dependent on the mix of organisational culture and enabling technology present. Since the development of radar, and reinforced by the advent of combat data systems and guided weapons, the volume of information available to a naval commander, and the speed with which command decisions have to be made, has necessitated the development of the additional concept of *command by veto*. This concept is similar in some ways to mission command, but with some substantial differences born of the challenges of warfare at sea.³ This article will trace the development of command at sea through the lens of mission command and command by veto. We have contributed this article to the *Australian Army Journal* to inform members of the integrated force (outside of Navy) as to how command functions in ships at sea. We believe that this is an important consideration given the forthcoming implementation into service of landing craft, and to bolster inter-service understanding in integrated contexts.

While references to *command by veto* are scattered throughout the warfighting policy, manuals and tactical documents of the Royal Australian Navy (RAN), the term is rarely explicitly defined. The concept has become such an inherent part of the modern maritime command culture that it is assumed knowledge: the now retired *Australian Maritime Doctrine* did not mention the concept.⁴ For the purposes of this article, command by veto is taken to be the delegation of command authority, within defined limits, exercised in the presence of the officer who made the delegation, for the purpose of expediting decision-making. Allied and multinational maritime procedures and instructions tend to use the term 'command by negation'. This has substantively the same meaning as 'command by veto' and is the terminology used in the recently published *ADF Maritime Power* doctrine⁵ and the United States Joint Publication 3-32 *Joint Maritime Operations*.⁶

In the military context, it is unremarkable to state that the exercise of any command (and control) cannot be divorced from communications, or indeed from intelligence. Without a good understanding of the environment and context, command decisions are governed more by chance than by professional skill. Without the ability to communicate a direction

to subordinates, command is ineffective. Prior to the advent of modern long-range communications, there were few opportunities for a ship's commander to receive new orders or send dispatches—in port or when ships joined or left a fleet. A frigate or sloop, if available, could be used to physically transport orders and information, but often with great time delay due to the distance to be covered, and not with certainty.⁷ It was therefore a practical consequence that commanders were given (and gave) direction on what was to be achieved, assigned resources and provided constraints, and were then afforded very broad freedom of action as to how to achieve the aim. Simply put, the communications available did not enable anything else.

Take for instance Captain Arthur Phillip in command of the First Fleet in 1788. Phillip was instructed to take the fleet to Botany Bay and establish a British colony. He sailed with the fleet, and delivered on the mission intent, with little to no communication with higher headquarters for several years. On arrival at his destination, he changed the location of the colony because he judged that Sydney Cove presented a better option.⁸ This experience was not unique among seagoing explorers and naval commanders of the time. The officer in command of a warship was frequently the person with the most recent and complete information about their government's position on any given matter, and possessed the means to give effect to that position through negotiation or force if necessary. In addition to creating the conditions by which mission command was the norm at sea, the vesting of responsibility in the commander created the conditions by which naval forces were regarded as routine or normal diplomatic mechanisms.⁹ The limitations of technology created the culture of (what was in practice) mission command with the associated expectation that commanders were sufficiently capable of carrying out a wide range of diplomatic, constabulary and warfighting tasks. This situation is similar to *Auftragstaktik* developing to multiply capacity for leadership by devolving responsibility for the delivery of mission/command intent downward on the battlefield.¹⁰

Today, reliable long-range communications are near ubiquitous on and above the water; the same cannot be said below the surface. Due to a combination of factors (including the constraints imposed on communication by the physics of the marine environment, and the need to remain undetected), submarine commanders in particular must exercise mission command as a matter of course. Indeed, this has been the case from almost the first uses of submarines for military purposes. In this regard, the example of Lieutenant Henry Stoker (commanding officer of submarine HMAS AE2) in the First World War is relevant. His orders were to penetrate the Dardanelles, sinking any minelayers he saw. From there he was to 'run amok' in the Sea of Marmara to interdict Turkish shipping to and from Gallipoli, thereby significantly inhibiting the adversary's freedom to manoeuvre while supporting forces ashore.¹¹ With minimal intelligence, and no modern surveillance capabilities or communications systems, Stoker had to conduct his own reconnaissance, maintain his own understanding of the environment (particularly once he began operating

in the Sea of Marmara) and then decide for himself the best way to 'run amok'. While assessing the opportunities as they presented themselves, he simultaneously needed to carefully calculate the risks to his boat and crew. Stoker was successful in this endeavour, meeting the command intent.¹² Mission command was, and remains, a routine practice for submarine service.

The introduction of better communications above water did not initially change the practice of mission command substantially in the maritime domain. In part, communications systems had not improved sufficiently to enable commanders ashore to have a better appreciation of the operational situation than the commander at sea. In addition to the limited bandwidths available, other factors limited what was possible. For example, during the First World War, commanders at sea were initially suspicious of the accuracy of signals intelligence provided by higher headquarters ashore. Equally, cumulative errors in navigation by the ships meant that there was no common operating picture.¹³ Even when these issues were resolved, communication was limited by the naval practice of radio silence as a means of remaining covert and denying information to an enemy.

The necessity for mission command remained a feature of the Second World War naval operations. For example, Captain John Collins,¹⁴ in command of HMAS *Sydney* at the Battle of Cape Spada,¹⁵ did not inform his higher headquarters of his position and intentions, or even the British destroyers which initially made contact with the opposing Italian naval force; there was no expectation that he would do so. If Collins was in a position to intervene in the developing encounter battle, and his orders for the operation anticipated the possibility, then it was expected that he would do so.¹⁶ Similarly, it was not expected that the commander ashore would direct how to conduct the action; a consequence of the principles relating to radio silence was that the commander ashore did not have the fullest or best picture. Once again, mission command was practised if not named.

During the Second World War through to the 1950s, a new concept of command, known as 'command by veto', came about through the interaction between commanders and technology.¹⁷ In the early 20th century, there were several changes to the way naval warfare was conducted that drove this change.¹⁸ Initially, this included the emerging wireless radio technology that enabled communication at greater ranges; the introduction of turbine machinery allowing ships to operate at greater speed; and the development of longer engagement ranges by gyro-stabilised torpedoes. These advances greatly increased the size of the battle space, made it more difficult for a commander to see everything for themselves and, as a consequence, made it even more difficult to have enough information to make good decisions quickly enough. The most significant catalysts for change, however, were the advent of radar and guided weapons.¹⁹

Radar was first introduced into the naval forces of most of the major combatants during the Second World War. Prior to its introduction, a commander was best placed to understand their tactical circumstances from the bridge of the ship, as it was the focal point for communication and observation on board. Here a commander could work and eat, and they could sleep in a sea cabin mere metres away. As tactical situations generally did not develop quickly, the commander was sufficiently on hand to make informed command decisions at all times. Radar brought a new source of information (as did sonar) to bear which could not be displayed or integrated with other sources quickly enough on a warship's bridge for it to be put to good use by a commander. In response, the United States Navy established the 'Combat Information Centre' or 'Operations Room'. Its role was to bring together the different sources of information to produce a plot or operating picture to enable command decisions. Serviced by increasingly efficient communications methods, this entity could then pass the relevant information to other units under command.²⁰ The Command Information Centre came into common usage in ships in the US Navy during the Eastern Solomons campaign; the concept spread to Allied navies in the latter years of the Second World War and more widely thereafter.

Aircraft and then guided weapons increased the pace at which military engagements were fought. In this emerging warfighting environment, it became simply impossible for a naval commander to remain sufficiently available and adequately informed for 24 hours a day for extended periods. In response, commanders began delegating authority to warfare officers to make decisions, usually about the employment of weapons. Today, this situation has evolved such that appropriately trained and authorised officers will make the command decisions in the presence (physically or on a communication circuit) of their commander, who will intervene only if they need to modify or veto a decision—command by veto.²¹ Command by veto relies on a shared tactical understanding between the commanding officer and the delegate, usually the principal warfare officer.

The principle of command by veto generally involves a trained and trusted officer executing a defined set of pre-planned responses on behalf of their commander.²² It is a concept that is focused on defensive or procedural activities. In the case of defensive actions, this is because the response is usually required very quickly in order to avoid immediate threat to life or military capability. By contrast, offensive actions do not usually place the same time pressure on decision-making. While authority to act is delegated, accountability always remains with the commander. The benefit of this approach is that it enables rapid decision-making while still keeping a commander informed, engaged and empowered. More broadly, in a task group where command decision-making could occur across several warfare activities, involving multiple platforms (so commanders may not always be co-located), command by veto minimises the amount of communication required. This is particularly useful for procedural activities or for pre-planned responses and announced intentions.

The principle of command by veto underpins the so-called 'composite warfare commander concept'. This is a naval command structure that organises forces into warfare areas (air, surface, subsurface etc.) under the overall command of the composite warfare commander. The relationship between the two ideas is well expressed by the US Joint Chiefs of Staff maritime operations publication:

Command by negation acknowledges that, because of the often distributed and dispersed nature of maritime warfare, it is necessary to pre-plan the actions of a force to an assessed threat and delegate some warfare functions to subordinate commanders. Once such functions are delegated, the subordinate commander is to take the required action without delay, always keeping the OTC (Officer in Tactical Command) informed of the situation.²³

For Australia, *ADF Maritime Power* doctrine offers:

[M]aritime command and control is executed in Navy platforms through an embedded command structure, including the commanding officer and heads of departments, responsible for the execution of higher command intent through a command by veto construct.²⁴

Command by veto necessarily involves a very explicit use of the term 'intent'. Specifically, a subordinate, in the presence of their commander, is able to assume approval of that intent unless it is countermanded or otherwise modified.

Command by veto expedites decision-making by encouraging (and indeed requiring) that subordinates exercise initiative on behalf of the commander.²⁵ In effect, the delegations granted to warfare officers (and increasingly to other key positions within the operations room) are similar to localised rules of engagement or 'orders for opening fire'. When a vessel is under fire, the ability to speed up reaction times to stimuli, or respond to a threat, may be the determining factor in whether a ship survives a naval engagement or becomes a 'mission kill'. Similarly, in air warfare, extra seconds taken in decision-making can mean 'miles' of closure rate of an inbound missile or aircraft. Equally, in anti-submarine warfare, seconds may mean the difference between a vessel turning quickly and avoiding a torpedo attack, or succumbing to it.

Command by veto and mission command continue to evolve in maritime warfare, again responding to what technology demands (evolving threats) and the opportunities it presents. For example, in a modern warship, the command by veto concept extends to the application of both 'human *on* the loop'²⁶ and 'human *in* the loop'²⁷ systems. For example, in the Aegis Combat System fitted to Hobart-class guided missile destroyers (DDGs), an individual pre-programs the system's automation settings to fire (or recommend firing) a missile based on the threat meeting certain parameters. The system will respond as programmed, unless a human observing (on the loop) intervenes.

The second concept requires a human to physically act to progress an engagement at certain decision points (in the loop) to allow the missile to leave the ship. In each case, there are decisions made in programming the system and responding to its recommendations which require command input.

A commander will specify the level of autonomy granted to delegates over the conduct of certain high-risk or sensitive activities. These may include actions such as launching or recovering helicopters or streaming towed arrays, or decisions that will involve a vessel operating in or near contested waters. Delegates may be granted full autonomy or partial autonomy, or their decision-making authority may be subject to caveats.²⁸ For example, a warfare officer may not need to inform their commander over the radio that the ship has been challenged by another warship or an aircraft before responding with an authorised response, but the commander may nevertheless need to be informed immediately thereafter. Levels of autonomy may change depending on whether the commander is in the operations room or elsewhere. The level of autonomy for each action may differ depending on the level of threat, the proximity of the enemy, and the state of readiness. Regardless of the delegation granted, it is worth observing that the delegate is always authorised (and expected) to exercise the overriding right to use force in self-defence, recognised by international law. In such situations, the commander will be informed *after* the action is taken.

Prior to the modern day, delegations tended to vary depending on the state of readiness of the ship. Such readiness states would be described variously as ‘cruising watches’, ‘defence watches’ and ‘action stations’, with higher levels of autonomy granted towards the latter states. Modern delegations, especially those in highly automated DDGs, are more nuanced and situation based. Autonomy increases relative to weapons posture (the readiness of the weapons systems) with some correlation but not causation based on the specified ‘threat warning condition’.²⁹

Much as concepts of naval command at sea have changed in response to changes in technology, the relationship between a commander at sea and higher headquarters is continuing to evolve. From about the 1980s onwards, higher headquarters (afloat or ashore) have increasingly been able to achieve a better, more complete picture.³⁰ This is due to the multiple intelligence sources and situational awareness tools available to a higher headquarters (Joint Operations Command in the Australian context), which far exceed the volume and quality of information available to or digestible by a ship or task group, particularly given enduring concerns over information security at sea. Information provided to a ship’s commander is inevitably filtered and interpreted in an effort to provide them with adequate situational awareness without overwhelming them; it is a tricky balance. This is especially the case when vessels are involved in shaping activities: actions taken to influence the behaviour of allies, partners and potentially adversaries. Such actions may include transiting through or near contested waters, interacting with

adversary vessels shadowing the fleet, or interacting when challenged by ships or aircraft. Commanders of vessels involved in such activities will provide a lot of data back up the chain of command so that the higher headquarters can combine this information, with that gathered from other sources, to determine how best to respond.

The data-heavy method of operational control over modern military operations—enabled by technology and the product of cautious peacetime strategic manoeuvring—may be regarded as the antithesis of mission command. However, mission command is not dead, especially when communications are denied or tactical units are running silent—and this does not only apply to submariners.³¹ Just as the preceding paragraphs have explored the evolution of the command by veto concept into a much more nuanced and conditional practice, so it is likely that mission command will continue to evolve with tactical commanders and higher headquarters being able to adopt different modes of operation depending on the circumstances.

There are also limits to what a higher headquarters can do, even if communications are efficient. For example, a headquarters ashore will usually have an excellent picture of the air and missile threat facing a force at sea. However, they are not all the way ‘in the loop’ so far as the tactical-level engagements are concerned; nor are they inside the combat system. For example, in ballistic missile defence (a strategic-level activity), the higher headquarters will provide cueing, and the firing units will execute the engagement because the latency in communications systems is too great for accurate engagement by a higher headquarters. In this instance, while mission command can move between the commander of the naval vessel and the higher headquarters, the application of command by veto during the engagement remains at the discretion of the commander at sea. The converse of this situation would occur in strike warfare involving a Tomahawk mission.³² In this instance, the ship is just a delivery platform for the cruise missile, responsible only for the safe overwater flight of the weapon. The mission itself is developed and approved by the higher headquarters. The ship provides the weapon to the mission but is not responsible for where it goes once it is over land. The authority to engage is instead assumed by the unit commander and there is no veto other than that affecting the safety of the firing unit or its immediate surroundings. In the terminology of warfare delegations, the employment of strike weapons from the ship is one delegation that is never passed to a warfare officer and remains solely with the commander.

Conclusion

This article has proposed that the concept of mission command has existed in the context of naval operations for centuries and, to a degree, persists to this day. However, better communications and access to richer and often classified information sources have

enabled higher headquarters to play a more active role in decision-making and directing the actions of commanders at sea. The exercise of mission command is therefore increasingly nuanced and conditions based. Mission command is complemented by the concept of command by veto, particularly in maritime task group organisations using the composite warfare commander concept. These approaches to command have been shaped by technology, particularly as it relates to communication capabilities and the demands for increasingly rapid decision-making in modern warfare. While new technology has served to assist decision-making and command in some ways, it has also created new challenges that have needed to be solved. Solutions have been found in the introduction of new concepts of command, such as command by veto. While command concepts in the maritime domain share many similarities with *Auftragstaktik* and mission command in the land domain, they have developed separately. The interaction between what technology both enables and dictates, and the exercise of command at sea is, by necessity, sufficiently different from command in other domains that it is worthy of understanding on its own terms. If it is to respond effectively across the spectrum of complex operating environments demanded by government, the ADF must plan both for the existing methods of executing command at sea and for their future development.

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ENDNOTES

- 1 The authors are very grateful for the review and input from Commodore Peter Leavy and Commanders Bernard Dobson and Bart Harrington. All errors remain the responsibility of the authors.
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- 23 US Department of Defense and Joint Chiefs of Staff, *Joint Publication 3-32*.
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- 32 The Tomahawk (BGM-109) is a long-range subsonic cruise missile developed by the United States and used primarily in the US Navy, Royal Navy and now RAN for ship- and submarine-based land attack operations.

/ 'ANYTHING BUT SIMPLE AND CLEAR CUT': THE UTILITY OF MISSION COMMAND WITHIN DOMESTIC SECURITY AND RESPONSE OPERATIONS

Dayton McCarthy

The land domain is where people live, where decision makers reside and where human, physical and technical access to all other domains begins. It is where military action intersects with populations and audiences. It encompasses decisive terrain and hosts critical infrastructure.¹

Domestic operations have unique characteristics and considerations.²

Introduction

Associate Professor David Stahel's *Auftragstaktik: The Prussian-German Origins and Application of Mission Command* provides a nuanced assessment of a concept that has been widely adopted by most Western armies.³ Indeed, the concept of *Auftragstaktik*—better known in such armies by its more prosaic-sounding English translation of 'mission command'—occupies an exalted status within doctrine and military theory. Stahel acknowledges this up front and so proceeds immediately to describe the historical underpinnings of the concept. In doing so, he demonstrates that, far from being universally adopted within the Prussian and later German armies, the concept was understood and implemented in varied ways—if it was adopted at all. Stahel posits that there was no 'golden age' of *Auftragstaktik*.

In spite of this, mission command has been adopted by the Australian Defence Force (ADF) as the preferred command model. ADF-P-0 *Command*, which also takes a very nuanced approach to mission command, states that while there will be occasion for the use of 'prescriptive command', the ADF has a 'bias' for mission command. Nonetheless ADF-P-0 *Command* cautions that the chosen command approach 'will depend on a variety of factors, such as the nature of the mission, the nature and capabilities of the adversary and perhaps most of all, the qualities of our people'.⁴ *This is an important caveat.* Although the concepts of employment, doctrine and standard operating procedures are in a developing state as they apply to domestic security and response operations, we can be still certain of several things.⁵ The first is that such operations will be characterised by complexity due to the need to synchronise and integrate with whole-of-government and interagency partners. But working against this is a lack of trust born from poor interoperability and differences in organisational cultures among the agencies supported by the ADF on such operations.⁶ The second will be the imposition of restrictive rules of engagement (ROE). The third, especially in the absence of a declared conflict (i.e. 'grey zone warfare') and without expanded ADF authorities, will be ever-present political sensitivities to military operations on Australian soil. The fourth, which is related to the third, is that domestic security and response operations will inevitably have strategic effects. For example, if a soldier miscalculates, overreaches their authority or, alternatively, is perceived to have responded inadequately, these deficiencies can be readily 'weaponised' by malicious actors.⁷ Taken together, these considerations would suggest that although the ADF's preferred 'bias' is for mission command, something akin to 'prescriptive command' is, in the words of ADF-P-0 *Command*, not only 'appropriate' but also 'necessary'.⁸

This article will discuss the applicability of mission command to domestic security and response operations. To do so, it will first examine key aspects of Stahel's article, drawing out certain themes that relate to the applicability—or otherwise—of this command concept to domestic security and response operations. Next it will examine the strategic guidance given to Army and how this has guided the development of military security and response operational concepts and draft doctrine. Such concepts and doctrine have also been informed by recent ADF exercises as well as an examination of historical precedents. Therefore, while concepts and doctrine are in the developing and draft stage, there is sufficient material available to assess the utility of mission command to domestic security and response operations.

'A constant state of tension'—a Precis of the Concept

Stahel, a German speaker, has researched key German-language sources. This provides crucial context to the concept that has been distilled (or perhaps even lost) over time. This historical background provides some good insights, none more so than that *Auftragstaktik* was not an unimpeachable *idée fixe* in the Prussian/German tradition. Does this contested provenance undermine the concept, noting that much of the basis for its adoption in the postwar Western armies was due to the supposed battlefield advantages it bestowed upon the German Army in the Second World War?

The answer to this question is 'possibly'. Stahel makes it clear that, even among its earliest Prussian advocates, *Auftragstaktik* was not intended to be a *carte blanche* empowerment of subordinate officers working only loosely within a broad strategic intent. 'Prussian officers', observes Stahel, 'were not free spirits making their own choices [as] their training traditions, and insular culture predetermined much of their thinking, *leaving a relatively narrow scope for discretionary behaviour*' (emphasis added).⁹ Opposing the concept were the 'normal tacticians', who believed that modern warfare required precision, coordination and synchronisation of formations and fires. 'Normal tacticians' could not abide any concept that threatened the intricate workings of the cohesive whole of an army on the battlefield.¹⁰

Stahel then overlays another much-lauded Prussian-originated concept—the Clausewitzian world view. With war understood as something that could not be controlled but was rather a phenomenon characterised by chaos, friction and chance, Clausewitz and his later proponents stressed that military thinking must react and adapt to war's vagaries, including the loss or degradation of the means of command and control. This, therefore, placed a premium on *Auftragstaktik*, which was seen as an 'organic solution [of] a culture of instinctive initiative and rapid intervention' that could 'counteract the inevitable gridlock of otherwise rigid command processes and battlefield confusion'.¹¹ With *Auftragstaktik* infusing the command culture of the Prussian and later German armies, it was believed that it was better *to make an incorrect decision* than to make no decision at all.

With some evidence suggesting that *Auftragstaktik* was barely applied at the tactical level but wholeheartedly adopted (and often abused) at the operational level in the German Army of the Second World War, Stahel reparses the admonitions of the 'normal tacticians' who warned against 'exaggerating the principle of independence into an absolute law'. Instead, Stahel notes, such officers stressed the '*importance of the situation, which could make it necessary to restrict the subordinate leaders' scope for action*' (emphasis added). And so, with the historical context in place, Stahel concludes that there never was a universally adopted or understood *Auftragstaktik*. Instead, he writes:

The best that might be said is that *Auftragstaktik* is in a constant state of tension, oscillating according to battlefield circumstance, the level of command, available communication technologies and the willingness of personalities or command cultures to act or instruct.¹²

As a coda, Stahel ruminates on the dangers of adopting a concept without a clear understanding of the specific historical and cultural contexts from which it was born. Here he brings his interesting foray into the history of *Auftragstaktik* into the spotlight for the contemporary Australian military professional. For the Germans, *Auftragstaktik* was nothing more than the most efficient means to achieve a military end. Stahel describes this perspective as being 'functional-rational'; this is also known as 'instrumental rationality'.¹³ But for the ADF, like many other Western militaries, mission command has evolved into something more. Specifically, mission command has been adopted not just for its perceived functional benefits but also on the basis of the value-rational benefit it offers—regardless of whether the original intention of mission command was to do so. Value rationality refers to making decisions based on a series of values; that is, the importance of adhering to these values is correct and good in and of itself. Specifically for the ADF, value rationality is built on ethical, legal, political and social aspects that are deemed appropriate for the practice of command and leadership of military forces in a democracy. As ADF-P-0 *Command* notes, because 'mission command decentralises decision-making authority, and grants subordinates significant freedom of action, it demands more of commanders at all levels and requires extensive training and education' (emphasis added).¹⁴ In other words, in the ADF, mission command can exist only when there is sufficient trust between superior and subordinate. For the superior, this is the trust that the subordinate will make not only the 'best' decision (instrumental rational) but also the 'right' decision (value rational). Trust—the grease that lubricates the cogs of mission command—must be grown formally through education and training and informally through relationships, experience and immersion in the organisation.

Thus, one may observe that several elements in this precis require further examination. These elements suggest that prima facie mission command may *not* be suitable for security and response operations. Alternatively, if mission command *is* suitable, what preconditions would need to be met? To answer this, one must understand the strategic and the operational context of such operations and the factors that may preclude the practice of mission command in domestic security and response operations.

Domestic Security and Response Operations—a Work in Progress

What, then, are domestic security and response operations? The Defence Strategic Review provides this explicit but broad guidance:

[E]nhanced *domestic security and response* Army Reserve brigades will be required to provide area security to the northern base network and other critical infrastructure, as well as providing an expansion base and follow-on forces.¹⁵

From here, the National Defence Strategy gives more detailed direction. It states that the primary mission of the ADF is to defend Australia through the strategy of deterrence by denial. A key element of this is 'a logistically networked and resilient set of bases, predominantly across the north of Australia'. Accordingly the ADF's 'ability to protect its personnel, critical facilities and information in Australia underpins its ability to defend Australia, project force and hold the forces of any potential adversary at risk'.¹⁶

The 'how' of base and infrastructure security is then woven through, and nested within, the ADF Joint Concepts Framework. This starts with the capstone concept of *Concept APEX: Integrated Campaigning for Deterrence* and is further refined into *Concept ASPIRE*, which details the theatre missions, most notably Theatre Mission One—Defend Australia.¹⁷ Beneath this is *Concept Lantana—the Land Domain Concept*, which clarifies further that:

the land force contributes to domestic support, domestic security and homeland security in conjunction with the integrated force and in partnership with national and state authorities and coalition force elements. It contributes to situational awareness across Australia's north alongside all-domain sensors, and delivers protection of northern base network and critical infrastructure. It enables the integrated force through security of coalition and joint force assets.¹⁸

Finally, *The Australian Army Contribution to the National Defence Strategy* identifies the 'who'. It states that the 2nd (Australian) Division will be responsible for 'domestic security and response operations' which support 'civil authorities with homeland security including the northern base network and other critical infrastructure'.¹⁹ Joint Task Force 629 (JTF 629), based upon the 2nd (Australian) Division, is the standing JTF responsible for domestic operations, including Defence assistance to the civilian community (DACC) and Defence Force aid to the civil authorities (DFACA) in addition to homeland defence tasks detailed above. Within JTF 629 reside several subordinate joint task groups (JTGs) which are generated from the state-based brigades of the 2nd (Australian) Division.

Although security and response operations, within the context of homeland defence, will be joint and interagency, there is a very clear focus on land forces, and the 2nd (Australian) Division in particular. In other words, domestic security and response operations will be a key part of the land force's contribution to the integrated force. To this end, the Army commissioned the *Land Contributions to Homeland Defence Concept of Employment* as a starting point from which to develop force structures, capabilities, plans and subordinate doctrine. This concept of employment (CONEMP) is subordinate to *Concept Lantana*. It sets the scene quickly when describing the homeland operating environment as:

a complex array of stakeholders requiring close coordination between agencies with overlapping authorities and responsibilities. Effective planning and execution requires a unified approach through a national coordination mechanism. These challenges are compounded by vast geographical dispersion and a paucity of security resources across all agencies. The number of vulnerable assets and infrastructure far exceed the number of forces available for protection operations.²⁰

Expanding upon this further, the CONEMP acknowledges three key aspects. The first is that civil authorities will retain primacy for policing and security within state and territory jurisdictions. In other words, state and territory boundaries and equities do not simply disappear when security and response operations are to be conducted.²¹ The second is that deployment of armed ADF elements domestically requires specific legal authority; such authority may be derived from extant legislation—the *Defence Act 1903*—or from within the executive power inherent in the Constitution. The Defence Act Part IIIAAA provides for ministerial authorisation for use of the ADF within Australia for specific purposes up to and including the use of lethal force. The three authorisations are shown in Figure 1.

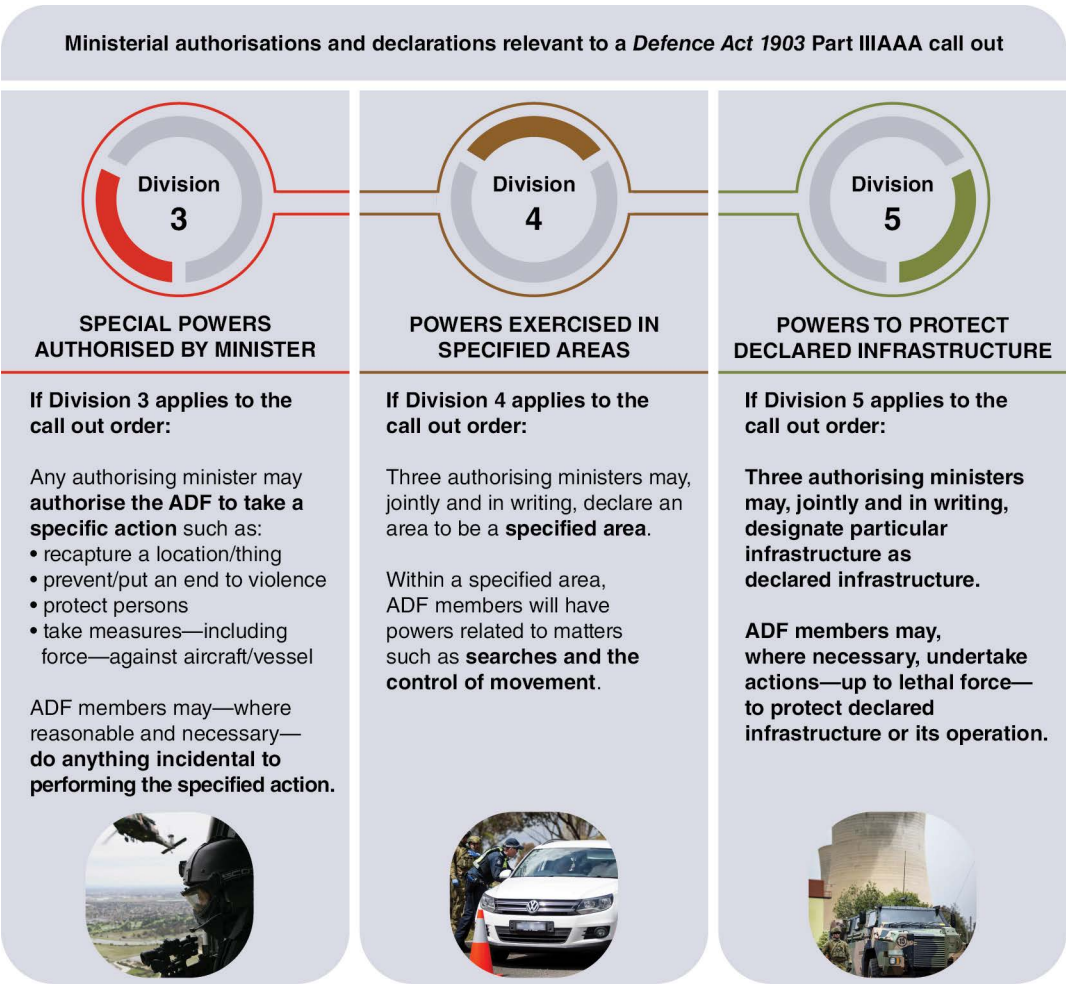


Figure 1. Three types of ministerial authorisations for a *Defence Act* Part IIIAAA call out.²²
Source: Adapted from ADF-I-3 *Domestic Operations*

If the ADF is called out under these authorities, the Chief of the Defence Force (CDF) is permitted to use the ADF to exercise specific powers. Part of the orders issued by the CDF will be specific ROE for the operation. Even with these authorisations under the *Defence Act*, however, the scope of the ADF's role is not entirely clear. Specifically, these authorisations relate to 'domestic violence' as it relates to DFACA rather than the envisaged security and response operations in time of conflict. One may assume that in time of war the Australian Government might exercise its executive power to widen the employment of, and the authorities given to, the ADF. Despite the existence of such provisions in the *Defence Act*, use of the ADF within Australia for the purpose of internal security operations remains a contentious area of constitutional jurisprudence.²³ Legal and jurisdictional concerns are likely to be an ever-present characteristic of security and response operations. Therefore, the legal officer will likely be one of the key members of any JTG or JTF staff.

Security and response operations will be interagency in nature, comprising both state and federal entities, and straddling state and territory jurisdictions. This makes a national coordination mechanism necessary to support coordination and assist in reconciling competing priorities for the use of the ADF. Such coordination will take place at the strategic, operational/national, state/tactical and local/sub-tactical levels of command.

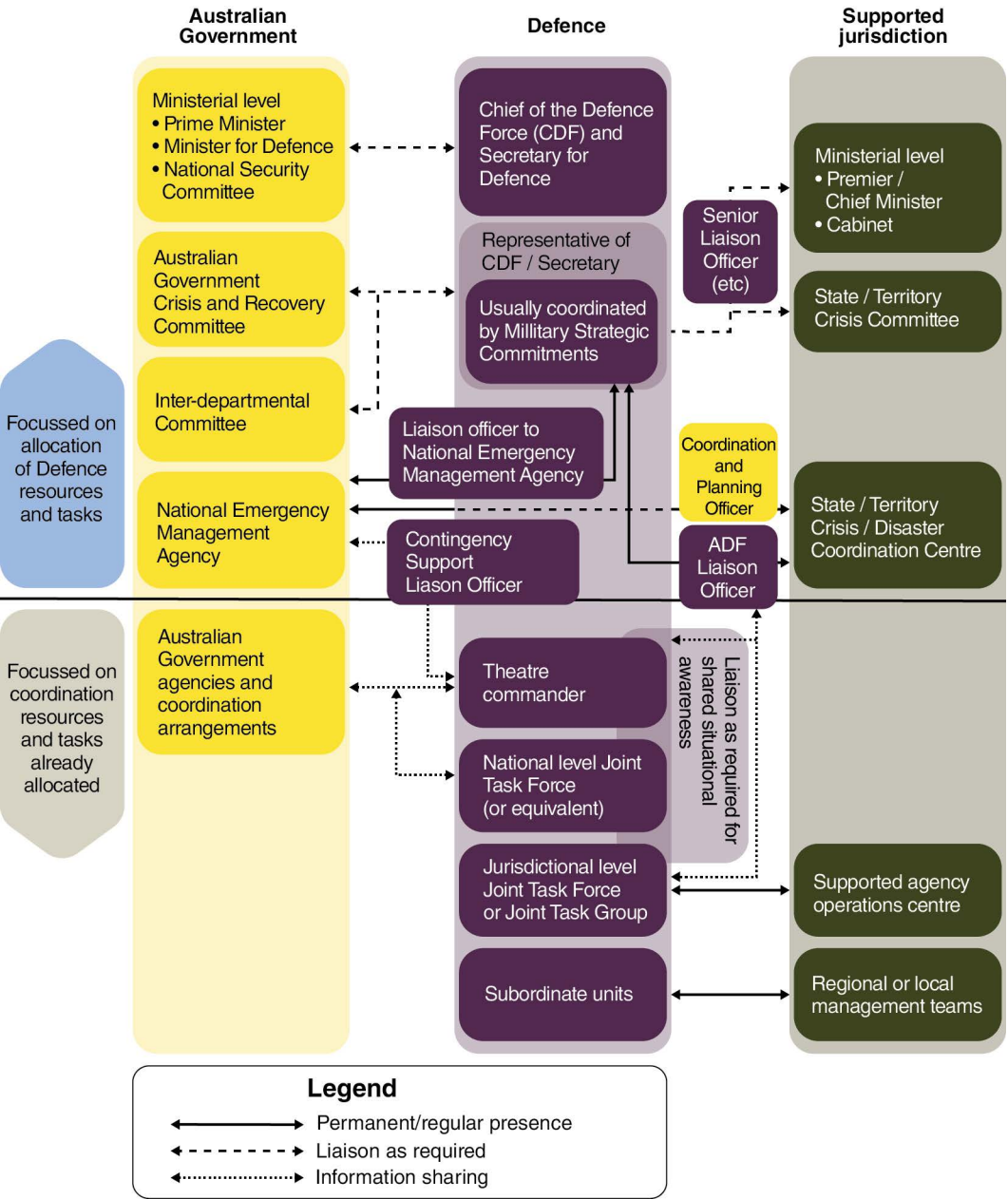


Figure 2. Coordination between Defence and other agencies

Within the legal, jurisdictional and interagency context of this framework, the CONEMP describes the land force effects within homeland defence. Broadly, such effects may be characterised in terms of three operational functions: 'detect', 'protect' and 'respond'. These functions are part of standardised language understood by the military as conveying specific actions or tasks to be performed. These include, for example, defence of vital points, wide area surveillance (such as that conducted by the Regional Force Surveillance Group), wide area security, and support to prisoner of war, internee and detainee (PWID) operations.²⁴ Even in crisis or conflict, the requirement to support DFACA and DACC exists in parallel.

Examples of land force effects can be broken down further into missions or tactical tasks. For example, 'wide area security' entails the protection of populations, forces, infrastructure and activities to deny the enemy positions of advantage. Tactical tasks will include patrol, clear, seize, attack, defend, destroy, capture/detain, cordon and search, as well as the conduct of information activities. For the protection of critical assets, land forces may employ graduated force up to and including lethal force against threats and intrusions to protect, defend, retain or secure critical assets, designated infrastructure or prescribed areas. Related actions may include screen and guard patrolling; the establishment of checkpoints, access control and cordons; and the conduct of decisive engagement to deter, repel and defeat hostile acts.²⁵ Some of the protective tasks could be conducted to protect Royal Australian Air Force or Royal Australian Navy bases. This possibility necessitates that a clear understanding exists among the three services of the relevant command relationships and responsibilities of both the 'protected' and the 'protector'. Such tasks may also be conducted in conjunction with civilian police. Remember also that these actions will take place on Australian soil, potentially in and around Australian cities and towns and, most notably, could potentially be conducted against Australian citizens or residents. Australian and international media will be present. Likewise, we may assume that 'citizen journalists'—some with malicious intent—will be recording and posting the actions of security and response forces on social media. If the captured media is not controversial enough, we may assume that some actors will produce AI-enabled 'deepfakes' to create media that supports their particular narrative.

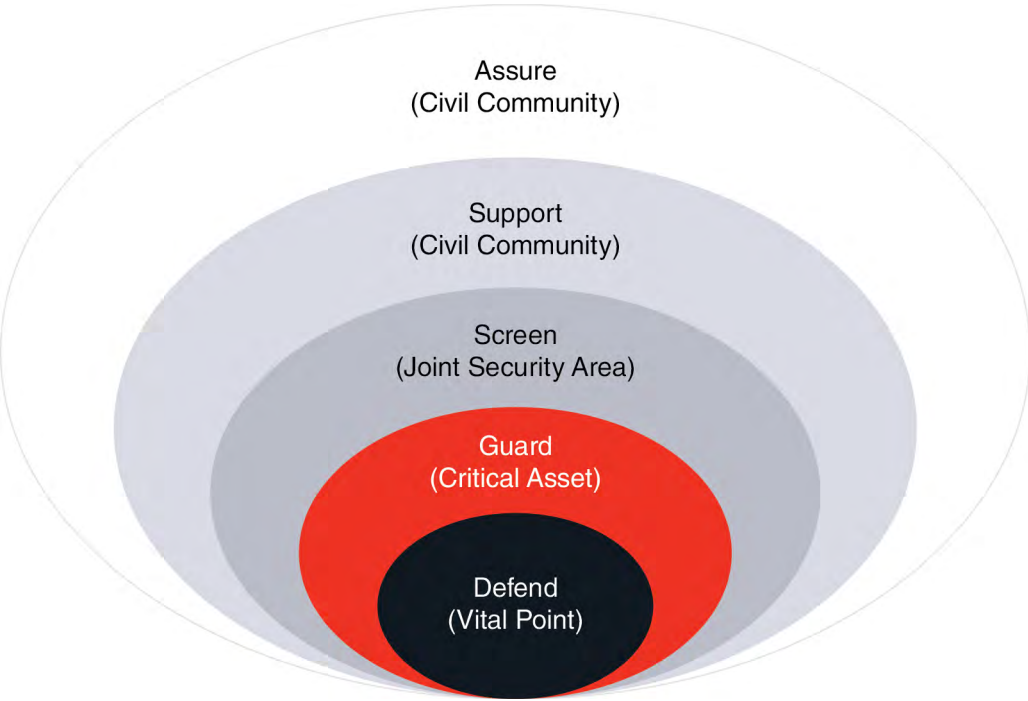


Figure 3. Concentric circles of land force effects in security and response operations

With the CONEMP in place, there are several concurrent lines of activity conducted by Army (particularly 2nd (Australian) Division) that seek to broaden and deepen the collective understanding of security and response operations. This includes assimilating lessons from relevant command post and field training exercises, modernising and then testing ‘Defence of Australia’ era dormant doctrine, and analysing force structure concepts through wargaming and experimentation. Understanding the totality of, and the multitudinous tasks and linkages within, security and response operations is ongoing: *it is a work in progress*. What one may see, however, is the manifold mix of interagency challenges, political sensitivities, legal ambiguity and competing demands for finite capabilities. One associated challenge is how to apply mission command within this context.

The Challenge—Balancing Independence and Compliance

ADF-P-0 *Command* states that ‘command exists on a spectrum ... with prescriptive command at one end and mission command at the other’. In prescriptive command, commanders produce detailed plans and coordination arrangements. The successful execution of these plans requires strict compliance with the details, and thus subordinates’ freedom of action must be minimised. Information is fed to the top of the chain of command where the decision-making authority lies; orders are then issued downwards for execution. ADF-P-0 *Command* concludes that ‘organisations that are characterised by distrust tend towards it’.²⁶ The spectrum of command is illustrated in Figure 4.

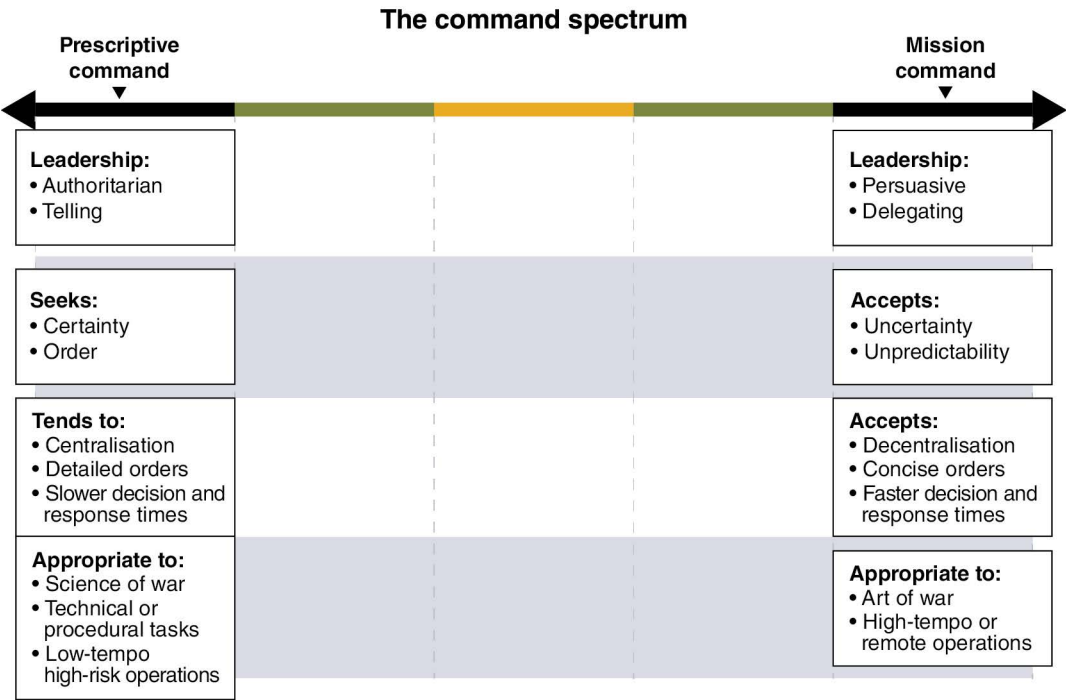


Figure 4. The command spectrum. Source: Adapted from ADF-P-0 *Command*

Based on what this article has illustrated thus far, one may assess that the characteristics of security and response operations strongly favour prescriptive command. This is because of the centralised nature of the top-down coordination framework—a framework designed to facilitate state and federal government and interagency objectives, actions and information sharing (which the ADF must plug into at all levels). By virtue of legal necessity, several security and response tasks will be very procedural and technical in nature, and must be executed prescriptively. PWID operations, overseen by an array of international treaties and federal and state laws, are the best example of such tasks.²⁷

But even the relatively simple act of providing an armed patrol within an Australian town will be technical and procedural insofar as that it must comply with state and federal laws, CDF directives and ROE.

Based on these considerations, one might conclude that prescriptive command, far from being a less than ideal command style, actually *protects* security and response forces in an armour of well-planned legality and coordination. The reality is that failure to follow relevant laws and directions may endanger soldiers and civilians alike, and may also result in negative public perceptions of the military. In such circumstances, prescriptive command may offer the best means to ensure that security and response forces achieve the strategic intent of the mission. While we observed that the legal officer will be a key player in the security and response operations, it may be equally assumed that the public affairs officer and those charged with conducting information actions will also be critical capabilities for such operations.²⁸

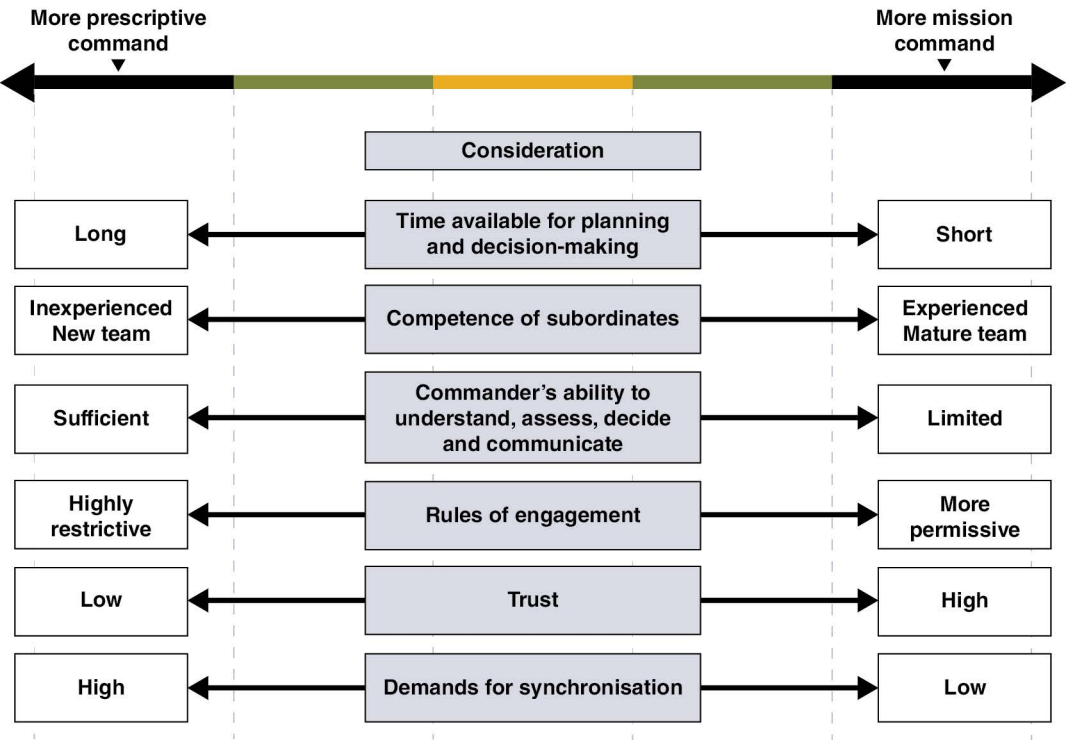


Figure 5. Factors to be considered when determining the most appropriate command response. Source: Adapted from ADF-P-0 Command

As previously mentioned, a major factor affecting the conduct of security and response operations will be the need to work effectively with state and federal police forces. This may take several forms, from the establishment of a joint police/military framework, to the conduct of joint patrolling, to the sharing of situational awareness at military/police operations centres. In terms of the latter, there have been advances in joint ADF/police interoperability over the last decade. This has largely occurred with respect to DACC responses to a series of fires, floods and COVID-19 operations. The establishment of the ADF's JTF 629 and the standing state-based military JTGs has enabled these commands to develop ongoing relationships with emergency service and interagency peers.

While the frameworks for cooperation have improved for DACC operations, it is arguable that sufficient levels of interoperability and cross-cultural understanding do not yet exist for DFACA and homeland defence missions. Figure 5 illustrates that low trust normally results in prescriptive command. In the context of land-based security and response operations, trust must exist between Army and the various state and federal police forces. ADF-P-0 *Command* notes:

mutual trust is the result of shared confidence across an organisation. It is based on the confidence that the group has in each member's reliability and their competence to perform assigned tasks.²⁹

In other words, Army and police must understand each other's cultures and capabilities (i.e. what each can and cannot do). Despite ostensible similarities between Army and state and federal police—uniforms, badges of rank and several joint DACC responses—it is safe to suggest that Army is still better able to integrate with a foreign military than with an Australian domestic police force. Much of this circumstance arises from the fundamental differences between how Army and police forces 'do business':

Military operations are typically proactive and conducted as a unit or team. They are usually carefully considered, planned and controlled according to doctrine. Risk is mitigated through written orders and formal orders groups, *stringent control measures and tactical guidance, strict tiered use of force criteria*, established 'actions on' and rehearsals—all *underpinned by limits to soldier discretion* within the framework of the 'Commander's Intent'.

In comparison, police work is ordinarily highly reactive in nature and conducted individually or in pairs. Police follow broad strategic guidelines too, but the core *community policing role revolves around response and individual discretion*. When attending an incident individual police officers must make fast decisions, often under pressure, to effectively and appropriately address whatever incident they meet. While supported by training and experience, police must quickly

consider a wide array of variables and choose the most suitable options (including use of force) depending on the situation. *The time critical nature of these decisions means they are often made in isolation, without further reference to the chain of command.*³⁰ (emphasis added)

From these observations, it is apparent that Army and police have mutually exclusive *modi operandi*—a situation which does not bode well for security and response operations where Army/police interoperability *on the ground* (rather than just at the command centre) will be the true test.

To say that barriers exist to the ADF collaborating with police on domestic operations does not mean that mission command has no place. During security and response operations conducted in Australia's remote north, for example, military units and sub-units will inevitably work dispersed across vast areas. In these situations, maintaining communications will be problematic even in the best of circumstances. Being dislocated both functionally and geographically, units will operate in a disrupted, disconnected, intermittent and low-bandwidth environment. In such scenarios, mission command arrangements would (by the criteria provided in ADF-P-0 *Command*) remain suitable.

What is more, Stahel makes an interesting observation in the conclusion to his article. He suggests that mission command, as adopted and understood by modern militaries, is infused with value rationality—that is, 'doing the right thing'. That is not to suggest that instrumental rationality—that is, 'doing that which best achieves the mission'—has been completely subsumed by it. Instead, it is more accurate to say that the modern understanding of mission command has moved from a purely instrumental-rational system (as originally conceived) to one that has been moderated by value-rational thinking. This conclusion is certainly reinforced by the contents of ADF-P-0 *Command* and ADF-P-0 *Leadership*, which combine instrumental and value-rational elements as the command ideal. For example, when discussing mission command, ADF-P-0 *Leadership* emphasises the primacy of instrumental rationality:

Central to mission command is an understanding that the mission has primacy over all other direction and tasks. The core component of any mission is the purpose—which lays out what is to be achieved and why. Clear articulation of the purpose and the mission enables subordinates to adapt and respond to changing circumstances and uncertain environments.³¹

However, this is not 'a blank cheque'.³² ADF-P-0 *Leadership* cautions that value rationality is a very important element of mission command: 'Of course, doing the right thing remains paramount. Failure due to negligence should neither be accepted nor overlooked.'³³

Accepting that value-rational infused mission command exists, what does it offer the modern military? One may suggest that the quality of value rationality imposes a clear *restraining effect* on the potential excesses of mission command. In other words, instead of the Prussian ideal of bold leadership (where passivity was considered worse than an incorrect decision), the Australian ideal of mission command stresses that a decision cannot be considered 'correct' if it does not include doing 'the right thing'. In the security and response context, the Prussian ideal could be fraught with danger and prone to generate any number of adverse second- and third-order effects. In some circumstances, making no decision may in fact be the lesser of two evils. But making a decision is still the objective. Here, values-infused mission command (wherein several legal, cultural and moral as well as utilitarian factors remove or at least ameliorate the chance of adverse effects) seems well suited to domestic security and response operations. Even with this values-infused mission command, commanders must still issue clear guidance for subordinates. Importantly subordinates at the tactical level must still exercise sound judgement to achieve the mission and reduce the myriad inherent risks that inevitably arise during the conduct of security and response operations.

Mission Command in Security and Response Operations—Yes or No?

Based on the arguments presented in this essay, it would seem that mission command—even with its value-rational additions—is a poor fit for the circumstances inherent in domestic security and response operations. What is more, it is unlikely that any of the structural elements that shape the conduct of such operations (e.g. centralised interagency coordination; stringent legal and jurisdictional parameters; intense community, political and media scrutiny; and the need to work with culturally disparate organisations) can be sufficiently modified to support the exercise of mission command by the military in a domestic setting.

Despite these limitations, there nevertheless remain circumstances where the principle of mission command has clear application. For example, in a situation in which units and sub-units are dispersed, it is difficult to imagine how operations could be conducted without some form of mission command. Equally, if sufficient authorities are allocated to subordinate elements, accompanied by clear ROE, Army units can be more responsive to local police operations and thereby provide far superior security and response effects. Likewise, there are circumstances in which commanders (at all levels) need to apply the principles of mission command in order to coordinate effectively with interagency partners and government representatives. After all, if the tempo of a security or response operation were to become anything other than 'low', it is likely that the constraints of prescriptive command would quickly overwhelm headquarters staff.

Whatever the circumstance, questions will inevitably arise as to whether the potential benefit of agile decision-making and response (enabled by the principle of mission command) is sufficient to outweigh the considerable risks to the ADF's reputation and mission if 'incorrect' decisions are made. This is particularly the case in domestic and security operations when the eyes of the nation will likely be firmly focused on the military. Despite this uncertainty, however, the achievement of either prescriptive command or mission command will always depend on adequate training and education among soldiers and junior leaders. This is the only way to ensure that our military men and women are adequately equipped on domestic security operations to protect themselves, essential infrastructure and assets, *and* the Australian population.

In sum, there is still much to learn about the utility of mission command in the context of security and response operations. The nuances that arise from the unique and challenging context of these operations mean that questions around how best to achieve command are difficult to answer. We can, however, say with some certainty that mission command's applicability to these operations will be—like Stahel's assessment of the German military's engagement with *Auftragstaktik*—'anything but simple and clear cut'.

About the Author

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ENDNOTES

- 1 Joint Warfare Development Branch, *Concept Lantana—the Land Domain Concept*, ADF Domain Concept (2024), p. 4.
- 2 Doctrine Directorate, *ADF-I-3 Domestic Operations*, p. 1.
- 3 David Stahel, 'Auftragstaktik: The Prussian-German Origins and Application of Mission Command', *Australian Army Journal* XXI, no. 3 (2025). The adoption of mission command for the ADF is also mirrored in Chapter Five of *ADF-P-0 Leadership*.
- 4 *ADF-P-0 Command*, p. 24.
- 5 For example, see *ADF I-3 Domestic Operations*, p. 1. This publication details the nuances, context and issues of all types of domestic operations, including 'domestic security operations'. Domestic security and response operations would likely comprise actions greater in scale and authority than domestic security operations as defined in the publication. Therefore one may surmise that security and response operations will be interagency, with many stakeholders and surrounded by legal and political sensitivities.
- 6 Mark Smith, *No Better Friend, No Worse Enemy: How Different Organisational Cultures Impede and Enhance Australia's Whole-of Government Approach* (Canberra: Australian Civil-Military Centre, 2016), p. 4; Dave Chalmers, 'Interagency Leadership Lessons from the Northern Territory Emergency Response', in *Reflections of Interagency Leadership* (Canberra: Australian Civil-Military Centre, 2021), pp. 10–11.
- 7 *ADF-I-3 Domestic Operations*, pp. 13–14, 31–35 and 54–64.
- 8 *Ibid.*, p 26.
- 9 Stahel, 'Auftragstaktik', p. x.
- 10 *Ibid.*, p. x.
- 11 *Ibid.*, p. x.
- 12 *Ibid.*, p. x. The author appreciates that the Wehrmacht did not consider the 'operational level of war' as a distinct doctrinal concept; the term is used here to enable the contemporary reader to understand the context of *Auftragstaktik*'s application (or lack thereof) during the Second World War. For a recent Australian perspective on the debate over the existence of the operational level of war, see Jeremy Barraclough, 'Does the Operational Level of War Exist?', CoveTalk presentation, 29 March 2023, *The Cove*, at: <https://cove.army.gov.au/article/covetalk-2-div-pme-series-operational-level-of-war>.
- 13 'Instrumental and Value-Rational Action', *Wikipedia*, at: https://en.wikipedia.org/wiki/Instrumental_and_value-rational_action (accessed 28 February 2025); Andrew McWilliams-Doty, 'Instrumental Rationality vs. Value Rationality. Would You Rather Be "Right" or Effective?', *Medium*, 25 October 2022, at: <https://medium.com/@amdoty90/instrumental-rationality-vs-value-rationality-604884455337>.
- 14 *ADF-P-0 Command*, p. 23. Although not explicitly discussing mission command, Chapter 10 of *ADF-I-5 Decision Making and Planning Processes* (2024) also places great emphasis on the importance of raising the professional mastery of commanders and staffs.
- 15 Australian Government, *National Defence: Defence Strategic Review* (Canberra: Commonwealth of Australia, 2023), p. 58.
- 16 Australian Government, *National Defence Strategy 2024* (Canberra: Commonwealth of Australia, 2024), pp. 27–29.
- 17 Joint Concepts, *ADF Capstone Concept APEX* (2024); Joint Warfare Development Branch, *ADF Theatre Concept ASPIRE* (2023).
- 18 Joint Warfare Development Branch, *Concept Lantana*, pp. 19–20.
- 19 Australian Army, *The Australian Army Contribution to the National Defence Strategy 2024* (Department of Defence, 2024), p. 16.
- 20 Australian Army, *Land Contributions to Homeland Defence Concept of Employment* (Department of Defence, 2025), p. 11.

- 21 This does not mean that the states and territories necessarily have the lead in all circumstances; rather, a state or territory retains the responsibility for operational management of its police forces within the state/territory. For example, the New South Wales Counter Terrorism Plan states that if a 'national terrorist situation' exists, the overall responsibility for policy and broad strategy transfers to the Australian Government (via the National Crisis Committee) but New South Wales retains control of operational management and deployment of its emergency services within the state. NSW Government, *New South Wales Counter Terrorism Plan* (2018), pp. 18–22.
- 22 ADF-I-3 *Domestic Operations*, p. 44.
- 23 See Samuel White, *Keeping the Peace of the Realm* (LexisNexis, 2021); David Thomae, 'Keeping the Peace of the Realm', *Adelaide Law Review* 43, no. 2 (2022), pp. 1018–1022.
- 24 ADF-I-3 *Prisoners of War, Internees and Detainees* (2024), pp. 1–4.
- 25 Australian Army, *Land Contributions to Homeland Defence Concept of Employment*, pp. 21–26.
- 26 ADF-P-0 *Command*, pp. 22–23.
- 27 At the time of writing, the concept of how and by whom PWID operations would be undertaken in a domestic setting was unclear; it, like the wider concept of security and response operations, remains a 'work in progress'.
- 28 The author differentiates between public affairs actions as information actions directed towards the Australian population, and information operations which are directed towards the adversary.
- 29 ADF-P-0 *Command*, p. 30.
- 30 David Connery and Tim Dawe, 'Army-Police Interoperability: Collective Contributions to Future Land Power', *Land Power Forum*, 12 June 2015, at: <https://researchcentre.army.gov.au/library/land-power-forum/army-police-interoperability-collective-contributions-future-land-power>.
- 31 ADF-P-0 *Leadership*, p. 34.
- 32 *Ibid.*, p. 35.
- 33 *Ibid.*, p. 40.

/ BRITS ON A MISSION

Andrew Sharpe

This is not an article about what the British Army consider the concept of ‘mission command’ to be; nor is it about how they approach its practice. Those who wish to explore that can simply read their doctrine. It is well written, well thought through, very readable and readily available.¹ I am, however, a great believer in the maxim that if you want to know where you are it’s a very good idea to understand how you got there and where you came from. In that respect, this article will make the (perhaps bold) assumption that the reader is familiar with what British military doctrine has to say about the philosophy behind, and the conduct of, mission command.² It will instead seek to explore how the British Army got to that doctrinal place. Working upon that and upon the aforementioned assumption that the reader has a clear idea of what the doctrine now has to say on the subject, we might also get an insight not just into where the British Army may be in this respect but also into where they may be going.

The related concepts of ‘manoeuvre warfare’ and ‘mission command’ have come, over a period of some 30 years or so, to represent the underpinning philosophies of the British Army’s approach, indeed British Defence’s approach, to warfare and warfighting. If you are a British Army non-commissioned officer (NCO) or officer and you don’t understand these two concepts and demonstrably hold them dear, then you simply are not professionally credible. After all, why would anyone not want to be, as Sun Tzu would have it, like water flowing around the difficult rocky obstacles and rushing on through the weak spots on the path to success? And why would anyone not want to empower their thinking, competent, motivated, professional subordinates to use their initiative, understand the intent that guides their path to a greater ‘end game’, and seize opportunities as soon as they recognise them? How could anyone not see that this is the surest method of retaining that acme of the tactical, operational and strategic arts—that is to say, the initiative? Surely this sort of doctrine provides the capability that is exactly the asymmetric edge that highly professional armies, like the British Army, hold over their more hidebound and less professional rivals and potential opponents. Mission command is all about the ‘in order to’: so long as those executing their military business understand the greater ‘why’ of their remit, then they are more likely to achieve it, both individually and collectively. Under these conditions, leaving the ‘how’ and the ‘with what’ to those professional and capable subordinates who are closest to the problem and most familiar with their own ways and means makes complete sense. And if those professionals have

also learnt that those who seize, hold and retain the initiative are likely to prevail on the battlefield, and therefore strive to achieve this in their planning and execution, then the methods that they apply on the path to that overarching 'in order to' are likely to lead not just to limited individual successes but to greater collective success. Obvious, isn't it?

Or is it? If it is so obvious then why did the British Army of the 1950s to 1980s harbour such a different philosophy? This was an army that had forged its thinking as a result of warfighting experience on the World War II battlefields of Europe, Africa and Indochina—an experience that contained as much in the way of failures from which to learn as it did successes. Its doctrine and concept writers were the grizzled veterans of global war. This was an army whose job was to help to win the Cold War. That army, along with just about all of its NATO allies, held a very different central philosophy to one of 'mission command'. In a nutshell, the thinking in that time preached with great certainty that the defence was a stronger form of warfare than the attack (although an 'offensive spirit was to be maintained') and that in the stately-dance layer cake of the Central Front in Germany there was little room for initiative. On the contrary, it was thought that there was much sense in directive command, in meticulous attention to pre-analysed detail and the disciplined following of orders. And this was a time when, like now, the NATO allies were focused not on counterinsurgency and so-called small wars and wars of choice but on warfighting against a Russian-led enemy on a continental scale. In 1(BR) Corps in the 1970s and 1980s, the last thing that the corps commanders thought they needed (after literally years of preparation and detailed planning, contingency planning, training and exercising) was a bunch of battalion commanders or, worse, brigade commanders who suddenly started 'showing initiative', deviating from the plan and rushing around the battle space trying to show that they knew better than those who had the full picture, more experience and loftier rank!

Against that background, mission command had a difficult birth in the British Army of the 1990s. It was not universally seen as a no-brainer and it experienced considerable pushback. General (later Field Marshal) Sir Nigel Bagnall is rightly due much credit for getting a new idea into the reluctant military minds of the late- and post-Cold War British Army.³ Of course, he had to begin by forcing the old ones out first.⁴ At the seat of Bagnall's thinking was that defence might well be the strongest form of warfare, in many ways, but that defence alone would never bring about operational (probably) and strategic (certainly) resolution. He believed profoundly that attrition of an aggressive enemy, even at its most successful, could only ever bring about a stalemate that required resolution by other means. Cold War thinking argued that, as long as successfully conducted defence brought about the required operational stalemate, strategic resolution could be found in the threat of, or actual graduated use of, nuclear weapons and, thereafter, political resolution. The army's job, it was therefore posited, was simply to bring about that operational stalemate. Bagnall argued, from a soldier's point of view, that such

an approach was neither practically nor morally defensible and nor was it, indeed, professionally satisfactory or satisfying. His extensive and detailed study of military history, from the Peloponnesian War to the First World War and through into the late 20th century,⁵ had taught him that favourable strategic resolution was likely to come only to those whose armies searched for the so-called tipping points that allowed them to seize the opportunities to harry their opponents through a drumbeat of offensive actions that broke through battlefield stalemates and delivered operational successes at scale. It was, he argued, commanders who could not just recognise and seize upon such moments but exploit them through initiative-enabled offensive action who would deliver the campaign successes that were needed for strategic leverage.

Over an extended period of discussion and doctrinal debate in the British Army, roughly covering 1985 to 1995, the old orthodoxy of the primacy of defence, underpinned by the importance of meticulous planning and adherence to detailed and well-practised orders, was forced out, kicking and screaming as it went. Inevitably it was the next generation, taught the new orthodoxy from Sandhurst onwards, who embraced mission command as an obvious and professionally rewarding ethos. As the grumbling naysayers reached retirement, so the memory of 'another way of doing it' retired too. With the confidence and certainty of youth, the next generation of officers, joining the Army from the early 1990s onwards, unburdened by 'old ideas to get out', embraced the new orthodoxy with confidence and assurance. From then on 'if you didn't get mission command, then you simply didn't get it.' You were professionally questionable.

And then came 9/11 and 20 years of counterinsurgency conducted not just by the British Army but by all of their closest friends and allies too. So both the external and internal doctrinal debates focused or refocused on such operations. Krulak's three-block war and strategic corporal made sense.⁶ Britain's centuries of empire building and then the subsequent management of the retreat from empire, along with the Northern Ireland experience, seemed to the British Army to provide them with a wealth of doctrinal evidence, alongside an in-the-bones inherited experience, that suggested the Brits were going to be good at this approach. For centuries the British Army had practised an extreme form of mission command where junior officers found themselves in the remotest of places with the grandest of responsibilities on behalf of the Crown. It was perfectly normal for captains and majors, remote from higher authority and provided with limited resources reinforced only with a clear sense of a greater 'in order to', to use their own initiative and make decisions with strategic impact and consequence. This contrasted with Britain's NATO allies, both Continental European and North American, whose armies (standfast to a degree, perhaps, the French) had a history of concentrating on warfighting at scale as their core purpose, rather than operating at reach and in isolated dispersion. As some NATO armies struggled with embracing the notion of subordinates practising mission command in its purest sense, the British, armed with long experience, and (as

usual) untroubled by self-doubt, found that the new set of clothes suited them very well indeed. Thus mission command was embraced with enthusiasm by the British, who felt that they were better at it than most others and that thus, with friends and enemies alike, it gave them an edge.

Regardless of the strategic outcomes generated by the pursuit of the at-reach, counterinsurgency wars-of-choice operations in Iraq, Afghanistan and elsewhere, the British Army, in its extended moments of self-examination over more than 20 years, repeatedly came to the conclusion that the central ethos and philosophy of mission command had delivered repeated tactical successes. It was a good way of doing business. It continued to give a thinking, professional army an edge over less-thinking, less-professional opponents. Despite the self-doubt generated by the troubling campaign outcomes, the British Army (and, indeed, most of their NATO allies, including the US) came to the reinforced conclusion that the approach was sound. Seizing, holding and maintaining the initiative remained the thinking soldier's best path to tactical and operational success. Delegated empowerment, underpinned by a clear understanding of higher commanders' intent, remained a force multiplier over more hidebound opponents. It had also proved to be the only sensible way of doing business in the remotely dispersed sub-unit bases of Iraq and Afghanistan. The ethos was validated in combat—confirmed as fit for purpose.

Then, in February 2022, the next strategic shock struck as Russia rolled into Ukraine. Here is not the place to examine the multiple wake-up calls that the conflict in the Donbas and across wider Ukraine has offered to military thinkers. The war in Ukraine has reminded NATO armies, and the British Army in particular, that their core purpose is, and always will be, simply to be ready to fight and win the nation's wars on and from the land. It has reminded NATO and Europe, and Britain in particular, that to fight such wars long-neglected 'conventional' capabilities (such as combat bridging, mines and other counter-mobility capabilities, integral air defence, massed and delegated tube artillery, electronic warfare competences and equipment—the long list goes on) need to be rediscovered, relearned and reprovisioned. It has shown the same armies that new capabilities (such as the full panoply of drones, from long range to micro-tactical; electronic countermeasures; information management in a universally accessible digital world; operations in the 'transparent battlespace'; cyberwar; robotics and unmanned vehicles—the equally long list goes on) need to be understood, learned and provisioned.

Interestingly, however, in the context of this article, new thinking (or, to old-timers like me, new old thinking) is beginning to be conducted concerning the accepted orthodoxies, especially those that have made 'manoeuvre warfare' feel synonymous with the primacy of initiative-enabled offensive action conducted with flair and imagination. And if manoeuvre warfare is under scrutiny then so too, by association, is its sister concept of mission command. The latest drafts of British Army doctrine⁷ are starting to use language

like ‘the relearned primacy of defence’ and the value of ‘deterrence by denial’. The British Army is one in which almost all of those who have more than 15 years of service behind them (the senior NCOs, warrant officers, battalion and regimental commanding officers and above), and are thus the decision-makers on directions of doctrinal travel, are all men and women with huge and visceral combat experience. But their experience, valid and valued though it may be, is in warfare other than more conventional warfighting. At the same time, the generation below them have no such experience but have accepted the primacy of the mission command orthodoxy because it is what they have been taught and no alternative has yet been offered.

Against that background, the British Army understands where it is and where it has come from, and it is thinking hard and deeply. And, as this intelligent, professional army examines the lessons from the last 30 years of its own experience and the experience of those close at hand who are now fighting a modern existential war at scale, there is a new urgency. Everything is up for debate. In the British doctrinal discussion, the accepted orthodoxies are all fair game, and, therefore, so is the orthodoxy of mission command.

So, do I think that the likely outcome of that discourse will be that the current understanding of the value of mission command, as articulated in the references that I urged you to peruse in endnote 1, are under threat? If one continues to believe that the soldiers who are likely to prevail are those who understand the primacy, at all levels of their art, of the need to drive events, rather than be the victim of events, then the concept continues to have great merit. I am convinced that seizing, holding and maintaining the initiative is likely to remain the acme of the soldier’s art. That being so, the practice of offering leaders at all levels a clear understanding of the endgames beyond their own limited goals, and empowering capable people with the delegated authority to use their own wits and initiative, is likely to remain an asymmetric edge over less enlightened practitioners of the military art. There will be exceptions to the rule. The ethos will need to be a philosophy, not an orthodoxy. The learning and practising of delegated authority within an understanding of higher purpose will need to be more nuanced.

To my mind, however—and, if my instincts are right, to the minds of the British Army’s current crop of doctrinal thinkers—the concept will endure with great strength. The relative merits of attack and defence will sway back and forth in the debate. The influences of technology and context will ebb and flow as the ever-rapidly changing character of war evolves. On the other hand, the need to do what you are told, to obey orders and not deviate from higher direction, will continue to have its place, as much as it did when Marius reformed the legions and Xenophon marched to the sea. As long as one understands that balance, then the underpinning idea of mission command—of decision-making by people who are good at their art, professionally competent, well-trained and practised, rightly self-confident, equipped with the right capabilities and empowered by a

philosophy and practice that encourages them to seek ownership of the initiative through the use of objective-informed action —remains valid. Those so empowered will continue to hold a vital edge over opponents who are not.

So, do I believe that the British Army's answer to their question 'Whither mission command?' is likely to be 'Wither mission command!'? No, I don't.

About the Author

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ENDNOTES

- 1 See, for example, Linda Risso (ed.), *Mission Command and Leadership on Operations since 1991* (Camberly: The Centre for Army Leadership, 2024), at: <https://www.army.mod.uk/media/25267/cal-mission-command-and-leadership-on-operations-2024-final-v2.pdf>; House of Commons Defence Committee, *Defence—Fifth Report* (UK Parliament, 2004), at: <https://publications.parliament.uk/pa/cm200304/cmselect/cmdfence/465/46508.htm>; and Luke Turrell, *Mission Command in the British Army*, In-Depth Briefing No. 67 (Centre for Historical Analysis and Conflict Research, 2023), at: <https://chacr.org.uk/wp-content/uploads/2023/11/IDB-67-Mission-Command.pdf>.
- 2 If you are not, then I refer you to endnote 1 above and offer that you might like to take a few moments to, at least, scan the references, in order to get the best value out of the next few pages!
- 3 See the Centre for Historical Analysis and Conflict Research publication *Ares & Athena* 21 (2022), especially the leading two articles, at: <https://chacr.org.uk/2022/07/15/ares-athena-issue-21/>; and Turrell, *Mission Command*.
- 4 Sir Basil Liddell Hart repeatedly observed that ‘the only thing harder than to get a new idea into the military mind is to get an old one out’.
- 5 Bagnall’s book on the Peloponnesian War is instructive on its own merits but is equally instructive in understanding the merits, as an informed thinker and as a soldier, of the individual who wrote it. Nigel Bagnall, *The Peloponnesian War: Athens, Sparta and the Struggle for Greece* (Pimlico, 2004).
- 6 See the widely discussed article on this topic by General Charles Krulak of the USMC. Charles C Krulak, ‘The Strategic Corporal: Leadership in the Three Block War’, *Marines Magazine*, January 1999, at: <https://www.mca-marines.org/wp-content/uploads/1999-Jan-The-strategic-corporal-Leadership-in-the-three-block-war.pdf>.
- 7 See, for example, the shortly to be published (at the time of writing: March 2025) British Army Tactical Doctrine Note *Battlegroup Recce Strike*.

/ MISSION COMMAND AND THE AUSTRALIAN ARMY¹

John Blaxland

Soldiers of today's Australian Army draw on the inspiration of their predecessors. Following British tactics and procedures for the first half of the 20th century and beyond, Australian soldiers have fought at the direction of their government in conflicts and places ranging from the Anglo-Boer War in South Africa from 1899 to 1902, to Gallipoli in 1915, Beersheba in 1917 and Amiens in 1918, to Tobruk in 1941 and Kokoda in 1942. After the world wars, Australian soldiers also fought at places such as Kapyong in Korea in 1951 and Long Tan in Vietnam in 1966. Increasingly, they also have shaped their thinking, practices and procedures from the military operations conducted during the post-Cold War years and the conflicts fought since the onset of the so-called Global War on Terror, with growing American influence on concepts and procedures. Along the way, mission-type tactics, which came to be known as 'mission command', came into the Army's vocabulary. Influenced by American precedent and drawing on the German concept of *Auftragstaktik*, the term came into vogue late in the 1980s. The Australian Army adopted it readily enough in the 1990s, in part because allies had adopted it and because the concept reflected an approach that echoed that taken by Australian military commanders in Australia's past wars. This article reflects on how and why that happened. Australian forces effectively practised the concept of mission command during the world wars and beyond not because it was a uniquely Australian practice based on its societal culture but because they followed established British command and control doctrine. With technology enabling commanders to reach down from the highest to the lowest levels, a question remains over how much it will be possible to apply in networked coalition conflicts of the future.

Australia's Military Pedigree Prior to 'Mission Command'

The fixation on Gallipoli in Australian popular culture has overshadowed Australia's premier wartime field commander, Lieutenant General (later General) Sir John Monash. Under his command, the Australian Corps in France was instrumental, alongside the Canadian Corps of Lieutenant General Sir Arthur Currie, in some of the greatest feats of arms seen in the First World War.² Monash brought his skills as an engineer to an approach to battle that involved precise calculations and timings, and what Monash

(and others) described as ‘orchestration’—combining the effects of infantry, artillery, armour and air power, along with supporting engineers, logistics, communications and intelligence—to inflict the *Schwarte Tag*, or ‘Black Day’, on the Imperial German Army on 8 August 1918. While Monash’s contribution was part of a larger allied offensive involving the British Fourth and French First armies, this set-piece battle was a breakthrough moment that was followed by weeks of some of the most fluid action on the battlefield witnessed since the German onslaught in August 1914. Monash was meticulous in planning; he was both commander and chief of staff. His orders were very prescriptive, leaving nothing to chance. Evidently, he did not embrace decentralised command but kept the reins very tight. In the end, this proved very effective in the context of late 1918.

Nonetheless, British doctrine—which Australian forces largely adhered to—was, as Dr Christopher Pugsley observed, ‘based on a command philosophy of centralised intent and decentralised execution’. In effect, this is not substantively different in intent to contemporary British military doctrine. Pugsley quoted extensively from the various British doctrinal manuals to support his case, showing that the British approach has essentially been what today is termed ‘mission command’.³

The German approach to mission-type tactics had stood the Germans in good stead in terms of tactics and operations, but their competence would be matched by such orchestration. In time, the concept of *Auftragstaktik* would evolve and be formalised in time for the next war.⁴

Meanwhile, the Australian approach to conducting military operations also was influenced by experiences in the Middle East, with desert warfare during both world wars, where extensive battlefield manoeuvre was both feasible and more common. Lieutenant General (later General) Sir Harry Chauvel’s exploits with the Desert Mounted Corps in Egypt and Palestine in 1917 and 1918 were influential. The Battle of Beersheba serves as an appropriate example. In this instance, while the battle had largely been won by British infantry, the committal of the 4th Light Horse Brigade secured the victory and saved the wells from being destroyed. The Battle of Megiddo in 1918 and the pursuit operations following the breakthrough offers an even better example. While the term ‘mission command’ was not in popular usage back then, in effect the concept was put into practice in these battles.

In contrast to the experience of trench warfare in Europe, the legacy of this experience was of a fluid and not just positional form of warfare.⁵ The same could be said of the exploits of the Australians who fought over similar terrain a generation later. While not described as mission command, these battles involved the application of mission-type tactics, including the issuance of clear orders and a level of delegated authority for commanders and subordinate unit and sub-unit commanders to operate using their initiative, albeit within clearly demarcated limits. This was manifested in Australia’s Pacific

War in what could be described as the corporal's battle that epitomised close-range jungle warfare. This approach stood in contrast to another model applied by Australian forces in the Pacific: the more orchestrated form of littoral operations. Two different styles of command were needed to perform these types of operations.

The Australian experience in the Second World War also featured the exercise of discretion and initiative, of mission-type tactics at unit and sub-unit level, with fighting in the jungles and islands to the north of Australia. There, amphibious operations, light forces, limited availability of artillery (with a concomitant increased reliance on air support) and small-team actions, including assertive patrolling, featured prominently. Tanks also proved to be remarkably effective in this environment when operating dispersed and directly in support of advancing infantry—much as they had been used a generation earlier under General Monash in France. At the war's height, the Australian Army learnt to master combined-arms warfare in the New Guinea campaign from 1943 and conducted division-level amphibious operations in New Guinea in 1944 and Borneo in 1945.⁶

Arguably, Australia's overly romantic focus on the trials of the battle of Kokoda has masked the significant success in combined arms and joint warfare as the Second World War progressed. For much of the time, the tactics employed were driven by equipment shortages and limited numbers of adequately trained personnel as much as by the inaccessibility of the battlefields. This combination led to a strong emphasis on battle cunning and initiative based on mastering local conditions. These are characteristics that would come to be associated with the notion of mission command.

When the Australian Army began publishing its own doctrine in the 1950s and 1960s the concepts expressed in today's 'mission command' were evident,⁷ although it is more restrictive in its intent than the previous British doctrine the army operated under. This indicates that the Australian Army doctrine was more prescriptive than that previously practised under British doctrine, and challenges the much-believed myth that the Australian Army showed a greater flair for initiative than the British Army.

During the Confrontation in Borneo, Australia's approach to warfighting sought to empower local commanders to use their initiative and minimise their own casualties. They did this using stealthy patrols. Indeed, infantry section and platoon-sized teams had conducted sensitive cross-border 'Claret' patrols in Indonesian Borneo, demonstrating versatility and prowess with minimal casualties. This approach would largely be echoed during Australia's involvement in the Vietnam War.⁸

Vietnam War Experience

With the Army focused on Vietnam, counterinsurgency operations were emphasised for the following decade. The flow-on effect of the British 'centralised intent and decentralised execution' was practised in Vietnam, and afterwards in postwar exercises and training. Initially, in 1965, Australia committed an infantry battalion to fight as part of the 173rd US Airborne Brigade (Separate) in Bien Hoa province, north-east of Saigon. But Australians found US Army tactics inappropriate for them. Working closely with US forces at the tactical level disturbed Australian commanders. The American approach relied on drawing out the enemy and then retaliating with superior firepower, but this was costly in terms of their own casualties. Australian commanders sought to minimise casualties and to operate separately to implement more effectively British-influenced Australian tactics of stealthy jungle patrols, frugal use of force and carefully targeted ambushing. The Australian Government felt the best way to bolster further alliance credentials while enabling their troops to operate according to their own procedures was to increase the force size and take responsibility for a discrete area. By 1966, therefore, Australia increased its land force commitment in Vietnam to a combined-arms (light infantry based) brigade-sized force called the 1st Australian Task Force (1ATF). 1ATF was tasked with operating principally in its own distinct province, Phuoc Tuy, south-east of Saigon. In addition, separate air and naval contributions were made alongside American counterparts, largely on a single-service basis.⁹

The battle of Long Tan in August 1966 provides an example of the kind of mission-type tactics Australian soldiers were trained to undertake. In this instance, an infantry company on patrol a few kilometres away from the main base for 1ATF at Nui Dat encountered a regimental-sized enemy force in a rubber plantation. The company commander and the platoon commanders responded to the encounter with discipline and remarkable effectiveness, drawing on support from the rest of the task force to dominate on the battlefield.¹⁰ Critics may contend that Long Tan had nothing to do with mission command. D Company, 6th Battalion, Royal Australian Regiment was tasked to search for the Viet Cong mortar base plates' positions, following a mortar attack on the 1ATF base. What eventuated was an unexpected encounter battle and the men of D Company fighting for their lives in a desperate defensive action, in which the artillery played a major role in saving them. Nonetheless, the initiative and trusted teamwork of those on the ground and providing support from the rear reflected a recognition of the limits of one's own resources, and the criticality of drawing in the combined-arms effects to achieve success.

Throughout the rest of the time Australian forces operated in Vietnam, mission command was regularly practised in that company commanders were given an area of operations, tasked with a mission and allowed to conduct it the best way they saw fit. This was all before 'mission command' was in the Army's lexicon.

The practice of dealing with US tactics and equipment forced the Australian Army to reconsider its British-derived approach to warfighting. As one writer observed, the developments in tactics and doctrine of the Vietnam War period marked a substantial step in the process of developing Australian Army doctrine. It is little wonder, therefore, that when the concept of mission command came into vogue in US military circles after the Vietnam War, it would not be long before the term would come into usage in Australia as well.

1970s to 1990s: Exercises, Exchanges and Mission-Type Tactics

The Kangaroo exercises of the 1970s through to the late 1990s were predicated on the direct defence of continental Australia. These scenarios often involved deployment of small force elements widely dispersed with broad directives. These allowed for a significant level of local initiative, effectively (if not formally) involving mission-type tactics to be exercised by those involved.¹¹

The Australian Army also would conduct a wide range of exercises and exchanges with the US Army and Marine Corps in the decades following the Vietnam War. These would facilitate a significant level of cross-pollination and awareness of conceptual developments in the US military—including the concept of mission command. The first exchange exercise in continental USA involved 165 Australians from armoured and infantry units undergoing ‘intensive familiarisation training’ at Fort Bliss, Texas, in 1976.

Another popular activity was Exercise Long Look. This provided an opportunity for soldiers to exchange places with counterparts in the British Army in the United Kingdom and West Germany. This was initiated in 1976 as a three-month personnel exchange rather than an exercise per se. It enabled 60 to 90 soldiers each year to broaden their knowledge and experience with the British Army. The arrangement providing participating soldiers with a wider understanding and enhanced cooperation between the two armies. It also provided excellent exposure to the challenges faced in preparing for a major power threat such as NATO faced in northern Europe, where the concept of mission command was gaining greater acceptance in the 1970s. In the case of the British Army, it was adopted formally in 1987.¹²

This practical experience, and the theoretical lessons to be learned from it, was impossible to replicate in Australia. It also exposed Australian soldiers to the emerging thinking about mission command. Much of this was exposure informed by increasingly frequent and popular reflections on the German concept of *Auftragstaktik*, which American and British senior commanders, staff college staff and strategists were absorbing in the wake of the evident failure in Vietnam.

In addition, Australia sent individual exchange students to institutions such as the German Army staff college, who were exposed to *Auftragstaktik* and returned to Australia with an almost missionary zeal to raise awareness of this conceptual work.¹³ Beyond exchange students, combat-experienced Americans and Brits posted on exchange to Australia were also key. They helped not only to raise awareness but to shape the thinking of Army leadership about the efficacy of adopting mission command as an appropriate concept for the Australian Army.

In reflecting on the corporate memory and sense of perspective of Australian army commanders in the years following the Korean War, it is worth noting that the Australian Army had not been involved in combat operations above company level, with the exception of the fighting during the 1968 Tet Offensive in Vietnam. Even though battalions deployed to a theatre of operations, in most instances, from Malaya to Afghanistan, the operations undertaken were largely at company level. Additionally, as an army that largely eschewed the study of military history, and with an unhealthy dose of parochial nationalism, hubris and anti-British history, its officers arguably had lost sight of its roots in command and control practices—British Army doctrine. Hence, when the idea of mission command was floated as a new concept based on German *Auftragstaktik* and discovered during the 1980s, one could easily come to believe that the concept was entirely novel and without precedent in the experience of the Australian Army. Nonetheless, with the allure of American doctrinal trends, the idea would be catapulted further in the years following the end of the Cold War.

Gulf War Catalyst?

The convincing and rapid defeat of Iraqi forces during the 1991 Gulf War displayed the effects on American and allied military capability arising from a revolution in information technology. Spectacular demonstrations of high technology for modern warfare popularised the notion of a ‘revolution in military affairs’, or RMA. The ‘revolutionary’ aspect was that advanced military technology appeared to portend a dramatic shift in the balance of power, favouring technologically superior forces over others.¹⁴

After the Gulf War in 1991 the author sensed that among his peers as junior officers there was a feeling that allied doctrine and methods had left Australia far behind as well. And by the late 1990s, considerable informal conceptual development was taking place within Army circles. To most thinkers within the Army, that understanding was encapsulated in a ‘manoeuvre warfare’ framework—avoiding hard spots and attacking through soft spots or ‘gaps’ to achieve a mission—where speedy and informed decision-making was considered critical to maximise fighting power and minimise casualties. The adoption of manoeuvre theory and mission command had been either driven from the bottom up (with

manoeuvre theory) or at least grasped more fully there (with mission command). This was captured in the work of military scholars including William Lind in his *Maneuver Warfare Handbook* (1985) and Robert Leonhard in *The Art of Maneuver* (1994).¹⁵ Their thought-provoking books helped stimulate conceptual development at a formative time. This predisposition to innovate and to challenge the bounds of guidance was more important than the hardware that came from the RMA and networked warfare.

A key document to emerge from the intellectual ferment aroused in the mid-to-late 1990s under Lieutenant General Frank Hickling's tenure as Chief of Army was *Land Warfare Doctrine 1: The Fundamentals of Land Warfare*, written by a team from both Future Land Warfare and the Land Warfare Studies Centre and published by the Combined Arms Training and Development Centre in 1998. This forward-looking work was intended as a guide for the development of all Army doctrine. It saw mission command come into prominence in capstone Army doctrine—a place it would retain in subsequent iterations of the capstone document.¹⁶

In the years that followed, from 1999 onwards, the Australian Army faced a range of challenges, often enough where soldier-level and junior commander initiative was critical to the avoidance of unnecessary escalation and the effective management of challenges on operations far from Australia's shores. Informed by such challenges, and with a wealth of experience to draw on from recent operations, the Australian Army refined its conceptualisation of its likely operational environment. As a result, in 2004 the Army published a seminal paper entitled 'Complex Warfighting', which sought holistically to address the subject of warfare for the Australian Army. The paper described war as a fundamentally human, societal activity rather than a technical or engineering one. 'Complex Warfighting' articulated a comprehensive overview of the nature of warfare in the early 21st century and outlined an appropriate posture for modern armies. That paper sparked considerable debate. Dr (then Lieutenant Colonel) David Kilcullen was the lead author for this original and innovative exposition on the nature of modern war. Yet to many Australian military officers, Kilcullen's work was surprisingly uncontroversial. Perhaps this was because he managed to articulate what was a deeply ingrained part of the Australian Army's culture. This, in part at least, was due to the fact that his writing echoed the Australian experience of warfighting in Vietnam and the approach to mission-type tactics which the Australian Army would come to know as mission command.

In December 2005 the Hardened and Networked Army initiative was endorsed as part of the launch of the Strategic Update 2005. This and other initiatives reflected the concerns raised by the Chief of Army, Lieutenant General Peter Leahy, who argued that the Army needed to be hardened to be able to survive in an environment where every potential adversary had access to highly lethal hand-held anti-armour weapons. This expansion and modernisation built on the mission command mindset instilled in the Australian Army; it would permit the Army to deploy small, agile combined-arms teams mounted

behind armour and with access to an array of joint direct and indirect fires. The ideal was that ultimately each soldier would be a 'node in a seamless network of sensors and shooters'.¹⁷

In 2007 the Army identified nine 'core behaviours' that were intended, in part at least, to reinforce a learning disposition. They were used as the basis of the 'I'm an Australian Soldier' initiative, which stated that every soldier: (1) is an expert in close combat, (2) is a leader, (3) is physically tough, (4) is mentally prepared, (5) is committed to continuous learning and self-development, (6) is courageous, (7) takes the initiative, (8) works for the team and (9) demonstrates compassion.¹⁸ The tabulation of these traits reflects the characteristics which make the application of mission command viable, down to the lowest tactical levels.

Mission Command and Five Reasons for Prowess

In *The Australian Army from Whitlam to Howard*, I argued there are five reasons for the prowess of the Australian Army. These reasons help explain how the concept of mission command came to be practised under various guises in the Australian context. The first is the creation of common individual training and education institutions. These institutions reinforced the understanding of the Army's various components as part of a trusted and collaborative combined-arms team. This is foundational for effective delegation of authority and confidence in subordinates' abilities to carry out assigned tasks with limited additional direction.

The second reason for prowess was the emphasis on collective field training exercises and 'battle evaluation'. Collective training brought together individual skills to amount to more than the sum of the parts. The ability to plan and undertake multifaceted combat exercises was a sign of a first-order army that could deploy from the barracks, simulating an operational deployment far from its home base. This adds to the confidence and the trust required for mission command to work. That practised trust and the confidence of knowing the fundamentals are also critical for effective and efficient exercise of mission command.

The third reason concerns the Army's various regimental or corps identities. In many ways these have echoed the experience of other Commonwealth armies, notably the British, Canadian and New Zealand forces. The identity concerned internal specialisation, whereby relatively tight-knit communities of experts in the component arms and services of the Army (the regiments and corps) have developed family-like bonds of trust and friendship. The Army's small size has contributed to the degree of familiarity and confidence achieved within a corps grouping. In this context, excellence can be fostered, enabling the niche areas to work together. The aggregate has come to be known as

the 'combined arms team', which built and relied on a high level of trust in respective specialisations. The concept of mission command depends on the combined-arms team components working in a trusted and complementary way.

The fourth reason for prowess relates to Australia's historic and enduring connection with great and powerful friends and significant regional partners. Personnel exchanges and interaction with counterparts from ABCANZ partner armies (America, Britain, Canada and New Zealand) have provided critical infusions of experience and innovation. There are many notable soldiers who have served on such exchanges and gained considerable professional benefit which they brought back with them to Australia. Indeed, the earlier manifestations of the mission command ethos stem from connections with the British army and the more recent manifestations draw on writings emanating from US military circles.

The fifth and most significant reason for the Army's prowess concerns its links into society and Australian society's links into its Army. There has long been a strong sense of Australian national identity linked to the Army, which has enabled it to attract high-calibre candidates as recruits, both as officers and as enlisted personnel. Lieutenant General (Retd) Peter Leahy saw the links into society as pivotal: 'To me this is the strength of the Army—the citizen soldiers who bring community values with them, keep them in the Army and then go back to their communities.'¹⁹ In addition, the Army's recruiting system selected only those with physical prowess, agility and mental acumen. The Army's links into society were reinforced by its sense of identity and values which reflected Australian culture. These values stressed promotion on merit as the principal consideration. They also draw on an educated core of people who can be assigned challenging, complicated tasks with confidence that only limited direction is required. In essence, it is about the educational and cultural predisposition to use one's initiative; it is about the cognitive domain—what is between the ears.

The five reasons for prowess have helped create what, in a limited sphere at least, became a world-class military force with its own unique culture and distinct values. These factors were responsible for the Australian Army's international reputation and regional edge. The Army demonstrated its capabilities for stability operations (such as counterinsurgency, peacekeeping, humanitarian assistance and disaster relief) as part of a 'joint' capability: that is, supported by air force, navy, intelligence, logistics, and command and control enabling components—admittedly often provided by allies. That joint capability enabled the Army to operate more effectively as part of a wider 'interagency' team, drawing on diplomatic, police and aid agency resources from across the arms of government. The development of this interagency approach, whereby mission-type tactics were employed, was demonstrated on operations in Bougainville, East Timor, Solomon Islands and elsewhere. While the terminology had changed, this reflected more continuity than change in the Australian Army's organisational culture going back for more than a century.

Mission Command Crimped?

The years from 2005 to 2014 saw the peak of Australia's military contribution to coalition operations in Iraq and Afghanistan, even though Australian Army personnel continued to serve on operations in the years that followed. But these operations saw a succession of task groups deploy with tightly constrained mission directives and scope for initiative by local commanders. In part this reflected that these conflicts were far away from Australia's shores, and Australia's contributions were carefully calibrated to make a political and modest substantive contribution to the outcome of the conflicts.

This led to the sort of criticism levelled in 2008 at the senior ranks by then Major Jim Hammett, who wrote a piece for the *Australian Army Journal* entitled 'We Were Soldiers Once'.²⁰ This provocative article outlined how infantry soldiers were feeling frustrated, noting that they were not being employed to their full potential. To Hammett, 'the restrictions placed on deployed elements as a result of force protection and national policies have, at times, made Infantrymen ashamed of wearing their Australian uniform and regimental hat badge'. The Al-Muthanna Task Group (AMTG) which deployed in southern Iraq was a case in point. At least one AMTG commander complained that they had been sent on operations without a strategy and this significantly constrained their freedom of action and affected morale.

Conversely, there were others who felt that they had considerable freedom of action in how to conduct operations in Afghanistan—within the guidance provided from national and regional commanders. In reflecting on his experiences as commander of the Reconstruction Task Force (RTF) in Uruzgan province, then Lieutenant Colonel Mick Ryan observed that the Australian Army, and Headquarters Joint Operations Command charged with conducting operations, provided him and the RTF with a robust support infrastructure. Ryan's Australian boss, the Baghdad-based national commander Brigadier Mick Crane (who had commanded forces in Oecussi in East Timor in 1999), exercised 'mission command'. As Ryan explained, this meant that 'once confident he knew I understood the strategic intent, he let me run RTF operations with the Dutch forces. I didn't have to ask, I just did it'.²¹

Other constraints included bifurcated command channels with operational and national command managed separately. In Iraq and Afghanistan, deployed task groups operated to a local regional command chain in addition to the separate national command chain to a senior officer hundreds of kilometres away. As one veteran of multiple deployments observed, 'it's hard to work for two bosses'.²² Indeed, mission command is more challenging to implement in a coalition or multi-agency setting, where arguably there are too many cultural variations to enable the high levels of trust required to make it work well in a crisis.

Another challenge in making mission command workable is ensuring a high degree of trust between commanders up and down the command chain. The Australian Army works hard to maintain standards and networks of collegiality and mutual respect and, by and large, it has been successful. But there are concerns that, notwithstanding the reasons for the Army's prowess, the high rate of turnover of key appointments (usually in a command appointment for up to only 24 months) makes it difficult to build high levels of trust—something which is so important for mission command to be effectively implemented. One retired senior officer and veteran of several operations declared, 'I'm not convinced we are helping to develop trust within our units by changing personalities yearly with posting cycles'.²³

Further limitations to the freedom of commanders to exercise mission command are emerging from the proliferation of communications devices and reporting expectations. Commanders are likely to find it even more challenging, if not impossible, to exercise mission command—that is, to specify a task to a subordinate commander, assign resources and let the subordinate get on with the job without undue scrutiny and intrusion. The onset of the fourth industrial revolution and the emergence of increasingly network-centric work models, relying increasingly on artificial intelligence, are a game changer.

The prospect of mission command being exercised in future is further challenged when coupled with greater demands for information, more frequent reporting intervals and greater access for senior commanders. This includes those at multiple echelons above the assigned task force, enabled to monitor and intervene in the execution of a mission if they so wish. With the added information, senior commanders struggle to resist the impulse to claim greater insight and to offer their unsolicited wisdom. This has been described as the 'strategic screwdriver' effect.

Final Thoughts

Mission command, as a term, has a relatively short pedigree in the Australian Army, but in a force intent on capitalising on the strengths and individual initiative of the Australian soldier, mission command has turned out to be a fairly easy fit, drawing on a pedigree that pre-dates the introduction of the term into the Army's lexicon. The challenge remains for commanders to trust their subordinates and to look to capitalise on the available advancing technology without its imposing a stultifying effect on initiative and *élan* among the soldiers of today's and tomorrow's Australian Army. Indeed, a question remains over how much it will be possible to apply in networked coalition conflicts that the Australian Army may be involved with in the future.

Mission command is a cultural matter, and its implementation is very much governed by personalities, especially of those in superior command positions. Thus, embedding the mission command terminology and concept within the Australian Army should be addressed as a cultural education program.

Mission command is also founded on trust up and down the chain of command. It involves a readiness to delegate, an acceptance of responsibility and accountability, and superiors not interfering in the execution of the task unless it becomes necessary to do so. It is not simply a matter of espousing mission command as doctrine. Officers must be educated and regularly practised in undertaking it in simulated exercises that are designed to reinforce the doctrine. Similarly, subordinates must be allowed to make mistakes and wrong decisions. They are the best means of learning and making better decisions under pressure. This also builds confidence in exercising mission command.

Enabling subordinates to exercise mission command relies on superiors who have a thorough professional military education, are technically competent and are confident in their own ability. Less technically proficient officers who lack confidence in themselves are inclined to micromanage their subordinates and restrict the practice of mission command.

The advent of real-time communications from Defence Headquarters all the way down to the combat units in the field—the 3,000-mile screwdriver—gives very senior commanders the ability to interfere and direct operations on the ground from armchairs in Canberra and Bungendore. In effect, today this is one of the biggest challenges to implementing mission command in the Army.

About the Author

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ENDNOTES

- 1 This paper draws on material covered in John Blaxland, *The Australian Army from Whitlam to Howard* (CUP, 2014). The author wishes to acknowledge the constructive feedback from the blind reviewers. Readers interested in exploring this issue further should also examine the contributions by a range of authors in Russel Glenn (ed.) *Trust and Leadership: The Australian Army Approach to Mission Command* (University of North Georgia Press, 2020). This includes contributions by Russell Glenn (mission command overview), Peter Pedersen (AIF), Peter Dean (Pacific War), Meghan Fitzpatrick (Korean War), Bob Hall (Vietnam War), John Caligari (1 RAR Group in Somalia), John Blaxland (East Timor in 1999), John Frewen (Solomon Islands in 2003), Ian Langford (Special Forces) and Chris Field (Queensland national emergency in 2010–11). See also Russell Glenn, 'Mission Command in the Australian Army: A Contrast in Detail', *Parameters: The US Army War College Quarterly* 47, no. 1 (2017), DOI:10.5554/0031-1723.2833.
- 2 The comparison is found in John Blaxland, *Strategic Cousins: Australian and Canadian Expeditionary Forces and the British and American Empires* (Montreal: McGill-Queen's University Press, 2006), pp. 34–41.
- 3 Christopher Pugsley, *We Have Been Here Before: The Evolution of the Doctrine of Decentralised Command in the British Army 1905–1989*, Sandhurst Occasional Papers No. 9 (Central Library, RMA Sandhurst, 2011), p. 5
- 4 The author's views on this were shaped as a junior officer by reading Robert R Leonhard, *The Art of Maneuver: Maneuver Warfare Theory and Airland Battle* (New York: Random House, 1994).
- 5 The author's favourite overarching account of Australia in the First World war remains CEW Bean, *Anzac to Amiens* (Sydney: Penguin, 1993 [originally Canberra: Australian War Memorial, 1946]).
- 6 The author's favourite overviews of Australia in the Second World War include Gavin Long, *The Six Years War: A Concise History of Australia in the 1939–45 War* (Canberra: Australian War Memorial, 1973). There are some other excellent ones including David Horner, *High Command: Australia's Struggle for an Independent War Strategy* (Sydney: Allen & Unwin, 1982); Peter Dean, *MacArthur's Coalition: US and Australian Military Operations in the Southwest Pacific Area, 1942–1945* (Lawrence KS: University Press of Kansas, 2018); Garth Pratten, *Australian Battalion Commanders in the Second World War* (Melbourne: Cambridge University Press, 2009)
- 7 For example, *The Division in Battle—Pamphlet 1, Organization and Tactics* (1965), Chapter 6, 'Command and Control', has a section titled 'Departure from Orders' which outlines the situations in which a junior officer may depart from his given orders.
- 8 See David Horner, *Phantoms of War: A History of the Australian Special Air Service* (Sydney: Allen & Unwin, 1989 [originally published as *Phantoms of the Jungle*]). See also David Horner and Jean Bou (eds), *Duty First: A History of the Royal Australian Regiment*, 2nd edition (Sydney: Allen & Unwin, 2008),
- 9 See, for instance, Bob Breen, *First to Fight: Australian Diggers, N.Z. Kiwis and U.S. Paratroopers in Vietnam, 1965–66* (Sydney: Allen & Unwin, 1988); Frank Frost, *Australia's War in Vietnam* (Sydney: Allen & Unwin, 1987); Peter Edwards, *Australia in the Vietnam War* (Sydney: UNSW Press, 2014).
- 10 See Ian McNeill, *To Long Tan: The Australian Army and the Vietnam War, 1950–1966* (Sydney: Allen & Unwin, 1993).
- 11 See Blaxland, *The Australian Army from Whitlam to Howard*, pp. 26–124.
- 12 Major Jim Storr, 'A Command Philosophy for the Information Age: The Continuing Relevance of Mission Command', *Defence Studies* 3, no. 3 (2003): 119–129, DOI: 10.1080/14702430320000214421.
- 13 The author was an instructor in the early 1990s when one of the senior instructors, who was a graduate of the German Army Staff College, then Major Ross Parrott, CSC, was involved in shaping Army training and thinking about adopting a mission command approach to training for operations.
- 14 A concise overview of the RMA can be found in Elinor C Sloan, *The Revolution in Military Affairs* (Montreal: McGill-Queen's University Press, 2002).

- 15 William S Lind, *Maneuver Warfare Handbook* (Westview Press,1985); Leonhard, *The Art of Maneuver*.
- 16 See Land Warfare Doctrine 1—The Fundamentals of Land Power (2017), at: https://researchcentre.army.gov.au/sites/default/files/lwd_1_the_fundamentals_of_land_power_full_july_2017.pdf.
- 17 Peter Leahy, speech to the Royal United Services Institute, Hobart, 15 September 2005; MINDEF 157/06.
- 18 'I'm An Australian Soldier', *Army: The Soldiers' Newspaper*, 3 May, 2007, p. 16.
- 19 Cited in Blaxland, *The Australian Army from Whitlam to Howard*, pp. 13–14.
- 20 Major Jim Hammett, 'We Were Soldiers Once ... The Decline of the Royal Australian Infantry Corps?', *Australian Army Journal* V, no. 1 (2008): 39–50, at: https://researchcentre.army.gov.au/sites/default/files/aaaj_2008_1.pdf.
- 21 Cited in Blaxland, *The Australian Army from Whitlam to Howard*, p. 261.
- 22 This point is explored by contributing authors in several of the chapters in *Niche Wars: Australia in Afghanistan and Iraq* (ANU Press, 2020), at: <https://press.anu.edu.au/publications/niche-wars>.
- 23 Colonel Marcus Fielding (Retd), correspondence with author, January 2025.

/ PAYING THE MISSION COMMAND BILL

Anthony Duus

There is no more challenging role in the Australian Defence Force (ADF) than to command in war.

ADF-P-0 Command¹

Command is not easy. In peace or war, command is one of the most difficult activities we do as military professionals. Command in the Australian Defence Force (ADF) is unique—very few organisations can knowingly order subordinates into life-threatening situations. It takes a great deal of training, education and experience to be ready to command, and then the execution of command takes constant work at the personal level. Given the enduring human nature of war,² even in the face of increasing technological advances, enabling successful command should be an absolute priority. If we want to be able to use the benefits that command gives us, we need to be doing everything we can to enable it in wartime while we are at peace.

Doctrinally, ADF-P-0 *Command* provides a concept of command as a spectrum with prescriptive command (requiring the commander's personal direction and detailed instructions) at one end and mission command (relying on subordinates' knowledge of the mission and purpose to guide decisions) at the other. This concept of command is a shift in language and terminology by the doctrine's own admission. This doctrine marks a change for the ADF in 'moving away from [a] unitary concept of mission command towards the concept of command on a spectrum'.³

For Army, the concept of command is mission command and it is not unitary in nature. There is a spectrum within mission command ranging from detailed command to guided command. A comparison of the two concepts is summarised in Figure 1. While on the surface it may seem that the change has been a superficial one of 're-badging', the concern of this author is that the shifting of this terminology has confused the idea of a single concept of command.

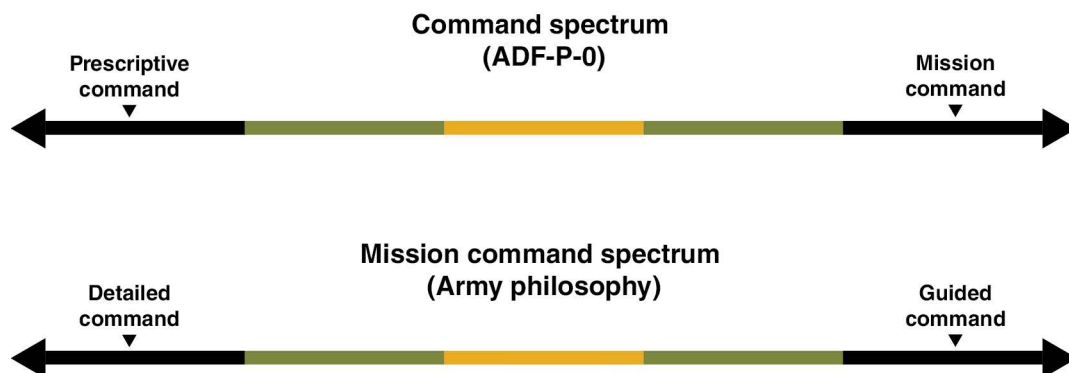


Figure 1: Comparison of the command spectrums. Source: Adapted from ADF-P-0 Command

This article will explore Army's use of mission command across the spectrum.

Mission command can be poorly understood even by its practitioners. Its exercise is not simply about standing up and telling people what your intent is and sending them off to do their best in accordance with your instructions. At its heart, mission command is an extension of philosopher Immanuel Kant's assumption that every worthwhile man will always do his duty to the best of his ability. The extension is that every soldier, from private to field marshal, must be brilliant at the fundamental warfighting skills associated with their station; further, they will always execute those skills to the limits of their exertion.⁴

Army's association with mission command over the past 50 years has led to significant in-service discussions over its utility, efficacy, benefits and drawbacks. Perhaps the fundamental lesson out of these discussions has been to acknowledge that all spectrums of mission command are applicable to some situations, and one cannot associate battlefield success only with the idealised version of the concept, namely 'guided command'. Indeed, the use of 'detailed command' can be ideal in certain situations to get tasks back on track or to attempt to manage an impetuous subordinate. For example, following a mismanaged assault on an enemy strongpoint by a subordinate, a commander would be justified in giving detailed guidance to the subordinate in a subsequent action or operation, both to secure success and to mentor that subordinate and show them a 'better' way.

In 2011 then Lieutenant Colonel Rupert Hoskin provided a further critique of how commanders can mismanage guided command, stating:

All too often, people claim to be mission commanders in the belief that staying out of the subordinates' way is a virtue in its own right. This is simplistic and lazy. What tends to happen is that the subordinate gets poor initial guidance ('I'm busy and it will do him good to work it out for himself, and I can assess him better this way'), then cracks on manfully until things stray from the commander's (belatedly considered) intent. By then it's too late for a light touch and the commander re-injects himself to get things back on track, employing tight control and leaving all parties disgruntled. It is all very well to let people learn from their mistakes, but in reality it is wasteful to make a habit of this: while one leader executes his flawed plan, his subordinates are learning bad lessons, getting frustrated and expending scarce resources. Better to let the lesson be learned 'virtually', via the back brief process, then reinforce success via execution of a good plan.⁵

Mission command is erroneously employed by many commanders with a hands-off approach, exactly as described by Hoskin above. This would be workable had the commander given appropriate guidance, resources and supervision. The level of appropriate guidance and supervision is determined by the level of mutual understanding,⁶ and trust, the commander has with and in the subordinate. That trust is established through education, training and shared experiences.

Building Trust—a Head Start

How do we institutionally build this trust and how can we as commanders ensure we build on it constantly? The Australian Army is a very different organisation to civilian or other government agencies across Australia. Unlike a headhunted chief executive officer parachuted in to run a civilian organisation, every Chief of Army (or Chief of the General Staff (CGS), as the position was called before 1997) since Lieutenant General Sir Thomas Daly has been largely educated and trained within the Australian Army and the ADF.⁷ Each Chief of Army knows his subordinate commanders—and has for over 25 years in many instances. He may have gone through Royal Military College, Duntroon with them as a peer or superior, and instructed or led subordinates on courses or in units. Since the appointment of Lieutenant General Ernest Squires as CGS in 1939, the Australian Army has not appointed a soldier of a different army as its professional head, and it is very unlikely this would occur again, owing to the degree to which it would undermine Australian sovereignty and social legitimacy.⁸ This almost intimate knowledge of peers, near subordinates and superiors allows for an environment of shared education, training and experiences that is not present in other organisations. This is an excellent institutional start.

Trust enables freedom of action—the higher the level of trust, the more likely that a commander will enable a subordinate to execute more freely. There is a bill to be paid before mission command can ultimately be used successfully across the left and right extremes of the spectrum. That bill—generating that trust—is paid in education, in training, in shared experiences and in execution.

Educating about Mission Command

Mission command is not some kind of laissez faire anarchy ...

ADF-P-3 Campaign and Operations Edition 3⁹

Educating people about mission command is akin to forcing people to read Carl von Clausewitz's or Antoine-Henri Jomini's vast tracts on war, not just google them for quotes. The common misconception is that mission command is all about full freedom of action by subordinates. Commanders and subordinates alike fail to understand the spectrum and what must be done to enable its use between the extremes. At the first use of detailed command, subordinates can complain of micromanagement, often not appreciating why it is being used. The principal use of detailed command, as noted above, is by commanders who seek assurance that key tasks get done through the means they desire, and this may include technical or procedural tasks. Fundamentally, the commander has the intrinsic right to give detailed guidance on any task. If operational success is the responsibility of the commander, and if this hinges on a crucial event, it is natural for the commander to become detail oriented and get intimately involved in such an operation. This is why we must educate on the spectrum of techniques available for mission command.

Another common use of detailed command is when a commander is assigned subordinates who they may not know or trust. In this situation, the commander can use their presence and experience to ensure the potential success of an operation. Alternatively, an event may be so detailed—breaching a minefield or marching a large organisation on multiple routes, for example—that precisely following orders is required. This is still within the spectrum of mission command. Detailed command is micromanagement—there can be no doubt on this—but there are many circumstances in which a commander, with more years of experience than their subordinate, recognises that they need to impose themselves on a situation to ensure success. Commanders are right to use it—to impose their skills on a tactical situation, using years of knowledge and skill to reinforce a young officer with less experience, to ensure success.

There are numerous examples of detailed command being used within a mission command system by both Allied and Axis forces in World War II. For example, in July 1944 Major Hans von Luck, a German Army battle group commander, directed, at gunpoint, a Luftwaffe air defence battery commander located in Cagny, France, to redeploy, where to deploy to, what direction to face and what to shoot at¹⁰—directing the battery commander to stop firing at Allied bombers and instead to focus upon British tanks. This direction provided invaluable support to the disruption of Operation Goodwood in his area. While the extent to which the United States Army of the Second World War utilised a mission command style system can be debated, the exercise of detailed command nonetheless also occurred. In France in August 1944, Lieutenant General George Patton found his 3rd Army trapped in a traffic jam in Avranches. Patton intervened, and for 90 minutes he personally directed traffic. In this instance, the insertion of his command presence and experience sorted out the jam, whereas a lesser subordinate might have had extreme difficulty.¹¹ This is an example of detailed command—precisely telling individual anti-air gunners where to position themselves, and drivers when and where to go. Such circumstances may seem its antithesis, but they are still within the spectrum of mission command.

Detailed command, however, can become dangerous to an organisation when a commander uses it all the time. Subordinates can begin to feel stifled or resentful of such ‘interference’ or lack of trust. Understandably, then, subordinates are generally dismayed at this end of the arc of mission command. It is common for each subordinate to believe that guided command is the right, and the only, use of mission command.

The principles underlying guided command¹² are perhaps the most commonly known throughout Army. It ostensibly allows a subordinate maximum flexibility to choose the way a task is to be achieved, fostering a greater tempo by decentralising decision-making, allowing the commander on the ground to assess the situation and make an appropriate decision. This ideal should be sought when appropriate. Nevertheless, and as previously noted, its successful achievement requires trust between a commander and their subordinates and an understanding of their capabilities. For subordinates, the real value of understanding a commander comes when the situation that presents or develops is significantly different from the estimate used during planning. When this occurs, commanders rely on their subordinates to execute a number of critical abstractions as follows:

- a. Correctly identify that the situation they see is indeed nothing like that planned for and, as a result, large parts of their plan (if not the whole thing) are rendered irrelevant.

- b. Develop their understanding of what the situation actually is.
- c. Estimate their commander's intent given that the situation has changed. In this instance answering one simple question should do the trick: 'If my commander were here and understood the actual situation as I do, what would he want me to do?'
- d. Generate and implement a solution, within their (the subordinate commander's) authority, to achieve the previously articulated end state. Alternatively, if that end state is no longer valid, then the new plan should reach an end state that is at least beneficial to friendly forces, ideally while deteriorating the capacity of the enemy.

Guided command allows for decentralised decision-making at the lowest levels. Time previously spent reporting, creating a picture at higher headquarters, solving the problem, giving orders back down the chain of command and then executing the mission is no longer required. This is because the commander at the point of contact has been empowered to decide and act. This situation potentially generates a significant advantage for the ADF in operational tempo, especially if we face an opponent that favours a centralised model.

How We Get There—Educating and Training

Education and training are a responsibility for every commander at all levels—they are what we do every day in barracks and in the field. Good units continue to educate and train even when deployed. For example, in 2001 in Suai, East Timor, Headquarters Sector West conducted a weekly command post exercise to drill lessons learned from that week's operations. This practice was only cancelled in the event of an incident.¹³ Our core role as commanders is to ensure that we educate and train subordinates to solve problems, convey intent, lead and then learn from the experience—four critical skills that must be developed and practised. Training must be relentless—everything that we can turn into a drill should be repeated until no thought is required. Repetition in training allows us to save the brain from fatigue. The most precious thing we have is the ability to solve new problems—we should not be wasting it solving the routine and mundane activities.

This education and training should include tactics—the constant building of a mental library of tactical events that builds the 'pattern recognition' essential for tactical success. Tactical decision-making often relies on pattern matching and heuristics, the development of which requires significant training, education and experience to build up a 'library' to be called upon by the commander. There are very few scenarios that have not occurred in some form or another in history. Competent tacticians identify a tactical scenario, compare it to one they have either learned about or previously practised, and then apply a solution that worked, with tweaks to account for contextual differences. The larger the

mental library a tactician has, the better they will perform.¹⁴ Tactical exercises should never have a school solution.¹⁵ There are no right answers in tactics.¹⁶ There are solutions that might work and solutions that might not work, but we can never assume that our seemingly perfect solution will be unaffected by chaos, friction, uncertainty and chance. Equally, we should not overlook the fact that a solution that looks unlikely may be hit by a 'lucky bolt' from the sky.¹⁷

There are two important components of this tactical education and training. The first is to ensure that a timely decision is made. Subordinates should be encouraged when they make a decision, even if it is wrong.¹⁸ A quick wrong decision can be corrected by a quick correct second decision—the important bit is to encourage subordinates to make decisions. As noted in *Truppenführung* ('Handling of Combined-Arms Formations'):

The first criterion in war remains decisive action. Everyone, from the highest commander to the youngest soldier, must constantly be aware that inaction and neglect incriminate him more severely than any error in the choice of means.¹⁹

The second component of education and training is for commanders and subordinates to share perspectives on how and why a solution was attained. This allows them to understand how, respectively, they think tactically and solve problems. This is a critical experience—if we know how we approach tactical problems, we have a much better understanding of the capability of each other.²⁰

In shaping tactical problems for consideration, trainers and educators should include scenarios that are not tactically feasible. For example, there is value in forcing ratios way out of acceptable ranges, as this will generate innovative and instructional discussion and thinking. Problems should always be incomplete, fragments of what is expected in reality. This promotes comfort with uncertainty—100 per cent situational awareness is unlikely to be achieved, and we should be prepared to conduct activities knowing the bare minimum.

Shared Experiences

Generating shared experiences is likewise a core activity. Such experiences do not have to occur exclusively in the context of field exercises. Shared experience will also be stronger when there is a perceived (or actual) threat of harm to the individual, but it is not limited to these situations.²¹ Physical training, adventure training, team sport and even social events all generate shared experiences. These shared experiences—bonding over events and testing activities—further build the level of trust between subordinates and commanders.

The only way to generate understanding of subordinates, including of their strengths and weaknesses, is through personal familiarity with them, or observation of their training, education and abilities. The commander's responsibility to educate, train and test subordinates, therefore, is a means of generating trust and understanding. This, however, goes both ways. Through their own observations, a subordinate will develop a better understanding of their commander's abilities and, hopefully, develop trust and faith in the commander's higher direction.²² Only through this mutual knowledge can a commander know when to impose in the process—and when to remove themselves and trust the subordinate to do the job they have to do.

Mission Command in Execution

The commander plays the lead role in executing mission command. It is, and should be, mentally and physically exhausting. Knowing where to be physically located and when to be there, checking subordinates' welfare, giving guidance to staff—the bill on the commander is great and consuming. A commander's staff are critical in this aspect. Competent staff, led by a chief of staff, must remove all but the most critical of decisions to be made by the commander, not bogging the commander down in the mundane. This is a critical function—executing mission command requires the active participation of the commander and they must be kept as free from minor decisions and situations as possible.

The execution of mission command requires a great deal of detailed planning and coordination by a commander's staff. Enabling mission command in execution requires thorough and detailed staff work to ensure that forces are in the right place at the right time, armed, fuelled and prepared. The 'right of arc' of mission command cannot be used for staff work. Planning goes beyond the commander's 'intent' paragraphs in operational orders. Staff work needs to be thorough and fully integrated across the arms corps and all affected services. Currently, our planning and orders doctrines enable mission command. In a set of SMEAC (situation, mission, execution, administration/logistics, command/signal) orders, subordinates get a series of tasks, not a mission. This situation allows them to compose their mission and the way the tasks are to be executed. Any tendency to airily dismiss the relevance of logistics, traffic control or personnel management will see every good plan come crashing down—the execution bill must also be paid in staff work.

Execution of a commander's intent must be supported by thorough staff work. This takes time, expertise and a competent headquarters with trained staff. Post 'H-Hour' needs staff support just as much. Staff must keep abreast of the changing situation and changing commander's intent, recognise for themselves when the situation has changed, and enable subordinates or point them in the new direction.

Conclusion

Army inherently uses mission command as its command philosophy. Mission command has a spectrum of command from detailed command to guided command, and the flexibility to adapt the philosophy depending upon the situation. Both extremes of the spectrum are perfectly acceptable to use at the right time and place. The challenge for commanders is, of course, knowing when and where to use this spectrum—knowing when to impose themselves and when to let subordinates act independently within the intent.

This is where paying the mission command bill comes in. We pay this bill in training, education and building shared experiences with subordinates and superiors. This generates trust and understanding of our actions. It also creates thought patterns under stress, when tired, when hungry and when the real fear of life is upon us. Warfare is a fundamentally human affair. It is about imposing our will on the enemy and upon our subordinates to do our bidding—bidding that often involves unpleasant and unnatural things.

Command is not easy. Mission command gives us the flexibility to ensure that the correct command technique is available when required. Mission command works best when we pay the bill first—a bill not paid by arriving and expecting complete trust and understanding. Spend the time, build the trust, educate, train, ensure the mutual understanding, and know subordinates and superiors. By educating, training, sharing experiences and executing Mission Command appropriately, the Australian Army can move beyond the point we are currently at and start taking advantage of the tremendous advantages that mission command can give us.

About the Author

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ENDNOTES

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- 2 Lieutenant General Simon Stuart, 'The Human Face of Battle and the State of the Army Profession', speech, Melbourne Convention and Exhibition Centre, 12 September 2024, at: www.army.gov.au/news-and-events/speeches-and-transcripts/2024-09-12/chief-army-symposium-keynote-speech-human-face-battle-and-state-army-profession.
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- 4 See Immanuel Kant, *Groundwork of the Metaphysics of Morals*, trans. and ed. Mary Gregor (Cambridge: Cambridge University Press, 1998). Thanks to BRIG Grant Chambers for this insight.
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- 6 *On the German Art of War: Truppenführung*, trans. and ed. Bruce Condell and David T Zabecki (Boulder: Lynne Rienner Publishers, 2001), p. 18.
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- 11 Carlo D'Este, *Patton: A Genius for War* (New York: Harperperennial, 1996), p. 628.
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- 14 General Mattis states that the problem with being 'too busy to read' is that you learn by experience, i.e. the hard way. Instead, he suggests that by reading, you learn through others' experiences, which is generally a better way to do business. He says, 'Thanks to my reading, I have never been caught flat-footed by any situation, never at a loss for how any problem has been addressed (successfully or unsuccessfully) before. It doesn't give me all the answers, but it lights what is often a dark path ahead.' He reminds us that human beings have been fighting on this planet for 5,000 years, and that it would be foolish not to take advantage of those who have gone before us. See Jim Mattis, *Call Sign Chaos* (New York: Random House, 2021), pp. 256–257.
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/ MORAL FRAMING IN THE PROFESSION OF ARMS ACROSS MILITARY LIFE STAGES

Renton McRae and Darren Cronshaw

The most powerful tool we have in succeeding in this era of strategic competition is not the weapons we have, nor is it technology. It is the people ...

Chief of Army LTGEN Simon Stuart LANPAC 2024

Introduction

One distinguishing element of a profession that sets it apart from other jobs is a commitment to ethical and moral conduct. The ‘profession of arms’ is like medicine, law and ministry—professionals who share a commitment to practising a role within the ethical bounds of agreed ethical frameworks.¹

The Chief of Army has appealed for an assessment of the state of the Army profession and suggests the three pillars of the profession of arms are ‘jurisdiction’, the unique service Army provides to society; ‘expertise’ in a distinct professional body of knowledge; and capacity to ‘self-regulate’. All three pillars relate to ethics, but self-regulation is especially important in guarding against war’s corrupting influence, calling for ethical foundations that ‘must be at once uncompromising and uncompromised’.²

One of the combat behaviours required of an Australian Army soldier is ethical decision-making, and it underpins all other behaviours.³ Since 2002, the Centre for Defence Leadership and Ethics (CDLE) has emphasised the importance of ethical leadership in a military context. CDLE led the compilation of the Australian Defence Force (ADF) ‘Philosophical Doctrine on Leadership, Character and Ethics’.⁴ Relatedly, it is currently developing training continua for integrating character-based leadership at each stage of the military career for joint professional military education (JPME) beyond induction training.⁵ Since 2019, the Centre for Australian Army Leadership has been delivering the Australian Army Leadership Program across Army’s promotion courses, including

integrating ethics lessons in every leadership course. Army Special Operations Command has developed ‘ethical armouring’ to equip its members to operate ethically at all times and to return from service both physically and morally whole.⁶ These are freshly contextualised initiatives to remind present and future soldiers what past Aussie diggers have long esteemed—a proud tradition of being and behaving upright and ethically. Ethical behaviour is about *doing* good things (*good soldiering*) undergirded by strength of moral character—*being* a good person.

Character is that moral construct that ‘relates to how we use moral sense to distinguish good from evil, right from wrong, just from unjust, and virtue from vice’.⁷ The whole purpose of virtue ethics is to inculcate good character in people so that they will be good people who make good decisions.⁸ A revival in virtue ethics and virtuous practices is important in military ethics education because it underlines the Aristotelian foundations of character that guides behaviour rather than relying on rules when we cannot foresee every situation.⁹ Specifically, we cannot teach soldiers drill-based responses for every dilemma they may face, because we cannot imagine all the complex issues future warfare will present.

To help posture Army for future land warfare challenges, soldiers need a moral framework. This is part of the enduring nature of war despite changes to strategic imperatives and adaptations in methods of warfare.¹⁰ It is nothing new. Acknowledging this enduring characteristic, this article is an invitation to refocus character training around the development of a clear moral inner self, and to offer generation-specific training across a soldier’s career life stages.

Character training and ethics education occurs intentionally in ab initio training environments. These include the Army Recruit Training Centre—Kapooka, the Royal Military College—Duntroon, and sometimes initial employment training (IET) conducted at various military bases throughout Australia. In those contexts, however, it can be difficult for learners to absorb character and ethics lessons alongside everything else. Once a soldier is posted to a unit the presumptive need for good character prevails, but ongoing formal character development is at the discretion of command and, while touched on during promotion courses, can be otherwise challenging to timetable. At the practical level, character development is every leader’s responsibility every day—to set a moral example and be attentive to opportunities to develop character in team members.

It is the remit of a chaplain to support command with monitoring, coaching and resourcing character development in formal and informal contexts.¹¹ This is part of the chaplain’s role description and draws on their expertise in cultivating values and beliefs. Where then can chaplains complement and resource character development initiatives, and

what is needed at different life stages of soldiers through their careers? This article offers chaplains—as well as soldiers and commanders—a philosophical and pedagogical framework through which to facilitate learning about a soldier’s moral inner self. It also proposes a generational understanding of soldiers across their career and suggests a key lesson for each stage.

Towards a Moral Inner Self

The development of the inner self (the so-called ‘invisible underside’¹²) is critical for guiding moral and ethical decision-making. Soldiers need fit bodies, healthy minds and sustaining relationships, but also the grounding of purpose and meaning that comes from the spiritual dimension of the inner self. This article argues for the development of this equally important grounding of purpose. Chaplains bring a distinctive contribution to supporting the spiritual dimension, as well as holistic pastoral care across the bio-psycho-social-spiritual spheres.¹³ Joint Health Command and the Defence Mental Health and Wellbeing Branch have adopted a bio-psycho-social-spiritual support posture for wellbeing, incorporating meaning and spirituality as an important wellbeing factor.¹⁴ The moral inner self addresses the belief systems that determine the values that shape behaviour at work, at home and in the community.

To set the framework for considering opportunities for formal and informal character development within Army, this article draws upon the characteristics and behaviours of human life-span development theory. This theoretical basis helps explain how humans learn, mature and adapt from infancy to adulthood to elderly phases of life, and how this interacts with resilience.¹⁵ The consistent theme through each of these stages is the formation of the moral inner self, guided by three statements that underpin personal responsibility and accountability:

- Know your self
- Control your self
- Give of your self.

This is known as the LEO ‘K-C-G’ character development model, originating from the life and ministry of Chaplain Lionel Edward Orreal CSM (Ret.), commonly known as ‘Leo’. It serves as a tribute to his boundless energy, passion and faithfulness to ‘serve the soldier’. It is meaningful for us as chaplains, especially some of us who know him, to use Orreal’s framework. Yet more significantly, the K-C-G framework complements other models of character development while emphasising the importance of giving attention to one’s self for the end purpose of service.

Know Your Self

The Socratic dictum 'The unexamined life is not worth living' reminds us that the pursuit of knowing yourself has characterised the desire for meaning, purpose and identity for thousands of years. Knowing yourself requires self-reflection and self-awareness about one's personality and temperament, strengths and weaknesses, assumptions and blind spots, worldview and cultural assumptions.

The person with poor self-awareness is usually unaware of why they behave how they do and how their behaviour affects others. They may be oblivious to the masks they wear, creating a duplicity that lacks integrity. Inability to take responsibility for one's thoughts and actions limits the development of character and leadership. Honest self-awareness challenges known and unknown fears, insecurities and masks, and fosters responsibility for thoughts and actions as a basis for sound ethical and moral decision-making.

John Dewey commented: 'We do not learn from experience, we learn from reflecting on experience.'¹⁶ To 'know yourself and seek improvement' is the foremost of the ADF leadership behaviours.¹⁷ But self-awareness is not an end in itself. To know oneself is a prerequisite for controlling oneself, the purpose of which is to give of oneself in service to others.

Control Your Self

Knowing oneself is about being self-aware and self-reflective, while also being self-regulating and self-controlling. This takes particular resilience in the context of challenge and adversity. Self-regulating emotional response to adversity and overcoming intense fear demonstrates resilience of the inner self. It provides the ability to recover quickly from setbacks and stressful situations and to adapt to new circumstances. It helps transform us beyond self-centredness and self-preservation. It also helps model and lead others in these directions. By example, leaders motivate and influence others to push themselves beyond their perceived limits and achieve far more than they had imagined they were capable of. They also set the ethical tone of their units.

ADF mandatory training includes instruction in workplace behaviour, the essence of which is controlling yourself and showing respect to colleagues. Values-based behaviour requires everyone to accept personal responsibility and accountability for their actions, and to think about the consequences of their behaviours and actions for themselves, for others, and for Defence more broadly. When members come to the organisation with dysfunctional backgrounds or rigid mindsets, they need leaders to be the 'moral brake' who can align values and behaviour in appropriate directions. Ultimately, soldiers do best to exercise this self-control themselves.

To *control your self* is not a process of disassociating from one's emotions. Emotions play a vital role in the process of self-reflection, providing a window into the soul. To control

oneself requires a person to recognise and identify the emotions they are experiencing—and sometimes to ‘feel the fear and do it anyway’.

Give of Your Self

Being self-aware of and controlling yourself are not ends in themselves. They are also the basis for being ready and able to give yourself in service to others. The end goal of self-awareness and self-control is service, the first Defence value: ‘the selflessness of character to place the security and interests of our nation and its people ahead of my own’.¹⁸ This selflessness of character represents the highest of ideals, challenging the nature of individualism and self-centeredness.

Giving of yourself in service has natural synergy with—and is guided by—other Defence values. Service takes *courage*—‘the strength of character to say and do the right thing, always, especially in the face of adversity’. Without physical courage, it is difficult to lay our lives on the line. Without the conviction of moral courage, it is difficult to lay our reputation on the line and consistently say and do the right thing.

Giving priority to others also comes from *respect*—‘the humility of character to value others and treat them with dignity’. Serving with respect is learned through interpersonal relationships, in teams with people different to us, and in humility as we recognise the dignity of civilians and of enemy forces.

Transcending self-interest and fighting for the interests of the nation and its people is also fuelled by *integrity*—‘the consistency of character to align one’s thoughts, words and actions to do what is right’. When we know in our inner self what is right, we express that in right actions and truth in speech.

Finally, giving of yourself is framed by *excellence*—‘the willingness of character to strive each day to be the best I can be’. Striving to transcend self-interest is a continuous process—for every career stage. Relational dynamics within military teams allow character shortfalls to surface. With skills of self-reflection, we can work through character and relational shortfalls. This is an exercise in excellence—being the best and better version of ourselves in the interest of better serving the people of Australia.

The LEO K-C-G framework of knowing, controlling and giving of yourself allows for individual lesson development and delivery. It is a simple development trajectory for people to reflect upon their values, beliefs and behaviours, and to challenge their assumptions, biases and blind spots. It can guide formal or informal lessons for teams. It also provides a useful guide for counselling, providing a simple structure and language to challenge and improve behaviour and thinking. Moreover, it can be tailored and applied to members at different stages of the military life cycle.

Military Life Stages

Moral framing means different things for soldiers at different stages in their careers. We propose a model of four stages of military service, beginning at age 17 (see Tables 1 and 2). Each stage, defined by an additional decade of service life, builds on previous stages of development. The first, *the young warrior*, represents the initial stage of enlistment and service that shapes the military and combat mindset. The second, *professional mastery*, describes those who embrace the military life as a calling and a career. The third, *hardened and stoic*, represents the more senior levels of service. Lastly, *old warrior* describes those who have committed the greater part of their life to military service.

Table 1: Four military life stages¹⁹

Stage	Description
Stage 1	Young warrior (17–27 years)
Stage 2	Professional mastery (27–37 years)
Stage 3	Hardened and stoic (37–47 years)
Stage 4	Old warrior (47 plus)

Each stage includes general age brackets, though sometimes people enter a stage at a different age.²⁰

The ‘four military life stages’ model is reflective of other age-based typologies such as Piaget’s cognitive development theory, Erikson’s psychosocial development stages, Vygotsky’s sociocultural theory, Kohlberg’s moral development stages and Fowler’s faith stages.²¹ Further research may explore connections between these theories and military life stages. For the purpose of this discussion, the purpose of the stage and age guidelines is to invite commanders, chaplains and members to think about where individuals are in their military career development and what lessons are needed at different stages. The intention is to tailor character training for different career stages—allowing for flexibility to adjust lesson plans, pastoral counselling and training activities to suit the respective audiences, utilising whatever holistic learning spaces are available to enhance character and ethics in the context of the JPME continuum.²²

To cultivate a moral inner self in soldiers, we propose one key lesson for each stage. These lessons have relevance across a soldier’s career, but we suggest they deserve particular attention for soldiers at particular stages.

Stage 1—The Young Warrior (17–27)

The term warrior is a contentious description of soldiers within the ADF. Some suggest the ADF does not widely identify with a warrior culture. The negative perception of ‘warrior’ is more commonly attributed to American culture and has been popularised in the Australian Army after operations in Iraq and Afghanistan. Australian veterans from earlier conflicts have not widely described themselves as warriors, though they recognised that being a soldier was about fighting and (if required) killing. A ‘warrior culture’ of ‘warrior heroes’ was identified in the Afghanistan Inquiry as a factor that led to ADF personnel being implicated in war crimes.²³ Deane-Peter Baker suggests ‘guardian’ is a better term than warrior.²⁴ Others use ‘combatant’ or ‘war-fighter’. Warrior as a description of the Australian soldier is not widely appealing to the ADF or the Australian public and is not used by Defence Force Recruiting. Thus there are a number of reasons to be wary of promoting the use of the term.

However, we believe ‘young warrior’ is a helpful typological description of the first stage in the service of an Australian Army soldier (or Navy sailor or Air Force aviator). It is relevant to the need at this stage to develop a moral combat mindset. We note that Deputy Chief of Army Major General Chris Smith is urging Army to reclaim and achieve a modern warrior culture.²⁵

Warrior culture ... needs to be a culture that wins battles, and by extension wins wars. It must sustain morale and a fighting spirit. It needs to imbue soldiers with the ability to kill. It must be a noble culture with an element of restraint, mirroring the expectations of the society that sends us to protect it. It needs a strong sense of loyalty, loyalty to the government and the cause for which we fight for. It must include an obedience to the lawful orders of the chain of command complimented [sic] by a strong sense of discipline.²⁶

Deputy Chief of Army is referring to the ethos of the moral combat mindset that we believe is crucial for ‘young warriors’ to adopt and embody. Warrior as a term is gender neutral and generic, and inclusive of all arms of military service. Moreover, warrior suggests a role that ideally is about serving the community, engaging in war for the sake of defence of others—that is, a moral focus.²⁷ Thus, in the tradition of typology, ‘young warrior’ is a good depiction of the first stage of the military persona. We are not espousing it as a label for Australian soldiers (or sailors or aviators). But it is descriptive of this first phase of military service. Ages 17 to 27 represents the formative stage of military service and the shaping of the military identity. In the JPME continuum this stage incorporates learning level 1 (induction) and evolves into level 2 (intermediate).²⁸ It is a period when individuality, independence and identity are central to self-worth and self-image. The young warrior is usually highly motivated, competitive and impressionable, determined to prove their worth and find their place in a community that measures itself by high standards.

Prior to enlisting, young warriors commonly have limited life experience, with an underdeveloped interest in or aptitude for developing the inner self. To overcome the self-serving bias that has limited understanding of personal strengths and weakness, the primary need during the young warrior stage is to develop skills and practices of self-awareness and self-regulation—to know and control yourself.

An ambitious young person is fabled to have asked a master:

‘I want to be your student, your best student. How long must I study?’

‘Ten years.’

‘But ten years is too long. What if I study twice as hard as all your other students?’

‘Then it will take twenty years.’

Young warriors cannot shortcut the development of self-awareness and self-regulation.

Lesson preparation for young warriors in the first stage of service life must look at the nature of the self and the need to develop self-reflective skills that allow for character and leadership growth (knowing yourself in order to control and give of yourself). One key lesson throughout this stage—from recruit training, through IET and development as a junior leader—is to cultivate the military and combat mindset.²⁹

A Moral Combat Mindset

Young warriors need to be formed and encultured in a certain mindset—a military and combat mindset—and this needs to be intrinsically moral. The primary purpose of developing the combat mindset is to condition young warriors to face the rigours of war and death. Military service requires the development of warfighting skills, knowledge, attitudes and behaviours to seek out and engage with an enemy, kill them, and be prepared to die oneself. This is the ‘contract of unlimited liability’ that is central to the idea of the professional soldier.³⁰ There is no sugar-coating the brutal nature of war fighting.

Infantry Officers Caligari and Lewis describe the development of mindset before skillset:

The Combat Mindset is a state of mind that prepares soldiers to kill the enemy, survive, and then continue the fight. This state of mind offers the optimal paradigm for training Australian soldiers, and promotes the development of resilience and intuitive behaviours to perform in battle ...

The Combat Mindset's foundation identifies the combatant, not his tools, as the weapon—a system that operates cohesively to kill the enemy. The Combat Mindset is the defining philosophy of the professional soldier; it is the difference between a true soldier and someone who simply has weapons qualifications and equipment ...

A key outcome in the adoption of Combat Mindset training is the 'pre-combat veteran'—a soldier who has the skills, deep understanding of warfare, and maturity of a combat veteran, but is yet to fire a shot in battle.³¹

Caligari provides valuable insight into the formation of the young warrior's mindset and identity. The language characterises the mindset—'a state of mind that prepares soldiers to kill the enemy, survive, and then continue the fight'. Within the profession of arms, the combat mindset makes sense, but describing a person as a weapon system that operates cohesively to kill other humans highlights potential moral dissonance in the development of the young warrior, in particular the effect on an adolescent brain.

The ADF's publication *Chaplaincy in War* (2024) recognises that military personnel have a unique way of looking at life as they train and prepare for war. The potential violence brings a brutal reality of fear, ambiguity and confusion, different from the reality of normal civilian jobs.³² Survivability and resilience depends on whether soldiers adopt a combat mindset.³³ Army has training in combat behaviours to drill to enhance survivability and effectiveness. These include combat shooting, Army combatives, tactical combat casualty care, combat physical conditioning, behaviour of combat communication (a recent addition)³⁴ and foundational training in ethical decision-making. Ethical decision-making synergises with the other five behaviours—positioning soldiers not just to win battles but to help win the war by winning 'hearts and minds'. Importantly, training soldiers in ethical decision-making positions the ADF to uphold its national reputation by diminishing the risk of war crimes being committed by its members. We are also concerned not just with physical survivability but with bringing soldiers home with their souls intact. This requires ethical decisions, an ethical culture, and a moral combat mindset building on a moral inner self.

The combat mindset has a powerful effect upon the adolescent brain and the bio-psycho-social-spiritual growth of young adulthood. Jünger in *Tribe* emphasises the military's universal and historical practice of disproportionately drawing recruits from troubled families.³⁵ The development of self-awareness and self-regulation is difficult for those who have suffered trauma during early developmental stages of life. Such individuals are more likely to struggle to emotionally process and communicate their feelings, making it difficult to turn a combat mindset on and off or differentiate between normal and abnormal behaviour.

How do we develop not just a combat mindset but a *moral* combat mindset in young warriors? Firstly, we need to discuss the moral component of fighting power. Chaplains teach about beliefs and values at Kapooka, inviting recruits to reflect on what worldview and belief system they draw on. The same type of individual reflection is also needed in IET and unit contexts. *Foundations of Australian Military Doctrine* underlines that soldiers need physical, mental and spiritual preparation and training to condition their minds and bodies for war:

War is by nature brutal and tough. In this environment, the ADF must understand and enforce the rule of law so that they can rise above the chaos and uncertainty and achieve the missions and objectives set by Government. The ADF's people need to be spiritually, mentally and physically tough enough to conduct war.

Spiritual, mental and physical toughness are not innate qualities gained at birth; they must be developed. This requires deliberate and demanding preparation through training, and through the Service and joint professional military education system.³⁶

Fighting power derives from the integration of these three components: the intellectual component provides knowledge to fight, the physical component provides means to fight, and the moral component provides will to fight.³⁷ Their synergy creates warfighting power in the military and combat mindset. The intellectual and moral components also combine to help with ethical decision-making, including dilemmas of balancing achieving the mission, protecting one's mates (or—for commanders—the soldiers one leads), and protecting non-combatants.³⁸

Secondly, a moral combat mindset is best modelled and taught by senior soldiers and officers, but also supported by chaplains. Credibility and authority come from experience. In every military environment, there are leaders and mentors who have the respect and admiration of the young warrior. They are the people the chaplain best utilises to communicate to young warriors. Their example and experience impart inspiration and motivation for change. Anecdotally, we have observed that the co-teaching of combat mindset by chaplains and senior soldiers offers several benefits. The senior non-commissioned officer (NCO) can share from their perspective and experience, while the chaplain facilitates, presents ethical tools and is available for individual follow-up. Junior NCOs also have an important role to play—moral framing is unlikely to be adopted if a soldier's leader does not agree with it and embodies this dissonance in their interactions with troops. NCOs and senior officers are often the 'more knowledgeable other', to use Vygotsky's sociocultural term,³⁹ who helps young warriors cultivate a *moral* combat mindset.

Thirdly, a moral combat mindset can be developed through integrated field-based training, not just classroom education. Through *hard* training, the discipline of controlled aggression allows for the development of self-regulation, shaping the behaviour of the individual and the team. Many young warriors are still adolescents in terms of development, prone to impulsiveness in decision-making without considering consequences.⁴⁰ As we train young warriors in the military and combat mindset, it is imperative to develop the moral inner self in order to prepare the next generations of members for 'good soldiering' and the highest standards of ethical decision-making and moral behaviours—and this is best done using scenarios in field-based training.

Whatever trade or specialty they pursue as soldiers, young warriors need a moral military and combat mindset. They need to be able to integrate this mindset with their sense of moral inner self, while also maintaining separation in order to sustain a healthy life outside of the ADF, including being ready to transition when they leave the organisation.

The Royal Commission into Defence and Veteran Suicide identified that leaving the ADF involuntarily was a serious risk factor for suicidality.⁴¹ This may especially apply to young members, and we note that a number of our personnel do not serve beyond four years and some serve for far less.

Stage 1 lessons will help young warriors understand their military service and identity within the wider responsibilities of life. But stage 1 lessons also help soldiers develop their moral inner self to be positioned for cultivating professional mastery.

Stage 2—Professional Mastery (27–37)

The second stage of the military demographic represents consolidative years of service, defined as professional mastery, when theory and practice align. In the JPME continuum, this stage incorporates the completion of level 2 (intermediate) and moving into level 3 (joint operational).⁴² Achievement of professional mastery at this level demands the highest degree of moral character and leadership in conjunction with trade competency. Life-stage theorists, beginning with Erikson, refer to 'ego strength' as a middle adult stage of productivity, creativity and procreativity.⁴³ For soldiers, professional mastery is the goal that young warriors aspire to grow into, the measure of military success. Through professional mastery, the military identity submits its autonomy to a calling of selfless service. For most commissioned officers, professional mastery defines the pathway for command and leadership responsibilities. Positions of senior corporal, sergeant and warrant officer embrace the responsibilities of military custodianship.

Caligari emphasised the combat mindset as *the defining philosophy of the professional soldier*. The transition from young warrior to professional mastery requires self-reflection and forward projection, asking ‘What do I need to do to become the person I want to be?’. The convergence of knowledge and experience creates a synergy of confidence, authority and responsibility.

Yet as soldiers develop as young warriors and as they develop professional mastery, they can also become desensitised to the emotional consequences of military service. This can occur due to the loss of mates killed in training or operations; to missed opportunities (such as being overlooked for deployments, promotions and courses); or to relationship failures. Such factors all take a toll within the moral conscience. Operational service and combat-related experiences can suppress the moral conscience, hardening the heart, reducing empathy and compassion. This can cause distance in friendships and family relationships, and a hardening rather than development of the moral inner self. An important key concept for soldiers to understand, coinciding with the development of professional mastery, is moral injury.

Moral Injury

Moral injury is a complex term to define,⁴⁴ although pivotal to understanding the workings of the inner self for knowing and regulating oneself, which is particularly important given the stress of moral dilemmas upon one’s mental health and wellbeing. Indeed, moral injury can be classified within the Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR) under the symptom cluster of ‘moral, religious and spiritual problems’—namely ‘experiences that disrupt one’s understanding of right and wrong, or sense of goodness of oneself, others or institutions’.⁴⁵ The ADF specifically defines moral injury thus:

Moral injury is a trauma related syndrome caused by the physical, psychological, social and spiritual impact of grievous moral transgressions, or violations, of an individual’s deeply-held moral beliefs and/or ethical standards due to: (i) an individual perpetrating, failing to prevent, bearing witness to, or learning about inhumane acts which result in the pain, suffering or death of others, and which fundamentally challenges the moral integrity of an individual, organisation or community, and/or (ii) the subsequent experience and feelings of utter betrayal of what is right caused by trusted individuals who hold legitimate authority.⁴⁶

Fundamentally, moral injury occurs when an external experience transgresses or violates a person’s conscience, their sense of right and wrong, undermining their belief system—creating a conflict within the inner self. Pastoral narrative disclosure⁴⁷ is the ADF model which can be utilised by chaplains (military⁴⁸ and civilian⁴⁹) to help address and

rehabilitate personnel from moral injury.⁵⁰ What we discuss here is how an understanding of moral injury can coincide with and support professional mastery, and how professional mastery can respond to potentially morally injurious encounters.

In order to apply a *moral* combat mindset, young warriors and more experienced soldiers need to learn when and how it is right to apply lethal force. A dilemma of military service and the combat mindset is that Army trains soldiers to kill—normally an act against a healthy moral conscience. To kill a human being is usually an immoral act, yet it is legally justified in the military under necessary rules of engagement. Learning how to process sanctioned killing and associated consequences of warfighting is critical if the impact of moral injury is to be minimised. Where the rationale for killing is clearly justified (as when an opposing soldier is a threat to them and their country), soldiers understand that this is the nature of their role and do not usually feel guilty or suffer moral injury. However, other behaviours in war—acting outside the ethical bounds of just war—are always wrong. For example, when soldiers perpetrate unethical acts, a guilt response is appropriate—and accounting for and healing from the moral injury is necessary. This is all part of the journey of professional mastery.

One of the contributions of Ukrainian military chaplains is helping their soldiers through character training, mentoring and rituals to maintain morality and ethics during a prolonged war on their own soil. The desired effect is to preserve the individual humanity of military personnel and to help them avoid reckless behaviours, war crimes and moral injury.⁵¹

Professional mastery represents the epitome or culmination of the young warrior's skills and strengths. Coinciding with the development of the skills and leadership of professional mastery, it is critical for soldiers to develop their moral inner self in ways that help them understand, navigate, avoid or, if necessary, heal from morally injurious events. This is for the sake of the soldier's own soul and mental health, and those of their families, friends and colleagues.

Stage 3—Hardened and Stoic (37–47)

The term 'hardened and stoic' is applied to the more senior military personnel and describes a distinct type of military demographic. Greater responsibility and greater accountability characterise this demographic, often requiring a prioritisation of ADF needs above personal needs. This stage requires highly developed leadership and technical skills and corresponds with JPME continuum learning level 3 (joint operational) and/or level 4 (integrated).⁵² This article focuses more on the relationship needs at this military life stage.

Having given the greater part of their life to service in uniform, this demographic is difficult to influence. Varying levels of moral injury and mental health related issues sometimes characterise the inner self, compounded by a military culture that ensures professional mastery masks outward signs of perceived weakness. Members who become hardened and stoic may rarely seek external help, enduring hardship and challenges as part of their professional duty.

It is sometimes difficult to talk about feelings with the hardened and stoic, especially when conditioned by a combat mindset. Nevertheless, older military people may be open to reflecting on and talking about their feelings, especially after relationship struggles or highly emotional or traumatic experiences. Understanding feelings is essential to developing the inner self, which reinforces why the development of personal character and leadership is critical. Emotions give a person a sense of being alive; they move people. Without feelings, people lose interest in things, in life itself. The greater the inability to feel and emotionally engage, the greater the risk of moral dissonance, compounded by moral injury. A person can become detached or disassociated from the things that give meaning and purpose, often appearing insensitive to the needs of others. An unattributable popular saying is 'A slab of concrete doesn't have to worry about weeds—but it will never be a garden', which suggests to us the need for vulnerability if we want to grow and be creative.

Even if not interested in 'growth and creativity', members still need to learn to be ethical because of negative consequences for them and others if they are not. Yet the emphasis on self-discipline and self-control that is required to be combat ready has an effect on the inner self, particularly emotions. If a person is to lead by example, and be capable of demonstrating Defence values and behaviours, they must have the capacity for empathy and compassion—this is part of their moral responsibility as a leader.

Stoicism provides a philosophical code well suited to military life. Stoicism teaches that a person cannot control the circumstances that happen to them; they can only control their response. This thinking is repeated in the classic teaching of Victor Frankl.⁵³ If not a necessary philosophy of a soldier at any stage of service, some teachings of stoicism provide helpful coping mechanisms. For example, Jim Stockdale modelled and popularised stoicism from what he learned in maintaining morale as a prisoner of war in Vietnam.⁵⁴

Ethicist Nancy Sherman in *Stoic Warriors* explores the relationship of stoicism to US military culture, seeking to understand 'the attractions and dangers of austere self-control and discipline'.⁵⁵ She points out that there is a cost to being stoic, describing stoicism as a blessing and a curse for those in the military: 'A blessing in that it girds them for facing the horrors of war, a curse in that it cannot deliver and that leads to the undoing of the mind.'⁵⁶

Sherman acknowledges the strengths and qualities of stoicism that describe the military persona, while cautioning her readers to be ‘critical and wary of the stoic tendency to both over-idealise human strengths and minimise human vulnerability’.⁵⁷ This underside of stoicism—the tendency to minimise vulnerability—suggests a need for soldiers at this military life-stage to develop this quality. A primary need for this ‘hardened and stoic’ period of service life is emotional connectedness.

For members who are not ‘hardened’ by service, this is still a stage of emotional connections with significant family and friends. Many members by this stage of their career and life have formed significant loving relationships and many have begun families. The experience of partnering and/or parenthood fosters wisdom and empathy and opportunity for practising emotional connectedness. For healthy relationships, knowing, controlling and giving of yourself continues to be important.

Emotional Connectedness

Emotional connectedness begins with the self-awareness and emotional intelligence as to how life and military service affects emotions. Young warriors learn to value service for others and develop self-control as a survival instinct. To survive and thrive long term, they also need to care for themselves. We all need emotionally safe environments where we can be ourselves and not feel threatened or embarrassed. Mates in the ADF can offer this but at all stages we also need friendships and family relationships outside the organisation.

The longer a person serves without developing their inner self, the harder it is to reconcile the stoic attitude of military professionalism with the emotional intimacy needed to develop interdependency with significant others. There is much about the combat mindset that potentially clashes with family systems and the nuances of social mastery. Although soldiers may be motivated by selfless service, from the perspective of family and social life, military service can appear inherently selfish or self-serving. Professional mastery can demand continuous time away from family and friends. The ethos of sacrifice demands that the military comes first to remain loyal to tribal identity.

Sociologist Hugh Mackay offers helpful advice on balancing investment in service for the greater good with investing in life-giving relationships. He echoes the stoic view of how wisdom and living for a purpose greater than oneself is the fount of happiness: ‘fulfilling one’s sense of purpose, doing one’s civic duty, living virtuously, being fully engaged with the world and in particular, experiencing the richness of human love and friendship’.⁵⁸ Yet in *The Art of Belonging*, Mackay alludes to our need for community. He argues we should not be so focused on the issue of ‘Who am I?’ but should ask ‘Who are we?’.⁵⁹

Who are we? recognises the uniqueness of the military identity and mindset, and the importance of healing within community. Forgiveness requires emotional vulnerability and the desire to be connected with significant others. Forgiveness of self is a choice often born out of brokenness within the inner self. Mackay concludes:

This is the ultimate paradox of self-hood: when we get to the core of who we are, we find that just like everyone else, our essence is love—and what can love be about except connection and community.⁶⁰

While serving beyond ourselves we need emotional connectedness with others. A risk of professional mastery leading to being hardened and stoic is that the focus on work and service are achieved to the exclusion of self and others. This is not everyone's experience. Some become aware of the indoctrination or emotional downsides of their training and begin to question it. Many naturally grow in emotional awareness as they develop their broader identity as partner, parent and citizen.

Wherever the motivation comes from, the greater need during this stage of military life is connectedness—connecting with others (outside of the military tribe) and building interdependent relationships as well as connecting with self. Otherwise, the risk is that soldiers are hardened to be strong for service but also hardened in being disconnected from themselves and distant from their friends and families. The real casualties are often the families, partners and children deeply impacted by the vicarious effects of military service. Families sacrifice much on the altar of service. A saying of yesteryear was, 'If the Army wanted you to have a wife [sic.] they would have issued you one'. Today it is more common to honour the importance of families, but the ongoing challenge is to nurture this aspect of life.

Giving and forgiving are intricately associated with connectedness and community, and echo again the topic of moral repair. Personnel suffering morally injurious events often cannot overcome a barrage of negative feelings, believing they are unworthy of forgiveness, particularly if they were the perpetrator. They then struggle to forgive others when they cannot forgive themselves. Often, the first step in this process occurs when a person feels safe within the trust of others (i.e., mates who have shared the same experience). Family and friendships outside Defence are also integrally important in soul repair.

Figure 1: Moral framing across the military life stages⁶¹



Stage 4—The Old Warrior (47+)

Old warriors are the fourth career life stage in our categorisation. We describe these as the 47-plus year olds approaching the end of their careers. They still have a lot to offer the ADF but also, importantly, have much to offer beyond it. The term old warrior is symbolic of the soldier who has grown beyond their youthful years, through professional mastery and the ‘hardened and stoic’ years and beyond. They may still exhibit professional mastery but they know their military years are limited and their focus shifts to transition beyond the uniform.

A mid-life task is to consider to what we have been giving our lives and to what we want to give the remainder of our lifetime. This can trigger reorientation of values and goals.

Erikson describes the task of middle adulthood (40–65) as developing generativity versus stagnation, and creating things that outlast one, including parenting children and contributing to the world.⁶² As a life-stage theorist, he uses the term ‘ego integrity’, involving acceptance of one’s life as meaningful.⁶³ This is not just about work life and in fact often involves asking about identity and purpose beyond work. For ADF members with a compulsory retirement age of 60, these questions necessarily come earlier than they do for people in some other careers. As old warriors finish out their careers and approach retirement they still need to maintain a moral mindset, address any moral injuries and foster social connectedness, but additionally a key lesson to consider is legacy. In one sense this is an ultimate expression of knowing yourself and where you can best make a contribution, exercising self-control and giving of yourself to others and the world around.

Legacy

Transition and retirement from the ADF, and thinking about legacy, can occur during any stage of service life. But beyond age 47 a significant shift occurs in military careers, and identity in that transition will happen in the coming decade.⁶⁴ Looming transition triggers thoughts of what contribution members have made, what contribution they want to still make in Defence, and what and how they want to make the world a better place beyond it. Moreover, legacy is not entirely about what a person leaves behind; it is also about what they take with them—the Defence legacy. These are issues important for a person’s inner health and wellbeing, addressing the spiritual context of meaning, purpose and identity within the bio-psycho-social-spiritual model.

Many members move successfully into other spheres of service and duty, including contributing back to the Defence and veteran community. But some struggle with the loss of identity and the long, cumbersome process of transitioning.⁶⁵

Legacy implies a lasting impact left behind after one leaves. What may matter more is sense-making and significance—defining the events and outcomes that matter most to the individual. These might not leave a lasting legacy organisationally, but they help shape a vision of one’s own life’s purpose and thus personal legacy.

Whether they are old warriors or young warriors or others transitioning, for soldiers to transition well requires deliberate planning and preparation. The process has improved greatly in recent times, through the allocation of a transition coach and information seminars. But the process does not necessarily guide members in meaningful self-reflection on matters of legacy. The longer a person has served, the more significant the need for reflection, particularly on legacy; however, deeper self-reflection usually occurs after a person has separated from the ADF. It is important for lessons on legacy to front-load information that will help members reflect on these important themes when the opportunity arises.

Conclusion

Moral framing provides a construct for personal character and leadership development guided by ADF values and behaviours. As a complement to ethical decision-making models and ethical armouring, it seeks to strengthen and protect the inner self, recognising the role of the human spirit as defined within the bio-psycho-social-spiritual model of health and wellbeing. Through the leadership tenets of *know your self*, *control your self* and *give of your self*, moral framing is about developing ethically and morally informed leaders—tailored to the demographics of military service and drawing on characteristics of life-span development theory.

This article has proposed four career stages of soldiers—beginning with the young warrior. Young warriors need a combat mindset, uniquely shaped to fit its purpose. But this needs to be foundationally a *moral* combat mindset, helping guide young warriors with the moral element for warfighting power to influence morale for the will to win and a thorough commitment to moral and ethical practice of the profession of arms.

The second stage for the career soldier is development of professional mastery. From hard training to operational experience and unconditional service, the oath to serve calls for sacrifice. But military service also brings risks of moral injury and therefore the need for attention to moral or soul repair.

The third stage is labelled ‘hardened and stoic’, which suggests both strengths and potential weaknesses. A bio-psycho-social-spiritual model of wholeness recognises the need for emotional connectedness and meaning-making beyond the uniform—underlining the importance of vulnerability and honesty at emotional levels with oneself and mates, and with family and friends beyond Defence.

The fourth stage is the old warrior. A key lesson for soldiers at this career stage is legacy—considering what they are leaving behind, what they want to take with them and how they want to continue to make a value-based positive contribution to their community and world.

We do not presume that these lessons are exclusive for that stage; nor are they the only lesson each stage needs. As with most theories, the stages are probabilistic rather than prescriptive.⁶⁶ We hope our analysis will prompt other and better plans for JPME and counselling for the profession of arms across military life stages. What is critical and what we want to continue to develop is how to foster the inner formation of the moral self for soldiers, tailored to the demographics of military service. We thus need some of our best thinking and training focused on how to best develop the moral inner self of our most important capability—our people—alongside giving them the best tools and trade competency for the profession of arms.

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ENDNOTES

- 1 Early discussion of officers as professionals included Samuel P Huntington, *The Soldier and the State: The Theory and Politics of Civil–Military Relations* (Harvard University Press, 1957), pp. 7–18; and Sir John Winthrop Hackett, *The Profession of Arms: The 1962 Lees Knowles Lectures Given at Trinity College, Cambridge* (London: The Times Publishing Company Limited, 1962), pp. 38, 40. Huntington equated officers with physicians and lawyers, while Hackett added holy orders and teachers to the list—an important nuance for this article focused on chaplaincy and teaching of morality. The ADF draws on General Hackett’s framework to underline the importance of codes of conduct. See Australian Defence Force, *ADF-C-0 Australian Military Power*, Edition 2 (2024), p. 69.
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- 19 Table 1: 'Four military life stages' was developed by the authors.
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 - Stage 1: 1–4 years' service: young warrior
 - Stage 2: 5–10 years' service: professional mastery
 - Stage 3: 11–15 years' service: hardened and stoic
 - Stage 4: 16–20 years' service: seasoned warrior
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/ DOES THE PROFESSION OF ARMS EXIST? ALTERNATIVE VIEWS ON THE NATURE OF THE PROFESSION

Phillip Hoglin

The term 'profession of arms' is relatively common throughout military discourse. However, while it appears frequently in doctrine, speeches,¹ articles and essays, until late 2021 the term was undefined by the Australian Defence Force (ADF). While it is now articulated in doctrine, the ADF's definition has not yet been distilled for the Australian Army but left instead to notions of abstract intuition developed by individuals through years of training and exposure to the Army institution. Despite this lack of a simple and clear definition, the language around the profession of arms is readily adopted by Army members, particularly officers, who unquestionably conform to what they perceive to be its norms, requirements and purpose. Overall, it is taken as given, by both the institution itself and much of society, that there is a literal 'profession of arms' in Australia, embodied in part by the Army (alongside Navy and Air Force), whose existence is unique, tangible and unequivocal and exhibits all the characteristics of a contemporary profession.

In this article, a more inquisitive, perhaps sceptical, approach is taken, to explore whether the Army can really be described as a profession. First, an important distinction should be made between 'professionalism' and 'profession'. Despite the occasional transgression from some individuals, the overwhelming majority of Army members are professional in the conduct of their roles and responsibilities. However, a person behaving professionally in their conduct does not necessarily make for the existence of a profession, nor does it imply membership in one.

To establish the case for the profession of arms as a bona fide profession, this article compares the Army against the most commonly accepted general characteristics of a profession. A contemporary Australian definition for a profession will be considered alongside some of the classical definitions of the profession of arms. Additionally, the characteristics of the Australian Army will be compared against the characteristics of professions outlined in general literature. Following this, a deeper examination will be undertaken to identify any areas where the 'profession of arms' embodied by the

Army might deviate from the boundaries and thresholds of a profession and instead reside primarily in the ordinary definitions of an organisation.² The objective is to identify whether, on balance, the Australian Army can be defined as a profession and a component of the profession of arms, or whether the term is closer to an abstract description of the Army that serves a particular purpose to segregate the Army from the rest of society.

The Profession of Arms—Deficiency of Definition

Before considering the characteristics of professions, it is useful to outline where the concept of the profession of arms originated. During a series of lectures in 1962, Lieutenant General Sir John Winthrop Hackett, who is frequently cited as defining or articulating the profession of arms, provided the following description of the military:

... a profession, not only in the wider sense of what is professed, but in the narrower sense of an occupation with distinguishable corpus of specific technical knowledge and doctrine, a more or less exclusive group coherence, a complex of institutions peculiar to itself, an educational pattern adapted to its own needs, a career structure of its own and a distinct place in the society which has brought it forth.³

He, along with other pre-eminent authors of the era, further outlined that the ‘function of the profession of arms is the ordered application of force’, or similar phrasing.⁴ The Hackett lectures remain the enduring reference for defining the profession of arms in Australia, and the broad concepts have not been substantially advanced since the 1960s,⁵ despite significant changes in the Australian military, including the introduction of the all-volunteer military in Australia in 1973. This is not to say that the definition of the profession of arms hasn’t subtly evolved. The 2024 edition of the ADF’s capstone doctrine, *Australian Military Power* (the first edition was only released in 2021 and did not define the profession of arms) proclaims the profession as comprising ‘people practised in the ethical application and exercise of lethal force to defend the rights and interests of the nation’.⁶ A definition is mentioned in one other subordinate ADF doctrine dealing with ethics, albeit it is somewhat inconsistent with the capstone doctrine and more aligned to the US Army⁷ definition: ‘people practised in the ethical application of combat power, serving under government authority, entrusted to defend the rights and interests of the nation’.⁸

Although the ADF now defines the term ‘profession of arms’ in its doctrine, conceptual gaps remain. Specifically, there exists no adequate description or definition of the characteristics of the profession of arms, any further than superficially outlining the ‘unique nature of service’, concepts of ‘unlimited liability’ and the requirement of a military

to use lethal force. While these characteristics are unique and specific to the military, they don't offer a general framework or basis on which to compare its congruence with the broader characteristics of professions or even provide an explicit explanation of why the military is a profession. ADF doctrines dealing with character, command or culture provide no additional insights for describing the profession of arms in Australia.

While commentators rarely remark on deficiencies in the definition of the profession of arms in Australia, it is not a new observation. In a 2011 major review of personal conduct, Major General Craig Orme reported that the nuances of the profession were not deeply understood and that the topic was only addressed at an introductory level on some courses.⁹ Further, in his 2016 contribution to Army's Land Power Forum, Mark Gilchrist observed that in 'the Australian context ... a coherent, unified view is missing of what the profession of arms actually is', offering that there is only an 'implied understanding'.¹⁰ Federal legislation also provides little insight, with the profession of arms undefined in the Defence Act or any regulation.¹¹ Recently, the Chief of Army provided some insight into a contemporary definition of the characteristics of the profession of arms as being of jurisdiction, expertise and an ability to self-regulate, but his concepts currently remain undeveloped in Army doctrine (although there are initiatives to address this).¹²

Overall, despite the frequency of mention, a clear definition of the profession of arms that is interpretable by and applicable to all Army members and the general public remains elusive. It is still largely entrusted to a person's intuition as to what they perceive the profession of arms to be. This presents a conundrum: in all likelihood there will be a discrepancy, or even inconsistency, in the way that different Army members describe the profession. Furthermore, if this is true, civilians will almost certainly struggle to define the profession in any meaningful and consistent way, perhaps defaulting to historical notions of the nation at war.¹³ If the term 'profession of arms' is to have meaning for the average soldier or officer then it ought to have definition and substance. At the very least, if Army claims to be part of the profession then there is an intuitive requirement that it should know what the profession is without relying on the abstract views of individuals and risking inconsistencies. The Chief of Army appeared to acknowledge this deficiency with his recent initiatives to review the state of the army profession,¹⁴ which might go some way to providing clarity around the definitions of the profession itself and its applicability to the Australian Army.

Fortunately, deficiencies in a definition of the profession of arms do not prohibit a comparison of some of its organisational characteristics against commonly accepted general characteristics of professions. Before examining the nuances of the profession of arms and where its characteristics might deviate from those of other professions, it is useful to first outline a definition of 'profession', including some of its broad and commonly accepted characteristics.

The Profession of Arms and Characteristics of Professions

Professions have existed in concept for centuries, becoming increasingly codified as the need to better define and distinguish professions from occupations emerged. While the original professions were considered to be medicine, law and divinity, by the middle of last century definitional frameworks were developed, and the resulting taxonomy introduced other occupations as professions.¹⁵ In their seminal work *The Professions*, Carr-Saunders and Wilson concluded that the ‘application of an intellectual technique to the *ordinary business of life* [emphasis added], acquired as a result of prolonged and specialized training, is the chief distinguishing characteristic of the professions’.¹⁶ They introduced, through analysis against these characteristics, many further professions, including dentists, nurses, midwives, pharmacists, engineers, chemists, physicists, architects, engineers, teachers and others. The army, or military, was deliberately not analysed because the public service that an army provides is ‘one which it is hoped they will never be called upon to perform’ and not ‘ordinary business of life’. However, it seems that the authors may have indirectly considered the army among the professions simply through mention of its omission.¹⁷ Perhaps unhelpfully, a definition for a profession was purposely avoided by the authors.¹⁸

Regardless, there is no shortage of definitions for a profession, lists of professions, or consideration of the characteristics of professions.¹⁹ Of contextual relevance, the Australian Council of Professions (ACP) defines a profession as:

a disciplined group of individuals who adhere to ethical standards and who hold themselves out as, and are accepted by the public as possessing special knowledge and skills in a widely recognised body of learning derived from research, education and training at a high level, and who are prepared to apply this knowledge and exercise these skills in the interest of others.²⁰

ACP membership includes medical practitioners, architects, veterinarians, dentists, geoscientists, midwives, pharmacists, engineers, psychologists and speech pathologists.²¹ For the most part, while it is not explicitly listed, the Australian Army would seem to sit within this broad definition of a profession, although thresholds of criteria such as research, education and training are not clear.²² However, it is notable that most of the pre-eminent authors on professions do not recognise the militaries in their lists of professions in the civilian scholarly literature.²³

Australia's Professional Standards Council (PSC) explains that professions are a 'part of civil society and stand between the market and the state', acknowledging that tensions between society, the market and the state exist.²⁴ This gives rise to subtle incongruence between this explanation of a profession and the nature of the profession of arms: the Army does not operate in the market and therefore cannot stand between the market and the state. Further, while many contemporary military sociologists posit that an army is part of civil society and closely integrated with it,²⁵ others maintain views more aligned with those of the classical theorists²⁶ and suggest that it remains distinct (and separate). Regardless, the Australian Army rests uncomfortably against the PSC explanation of professions given its lack of involvement in the market and oft-debated status in society.

For the purpose of this article, the APC definition of a profession has been adopted, supported by the six characteristics common in literature, identified by Tapper and Millet²⁷—that is, professions have the characteristics of specialised expertise and an ethics framework, exercise self-regulation, provide a service to society for the public good, possess strategic responsibilities, and possess unique membership and identity.

Against this definition and these characteristics, those with knowledge of the Army will make strong *prima facie* observations that the Army appears to be a genuine profession, as follows:

- **Specialised expertise and training.** Officers and soldiers will commence their career with rigorous initial military training, followed by relevant trade-related training. In some instances, this training is lengthy, lasting several years, particularly for officers and those enlisting into technical trades. Education and training continue throughout a member's career, reinforcing professional mastery.²⁸ These attributes of expertise and ongoing education are similar to other professions such as medicine, law, engineering and teaching, although the duration differs substantially.
- **Ethical framework.** The Army adheres to the ADF's prescribed ethical standard. As is currently articulated in doctrine as it relates to operations,²⁹ organisationally represented by values and behaviours statements,³⁰ and supported by international law, disciplinary processes, complaints and resolutions processes, and other policies and frameworks, the Army is subject to a rigorous ethical framework that has been subject to many evolutions over its history.
- **Self-regulation and discipline.** The Army is characterised by a detailed, and at times complex, system of regulations incorporating matters such as discipline, personnel management, equipment maintenance and tactics. Directives, policy, processes and orders are governed by formal and accountable documents and manuals, which are, in turn, subordinate to legislation or issued through command authority. This provides a system of self-governed autonomy that is characteristic of professions such as medicine, engineering and aviation, among others.

- **Service to society.** The purpose of the ADF is to ‘defend Australia and its national interests in order to advance Australia’s security and prosperity.’³¹ This purpose implies a commitment to protecting the Australian population. The Army’s purpose is subordinate to this ‘to prepare land power in order to enable the integrated force in competition and conflict.’³² However, unlike with other professions, there is no individual transaction in the provision of professional services—that is, the nation at large receives the services of the Army, but individual citizens do not routinely derive personal benefit in the same manner they might from a visit to the doctor, psychiatrist or dentist or from instruction by an educator.
- **Strategic responsibilities.** The Army organisation itself maintains strategic responsibilities described in its mission and the National Defence Strategy.³³ The ADF, and Army as one of its services, have unambiguous national strategic security responsibilities.
- **Membership and identity.** Perhaps the most obvious and visible alignment between Army and the characteristics of professions is the observation of membership and identity among Army’s members, at least while they continue to serve, and well beyond transition for some veterans. Shared training, culture and tradition all contribute to an exclusive environment that is only familiar to those who have served in the Army, reinforcing notions of membership and identity.

While these six characteristics are most often cited when describing professions, there are alternatives in the specific context of the profession of arms that require mention. For example, Huntington defines the characteristics of the profession of arms as expertise, responsibility and corporateness,³⁴ with Swain adding ‘ethics and ethos’ to these.³⁵ In the Australian context, Orme suggested expertise, stewardship, representativeness and service to the state.³⁶ Similarly, Ryan suggested the characteristics of expertise, stewardship, corporateness and service to the state.³⁷ Recently, Stuart settled on the ‘three pillars of the modern Army profession’ as jurisdiction, expertise and self-regulation, describing jurisdiction as ‘the unique service we provide to society as its army’, expertise as ‘the distinctive professional body of knowledge we maintain’, augmented by a capacity to self-regulate.³⁸ These characteristics all overlap heavily with each other and the six general characteristics listed earlier, particularly those of expertise and self-regulation. While army-focused taxonomies, with their distinctly military emphasis, are useful in their description of the profession of arms—and help to position the Army as a profession alongside other professions—they do not provide any deeper insight into a comparative description of the Army as a profession beyond the six characteristics offered above.

On the basis of a strong alignment with the six general characteristics, and even without the specific descriptions of Huntington, Orme, Ryan or Stuart, it would seem that the Army could be defined as a profession. However, these characteristics are largely superficial, designed or manufactured, and sometimes created (or better refined) for an occupation to be identified as a profession or distinguished from other occupations.³⁹ They are not especially insightful, and almost any occupation can lay claim to several of these characteristics, or manufacture a pathway to observance of all of them, even if they are not a profession by common understanding⁴⁰ (a common criticism of the taxonomical approach to defining professions).⁴¹ Beyond these six characteristics and the three or four Army-specific characteristics, there are certain attributes of Army, discussed in the next section, that deviate from regular professions in a manner that gives rise to questions concerning the extent to which Army can lay claim to being a profession.⁴²

The view that armies might not be professions is outlined by several overseas authors and commentators, predominantly in relation to the US military. While some claim that the nature of military service as a profession is 'widely accepted' and requires no further proof, and that the 'concern now is not to prove that the military is a profession, but rather to inspire men and women in uniform to reflect the expected characteristics of professionals in their day-to-day activities',⁴³ there are others who are not as convinced. In an essay that courted much online feedback at the time (2015), one author opined that in applying 'the correct understanding and application of a term' the US Army is not a profession, but added that there was no need to torture the term in order to recognise the quality of the military institution and its people.⁴⁴ The catalyst for this article was a 2015 article, published by The Strategy Bridge, about whether the military was a profession. In this piece, Pauline Shanks Kaurin conceded that the military would not satisfy an empirical (taxonomical) description of a profession, before outlining her views that the military 'probably' was a profession on the basis of the requirement for self-regulation.⁴⁵ In stark contrast to those arguing that the military is a profession, Donald Travis, in his 2020 book on democracy and security, provocatively declared that military service 'is no more exceptional in its value to society than any other vocation that offers a service to the well-being of the nation-state', offering a different framework to describe armies.⁴⁶ Similarly, in his study of the military profession published in the same year, Libel also concluded that armies 'never fully met the characteristics of a profession'.⁴⁷ In sum, despite the common view that the army is a profession, there are sufficient contrary opinions to conclude that such a categorisation is not settled and the concept remains contestable.

Army's Deviation from a Profession

Army is an apparatus of government, with its purpose subject to the requirements and demands of the government of the day. In this regard, it is indistinguishable from other federal government departments that are not characterised as professions. Government defines the parameters of the Army's mission, including its funding, acquisitions, structures and strength. Significantly, government defines what is, and what is not, in 'the national interest' and specifies any associated rules of engagement or operational parameters during its deployments. At the most fundamental level, whether to even use or deploy the Army is not a decision of Army but a decision, made within a democratic bureaucracy, that typically requires the tacit support of the nation.⁴⁸ Army's jurisdiction (as it has been described by Snider and Watkins, and by Stuart), is not defined by Army but in negotiation with 'government and people'.⁴⁹ This lack of independence and autonomy from government bureaucracy is not a characteristic exhibited by any profession. The Army might not exist if it were not for the requirements of the state, and it is speculative as to whether the citizenry would demand its existence otherwise (a complex philosophical question that cannot be easily tested without an existential national security threat). Indeed, some sovereign states, with or without land borders, have opted not to maintain a standing permanent army.⁵⁰

The fact that Army is wholly responsive to the federal government also means that its societal benefit (when not deployed directly in defence of the nation) is largely unquantifiable. Specifically, the benefit is based on notions of a national insurance policy against adversarial action, deterrence, and as a Clausewitzian extension of government international diplomacy policy to the greater benefit of the nation.⁵¹ An intangible and unmeasurable societal benefit such as this is problematic in defining Army as a profession, because for many (including pacifists⁵² at one end of the spectrum but also a questioning moderate public) there is no perceived benefit of a military, let alone one with expeditionary capabilities.⁵³ There will therefore be societal perceptions that the resources allocated to maintaining a standing military could be better used elsewhere. Indeed, unless the nation is under threat of invasion, and the lives and wellbeing of the population are immediately at risk, Army's service to society will inevitably be hard to define and harder to measure. This situation differs substantially from the daily beneficial interactions one might experience with a doctor, teacher or other professional.⁵⁴

The ambiguity that exists around an army's societal benefit is in marked contrast to other professions where the nexus between the profession's purpose and its public good or service to society is more direct, immediate and clear. Societies struggle to thrive without professions associated with education, medicine and the rule of law, but the same cannot easily be said of an army. It remains unknown to the average Australian citizen what might prevail if Australia had one less officer, battalion or brigade or even ceased to maintain

a standing army; nor is it known what societal benefits might be derived if the army were doubled or tripled in size. In contrast, the benefit arising from structural changes and increases (or decreases) in the size of other professions is unambiguous. Increases in the number of doctors, lawyers, engineers, teachers and other professionals are likely to have an easily identifiable (usually immediate) and measurable societal benefit.

Perhaps the profession of arms' most significant deviation from a regular profession is that, in achieving its purpose, the Army is required to use lethal violence.⁵⁵ All other professions are oriented towards serving a peaceful public good, or at least one that does not inherently involve death and destruction. While Army maintains a tenuous link to serving the public good through deterring invasion and participating in government-defined 'just wars', this remains an indirect, and even vague, notion of a public good where it is not immediately evident what transactional benefit the public derive (e.g. what benefit did 'Joe Citizen' derive from Australia's involvement in any of the wars of the volunteer army era?). The very execution of Army's mission involves casualties (friendly, adversary and civilian), the destruction of infrastructure and the consumption of resources, and it leaves a legacy of physical and emotional harm with all those involved for generations. The fact that the use of lethal violence is a fundamental purpose of armies raises an ethical concern about whether the profession of arms can be considered alongside other professions, or whether it would benefit more from its own categorisation.

Further definitional conflicts arise when the government's contemporary use of the Army for non-warfighting tasks operates to obstruct Army's formal purpose. Use of the Army for tasks such as disaster relief and recovery expands its jurisdiction beyond its expertise and blurs the boundaries of its claim for membership of the profession of arms, whose purpose is tied implicitly to the conduct of war through the National Defence Strategy.⁵⁶ Professions do not have the wide variation of purpose that is seen in the types of tasks entrusted to the Army, many of which are well beyond its specified mission and could be ably conducted by other well-resourced civil agencies or even contractors (such as disaster relief and recovery). Arguably, while the ADF has made appeals for reduced use in non-warfighting roles,⁵⁷ it is ultimately the choice of government to deploy Army in capacities outside of its mission, and it is a reality that this occurs far more frequently than deployment on warlike operations. While not necessarily the fault of Army, this suggests a substantial deviation from the characteristics of regular professions, whose purposes are stable and whose members are not employed in roles beyond their professional mandate and jurisdiction.

Beyond its bureaucratic characteristics and questions around its public good, the nature of military service is unique among professions in many other regards. For one, Army personnel choose or are allocated to employment categories, job roles, many of which are functionally quite similar to non-military employment outside the profession of arms. Further, unlike civilian employees, members of the Army can supposedly be members of several professions concurrently, such as the profession of arms alongside the professions of law, medicine, clergy, engineering and so on. Significantly, too, many Army personnel remain members of the profession of arms for a remarkably short period and lose their membership as soon as they separate from employment in the Army, voluntarily or involuntarily. This differs from other professions, where membership may extend for the entirety of an individual's career and transcend their organisational employer of the day. Arguably, these peculiarities of military service, explained further below, are at odds with common perceptions of the characteristics of professions and individuals' membership of them.

With the exception of warfighting roles, most job roles within Army are not uniquely specialised. These roles now account for around 58 per cent of Army's strength.⁵⁸ For example, health, maintenance, logistics and administration employment categories are largely subject to civilian credentialling, with external civilian education providers responsible for initial employment training and some career courses. Aside from some routine and common military training, these roles are not unique to the Army, which challenges the notion that the profession of arms comprises people with unique skills employable only within the profession of arms.⁵⁹ Furthermore, the Army invests considerable effort in ensuring civilian equivalency in many of the qualifications and much of the training undertaken throughout a career. While the intent is partially to assist with transition to post-Army life and to recognise the training and skills obtained, an outcome is that it diminishes the exclusivity and uniqueness of a person's training, education and role in the Army, which are inherent in the six aforementioned characteristics of a profession. Some authors have even noted an emerging ability and potential for roles associated with warfighting, such as security and defence, to be outsourced and contracted, thereby removing notions of a unique purpose, mission and training.⁶⁰ Regular professions do not have an equivalency outside of the profession itself, and roles cannot be performed by others, as they maintain an exclusive credentialing and employment monopoly on those who are part of the profession. That is not always the case for Army employment categories, where civilian equivalencies often exist.

The observation that many roles are not necessarily unique to Army leads to a further confounding attribute of Army's employment model. It is possible to belong to both a regular profession and the profession of arms simultaneously. A person can be a doctor, lawyer, chaplain, teacher, dentist, engineer et cetera within the Army. This requires that a person adheres simultaneously to the membership, credentialing, legislation and values of two professions, which can potentially lead to contradiction and conflict.⁶¹ It also creates an unusual non-reciprocal interdependence. A person can depart membership of one profession, the Army, while remaining in the other indefinitely. But the opposite is not true; if an Army doctor were to leave the medical profession, they could not remain in the Army.⁶² Outside of the military, a person cannot, in practice, genuinely belong to two professions at the same time.⁶³

Reserve service sits at a particularly uncomfortable junction of the profession of arms because part-time service implies that a person is not always a member of the profession of arms. When they are in other employment (including an alternative profession), in education or even unemployed, the member is not always active in the profession of arms. Indeed, defence legislation details that a person is only a defence member when they are on duty. The rest of the time they are not technically, or even functionally, a member of the profession of arms and undertake their non-Army daily activities without many of the constraints of membership.⁶⁴ This temporal nature of service that exists through reserve service does not seem congruent with the characteristics of a regular profession, whereby members are a part of the profession all the time, even when not at work or on duty. Indeed, while times, roles and perceptions have changed regarding reservists, Huntington argued that reservists are not members of the profession of arms.⁶⁵ This introduces an issue likely to be uncomfortable for defence leadership: perhaps membership in the profession of arms is applicable only to permanent force members. This is a concept that would be both unpopular and incongruent with the total workforce system.

Occasionally, reserve service, membership of a regular profession, and membership of the profession of arms are awkwardly juxtaposed. For example, an Army reserve medical doctor may be a civilian general practitioner in one instance, an officer in another, and occasionally both when on duty. Such individuals must sometimes adhere to the values and obligations of each profession simultaneously, while at other times they are obliged to observe the requirements of just one (i.e. when not on duty).⁶⁶ In such circumstances there is no ADF policy governing which profession takes precedence, which values and ethics are more enforceable over the other (where there is contradiction), or which training and career system has priority. Since most professions are subject to their own legislation, and breaches may result in revocation of membership, it may be an uncomfortable reality that, for an individual who is a member of a regular profession, legislation governing that profession will always take precedence over conflicting

defence obligations.⁶⁷ The concept that a person could feasibly be in two professions simultaneously, subject to different legislation, values, ethics, credentialing and standards—particularly where membership of one of those professions might only be part-time—would seem to be a counter-thesis to the exclusivity of membership maintained by professions.

Finally, turnover—separation or transition—in the Army suggests that even its members do not necessarily consider themselves part of a lifelong profession. A third of Army members will leave the permanent force shortly after their fourth year of service, a majority will leave before they've completed eight years of service, very few will reach Army's retirement age, and many will not reference their military service after they leave or continue in employment related to their prior military service.⁶⁸ An Army career will often represent just a small proportion of a member's working life, typically less than 10 per cent for those transitioning after four years. Today's Army places much emphasis on transition out of a military career and towards the pursuit of non-Army employment, a characteristic that would be unique among professions that favour lifelong membership. In contrast, members of regular professions tend to be trained, then employed in that profession in some capacity for their entire adult working life.

Addressing the Deficiency

As service in the Army transitions ever closer towards an occupation, and slowly sheds its institutional characteristics,⁶⁹ describing it as part of the profession of arms seems to unintentionally and unnecessarily overstate its actual status. If Army insists on describing itself as a profession, there are several deficiencies that need to be addressed. The most obvious and pressing is to doctrinally define the profession of arms, rather than relying on neo-Hackett historical and vague notions of uniqueness, tradition and belonging. Its characteristics as a profession, vice characteristics of an army, should be detailed and unambiguously explained such that every soldier and officer, past and present, is able to recognise their service in the profession and understand the attributes that differentiate it from other employment, occupations or vocations.⁷⁰ In defining the profession of arms, it is necessary that reasons for its deviation from regular professions are explained. It is also necessary to justify why it can still be defined as a profession. Ultimately, every soldier and officer should understand that they are in the profession of arms, what that entails, the reasons for their membership, and the societal obligations on them that arise from being members of the profession.

Secondly, having defined the profession of arms for itself, Army needs to resolve ‘the point of the concept of a profession’ and what it aims to achieve through this designation.⁷¹ It needs to discuss and address questions such as: Why does the description of Army belonging to a profession of arms need to exist? Why is Army not comfortable with simply describing itself as an Army? What does Army gain or achieve in defining itself in the profession of arms? Overall, Army needs to develop an understanding of what is achieved when it describes itself as a profession, what might be lost when it does so, and whether the trade-off will be worth it in the long run.

Finally, Army needs to grapple with part-time membership of the profession of arms, the cessation of membership when Army members transition to civilian life, and the identity conflict in members who belong to multiple professions. It should also be recognised that the profession of arms is unique as the only profession in which many people have only a short-term membership and lose this membership simply by leaving the Army, losing all Army credentials in the process. Reconciling the differences between the profession of arms and regular professions is not trivial and will require deeper thought around the nature and characteristics of the profession of arms.

Conclusion

The Australian Army comprises people whose conduct is professional. The organisation is regulated, and structures and processes are organised. Its members are trained, motivated and disciplined. Yet, while the Army might exhibit some of the *prima facie* general characteristics of a profession, such as specialised expertise and training, an ethical framework, discipline, strategic responsibilities and identity, there is much nuance that suggests the profession of arms deviates from regular professions in some important criteria. These deviations make the categorisation of the ‘profession of arms’—as an actual profession—less robust than popular rhetoric would suggest.

Of those characteristics that are not aligned to regular professions, the most substantial is the ambiguity around the regular daily public good provided by a standing army, which is even less clear during periods of sustained peace. Australia’s citizens will rarely derive any immediate direct benefit from a standing army most of the time, or at all in their lifetime. This characteristic stands Army apart from any other profession. The requirement of Army to use lethal and violent force, resulting in casualties and destruction of property (including collateral damage), along with its lack of autonomy from government, represents additional substantial and near-irreconcilable differences when compared against traditional and contemporary professions. There are other differences too: the recent use of Army in non-profession-related roles, such as a labour workforce during times of disaster relief and recovery; the lack of uniqueness of many of Army’s

employment categories; the non-enduring nature of membership; the concurrency of other professional memberships for some Army members; and the ambiguity around the nature of reserve service. In all of these areas, either the profession of arms would appear unique among professions or its classification as a profession requires further consideration.

Currently, the term 'profession of arms' suits a narrative, one that positions the Army as separate from society and implies professionalism in the conduct of its purpose and mission. The concept that Army is its own distinct profession appeals to a sentimental and traditional notion of service that provides those who have passed through its ranks with a unique point of difference from others in society. However, the differences between the Army and other professions are substantial and may challenge Army's licence to call itself a profession. It is not obvious that the term is meaningful or necessary, in lieu of simply belonging to the Army, with its own unique customs and traditions.

The idea that there may not be a literal 'profession of arms' should not be seen as diminishing the service of current members or veterans. For the most part, it makes no difference to the average soldier or officer whether they define themselves as a member of the profession of arms or simply as a member of Army. However, if the term is to endure it requires effort from Army to define its meaning and boundaries along with addressing the points of difference with other professions. This may result in Army developing its own professional criteria that are distinct and different from other professions, requiring their own definitional framework. As it stands, the lack of definition, and the many points of difference from other professions, may lead to a conclusion that the term 'profession of arms' is simply an artefact that is useful to set the Army aside from society but might not accurately reflect the realities of service in the Army. It is plausible that for the Australian Army 'a firm definition of profession is both unnecessary and dangerous'.⁷²

About the Author

Colonel Phillip Hoglin graduated from the Royal Military College, Duntroon, in 1994, having completed a Bachelor of Science (Honours), majoring in statistics. He completed a Master of Science in Management through the United States Naval Postgraduate School in 2004, graduated from the Command and General Staff College of the Armed Forces of the Philippines in 2006, and was awarded a Master of Philosophy (Statistics) through the University of New South Wales in 2012. He has been involved in workforce analysis since 2004, was the Director of Military People Policy from 2014 to 2017 and the Director of Military Recruiting from 2018 to mid-2020, and is currently a researcher in Workforce Strategy Branch, Defence People Group.

ENDNOTES

- 1 For example: Simon Stuart, 'Chief of Army Symposium Keynote Speech: The Human Face of Battle and the State of the Army Profession', 12 September 2024, at: <https://www.army.gov.au/news-and-events/speeches-and-transcripts/2024-09-12/chief-army-symposium-keynote-speech-human-face-battle-and-state-army-profession>.
- 2 In Don M Snider and Gayle L Watkins, 'The Future of Army Professionalism: A Need for Renewal and Redefinition', *Parameters* 30, no. 3 (2000): 6, the authors discuss the transition of the US Army towards organisational concepts. In Samuel English, Phillip Hoglin and Alice Paton, 'Is the ADF an Institution or Organisation?', *The Forge*, 14 May 2024, at: <https://theforge.defence.gov.au/article/adf-institution-or-organisation>, the authors outline that the ADF increasingly exhibits the traits of an occupation rather than an institution.
- 3 John W Hackett, *The Profession of Arms* (London: Sidgwick & Jackson 1983 [1962]), p. 3.
- 4 For example, Samuel P Huntington, *The Soldier and the State: The Theory and Politics of Civil–Military Relations* (Harvard University Press, 1957); and Morris Janowitz, *The Professional Soldier: A Social and Political Portrait* (New York: The Free Press, 1960).
- 5 The works of Huntington and Janowitz feature regularly in debate and discussion about the profession of arms.
- 6 Australian Defence Force, *ADF Capstone Doctrine—Australian Military Power* (ADF-C-0), Edition 2 (Canberra, 2024), p. 69, at: <https://www.acmc.gov.au/defence-doctrine-documents/adf-capstone-doctrine-australian-military-power>.
- 7 United States Army, *The Army Profession* (ADRP1) (Headquarters, Department of the Army, 2015), at: <https://irp.fas.org/doddir/army/adrp1.pdf>, defined the army profession as 'a unique vocation of experts certified in the ethical design, generation, support, and application of landpower, serving under civilian authority and entrusted to defend the Constitution and the rights and interests of the American people'.
- 8 Australian Defence Force, *ADF Philosophical Doctrine—Military Ethics* (ADF-P-0), Edition 1 (Canberra, 2021), p. 3, at: <https://theforge.defence.gov.au/military-ethics/adf-philosophical-doctrine-military-ethics>.
- 9 Craig Orme, *Beyond Compliance: Professionalism, Trust and Capability in the Australian Profession of Arms: Report of the Australian Defence Force Personal Conduct Review* (Canberra: ADF, 2011), para 57.
- 10 Mark Gilchrist, 'What Defines the Profession of Arms?', *Land Power Forum*, 8 August 2016 at: <https://researchcentre.army.gov.au/library/land-power-forum/what-defines-profession-arms>.
- 11 Commonwealth of Australia, *Defence Act 1903*, version C2025C00176 (C82), 21 February 2025; Commonwealth of Australia, *Defence Regulation 2016*, version F2024C01048 (C07) 14 October 2024.
- 12 Simon Stuart, 'The Challenges to the Australian Army Profession', address to the Australian National University National Security College, 25 November 2024, at: <https://www.army.gov.au/news-and-events/speeches-and-transcripts/2024-11-25/challenges-australian-army-profession>.
- 13 Ibid. Stuart also makes this observation: 'How evident is the 'jurisdiction' of the Australian Army today? I believe we would elicit a remarkably wide range of answers if we asked a thousand of our fellow Australian citizens this question.'
- 14 For example, the *Australian Army Journal* call for submissions on the state of the army profession, and commitments outlined in Marcus Schultz, 'Australian Army Chief Prioritises Trust, the Study of War and Military professionalism', *The Strategist*, 20 September 2024, at: <https://www.aspistrategist.org.au/australian-army-chief-prioritises-trust-the-study-of-war-and-military-professionalism/>; along with speeches such as Stuart's 'The Challenges to the Australian Army Profession'.
- 15 AM Carr-Saunders and PA Wilson, *The Professions*, 2nd Edition (Oxford: The Clarendon Press, 1964).
- 16 Ibid., p. 490.
- 17 *The Professions* briefly mentions that the army claims professional status, but the army has been purposely omitted from its study. Ibid., p. 3.
- 18 Ibid., p. 4.
- 19 Some of these are summarised in Alan Tapper and Stephan Millett, 'Revisiting the Concept of a Profession', *Research in Ethical Issues in Organizations* 13 (2015): 1–18.

- 20 Justine Rogers and Dimity Kingsford Smith, *Professions* (Professional Standards Council, n.d.), at: <https://www.psc.gov.au/research-library/professions/what-profession>.
- 21 But it will be missing many professions due to the voluntary nature of membership.
- 22 George Beaton summarises the proliferation of professions, including admission to the category of a profession. George Beaton, *Why professionalism Is Still Relevant* (Australian Council of Professions, 2010), at" https://www.professions.org.au/wp-content/uploads/Why_Professionalism_is_still_Relevant_Beaton_WIP.pdf.
- 23 These include Andrew Abbott, *The System of Professions: An Essay on the Division of Expert Labor* (Chicago: The University of Chicago Press, 1988); Eliot Freidson, *Professionalism: The Third Logic* (Chicago: University of Chicago Press, 2001); Margali Larson, *The Rise of Professionalism: A Sociological Analysis* (Berkeley: University of California Press, 1977); Harold L Wilensky, 'The Professionalization of Everyone?' *American Journal of Sociology* 70, no. 2 (1964): 137–158.
- 24 Rogers and Kingsford Smith, *Professions*.
- 25 Brad West and Cate Carter, *The New Australian Military Sociology: Antipodean Perspectives*, Vol. 2 (Berghahn Books, 2024), pp. 11–40, at: <https://doi.org/10.2307/jj.11930988>.
- 26 For example, Risa Brooks, 'Beyond Huntington: US Military Professionalism Today', *Parameters* 51, no. 1 (2021): 55–77, reflecting the theories of Huntington, Janowitz and Segal.
- 27 For a good synopsis, see table 1 in Tapper and Millett, 'Revisiting the Concept of a Profession'.
- 28 However, there is substantial debate about the extent of professional mastery, as examined in detail by Michael Evans, *Vincible Ignorance: Reforming Australian Professional Military Education for the Demands of the Twenty-First Century* (Department of Defence, 2023).
- 29 ADF, *Military Ethics* (ADF-P-0).
- 30 'Values and Behaviours', *Department of Defence* (website), at: <https://www.defence.gov.au/about/who-we-are/values-behaviours> (accessed 20 March 2025).
- 31 'Defence Mission', *Department of Defence* (website), at: <https://www.defence.gov.au/about/who-we-are/defence-mission> (accessed 20 March 2025).
- 32 'Our Mission', *Australian Army* (website), at: <https://www.army.gov.au/about-us/who-we-are/our-mission> (accessed 20 March 2025).
- 33 Department of Defence, *National Defence Strategy 2024* (Canberra: Commonwealth of Australia, 2024); Department of Defence, *National Defence: Defence Strategic Review* (Canberra: Commonwealth of Australia, 2023), p. 42, recommendation 2.
- 34 Huntington, *The Soldier and the State*, pp. 8–10.
- 35 Richard Swain and Albert Pierce, *The Armed Forces Officer* (Washington DC: National Defense University Press, 2017), p. 18, at: <https://ndupress.ndu.edu/Publications/Books/Armed-Forces-Officer/Article/1153508/chapter-2-the-profession-of-arms/>.
- 36 Orme, *Beyond Compliance*, para 72.
- 37 Mick Ryan, 'Mastering the Profession of Arms, Part I: The Enduring Nature', *War on the Rocks*, 8 February 2017,
- 38 Stuart, 'The Challenges to the Australian Army Profession'.
- 39 Categorisation such as this is described by Mike Saks, 'Defining a Profession: The Role of Knowledge and Expertise', *Professions and Professionalism* 2, no. 1 (2012), as the 'taxonomic approach' to defining professions. Arguably, the taxonomies suggested by various authors for the Australian Army are retrofitted and self-fulfilling in their applicability to the army-in-being.
- 40 In his seminal work, Harold L. Wilensky, 'The Professionalization of Everyone?' *American Journal of Sociology* 70, no. 2 (1964): 137–58, suggests that common criteria are less important in the definition of profession than 'autonomous expertise and the service ideal'.
- 41 Saks, 'Defining a Profession', pp. 2–3.
- 42 In this context, 'regular' professions is taken to mean all professions other than the profession of arms.
- 43 Swain and Pierce, *The Armed Forces Officer*, p. 18.
- 44 Jill Sargent Russell, 'Why You're Not #Professionals', *The Strategy Bridge*, 12 January 2015, at: <https://thestrategybridge.org/the-bridge/2015/1/12/why-youre-not-professionals>.

- 45 Pauline Shanks Kaurin, 'Questioning Military #Professionalism', *The Strategy Bridge*, 22 January 2015, at: <https://thestrategybridge.org/the-bridge/2016/2/1/questioning-military-professionalism> .
- 46 Donald S Travis , 'Democracy, Security, and the Problems with Labelling the Military as a Profession', presentation, 2018 IUS Canada Conference Ottawa, Ontario, 20 October 2018.
- 47 Tamir Libel, 'The Rise and Fall of the Study of the Military Profession: From the Sociology of the Military Profession to the Sociology of Security Expertise', in *Rethinking Military Professionalism for the Changing Armed Forces* (Springer International Publishing, 2020).
- 48 Brendan Nelson, *The Role of Government and Parliament in the Decision to Go to War*, Papers on Parliament No. 63 (Parliament of Australia, 2015), at: https://www.aph.gov.au/About_Parliament/Senate/Publications_and_resources/Papers_and_research/Papers_on_Parliament_and_other_resources/Papers_on_Parliament/63. Currently, committing Australia to war is considered by the National Security Council before providing advice and recommendations to Cabinet.
- 49 Snider and Watkins, 'The Future of Army Professionalism'.
- 50 There are several sovereign states without a standing army, including Andorra, Grenada, Solomon Islands, Costa Rica, Iceland and Panama. 'Countries Without a Military 2025', *World Population Review*, at: <https://worldpopulationreview.com/country-rankings/countries-without-a-military>.
- 51 For example, Carl von Clausewitz, *On War*, translated by JJ Graham (Ware, England: Wordsworth Editions, 1997), 'War is merely the continuation of policy by other means' (p. 24) and 'The consequences for theory' (p. 28).
- 52 Richard Davis, 'The Art of Pacifism in the Conduct of War,' *The Forge*, 21 December 2021.
- 53 Using opinions on defence spending as a (weak) proxy for public scepticism about the military, a recent survey indicated that while half of the respondents thought the ADF was appropriately sized, 7 per cent thought it too big. The same survey indicated that only a third of Australians support increasing defence spending. Richard Dunley, Miranda Booth and Tristan Moss, 'Only a Third of Australians Support Increasing Defence Spending: New Research', *University of New South Wales* (website), 23 April 2025), at: <https://www.unsw.edu.au/newsroom/news/2025/04/-third-of-australians-support-increasing-defence-spend>. In the lead-up to the 2025 federal election, VoteCompass found that '52.9 per cent of respondents believe Australia should spend much or somewhat more on its military', but over 12 per cent believed less should be spent. Claudia Williams and Isabella Higgins, 'Data Shows Shift in Views Towards Australia's Relationship with the United States and China', ABC News, 29 April 2025, at: <https://www.abc.net.au/news/2025-04-30/relationship-with-china-united-states-vote-compass-election/105211854>.
- 54 Even in considering more recent tangible contributions of the Army towards disaster relief, roles for which the Army is not necessarily structured, resourced or trained, it is notable that the Army was not used in its mission capacity but more as a federally funded labour-hire service. The Defence Strategic Review appears to resent this type of role for the military.
- 55 Described variously as the 'management of violence' by authors such as Huntington (in *The Soldier and the State*) and the 'ordered application of force' by Hackett (in *The Profession of Arms*).
- 56 National Defence Strategy, p. 25. In reflecting the views of Evans (in *Vincible Ignorance*), Stuart notes the erosion of Army's jurisdiction and the diffusion of the roles of soldiers.
- 57 Defence Strategic Review, p. 41, 5.5.
- 58 Australian Defence Force, Directorate of Workforce Analysis, Australian Defence Organisation Dashboard (1 May 2025) [official], internal document. Around 42 per cent of current Army strength are defined as employed in roles that are largely unique to Army with limited non-military equivalency, such as combat and intelligence roles. A further 12 per cent are in roles where there is substantial overlap with non-military employment in aviation and communications, and the remaining 46 per cent are employed in roles where there is direct non-military equivalence and likely civilian credentialling such as logistics, health, engineering, maintenance and administration.
- 59 That they use their skills in a uniquely army environment does not override or negate the observation that these members are credentialled and employable in these skills outside the Army and that, if their credentials are revoked, they cannot be employed in that skill within the Army.
- 60 Described as 'security expertise' in Evans, *Vincible Ignorance*, p. 25.

- 61 For example, Defence chaplains may face conflict when the values and doctrines of their church are not congruent with those of Defence or when legislated requirements of certified/accredited professions conflict with the delivery of combat capability (such as health and safety), requiring legislated exemptions.
- 62 In appointing some members to the ADF, the Chief of the Defence Force establishes a condition, under section 12(4) of the Defence Regulation 2016, that a person must maintain the appropriate professional credentials for the employment category into which they have been recruited. Failure to do can result in termination under section 24(3)(b)(i).
- 63 Huntington, 'The Soldier and the State', p. 12, argues that members of these 'auxiliary' professions do not belong to the profession of arms in its capacity as a professional body.
- 64 *Defence Force Discipline Act 1982* (Cth), version C2024C00861 (C37), 11 December 2024, definition of 'defence member'.
- 65 Huntington, 'The Soldier and the State', p. 17.
- 66 For example, see Australian Health Practitioner Regulation Agency, *Good Medical Practice: A Code of Conduct for Doctors in Australia* (2020), at: <https://www.medicalboard.gov.au/Codes-Guidelines-Policies/Code-of-conduct.aspx> (accessed 9 June 2025).
- 67 For example, *Health Practitioner Regulation National Law Act 2009* (Qld), section 178—'National Board may take action', at: <https://www.legislation.qld.gov.au/view/html/inforce/current/act-2009-045> (accessed 9 June 2025).
- 68 Australian Defence Force, 'Defence Monthly Workforce Report as at 1 April 2025', 20, ADF Retention Profiles [Official: Sensitive] internal document.
- 69 English, Hoglin and Paton, 'Is the ADF an Institution or Organisation?'.
70 A sound starting point would be to consider the 'four unique features that set military professionalism apart from civil society' described in Evans, *Vincible Ignorance*, Part III.
- 71 This concept is discussed in Tapper and Millett, 'Revisiting the Concept of a Profession'.
72 Echoing the sentiment of Abbott, *The System of Professions*, p. 318.

/ TOWARDS A DEEPER UNDERSTANDING OF MILITARY PLANNING

Michael Krause

Introduction

The Chief of Army's directive to review the state of the Army profession divides the task into a review of Army's jurisdiction, expertise, and self-regulation. One area of expertise that the Army prides itself on, and which tends at times to set it apart from other services, is in the area of tactical and operational planning.¹ Planning and decision-making is not something that is peculiar to the Army or to the military; planning is an activity that is a normal part of everyday living. Humans are often confronted by choices and need to consider how multiple things (whether they be abstract ideas or concrete objects) are best arranged for optimal effect.² These two broad areas, which we might call choices and coordination, form the two key military planning activities that need to occur to facilitate decisions and help arrive at outcomes. Choices require decisions, so decision-making and how decisions are reached is one area of interest—this is the preserve of what is known in the military as command.³ The second area of planning interest is when coordination rather than decision-making is required. Coordination requires a process to determine optimal patterns, structure and sequences, and also a method to measure planning and make adjustments—this is the preserve of what the military terms control.⁴ The two are often linked: decision-making determines a preferred course of action and then further planning determines the optimal way to allocate resources to achieve the desired outcome. Sometimes the process may be iterative so that courses of action are tested before a decision is made. Either way, the two key areas of planning remain: decision-making and optimal coordination.

Military planning is a subset or specialised area of planning. Military planning is a combination of decision-making and optimal coordination. The addition of the word 'military' indicates that this planning is influenced by the military environment, specifically the peculiar and unusual stressors or inputs that make military planning different to planning in a non-military environment. Some of these peculiarities might be the increased uncertainty that inevitably pervades military activity, the human factors in such

a stressful and deadly environment, the consequences of success and failure, and the aggressive competitiveness between combatants. While not completely absent in other areas of human endeavour, the combination of factors in the military environment make military planning its own area of unique interest.

The military profession has often codified its planning processes, and periodically updates and issues new planning doctrine. The Chief of the Defence Force (CDF) signed the latest Australian Defence Force (ADF) planning doctrine, *Decision Making and Planning Processes* (DMPP) on 21 October 2024.⁵ For full disclosure, the author of this article is also the author of this new doctrine. That said, this article does not aim to describe the new doctrine. Instead, it offers a deeper understanding of some of the thinking that lies at the heart of it and, by so doing, aims to improve military planning and decision-making.

A Brief History of Military Planning

Simply stated, military planning throughout history has always required decision-making by leaders (our first area of military interest), while showing a steady but marked increase in the coordination required for military activities (our second area of interest). With the broadest of historical brushstrokes, pre-industrial war can be categorised as a series of intense but brief battles and the occasional siege, even if a state of war might last for years. The inability to preserve food, inadequate or absent medical facilities, and rudimentary transport systems meant that nations could not keep large numbers of troops sustained for an extended period.⁶ While the Roman legions' success can be attributed to their ability to overcome these issues better than their adversaries, there were still practical limits to what was possible.⁷ One of the practical limitations was communications, restricting the view of commanders and thus the scope of battle. The commander was expected not only to command but also to physically lead; this emphasised the need for sequential decisions by individuals rather than the detailed coordination of multiple factors.⁸

As warfare became industrialised, and mass armies became practical, detailed coordination and planning to support decision-makers became essential. Commanders throughout history have always had close advisers, but these individuals advised more on tactical decisions and political considerations rather than the behind-the-scenes coordination.⁹ This is where the creation of a separate group of advisers and planners became useful—separate specialists provided the detail to coordinate the many factors. The first quasi-modern 'staff' is observable during the Napoleonic Wars as first the French and then the Prussians saw the need of specialist staff officers to coordinate the battle.¹⁰ There had been earlier embryonic staff systems in the French army: a staff

officer responsible for lodging, supplies and the organisation of marches is identifiable during the era of Louis XIII (1610–1643).¹¹ During the 18th century there was further development of staff officers but nowhere near the numbers that are commonly used today: for example, each 'division' was authorised only three staff officers. Yet we can see the lasting influence of the French staff system with, for example, our modern staff section numbering harkening back to this period. Thus, the First Bureau was responsible for personnel, the Second Bureau was responsible for a daily log of events, the Third Bureau was responsible for reconnaissance and plans and the Fourth Bureau was responsible for headquarters and lodgement of troops. A critical part of the French Army's success against most of Europe can be attributed to its ability to harness the French nation in a '*levée en masse*' and this was made optimally successful because of an efficient staff system.¹²

It was their crushing defeat by Napoleon and the French in 1806 that convinced the Prussians of the need for sweeping reforms. One of these reforms was the creation of the Prussian general staff system. Field Marshal General August Neidhardt von Gneisenau and General Gerhard Johann David von Scharnhorst were prominent in these reforms.¹³ They institutionalised the right of the commander's adviser to take part in command and control by advising the commander until he made a decision.¹⁴ The staff would then produce the staff work that enabled the coordination required for the execution of the commander's plan. To better prepare personnel for these roles, the Prussians enhanced their War Academy in the late 1800s. By 1872, it was directly under command of the Chief of the General Staff and its purpose was focused on producing staff officers.¹⁵ The course was rigorous and demanding. Of the hundreds of applicants, only one hundred were selected annually, and by the end of the three-year course only five to eight were permanently assigned to the General Staff.¹⁶

In the intervening years, wars have become ever more complex. The industrial wars of the 20th century became as much about the production and massing of resources as they did about individual decisions, so the staff grew and the individual often receded into the background.¹⁷ While histories record the names of famous leaders who led and won battles, it was the titanic nature of World War I and World War II that tended to decide the issue. This global total mobilisation for war required as much coordination as it did decisions.¹⁸ The size of staffs continued to grow in the early 21st century, and modern communications systems now allow vast amounts of information to be processed and disseminated.¹⁹ Today, it is extremely difficult for any one person to be across the detail of every military department, and often these departments can become self-perpetuating entities churning out reams of data and information like some kind of out-of-control sorcerer's apprentice.²⁰

The Previous Planning Process

The preceding rapid gallop through military planning history brings us to the present day and the planning process. Armies, in particular, have now formalised their planning process. Before 1995, the Australian Army used the British planning method, known as the 'Military Estimate'. From 1995, the Australian Army began adopting the US (and later NATO) planning process.²¹ This was initially called by the US Army the 'Tactical Decision Making Process' and then the 'Military Decision Making Process'. The Australian Army called it the 'Military Appreciation Process' (MAP),²² and in 1999–2000 another version was produced by the ADF specifically for the joint operational level. It became known as the 'Joint Military Appreciation Process' (JMAP).²³

The MAP and JMAP were very similar to each other, with minor wording changes to reflect either the single-service need or the level of conflict. They both followed a standard process through several steps: scoping and framing (or receipt of mission), mission analysis, course of action development, course of action analysis and then decision and execution. The steps had sub-steps and then sub-sub-steps, each step building on the other in a predictable, linear fashion that attempted to reduce a problem to an optimal solution.

The MAP and JMAP processes were both broadly sound in principle and, like the Military Estimate that preceded them, they reflected contemporary understanding of how humans made decisions. The accepted belief at the time was that humans were rational beings and, when confronted with multiple options requiring a choice, would dispassionately and systematically reduce the options to arrive at the optimal outcome.²⁴ The pros and cons of possible outcomes would be objectively weighed and measured, and then the most sensible and rational course of action would be selected. It was felt that not only was this a practical way to make decisions that exploited the human brain's capacity but also it could excise any passion, emotion and bias that might lead to suboptimal decisions.

This iterative linear process of accepted decision-making theory was the cornerstone of the MAP and JMAP processes. Both were analytical, reductionist decision-making processes that, at least in their purest sense, considered all possible inputs, reduced them to all possible courses of action, and then compared these courses of action to all possible adversary actions. The process suggested that, if all facts were assembled and all possible courses of action were accessed without bias, passion or time constraints, then you would arrive at the optimal outcome. It was also easy to teach: as a process that logically moved from step to step, it lent itself to classroom sequences in which the process could be taught for its own inherent value. Given that the process in its purest sense was never-ending, large staffs could endlessly analyse an infinite array of combinations and variables to prepare various plans and courses of action.²⁵

Despite several positive aspects of the MAP and JMAP, both had critical flaws. Over many years of use it became apparent to the author that these reductionist analytical rationalist processes were sometimes quite unsuited to the military environment for which they were designed.²⁶ A reductionist analytical rationalist process requires certain factors to be present in order to be effective. For example, it requires that limited time is not a pressing factor, objectives are clearly defined, there is a complete understanding of the problem, information is complete, researched and derived, and there are present well-defined problem parameters that do not change.²⁷ If this environment exists, then planning and decision-making can use a reductionist process and will arrive at an optimal outcome. This approach is perfectly suited for, say, the optimisation of a car assembly line.

The military environment is, however, about as far removed from the environment described above as can be imagined, especially at the tactical and lower operational levels. Time is always short—invariably decisions are made in a time competition with an adversary. Information is always incomplete, untimely or wrong. The situation is always dynamic so that the problem that needs to be solved is constantly morphing. Further, the adversary's own 'car assembly line' shoots back. The Prussian military theorist Major General Carl Philipp Gottfried von Clausewitz reminds us that chance, uncertainty and friction are central to the nature of war, along with the human qualities required to overcome them such as courage, determination and adaptability.²⁸ Yet these qualities are not taken into account in a reductionist system characterised by the MAP and JMAP.

Western militaries, including the ADF, fought against these realities for many years, propping up processes like the MAP and JMAP rather than accepting that the processes themselves were the root of planning problems.²⁹ To start, it needs to be emphasised that the processes that anchored the MAP and JMAP are always compromised in some way. Nobody has time to consider all possible outcomes, so the process is invariably abbreviated. Indeed, having more time to plan can be a problem rather than a solution. The more time we take, the more the situation changes—if we take too long the initial inputs to our planning are likely to be obsolete and wrong so that we are now planning for a future response against an increasingly receding past. To use an analogy, this approach is akin to the use of some commercial drones by holiday-makers to take videos on cruise ships. After their video session is completed and the drone is signalled to return, many drones will attempt to land where they were launched and not where the ship has moved to, invariably resulting in the drones crashing into the wake of the ship. Military planning in a large staff can easily face analogous challenges; if too long is taken to consider all angles of a problem and in scripting PowerPoint briefings, the staff will not be able to keep pace with the ever-evolving situation. They will now be planning future actions against an increasingly receding past, and their planning is likely to crash into a hypothetical ship's wake.

Further examples of how the MAP and JMAP are compromised will come to mind to anyone experienced in the process.³⁰ Planners do not consider all possible adversary options because there is never the time to do so. Instead, they tend to make do with an assessment of the foe's 'most likely' and 'most dangerous' actions. In doing so, they invariably restrict themselves to two or three friendly courses of action in response, because they rarely have time or resources, or even intellectual bandwidth, to do more. Further, there are generally enormous gaps in information available to planners. In response, they tend to cover these deficiencies with assumptions, promising to revise plans if assumptions are proven wrong (though they rarely do so, because of the linear nature of the planning process). Attempts are made to predict exactly how forces will interact by crafting 'synchronisation matrixes'. While these are useful tools to help militaries envisage operational sequencing during the conceptual planning phase, they are useless (and even dangerous) if used to actually execute an operational plan. After-action reviews usually reveal how quickly forces depart from their synchronisation matrix on operations.³¹ Concerningly, staffs will often try to execute their plan rather than adapt to the actual situation on the ground. In some training institutions this problem is avoided by ignoring any study of plan execution altogether. In such scenarios, the plan becomes the end-point of analysis rather than the start.

The compromises made in efforts to apply the MAP and JMAP lead to a clear conclusion. Specifically, these reductionist analytical processes are suitable for planning only when the environment is stable. Such an environment can exist in the military: for example, the science behind many logistics plans and forecasts makes extensive use of analytical processes. But for the planning required for forces coming into contact, in the Clausewitzian environment of chance, uncertainty and friction, alternative planning processes and decision-making methods are required.

The Way We Actually Make Decisions

There is considerable literature on how humans actually make decisions in a time-constrained and ambiguous situation. Noted academics Gary Klein and Daniel Kahneman,³² for example, suggest that we are much more likely to quickly orientate to possible solutions using our experience. This experience, or heuristics and bias, is hard-wired into us, and we will tend to go with what we intuitively know based on what has worked for us before. Far from rationally and systematically analysing all possible courses of action, we will tend to quickly appreciate what we understand about a situation and act, changing our actions based on how our interaction changes a dynamic situation.

This approach has obvious advantages but also potential dangers when applied to a military situation. The advantage of drawing on previous experience is that it facilitates a speedy response; our tendency to act quickly (even if not perfectly) can have profound advantages in seizing the initiative or forcing an adversary to react to us. The other advantage is that our inclination to act is well attuned to the military environment where we simply cannot predict with any certainty the interplay between forces, and where we cannot plan ourselves out of situations that are unpredictable. The danger is, however, that a familiar response may also be a response that an adversary anticipates, and simplification of a problem to known heuristics may not allow the most creative or optimal use of all available resources.

To achieve sound military decisions, the key is to effectively harness both analytical processes and individuals' intuitive tendencies. By understanding the strengths and weaknesses of both processes we can use their respective benefits while masking or compensating for their vulnerabilities. The new ADF DMPP doctrine is centred on this approach. As already noted, analytical planning models are extremely useful in certain circumstances, particularly once a decision has been reached and detailed coordination is required. Analytics are very useful for what might be called 'the science of war', where facts and figures are the predominant concern. Equally, intuition and heuristics are particularly useful when ambiguity, intangibles and human factors are the primary factors.³³ The challenge is to know when and where to do which. The new doctrine directs that the way to approach this dichotomy is to reflect not on the needs of the staff and the process but instead on the person actually responsible and accountable for the decisions, the plan and the outcomes: the commander.

The Centrality of the Commander

At the outset, it is worthwhile to observe that there has never been an academy in Prussia or any other Western country that specifically focuses on the training of commanders. Over history, monarchies did not need such institutions because senior commanders were invariably appointed from within the nobility, who, with their 'special breeding' and 'innate, often divine talents' were already perfectly suited to command.³⁴ Beyond such assumptions, there was also some practical political reasoning behind selecting commanders in this way. After all, for countries that were ruled by monarchs, a loss in war might mean the loss of kingdoms. While this approach may seem quaint to us today, there are still vestiges of it apparent in the modern ADF. We should not forget, for example, that Royal Military College Duntroon was not established to produce commanders but to train staff officers; cadets were called staff cadets because they were destined to be staff officers, not commanders.³⁵ Commanders would come from the citizen forces—individuals whose skill in business could be expected to translate to military command.

The same was true of the naval training institution HMAS *Creswell*: its purpose was to produce midshipmen for the 'Grand Fleet', not to produce commanders of Australian warships. After all, it was assumed that these vessels would be commanded by British officers on loan from the Royal Navy.³⁶ It would also be fair to say that, even to this day, officer promotion (and other) courses tend to focus more on improving staff processes and staff functions than on improving commanders' ability to command.³⁷ During peacetime, staff work is often valued more highly, and is demonstrably more obvious and tangible, than command in battle. This being the case, the ADF's individual and collective training programs rarely reflect on the specific needs of the commander. A commander's experience on a military exercise is not the same as focused training; commanders need training at least as much as staff do.

The Australian Army's emphasis on staff training during formal courses has tended to diminish the importance of the commander and the chain of command, and their relationship with the staff. As a means to begin to rectify this, and as a departure from past planning doctrine, the new DMPP doctrine directly addresses this relationship.

Either the commander will be given a task by their higher commander, or the situation will have changed to such an extent that the existing orders under which subordinates are acting are no longer appropriate. The commander starts by understanding the problem they have been set, and then visualising possible responses. This understanding and visualisation is a personal response, and will invariably draw more upon heuristics and intuition than detailed analysis. A commander's response is automatic and very human—it actually takes considerable mental effort to not start formulating intuitive responses. Such a response starts as soon as the situation starts changing: in orders groups, commanders are continually focusing on their tasks while the orders are in progress, mentally visualising possible responses. As information enters a command post or reaches a commander through personal observation, they are able to continue to speedily identify and develop initial responses to the changing situation.

What happens next depends on the commander's ability to respond to the emerging situation. Inevitably, a commander will *pattern match*; that is, they will mentally scour their past experiences or knowledge gained from professional study to match a response, or pattern, to the situation. Through the process of pattern matching, the commander can recognise the level of uncertainty that exists between the needs of the situation and their ability to identify an appropriate response.³⁸ In some cases, there may be zero uncertainty; that is, a commander has sufficient information and experience to both see what immediately needs to be done and identify an appropriate response. In this case, the commander can decide and act immediately without further consideration. By contrast, the commander may be completely uncertain and unable to identify any workable response. In both examples, planning will not help the commander to respond. In the first, the commander has reached a decision immediately. In the

second, no amount of planning will solve uncertainty, except in the rare situation in which the uncertainty is about a 'friendly forces' situation or capability. Even then, the uncertainty arises more from an information gap than a planning problem. As these examples illustrate, the key start point for any commander's response is their knowledge base: knowledge which is derived from experience, training or both. The greater the commander's knowledge, the broader and deeper will be their pattern library. The better the quality of their pattern library, the better able they are to quickly orientate to a problem and match a pattern that aids both rapid and appropriate responses.

If the commander is so central to the process of operational decision-making, one can rightly question what the purpose of the planning staff is. In answering this question, it is important to reinforce what the staff do *not* do—they do not do the commander's job. This fact can be forgotten in the application of staff planning processes. Based on the way these processes are taught, and staffs exercised, someone unfamiliar with the process can come to believe that the planning process is a staff-led, commander-approved process. From this perspective, the commander is seen as a bit player who wanders in for briefings at key intervals, is presented options by the staff, mumbles some casual observations, and only returns for the next briefing. While this model might have some value when teaching the process (albeit it requires very careful expectation management), it does not represent operational need or the key role and responsibility of the commander. It is the commander's plan, not the staff's. The commander drives the plan to meet their needs.

The staff does have a key role, most of which starts *after* the commander makes a decision rather than before. The staff uses its power to undertake the second primary function of planning—coordinating the detail needed to execute the plan. Their role is far more the science of war than the art: their job is to answer the commander's remaining uncertainty and then produce an executable plan. While a good staff and good commander will not stubbornly sit in their respective lanes, and a commander uses their staff to cover their bias and provide options, the main role of the staff is to provide the detail. They need to be able to effortlessly and quickly turn concepts and ideas into executable plans. That is their key strength and responsibility, rather than doing the commander's job.

Who Are We Actually Planning For? The Importance of Subordinates

It is easy for staff to become focused on answering the mail from their higher headquarters and fulfilling the needs of their commander. It should never be forgotten, however, that commanders and staff write plans and issue orders for subordinates to execute. Therefore, commanders must exercise care when tasking staff, providing the appropriate balance between unified effort and freedom of action. Field Marshal Bernard Montgomery identified this requirement clearly, stating in his memoirs:

[My] war experience led me to believe that the staff must be the servant of the troops, and that a good staff officer must serve his commander and the troops but himself be anonymous.³⁹

An effective set of orders should be in the form of confirmatory notes rather than a revelation delivered from 'on high'. Subordinates should never be surprised by orders; nor should orders be the first indication of an operation. Subordinates should be involved in planning as often and as soon as possible, with parallel planning facilitated where possible. The earlier they are involved in the development of orders, the earlier they will understand the thought process behind the orders and thereby be in a position to develop their part of the action. Coordination between the staff and lower echelons leads to one of the most important outcomes of any good set of orders, and that is an intimate understanding by subordinates of the commander's intent. If subordinates are part of the process as the commander directs his staff and articulates what is important and what is not, they can more readily adapt to a changing situation while still operating within their commander's intent—a most useful output from orders. Similarly, it is too easy in a formal orders group to miss some of the nuances of supporting or flanking call signs. By contributing to the planning process, subordinates gain a broader awareness of all the parts that make up the whole, and a better awareness of how their tasks contribute to the overall operational outcome.

In addition to the renewed emphasis on the role of the commander, the new DMPP also emphasises the importance of adaptation during execution. Part of this adaptation is achieved in the way subordinates are tasked. Specifically, a subordinate should be given task(s), purpose and groupings but never a mission. This assertion may seem a little odd at first, and may start to sound as if we are chasing the elusive magic of *Auftragstaktik*, so well discussed in David Stahel's accompanying essay.⁴⁰ While seemingly incongruous, however, the idea of decentralised execution and intuition required by all commanders is deeply rooted in Australian doctrine.

Operational orders ordinarily adhere to a five-paragraph format. This format has a lineage far older than when the Australian Army began to study German theory. In this structure, there is only ever one mission statement. It appears in paragraph two and states the mission of the issuing command. The only mission that should be within an operational order is this one mission, the mission of the issuing command. Paragraph three describes the groupings and tasks, and often the purpose, for subordinates, but it does not set their missions. The specified tasks will generally be expressed using a 'task verb' (defined in doctrine) that describes an action or activity specifically assigned to an individual or organisation. Subordinates, however, are not bound specifically by this direction. They can alter the action or activity after analysis or as the situation changes. Subordinates are therefore expected to derive their mission by conducting analysis and arriving at their own mission. They do this by combining their understanding of their superior's mission (as stated in paragraph two), their understanding, and ideally intimate knowledge of the commander's intent and their own tasks and purpose. From this they derive their mission, which must be nested and bound by the three 'lenses' described above. Where circumstances permit, subordinates should brief the concept of their plan to their superior, who then has the opportunity to provide alignment where necessary, and then the concept is theirs to fulfil.

It is profoundly important that subordinate elements own their own mission. It is the principle upon which the deeper philosophies of mission command and decentralised execution are based. As Colonel-General Hans von Seeckt⁴¹ once wrote:

[I]n contrast to the binding order interfering in details of execution, the goal to be achieved is designated with assignment of resources, but with full freedom for the execution of the order. This viewpoint underscores a healthy understanding that **he who bears the responsibility for success must also choose the way to achieve it**. Just as it is a sign of weak spirit to shirk a responsibility, so it is arrogance to usurp a task that one is not responsible for.⁴²

Coupled with the responsibility to derive one's own mission is the motivation to achieve it within the commander's intent. Missions can and should change during their execution, and subordinates have both the **right and responsibility** to make such changes as the situation evolves. This approach is not radical; nor in adopting this procedure is the ADF aping another country's command and leadership philosophy or decision-making process. It is deeply ingrained in Australian doctrine. To illustrate, the 1970 'Division in Battle' doctrine has this to say:

Departure from Orders.

Notwithstanding the greatest skill and care in framing orders, unexpected circumstances may render the precise execution of an order unsuitable or impracticable. In such circumstances the following principles will guide the recipient of an order in deciding his course of action:

- a. A formal order is never to be departed from, either in the letter or spirit, so long as the officer who issued it is present, or there is time to report to him and await a reply without losing an opportunity or endangering the force concerned.
- b. If the conditions in Sub-paragraph a. cannot be fulfilled, a departure from either the spirit or the letter of an order is justified if the subordinate who assumes the responsibility bases his decision on facts which could not be known to the officer who issued the order, and if he is satisfied that he is acting as his superior would order him to act were he present.
- c. If a subordinate neglects to depart from the letter of his orders when such departure is clearly demanded, he will be held responsible for any failure that may ensue.
- d. Should a subordinate find it necessary to depart from an order, he is to inform the originator and the commanders of any neighbouring forces likely to be affected, as a matter of urgency.⁴³

Sub-paragraph c of this doctrine is particularly instructive. It both encourages subordinates to continually assess their mission and actually demands it of them, holding them accountable if they do not. This is how speed, agility and adaptability happen in combat—the quickest order is the one that does not have to be given because subordinates are already acting on their own initiative, sensing the threat or opportunity, and having the bias for action and joy in the responsibility to act. This realisation needs to be drummed into subordinates at the earliest opportunity, and every opportunity needs to be given in training to encourage this state of mind and sense of responsibility. Granting subordinates responsibility for their missions builds the basis of experience that becomes the foundation of pattern matching. But this opportunity is useless if the subordinate leader is not willing and prepared to use it. Therefore, despite uncertainty, anxiety and doubt, commanders must encourage subordinates to act. This takes patience and forbearance, and the acceptance of risk and the tolerance of mistakes in execution, but no other method survives and flourishes in the demands of combat.

Conclusion

This article is not an attempt to paraphrase the new doctrine released by the CDF—nothing substitutes for reading it and applying it. Instead, it has explained the fundamental shifts in thinking that underpin the doctrine. The staff, and its processes, have a long legacy, taking different styles and forms as they have evolved to the modern day. As has been described, the old planning process used by the staff—the reductionist and analytical approach—required a specific environment to be useful. While this environment could sometimes be found in a military context, especially when the science of war was required, it was generally disrupted by the friction, uncertainty and chance that characterises war. In an increasingly volatile and uncertain strategic environment, the ADF needs to turn to more naturalistic intuitive decision-making processes supported by the useful detail of analytics.

A planning process rarely exists by itself, yet previous ADF planning doctrine, and the way it was sometimes taught, could lead one to believe that the process was an end in itself.⁴⁴ The centrality of the commander to the process, therefore, has been enhanced in the new doctrine, and the relationship between the commander and their staff is iteratively illustrated. This new approach enhances adaptability during execution, and more fully accounts for how the involvement, tasking and training of subordinates is a key part of the whole decision-making process. It emphasises that learning a planning process for its own value is unsatisfactory and incomplete; the process must lead to sound and effective operational outcomes, specifically decisions that motivate and energise military forces. Good decision-making and sound planning processes exist to maximise the chance of success in war. Sound doctrine takes us some way forward to achieving this success.

About the Author

Major General Michael Krause is a cavalry officer and has commanded 2nd Cavalry Regiment and 1st Brigade when it was the Army's mechanised brigade. He has also served as an operational staff planner, both as the J5 at Headquarters Joint Operations Command and as the Chief of Staff Plans on Headquarters IJC in Afghanistan. He has served on operations in Iran, Iraq, Afghanistan and Solomon Islands. He was the operations instructor at Australian Command and Staff College, and served as Military Advisor to the Deputy Chief of Army and Chief of Staff to the Vice Chief of Defence Force/Chief of Joint Operations. Since transferring to SERCAT 3 (Army Reserve) he has mentored for nine years on the Army's senior tactics course, Combined Officers Advanced Course and Land Warfare Intermediate Course, and has mentored senior officers at the brigade level on major field exercises. He has contributed to Army and joint doctrine, including penning *Campaigns and Operations* and *Decision Making and Planning Processes*, the latter being the subject of this article.

ENDNOTES

- 1 M Ryan, *The Ryan Review: A Study of Army's Education, Training and Doctrine* (Australian Army Research Centre, 2016), p. 90. The author often hears anecdotes that at Command and Staff College, for example, the Army students are given the lead by others in many of the planning tasks.
- 2 M Cook, J Noyes and Y Masakowski (eds), *Decision Making in Complex Environments* (CRC Press, 2007), p. xxxii.
- 3 The ADF's doctrinal definition of command is 'The authority which a commander in the military lawfully exercises over subordinates by virtue of rank or assignment'. Command also includes the authority and responsibility for effectively using available resources and for planning the employment of organising, directing, coordinating and controlling military forces for the accomplishment of assigned missions. Australian Defence Force, ADF-P-0 Command, Edition 1, AL 1 (2024), p. 2.
- 4 Control is defined as 'The authority exercised by a commander over part of the activities of subordinate organisations, or other organisations not normally under their command, which encompasses the responsibility for implementing orders or directives'. It includes responsibility for health, welfare, morale and discipline of assigned personnel. All or part of this authority may be transferred or delegated. Ibid., p. 39.
- 5 Australian Defence Force, *ADF-I-5 Decision Making and Planning Processes* (2024).
- 6 J Keegan, *A History of Warfare* (London: Pimlico, 1993), p. 63.
- 7 B Montgomery, *A History of Warfare* (London: Janes, 1982), p. 89.
- 8 P Cartledge, *Alexander The Great: The Hunt for a New Past* (London: Macmillan, 2005), pp. 157–159.
- 9 F Fazekas, 'The Evolution of Military Staffs and the Possible Effects of Artificial Intelligence', in *International Conference Knowledge-based Organisations XXVII*, no. 1 (2021): 34.
- 10 D Irvine, 'The French and German Staff Systems Before 1870', *Journal of American History Foundation* 2, no. 4 (1938): 124.
- 11 E Vovsi, 'Paul Thiébault and the Development of the French Staff System from Ancien Régime to the Revolution', *The Napoleon Series* (website), at: www.napoleon-series.org.
- 12 M Van Creveld, *Command in War* (Harvard University Press, 1985), pp. 65–67.
- 13 C Millotat, *Understanding the Prussian-German General Staff System* (SSI, US Army War College, 1992), p. 12.
- 14 Ibid., p. 19.
- 15 Van Creveld, *Command*, p. 110.
- 16 J Corum, *The Roots of Blitzkrieg: Hans von Seeckt and German Military Reform* (University Press of Kansas, 1992), p. 25.
- 17 Keegan, *A History*, p. 377.
- 18 L Ordonez, *Military Operational Planning and Strategic Moves* (Springer, 2017), p. 21.
- 19 J Storr, *Something Rotten: Land Command in the 21st Century* (Hampshire: Howgate Publishing, 2022), p. 113.
- 20 This allusion is to 'The Sorcerer's Apprentice' (German: 'Der Zauberlehrling'), a poem by Johann Wolfgang von Goethe written in 1797. The poem begins as an old sorcerer departs his workshop, leaving his apprentice with chores to perform. Tired of fetching water by bucket, the apprentice enchants a broom to do the work for him, using magic in which he is not fully trained. The floor is soon awash with water, and the apprentice realises that he cannot stop the broom because he does not know the magic required to do so. Staff officers at large headquarters can both feel and act like the brooms, constantly producing staff work with little visibility of its value or how it connects with the bigger picture. See 'Works', *Babelmatrix* (website), at: <https://www.babelmatrix.org/works/de/goethe>.
- 21 The author was a student at Australian Command and Staff College in 1995 and was part of a small team selected to trial the new planning process.

- 22 Australian Defence Force, LWD 5-1-4 *The Military Appreciation Process* (2009).
- 23 Australian Defence Force, ADFP 5.0.1 *The Joint Military Appreciation Process* (2019).
- 24 L Buchanan and A O'Connell, 'A Brief History of Decision Making', *Harvard Business Review*, January 2006, at: <https://hbr.org/2006/01/a-brief-history-of-decision-making>.
- 25 This facet of the MAP and JMAP process was observed by the author while teaching it for nine years on Army's premier tactics course, the Combined Officers Advanced Course, and again while serving on a large coalition staff in Afghanistan in 2011–12. This latter experience further identified that one of the most common phenomena in low-tempo operations is a feeling of drift and boredom. It is very hard to identify progress; change is slow and often only identifiable in retrospect. With large staffs, and not much of real significance happening on a daily basis, staff work filled the void and kept people busy. Staff work fed the daily battle rhythm rather than meeting the needs of the operation/campaign.
- 26 R Lempert, 'Robust Decision Making', in V Marchau, W Walker, P Bloemen and S Popper (eds), *Decision Making Under Deep Uncertainty* (Switzerland: Springer, 2019), p. 13.
- 27 Australian Defence Force, *ADF-I-5 Decision Making and Planning Processes*, p. 10.
- 28 Carl von Clausewitz, *On War* (Princeton University Press, 1976 [1832]), p. 119.
- 29 Lempert, 'Robust Decision Making', p. 25.
- 30 These are common issues identified by the author.
- 31 The Combat Training Centre trend reports are full of examples. Many are available through *The Cove or Smart Soldier*. See *The Cove* (website), at: <https://cove.army.gov.au/>.
- 32 Gary Klein's work can be found at *Gary Klein* (website), at: <https://www.gary-klein.com>. One of the late Daniel Kahneman's more popular books is D Kahneman, *Thinking Fast and Slow* (London: Penguin, 2012).
- 33 For further exploration of the 'art' and 'science' of war, see Beatrice Heuser, 'Theory and Practice, Art and Science in Warfare: An Etymological Note', in Daniel Marson and Tamara Leahy (eds), *War, Strategy and History: Essays in Honour of Professor Robert O'Neill* (Canberra: Australian National University Press, 2016), pp. 179–196.
- 34 As late as World War I, many armies were commanded by nobles or even monarchs. King Albert took to the field as head of the Belgian Army, and William, the crown prince of Prussia, commanded the Fifth Army advancing into Alsace. See B Tuchman, *The Guns of August* (London: Robinson, 1962).
- 35 D Moore, Duntroon: A History of the Royal Military College in Australia, 1911–2001 (RMC, 2003).
- 36 See 'The Royal Australian Naval College's Debt to Admiral Creswell', *Naval Historical Society of Australia* (website), at: <https://navyhistory.au/the-royal-australian-naval-colleges-debt-to-admiral-creswell/>.
- 37 In my own career, all courses concentrated on staff work far more than they did on operational command. Perhaps instructively, most Army courses separate the training on command, leadership and management from the operations component, and the former is often esoteric, conceptual and general rather than specifically aimed at operational command.
- 38 'Pattern matching' and 'recognition primed decision making' are terms used by Gary Klein. See *Gary Klein* (website). See also K Ross, G Klein, P Thunholm, J Schmitt and H Baxter, 'The Recognition Primed Decision Model', *Military Review* 84, no. 4 (2004).
- 39 B Montgomery, *The Memoirs of Field-Marshal Montgomery* (London: Collins, 1958), p. 35.
- 40 David Stahel, 'Auftragstaktik: The Prussian-German Origins and Applications of Mission Command', *Australian Army Journal* 21, no. 3 (2025).
- 41 Chief of the German General Staff 1919–1920 and Army Commander 1920–1926. Von Seeckt is credited with forming the intellectual underpinning of the later Wehrmacht, particularly its command philosophy. See J Corum, *The Roots of Blitzkrieg*.

- 42 Quoted in E Middeldorf, *Führung und Gefecht: Grundriß der Taktik* (Frankfurt am Main: Bernard and Graefe, 1968), p. 68. Emphasis added by this author. Some commentators express concern that any military should follow or study German methods from the two world wars, given the reasons why the Germans were fighting and especially the odious political leadership in the second. Professionals can separate why the Germans fought from how they fought, and much can be learned from the leadership theories of thinkers and leaders such as von Seeckt. This is not modern whitewashing; to quote from the diary of Field Marshal Viscount Alanbrooke on 23 May 1940 as he withdrew his corps in the face of the German advance through Belgium and France, 'It is a fortnight since the German advance started and the success they have achieved is nothing short of phenomenal. There is no doubt that they are the most wonderful soldiers'. A Bryant, *The Turn of the Tide 1939–1945* (London: Collins, 1958), p. 101.
- 43 Australian Army, *The Division in Battle Pamphlet 1: Organisation and Tactics*, Australian Army Doctrine (obsolete) (1970), p. 6–2.
- 44 This is a personal observation.

/ DEVELOPING THE ARMY MIND

Chris Wooding

‘I think the greatest gift anyone can give to another is the desire to know, to understand.’¹

Louis L’Amour

The Australian Army must improve its approach to teaching defence mastery to its junior officers (JOs) to better prepare Army for now and the future. In his keynote address to the 2024 Chief of Army Symposium, Chief of Army (CA) Lieutenant General Simon Stuart introduced his intent for a ‘wholesale, holistic review of our profession’.² In this speech, he asked:

How do we best weave together the human elements of fighting power—the intellectual and the moral—with the physical elements, to become more than the sum of their parts? ... we must ensure our profession is fit for today’s purpose ... that we are ready to ‘fight tonight’.³

This quote highlights the central question to the CA’s review: is the Australian Army preparing itself and its people sufficiently for the next war and beyond? CA’s emphasis ‘[goes] beyond the physical component of fighting power’⁴—the equipment and platforms. Instead, it is centred on people and understanding the human face of war. As CA suggested, and this article argues, Army needs to enhance its professional expertise, its professional body of knowledge. Such a body of knowledge is essential to Army’s ‘intellectual edge’ and is fundamental to its ability to contribute to joint warfighting at a time of growing geostrategic competition and regional tension.

This article proposes that the Australian Army could be more prepared to ‘fight tonight’ and sustain long-term competition by enhancing its JO education to develop the Army mind—the individual component of an intellectual edge—and contribute to an Australian Army school of thought. As it stands, Army’s approach to JO education does not fully prepare the Army and its junior leaders for the challenges of today and tomorrow. The current system focuses JO development on technical and social mastery, excluding the deliberate teaching of defence mastery after initial officer training⁵ until the Australian Command and Staff Course (ACSC)—10 years into an officer’s career.⁶ While instilling

the fundamentals of tactics and command is necessary for consolidating JO competency, this article contends that enhancing JO professional expertise goes beyond these things. Such measures, by themselves, are insufficient to address the complexities and challenges of today's existing and emerging battlespace.

To enhance professional expertise as CA desires, a more structured, continuous and engaging approach to professional military education (PME) will need to be adopted—starting with reconceptualising defence mastery. For the purposes of this article, defence mastery is defined as '[the] deeper understanding of what, how and why Defence contributes to protecting and promoting Australia's national interests'.⁷ In considering this issue, this article treats professional expertise synonymously with the concept of professional mastery. Defence mastery is considered by the continuum of joint profession military education (JPME) to be: 'the sum of an individual's depth and breadth of knowledge and understanding of a profession combined judiciously with the ability to apply it through the lens of personal experience and intellect'.⁸ Within Army, the study of defence mastery generally involves three topics: profession of arms, national security policy and strategy, and cognitive abilities.

This article will describe the current state of JO education and defence mastery in the Army, and the need for long-term investment in it. It will discuss the need for an intellectual edge within Army, and it will introduce the concept of the 'Army mind'. The article will then relate this analysis to the concept of enhanced defence mastery. Finally, this article suggests ways to optimise the existing approach taken by Army to JO education programs in its efforts to foster defence mastery. Specifically, it proposes that defence mastery within Army be reconceptualised, and it provides key considerations to help achieve this. This article will not, however, address the challenges of implementing the above suggestions. Instead, it will focus on diagnosing the problem and optimising Army's current approach to PME. This is simply the first step to better conceiving and implementing PME within the Australian Army. As part of this limitation, this article does not conduct a comparative analysis of Royal Australian Navy (RAN) or Royal Australian Air Force (RAAF) PME approaches—though this is worth investigation in another body of work. Further, it does not seek to challenge the relationships established in the JPME continuum, specifically between the concepts of professional mastery and defence mastery. These relationships, and related definitions, deserve analysis; however, there is insufficient scope within an article of this nature to do so comprehensively.

The Current State of Army PME

People are the foundation of war, capability, and military advantage.⁹ Given this, Army needs officers who, in the words of retired Major General Mick Ryan, have the capacity ‘to thrive in ambiguity, to exploit fleeting opportunities and the ability to continuously learn about their ever-changing environment’.¹⁰ They must be able to interpret and adapt to changes in the character of war as new technologies affect the profession. JOs have a significant role to play in guaranteeing institutional success in the information age. This is broadly the intent of the JPME continuum, published by the Australian Defence College, which states the ‘fundamental goal [of JPME] is to develop transferable abilities for unforeseen challenges’.¹¹ The JPME continuum approaches this goal through a pyramid model addressing themes related to technical, social and defence mastery—each with its own sub-topics.

While the JPME continuum has a broad focus, JO education emphasises the achievement of technical mastery—core domain and specialist skills and procedures—over defence mastery.¹² This means that while the induction level of JPME taught at initial officer training provides a foundation in defence mastery for officer cadets, this does not continue in a directed or structured manner at the second JPME level: the intermediate level. Rather, at the intermediate level of the JPME continuum—between lieutenant and major—the focus is on developing tactical and technical expertise as well as the basics of leadership and command. JOs learn how to contribute to the fight within their service and specialisation.¹³ The all-corps officer training continuum (ACOTC) is the main formal mechanism for developing tactical mastery. It involves a series of corps-specific and all-corps courses at lieutenant, captain and major ranks. Through ACOTC, Army systematically develops officers with strong abilities in tactics, command and leadership—that is, technical and social mastery in the JPME continuum. In addition to tactical mastery, career courses prepare students for command and staff roles in units. In this regard, ACOTC courses are useful in ensuring sufficient staff-trained officers are available to support the functioning of the Australian Army in war—and are a continuation of a long tradition of similar courses dating back to the early 1910s.¹⁴ ACOTC produces officers who are technically and tactically proficient within their specialisation and service but have little formal development in the concept of defence mastery.

Currently, defence mastery is comprehensively introduced at the mid-career point through ACSC, otherwise known as Staff College. This approach is largely the same as that which existed in 1938, with Australia’s first Command and Staff College.¹⁵ Prior to Staff College, defence mastery is predominantly studied through informal PME. Informal PME encompasses those learning activities which occur outside the military’s schools and formal processes. They might take place in units, in messes, or via blogs. They might also involve, for example, informal social discussions, reading, mentoring relationships,

or self-study. On-the-job training (OJT) is another mechanism for developing officers. However, this type of learning takes place incidentally and is reinforced through practical workplace experience. It is not a directed and structured approach. While OJT is an important mechanism for achieving PME, it suffers from many of the same challenges as informal PME—being reliant on the specific job and supervisor as well as being siloed within posting cycles.

Although informal PME is a strength of Army and one valued by its people, it is insufficient by itself to develop defence mastery and achieve an intellectual edge.¹⁶ The current state of informal PME is described as ‘ad hoc and personality based’.¹⁷ This state does not adequately develop the Army mind because it lacks direction and structure. This is particularly true for achieving defence mastery. Even where significant resources exist, such as COVE+ (Army’s online PME repository), there is no core syllabus to direct learning. COVE+ is composed of a series of short courses, ranging between 10 and 40 hours of learning. These courses are grouped into modules based on broad topics, such as ‘Art and Science of War’ and ‘Art and Science of Thinking’.¹⁸ Internally, each course is well structured to guide learners through that particular topic. However, the only structure that exists external to each course is the module groupings previously mentioned and a quasi-structure implied by hours required per course. In other words, the COVE+ does not feature any kind of syllabus to guide learners between courses to develop nested understanding.¹⁹ While this unstructured approach can be a strength of informal PME because it enables flexible and self-paced learning, greater direction is required if learners are to fully understand organisational problems and priorities, and to navigate the plethora of resources, both credible and un-credible.²⁰

The lack of focus on defence mastery and the absence of formal military education for the first 10 years of an officer’s career in the Army is untenable.²¹ Students arrive at Staff College with limited awareness of their broader profession, both single service and joint—risking bad habits and misinformed views. Despite the ADF recognising that this approach is inadequate, previous reform efforts have been stymied by ‘the ADF’s unwillingness, or inability, to take ownership of core professional knowledge’.²² The success of the ADF as an integrated force capable of joint warfare rests, in part, on the willingness of the RAN, Army and RAAF—the organs to which uniformed members belong—to invest in JPME. While JOs must master the fundamentals of technical and social mastery, focusing solely on these aspects fails to broaden their minds sufficiently and inadequately prepares them for war and command. It further denies the organisation the opportunity to be informed by fresh minds who can help shape the profession. Improving the direction and structure of Army’s approach to defence mastery will enhance its professional expertise and intellectual depth. Achieving this begins with affirming the need and purpose of developing an ‘Army mind’ before addressing a more clearly defined and structured framework for Army PME.

An Intellectual Edge and the Army Mind

Achieving enhanced defence mastery will contribute to generating Army's intellectual edge and will develop the Army mind. Defence mastery develops judgement, both practical and intellectual, which can offset declining technological advantage.

An intellectual edge is 'a relative state of collectively performing at a higher cognitive level than our adversaries'.²³ This collective performance is gained through institutional and individual intellectual practices.²⁴ An intellectual edge goes beyond thinking and adapting more quickly than an adversary. It is also about anticipating (not predicting) changes in war. It involves understanding those elements of both change and continuity as part of an organisation's ability to anticipate and adapt before, during and after conflict. It does not simply entail the achievement of better cognitive abilities; it also requires knowledge of the Army profession to identify and address the tactical, operational and strategic problems which inhibit military effectiveness now and into the future. An intellectual edge matters across the entire span of competition and conflict, both short and long term.

PME helps develop an intellectual edge through the expertise it imparts, the cognitive skills it grows, and the problems it helps to solve. When General James Mattis, USMC, wrote on the importance of reading (as self-study), he was also alluding to the value of PME. His famous remarks are a simple yet profound articulation of its importance:

By reading, you learn through others' experiences, generally a better way to do business, especially in our line of work where the consequences of incompetence are so final for young men. Thanks to my reading, I have never been caught flat-footed by any situation, never at a loss for how any problem has been addressed (successfully or unsuccessfully) before. It doesn't give me all the answers, but it lights what is often a dark path ahead.²⁵

The Army mind is the individual component of the intellectual edge and embodies an understanding of the fundamentals of land power and the Army profession. The Army mind is one that can think both tactically and strategically, and do so at the right time, to make effective decisions.²⁶ Through developing the Army mind, JOs master the propositional and conceptual elements of professional expertise—not simply its procedures. The Army mind assists in creating officers who continually refine their trade to achieve excellence across tactics, operational art, and strategy—similar to how a generation of British naval officers, embodied by Vice Admiral Horatio Nelson, refined their profession to create the peak of British sea power at the turn of the 19th century.²⁷ The problems facing joint warfighting, land power and even individual corps' tactics have not decreased. Trends in the character of war, such as increasing technological parity, new forms of mass, and changing appreciations of time, demand an intellectual edge to win.²⁸ Further, technological change will complement—not replace—the need to develop professional expertise to address the challenges of combat and conflict. Humans are

the users of technology,²⁹ and militaries will always need to connect technologies with concepts to achieve military advantage. This is why developing the Army mind matters—it is a key part of every individual's intellectual edge.

By enhancing defence mastery—and thus officers' intellectual edge—JOs can be employed more effectively across the span of competition and conflict. Their job in war, as already established, is tactics and command with the aim of winning battles. Grounding officers in tactics and command is clearly important to military effectiveness. Nevertheless, issues such as emerging technologies, climate change and social trends—as well as the constantly changing character of war—all demand more of military leaders. Creating officers who have the professional expertise to think about *and* solve the problems they confront, tactical or otherwise, is the essence of an intellectual edge. Defence mastery should complement tactical mastery by providing the intellectual foundation and arguments to engage in debates around changes in the character of war. JOs can bring their recent experience and fresh perspectives to debates about tactical, operational and strategic challenges. JOs can also elevate the perspectives of soldier practitioners to the staff officers who lead and manage capability. Yet too often, JOs are left without the professional intellectual foundation to influence these debates. Their insights remain an untapped resource that should be harnessed to help generate Army's intellectual edge—especially through the development of a collective intellectual framework such as an Army school of thought.

JOs have the potential to contribute more to an Australian Army school of thought to help solve institutional challenges in the face of a changing character of war—it is part of the institutional component of an intellectual edge. A school of thought is described as 'a way of thinking'³⁰ or 'a set of ideas and opinions that a group of people share about a matter'.³¹ A school of thought is part of the collective, or institutional, component of an intellectual edge. It does not comprise simply doctrine and concepts (which might be inputs or outputs); nor is it simply a component of strategic culture—although this is an obvious influence on any military school of thought. Whereas doctrine is considered to be a command and planning tool,³² an Army school of thought is an intellectual framework to identify, frame, and address contemporary and future military problems. A school of thought informs concepts, which are the 'agreed ideas to address a future military problem'.³³ An Army school of thought is as much about the agreed problems to be solved as it is about the shared intellectual culture and foundations of the institution—it encapsulates the approach Army takes to the challenges it faces. The agreed problems of a school of thought might be unique to Army or might be common among the three services, RAN, Army and RAAF. Examples of this latter type of problem might be command and control or joint fires. Army will have a different view on how to achieve joint interoperability when compared to the RAN or the RAAF, and even when compared to other nations' armies. The Australian Army's distinct perspective on both problems and

solutions contributes to intellectual diversity and the competition of ideas, both within and beyond Army. An Australian Army school of thought contributes to effective institutional problem-solving and innovation for future military effectiveness.

JOs, with strong intellectual foundations, can contribute to solving operational and tactical problems. In *The Arms of the Future*, Jack Watling describes the difficulties militaries face in effective transformation. He argues that current visions of the future are inadequate—overly focused on technical possibility and strategic impact—and thus fail to address the operational and tactical challenges of future war. Watling contends that the absent elements of institutional problem-solving mean militaries struggle to envision alternatives to their current models and thus tend to optimise for existing concepts over pursuing new ones.³⁴ JOs can be armed with the knowledge and language to offer their experiences and observations to staff officers tasked with developing Army's future capabilities, concepts, and doctrine. Furthermore, junior members of the profession may be less constrained by prevailing wisdom—adding to the innovativeness of Army. JOs may help to answer the questions of 'what new tools are available, what does it take to employ them in a coherent manner, and therefore what pieces are available to be assigned by operational planners?'³⁵ JOs may not solve complex military problems alone, but they can better contribute to a bottom-up approach in efforts to analyse the future character of war by virtue of their tendency to focus on tactical and technical expertise. Innovation is an important output of an intellectual edge, but this innovation only serves to sustain military effectiveness and advantage. The Army school of thought developed through defence mastery helps create an institutional intellectual edge by bringing together diverse perspectives to solve common problems.

An Investment in the Future

Some within Army may consider that efforts to improve Army's approach to defence mastery, and PME generally, for JOs are distractions from core business. They are not. A more clearly defined PME pathway for defence mastery would be part of a long-term investment in officers as military professionals—more than a 'quick win' with immediate rewards. It would provide officers with a broader military context to support their pursuit of excellence within their assigned roles, without seeking to make them into operational artists³⁶ or strategists at the wrong time. Knowledge gained through PME remains relevant throughout an officer's career regardless of the length of time they serve or the professional pathway they take. Furthermore, there is a long lead-time for intellectual development—it requires years of nurturing. It takes time for individuals to achieve sufficient knowledge and experience to make expert judgements. Providing courses to officers just prior to their commencing a role may be adequate when their responsibilities are limited to procedural duties and training, but it deprives individuals and Army of

the opportunity to think deeply about military effectiveness and advantage. Enhancing defence mastery provides several benefits to individuals and the institution in the short, medium and long term.

In the short term, defence mastery reinforces the fundamental relationship between the military functions of tactics, operational art, and strategy. In practice, these functions are mutually supporting and involve interdependent activities—they are not discrete ‘levels of war’ as they are often conceptualised.³⁷ Sir Lawrence Freedman describes how distinctions between strategy and tactics are blurred in practice. This is because their dialectic relationship creates a feedback loop that shapes one another.³⁸ This dialectic makes it important for JOs to better understand defence mastery so they can appreciate the broader aspects of the Army profession. While JOs may focus on tactical activities, the quality of the tactical outcomes they produce within their domains and specialisations inevitably shapes the strategic options available to higher command.³⁹ Similarly, ensuring JOs understand the interconnected relationship between tactical decisions and strategic outcomes helps avoid a disconnect developing between strategy and tactics if institutional weaknesses exist at the operational level. In this regard, Major General Andrew Hocking’s review of Australia’s Afghanistan campaign noted:

Failure to invest at the operational level generates increased risk that sacrifices made at the tactical level will not align with or contribute to desired outcomes at the strategic level.⁴⁰

Connecting strategy, operational art, and tactics will be important to unifying military efforts, particularly as the notion of an operational level of war is being increasingly challenged as inadequate.⁴¹ While structural and procedural changes to methods of warfare may work to resolve this, JOs with enhanced defence mastery are an equally, if not more, important investment.

In the medium term, earlier introduction to defence mastery would prepare JOs for their next career stage, when they need to become operational artists. Such a measure would allow for a new vision for the ACSC—one in which it focuses on domain consolidation and joint integration.⁴² ACSC is typically the point at which officers ‘transition from tactically focussed activities to building excellence in higher level joint activities’.⁴³ Ryan notes this is also the point where education ‘nurtures the capacity for more strategic understanding while building expertise in the operational art’.⁴⁴ Developing the Army mind at a junior level leads to a more nuanced approach to the concept of operational art and generates officers who are better able to contribute to the joint operational echelons of the ADF that focus on ‘achieving a convergence of military tools across warfighting domains’.⁴⁵ Instead of providing an introduction to these broader professional ideas, ACSC could shift its focus towards consolidating and integrating them within the three services. A revised ACSC curriculum could also complement civilian analysis and existing

ADF efforts (such as those led by the Future Land Warfare Directorate) by acting ‘as think tanks and idea incubators for the wider military institution’.⁴⁶ This approach would see a portion of the ACSC curriculum used to solve real institutional problems, akin to how the US Naval War College was used prior to the Second World War to develop War Plan Orange across the plan’s various iterations.⁴⁷ ACSC students would be guided and mentored by experts and supported by resources. This framework would position the ADF to apply collective mental effort to problems informed by material that is not available in, for example, open-source PME blogs.⁴⁸

In addition to preparing officers for career progression, the study of defence mastery would assist them to assume higher responsibilities in the event of mobilisation. In a wartime scenario, it is likely that Army will rapidly grow, requiring officers to assume greater responsibility than in peace. Rapid organisational expansion may preclude many officers from attending military educational institutions, such as ACSC. Instead, they may be offered an abridged course focusing on the immediate practicalities required to join a staff, with an emphasis on standardised solutions (rather than broader aspects of war), and inducting them into a community of thought.⁴⁹ History has shown that this can occur due to the demand for more people forcing education and training establishments to emphasise quantity over quality, as occurred in the British Army during the First and Second World Wars⁵⁰ and in the United States Navy in the Second World War.⁵¹ As with any effort to develop strategic understanding, developing professional expertise on the broader aspects of war, and inculcating a community of thought among military personnel, cannot be surged in crisis. Introduction to defence mastery at an early stage in a JO’s career would ensure a baseline of professional expertise is achieved at all levels, resulting in Army being better prepared to accept the inevitable challenges of mobilisation.

In the long term, achieving defence mastery is part of the continuous development of professional expertise. PME cannot stop at ACSC. PME is a career-long endeavour for all Army professionals, both soldiers and senior officers—in this, the need for sound PME programs does not dissipate beyond O4 (major) rank. Although such programs of learning already exist, they tend to be for star-ranking officers. This situation has led Evans to comment on the existence of a second 10-year gap in professional education between ACSC and the senior Defence and Strategic Studies Course.⁵² Improving institutional efforts to achieve defence mastery throughout the officer career continuum can help address this gap by enabling officers to continue their professional education between O4 and star ranks. Enhancing defence mastery also supports the identification and development of strategists. Writing in 2021, Ryan discussed the failure of the ADF to consistently generate strategic thinkers and strategists. He noted that many individuals in strategic roles, particularly senior leaders, only receive training immediately prior to assuming their leadership positions. This is too late to be developing strategic

thinkers—something that Ryan notes cannot be surged in a crisis but requires long-term investment.⁵³ Senior officers must master operational art and develop strong strategic thinking skills before they become eligible for star-rank, not at the point of promotion.

The investment in JOs through defence mastery has several enduring applications beyond those benefits mentioned above, such as enabling mission command, preparing officers to cope with surprise, and facilitating organisational change (adaptation and innovation). These three enduring aspects of defence mastery are detailed below. In the case of mission command, defence mastery augments the capacity of JOs to understand and contextualise the commander's intent, which improves the quality of their decision-making. This observation applies to JOs in both command and staff roles. The importance of mission command in staff roles is perhaps less discussed, but the continuous evolution of the modern battlefield makes this aspect increasingly important, as BA Friedman describes:

The difference on the modern battlefield isn't the number of troops or tanks, but the right kind of teams sharing the right information ... It's less about staffs that can feed information to the commander, and more about staffs that can run an OODA loop based on the commander's intent.⁵⁴

Friedman's description clearly indicates the importance of mission command in contemporary conflict. Trends such as distributed operations and contested electromagnetic environments place a high premium on commanders exercising sound judgement across all levels. Developing the Army mind, through defence mastery, hones their capacity to achieve this. Defence mastery further creates trust between commanders through the relationships formed in the shared intellectual development of the Army mind. In this way, Army is better able to apply the principles of mission command to exploit an intellectual edge.

Another enduring benefit of enhancing defence mastery among JOs is that it improves their capacity to cope with surprise. Although new technologies are making the battlespace increasingly transparent and are enhancing command and control, there is still room for surprise on the modern battlefield.⁵⁵ In this environment, officers must be able to both cope with and exploit surprise in its various forms.⁵⁶ Defence mastery improves the capacity of JOs to recognise and understand surprise beyond the immediate 'actions on' that training provides. It also helps prevent the mental shock that often accompanies surprise, as well as assisting officers to identify opportunities to exploit surprise. This is particularly important, as surprise has become a requirement for successful tactical action on the modern battlefield.⁵⁷

Change, through adaptation and innovation, is a hallmark of military affairs across the spectrum of conflict. Change exists through every function and layer of the organisation, from tactics to strategy and from platoon level to the army organisation as a whole.

Militaries seek to gain advantage over an adversary through change. While training and ethos are important in creating individuals able to navigate change, so too is education. General Giulio Douhet, an Italian air power theorist, wrote in 1921 that '[victory] smiles upon those who anticipate the change in the character of war, not upon those who wait to adapt themselves after the changes occur'.⁵⁸ However, adaptation does not stop after the commencement of hostilities. Militaries must be able to survive day one and then continue adapting—as the Russia-Ukraine War demonstrates.⁵⁹ Accordingly, Army needs to anticipate and prepare for a future war while being adaptive enough to adjust throughout. Enhanced defence mastery provides the intellectual foundations to achieve adaptation and innovation through the process of change.

Optimising Defence Mastery

To improve defence mastery, better direction and structure is required to connect the JPME continuum to the Army context. Defence mastery should complement technical mastery through joint operational understanding and strategic awareness. This means redefining defence mastery to more fully reflect the studies required to achieve professional expertise. It means being explicit not just about the importance of cognitive abilities and strategy but also about the distinct need to study land power and joint warfighting alongside foundational topics such as the relationship between military and society. CA Directive 11/24 takes the first step towards this aspiration by directing the creation of an Army PME plan.⁶⁰ To be effective, this plan will need to amount to more than the rank-based reading list currently published periodically by CA. Instead, Army members will need lenses through which to interpret what they read and watch. These lenses need to be relevant to the organisation's priorities and challenges, while not being restrictive. The PME plan must therefore aid officers and soldiers alike to pursue defence mastery throughout their careers by providing accessible lenses to achieve it.

This article proposes that defence mastery should be divided into sub-elements, or topics, to better guide units and individuals to develop the Army mind. These topics connect the abstract notions of PME and defence mastery to practical learning guides. The first three studies—land power, joint warfighting, and professional foundation studies—are a devolution of the singular 'the profession of arms' topic, which is already incorporated as a sub-element within the JPME continuum. The remaining two studies, 'national security policy and strategy' and 'cognitive abilities' are not new topics but this article proposes a framework within which they can be studied more systematically.⁶¹ By breaking down defence mastery in this way, these studies can bridge the divide between military training and academic education to ensure they are cohesively enhancing military effectiveness.⁶² These topics address what Evans describes as 'studies which draw on academic and military knowledge, but which are designed to promote the effectiveness and viability

of military organisations'.⁶³ In other words, they affect military effectiveness and are concerned with understanding war. The five areas of study are further explored below—noting, however, that these topics are not mutually exclusive; they frequently overlap.

Land Power Studies. This topic is central to developing the Army mind. The purpose of land power studies is to develop the Army mind and contribute to an Army school of thought. To achieve this, land power studies entail domain-centric learning focused on the design, development, sustainment and application of land forces. Land power studies also include the study of interdisciplinary topics relevant to military effectiveness in the land domain. Exploring this topic must be more than a doctrine walkthrough—it should span the breadth of military history and cover war in its various dimensions.⁶⁴ It should include study on the principles of land power to enable officers to solve contemporary problems and to anticipate the future of land warfare.

Joint Warfighting Studies. Major General Smith, Deputy Chief of Army (DCA), noted the historical continuity of all-domain warfare when he wrote 'It is not new; we're just going to do it with new stuff'.⁶⁵ In this context, joint warfighting studies builds understanding of the interrelationships between domains in all-domain warfare. It provides the intellectual link between domain mastery and joint warfighting, between the Army and the integrated force. The topic describes the nature of warfare domains (land, sea, air, space, and information) and how land power is affected by—and affects—the other domains. DCA underscored the relevance of such study when he described a vision of 'all-domain warfare', which he defined as 'a battle fought in one domain for an effect in another'.⁶⁶ Army has a professional obligation to develop and sustain expertise in joint warfare in addition to land warfare. For example, Army members might study British naval theorist Sir Julian Corbett and American naval strategist Admiral Alfred Thayer Mahan to understand the dynamics of sea power—relevant given Army's renewed focus on littoral operations and a long-range land and maritime strike capability.⁶⁷

Professional Foundation Studies. These studies are relevant to the military as a profession and are often domain-agnostic. Professional foundation studies aim to develop an understanding of the military and the Army as a profession, not just an occupation. They are about the history and sociology of the profession of arms, and they are about war as a phenomenon.⁶⁸ They build breadth and depth of knowledge beyond more traditional studies in tactics, operational art, and strategy. When they do consider these conventional topics, professional foundational studies emphasise their philosophical aspects with the purpose of enabling students to gauge the organisational 'health' of the Army profession.

National Security Policy and Strategy. This topic already exists within the current JPME continuum. It focuses on generating understanding of strategy, the application of military power as an instrument of national power, and Australia's place in the regional

and global context.⁶⁹ This topic has some overlap with professional foundation studies as the focus is not dissimilar; however, where professional foundation studies emphasise the profession, national security policy and strategy focuses on practice. While the topic is generally regarded as of most benefit to officers after ACSC,⁷⁰ Hocking observes that it is also highly relevant to JOs:

[The] understanding of national and military strategic objectives at the tactical level is in many ways central to the 'soldier/state compact'. It both guides and motivates tactical action and in doing so reduces the risk of moral injury that is associated with unclear purpose.⁷¹

Cognitive Abilities. Like national security policy and strategy, this topic is already included within the existing JPME continuum. It involves aspects of defence mastery as well as technical and social mastery. It exists as a standalone topic due to its importance—it requires explicit emphasis. This is because cognitive abilities are a prerequisite for enhancing defence mastery and developing an Army mind that has the attributes needed to succeed in warfare. Cognitive abilities entail more than the capacity to frame and solve problems, or the faculty to think critically and creatively. They also encompass the capacity to adapt and thrive in chaotic environments—to be what Peter Roberts describes as the 'antifragile fighter'.⁷² Guided education can provide an effective way to enhance cognitive abilities among military members, thus improving the organisation's ability to adapt and innovate.

While adding the topics 'land power', 'joint warfighting' and 'professional foundation studies' to the study of defence mastery promises to enhance the professional abilities of officers, Army requires a more detailed PME pathway. To this end, Table A proposes specific themes that should be addressed within each topic (except for 'cognitive abilities' because it is composed of skills developed through practical engagement with the other topics, rather than through its own themes). In essence, these directed themes provide an element of strategic design to guide efforts to develop the Army mind, to foster discussion about topics from different perspectives and understandings, and to help connect informal PME and self-study with formal education. The themes do this by helping to provide direction about the Army's intellectual priorities at an organisational level without curtailing the flexibility of informal PME. They provide an institutional framework for engaging in PME without dictating the means of engagement. They allow flexibility for individuals to explore their own interests, thus contributing to the intellectual diversity of the organisation. The themes reflect both the agreed problems at the heart of the Army's school of thought and the core knowledge required within the Army profession. Importantly, they are resilient to changes in the world—unrestricted by a learning management program that may take months to change and be outdated again by the time it is released. Ultimately, the themes outlined in Table 1 support what Ryan calls 'a nucleus around which we can build individually tailored intellectual developments'.⁷³

Table 1. Examples of topics and themes in professional, joint warfighting, land power studies, and national security policy and strategy

	Professional Foundation Studies	Joint Warfighting Studies	Land Power Studies	National Security Policy and Strategy
Themes	<ul style="list-style-type: none">• The Profession of Arms and Australia*• Law and Ethics*• Theory of War and Conflict*• Civil-Military Relations*	<ul style="list-style-type: none">• Understanding Joint and All-Domain Warfare• All-Domain Command and Control• Integrating with Coalition Partners and Allies	<ul style="list-style-type: none">• Land Power in All-Domain Warfare**• Balancing Change and Continuity in Land Power**• The Influence of Land Power on the Sea	<ul style="list-style-type: none">• Contemporary Australian Strategy• International Relations in a Changing World

* Indicates themes drawn from *Vincible Ignorance*⁷⁴

** Indicates themes adapted from *Studying Airpower*⁷⁵

Each of the themes outlined in Table 1 supports officers to enhance their knowledge of history, theory and doctrine and to reflect on relevant experiences that contribute to their achievement of defence mastery. Given the practical nature of the military profession, the topics and their supporting themes should be studied in the same manner in which Sir Michael Howard suggests practitioners study military history: in width, depth and context.⁷⁶ This means to study across the width of time to view change and continuity, in depth to avoid the artificial order imposed on events and systems by rationalists,⁷⁷ and in context to grasp that wars are fought by societies, not solely militaries.⁷⁸ To study defence mastery in this way requires commitment to continuously learn about the Army profession and the profession of arms more generally. To ensure that maximum benefit is achieved, there are some further relevant considerations outlined below.

Intellectual Rigour. This is an essential quality of military studies because achieving defence mastery requires deeply and seriously engaging with the themes and topics for a practical purpose—that of war. There is a danger of credentialism in this type of education—to acquire qualifications for their own sake rather than to enhance intellectual capacity. This has been a recurring theme in many reviews of Australian military education, to the point where Evans argues:

[The ADF] saw the development of an institutional mindset that fostered dependence over independence; credentialism over creativity; academic stricture over professional knowledge; and superficial understanding over serious study.⁷⁹

The purpose of military studies is in their application to practical problems confronting the military and the nation. The knowledge and ideas explored through such studies are tools for achieving clear and critical thought based on evidence and sound logic.⁸⁰ It is far too easy to accept the views of others when the demands of work (and life) diminish one's capacity to develop the mind and critically analyse others' views—regardless of whether they come from senior officers, academics or other commentators. The cost of sloppy thinking in peacetime might only be felt in money or time, whereas during war it will manifest in the loss of blood and lives. No commander or leader wants to reflect and say they could have done more. The First World War is an example of this occurring in the most tragic way. The French Army's entrenched belief in an 'offensive spirit' failed to survive the bullets and artillery of the Western Front, leading to the deaths of 300,000 French soldiers in first month of the war alone.⁸¹ Every officer, as a member of the profession of arms, owes it to their soldiers and themselves to develop their professional expertise in a practical and realistic way. In the next war, particularly as a middle power, and even when operating in a coalition, the cost to Australia of poor thinking is likely to be defeat.

Instructional Cadre. To improve defence mastery, Army needs a cadre of officers, with demonstrated intellectual rigor and research skills who can teach professional studies.⁸² The requirements of these educators differ to those of educators in training roles, meaning that existing military and recruit instructor cadres are unsuited for this purpose. Instead, the instructional cadre needs to be more akin to officers posted to the Australian War College as directing staff. These educators should possess the qualities of officer-teachers who are able to coach students through reflective practices and discussions and inspire their intellectual reflection and curiosity. They should possess research skills to enable them to engage in research activities outside of their teaching roles and to maintain the corpus of professional knowledge. They should play a key role in adapting Army's educational approaches to the realities of modern warfare. Developing such a cadre will take time to fully embed into the career management process but, fortunately, suitable officers already exist across Army. The challenge is to harness the career management processes to develop those who show potential for this kind of instructional work and ensure they are placed in the right roles to teach professional studies. Further, it is important that these educators are recognised and rewarded for their efforts—if officers lose out on career opportunities due to this role, it will make this initiative short-lived.

Army already possesses institutions that can underpin land power education. The Australian Army Research Centre (AARC), for example, conducts research into some of the relevant topics and fields. However, AARC research—and output—is primarily oriented towards senior leaders and decision-makers, rather than towards providing products of an educative nature. Whether the AARC, the Army G7 (the staff section responsible for training and education), or some other entity is the responsible agency, there exists a need for an outreach function. This function should provide access to experts who can conduct PME activities where and when they are needed and develop learning courses that can be delivered by units to supplement what is delivered by such experts.⁸³

Reflective Practice and Mentoring. These conditions are both essential for developing the Army mind. This is particularly true in the absence of any instructional cadre or a systematic approach to the achievement of defence mastery. Reflection is the process by which experience becomes wisdom. It is perhaps the fundamental process of learning, by synthesising new experiences and knowledge with the old to increase understanding. As observed by Shane Parrish, a former Canadian intelligence officer, 'Reflection is the grunt work of thinking ... If we read and don't reflect, we only have the illusion of knowledge'.⁸⁴ Reflective practice is often undertaken by an individual, so there is the need to support such efforts with mentorship and discussion. Writing for the US Navy, BJ Armstrong and John Freymann state that 'it is the responsibility of every leader to develop the intellectual professionalism of the men and women who serve with them'.⁸⁵ In an Australian context, this requires superiors to make time to engage with their subordinates to mentor them across all three elements of the JPME continuum.

Discussion Forums. These forums are an enabler of the study of defence mastery. They include blogs, journals and even podcasts. Discussion forums allow members to share ideas across the organisation, at all levels, without the limitations of location. Army possesses a number of these forums, such as *The Cove* and the *Australian Army Journal*. It is important that these resources exist to provide members from different specialisations the opportunity to discuss and debate the problems and ideas relevant to their community. Existing forums tend to be general in nature, attempting to be one-size-fits-all. Where this is not the case, forums tend to focus on strategic issues rather than on 'smaller' problems of particular units and specialisations. Army needs the forums that exist, but it also needs 'watering holes' that can deal with 'more specific topics of interest to only some subset of specialists'.⁸⁶ The establishment of specialist forums might also help overcome another limitation of existing platforms: that they are predominantly open source and thus inhibit discussion due to security requirements. Creating a separate

forum within a system classified at the 'protected' level or higher could help contribute an intellectual edge within Army. In this regard, the Australian Defence Education Learning Environment (Protected) is one existing mechanism that could be used for this purpose. Messes are another place in which professional discussions can occur. Although mess culture has dwindled in recent years, messes are still recognised as an important space for PME.⁸⁷

While this article has focused on optimising the achievement of defence mastery within the existing Army education system, it can be further enhanced by creating a more systematic approach to educating for war. To support the intellectual development of military professionals, such an approach to PME should commence in the first decade before officers attend ACSC. It should provide a way to continually engage in the long-term development of individuals to achieve an intellectual edge. Making the time available to learn in the face of Army's persistently high tempo of activities and ongoing changes is vital to any such long-term effort. Even if a systematic approach were introduced in the near term, it would need to be sustained in order to maximise results. This may be difficult to achieve because the results of the measures proposed here may not be evident for several years, perhaps decades, as officers move through Army and as the approach finds its mark. Therefore, long-term investment would need to be maintained across successive Chiefs of Army to ensure this systematic approach persists and is able to help intellectually prepare Army for long-term competition.

Achieving a systematic approach to the achievement of defence mastery within Army would require a transformative effort. One proposal is Evans's recommendation to reorientate formal PME delivery from exclusively episodic residential courses (at 10-year intervals)—which he regards as more suited to industrial-age education—to a system of continuous career-long learning. This needs to include blended short courses that can deliver professional studies between residential milestones. Such efforts could be based on the Centre for Defence Research's short course model.⁸⁸ Further, the elements of defence mastery could be better included within existing ACOTC courses to create additional deliberate touchpoints for intellectual development. Complementing these efforts, COVE+ could be reorganised to more clearly reflect the topics and themes proposed in Table 1 and could provide a suggested syllabus to support each topic, including core and elective modules. Measures like these would better introduce officers to an Army school of thought and an intellectual culture that would support developing the Army mind.⁸⁹

Conclusion

The concept of defence mastery is an important missing element in efforts to develop the Army mind of JOs. Although is introduced during initial officer training, defence mastery is not consolidated or adequately updated until Staff College, which is typically 10 to 15 years into an officer's career. Instead, the intervening period focuses primarily on the generation of tactical expertise. This situation limits the development of Army's professional expertise and the intellectual edge needed to prepare Army to fight tonight and compete long term.

The Army mind needs to be developed during Army officers' formative years in order to generate a solid understanding of the profession beyond an exclusively tactical or technical perspective. Earlier introduction to defence mastery benefits Army's professional expertise and military effectiveness by developing an Army school of thought that can contribute to an intellectual edge in response to conflict and long-term competition. Such an approach would represent a departure from the current system, which is overly reliant on informal and often self-directed PME prior to officers' attendance at ACSC. Better defining the elements of defence mastery, however, would better position JOs to develop an Army mind that would enhance their effectiveness in both command and staff roles. It would also inculcate JOs in an Army school of thought consistent with the sustainment of Army's professional expertise and military effectiveness, including its contribution to joint warfare. Further, it would enable Army to better focus the learning opportunities provided by ACSC. In sum, the measures proposed in this article represent a fundamental shift in Army's weight of effort for PME—from a system that largely ignores the concept of defence mastery during an officer's formative years prior to ACSC, to one that favours continuous professional development with a focus on integration and consolidation of learning to achieve both Army and joint effects.

This article has provided several suggestions to help optimise Army's existing approach to defence mastery—although it has not addressed the challenges of implementation. Instead, it recommends reframing the concept of defence mastery from its current focus on three topics to a focus on five topics. This new framework for JPME better articulates the areas of study necessary to achieve defence mastery and positions ACSC to focus on consolidation and integration of defence mastery, rather than the introduction of those broader professional ideas. This article has proposed that each of the learning topics related to defence mastery should be supported by themes that provide a more clearly defined structure for interpretation and study, while preserving a degree of flexibility to approach each topic and theme in a variety of ways. The article also suggests that Army

more deeply consider the importance of intellectual rigour, instructional cadre, reflective practice and mentoring, and discussion forums to achieve maximum benefit from the framework proposed. Finally, the article has highlighted that Army could further improve its professional expertise by pursuing a systematic approach to defence mastery, and that these efforts must continue beyond the mid-career point of ACSC.

Although it is only one part of an entire system of professional military education, defence mastery contributes to a more professional Army whose officer corps can think beyond the tactical and the technical. It is not about turning junior officers into strategists—it is about the continuous development of officers so they can contribute more fully to military success regardless of specialisation. Defence mastery is a crucial component of ensuring Army is not only ready to fight tonight but also able to sustain its profession for long-term competition. Army should not be satisfied with ignoring the development of the Army mind in its junior officers for their first 10 years of service.

About the Author

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/ A CENTRAL PILLAR OF THE ARMY PROFESSION: THE CONCEPTUAL EVOLUTION OF THE AUSTRALIAN ARMY'S AND AUSTRALIAN DEFENCE FORCE'S OPERATIONAL AND TACTICAL PLANNING PROCESSES

Aaron P Jackson

In the opening chapter of his seminal 1957 book *The Soldier and the State*, Samuel Huntington enduringly defined what makes the military a profession rather than a trade, vocation or job. Huntington defined a *profession* as uniquely manifesting three aspects: expertise, responsibility, and corporateness.¹ In the case of the military, the foremost aspect, he asserted, is:

a central skill [that] is perhaps best summed up in Harold Lasswell's phrase 'the management of violence'. The function of a military force is successful armed combat. The duties of the military officer include: (1) the organizing, equipping, and training of this force; (2) the planning of its activities; and (3) the direction of its activities in and out of combat.²

Though Huntington's primary focus was on civil-military relations, and most of his arguments in this regard have since been disproven,³ his definition of what constitutes the military profession has been remarkably enduring. This is likely to be because, in this definition if not in most other aspects of his study, Huntington was largely right. It is no wonder, therefore, that other scholars using this definition have since traced the military profession to ancient times,⁴ and that the majority of the 'classical' studies of military affairs focus on strategy, tactics or campaign histories.⁵ Even Clausewitz, arguably the most masterful military scholar, focused primarily on these areas, the most significant of his many contributions being to explicitly link their purpose to the pursuit of government

policy.⁶ It is only since the late 20th century that other aspects of military professionalism, such as ethics and related matters including organisational value systems and codes of conduct, have risen to a position of equal prominence.⁷

Despite this recent broadening of scholarly focus, the management of violence not only remains central to the military profession but is its *raison d'être*. No *Australian Army Journal* special edition focusing on the Army profession would be complete without addressing it. This paper focuses on one of its significant components: how the Army plans military operations. Specifically, it analyses the recent conceptual evolution of the Australian Defence Force's *Decision-Making and Planning Processes* doctrine publication, which provides guidance for planning at the operational and tactical levels.⁸ The centrality of this doctrine publication to the Army profession, and for that matter to the Australian Defence Force (ADF) as a whole, should not be understated. In the words of Marcus Mäder:

Doctrine is more than the formal publication of military concepts. It stands for an institutional culture of conceptual thinking on the nature of conflict and the best conduct of warfare. It is the military's instrument for analysing past experience, guiding current operations and exploring future challenges.⁹

The management of violence is central to the Army profession; planning military activities is central to the effective management of violence; and the *Decision-Making and Planning Processes* doctrine publication is central to how Army plans military activities. As a profession, it would be remiss of us not to critically reflect upon it.

Such an analysis is also timely. Part of an entirely new doctrine hierarchy that was introduced following recent reforms that rolled single-service and joint doctrine into a single, integrated series, *Decision-Making and Planning Processes* was published in November 2024. It has superseded two prior publications: *Joint Military Appreciation Process*, which was an ADF joint doctrine publication; and the Army's *Military Appreciation Process* doctrine publication.¹⁰ Yet the new *Decision-Making and Planning Processes* doctrine publication is not simply an integration of its two predecessors. On the contrary, it arguably contains the most unique planning process that the ADF has ever promulgated. It is therefore even more important that it be thoughtfully examined than would be the case had it merely been a minor update to the publications it replaced. This paper provides context by briefly summarising *Decision-Making and Planning Processes*. It then conducts a quantitative, followed by a qualitative, analysis of this publication relative to its predecessors. In conclusion, recommendations are made about how the planning processes it contains and their implementation could be further enhanced.

Decision-Making and Planning Processes: An Overview

Decision-Making and Planning Processes contains two separate yet interrelated planning processes. The first is the Immediate Decision-Making Process (IDMP), which is designed to assist a commander to quickly appraise a situation, determine a response and, depending on the context, either issue orders to subordinates or issue guidance to planning staff. IDMP has seven elements: scoping; framing; mission analysis; decide response; develop response into orders or plan; implement orders; and assess. Two additional elements may be added, depending on the context: reassessing the situation if scoping and framing determines that the commander does not possess enough information; and course of action (COA) development and analysis if the commander cannot intuitively determine a suitable response. IDMP is intended to be rapid and intuitive, using pattern matching to enable commanders to determine suitable response options.¹¹ This requires training in pattern recognition, and chapters are included discussing how to effectively make decisions, and how to effectively train commanders and planning staff.¹²

The second planning process contained in *Decision-Making and Planning Processes* is the Deliberate Military Appreciation Process (DMAP), which is designed to be undertaken by a planning staff in support of a commander. Completed over a longer timeframe than IDMP, DMAP consists of three core steps, which are summarised below.

1. **Scoping and framing.** This step confirms that the commander and planning team understand the nature of the problem to be solved, and establishes a risk management process that adapts a conventional workplace risk management framework to suit operational conditions. A 'staff estimate', which contains a snapshot of key information and planning outcomes, is established in this step, but requires continual update and supplementation throughout the rest of the process.¹³
2. **Mission analysis.** The most substantial step, this step determines objectives (achieving all objectives enables an 'end state', which was determined by the commander during their IDMP) to be reached at the conclusion of the operation; tasks; and decisive actions, which determine discrete activities required to achieve objectives. A mission statement is determined, limitations identified, and decisive actions sequenced in space and time along thematic lines of operation. A centre of gravity analysis identifies adversary vulnerabilities that can be targeted to defeat it, and own vulnerabilities that need to be protected. COA sketches and statements are produced at the end of this step. These contain a broad schematic of how an operation may unfold.¹⁴

3. **COA development and analysis.** During this step at least one COA, sometimes more, is developed in detail. The purpose of each COA is to enable all decisive actions, tasks and objectives to be achieved. The suitability of each COA is then tested through the conduct of a wargame, enabling improvements to be identified and incorporated.¹⁵

These steps are supported by two complementary activities. The first is the Joint Intelligence Preparation of the Operational Environment (JIPOE) process. This iterative activity occurs concurrently with DMAP. It analyses the environment, adversary and other major stakeholders, enabling possible adversary actions to be identified and countered.¹⁶ The second is 'concept of operations development' or 'plan development and execution', which may occur at any point in the process once the commander has decided upon actions to be taken. This activity takes DMAP's outcomes and finalises them for implementation. Depending on the operation, this may be as simple as writing and issuing orders, or it may involve development of several detailed supporting plans and assessment measures.¹⁷

Several aspects of IDMP and DMAP deliberately overlap, with the complementary relationship between the two processes being that the commander uses IDMP to identify key inputs to, and requirements from, DMAP. They also use the information gaps and resulting questions identified during IDMP, and their assessment of available planning time, to consider which parts of DMAP need to be completed, and which can be abbreviated or omitted.¹⁸ This occurs because DMAP is comprehensive but very lengthy, and completing all activities may not be possible in all circumstances.

Quantitative Analysis

Comparing *Decision-Making and Planning Processes* to the two doctrine publications it replaced requires comparing the two current planning processes to four predecessors. This is because one of the two preceding publications, *Military Appreciation Process*, contained three different processes. In descending order of scale, these were the Staff Military Appreciation Process (SMAP), designed for use by staff in land domain tactical headquarters; the Individual Military Appreciation Process (IMAP), designed for use by individual commanders prior to execution; and the Combat Military Appreciation Process (CMAP), designed for rapid post-execution responses to changing situations. The previous joint doctrine publication contained only one planning process, the Joint Military Appreciation Process (JMAP), which was designed for use by staff in joint operational-level headquarters.

A quantitative comparison of the two new and four previous planning processes is shown in Table 1. This table shows the planning methods featured in each process. For the purposes of this comparison, a 'method' is defined as a way of doing something, or an established approach or procedure. Each planning process is itself a 'methodology', which is a deliberately structured framework of methods employed to complete a task.¹⁹ Table 1 therefore breaks each planning process (methodology) into its constituent components (methods) for the purposes of analysis, in the same way the planning processes themselves consist of steps and sub-steps to break planning down into manageable tasks. Importantly, the steps and sub-steps of each planning process are not synonymous with their constituent methods. Some sub-steps contain several methods, while others contain just one. This is why Table 1 shows more methods than there are steps or sub-steps in any of the planning processes reviewed. Additionally, in some instances different processes use different methods to achieve the same or similar planning outcomes. Table 1 therefore includes several methods that may seem synonymous within the table but which are different when the doctrine is read in detail.

Table 1. Comparing methods in different planning processes

Ser.	Method	CMAP	IMAP	SMAP	JMAP	IDMP	DMAP
1.	Allocate resources (e.g., to tasks)	✓	✓	✓	✓	✓	✓
2.	Assess relative combat power						✓
3.	Battlespace operating systems		✓	✓			
4.	Branches (on lines of operation)			✓	✓		✓
5.	Centre of gravity analysis		✓	✓	✓		✓
6.	Commander's critical information requirements		✓	✓	✓		✓
7.	(Commander's) decision points			✓	✓		✓
8.	Commander's direction and guidance	✓	✓	✓			✓
9.	Commander's estimate					✓	
10.	Commander's intent statement	✓		✓	✓	✓	✓
11.	Consider implications of operational environment					✓	
12.	Consider own capabilities and their availability	✓	✓	✓		✓	
13.	Control measures	✓	✓	✓			
14.	COA (map) overlay		✓	✓			
15.	COA analysis questions		✓				

Ser.	Method	CMAP	IMAP	SMAP	JMAP	IDMP	DMAP
16.	COA development	✓	✓	✓	✓	✓	✓
17.	COA method statement			✓			
18.	COA viability test (e.g., FASSD (feasible, acceptable, suitable, sustainable, distinguishable) or FASSADD (feasible, acceptable, suitable, sustainable, adaptable deception, distinguishable))	✓	✓	✓	✓	✓	
19.	Critical factors analysis		✓	✓	✓		✓
20.	Culminating points				✓		✓
21.	Deception measures (mandatory incorporation)			✓			✓
22.	Decision support (map) overlay			✓			✓
23.	Decisive events		✓	✓			
24.	Decisive points/actions				✓	✓	✓
25.	Determine area of interest		✓	✓	✓		✓
26.	Determine area of operations		✓	✓	✓		✓
27.	Determine mission	✓	✓	✓	✓	✓	✓
28.	Developing supporting plans				✓		✓
29.	Documenting the plan				✓		✓
30.	Effects	✓		✓	✓	✓	✓
31.	End states		✓	✓	✓	✓	✓
32.	Enemy capability analysis*	✓	✓	✓			
33.	Enemy COA analysis*	✓	✓	✓			
34.	Enemy doctrinal (map) overlay*		✓	✓			
35.	Evaluation/assessment			✓	✓	✓	✓
36.	Event (map) overlay		✓	✓			✓
37.	Event and intelligence, surveillance and reconnaissance matrix*			✓			
38.	Force ratio comparisons			✓			
39.	Framing				✓	✓	✓
40.	Graduated response						✓
41.	High value target list or matrix*		✓	✓			

Ser.	Method	CMAP	IMAP	SMAP	JMAP	IDMP	DMAP
42.	Identify assumptions		✓	✓	✓		✓
43.	Identify critical facts		✓	✓	✓		✓
44.	Identify limitations/constraints		✓	✓	✓		✓
45.	Identify named areas of interest		✓	✓	✓		✓
46.	Identify opportunities		✓	✓		✓	
47.	Identify targeted areas of interest			✓	✓		✓
48.	Identify tasks	✓	✓	✓	✓	✓	✓
49.	Integration of functions				✓		✓
50.	Intelligence/threat assessment			✓	✓	✓	✓
51.	Iterative planning (process or cycle)			✓	✓		✓
52.	Killboards						✓
53.	Lines of operation			✓	✓		✓
54.	Main effort		✓	✓	✓		✓
55.	Objectives			✓	✓	✓	✓
56.	Operational pauses				✓		✓
57.	Operational reach				✓		✓
58.	Operational risk	✓	✓	✓	✓	✓	✓
59.	Other battlespace factors analysis (i.e., PMESII/ASCOPE (political, military, economic, social, information, infrastructure / areas, structures, capabilities, organisation, people, events))*		✓	✓			
60.	Outline sketch			✓			✓
61.	Pattern matching					✓	
62.	Phasing		✓	✓	✓		✓
63.	Risk assessment/management (including safety and welfare)				✓		✓
64.	Sequels (on lines of operation)			✓	✓		✓
65.	Sequencing				✓		✓
66.	Simultaneity in depth				✓		✓
67.	Situation (map) overlay*		✓	✓			
68.	Situation description				✓	✓	✓

Ser.	Method	CMAP	IMAP	SMAP	JMAP	IDMP	DMAP
69.	Staff estimate						✓
70.	Structure for staff functions				✓		
71.	Synchronisation (not using matrix)	✓	✓		✓		✓
72.	Synchronisation matrix			✓	✓		✓
73.	Tempo planning				✓		✓
74.	Terrain analysis (e.g., OCOKA/ MCOO (observation and fields of fire, cover and concealment, obstacles, key and decisive terrain, avenues of approach / modified combined obstacle overlay))*	✓	✓	✓			
75.	Timeline planning	✓	✓	✓	✓		✓
76.	Visualisation	✓	✓	✓			✓
77.	Wargaming			✓	✓		✓
78.	Weather analysis*		✓	✓			
79.	Writing a concept of operations		✓		✓		
80.	Writing and issuing orders	✓	✓	✓	✓	✓	✓
	Total methods included	18	40	56	49	21	56

Given that *Decision-Making and Planning Processes* has replaced four previous planning processes with two new ones, one could reasonably expect the two new processes to synthesise the functions of all four of the old ones. The nature of the new processes conforms to this expectation: two old process and one new one (CMAP, IMAP and IDMP) are intended for use by individual commanders, while two old processes and one new one are intended for use by headquarters staffs (SMAP, JMAP and DMAP). Table 1 enables us to see where overlap, synthesis and divergence occur in the case of both of these groupings of processes.

With regard to the processes intended for use by staffs, SMAP and DMAP contain the same number of methods (56); however, only 38 (68 percent) of these are common between them. Although JMAP contains seven fewer methods overall (only including 49), 46 of these (94 per cent of those in JMAP) are also included in DMAP. SMAP and JMAP overlap for 33 methods (respectively 59 and 72 per cent), although it should be noted that 32 of these 33 methods are included in all three processes. Serial 18 is the only method in both SMAP and JMAP that is not in DMAP. This is because it has been moved to IDMP in the new doctrine, meaning that although it is now completed by the commander rather than the staff it is still included in planning. The first of the two JMAP methods that have

been removed from DMAP is serial 70, which is now in a different doctrine publication.²⁰ The other is serial 79; however, the status of this removal is questionable. Although a method for how to write a concept of operations is not included in DMAP, the related term 'conops' is used throughout, mostly in sections of text that appear to have been copied verbatim from the previous JMAP doctrine. Indeed, the term is even used in the name of one of DMAP's two complementary components, despite omission of a corresponding method.²¹ Accordingly, this omission may be an editorial oversight rather than the result of deliberate process design (more on this below).

Before drawing any conclusions from these overlaps, a key difference between the old processes (SMAP and JMAP) needs to be considered. This difference is that the number of included methods is higher in SMAP because it was intended to be taken into the field for use by all staff within an Army tactical headquarters as a single point of reference. By contrast, JMAP was designed for use by *planning* staff in operational-level joint headquarters, where other staff branches could access their own corresponding doctrine. As a result, JMAP was not intended to be a single point of reference. This difference in relative purpose resulted in SMAP including information that JMAP deliberately omitted. In particular, SMAP included methods used to complete the Intelligence Preparation of the Battlespace (IPB) process, whereas the joint equivalent, JIPOE, was contained in a separate doctrine publication. Nine IPB-specific methods are marked in Table 1 with an asterisk (serials 32, 33, 34, 37, 41, 59, 67, 74 and 78). None of these methods appears in either JMAP or DMAP. Once these are removed from the comparison, SMAP includes 47 other methods, of which 33 (70 per cent) are also in JMAP and 37 (79 per cent) are also in DMAP. Three of the nine non-IPB SMAP methods that are not included in DMAP are in IDMP instead (serials 12, 18 and 46), while the other six have been entirely removed from the new processes (serials 3, 13, 14, 17, 23 and 38).

An additional analysis of each method was undertaken to determine if that method is discussed primarily in terms of tactical application, in terms of operational application, or as being applicable at both levels.²² This analysis was completed for all methods based on their description within all six planning processes. The resultant groupings are shown in Table 2. Regarding the methods that are described both tactically and operationally, this assessment was made in consideration of the description in all processes that included the method. In several cases, description of a method in Army's processes (CMAP, IMAP and SMAP) was tactical in focus, while description of the same method in JMAP was operational in focus. For example, in CMAP, serial 30 is discussed primarily in tactical terms (local, immediate and direct effects); in JMAP and DMAP it is discussed primarily in operational terms (systemic, variable duration, and either direct or indirect effects); and in SMAP and IDMP it is discussed in a manner applicable to both levels.

Another qualifier regarding Table 2 is that its categorisation applies only to the methods as described in the evaluated doctrine. It does not take into account military theory or historical applications of each method, which may be broader or narrower in focus than the doctrine. For instance, serial 20 is assessed as being described primarily in terms of operational application and serial 21 as being described primarily in terms of tactical application. This is despite the fact that military theory conceives of both methods as being applicable at both levels.²³

There is a final qualifier regarding the use of percentages in Table 2 and the subsequent quantitative analysis. Percentages are used here to refer to the overall number of methods only. This does not account for the relative prominence afforded to some methods within a particular planning process, their relative centrality within it, or the number of other methods they are explicitly linked to. Although the findings of its quantitative analysis are nevertheless valid, these limitations are offset by further discussion contained below in this paper's qualitative analysis section.

Table 2. Categorisation of methods by explanation primarily in terms of tactical or operational application

Methods described primarily in terms of tactical application	Methods described primarily in terms of operational application	Methods described both tactically and operationally
3. Battlespace operating systems 9. Commander's estimate 13. Control measures 14. COA (map) overlay 15. COA analysis questions 17. COA method statement 21. Deception measures (mandatory incorporation) 22. Decision support (map) overlay 23. Decisive events 32. Enemy capability analysis* 33. Enemy COA analysis* 34. Enemy doctrinal (map) overlay* 36. Event (map) overlay 37. Event and intelligence, surveillance and reconnaissance matrix*	4. Branches (to lines of operation) 20. Culminating points 24. Decisive points/actions 28. Developing supporting plans 39. Framing 49. Integration of functions 53. Lines of operation 55. Objectives 56. Operational pauses 57. Operational reach 64. Sequels (on lines of operation) 65. Sequencing 66. Simultaneity in depth 68. Situation description 73. Tempo planning	1. Allocate resources (e.g., to tasks) 2. Assess relative combat power 5. Centre of gravity analysis 6. Commander's critical information requirements 7. (Commander's) decision points 8. Commander's direction and guidance 10. Commander's intent statement 11. Consider implications of operational environment 12. Consider own capabilities and their availability 16. COA development 18. COA viability test (e.g., FASSD or FASSADD)

Methods described primarily in terms of tactical application	Methods described primarily in terms of operational application	Methods described both tactically and operationally
38. Force ratio comparisons 46. Identify opportunities 52. Killboards 59. Other battlespace factors analysis (i.e., PMESII/ASCOPE)* 60. Outline sketch 61. Pattern matching 67. Situation (map) overlay* 69. Staff estimate 74. Terrain analysis (e.g., OCOKA/MCOO)* 76. Visualisation		19. Critical factors analysis 25. Determine area of interest 26. Determine area of operations 27. Determine mission 29. Documenting the plan 30. Effects 31. End states 35. Evaluation/assessment 40. Graduated response 41. High value target list or matrix* 42. Identify assumptions 43. Identify critical facts 44. Identify limitations/constraints 45. Identify named areas of interest 47. Identify targeted areas of interest 48. Identify tasks 50. Intelligence/threat assessment 51. Iterative planning (process or cycle) 54. Main effort 58. Operational risk 62. Phasing 63. Risk assessment/management (including safety and welfare) 70. Structure for staff functions 71. Synchronisation (not using matrix) 72. Synchronisation matrix 75. Timeline planning 77. Wargaming 78. Weather analysis* 79. Writing a concept of operations 80. Writing and issuing orders
Total number: 24 (30 per cent)	Total number: 15 (19 per cent)	Total number: 41 (51 per cent)

Regarding the significance of the omission of nine non-IPB SMAP methods from DMAP, it can now be observed that two of the nine fit into the category 'described both tactically and operationally' (serials 12 and 18), while the other seven are 'described primarily in terms of tactical application' (serials 3, 13, 14, 17, 23, 38 and 46). Both of the methods described at both levels (serials 12 and 18) were kept, but are now included within IDMP rather than DMAP; only one of the exclusively tactical methods was also retained here (serial 46). This finding shows that several of the land domain focused tactical planning methods included in SMAP are now omitted from ADF planning doctrine altogether.

Despite this omission, DMAP has a more tactical focus than JMAP. This difference is shown in Table 3, which sorts the methods in each process shown in Table 1 according to the groupings of primary method descriptions shown in Table 2. Unsurprisingly, given their intended application, CMAP and IMAP contained exclusively dual or tactical methods, while JMAP contained exclusively dual or operational methods. SMAP contained a mixture of all three method categorisations, though it included more tactical than operational methods. Both of the new planning processes contain a mixture of all three method categorisations, with the number of primarily tactical or operational methods in IDMP being relatively balanced and DMAP including more operational than tactical methods. The operational methods in DMAP match those in JMAP. Indeed, all 15 methods assessed in Table 2 as being 'discussed primarily in terms of operational application' are included in both JMAP and DMAP. Of the seven tactical methods in DMAP, three were in SMAP (serials 21, 22 and 60), one was in CMAP, IMAP and SMAP (serial 76), one was in IMAP and SMAP (serial 36) and two were not in any previous planning processes (serials 52 and 69).

This quantitative analysis identifies that JMAP and DMAP much more closely align than SMAP and DMAP. It is therefore likely that JMAP was much more influential on DMAP's development. Where changes have occurred between JMAP and DMAP, they have tended to incorporate tactical methods into what was previously an exclusively operational planning process. As a result of being optimised for neither tactical nor operational level planning, DMAP represents at once a 'tactification' of the ADF's joint operational art and a removal of tactically focused methods from Army's planning toolkit. This is most likely due to the integration of all ADF doctrine into a single series that attempts to address all domains. The integration of planning processes that were previously intended to serve different organisational purposes at different levels and in different operational environments has been achieved at the cost of the new processes being suboptimal at both levels.

Table 3. Number of methods per planning process, grouped by primary focus of methods

Description of method is primarily ...	Number of methods in CMAP	Number of methods in IMAP	Number of methods in SMAP	Number of methods in JMAP	Number of methods in IDMP	Number of methods in DMAP
... Tactical	5 (28%)	14 (35%)	19 (34%)	0 (0%)	3 (14%)	7 (13%)
... Operational	0 (0%)	0 (0%)	4 (7%)	15 (31%)	4 (19%)	15 (27%)
... Both	13 (72%)	26 (65%)	33 (59%)	34 (69%)	14 (67%)	34 (61%)
Categorisation	Exclusively dual/ tactical	Exclusively dual/ tactical	Primarily dual/ tactical with some operational	Exclusively dual/ operational	Primarily dual with balanced operational/ tactical	Primarily dual/ operational with some tactical
Level	Tactical	Tactical	Primarily tactical	Operational	Dual	Primarily operational

Turning to the three processes intended for use by individual commanders (CMAP, IMAP and IDMP), quantitative analysis shows foremost that IMAP was (as it claimed to be) a downscaled version of SMAP that could be completed by an individual commander rather than requiring a staff. Of IMAP's 40 methods, only three were not also included in SMAP (serials 15, 71 and 79). This is because all three had replaced others in SMAP that required more than one person to adequately complete (respectively serials 77, 72, and both 17 and 60). IMAP and SMAP were therefore very similar. The former was very much the individual version of the latter.

Unlike IMAP and SMAP, CMAP and IDMP are unique—both compared to each other and among all of the other planning processes assessed. CMAP was specifically designed for small-scale tactical decision-making. As shown in Table 3, five (28 per cent) of its included methods were primarily tactical in focus, and the other 13 (72 per cent) had a dual tactical/operational focus. This dual focus is due to these methods featuring in multiple planning processes; all are described exclusively in tactical terms within CMAP. Variations of all 18 methods contained in CMAP are also contained in other processes: all 18 were found in either IMAP, SMAP or both; and 11 were also found in JMAP, albeit that JMAP's description of these methods upscaled them for operational rather than

tactical application. In the 10 instances where the same method appears in CMAP and IDMP (serials 1, 10, 12, 16, 18, 27, 30, 48, 58 and 80), discussion of this method within IDMP more closely aligns with that contained in one or more of the other processes that also feature that method. It is therefore likely that CMAP was not extensively considered during the development of IDMP. IDMP is intended for flexible application either tactically or operationally and, as summarised above, for use either independently or to enable a commander to formulate guidance for a planning staff that is using DMAP. IDMP's predominance of dual-focused methods, accompanied by an approximate balance between methods described primarily tactically and methods described primarily operationally, reflects this dual intention.

Between them, IDMP and DMAP introduce seven new methods that were not in any previous process. Of these, three are dual focus (serials 2, 11 and 40) and four are tactical (serials 9, 52, 61 and 69).²⁴ This finding adds weight to the above observation that the new processes represent a tactification of the ADF's operational art. Two of the new tactical methods are in IDMP (serials 9 and 61) and two are in DMAP (serials 52 and 69). Although none of the new tactical methods overlap processes, serial 69 is the staff version of serial 9's method for individual commanders. Serial 46 is the only legacy primarily tactical method in IDMP. Serials 24, 39, 55 and 68 are the only four legacy primarily operational methods in IDMP. All of these serials are also contained in JMAP and DMAP, but only one (serial 55) is also found in SMAP. Of the 14 dual-focused methods contained in IDMP, one is new (serial 11), one is also found in CMAP, IMAP and SMAP (serial 12), and the others are also in one or more of the three previous Army planning processes and also in JMAP (serials 1, 10, 16, 18, 27, 30, 31, 35, 48, 50, 58 and 80). From this data, it is difficult to determine whether IDMP was influenced more prominently by SMAP, JMAP or both, or whether it was developed relatively independently.

Qualitative Analysis

Whereas the preceding quantitative analysis was based on the number and focus of methods in each planning process, the following qualitative analysis is instead based on content interpretation, examining factors such as the relative prominence of methods, and the coherence of the processes holistically.²⁵ This mode of comparison between *Decision-Making and Planning Processes* and the two doctrine publications it replaced leads to four significant observations about the *focus* of the new publication, and another five about the processes themselves.

The first focus-related observation was previously deduced using quantitative analysis: the new doctrine represents a tactification of the ADF's joint operational art. Qualitative analysis adds an additional dimension by enabling assessment of the relative prominence of different methods. For instance, relative to JMAP, DMAP de-emphasises the production and refinement of one of the key domain-agnostic, operationally-focused methods: specifically, the lines of operation diagram. Instead, it emphasises the importance of producing an outline sketch. Although DMAP includes a paragraph about how an outline sketch may be used at the operational level, the rest of the five-page explanation of this method is primarily tactical, and the two examples given are exclusive to the land domain.²⁶ Another example of this shift in focus is in DMAP's section on how to develop COAs at different levels. Considerations for developing operational-level COAs are summarised in a single page, while considerations for developing tactical COAs are given 3.5 pages.²⁷ Although operationally focused methods are included throughout DMAP, as these examples illustrate, they have often been de-emphasised relative to tactically-focused methods.

Second, the new doctrine is commander-centric rather than staff-centric, which is a key point of departure from both SMAP and JMAP. This change in focus manifests in the inclusion of greatly expanded 'commander's direction and guidance' between each DMAP step. How a commander ought to develop and deliver this guidance is contained in a new chapter bearing this title. In summary, this new chapter explains that the commander needs to understand the situation, visualise options, describe responses, then direct action.²⁸ IDMP is the means by which the commander does this.

Although CMAP and IMAP were designed for use by individual tactical commanders, these processes were nowhere near as versatile as IDMP, which has filled a hitherto significant gap at the operational level while maintaining tactical-level coverage. In the words of the new doctrine's author, Major General Michael Krause:

if you remember in the [previous version of the] MAP, it's got one little paragraph in there that says, 'the commander can abbreviate this process' ... and it never tells you how. This new [doctrine] does.²⁹

General Krause also explained that discussion of the commander's enhanced role was included following feedback on an earlier draft from Lieutenant General Greg Bilton, who was then Commander Joint Operations Command. Having worked in proximity to both generals, this author knows firsthand how engaged they both are as commanders. However, as a staff officer, this author has also worked in proximity to a range of commanders who were relatively disengaged. As a result, one is left wondering if, in closing a gap in the old doctrine, the current doctrine has opened a new gap, that being provision of guidance for staff officers about what to do if they work for a disengaged

commander. In theory, this ought not to happen. Commanders ought to be as engaged as the doctrine specifies. Alas, reality may sometimes differ, and guidance on how to address this would have been a valuable addition.

Closely related to the increased role of the commander is the third substantial difference between the new doctrine and its predecessors. This is the greater emphasis placed on speed and intuition relative to analysis in decision-making. This is particularly the case in IDMP, which uses pattern matching as its key intuitive decision-making tool.³⁰ This method has not been included in any previous ADF planning doctrine; nor is it included in key allied planning doctrine publications.³¹ It is therefore one of the most unique and innovative aspects of the new doctrine. In a doctrinal rarity, the section of IDMP that explains pattern matching includes two citations of source material. One citation is an academic journal article in the field of cognitive psychology. It argues that the outcomes of naturalistic decision-making research indicate ways to enhance intuitive decision-making, and proposes how these findings may be applied within cognitive psychology's other sub-fields. Of direct relevance to military decision-making is its finding that multiple variants of 'tactical decision games' (what the Australian Army calls 'quick decision exercises') enhance tacit knowledge, which in turn aids intuitive decision-making.³² The other citation is a military journal article that proposes the use of pattern matching to enhance tactical adaptation, arguing that a training approach that mixes deliberate practice, metacognition and emotional intelligence would help to build such recognition.³³ Both IDMP and the chapter on training commanders and staff to plan incorporate these papers' findings.³⁴

Given the substantial difference between pattern matching and methods previously included in ADF planning doctrine, it is noteworthy that its inclusion does not appear to have been preceded by any kind of trial application within the ADF. This is, to an extent, offset by testing that has occurred in other fields and in allied militaries.³⁵ However, this is not the same as testing it in ADF-specific conditions. Training commanders to effectively use this type of decision-making method requires an approach that incorporates multiple exposures to different scenarios, to enable them to build a mental library of experiences that can be combined to allow rapid recognition of different pattern types in chaotic, emerging situations. This is different to how the ADF has previously trained commanders to plan, and successfully implementing it will require a significant adjustment to how the ADF trains its personnel. The ADF's training approach will need to move from fewer iterations involving detailed analytical decision-making, to many more iterations focusing on snap decision-making. As a result, it is likely that a post-publication adjustment period will now need to occur to align ADF training to its new doctrinal methods. Care needs to be taken not only to ensure that feedback is then incorporated into the next planning doctrine review but also to ensure that if the method is a good one but poorly implemented, the methodological baby is not thrown out with the pedagogical bathwater.³⁶

A further difficulty may arise from the application of this method at the operational level. As the papers cited in the doctrine indicate, prior application of pattern-matching methods has occurred at the tactical level, where it enables commanders to make faster decisions than those strictly applying analytical methods. Pattern matching is therefore a tactically focused method. At the tactical level, it has been observed that 'units simply do not train collectively often enough to give leaders the necessary repetitions to develop adaptive expertise'.³⁷ Although this deficiency can be overcome by 'critical event training', all available examples of critical event training are also tactical in nature; none are at the operational level. Even in a single domain, it takes a tactical commander multiple repetitions to optimise performance. While operational-level commanders could potentially use their judgement to adapt the method to their specific requirements, neither *Decision-Making and Planning Processes* nor prior examples of the method's application that were detailed in the other cited sources offer explicit guidance on how to successfully achieve this.

Furthermore, at the operational level, no single commander is an expert across all domains. As Colin Powell famously put it, 'joint warfare is team warfare'.³⁸ This is because to succeed, it has to be. Operational planning therefore lends itself to a collaborative and analytical approach, even by a commander. This reality was observed in a major study of British commanders in Afghanistan and Iraq, which found (though not uncritically) evidence of a collaborative command approach emerging due to the complex nature of multi-domain, whole-of-government counterinsurgency operations in those conflicts.³⁹ Indeed, one of the key evolutions in military planning that resulted from the conflicts in Iraq and Afghanistan stemmed from recognition that commanders and staff are susceptible to misunderstanding the nature of unfamiliar problems and misdirecting planning efforts if they do not first consciously analyse the nature of the environment and the problem they should be trying to solve. From the late 2000s, design methods were included in operational planning processes alongside operational art, in an effort to address this issue.⁴⁰ This observation is not to suggest that pattern matching should be removed from the doctrine. On the contrary, it provides a method to address what was previously a doctrinal gap. However, in future iterations of IDMP, pattern matching could be supplemented at the operational level by inclusion of a suitable design method for commanders to confirm that their intuitive response has led to a correct assessment of the environment and the problem needing to be solved. The 'framing' and 'reassess the situation' elements of IDMP currently allude to this type of consideration but do not include an explicit method to enable it.

The fourth significant change in focus is that the new doctrine is forward focused, whereas the doctrine it replaced was present focused. Most doctrine has a present focus. It captures and disseminates what is currently considered institutional best practice. On occasion, however, doctrine can be forward focused, providing guidance for short-

term institutional change to a different way of doing business. Doctrine of the latter type is rare, but, if implemented well, it can spur significant organisational change. Successful examples include the 'AirLand Battle' doctrine that set the US Army up for success in the 1990–91 Gulf War, and the Australian Army's 'Military Operations in the Littoral Environment' doctrine that set it up for success during Operation Warden in East Timor.⁴¹

Decision-Making and Planning Processes is forward focused because it intends to bring about a change in how ADF personnel plan and make decisions. Where it differs from the examples just mentioned is that they were a part of broader institutional change that was already occurring. As such, they provided solutions to already identified problems. In contrast, *Decision-Making and Planning Processes* has initiated the need for such change. This situation presents a risk to its successful implementation, and indicates that a unified approach is required across training establishments to mitigate said risk. Perhaps in anticipation of this need, the doctrine includes a chapter discussing training of both commanders and staff; however, this is only five pages and is limited to highlighting requirements.⁴² Development of this unified approach could take the form of a miniature version of the Ryan Review, with a narrower focus limited to planning and decision-making.⁴³

In addition to these four significant observations about the *focus* of the new doctrine, several other observations can be made about the processes themselves. The most significant of these is bland and editorial in nature. This observation is that the new processes, DMAP in particular, contain several minor inconsistencies and internal contrasts that probably result from insufficient editorial review prior to publication.

Examples are numerous. For instance, there is ongoing use of old terminology in some places. JMAP's 'decisive points' have been renamed 'decisive actions' in DMAP, but the term 'decisive points' remains in some places.⁴⁴ Use of the term 'conops' remains in Chapter 9 in reference to a JMAP output that has been removed from DMAP.⁴⁵ It is implied in IDMP that establishing the desired end state now occurs in this process, but DMAP has not been changed to reflect this, with occasional references to establishing the end state within DMAP remaining unchanged from those in JMAP.⁴⁶ A different editorial issue is that numbered sub-steps are included in the scoping and framing and in the mission analysis DMAP steps, but not in the COA development and analysis step. They are also missing from a few places in the other steps. This indicates that where content was included relatively unchanged from the previous JMAP the sub-step numbering has been retained, but this was not standardised in places where new content was added. Diagrams and tables also present inconsistencies. On page 96, a table containing consequence descriptions omits minor and moderate risks, even though these are discussed throughout the corresponding text.⁴⁷ On page 70, a figure shows friendly actors in red and adversaries in blue.⁴⁸ Finally from an editorial perspective, annex numbers cited in text differ from those of the annexes themselves, some paragraph headings are not bolded, and occasionally section headings are not standardised.

The cumulative effect of these editorial issues is unfortunately greater than the sum of its parts, making DMAP unnecessarily difficult to understand. Fortunately, their editorial nature also makes these issues easy to fix. Such amendments are common within doctrine. The previous JMAP doctrine is illustrative. For similar reasons, its 2015 edition was amended twice within 18 months of publication.⁴⁹ Even if no other aspect of its content is changed, publication by year's end of an amended version of *Decision-Making and Planning Processes* that addresses its editorial problems would be highly beneficial.

Other observations about the planning processes are more conceptual in nature. One regards how much of DMAP occurs in mission analysis relative to the other steps. Looking at previous editions of JMAP, there is evidence of considerable 'mission analysis creep' over time. In its first (2009) edition, JMAP contained a rough content balance between the three steps mission analysis, COA development and (the then-separate step) COA analysis.⁵⁰ In its second (2015) edition, centre of gravity analysis, establishing objectives and decisive points, and developing lines of operation were moved from COA development to the previous step, mission analysis. The stated rationale was that 'the completion of operational design within the first two steps of a five-step planning process addresses the need to develop a broad plan quickly'.⁵¹ As a result, in the 2015 edition of JMAP, over 40 per cent of the planning sub-steps occurred in mission analysis.⁵² In DMAP, production of an outline sketch has also been added as an additional mission analysis output, because 'by being the basis of the [mission analysis] brief to the commander the output [of the brief] is a clear direction that significantly accelerates [COA development and analysis]'.⁵³ In the case of both the 2015 edition of JMAP and the newly published DMAP, the push to complete products quickly has led to a shuffling of proverbial deckchairs that probably does not actually change how long the entire process takes. Where DMAP is an improvement over its predecessor is that it acknowledges this and proposes an actual shortcut: 'In many cases, a good sketch and statement can be immediately developed into orders, saving a great deal of time'.⁵⁴ In essence, it is now up to the commander to decide whether COA development and analysis is required at all, based on their assessment of situational requirements and associated risks.

The inclusion of two new chapters in *Decision-Making and Planning Processes* usefully addresses some topics that were omitted from the previous doctrine publications. Chapter 8 discusses how to effectively adapt a plan during implementation, elaborating methods that support this.⁵⁵ Chapter 9, titled 'Plan development and implementation', discusses aspects of a plan that could be included in annexes, branch plans, sequels, etc., such as sustainment and logistics requirements. Some of the methods included in this chapter, such as event overlays, derive from SMAP; however, much of its discussion is new material, and inclusion of this new material is likely to benefit specialist staff who are required to support the planning effort. Further, a lot of it captures lessons identified

during ADF operations over the last few decades. Examples of this include discussions concerning planning considerations for force rotations; movement planning; and reception, staging, onward movement and integration of personnel.⁵⁶ Overall, inclusion of these chapters is likely to enhance planning outcomes.

A third process-related observation is that more actions are explicitly stated as being continuous throughout the planning process, rather than occurring in a single step. Although SMAP and JMAP were both explicitly non-linear—with planners encouraged to revisit, remove or change the sequence of steps to suit situational needs—they contained very little that was designed to be continually updated. DMAP, on the other hand, specifies that commander and staff estimates, risk assessments, and critical facts and assumptions all need to be constantly revised and updated. This is in addition to DMAP having enhanced the non-linearity of the process itself by expanding the explanation of how and when commanders should give directions to subordinates to abbreviate or skip steps.⁵⁷ The outcome of this change is greater flexibility in process application, and increased potential for rapid decision-making. The accompanying risk is that staff may get distracted from analysis by the need to update multiple outputs concurrently. The commander or chief of staff will need to ensure this risk is managed, and training in the use of the process needs to emphasise the requirement for ongoing analysis, rather than merely ensuring staff update briefing products.

The final process-related observation is also the most significant. IDMP and DMAP are the most uniquely Australian planning processes in ADF history. Until now, both Australian Army and ADF joint planning processes have remained conceptually close to their allied equivalents. Hitherto, the biggest conceptual change in Australian planning doctrine was the promulgation of the MAP in the late 1990s.⁵⁸ This development shifted Australian Army and ADF joint planning processes away from the British planning doctrine they had previously mirrored, and moved them conceptually towards mirroring US planning doctrine instead. But, despite this change, Australian planning doctrine nevertheless remained similar to an allied equivalent. DMAP and, particularly, IDMP break this trend. Despite their author's assertion that 'JP 5 is the US joint planning doctrine. It was by my side when I wrote this ... the other one I had was the NATO planning doctrine',⁵⁹ *Decision-Making and Planning Processes* is substantially different to both of these allied planning processes. This difference becomes quickly apparent when all three doctrine publications are evaluated together.⁶⁰ The key factors in this divergence are the changed focus areas and amended process aspects described above. None of these aspects of *Decision-Making and Planning Processes* are reflective of allied joint doctrine.

This unique aspect of the new doctrine is particularly important for the Australian Army profession. On one hand, it represents a significant milestone in the ADF's conceptual and doctrinal development as an independent, mature force. It also has implications for Australian sovereignty, representing an increased willingness to think independently about the nature of war and the requirements of the core aspect of the Army profession, the management of violence. On the other hand, the lack of institutional debate surrounding this development indicates that the broader implications of the new doctrine may not yet have been fully grasped across the ADF. Despite assertions that personnel familiar with IDMP and DMAP will be able to integrate into coalition headquarters as effectively as personnel trained in the processes they replaced, the available evidence (albeit anecdotal) indicates the existence of latent risk. Australian personnel in embedded roles have tended to bring an approach to planning that is *analytical* rather than merely being 'PowerPoint deep'. With IDMP and DMAP emphasising rapid intuitive decision-making and encouraging truncation or outright skipping of process steps—even during initial training in their use—it is possible that the ADF's analytical edge in coalition headquarters may become blunted. This is not to say that the ADF should return to the previous status quo. Rather, it highlights another risk that will need to be mitigated when developing and delivering training in the use of the new planning processes.

Conclusion

By analysing *Decision-Making and Planning Processes* comparatively to the doctrine publications it replaced, this paper has identified several ways in which the ADF's new tactical and operational planning processes have conceptually evolved. In several cases, these evolutions constitute genuine innovations, to the extent that IDMP and DMAP are the most novel planning processes ever included in Australian Army or ADF joint planning doctrine. The new approach to planning is not, however, without risk, and several areas of the new doctrine may require revision following a period of trial and testing. Foremost, an amendment is required to fix several minor editorial issues that together make the new doctrine difficult to read. This amendment should be prioritised for release by the end of this calendar year.

Beyond editorial issues, this paper's analysis of the focus, content and implementation of IDMP and DMAP enables several recommendations to be made. The first concerns the balance between tactical and operational needs. The task of integrating two previous planning doctrine publications, one with a land domain tactical focus and the other with a multi-domain operational focus, was never going to be easy. *Decision-Making and Planning Processes* has understandably opted for a middle ground, and seems to have achieved this to the greatest degree possible. But in doing so it is not optimised

for planning at either level. The result is the simultaneous tactification of the ADF's operational art and the removal of several tactical planning methods from doctrine. This issue is of sufficient significance that consideration should be given to whether integrated operational and tactical planning processes are actually appropriate or whether—in future—the ADF should (once again) produce separate operational and tactical planning processes. Some chapters in the current doctrine that explain DMAP steps include annexes addressing land and maritime domain specific tactical considerations.⁶¹ If an integrated doctrinal approach is to be retained, these annexes indicate a possible way forward. Specifically, for each DMAP step, a chapter could describe methods generically, with five separate annexes to each chapter detailing how to apply each step tactically within each domain (land, maritime, air, space and cyber), and a sixth detailing how to apply it operationally across all domains. Implementing this proposal would necessitate inclusion of several additional annexes.

Beyond the content of the doctrine, consideration must be given to how personnel can be successfully trained to apply the new planning processes. Key content changes from previous doctrine include that the new doctrine is commander-centric rather than staff-centric; it increases the importance of speed and intuition relative to analysis in decision-making; it contains an expanded number of outputs that are ongoing concurrently to all planning steps; and it more easily enables the commander to flexibly abridge or skip large parts of the process if they determine that the situation warrants this. All of these aspects will require a very different training approach to that used to teach the previous planning doctrine. A unified approach to training personnel across service and joint training establishments is likely to enhance overall outcomes. In the short term, there is an urgent need to establish a bridging course for personnel appointed as commanders who have completed their training using the previous doctrine. Priority needs to be given to establishing such a course and providing it with adequate resourcing.

Pattern matching is arguably the most significant new method contained in *Decision-Making and Planning Processes*. It constitutes a fundamental change in how ADF doctrine conceptualises decision-making. Importantly, it is key to enabling IDMP to fill what was previously a doctrinal gap, as it provides guidance to commanders about how to direct and guide planning staffs. While there is evidence of the utility of pattern matching at the tactical level, these findings have not yet been replicated at the operational level. Indeed, there is limited evidence to suggest that at the operational level, pattern matching may result in ADF commanders and staff seeing familiar problems when they are in fact confronting novelty, and they may attempt to solve the wrong operational problems as a result.⁶² Further research is therefore urgently required to establish whether this decision-making model is appropriate at the operational level. The findings of this research should be incorporated into the next edition of the doctrine.

Finally, this paper's most significant observation is that the two new planning processes, IDMP and DMAP, are the most uniquely Australian planning processes in ADF history. Their domestic pedigree is a significant milestone for the Army profession, and indeed for the ADF as a whole, as they constitute a major step forward in the ADF's evolution as an independent, mature military force. Returning to the roots of the Army profession—as defined by Huntington and those who followed him—planning military activities is at the very core of the profession. Accordingly, this paper's analysis, and the resulting recommendations, have been made in the spirit of aiding the application of the ADF's new planning doctrine, as well as enhancing its future iterations. It is sincerely hoped that further analysis will follow from other quarters.

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/ STOPGAP WEAPONS AS A FEATURE OF WARFARE: THEORISING FROM THE PAST TO PREPARE FOR FUTURE WARS

Marigold Black and Michael Webster

*'Now, men, you answered your country's call today.
We're all here to defend our homes and loved ones.
I know you will not shirk that duty.
With no guns, we are naked, but we have one invaluable weapon –
ingenuity and improvisation.
(That's two')
I want you all to go to your homes.
Gather what weapons you can and come back here in an hour's time.
From tonight, whatever the odds, we Englishmen ...
We British ...
We here are going to be able to say,
'Come on, Jerry, we're waiting for you!'*¹

Introduction

It is need, not want, that produces the great human discoveries and inventions, and war is the great crucible of need for humans. Much of the material modern world has its origins in the conduct of warfare and the need to survive. The internet, global positioning system technology and the humble duct tape are military inventions that many people use every day.² Medicine and medical technology, too, have been transformed by the need to care for the wounded.³ Even so, there has been surprisingly little attention paid to the instruments of ingenuity and improvisation that met those needs or the conditions in which they were born. In this, stopgap weapons have usually represented little more than

curiosities for historians and the military profession. Certainly, some of these weapons served a transient purpose, or they were a failure of design or use. However, others evolved to enter the inventory of warfare or were influential in a battle or cumulatively in a war. What has largely gone unrecognised, though, is that stopgap weapons have been a recurring feature of war in the post-industrial age and will likely continue to feature in warfare as necessity dictates.

By examining the conditions for their creation, we can anticipate the circumstances for the presence of stopgap weapons on the future battlefield. And by studying the history of stopgap weapons we can create a military culture that fosters different thinking about how to exploit an adversary's situation and how to defend against sudden vulnerability. The Defence Strategic Review 2023 cautioned that Australia faces the most challenging strategic circumstances since the end of the Second World War.⁴ As a future war will potentially be fought, in part, in the vast remoteness of the Pacific region, necessity will likely dictate the need for ingenuity and improvisation—indeed, for a resourcefulness that harkens to an earlier age of Australian soldiering. It is within this geostrategic context—and acknowledging the Chief of Army's 2024 speech 'The Challenges to the Australian Army Profession'⁵—that this article aims to provide an original and overdue contribution to the field of stopgap weapons, and so to expand the body of useful military knowledge.

This article is divided into three parts. The first part examines the historiographical and theoretical dimensions of stopgap weapons. Here, we offer a working description (not a definition) of stopgap weapons. The second part examines some stopgap weapons as short case studies in different war periods. There is a long history of the development and use of stopgap weapons in war. Our selection of wars and the stopgap weapons in them is far from exhaustive. We confined the study to several wars of continuing relevance to the Australian Army, and the Australian Defence Force more broadly, in which stopgap weapons played a notable part, or where there was an inflection in the development and use of stopgap weapons. Despite its being a contemporary conflict, we have included the Russia–Ukraine War as the final case study, as it clearly demonstrates the continuing relevance of stopgap weapons on the battlefield. In the third part of the article we make several observations, based on the historical cases studies, which we believe will better equip the Army to imagine and prepare for future wars, especially for littoral warfare. We consider the relevance of stopgap weapons for Australia's contemporary defence strategy, for acquisition processes and defence innovation, and for some of the intellectual dimensions of warfighting.

Part One: Context

In the history of military improvisation, particularly in the context of stopgap weapons in war, the field consists of a fragmented assortment of articles, books, reports and uninterrogated museum records focused on the resourcefulness of the soldier under fire or less frequently on the features of a weapon. For example, the Australian War Memorial has produced a publication on Australian wartime innovation that meets both these descriptions.⁶ In America and Europe, accounts of stopgap weapons in war are likely to take the form of informal accounts and discussions, or else to become folded into narratives about shifts in military technologies and broader combat histories.⁷ Where there has been scholarly engagement with the theoretical relevance of stopgap weapons, it has usually been in terms of how a specific weapon fits within existing innovation models used by military organisations, such as the top-down or bottom-up field-modification dialectic.⁸ Even in military schoolhouses, stopgap weapons are often seen as a dated feature of warfare, a marker of a time before professional standing armies, defence bureaucracies and armament industries.

The lack of scholarly interrogation of stopgap weapons as a field of study indicates a widespread assumption that stopgap weapons were a naturally occurring phenomenon among soldiers, who identified and on their own initiative quickly filled a capability gap of little enduring importance or strategic consequence. There is also, as we observe it, an assumption among Western militaries that armies will be equipped with the weapons and other materiel needed to fight their next war, and that any deficiencies or new requirements found during fighting will be quickly rectified through normal military procurement processes. However, these assumptions do not align with the chaos and uncertainties that are inherent in warfare, what Clausewitz described as part of the trinity that characterises war.⁹ Indeed, the fact that American soldiers in the Iraq War used scrap metal to protect their vehicles, so-called ‘hillbilly armor’,¹⁰ and, that there were lengthy delays in manufacturing sufficient countermeasures to the insurgents’ use of improvised explosive devices, demonstrates the danger of these assumptions.¹¹ Unprepared for an insurgency,¹² 48 per cent of the American soldiers killed between 2006 and 2021 were killed by improvised explosive devices.¹³ As the case studies in this article will show, the study of stopgap weapons as a distinct field offers strategic, theoretical and instructive lessons for future warfighting.

It is an ideal time, then, to examine stopgap weapons and the conditions for their development in an organised and rigorous manner. The Iraq War showed, as the Russia–Ukraine War does now, that stopgap weapons and battlefield innovation are an enduring feature of modern warfare. The use of adapted drones and other modified technologies in the Russia–Ukraine War, as well as the combination of old and new weapons, has garnered significant attention for how it might shape future wars.¹⁴ As Nina

Kollars described it, 'Field level inspired solutions have a peculiarly gritty sensibility to them: a grounded and oddly anachronistic feel that combines cutting edge technology with duct tape.'¹⁵ There is also growing scholarly interest in fields adjacent to stopgap weapons, such as how in contemporary conflicts sub-state armed groups and non-state actors have improvised or adapted the use of explosive devices, drones, lob bombs et cetera.¹⁶ Additionally, limited resources and a need for extreme secrecy have led to the use of innovative weaponry and tactics by terrorist organisations.¹⁷ There will be an expectation, indeed an imperative, for military professionals to understand the field of stopgap weapons as part of their body of professional knowledge.

However, a detailed study of the development of stopgap weapons and their use is not without its challenges. The character of stopgap weapons is fluid because they are a response to immediate, often transitory, military circumstances. This makes them difficult to classify (when they have been documented) in a systematised manner. Another issue is terminology. The term 'stopgap weapon' has been used often interchangeably with terms that have adjacent definitions. These include 'tactical innovation', which is 'the process by which operational Army units leverage innovative methodologies to develop solutions to their problems at the edge',¹⁸ and 'field modification', which describes low-end military innovations.¹⁹ In more recent years, 'improvised', 'experimental', 'innovative', and 'adapted' have become terms which can sometimes be understood as descriptive substitutes for stopgap weapons.²⁰ A similar, but notionally different, term is 'makeshift weapons', which has more affinity with improvised weapons, in describing the rudimentary conversion of common objects into a form of weapon.²¹ That the Virginia-class submarine has been described as a 'submarine stopgap' for Australia illustrates the terminological difficulties with researching the field of stopgap weapons.²²

For present purposes, we conceptualise (and describe) stopgap weapons as a subset of military innovation intended to meet a military need, but occurring in a compressed timeframe, from identifying the need to implementing the solution. A stopgap weapon is a response to a situation in war, or its anticipation, but it can include a response on the edge of war. While 'stopgap' indicates immediacy, meaning a stopgap weapon is intended for immediate use, on occasions it could be a weapon rapidly created for use, if needed, in a future specific situation. Similarly, 'stopgap' indicates a temporary measure, something not originally intended for military inventory. And 'weapon' should be understood as encompassing methods, which are something other than means, in tangible form, thus capturing the notion that a weapon is something intended to cause harm to an adversary or to counter their harm. Finally, we are concerned here with ingenuity at the tactical and operational levels of war, recognising that stopgap weapons of the strategic form are likely of a different nature.

In this article, we have consciously relaxed the definitional parameters around ‘stopgap weapons’ for several reasons. As the initiating effort, one is to open the field widely for examination. Another is that we locate stopgap weapons on a continuum of ‘improvised’ weapons in warfare. This allows the associated improvisation process to be read back onto their longer history and the history of those weapons with shared characteristics. This also allows for a broader multidisciplinary approach to the study of stopgap weapons, which maximises the theoretical and strategic benefits, including new ways to imagine capability development. This way of conceptualising stopgap weapons also allows for generous engagement with the associated human dimensions, which help draw out the intellectual and socio-military dimensions more clearly. Individual ingenuity and adaptability have long been recognised as important on the battlefield. The 18th-century soldier-philosopher Maurice de Saxe, in his *Reveries on the Art of War*, argued that the military professional:

should possess a talent for sudden and appropriate improvisation. He should be able to penetrate the minds of other men, while remaining impenetrable himself. He should be endowed with the capacity of being prepared for everything, with activity accompanied by judgment, with skill to make a proper decision on all occasions, and with exactness of discernment.²³

To explore the processes by which soldiers have responded to the ‘fog of war’ through the development of stopgap weapons is to begin to understand the mindset for this vital battlefield ingenuity and unique form of intelligence, which, along with historical knowledge, have long been understood as ‘the foundation of all sound military conclusions and practices’.²⁴ Sun Tzu remarked on the importance of wisdom in *The Art of War*,²⁵ and Clausewitz, in *On War*, was clear on the need for ‘sensitive and discriminating judgement’ in a context where ‘three quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty’.²⁶ Yet Williamson Murray has observed, ‘Adaptation in war represents one of the most persistent, yet rarely examined, problems that military institutions confront’ and, moreover, ‘one of the foremost attributes of military effectiveness must lie in the ability of armies, navies, or air forces to recognize and adapt to the actual conditions of combat’.²⁷ Training soldiers in the theory and practice of stopgap weapons may help win wars and save soldiers’ lives.

Part Two: Case Studies

First World War

HG Wells famously lamented ‘man’s increasing power of destruction’²⁸ when he observed the rapid technological changes occurring during the First World War. Unlike previous conflicts, the First World War was shaped by pre-existing trends towards industrialisation and methods of mass production. Prior to the war and throughout its duration there were major advances in artillery, grenades, machine guns and submarines as well as the development of new weapons such as poison gas, tanks and warplanes. These advances were combined with new methods of production, which meant that weapons and munitions could be made in large numbers and quickly.²⁹ On the battlefield, however, 20th-century technologies collided with 19th-century military science and models of warfare, greatly interfering with the equilibrium in warfare between firepower and manoeuvre.³⁰ The result was high casualties, horrendous battlefield conditions, and the stalemate and attrition of trench warfare for several years. The war was a modern form of medieval violence.

From those conditions emerged an assortment of stopgap weapons of impressive efficacy and ingenuity. In the rival trenches of the Western Front, especially those in close proximity, where there was a relatively high degree of creativity and technological sophistication, a kind of ‘technological meta-system’³¹ or ‘complex adaptive system’³² developed, as each side was motivated to create novel devices to match or better those of their enemy. As Williamson Murray reminded us:

The harsh fact is that the enemy is a community of living, breathing human beings who may be able to adapt to the conditions of war as fast, if not faster, than we will, or at least develop responses that lie outside our conceptions and assumptions.³³

The rival trenches of the war, at Gallipoli but especially on the Western Front, demonstrated the extent to which this complex adaptive system could push groundbreaking battlefield innovation in its brutal simplicity.

For soldiers at Gallipoli, scarcity in materiel became the impetus of stopgap weapons of a notably rudimentary character. Such was the reality of a campaign in a relatively minor and physically small theatre of war. For example, a shortage of grenades to attack and defend trench lines was soon addressed by the creation of the ‘jam tin bomb’. Used ration tins were filled with explosives and pieces of shrapnel such as scavenged nails, barbed wire and small pieces of shell, and were activated by a cigarette or friction device. The jam tin bombs were so effective that hundreds or more were assembled by hand each day.³⁴ Similarly simple in conception was the ‘periscope rifle’, which, through

the attachment of a slanted mirror in a wooden bracket, allowed an allied soldier in the trenches to fire on the enemy without being exposed to return fire. The periscope rifle was so popular that a makeshift manufacturing workshop was set up on Anzac beach, with the device later adapted and used in other theatres, including on the Western Front in trenches and fake observation trees. It was the periscope rifle which led British General William Birdwood to remark, 'Our complete moral superiority over the Turk is partly due to a very clever invention'.³⁵

Another device, incorporated into a program of 'silent stunts' to ensure the safe and unhindered evacuation of allied soldiers off Gallipoli was the 'drip rifle'. Because of the proximity of the rival trenches, measures were taken to distract Turkish forces from the withdrawal of contingents by creating the impression of a greater presence than was the case. In the early phases, soldiers played cricket in the ravines and gave the sense that the trenches were still full by soldiers smoking the 100 cigarettes each had been provided.³⁶ The drip rifle was employed to provide a distraction for the final and most dangerous phase of the evacuation. Created by an Australian soldier, the drip rifle used a system of weights to provide delayed fire until the trenches had been evacuated. It was made from string and two empty ration tins placed one above the other. The top tin was filled with water and had small holes in the bottom. Water dripped into the lower tin, and, when it was full, the sandbagged rifle was threaded for the weighted tin to pull the trigger. This gave the Turkish soldiers the feeling that they were still encountering harassing or targeted rifle fire. Some 80,000 soldiers were safely evacuated from Gallipoli, with only three casualties.³⁷

By the late stages of the First World War there was a convergent mass of innovation that was enough to eventually overcome the defensive strength of trenched warfare. This innovation was particularly in the form of aerial surveillance, chemical weapons, and tanks employed with existing means in a coordinated way. While we may no longer regard these weapons as stopgap, as they have entered the inventory of warfare, they were thought of as temporary measures at the time. Chemical weapons, though, warrant further comment. Even by the violent standards of the First World War, chemical weapons such as chlorine and mustard gas were viewed with horror and moral unease. But both sides used them extensively because of the cost of war and the drain on resources. Germany needed to break the impasse before its war-making capacity was entirely depleted.³⁸ As the German imperial minister of war observed, 'The ordinary weapons of attack often failed completely' and, therefore, superior weapons needed to be found. 'Such a weapon', he stated, 'existed in gas', which had the added benefit of 'not excessively tax[ing] the capacity of German war industry in its production'.³⁹

Second World War

Technology played a decisive role in the Second World War, to the point where stopgap weapons often become lost in the breadth and scale of military innovation which occurred during the six-year period. At the start of the war, soldiers were armed with weaponry that was little different from what had been used towards the end of the First World War. By its end, there were ballistic missiles, jet-powered aircraft, helicopters and atomic weapons. And soldiers faced even more changes on the battlefield. But, while technological innovation was fundamental to the war, it was in the Second World War that we found the clear emergence of civic-spirited, mobilised populations seeking to 'do their bit' to win the war through creating stopgap weapons and other improvised warfare measures. This was clearest in wartime Britain. Winston Churchill, the Prime Minister, animated this civic spirit with his 'We shall fight on the beaches' speech in 1940,⁴⁰ which he delivered as the evacuation of Dunkirk was ending and Britain faced the prospect of an invasion by Nazi Germany.

The national salvaging campaigns that followed, such as encouraging Britons to donate their pots and pans so the aluminium could be reused for military aircraft,⁴¹ reflected the 'doing their bit' spirit of that wartime period. This was later captured in *Dad's Army*, the British Broadcasting Corporation's popular comedy television series involving a fictional British Home Guard unit during the Second World War. The series included comical innovations such as a grenade made from a cabbage and a rifle made from a broom handle. But it was the character of Captain George Mainwaring, the commander of this motley unit, who memorably said in the first episode, 'We have one invaluable weapon—ingenuity and improvisation'.⁴² And while we might laugh at the thought of the cabbage and broom handle, or at Mainwaring's numeracy, they comically reflected the genuine effort by those at the time to create weapons from anything available. It reflected the 'make do' determination of a people in a war of national survival.

Perhaps the most notable of rudimentary stopgap weapons was the Northover projector. With the German invasion imminent and weapons in short supply, a home guardsman developed in late 1940 an anti-tank weapon made from a hollow metal tube on a tripod with a basic breech at one end. The stopgap weapon used rounds fired with black powder and a musket percussion cap.⁴³ Despite its many limitations, Churchill ordered its immediate production for Home Guard units because it was economical, simple to manufacture and simple to operate. By mid-1941, nearly 19,000 Northover projectors were in service.⁴⁴

Similar in conception, but developed by the Royal Navy's Directorate of Miscellaneous Weapons Development,⁴⁵ the Holman projector was an anti-aircraft weapon, used on British merchant ships to defend against German aircraft, that fired hand grenades using steam from the ship's boilers.⁴⁶ The Directorate also created the Hedgehog, which was an anti-submarine mortar that was eventually used by other navies during, and well after, the Second World War.⁴⁷ Indeed, the Australian Army mounted the Hedgehog on several of its Matilda II tanks for use against the Japanese in the Pacific campaign.⁴⁸ Less useful weapons created by the Directorate of Miscellaneous Weapons Development included the 'Great Panjandrum', a giant explosive Catherine wheel intended for storming enemy beaches.⁴⁹ Such is the hit-and-miss of military invention.

Many of the stopgap weapons developed during the Second World War were field modifications using scavenged parts to make weaponry to overcome specific battlefield situations. During the Battle of Normandy, American soldiers found the hedgerows and embankments of that part of France difficult for their tanks to quickly breach without exposing their weaker underside to anti-tank fire. Many implements were created, the most effective of which was the 'rhino tank', which initially involved using steel from the German beach obstacles to make a form of shears that were welded to the front of the tanks.⁵⁰ Within a week, three out of five tanks in the breakout were equipped with 'tusks' of various forms. Similarly, the AN/M2 Stinger rifle was developed using scavenged parts of crashed aircraft. It was created by American soldiers in the Pacific theatre who sought greater portability and higher firepower. They essentially converted an aircraft machine gun into a man-portable heavy assault weapon which they used for attacking Japanese bunkers on Pacific islands.⁵¹

The Second World War demonstrated the need, but also the ability, to rapidly mass-produce stopgap weapons within the mindset that a capable weapon fielded sooner was better than a perfected weapon fielded later. This 'must do' mindset was shown with the development of the Boomerang aircraft. In the mid-1930s, as the threat of war grew, there were concerns that Australia's small aircraft industry would not have the capacity to produce the combat aircraft that wartime conditions might demand. To establish a self-sufficient industry, three companies entered a joint venture, forming the Commonwealth Aircraft Corporation (CAC).⁵² Following the Japanese attack on America at Pearl Harbor in December 1941, it was clear to the Australian government that a stopgap aircraft was needed until a frontline fighter could be sourced. The CAC repurposed designs and techniques used for a training aircraft already in production to develop the Boomerang. The urgency was such that no prototype was produced, and the first five Boomerangs were already being manufactured before the aircraft was first test-flown. All this manufacture and testing occurred by May 1942, within six months of the Pearl Harbor attack.⁵³

Vietnam War

The Vietnam War demonstrated the need for constant innovation in challenging terrain, between asymmetrical forces and against new ways of waging war. While the Americans were able to draw on emerging and mature technologies, including laser-guided munitions, radar warning equipment and ground sensors, they soon found that these advances could not offset their flawed strategies and the marked change in tactics and patterns of attack adopted by contending forces compared with those used in the Second World War and the Korean War. The North Vietnamese Army and the Viet Cong, particularly during the early phases of the war, sought to avoid direct battles unless on favourable terms. Instead, they preferred jungle warfare, where their offensive actions would inflict casualties and destroy equipment through ambushes, raids and other forms of attack.⁵⁴

In contrast to the relatively narrow and distinct division of territory between friendly and enemy forces of past wars, fields of combat shifted across all of Vietnam and into adjacent countries. This had an extraordinary impact on every aspect of the war.⁵⁵ While there was a suite of new weaponry for American soldiers to use, there was a more urgent need to adapt at the operational and tactical levels, and to employ stopgap weapons to respond to the enemy's methods of operation. As General C Westmoreland observed:

Because of the nature of the war, tactical units had to be scattered throughout the nation at widespread locations. The lack of a sophisticated transportation system necessitated major units establishing their own logistic bases rather than one central dept serving a number of units ...⁵⁶

As there was no clear front line, there was also no safe rear area. This was a problem for American transport units, which faced continued attempts from the enemy to shut down supply routes.⁵⁷ The convoys were repeatedly exposed to ambush, disruption and hijacking, as the North Vietnamese Army and the Viet Cong recognised that their advantage lay in bleeding the American soldiers dry through the supply lines rather than in trying to defeat them in pitched battles. American convoys were constantly attacked using a variety of both explosive and non-explosive booby traps, ranging from the rudimentary to highly sophisticated weapons.⁵⁸

Indeed, because the North Vietnamese Army and especially the Viet Cong did not have the munitions and other materiel to fight on the same terms as the Americans, they used retrieved unexploded ordnance to create a variety of stopgap weaponry. They rescaled the war in their favour by scavenging and stealing aircraft bombs, artillery shells, mines, mortars and grenades, using them to attack American personnel, convoys, structures and even helicopters. Large munitions were cut open and the explosives used in various improvised devices, as Ukrainian soldiers are doing now,⁵⁹ whereas smaller munitions,

such as mortars or shells, were fitted with remote- or victim-triggered switches and employed in creative ways. A favoured tactic of the Viet Cong was to place mortars in tree lines above routes frequented by American soldiers. As the soldiers moved beneath the branches, the suspended shells were remotely detonated.⁶⁰ The splintering trees added to the shrapnel.

The Viet Cong used explosive and non-explosive booby traps in such a variety of ways and over such large combat areas that American soldiers and their allies had to be constantly on guard.⁶¹ But innovations only provided an advantage during the brief period in which the adversary was taken by surprise, and before they were able to devise effective countermeasures.⁶² Frequent encounters with new kinds of booby traps meant the Americans began to catalogue them and to publish manuals to keep up with the enemy's continuous process of improvisation. American forces also started training their soldiers in the detection and neutralisation of enemy improvised devices.⁶³ For both sides, predictable methods, patterns and tactics became a vulnerability and were readily exploited by the other. It quickly became clear to the combatants that battlefield ingenuity and improvisation were the only means of avoiding defeat and greater casualties.⁶⁴

The Americans developed ways to protect their convoys from attacks by adding field-made armour and guns to selected 'gun trucks' which would then be designated for escort combat roles. There were countless experimental designs for bumpers, windshields and side armour, the materials for which came from trading, repurposed resources, and scavenged timber, sheet metal and discarded truck parts.⁶⁵ The parallels with 'hillbilly armor' in the Iraq War are obvious. Miniguns sourced from helicopters were also mounted on the trucks. In some cases, the M2 Browning heavy machine gun set in single, dual or sometimes quad formation served that role. These hardening measures quickly spread to other units, becoming accepted practice despite lacking official approval.⁶⁶

An almost legendary stopgap weapon devised by the Americans to overcome fighting in jungles and mountainous terrain was the Douglas AC-47 gunship, a modified version of the C-47, which was a 20-year-old cargo aircraft not designed for combat. The AC-47s were equipped with surplus Second World War weapons and, later, electric miniguns which provided a semi-permanent action and sporadic fire. The gunships could loiter for hours to effectively corner an enemy force. The AC-47s could be used for close air support, to strike deep into enemy territory, and to defend allied bases and villages. At night, flares were discharged from them to illuminate enemy positions. The light trails gave the aircraft the look of a fire-spitting Dragon, hence the monikers 'Puff the Magic Dragon' and 'Spooky'.⁶⁷ Eventually, these stopgap AC-47s were replaced with Fairchild AC-119s, and now the Lockheed AC-130s currently in American service, each an improved version of the previous gunship, though still based on the same design and thinking as the AC-47.⁶⁸

Iraq and Afghanistan Wars

It is convenient for present purposes to examine the Iraq and Afghanistan wars as one case study, as they were contemporaries which shared several important features. Before that, however, it is useful to briefly mention two American stopgap weapons from the Persian Gulf War, the war that in many ways began these later wars.⁶⁹ During the planning for Operation Desert Storm, the Americans were concerned that their existing bombs lacked the explosive power to penetrate Iraq's deep bunkers. Consequently, they took 'barrels from M110 howitzers, filled them with explosives, and fitted them with laser guidance flight-kits'.⁷⁰ Within three weeks, the Americans went from designing to dropping these stopgap bombs in Iraq with devastating effect.⁷¹ Similarly, the Americans designed, tested, prototyped, assembled and used the GBU-28 'bunker buster' bomb in Iraq within two weeks.⁷² These bombs show how stopgap weapons remain a feature of modern war, but what they especially show is what can be quickly achieved with imagination, technical mastery, resources and motivation. The Americans went on to use these bunker buster bombs in Afghanistan in 2001 and later.⁷³

The dominant features that the Iraq and Afghanistan wars share are the threat posed by improvised explosive devices and the stopgap countermeasures deployed to stop them. In the Iraq War, 48 per cent of American soldiers killed between 2006 and 2021 were killed by improvised explosive devices, and in the Afghanistan War it was 45 per cent in the same period.⁷⁴ As insurgency wars, what they also had in common was a fight to gain the control or support of the local populations. General Petraeus observed that the key terrain was 'the human terrain',⁷⁵ indicating how inextricably the battlefields in Iraq and Afghanistan formed part of the larger human landscape. The use of improvised explosive devices was so prolific, and their designs so varied, that they shaped the wars into a 'series of moves and countermoves as each side adapt[ed] to the latest innovation by the other'.⁷⁶ Many of these devices were assembled from everyday civilian objects, and their broad-based use and evolving sophistication, enabled by local social systems.⁷⁷ Some devices were crudely designed and detonated by garage-door openers or washing machine timers, but over time they were triggered by infrared signals, mobile phones or pressure plates.⁷⁸

The improvised explosive device could be anything, and anything could be that device. The threat seemed everywhere in both wars. The catalogue of devices eventually included:

fertilizer, palm oil, a wooden box, homemade chemicals, a forgotten land mine mated with a cell phone, strung-together bits of old copper wire, a nine-volt battery, or a dead goat stuffed with artillery shells rigged to set off a daisy chain of other explosives buried in the road.⁷⁹

These devices were concealed behind signs or in roadside debris, litter, foodstuffs and building walls, or placed inside vehicles which were driven directly at a target as a victim-triggered explosion. Suicide bombers carried explosive vests triggered by them or someone else. Countermeasures implemented by coalition forces included the use of electronic jammers, radars, X-ray equipment, robotic explosive ordnance disposal equipment, equipment for personal security, and armoured vehicles. But there were frequent shortages of items such as body armour, lithium batteries and up-armoured humvee vehicles.⁸⁰ As a result, battlefield innovations like the gun truck reappeared, as did the creation of ‘hillbilly armor’ made from scrap or trade. ‘You wheel and deal to get what you can for your soldiers.’⁸¹

However, many of the countermeasures and mitigations had limited effect in these wars. And several of the stopgap measures, like ‘sniffer bees’, were a failure of common sense.⁸² Insurgents adapted more quickly with their weaponry, and they had relative freedom of action. They engineered their devices to penetrate coalition armour and varied the ways in which they employed them.⁸³ One way was to draw coalition soldiers into an ambush with a blast, then, as the rescue was occurring, detonate another improvised device or launch some other form of attack.⁸⁴ The insurgents also launched improvised explosive devices, or lob bombs, which were gas canisters or repurposed munitions set into the ground or from a civilian vehicle to fly haphazardly to their target.⁸⁵ Insurgents also used cheap, commercially available drones to launch improvised explosive devices. Drones allowed them physical separation from the attack and the means to target more destructively,⁸⁶ and they added another psychological element to the situation. Despite the coalition forces’ superior technology and weaponry, they had capability and knowledge gaps. They tended to be reactive to each new stopgap weapon or measure. And, among other sociocultural blind spots, they had a poor understanding of the societal networks supporting the insurgencies. Eventually, America embedded social scientists in every combat brigade in Iraq and Afghanistan,⁸⁷ recognising the ‘need to understand culture as a necessary element of overall victory’.⁸⁸

Russia–Ukraine War

The Russian invasion of Ukraine in 2022, and the continued fighting between these states since that date, may become the most consequential war in modern times. This can be understood in several terms, but it is the technological developments in this war which are clearest at present. For over three years, Ukraine and Russia have sought the means, often in conjunction with methods, to attack or defend against the other in what has become protracted positional, and frequently attritional, warfare. History may revise the assessment, but so far it has been Ukraine that has arguably led in technological ingenuity and improvisation.⁸⁹ This is because Ukraine has sought to compensate for its battlefield vulnerabilities, especially in manpower and firepower, and its dependency

on allied countries for critical ammunitions, weapon systems and enabling capabilities.⁹⁰ And Ukraine has done so while also relying on much older stopgap weapons and measures, such as its use of the *levée en masse* and the Molotov cocktail bomb, and the breaching of its own dams during the defence of Kyiv at the start of the war.⁹¹

Ukraine's technological innovations are now most visible in its efforts with artificial intelligence, autonomous weapons systems, and unmanned systems like aerial and maritime drones.⁹² Of course, none of these technologies are new, or new to warfare, with debate about their legal and ethical implications and whether they revolutionise war having occurred for years.⁹³ Nonetheless, they may still be thought of as stopgap weapons, not only for their rapid invention or innovation but also for their novel application to meet immediate battlefield needs. The Ukrainian approach to stopgap weapons has included refreshing obsolete air defence heavy weapons, such as remounting them on all-terrain vehicles for increased mobility and survivability or pairing them with advanced radar systems to increase their accuracy and lethality.⁹⁴ It has also involved using old and modern munitions in different delivery systems as well as converting anti-ship missiles into land-attack systems.⁹⁵

At the same time, Ukraine has been able to inflict significant losses on the Russian navy while not having a navy of its own, particularly through its creation and use of sea drones against anchored Russian warships.⁹⁶ Likewise, first-person videos of commercial drones dropping mortars onto (sometimes into) Russian armoured vehicles and defensive positions are also now common on social media platforms. Even more spectacular are the videos of Ukrainian 'dragon drones', which discharge thermite or other incendiary compounds onto Russian positions hidden in dense vegetation.⁹⁷ Ukrainians went on to use these incendiary drones against Russian armoured vehicles and fortified positions like bunkers. More recently, Ukraine announced that it had developed its own ground-based laser anti-aircraft weapon.⁹⁸ Indeed, the pace at which Ukraine has invented and innovated in military weaponry and equipment has meant that it is now able to manufacture a range of capabilities for defence export while still fighting the war.⁹⁹

It is the case that the Russians have also been gradually innovative and developed their own stopgap weapons in the war. Early on, the Russians placed vehicle tyres on top of their parked aircraft to confuse the targeting system on Ukrainian missiles.¹⁰⁰ But their more well-known weapons have been intended to defeat Ukraine's extensive use of aerial drones. Both sides have improvised armour structures, such as slate armour and 'coke cages'.¹⁰¹ These are intended to better protect against anti-armour weapons and particularly against the proliferation of cheap and disposable terminal drones on the battlefield, a phenomenon which has collapsed the notion that a common soldier or ordinary vehicle is not worth being targeted. It is estimated that about 70 per cent

of all Russian and Ukrainian casualties, up to 80 per cent in some battles, are now caused by ‘drone bomb’ attacks.¹⁰² More recently, Russian innovation led to its battlefield deployment of bomb-laden drones operated by miles of fibre-optic cable.¹⁰³ This reduces their disruption by electronic warfare means.¹⁰⁴ So Ukrainian soldiers use shotguns to down these drones.¹⁰⁵

The Russians have also improvised ‘turtle tanks’ (or ‘assault sheds’) which involve armour structures wrapped in building materials, sometimes also housing electronic warfare measures, to protect the lead assaulting armoured vehicles from drone strikes.¹⁰⁶ These vehicles are reminiscent of the ‘land battleship’ concept. The Russians have also developed mesh-netting ‘tunnels’ on key supply routes to protect their logistics vehicles against terminal drone attacks.¹⁰⁷ It is notable that Russian forces retaliated within weeks of first being attacked by ‘dragon drones’ with their own incendiary drone attacks on Ukrainian positions,¹⁰⁸ and that Ukrainian forces now use anti-drone netting on their defensive positions.¹⁰⁹ Ukraine and Russia are bound in competing technological innovation cycles, a mortal contest, creating stopgap weapons and their countermeasures, where the military advantage in being quicker to adapt to the battlefield situation is often short-lived but holds out the possibility of a tactical or operational victory.

Part Three: Observations

Strategy

The Defence Strategic Review 2023 and the National Defence Strategy 2024 stated in clear terms that Australia is facing the most complex and challenging strategic circumstances since the Second World War.¹¹⁰ The worrying implication is that Australia is militarily unprepared to meet these challenges as great-power competition between America and China increasingly shapes Australia’s security situation. Australia finds itself, as the Melians did in Thucydides’s account of the fate of Melos,¹¹¹ a lesser power unsure about how to secure itself within a contest of two greater powers. The Australian Defence Force is currently invested in a ‘strategy of denial’, which involves ‘signalling a credible ability to hold potential adversary forces at risk’ by shaping the strategic environment, deterring actions against Australia’s interests and responding with credible military force.¹¹² But the best laid plans of mice and men go awry. An important lesson from the case studies here is that the war Australia might next fight will not be the one for which it has planned. Strategic effort and judicious actions can shape the character of war, but success on the battlefield comes from adaptation to the specific conditions encountered there.

Familiarity with stopgap weapons development may be particularly valuable given the recent focus of the Defence Force on littoral warfare. The Defence Strategic Review stressed that Australia must enhance its capabilities for littoral warfighting in the Indo-Pacific, prioritising ‘a littoral manoeuvre capability by sea, land and air ... and close-combat capabilities ... able to meet the most demanding land challenges in our region’.¹¹³ The littoral domain is understood as ‘the part of the country that is near the coast’ or ‘the area in which shore-based forces can exert influence at sea, and forces at sea can exert influence ashore’.¹¹⁴ The Chief of Army described it as ‘the shallows, beaches, rivers, jungles and coastal towns that characterise our region’.¹¹⁵ As indicated, the littoral environment is more than the physical environment, drawing in ‘the land, rivers, people, infrastructure, coastal waters, airspace, and the electromagnetic spectrum in these coastal regions ... and even the space above them’.¹¹⁶ But as the Chief of Army observed about littoral warfare:

Not since the Pacific Campaigns of the early 1940s has our Army had to seriously consider fighting conventional adversaries in the littoral geography of our region: perhaps one of the most remote, dispersed and challenging battlefields.¹¹⁷

The Australian Army Contribution to the National Defence Strategy 2024 recognises that the Army must:

be highly versatile in the littoral terrain, able to achieve tasks ranging from rapid stabilisation and humanitarian assistance and disaster relief operations, to denying access into Australia’s northern approaches through long-range missile strikes, air and missile defence, and close combat.¹¹⁸

If the Defence Force finds itself engaged in littoral warfare in the Indo-Pacific region, the Australian Army must be able to operate for extended periods with limited to no communications, resupply or external support in the Pacific Islands chain and elsewhere in Australia’s near regions. As was the case during the Vietnam War, warfighting in the complex and varied terrain of the littoral will likely result in patterns of warfare where forces are asymmetrical and there is no distinct division of territory between friendly and enemy combatants, driving a need for constant innovation. We foresee stopgap weapons and other forms of military ingenuity and improvisation will likely return as critical factors in Army’s ability to conduct sustained operations in the littoral warfare environment, but also—to reprise Churchill’s speech—not just to fight on the beaches and landing grounds but to fight in the fields and streets and in the hills, and, if Australia or parts of it ‘were subjugated’, to carry on the struggle for the ‘rescue and liberation’ of their fellows.

Wars have historically been ‘prolonged struggle[s] between determined adversaries and will end with one or both sides’ exhaustion’.¹¹⁹ The army is often at the determining end of these contests, and, as a result, many stopgap weapons have been the product of the battlefield. The Australian Army, by acknowledging that ‘[s]eldom do we have everything we’d like or indeed need’, has stressed the importance of ‘resource stewardship’, treating deficiencies as opportunities for innovation and applying the principle to ‘do the very best you can, with what you have, wherever you are’.¹²⁰ While ‘resource stewardship’ refers to sustainable management in peacetime to ensure readiness and operational effectiveness, stopgap weapons are a lesson in military stewardship on the battlefield. They are the practical embodiment of how to do much with little in times of urgent need, which, as we think, may become particularly relevant in the littoral geography of the Indo-Pacific. American soldiers discovered during the Pacific campaign that the terrain and a stubborn enemy demanded more than their issued weapons provided, leading to the creation of stopgap man-portable heavy assault weapons like the AN/M2 Stinger rifle to attack Japanese bunker systems.¹²¹ Indeed, ‘how to do much with little’ should be Australia’s watchwords. That same sentiment should also encourage the Defence Force to document stopgaps and other battlefield innovations in history as a form of catalogue for use when needed by battlefield commanders. As it watches another old ally possibly drawing away, Australia finds itself once more isolated and vulnerable in the event of war. Overcoming the tyranny of distance,¹²² in its geographic and figurative senses, will require the same national spirit of ingenuity and improvisation, the same resourcefulness that once defined the Australian nation and its soldiers.

Technology

Stopgap weapons fill gaps in military capability through their imagination and purpose. As a means by which to meet an immediate battlefield need, they demonstrate the process of ‘adjustment from the war you planned for to the one you have’.¹²³ In that, they bring into sharp relief deficiencies and opportunities in strategic, operational and tactical planning. War metes out harsh discipline for militaries.¹²⁴ Combat provides, better than arguments, clear justification for jettisoning old ways of fighting and adopting new ones.¹²⁵ Stopgap weapons are a conspicuous enforcement of this discipline. They are borne of the necessities of war, which is critical to their worth. In so being, they are a missing piece in how we conceptualise military acquisition and innovation in peacetime.

In the Australian defence innovation ecosystem there has been a strong emphasis on the importance of industry and job creation, which has in many cases impeded radical innovations.¹²⁶ In part, this perhaps occurs because Australia has not been a battlefield, nor faced an existential threat for decades, and so capability development in defence bureaucracies has arguably become detached from a war-fighting mentality. Stopgap weapons may have a corrective role in that process, as they represent a means to

conceptualise capability so that it is foremost a rapid, uncongested effort in meeting battlefield demands. Stopgap weapons are lifted from the ‘frictions’ of development and acquisition to represent the mindset of ‘minimum viable capability in the shortest possible time’.¹²⁷ Historically, battlefield commanders usually approved the use of stopgap weapons, or else they went unauthorised except through their tolerance by commanders. This occurred in many of the case studies, notably the use of improvised vehicle armour in the Vietnam and Iraq wars. Where stopgap weapons required a higher level of resourcing, as in the case of the CAC Boomerang developed during the Second World War, bold production and manufacturing decisions enabled their realisation. The joint venture of three companies to form the CAC allowed for rapid production of a stopgap aircraft, showing the importance of sovereign industrial capacity and collaboration as well as the value of a skilled workforce and supplies of critical equipment and materials.

Stopgap weapons depart from usual military acquisition processes, described in the 2023 Defence Strategic Review as the ‘pursuit of the perfect solution or process’,¹²⁸ for whatever works and can be fielded rapidly. They are ‘brutally radical instead of starry-eyed and fantastical’.¹²⁹ The periscope rifle used in trench warfare during the First World War exemplified this gritty, brutally expedient character. Its simple design, efficacy and popularity resulted in its rapid production in makeshift manufacturing workshops on the battlefield and its use in other theatres. Usually, too, there is little need for stopgap weapons to neatly align with strategic priorities, because the rationale for their development is typically determined at the tactical level and in response to those immediate demands. In this sense there is also no ‘valley of death’ in the transition from one capability or technology to the next, as it is an unapologetic disposal in weapons, based on military utilitarian principles tempered by legal and moral considerations. Moreover, there is usually no great cost involved with stopgap weapons. As the case studies show, stopgap weapons tend to involve repurposing materials, including obsolete weapons.¹³⁰ This makes a case for keeping old military equipment as a sort of stopgap inventory.

The stopgap weapons in the case studies do not merely reveal deficiencies in capability processes and planning. In several of the case studies, we can identify a distinctive innovation mode which corresponds with a complex adaptive system—that is, a system that ‘involves great numbers of parts undergoing a kaleidoscopic array of simultaneous interactions’ and that has the characteristics of ‘evolution, aggregate behaviour, and anticipation’.¹³¹ In the rival trenches of the Western Front, each side was motivated to keep creating novel devices to match or better those of their enemy, which drove groundbreaking battlefield innovation. A similar process is presently occurring in the trench warfare of the Russia–Ukraine War. The cycle of competing technological improvisation that often occurs between opposing forces, and which pushes groundbreaking battlefield innovation, is a reminder of the importance of incentivised

rivalry in military innovation; indeed, in the important role of enemy agency in that process.¹³² In stopgap weapons and their development we have observed a truncated innovation timeline, where information is dispersed rather than drawn from a centralised directive and which draws on a complex system of influences from diverse sources in a process of adaptation, learning and self-organisation.

The innovation hubs, technology accelerators and 'MakerSpaces' which epitomise modern military innovation in Australia are in part an effort to artificially reproduce the tempo and cognitive demands of the battlefield and align technology development with the needs of the soldier.¹³³ However, because these organisations are largely created during peacetime and physically removed from battlefield conditions, they risk becoming more responsive to stakeholder interests and the need to align with policy than to 'the warfighter's problem set'.¹³⁴ Indeed, many of the stopgap weapons explored in the case studies used methods and materiel that would likely have no place in modern innovation hubs, where the primary interest is in the latest technologies and away from simply design and manufacture. Those wartime soldiers and others used modified vehicles and aircraft that were never designed for combat roles, adapted weaponry such that it better suited conditions, created bombs from the most commonplace of materials, repurposed stolen and scavenged munitions, and used technologies and innovations from civilian society to such effect that they changed the character of that war.

Intellect

Another important aspect of stopgap weapons is how they are institutionalised or intellectually situated by a military organisation. Here we briefly draw together the doctrinal, leadership, command, legal and ethical frameworks from an Australian Defence Force perspective. Our focus, though, is on the imperatives for the battlefield commander. The most violent form of human activity, which is warfighting, is also the most chaotic of human endeavours.¹³⁵ As Clausewitz observed, 'Everything is very simple in war, but the simplest thing is difficult'.¹³⁶ In similar sentiment, warfare has been described as 'pervaded by great chance, uncertainty and friction, while inescapable emotions impact behaviour'.¹³⁷ Success in warfighting, as Australian Defence Force doctrine observes, demands agility, adaptability, problem-solving, critical thinking, and resilience of the organisation and the person.¹³⁸ This requires a soldier-scholar mindset to see through the chaos and emotion of war, indeed its destruction and violence, to understand the basic problems and how they can be solved.¹³⁹ That is why the Defence Force regards doctrine, and the outworkings in learning and training, as foundational to the ability to achieve its missions and taskings.¹⁴⁰ And learning, as the Defence Force points out, is not simply about conditioning how a person thinks, acts and responds but also about how learning in its widest sense 'denies our competitors intellectual seams to exploit'.¹⁴¹

Australian Defence Force doctrine points out that innovative and inquiring minds are better equipped to adapt to technological changes and rapid changes on the battlefield.¹⁴² No doubt that is why the Chief of Army regards 'expertise' as one of the three pillars of the Army profession.¹⁴³ But what the doctrine seems to overlook is that innovation is not only a forward-looking process.¹⁴⁴ By that we mean—and the case studies have shown—that some problems or situations have occurred so repeatedly that past solutions can sometimes be lifted and adapted into place as a stopgap measure. The field improvisation of armour for vehicles in the Second World War, and in the Vietnam and Iraq wars, is an example. Further, looking backwards to problems and solutions may shorten the critical-thinking and problem-solving processes, offering battlefield commanders especially the better means to exploit fleeting opportunities or to quickly defend against sudden weaknesses. The American MRAP vehicle program was an urgent response to the threat of improvised explosive devices in the Iraq and Afghanistan wars.¹⁴⁵ These vehicles, like the Australian Bushmaster vehicle, used a V-shaped hull to deflect the blast from the passenger cabin.¹⁴⁶ This V-shaped hull was developed by the South Africans and Rhodesians in response to the landmine threats their troops faced during their 1960s and 1970s wars.¹⁴⁷ And that design was based on improvised field engineering for Portuguese troops during the Angolan War.¹⁴⁸ The study of stopgap weapons, then, like other forms of military history, can educate the commander and the soldier to reimagine their capabilities and resources in ways that out-think and defeat their adversaries. This underscores the Defence Force's statement that it 'considers the mind a weapon and learning a force multiplier'.¹⁴⁹

History has shown that the quality of military leadership has frequently determined victory or defeat on the battlefield.¹⁵⁰ Australian Defence Force Doctrine thus recognises that leadership has a central role in creating military power, which it explains as constituted by moral, intellectual and materiel elements.¹⁵¹ The moral and intellectual elements should be understood as bound closely together as parts of the reasoning process. Ideally, military leadership is more than making decisions and giving orders. Leadership is best exercised within a theory and context of command—that is, a practical philosophy about how a commander will best use their forces and resources in given circumstances. This allows subordinate commanders to, as it were, share the mind of their commander. In recent years, the Defence Force has 'mov[ed] away from the unitary concept of mission command towards the concept of command on a spectrum'.¹⁵² Nevertheless, the Defence Force retains a 'bias' towards mission command.¹⁵³ This is important to maintain. Although stopgap weapons did not occur only under one form of leadership in the case studies, mission command is ideally suited to fostering and exploiting them. This is because mission command aims to promote initiative, ingenuity, innovation and resourcefulness while also devolving authority for action to lower levels of the chain of command.¹⁵⁴ Ukraine's tactical ingenuity, the inventiveness of its battlefield soldiers, can be credited in part to the application of its own form of mission command.¹⁵⁵ A critical

component of mission command is 'disciplined initiative', which is about empowering (and requiring) subordinate commanders to act as the situation dictates so long as the action conforms to their commander's overall intent and objectives.¹⁵⁶ In many ways, disciplined initiative creates the intellectual and philosophical space, as it does the command authority, for battlefield commanders to make and use stopgap weapons as necessity dictates.

However, Australian Defence Force doctrine repeatedly emphasises that all military activity must now occur within the context of the law, ethics and values.¹⁵⁷ No exception is permitted.¹⁵⁸ For the battlefield commander, this requires their compliance with the laws and customs of war. The laws (or rules) of war are extensive, regulating not only who can be targeted and when, but also the means and methods that can be used in warfare.¹⁵⁹ Among those rules are the 'Article 36' obligations,¹⁶⁰ which involve the determination that a new weapon, means or method of warfare, which includes their material modification, complies with Australia's international legal obligations prior to its first use in war.¹⁶¹ This rule attaches to the use of stopgap weapons. Like many countries, Australia has developed a sophisticated process to legally review weapons (and other means and methods of warfare) for their compliance with the laws of war.¹⁶² But that process reflects a peacetime situation, and likely a methodology better suited to analysing weapons whose characteristics have been established by design, testing and manufacture. The situation is different in war, where the same types of stopgap weapons may vary depending upon the available resources, local conditions and idiosyncrasies, and the need to constantly adapt to changing battlefield circumstances. There is urgency, too, as there might also be no means to provide an example for examination off the battlefield. The ability to adapt an 'Article 36' review process to stopgap weapons, to allow their rapid use, represents a practical and moral imperative for battlefield commanders.¹⁶³

Conclusion

In his 1964 essay 'Australia and Southeast Asia', Paul Hasluck observed that Australia lay outside world affairs until European settlement, but, by that act, 'Modern Australia was linked to world power contests ... and today we cannot read our national future except in the language of world politics'.¹⁶⁴ It is 'world politics' that places Australia, as it did the Melians, between the two great powers of the time. In his 2024 speech at the Australian National University (ANU), the Chief of Army pointed to this situation as compelling urgency in the Australian Army to better prepare to fight and win wars.¹⁶⁵ He noted, however, that the Army has limited recent experience in large-scale combat operations, and particularly in littoral warfare. In his view, 'In the absence of personal experience, context can only be found in history, and in the study of the classical theories of warfare'.¹⁶⁶ He also said, 'It is our body of knowledge that helps us meet one of the central

challenges of the profession today', which is 'to balance war's enduring human nature with its ever-changing character'.¹⁶⁷ It is these ideas that framed our research on stopgap weapons with the aim of expanding the body of useful military knowledge for the Army, or at least to encourage its thinking in this direction.

We believe that some broad themes emerge from our observations. One is the importance of the stopgap weapon itself—that is, its features and necessity within war. As we saw in many of the historical case studies, stopgap weapons were often assembled using crude or repurposed materials and basic design, but those features reflected the precise and absolute demands of a battle. In using only what is available and essential to meet specific tactical or operational circumstances, stopgap weapons exemplify successful military expediency. Knowledge of the design, materials and contexts for stopgap weapons development throughout history will be valuable on future battlefields or as stimulus for new capabilities, particularly as they have already been tested in wartime conditions.

Another theme is that stopgap weapons represent an adaptive philosophy for a learning military organisation. We think two points come from this theme, and they are organisational and attitudinal in nature. The first, which is concerned with the technological dimensions of stopgap weapons, is that they may be characterised as a radical form of defence innovation lifted from usual capability development approaches. The second, which is concerned with the intellectual, legal, ethical and doctrinal dimensions of stopgap weapons, is that they represent the cultivation of a form of soldier-scholar culture in a military organisation. The Chief of Army highlighted the importance of the last point when he said 'the Army certainly needs technologists and futurists. But we also need historians, philosophers, ethicists and strategists in equal measure'.¹⁶⁸ Stopgap weapons research contributes in that way to our understanding of how a military organisation prepares for, and meets, the uncertainties and frictions of war. In that pursuit, our research highlights the importance of fostering a mindset that supports adaptation, but also of having a structural system for adaptation at the strategic level, in capability planning, in military doctrine and on the battlefield.

We said at the start of the article that war is the great crucible of need for humans. We can add from the case studies that war is the great clash of human creativity. But, as the Chief of Army pointed out in his speech at the ANU, the Russian invasion of Ukraine also 'reminds us that war is indeed a battle for adaptation'.¹⁶⁹ What that means for us, as we have sought to show through our case studies, is that stopgap weapons will continue to feature in future wars. The human urge to win, at least to survive, will frequently produce new weapons to gain or deny advantage on the battlefield. To this extent, stopgap weapons are a naturally occurring human phenomenon. But we think they occur more or less because of the knowledge, experience and motivation of the

soldier, and from leadership that encourages, and sets the moral conditions for, the soldier to understand battlefield problems and to create weapons and other measures that can solve them. For us, that places importance in the study, training and preparation for stopgap weapons within broader efforts to foster ingenuity and improvisation in the Australian Army. The region in which the Army might fight a war of national survival, the Indo-Pacific, is far different to that of the Second World War. But we believe this future war, however fought, will still require the character and resourcefulness which harken to that earlier age of Australian soldiering.

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/ AN ADAPTIVE, INNOVATIVE ADF: LESSONS FROM THE MILITARY INNOVATION LITERATURE

Charles Miller

There exists a consensus in modern military circles about the importance of innovation and adaptation. As the Chief of Army states, 'The side that adapts fastest gains the edge.'¹ Retired Major General Mick Ryan likewise argues that 'an important virtue for military organizations to develop in peacetime, and nurture constantly in war, must be adaptability to unexpected events'.² Based on his experience as chief of staff of the Ukrainian army, Valery Zaluzhny came to a similar conclusion: 'In the future high-tech war the winner will be the one who adapts to the technological conditions of the battlefield faster than the enemy.'³ Academic security specialists similarly argue that innovation and adaptation are key drivers of state power. John Mearsheimer, for instance, argues that 'great powers prize innovation' because it offers 'new ways to gain advantage over opponents'.⁴ Andrew Krepinevich agrees: 'Militaries that succeed in leading the way into a new and far more effective way of waging war during periods of military revolution can gain an enormous advantage over their rivals.'⁵ Innovation and adaptation are closely interconnected but distinct concepts. Both involve some kind of change in the ways that armies operate, what Kendrick Kuo calls a 'new institutionalized technique of organized violence intended to convert a service's resources into mission success'.⁶

This definition of innovation and adaptation is sufficiently general that it can include (but is not limited to) the introduction into service of new technologies such as weapons; hence it will be the definition used in this article. Some historical examples of innovation (for instance, the Stosstrupp tactics of World War I⁷ or Maurice of Nassau's system of drill, volley and countermarch⁸) were new ways of using existing physical technology. At the same time, even a seemingly purely technological innovation involves the introduction into service of a new operating concept and organisational change as much as it involves the introduction of a new physical artefact.⁹ What, then, is the difference between an innovation and an adaptation? Some scholars argue that innovation and adaptation are not so much distinct concepts as ends of a spectrum,¹⁰ while others claim that an adaptation is a subset or type of innovation.¹¹ Williamson Murray's influential definition argues that an innovation is associated with peacetime while an adaptation

is associated with war,¹² a definition also adopted by Barno and Bensahel.¹³ However, many historical adaptations come about in peacetime as a response to potential threats from enemy weapons systems or doctrines—for instance, the US Marine Corps concept of stand-in forces was, in part, a reaction to the proliferation of long-range fires, mines and other smart weapons.¹⁴ Conversely, many examples of innovation in the literature were developed during war. Rosen gives multiple instances, such as the invention of strategic targeting (by the US Air Force) during, rather than before, World War II.¹⁵ This article therefore proposes to view adaptation as a ‘counter-innovation’—a type of innovation designed to counter some new challenge, including but not limited to an enemy innovation.

Innovation and adaptation are thus closely interlinked—if adaptation is a type of innovation, then the drivers of adaptation and of innovation should be similar and an army that is good at one should also be good at the other. This is a tendency, not an infallible rule. There could be an army that is good at adaptation but not innovation, or vice versa, though, in general, competence in one should go hand in hand with competence in the other. This article examines what the literature on military innovation and adaptation has to say on the current state of the military profession in Australia. Most of the article will focus on what scholars say makes an army good at innovation and adaptation. Equally, the literature also makes an important related point: innovation is not always an unalloyed good and, where it is seen as a silver bullet which can resolve mismatches between commitments and resources, it can be harmful to the army’s overall effectiveness. I will conclude, therefore, by making recommendations about how to make (or keep) the Army innovative and adaptive. I will also conclude, however, by discussing how to make innovation ‘safe’—that is, how to ensure that the Army strikes the right balance between exploring the new and exploiting the existing.

This article divides the literature on fostering military innovation and adaptation into three themes: organisational culture, organisational structure and command style. This is a division by theme rather than by author. Many authors in the military innovation literature stress two or more of these themes simultaneously. Dividing my article in this manner, however, means the themes should be applicable to the current Australian context, starting with organisational culture.

Organisational Culture and Innovation

Organisational culture is an important variable in many studies of military innovation and adaptation. As the National Defence Strategy has it, 'Culture is fundamental to achieving the Defence mission.'¹⁶ Organisational culture here refers to the culture of the army or military organisation itself rather than the broader culture of the nation. Williamson Murray argues that the 'organizational culture of particular military organizations formed during peacetime will determine how effectively they will adapt to the actual conditions they will face in war'.¹⁷ He further claims:

Even more important than technology in innovation and adaptation has been the creation of military cultures amenable to careful historical and experiential learning, honest analysis, and imaginative, realistic thinking about the future possibilities of weapons systems.¹⁸

Meir Finkel argues, 'Flexibility or its lack is in many cases the result of the military culture.'¹⁹ The ability of some militaries, such as the Israel Defense Forces (IDF), to innovate successfully has been attributed to a culture of 'improvisation', or of 'asking questions'.²⁰ Conversely, the inability of certain European militaries to adapt successfully to the battlefield of World War I has been attributed to the 'deeply inbred conservative cultures of Europe's military institutions'.²¹

What is organisational culture? Austin Long defines it as a 'set of beliefs about the organization and its mission'.²² Elizabeth Kier, for her part, defines it as a 'set of basic assumptions and values that shape shared understandings, and the forms or practices whereby these meanings are expressed, affirmed, and communicated to the members of the organization'.²³ The question, then, is how the Army might shape these beliefs, values, forms and practices in a manner which promotes innovation and adaptation.

One way in which this can be accomplished is by a consistent rhetorical strategy to promote innovation and adaptation coming from the top of the organisation. As Farrell, Rynning and Terriff note, 'Change has to be championed from the top', with 'innovation champions' being the key.²⁴ In this regard, the current Chief of Army's emphasis on innovation and adaptation is an important step, but it must also be maintained by his successors and subordinates within the organisation. An important part of this rhetorical strategy is not simply to say that innovation and adaptation are good and that we must have more of them; it also must include a recognition that the corollary of increased innovation and adaptation is tolerance of failure. The future battlefield is likely to be dominated by uncertainty as much as, if not more than, the battlefields of the past. Consequently, it will be very hard to determine, in advance, which innovations are likely to succeed and which will fail. In fact, most likely most innovations will not be successful. If failure is not tolerated, then this will serve to dampen the ability to innovate at all.

Of course, a military organisation must strive to avoid unnecessary errors which could cost lives, but an organisational culture which promotes innovation would accept a higher level of failure from military personnel where those failures are the result of an honest attempt to devise new solutions to complex and novel problems. In this regard, Army's new emphasis on 'successful failure'²⁵ is most welcome—indeed, the phrase parallels the concept of 'creative destruction' familiar to the economics of innovation since Schumpeter.²⁶

However, a cautionary note should be sounded. Theorists note that organisational culture cannot simply be reduced to the official rhetoric of the organisation or of its leaders. Note that Kier talks about the 'the forms or practices whereby these meanings are expressed, affirmed, and communicated to the members of the organization'.²⁷ Sometimes the practices of an organisation belie the official rhetoric. The official publications of the British Army prior to both World War I and World War II, for instance, stressed decentralised control and the exercise of initiative by lower-level leaders.²⁸ In practice, however, in both world wars the British Army's command practices were far more rigid and centralised, at least for substantial portions of both wars.²⁹

Returning to the present day ADF, there is a danger of official rhetoric from the Chief of Army or other agencies within Army, such as the Robotic and Autonomous Systems Implementation and Coordination Office (RICO), about 'successful failure' being rendered ineffective if the practices of the Army continue to communicate a 'zero defects' approach in all matters. Moreover, the concept of 'successful failure' must continue to be practised consistently through the tenure of multiple chiefs of army. It is these mutual expectations, formed over constant practice, which create the shared understandings vital to organisational culture. It is especially important that, if the Army wishes to create a culture based around 'successful failure', it refrain from punishing failed but honest experimentation even in relatively tough cases. As the economist David Kreps said of corporate culture:

The organization will be characterized by the principle³⁰ it selects. It will (optimally) try to promote understanding of that principle in the minds of its hierarchical inferiors. In order to protect its reputation for applying the principle in all cases, it will apply the principle even when its application might not be optimal in the short run. It will apply the principle even when it serves no direct organizational objective, if doing so helps to preserve or clarify the principle.³¹

To fully embed a culture of innovation, however, the rhetorical emphasis on successful failure must persist over time and must be accompanied by actions which credibly communicate Army's commitment to this principle.

Organisational Structure

Organisational structure is another important element identified by the literature on military innovation and adaptation. The organisational theorists Argyris and Schön define organisational structures as consisting of five factors: channels of communication, information systems, the spatial environment of the organisation, the organisation's procedures and routines, and its systems of incentives.³²

Many writers on military innovation and adaptation especially stress the importance of the first two components—channels of communication and information systems. The starting point is that military innovations often emerge from the bottom up via experimentation within lower command echelons. The question then is: how might successful innovations pioneered by one unit spread to others? This enquiry implies the necessity of an institutional mechanism to gather innovations from frontline units and then communicate them to others. Barno and Bensahel, for instance, note:

Organizations must have both a culture and mechanisms that encourage the best ideas to flow up the chain of command. Newly devised changes must be effectively disseminated throughout the force and accompanied by necessary training.³³

Meir Finkel, for his part, notes that armies which have successfully adapted to surprise on the battlefield have, among other things, a 'mechanism for quickly relaying information from one unit that encountered and overcame a surprise situation to other units in a similar situation'.³⁴ Michael Hunzeker's 'assessment, command and training' (ACT) theory argues that one crucial component of battlefield learning is the existence of just such an institutionalised mechanism to gather lessons learned from frontline units and rapidly disseminate them to others.³⁵ Closely examining the cases of Britain, Germany and France in the First World War, Hunzeker argues that Germany was able to adapt more rapidly than the others in part because of the institution of the Great General Staff, which performed such a function for the German army.³⁶ This points to the importance of doctrine as a means of storing successful innovations and adaptations and communicating them to frontline units.

In this respect, the ADF's procedures are in line with the best practices identified in the military innovation and adaptation literature. The ADF's Battle Lab system collects lessons learned from frontline units, updates doctrine accordingly where necessary and communicates those lessons to others.³⁷

The Army also has an extensive structure for promoting technological innovation. The makerspace initiative provides workshops for ADF personnel both to develop new innovations and, perhaps more importantly, to think innovatively at nine locations across Australia.³⁸ Makerspace has already welcomed over 10,000 attendees since its foundation in 2019, resulting in some impressive innovations which have seen success even outside the military context. These include, among others, Lieutenant Jon Stevens's non-sterile intravenous fluid bag.³⁹ Makerspace sits within RICO, which, among other roles, seeks to 'explore, innovate and lead the investigation of disruptive technology'⁴⁰. In addition to Makerspace, RICO sponsors other innovation-related activities, including Army innovation days and 'hackathons'⁴¹. The Army has other initiatives to promote innovation and adaptation. These include brigade-level 'good ideas expos',⁴² for instance, and the re-rolling of one squadron from the 1st Armoured Regiment as an experimental unit designed 'to explore pathways for getting emerging technology into the hands of the warfighter quickly, and at scale'.⁴³

The innovation and adaptation literature would laud the existence of these initiatives—the more experiments there are, the better the chances good ideas will emerge—but might make two suggestions. First, there should be a regularised pathway to take technological innovations which emerge via this ecosystem into service. Innovation days and hackathons are good, but new innovations should regularly be put in front of decision-makers with the relevant authority to make orders. Second, the innovation literature, as we have seen, does not make a strict 'hard and fast' distinction between tactical and technological innovation. Indeed, as Williamson Murray points out, 'What matters in technological adaptation as well as technological innovation is how well new and improved technologies are incorporated into effective and intelligent concepts of fighting'.⁴⁴ The tank as a physical artefact entered into service in 1916, but it was not until much later, after decades of debate and experience, that armies reached a consensus on how tanks should best be employed on the battlefield⁴⁵ (see the discussion of Kuo's work below). Consequently, there should be the closest integration between Army's tactical (Battle Lab) and technological (RICO) innovation and adaptation structures.

Another way in which the Army might be able to bridge the gap between technological and tactical innovation is through Holmes's idea of the 'combat campus', which would be placed at major base locations to create ecosystems of innovation.⁴⁶ This concept would include a 'curriculum focussed on diverse knowledge interaction and a physical space where military and non-military experts can co-create'.⁴⁷ It would also combine knowledge from science, technology, engineering and medicine (STEM) and humanities, arts and social sciences (HASS). Participants would be educated on 'technological literacy, maker space use, design thinking theory and subjects that improve a military practitioner's knowledge of adjacent possibilities'.⁴⁸ The HASS component could include, for instance, military history as a source of ideas about future tactical developments or operational concepts for new technologies.

Command Style

Another consistent thread in the literature on military innovation and adaptation is the importance of command style, especially of a decentralised system of command and control such as mission command. Finkel writes, 'The decentralized (mission) command method [is] ... a key to recovery from technological and doctrinal surprise'.⁴⁹ Barno and Bensahel argue that 'strengthening mission command' is a key way to ensure that US forces remain able to adapt on the battlefield.⁵⁰ Shamir and Luttwak attribute much of the innovation and adaptation associated with the IDF to its practice of mission command,⁵¹ while Hunzeker,⁵² Murray,⁵³ Barno and Bensahel⁵⁴ and Finkel⁵⁵ argue that the ability of the German army to adapt in the world wars was partly due to its embrace of decentralised command and control.

There are a number of reasons why one might imagine decentralised command and control would imply a greater ability to innovate and adapt. First, decentralisation implies that lower-level leaders are able to experiment with both new tactics and new technologies (as can be seen with the experimental use of drones initially at the small-unit tactical level by Ukrainian forces). Now, in an environment of radical uncertainty, the chances are that the majority of such experiments will fail. However, the more experiments there are, the more likely it is that *at least one* of them will succeed, and, once one of them has succeeded, it can form the basis for an innovation which can then be spread to the rest of the army. Second, if different small units are allowed to experiment with new tactics or technologies, they can fail more 'safely'. The consequences of failure would normally be limited to that one unit. By contrast, one innovation imposed top-down on an entire army would be catastrophic should it fail.

There is an important caveat to this emphasis on the importance of decentralisation for innovation. As Rosen points out, one might imagine that centralisation could in principle imply more innovation or adaptation because, in a centralised army, new innovations can be driven through by the higher command against possible resistance by more conservative elements at lower command echelons.⁵⁶

Hunzeker's ACT theory provides a convincing resolution to the tension between the paradoxical need for both centralisation and decentralisation to generate innovation and adaptation. ACT theory argues that it is a combination of moderate *decentralisation* in decision-making, on the one hand, and *centralised* training and doctrinal development and dissemination, on the other, which best promotes adaptation.⁵⁷ Decentralisation in the form of mission command constitutes moderate decentralisation because it allows for experimentation and independence within the context of a shared doctrine and set of training standards. Mission command thus represents a sweet spot for innovation

and adaptation because it combines the decentralisation necessary for low-level experimentation with the centralised training and doctrine necessary to overcome excessive parochialism or conservatism on the part of some lower-level units.⁵⁸

Consequently, a large part of the question of how the Army can become/remain innovative and adaptive revolves around the question of mission command. On the face of it, the prospects would seem good, given that mission command has been accepted doctrine in the Australian Army for some time.⁵⁹ The question, however, is whether this momentum can be maintained. Here the literature points to a number of potential issues on the horizon.

The first is the problem of increasing regulatory compliance. Barno and Bensahel note that the practice of mission command in the US military is being stifled by excessive regulation. They report that in the US Army there are almost 500 different regulatory publications with which soldiers are expected to comply, and that it would take the average company commander 451 days to complete all of the annual training they are expected to undertake.⁶⁰ In the Australian context, too, regulatory compliance can prove an obstacle. Defence in general should consider, for instance, whether the Defence Work Health and Safety Strategy does not overly impinge on the flexibility and autonomy necessary for the achievement of mission command.⁶¹ The ADF must avoid the trap (common to many organisations) whereby its members come to focus on the organisation's procedures as an end in themselves, rather than the goals these procedures are designed to promote.⁶²

The second issue relates to the potential problem of scaling up in the event of a large-scale conflict. Amos Fox notes that unit proficiency is one key variable in determining the degree of centralisation a commander should exercise.⁶³ My historical research has found that one factor which has led to a greater degree of command decentralisation (independent of organisational or national culture) is the existence of a high proportion of well-trained soldiers in the army. Where states have embarked on crash mobilisation during wartime—or where wartime losses have severely thinned the ranks of experienced personnel—even armies such as the Wehrmacht, with an organisational culture stressing decentralisation, have resorted to centralised command and control.⁶⁴ Clearly, this is not a problem for the ADF at present. If, however, the ADF were to be compelled to embark on a process of rapid mobilisation, it might need, at least initially, to employ more centralised command styles as new recruits were trained to the required levels of proficiency. This centralisation in turn might serve to dampen innovation and adaptation.

While scaling in response to mobilisation events presents challenges, it is nevertheless the case that an influx of large numbers of new recruits from the civilian world may have compensating benefits in terms of innovation and adaptation. Luttwak and Shamir point to the close linkages between military and civilian life in Israel as a key factor in the IDF's ability to innovate and adapt.⁶⁵ Most IDF personnel are not professional soldiers in the Western sense and have permanent civilian careers. They therefore bring into the service fresh ways of thinking which can spur new innovations. This dynamic works in the opposite direction too. Because most Israelis in the civilian economy have military experience (and senior IDF officers are expected to have a second civilian career), the Israeli civilian economy is well suited to the needs of the military and there exist bonds of trust between the military and the civilian economy which allow for rapid innovation.⁶⁶ The same dynamics may be observed in Ukraine—the influx of large numbers of civilians into the Armed Forces of Ukraine (AFU) has been attended by new ways of thinking, and this may have been key to many of the innovations achieved in operations against Russian forces. The Birds of Magyar squad, for instance, which pioneered the use of first-person-view (FPV) and kamikaze drones, were mobilised as part of the military reserve component of the AFU.⁶⁷

Thus, while the issue of rapid mobilisation might appear to pose a challenge to the ADF's ability to innovate and adapt in wartime, it also points the way to a solution: an expansion of the reserves. This would have two benefits. First, it would provide the ADF with a pool of personnel with some level of military training at the outset of war. These individuals could therefore be trusted with a greater degree of decentralised command, which is more likely to generate innovation and adaptation than centralised command is. Second, as seen in Israel and Ukraine, reservists bring into the service fresh ideas and habits of mind from the civilian world. When applied to military problems, these characteristics can bring about innovations and adaptations which a military composed only of full-time professionals might overlook. In this respect, one proposed innovation worth considering is Mike Kalms's idea of lateral hires from outside the military at the O6/O7 level.⁶⁸

Bad Innovations?

The discussion up to this point has assumed that innovation and adaptation are good things and that the only question is how we can have more of them. Yet there are many examples in military history of innovations and adaptations which have worked less effectively than that which they were designed to replace. One relatively harmless example in terms of organisational structure is the Pentomic division with which the US Army experimented during the Cold War.⁶⁹ In some cases, the disruption caused by failed innovations has compelled militaries to return to the old way of doing things. Presumably it would have been better had the damaging innovation not been introduced at all.

Scholars of both civilian and military innovation suggest that we may have an inherent bias to recall only successful innovations and forget the ‘next big things’ which did not live up to their promise.⁷⁰ We often, therefore, hold up those who resisted innovation to ridicule, because we are only considering the innovations which succeeded and not those which failed, forgetting that the protagonists at the time did not know (and arguably could not have known) which innovations were which. This tendency may lead to a bias amongst modern-day decision-makers to be too accepting of new innovations to avoid a ‘false negative’ (i.e. missing a good innovation) at the expense of an increased risk of a ‘false positive’ (i.e. promoting a bad innovation).

The political scientist Kendrick Kuo’s research discusses the problem of ‘bad innovation’ at length. Kuo points to several military innovations which ended up failing in sometimes very harmful ways. He argues that bad innovations not only fail in their intended purpose but lead to the cannibalising of existing capabilities and a loss of capability in previous techniques which had been proven to work.⁷¹ After a bad innovation has failed, Kuo argues, armies are compelled to return to previous ways of doing things which they had mistakenly abandoned. His research especially focuses on the British Army’s interwar innovation in armoured warfare. Whereas the historical stereotype has the British—and French—armies rejecting the importance of the tank as a military innovation (sometimes attributed to the inherent conservatism of cavalry regiments) and therefore losing badly to the Germans in the early years of the Second World War, Kuo’s work shows this interpretation of history is wrong. In fact, Kuo demonstrates that the British were highly innovative in their ideas about armoured warfare and the organisational structure designed to support it but that this mindset made the British Army less effective; namely, the British believed that tanks were best employed in large, armour-heavy formations with little support from other combat arms, especially infantry.⁷² In many ways this represented a more radical innovation than the German concept of the combined arms Panzer division, in which infantry and artillery support played crucial supportive roles.⁷³ The problem was that the more innovative British concept that favoured an ‘armour-heavy’ formation was less well suited to the 1940s battlefield. In fact, prior British practice adopted at the end of World War I, involving combined action by infantry, artillery and armour, was more effective than the armour-heavy innovation which replaced it, and the British were forced to return to the former way of doing things.⁷⁴

According to Kuo, the British made this mistake due to the mismatch they faced between their interwar resources and their commitments. Following World War I, the British had to defend a worldwide empire in the context of financial austerity. The problem was exacerbated by the rise of fascism and militarism in Germany, Italy and Japan. In this context, British policymakers saw radical innovations, such as the armour-heavy

formation, as a silver bullet which would allow them to fulfil their global commitments with fewer resources. Consequently, the British Army pushed through the armour-heavy formation despite evidence from many sources, including field exercises, that it could not fulfil the role that its proponents envisaged for it. Instead, proponents of the armour-heavy formation, such as Basil Liddell Hart, misinterpreted this evidence to suggest that the exercises had been more successful than they had in fact been, and these interpretations were accepted by decision-makers.⁷⁵

The overall lesson, according to Kuo, is that damaging innovations are most likely to emerge when policymakers face a radical mismatch between their security commitments and the resources allocated to them.⁷⁶ The implication is that, rather than relying on innovation to save the day, policymakers would be better advised either to scale back their commitments or to increase the resources devoted to them.

Obviously, Australia is not a global power like 1930s Britain or the contemporary United States, and we are not faced with decisions such as whether we prioritise Europe, the Middle East or Asia. But Kuo's work does remind us that questions of innovation and adaptation are closely connected to broader issues of national strategy. One obvious implication of Kuo's work is that innovation should not serve as a substitute for higher defence spending in response to a given threat environment. Another implication is that we should not imagine that innovation reduces the need for allies or for higher defence spending, nor that it allows us to successfully take on much larger countries than ourselves. Of course, questions of national strategy, alliances and decisions over war and peace are properly decisions for politicians and the democratic public rather than soldiers. Nevertheless, the ADF (especially the senior leadership) can help in this regard by managing the expectations of politicians and the public as to what military innovation can realistically do. This is an issue of advice and public communications, which are both legitimate functions of the military leadership in a democratic society.

Kuo describes how the standard measures we use to judge a military innovation in peacetime have been circumvented in cases of bad innovation. Wartime innovations and adaptations can be tested through their application on the battlefield. In peacetime, however, the tools we have to assess a given innovation—exercises, wargames and computer simulations—are different.⁷⁷ These are imperfect substitutes for the test of combat, since they inevitably depend on assumptions about operational conditions, the enemy and so on which may diverge from reality in important respects.⁷⁸ It will be very difficult indeed to tell exactly which military innovations are likely to be successful before they are actually used in combat. At least, however, when the tools we do have suggest that a given innovation is not working as promised, this information must not be overlooked, distorted or brushed under the carpet. Venture capital firms and

specialist ‘innovation units’ within established firms are known for rejecting the majority of proposals.⁷⁹ Alphabet’s famous innovation unit, Google X, is famed for its use of ‘kill metrics’ designed to help decide when to kill off a project, ideally quickly, in order to prevent further waste of resources. The ‘kill metrics’ are devised by the team which proposes a given innovation in order to ‘help identify the riskiest parts of a project from the start, before the team is too emotionally invested’.⁸⁰ Applying the same logic, the developers of new innovations within the ADF should similarly be required to develop ‘kill metrics’ for their ideas.

What may be more controversial in Kuo’s recommendations is his caution against putting innovations into service too quickly. Many experts in the military, business, think tank and policy worlds have bemoaned the bureaucratic delays in the military innovations process in Australia, the United States and elsewhere. The US Department of Defense’s specialist innovation unit DIUx (now DIU) was established in part to expedite the adoption of innovative new technologies in the US military.⁸¹ The slowness of the US defence procurement process had been a major deterrent to technology startups in working with the US Department of Defense, since tech firms often require rapid turnaround in procurement decisions in order to satisfy their financial backers.⁸² Luttwak and Shamir contrast the speed with which the Israelis took the Iron Dome system into service with the delays prevalent in the US defence procurement system.⁸³ Similar concerns have been raised with respect to the defence innovation ecosystem in Australia. The Defence Strategic Review (DSR) argues, ‘Strategically important and urgent projects, and low-complexity projects, must both be streamlined.’⁸⁴ Similarly, the National Defence Strategy (NDS) speaks of ‘deliberate choices to prioritise the introduction of next generation capabilities asap’,⁸⁵ prioritising ‘lifting Australia’s capacity to rapidly translate disruptive new technologies into ADF capability’. The Integrated Investment Program (IIP) likewise speaks of ‘a cultural shift empowering greater initiative to achieve agreed capability outcomes with speed’.⁸⁶ As such, the One Defence Capability System (ODCS) has been designed to reduce delays in capability acquisition,⁸⁷ and Defence has adopted ‘a minimum viable capability model’.⁸⁸ These developments respond to the idea, expressed by Vice Admiral Johnston, that we ‘need to abandon the pursuit of the perfect solution or process and focus on timely and relevant capability delivery’.⁸⁹ Perhaps, as the DSR argues, ‘strategically important’ projects should be expedited, but if a project is strategically important then it is also important not to get it wrong.

One area that causes consistent problems for defence innovators is the vetting process. Vetting here refers to the whole suite of compliance checks through which a new innovation must pass before entering into service, from technological feasibility to compliance with national procurement regulations. Excessive delays in the vetting process might mean that innovations make their way into service too slowly, raising the risk that the Army’s capacities will be obsolete at the outbreak of war. Kuo, however, argues:

Although methodical and deliberate development of new weapons and concepts is slower, it reduces costly errors in producing and deploying new capabilities at scale. In contrast, bypassing rigorous vetting procedures in favour of rapid and dramatic reforms tends to obscure downside risks, particularly in complex organisations with multiple stakeholders.⁹⁰

Acknowledging the intractable nature of this issue, the NDS and the IIP are enshrining an approach which will expedite the vetting process.

So again we are faced with a dilemma—if we speed up the process of entering innovations into service, we risk bad innovations that may be less effective than the techniques they replace. On the other hand, if we do not speed up the process we may end up fighting with techniques which are obsolete and hard to change.

While this trade-off exists, its potential consequences may be less severe than they first appear. Many of the vetting procedures which delay the introduction of new innovations into service are directly related not to battlefield performance but to alternative considerations, such as whether the tender process was fair and competitive to the firms which participated.⁹¹ Such procedures could generate significant delays by giving firms incentives to dispute any contract they did not win.⁹² Procedures such as these could therefore be moderated or streamlined without necessarily generating the type of downside risks with which Kuo is concerned.

Based on the analysis presented here, there is scope to streamline those vetting procedures which do not directly relate to military effectiveness. Such measures have the potential to mitigate the risks that arise when speed (of innovation) is prioritised over risk (of its failure). Despite such mitigating measures, however, the risks are not entirely eliminated. It is therefore advisable to have some idea of how we might manage the trade-off between speed and risk.

A key variable in deciding whether to go fast or slow in innovation lies in how soon, we believe, Australia may be engaged in a large-scale conflict. This variable speaks to the DSR's concept of 'urgent' projects. For example, if Australia were already engaged in a large-scale conflict, of course vetting procedures would have to be streamlined to the extent that new innovations could enter into service very quickly, as is the case in Ukraine today. If we are not engaged in a conflict at present but believe we will be soon, the process likewise has to be relatively fast, even at the cost of risking more failures. However, the more we believe that we have time to prepare, the more rigorous, and hence slower, the vetting procedures can afford to be. Since we would not (by stipulation) be receiving direct battlefield feedback as to the effectiveness of the innovation in such a scenario, it would take much longer to get a clear idea—from exercises, wargames and simulations—of how effective an innovation is likely to be. Hence a slower and more rigorous process would not only be possible but also be advisable.

Where does Australia stand in this regard? Clearly the timelines have shortened. The Defence Strategic Update, DSR and NDS all confirm that Australia no longer has a 10-year window of strategic warning time for conflict.⁹³ The NDS talks about three critical periods over which the government will evolve the ADF's structure, posture and preparedness: 2025 for immediate enhancements, 2026–2030 for the accelerated acquisition of critical capabilities, and 2031 for the delivery of an ADF that is fit for purpose across all domains.⁹⁴ At the same time, however, we are likely to have more warning time for some contingencies than for others. For example, the risk of a high-intensity, peer-to-peer conventional conflict in the Asia-Pacific region within the next five years is judged relatively high by many analysts.⁹⁵ A direct attack on Australia's northern approaches, by contrast, would likely be further in the future.

A second key variable in deciding whether 'to go fast or slow' lies in the reversibility of the innovation—how quickly and cheaply the technique embodied in an innovation could be reversed if it turned out not to work as promised. If an innovation can be easily reversed, there is far less need for extensive vetting procedures. In this regard, the complexity of a project is one factor which helps to determine how reversible an innovation is. As the DSR states:

Low-complexity projects, such as like-for-like replacements and off-the-shelf acquisitions, are consuming too much time and resources. The default for these should be single source and other measures to streamline approvals and acquisition.⁹⁶

However, we must be careful to specify precisely what we mean by 'complexity' in this context. What is important here is not so much the complexity of a product (e.g. how many components and subcomponents go into making it) but how easy it is to replace. Here Horowitz's concept of organisational capital and financial intensity comes into play. Horowitz classifies military innovations according to their financial intensity and the amount of 'organisational capital' they require to be implemented. The higher the unit cost of a technology and the more specific this technology is to the military, the more financially intense it is. Similarly, the more an innovation requires 'not just changes in education, recruitment, and training but also wholesale shifts in force structure and plans for the use of force', the more organisational capital it may be said to require.⁹⁷ The introduction of the aircraft carrier in the interwar period, for instance, was financially intense and required significant organisational capital.⁹⁸ If an innovation is financially intense and/or requires significant organisational capital, it will be hard to reverse if it does not turn out well.

It stands to reason that the more an innovation is financially intense and/or requires significant organisational capital, the less the vetting procedures should be streamlined for it, and vice versa. For example, for a capability such as the smaller FPV drones used by the Ukrainians there is no harm in moving faster; these are low-financial-intensity capabilities.⁹⁹ The same is true to a lesser extent for more expensive, bespoke, uncrewed vehicles, such as the Ghost Bat or Ghost Shark.¹⁰⁰ On the other hand, the organisational structure innovation represented by the long range fires regiment concept is an idea that might require a slower, more deliberate approach, since it requires significant organisational capital and is, in part, designed for contingencies (such as a threat to Australia's northern approaches) which likely lie sometime in the future.¹⁰¹ Indeed, Kuo himself cautions about the US Marine Corps' 'push to stand up the marine littoral regiments', noting, 'Whether these moves bridge what appears to be a yawning gap between future mission obligations and available forces remains to be seen.'¹⁰²

In short, Kuo's work sensitises us to the possibility that innovation is not an unalloyed good. We cannot tell for sure which innovations are likely to prove effective on the battlefield and which will not, so some mistakes are inevitable. Mistakes, moreover, are more likely where innovation is seen as a magical remedy to the problems of mismatch between our strategic goals and our resources. The NDS states, 'Australia's middle power status means we must seek an advantage in innovative ways',¹⁰³ but we must not imagine that 'innovative ways' can compensate for our only being a middle power. If we are to embark on conflicts with larger powers, we will need to devote significant resources to defence and to fight alongside dependable and capable allies. While the ADF itself cannot determine Australia's strategic goals nor the resources devoted to them, it can help to educate the public and policymakers about this danger and to caution against seeing innovation as a panacea. The ADF and Defence more generally also have to ensure that, in streamlining the process whereby innovations are brought into service, we do not incur unacceptable risks of allowing bad innovations to slip through the net. There is a trade-off between speed and risk. Although this trade-off can be mitigated, it cannot be eliminated entirely. For reversible innovations, speed should be preferred over risk mitigation, and vice versa. Similarly, if we believe that conflict is imminent, speed is of the essence. By contrast, if we have time, the focus should be more strongly on risk mitigation.

Conclusion

This article has examined the literature on military innovation and adaptation. It has defined adaptation as a type of innovation—a ‘counter-innovation’—which justifies treating the two concepts as closely related. The article divided the literature into three themes: organisational culture, organisational structure and command style. It also examined the cautionary work of Kendrick Kuo, which notes that innovation can often go wrong and can lead to the replacement of tried and tested methods and the cannibalisation of existing capabilities. Kuo argues that these bad innovations will be more likely where there exists a mismatch between strategic commitments and resources, which innovation is seen as a silver bullet to resolve.

The organisational culture perspective reminds us that if we wish to establish a culture of risk taking, experimentation and adaptation in the ADF then this must be backed up both rhetorically from the top (as it is at present) but also with actions throughout the organisation. Organisational cultures reside in the shared understandings and expectations developed over time within an organisation and are often tacit and informal in nature. Rhetoric which is not backed up by action will not generate a desired cultural change as it will not shape these understandings and expectations. Backing up the rhetoric of ‘successful failure’ might mean, for example, very visibly refraining from punishing failed experimentation, or even admonishing those who punish failed experimentation.

The organisational structure perspective points to the importance of having an easily accessible ‘one-stop shop’ for gathering and transmitting lower-level innovations from frontline units to their peers. The ADF’s Battle Lab system is laudatory in this regard, though the military innovation literature would suggest the necessity for much tighter collaboration between Battle Lab and Army’s technological innovation infrastructure (e.g. RICO and its associated activities). The innovation and adaptation literature teaches us that technological innovation and tactical innovation are inextricably interlinked, so the relevant institutional infrastructures in the ADF should work together as closely as possible. Holmes’s combat campus concept shows us one way in which this might work in practice.

The literature on military innovation also tends to stress the importance of decentralised command styles, and mission command in particular, for both innovation and adaptation. All else being equal, a more decentralised command style should generate more innovation. The reason is simple—the more independent experiments there are in solving a problem, the more likely it is that at least one of them will succeed, even if most of them fail. Once a successful innovation is hit upon, it can then be dispersed among the rest of the Army. It is true that, in theory, decentralised command styles might stymie innovation if they imply that enlightened, innovative superiors cannot enforce beneficial innovations

on conservative lower-level units. However, Hunzeker's ACT theory offers a convincing rebuttal to this objection—provided decentralised command styles are combined with centralised training and doctrine, this problem should be overcome. Moreover, lower-level units should have incentives to adopt beneficial innovations which their peers have shown to work in similar circumstances.

Given these considerations, preserving mission command in the Australian Army is important for its ability to innovate and adapt. At present, mission command is official doctrine but is threatened by several developments, especially regulatory compliance and the increasingly complex interdependence of modern military operations. The practice of mission command may also be at risk if, in future, Australia is compelled to embark on a process of 'crash mobilisation'. The need for regulatory compliance can be reduced, for instance. At the same time, expansion of the reserves can provide the basis for a potential future mobilisation without jeopardising mission command and its ability to foster innovation and adaptation. Indeed, expansion of the reserves can actually foster innovation and adaptation, since it provides for the cross-pollination of ideas and practices between the civilian and military spheres. Many military analysts have noted that reserve forces play precisely this role in other armies, such as those of Israel and Ukraine.

Finally, this article has examined Kuo's countervailing view that innovations can be bad as well as good. While his argument is most obviously directed at a civilian, and an American, audience, it is also relevant for an Australian military one. The relevance of this component of Kuo's argument is partly in the realm of civil–military relations: the ADF should strive to educate policymakers and the public that, while innovation and adaptation are important, they complement and are not a substitute for strong allies and sound strategic decision-making. At the same time, Kuo's work also points to the fact that in expediting the vetting processes there are costs and risks involved which stand between an innovation and its entry into service. Where there are parts of the vetting process that are duplicative or aimed at satisfying requirements that are not related to military efficiency, it makes sense to streamline or even eliminate them. Yet whether it always makes sense to 'move fast' depends on context. The less time we believe we have before the ADF is likely to face high-intensity combat, the faster we should move. The type of innovation is also important. The more reversible it is—that is, the less financially intense it is and the less it requires fundamental organisational change to implement—the faster the vetting process can proceed.

To conclude, then, I present a number of ‘next steps’:

1. Army’s attempts to implement a culture of innovation and adaptation are laudable but must be carried through the tenure of multiple chiefs of army and backed with credible action to support the message—namely, honest but failed experimentation must not be punished.
2. Army should strive to maximise cooperation between its technological (e.g. RICO) and tactical (Battle Lab) infrastructures.
3. Army should strive to preserve a command style based on mission command. This means reducing as much as possible the regulatory burden at all command echelons.
4. An expansion of the reserves is desirable on a number of grounds. First, it would allow Army to benefit from a larger pool of trained personnel in the event of national security contingencies, and, second, it would allow for an influx of fresh perspectives and new ideas into Army.
5. Streamlining vetting procedures for new innovations, as the ODCS is intended to do, is desirable where these vetting procedures do not relate to military considerations per se. If these vetting procedures do relate to military considerations, however, the desirable degree of streamlining is related to how reversible a given innovation is. If a proposed innovation can be easily reversed in case of failure then ‘moving fast’ is advisable; if it cannot, more caution is required.

About the Author

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/ THE MILITARY PROFESSION, PROFESSIONAL MASTERY AND MILITARY THINKING: LESSONS FROM MORRIS JANOWITZ'S *THE PROFESSIONAL SOLDIER*

Nick Bosio

The concept of the profession of arms has existed for centuries. Many ancient Egyptian, Persian, Greek and Roman texts discuss generalship and soldiering.¹ The high medieval period saw extensive military research. Kings, nobles and knights all studied siege craft, fortifications, engineering, artillery and the management of armies.² As dominions grew in size and scope, so did scholarly works on military development and investment as a part of state affairs.³

The Italian Wars (1494 to 1559) solidified the idea of a 'professional soldier' in Western history. Such individuals specialised in the conduct of war and were separate from the nobility of the state. These soldiers were a mixture of mercenaries and growing city-state citizen militaries. However, it would not be until the Thirty Years War (1618 to 1648), and the military reforms introduced by Gustavus Adolphus, that the 'profession of arms' would become a key component in developing, managing and employing nation-state militaries.⁴ The concept of the profession would be further refined through the educational reforms of Fredrick the Great, as well as others. A similar progression can be traced in Asian, particularly Korean and Japanese, history.⁵ Despite such a rich history, it is still difficult to define what the profession is. Additionally, answering how the profession is structured, what is required to enter it and how to achieve professional mastery remains elusive. Medicine, engineering and law can trace their modern structures through their historical developments; however, the profession of arms remains an opaque concept—including, sometimes, to those who profess to be a part of it.

This short essay leverages Morris Janowitz's seminal work *The Professional Soldier* to provide some answers to the above. Although Janowitz may be less frequently cited than Samuel Huntington, his work offers a critical perspective on the modern profession of arms.⁶ It is interesting that Sir John Hackett, another key figure in understanding the military profession, directly references Janowitz's deductions when discussing what is required of British military officers.⁷ Additionally, recent scholarly work has reinvigorated the need to study Janowitz to better understand the profession of arms in a contemporary context.⁸ Within Australia, there appears to be limited exploration of Janowitz's work, particularly among those in uniform.⁹ In the book *The Commanders*, editor David Horner highlights several key traits of the military professional, including courage and integrity, charisma, robust and creative thinking, political acumen, and logistical and administrative understanding.¹⁰ The Australian Defence College's study *The Chiefs* reinforces these points.¹¹ As this article shows, Horner's traits align with Janowitz's earlier work. Yet, unlike Janowitz, these Australian texts do not delve deeply into the questions posed earlier. What these works, from Huntington through to Australian scholarship, indicate is that the profession of arms, like all professions, adapts throughout history and to the context of its time.¹²

To explore Janowitz's deductions, this essay first places his work within a contemporary setting. Janowitz's work was originally published in 1960, and updated in 1971. His analysis focuses on the US military transition from national service to a volunteer force at the height of the Cold War. Janowitz wrote his masterpiece partly to help US military leaders guide this transition.¹³ His conclusions relate to geostrategic circumstances similar to contemporary times, suggesting his work may still hold meaning for today's Western militaries. Part of this contemporary discussion is understanding Janowitz's three officer types: the military technologist, the heroic leader and the military manager. Each ideal type represents a different approach to military professionalism and drive for professional mastery.

With an understanding of Janowitz's work within today's context, the essay then discusses what 'profession' and 'professional mastery' mean. This discussion is reinforced by Janowitz's deductions concerning the importance of two activities that develop professional mastery: challenging and scaffolded professional military education, and a diverse military career. Next, the essay touches on another important part of the profession of arms: philosophical world views and their influence on military thinking. The above points are the most relevant to the Australian Army's review into the profession of arms; however, these are not the only lessons Janowitz's work can provide. Therefore, the essay concludes by explaining why, within the Australian context, officers at the O5 level (lieutenant colonel or equivalent) and above should read *The Professional Soldier*.

It is necessary to place Janowitz's meaning in a contemporary setting. His terminology and intended audience may lead modern Australian readers to misinterpret or dismiss his conclusions. Janowitz's writing, after all, is a product of his time and his disciplinary background: sociology. As such, he uses terms that either do not equate to their contemporary meaning or have been replaced in the military vernacular. Therefore, some key terms in *The Professional Soldier* require modern reinterpretation. The first is Janowitz's concept of a 'constabulary force' and its relationship to the military.

Janowitz states that contemporary Western militaries that seek to deter another power must be 'constabulary forces'. In contemporary thinking, such a term may lead readers to the wrong conclusion. Janowitz does not believe the military must become the police. Instead, he outlines that the military must move away from the dichotomy of peacetime and wartime and accept an always available, deployable and active mindset.¹⁴ This 'constabulary mindset' is not dissimilar to contemporary military preparedness and operations during this time of great power contestation.

The officer best suited for the always-on force is what Janowitz terms the 'military manager'. Janowitz's use of this term is not derogatory. Janowitz defines three broad types of military officers: the technologist (or specialist), the heroic leader and the military manager. Janowitz does not profess that these terms relate to US military officer categories, nor do they equate to contemporary doctrine or thinking. Rather, these terms are *ideal types*, or concepts that capture the general characteristics of a phenomenon or group.¹⁵ Ideal types can help frame a problem space and compare trends or themes. These three ideal types may help the Australian Army in its review of the profession of arms—how to enhance it and how broad such efforts should be.

The three officer types provide a way of thinking about the spectrum of officers, their importance to the military, and their focus and drive for military professionalism. As Janowitz states:

The military establishment requires a balance between the three roles of heroic leader, military manager, and military technologist, a balance which varies at each level in the hierarchy of authority.¹⁶

The first ideal type worth exploring is the military technologist: an officer who engages with the military profession while seeking or having professional mastery in another related discipline. Technologists are officers who, through direct recruitment, as a formal career path, or through individual self-selection, are highly specialised within a select military or civilian technical area.¹⁷ Such individuals actively seek professional mastery within their specialist discipline, allowing them to support the military better. Although such officers have potential for high office, they may require 'modification of their skills and outlook'.¹⁸ In the contemporary Australian Army, a range of officers may fit within this

technologist ideal type. The first are specialist service officers (SSOs).¹⁹ The concept may also refer to officers who seek to emphasise their specialist knowledge and move away from the broader general service officer continuum for a range of reasons. Some may belong to a formal career path, such as capability project management. Others may become 'unicorns', or individuals with specialist knowledge or background in an area, which makes them difficult to replace. In all cases, technologists are highly specialised individuals, often with a strong technical background, who actively seek professional mastery of their specialist area for the betterment of the military. Using this specialist mastery is part of their career motivation.²⁰ However, such drive means technologists may be unable to sustain the requirements to attain military professional mastery.²¹

The heroic leader and the military manager seek military professional mastery. Although some of these officers may have technical backgrounds, their career motivations drive them towards generalist skill sets and military professional mastery.²² Janowitz defines heroic leaders as 'warrior types' who are authoritarian and directed, and who uphold the fighting zeal for decisive battle—or the current mission.²³ Honour and tradition are paramount for the heroic leader because honour leads to prestige.²⁴ Meanwhile, military managers are pragmatic decision-makers and consultative leaders.²⁵ They seek to balance the needs of the immediate mission with longer-term goals. Their leadership style is one of consultation when time permits, directive action and guidance over prescribed control. What Janowitz describes as a military manager, Australian contemporary doctrine lauds as effective leadership and mission command.

Janowitz's concepts of the military manager and the constabulary force directly align with today's views on values, leadership and the expectations of service. The focus of the military manager's, and by extension the contemporary military officer's, professionalism is different to the honour- and family-based professional focus of the 'heroic leader'. Janowitz does not define 'profession' or 'professional mastery'. Nevertheless, his work provides significant insight into the profession of arms for a contemporary 'military manager' officer leading a 'constabulary' always-on force. Put another way: it remains directly applicable to the always-ready ethos of the Australian Army professional.

The report of the Ryan Review of Army's education and training system defines a professional as a 'person who earns their living from a specified activity, which primarily engages that person in creative and intellectually challenging work'.²⁶ The review expands on this definition by outlining how professions have an entry requirement focused on the rigorous study of first principles, ongoing standards and ethical structures.²⁷ Janowitz's work reinforces these points, stressing the intellectual and creative nature of the profession of arms. Through Janowitz's work, and Ryan's definition, it is clear that a military professional could be defined as someone *in* the military who acquires and holds knowledge concerning *war*. This knowledge is derived from theory, practical application of theory, and experience. Such knowledge allows the individual to exercise creative

thinking to solve very real and practical problems. Although military officers require training in military (war-fighting) skills, they primarily engage in the *intellectual endeavour of understanding, shaping and applying military theory in practice*.

Professional mastery, meanwhile, relates to thinking and learning. Where the definition of a profession refers to applying theory in practical ways, professional mastery is concerned with *advancing* that knowledge. There has been a substantial amount of ink spilled about professional mastery in general and in military terms. A generalised definition of *professional mastery* might be offered as: the self-discipline to challenge one's knowledge and world views, actively learn and grow, and continue to improve one's knowledge of the profession for the betterment of others.²⁸

Developed from various historical and contemporary sources, this definition highlights that professional mastery is not about expertise. Professional mastery is not *what you* think and know; rather, it is *how* you think, learn, and interpret the world.²⁹ In other words, good mastery is about self-disciplined, active learning and understanding *how* to acquire the knowledge needed to achieve any task within the profession. Janowitz reinforces this point when he discusses military education, development and career progression.

Janowitz's analysis of successful senior officers highlights that 'successful leadership [and professional judgement] requires the ability to shift from one role to another with ease ... [such skills lead to a] strong propensity to excel and to innovate'.³⁰ How these abilities are generated is twofold, with the first step being education. Professional mastery is attained through an early foundation in a 'military science', or military specialisation. Then, such specialist knowledge is challenged and expanded through scaffolded learning in war studies, humanities, and the social sciences through challenging study.³¹ Such study should grow the thirst for ongoing learning and development necessary for professional mastery.³² This thirst for learning can be achieved through multiple methods. Individuals may actively seek out such educational experiences. Leaders, particularly subunit and unit commanders, may inspire it in subordinates. Often, these experiences are achieved for a select few through a staff college.³³ Although some individuals will develop professional mastery, the military, like other professions, uses a formal method, the staff college, to explicitly recognise professional mastery, thereby supporting longitudinal career management.³⁴ No matter the path—individual-initiated, leader-inspired or staff college—the first step towards professional mastery is a challenging professional educational experience. Such experiences should be scaffolded courses that leverage academic, experiential and longitudinal learning to develop professional mastery of military art.³⁵

The next step in mastery is career diversity. Janowitz found that senior officers who could adapt quickly and advance military thinking often demonstrated unusual and non-standard careers.³⁶ Janowitz's work identified that alternative postings, such as

secondments, as educators at academic institutions, on out-of-specialisation tours and in international roles, helped build the self-discipline necessary to challenge one's thinking, accept alternative world views, and incorporate these into future military theory and action.³⁷ There remains a need for broad career management, or what Janowitz calls 'standardised careers'.³⁸ However, Janowitz found that having early career and mid-career diversity, interlaced with 'normal' postings, often enhanced, rather than detracting from, military professionalism, leadership, acumen and strategic thought.³⁹ In this way, education and career diversity suggests that *professional mastery is the development of a habit of mind that accepts different world views and paradigms*.⁴⁰ The above deduction may help guide some of Army's review into the current state and enhancement of the profession of arms.

Adapting and adjusting world views is another vital element of military professional mastery. Janowitz identifies two philosophical distinctions: 'absolutists' and 'pragmatists'. Absolutists believe that all conflict should be decisive in tactical and total war terms.⁴¹ They also have clear views on when the military instrument should be used: the military is for war, and wars should be decisive (and quick).⁴² For the absolutist, 'There is no substitute for "total victory"', even if the effort to achieve total victory is beyond the political rationale for the crisis or conflict.⁴³ The alternative 'pragmatist' believes: '[The] political objectives of warfare are gained by adapting the use or the threat of violence to the objectives to be achieved. To use too much or too little is self-defeating'.⁴⁴

Essentially, pragmatists believe the military instrument can be used within economic and ideological struggles, not just kinetic war. In other words, *the military is for more than war* and can be used to persuade, coerce, build and destroy.⁴⁵ Janowitz traces the ebb and flow of these philosophies in United States military thinking. Both world wars were absolutist in character and intent.⁴⁶ His analysis of General MacArthur's absolutist position in the Korean War highlights the (strategic and operational) limitations of such thinking, particularly during a period of great power competition. The Korean War was more than a conflict on the Korean peninsula. The war was also part of a wider US–USSR struggle across Asia and Europe. Janowitz compares MacArthur's total victory focus to Ridgway's pragmatic approach of limited military objectives to support wider competition.⁴⁷ The absolutist mindset led the former to hold a narrow and deterministic view of the Korean War, while the latter's pragmatist world view adapted military action 'in the name of political objectives, [and] was concerned with strengthening the system of mutual alliance'.⁴⁸ Janowitz's assessment of these two philosophies provides important lessons for contemporary militaries.

Janowitz argues that the pragmatist world view should hold sway for the contemporary military officer.⁴⁹ His analysis, supported by others, demonstrates that these two philosophical views influence thinking about, planning, and preparing for competition and conflict.⁵⁰ The absolutist view seeks to limit military use outside of conflict. In contrast,

the pragmatist view is willing to employ the military in a variety of roles in and out of conflict. Janowitz's analysis indicates that the pragmatist's willingness to consider and adapt military power to various activities, in and out of war, provides greater flexibility to the nation. Such a world view also enables officers to adapt to a 'constabulary', or always-on, force—much like the contemporary Australian Army.⁵¹ Nevertheless, he acknowledges that true professional mastery comes from the ability to understand both paradigms, recognise which is appropriate at a given time, rapidly adapt one's thinking, and assist others to adjust if required. Linking professional mastery to understanding and adapting world views is not the only lesson to draw from *The Professional Soldier*, but it may be the most powerful.

Although there are numerous lessons in this classic work, it is not for the entire military profession. Much of Janowitz's analysis explores how officers are developed into flag and general officers, and what makes them successful in generalised terms. The book is not about leadership, though that is discussed. Instead, *The Professional Soldier* straddles culture, military philosophical thinking, career development, education, recruiting and political acumen. In effect, the book is a distillation of all aspects of the military professional. Yet, to really engage with the work, a high degree of knowledge and experience with military service is required. This is because many of the work's deductions and conclusions relate to developing strategic insight, senior-level military–civil social acumen, and political understanding. However, the point at which officers require these skills differs in every nation. Within the Australian system, this is normally lieutenant colonel and above.⁵²

With a critical and experienced eye, an Australian officer can gain much wisdom from *The Professional Soldier*. One example is 'fraternal authority', or the concept of 'equality of unequals', as a way of thinking about the leadership of both peers and subordinates.⁵³ Janowitz also shatters the often-held shibboleth, or in-group self-belief, that military officers are apolitical. Instead, he highlights that senior military officers are part of politics but are not partisan.⁵⁴ Although anyone can engage with this work, the pre-command lieutenant colonel may get the most out of it, both to learn for a higher rank and to guide subordinate officer mentoring.

Janowitz's deductions on career development, education and how to think about military power are just as relevant to contemporary officers in the Australian Army as they were for US officers of the 1960s and 1970s. His work clarifies the discussion on what the profession of arms is and what is meant by professional mastery. It is this second point that is critical to the contemporary military officer. As highlighted earlier, professional mastery is not *what* you think and know but *how* you think, learn, and interpret the world. Good professional mastery is developed through challenging and scaffolded military education, career development that includes diverse postings, and a willingness to recognise, accept and use different world views. It is this final point that Janowitz and others believe is critical for officers during periods of great power competition and war.

About the Author

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ENDNOTES

- 1 Several texts outline the extensive history of military writing and thought. For a focus on ancient developments, some illustrative texts include: Thomas R Phillips (ed.), *Roots of Strategy*, Vol. 1 (Mechanicsburg PA: Stackpole Books, 1985); Beatrice Heuser, *The Evolution of Strategy: Thinking War from Antiquity to the Present* (Cambridge: Cambridge University Press, 2010), with emphasis on Part II; Lawrence Freedman, *Strategy: A History* (New York: Oxford University Press, 2013); Hal Brands (ed.), *The New Makers of Modern Strategy: From the Ancient World to the Digital Age* (Princeton NJ: Princeton University Press, 2023).
- 2 In addition to some of the texts listed in endnote 1, see Azar Gat, *A History of Military Thought: From the Enlightenment to the Cold War* (Oxford: Oxford University Press, 2001); Mark C Fissel (ed.), *The Military Revolution and Revolutions in Military Affairs*, De Gruyter Studies in Military History (Berlin: De Gruyter Olbenbourg, 2023).
- 3 Although this is recorded in several places, particularly in the texts listed above, the best examples remain Machiavelli's *Art of War and The Discourses*.
- 4 Gat, *A History of Military Thought*, pp. 9, 34, 64; Jan Angstrom and JJ Widen, *Contemporary Military Theory: The Dynamics of War* (New York NY: Routledge, 2015), p. 94.
- 5 An example of this is the development of military training and firearms uses in Japan and Korea. For further analysis, see Fissel, *The Military Revolution*.
- 6 Gregory D Foster, 'The Profession of Arms: What Scholars, Practitioners, and Others of Note Have Had to Say', *Joint Force Quarterly* 115 (2024): 72–75.
- 7 John Winthrop Hackett, *The Profession of Arms: Officer's Call* (Washington DC: Center of Military History (United States Army), 1962), pp. 36–38.
- 8 For illustrative purposes, see Donald S Travis, 'Decoding Morris Janowitz: Limited War and Pragmatic Doctrine', *Armed Forces & Society* 46, no. 1 (2020); Suzanne C Nielsen and Hugh Liebert, 'The Continuing Relevance of Morris Janowitz's *The Professional Soldier* for the Education of Officers', *Armed Forces & Society* 47, no. 4 (2021); Suzanne C Nielsen and Hugh Liebert, 'The Utility of Janowitz's Political Awareness in Officer Education', *Armed Forces & Society* 49, no. 1 (2023).
- 9 For example, a simple search of the Australian Army Research Centre's database highlights 16 articles directly employing Huntington's theories, and many more citing his works. Meanwhile, there are only five that consider Janowitz.
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- 11 Nicholas Jans, Stephen Mugford, Jamie Cullens and Judy Frazer-Jans, *The Chiefs: A Study of Strategic Leadership* (Canberra: Centre for Defence Leadership and Ethics (Australian Defence College), 2013), pp. 91–113.
- 12 Janowitz discusses the transition of the military profession over time in his introduction. Morris Janowitz, *The Professional Soldier: A Social and Political Portrait*, 2nd edition (New York NY: Free Press, 2007 [1971]), pp. 5–7.
- 13 Ibid. This is implied through Janowitz's prologue of the 2nd reprinted edition.
- 14 Ibid., pp. 419–420.
- 15 Matthew Lange, *Comparative-Historical Methods* (London: Sage Publications, 2013), p. 39.
- 16 Janowitz, *The Professional Soldier*, p. 21.
- 17 Ibid., pp. 21–22.

- 18 This quote is from Janowitz. However, he is reflecting research into the thinking traits of technologists and specialists over polymaths and generalists. Scholars have identified that being a technical specialist often leads to functionalist, structured and deterministic thinking. Although this is not true for all technical specialists, research indicates that a majority hold these thinking traits. Such traits, known as problem-solving thinking, may not be well suited to higher command in the military context. For a summary of research, see Janowitz, *The Professional Soldier*, p. 22; Nicholas J Bosio, *An Analysis of the Relationship between Contemporary Western Military Theory, Systems Thinking, and their Key Schools-of-Thought*, PhD thesis (Australian National University, 2022), pp. 107–110, at: <http://hdl.handle.net/1885/260048>.
- 19 Above the current SSO focus on doctors and lawyers, Army has directly employed engineers and specialist technicians as SSOs. Throughout the 2000s, Army directly recruited as SSOs electrical and mechanical engineers into the Royal Australian Electrical and Mechanical Engineers. Direct-entry pilots were also SSOs. Australian and other allied nations' history of mobilisation sees the use of direct-entry specialist officers to enable the military to achieve engineering and scientific outcomes in times of crisis and war.
- 20 Janowitz explores career motivations in Chapter 6 of his work. The work focuses on the concept of the 'military calling'. Though the reasons vary, the technologist's calling is to employ their skills in the military context. Janowitz, *The Professional Soldier*, pp. 104–108.
- 21 The Ryan Review highlights that technical mastery was important, but could not be the focus for military professional mastery. Given the time, resources, and necessary commitment to attain military professional mastery, attempting to maintain professional mastery in two disciplines can be difficult. Mick B Ryan, *The Ryan Review: A Study of Army's Education, Training and Doctrine Needs for the Future* (Canberra: Department of Defence, 2016), pp. 89–91.
- 22 Janowitz, *The Professional Soldier*, pp. 107–116.
- 23 Nolan's seminal work *The Allure of Battle* details this trait throughout much of Western and modern Eastern history. See Janowitz, *The Professional Soldier*, pp. 35–36; Cathal J Nolan, *The Allure of Battle: A History of How Wars Have Been Won and Lost* (Oxford: Oxford University Press, 2017).
- 24 Janowitz, *The Professional Soldier*, pp. 35–36, 215–232.
- 25 Ibid., pp. 35–36.
- 26 This definition broadly aligns with Janowitz's definition, though Janowitz focuses more on 'rendered service'. Quote from Ryan. See Janowitz, *The Professional Soldier*, p. 5; Ryan, *The Ryan Review*, p. 50.
- 27 Janowitz reinforces these traits. See Janowitz, *The Professional Soldier*, pp. 5–6; Ryan, *The Ryan Review*, p. 50.
- 28 This is a composite definition, derived after reviewing multiple sources including Peter M Senge, *The Fifth Discipline* (London: Random House Business Books, 1990), pp. 17–18; Greg de Somer and David Schmidtchen, *Professional Mastery: The Human Dimension of Warfighting Capability for the Army-After-Next* (Canberra: Land Warfare Studies Centre, 1999), p. 3; Sanu Kainikara, *Professional Mastery and Air Power Education* (Canberra: Air Power Development Centre, 2011), p. 4.
- 29 Gat makes a similar observation when considering military theorists over time: Gat, *A History of Military Thought*, p. 256.
- 30 Janowitz often combines leadership and professional acumen in his work. Quote from Janowitz, *The Professional Soldier*, p. 167.
- 31 Ibid., pp. 139–140.
- 32 Ibid., pp. 428–430; Bosio, *Relationship between Military Theory and Systems Thinking*, pp. 102–103 (importance of staff colleges).
- 33 Janowitz, *The Professional Soldier*, pp. 428–430; Bosio, *Relationship between Military Theory and Systems Thinking*, pp. 102–103 (importance of staff colleges).

- 34 This is similar to other professions, where formal recognition of professional mastery also supports longer-term (self-generated) career development. Engineers Australia has a specific method for selecting and maintaining Chartered Professional Engineers (CPEng). This process includes demonstration of experience and skills, select courses, and specific interview requirements. In the legal profession, KC or SC signifies professional mastery. Only a few may attain this qualification, and it requires specific study, research that adds to barrister's understanding and advocacy, and assessment by a select committee. Other professions have similar processes to formally select and recognise professional mastery. See previous endnote for information concerning the importance of staff college to military career development and management.
- 35 Williamson Murray, *War, Strategy, and Military Effectiveness* (New York, NY: Cambridge University Press, 2011), 3.4–3.5, 3.13; Nicholas J Bosio, *On Strategic Art: A Guide to Strategic Thinking and The Australian Strategy Formulation Framework* (Canberra: Australian War College, 2024), pp. 99–101.
- 36 This is discussed in detail in Chapter 8, 'The Elite Nucleus'. See: Janowitz, *The Professional Soldier*, pp. 150–172 (Chapter 8).
- 37 Ibid., pp. 144, 67–71, 426.
- 38 Ibid., pp. 145–148, 425–427.
- 39 Ibid., pp. 167–171, 425–427.
- 40 This is known as a pluralist habit of mind: having or using thinking dispositions that accept pluralism, are willing to consider alternative views, and can accept and integrate a wide range of paradigms/schools of thought and world views. See Bosio, *Relationship between Military Theory and Systems Thinking*, pp. 58–60, 301.
- 41 This discussion on absolutists aligns with military theory's war-as-science school of thought. This school of thought often has functionalist, structured and deterministic thinking tendencies. See Bosio, *Relationship between Military Theory and Systems Thinking*, pp. 40–42, 50–51, 222–223; Bosio, *On Strategic Art*, pp. 20–24.
- 42 Janowitz, *The Professional Soldier*, pp. x, 264–275.
- 43 This is a similar view to that seen in Nolan, *The Allure of Battle*, and is best represented by the 'Weinberger Doctrine' of 1984, and reinforced by the 'Powell Doctrine' during the First Gulf War. Ibid., p. 164.
- 44 Ibid., p. 264.
- 45 Ibid., pp. 264–275.
- 46 Ibid., pp. 267–271.
- 47 Ibid., pp. 310–311.
- 48 Ibid., pp. 310.
- 49 Ibid., pp. 418–422.
- 50 For a summary of other references, including Williamson Murray, Colin Gray and similar luminaries, see Bosio, *Relationship between Military Theory and Systems Thinking*, pp. 270–276; Bosio, *On Strategic Art*, pp. 12–25.
- 51 This point is made in multiple open-source Defence documents, press statements, and news articles. Army, and the wider ADF, is an always-ready, always-on force.
- 52 This is an extrapolation of the discussion in *On Strategic Art*. From the discussion on O6/O7 officers, it can be seen that in the Australian system, social and consultative acumen beyond one's service becomes paramount at the rank of Lieutenant Colonel and onwards. This includes the development and early refinement of political acumen. See Bosio, *On Strategic Art*, pp. 8–9, 99–101.
- 53 Janowitz, *The Professional Soldier*, p. 423.
- 54 Janowitz's Part VII focuses on the way military officers, particularly senior officers, are part of the state's political discourse. On the matter of non-partisanship for serving officers, versus retired surrogates, see Janowitz, *The Professional Soldier*, pp. 388–392.

CHIEF OF ARMY ESSAY COMPETITION

The Australian Army runs essay competitions to encourage writing on land warfare and joint operations. These competitions also develop and maintain the intellectual component of combat power. The annual Chief of Army (CA) Essay Competition is open to serving Australian Defence Force (ADF) personnel (SERCAT 3-7) and Australian public servants employed by the Department of Defence.

Army awards the winner of the Competition the Chauvel Prize, named in honour of General Sir Henry George (Harry) Chauvel, GCMG, KCB, and AUD\$3000.00 in prize money. Army will also publish the winning entry in the *Australian Army Journal (AAJ)* and fund domestic travel to Canberra to brief the Chief of Army's Senior Advisory Committee (CASAC) on their paper. The runner-up entry will receive \$500.00 in prize money and funded domestic travel to Canberra to brief CASAC on their paper.

The theme of the 2025 CA Essay Competition was the 'State of the Australian Army Profession – The Past, Present, and Future'. Submissions answered one of three questions related to the Competition theme:

- How can the Army, as a profession, be optimised for littoral warfare operations?
- How can the Army, as a profession, enable rapid mobilisation and expansion for conflict, if required?
- How can the Army, as a profession, fully and effectively contribute to the ADF's Integrated Force?

2025 CA Essay Competition Winner and Runner-Up

The judging panel recommended one winner, one runner up, three commendations and six essays identified as suitable for publication for the 2025 CA Essay Competition. The winner and runner-up for the 2025 CA Essay Competition are:

- Chauvel Prize Winner: CPL John Welfare, 'The Professional Revolution to Transform Army into an Integrated Enabler'
- Runner up: MAJ Robert Bruce, 'Preparing the Army as a Profession for Mobilisation'

Their essays are published in this edition of the *AAJ*.

The winner, runner-up, commended and all publishable essays will also be issued in a compendium, available on the [AARC website](#) and in hard copy.

/ MISSION CULTURE: THE PROFESSIONAL REVOLUTION TO TRANSFORM ARMY INTO AN INTEGRATED ENABLER

CPL John Welfare

2025 CA Essay Competition
Chauvel Prize Winner

Hungarian physician Ignaz Semmelweis died in an asylum in 1865, a pariah in the European medical profession. Two decades earlier at Vienna's General Hospital, Semmelweis had made a simple observation: the obstetric ward attended by doctors had a maternal mortality rate three times higher than the one attended by midwives. The difference? Doctors performed autopsies in addition to delivering babies, which Semmelweis hypothesised may have caused 'cadaverous particles' to transfer from the morgue to the birthing bed. When Semmelweis introduced a chlorinated hand-wash basin outside the maternity ward, mortality rates plummeted. Yet his peers dismissed him. Many professional physicians were insulted by the suggestion that their hands were instruments of death. Semmelweis was ridiculed, ignored, and ultimately broken by a profession unwilling to confront its own shortcomings.¹

The story seems absurd in hindsight—less than 200 years ago, medical professionals rejected outright the suggestion that they should wash their hands between dissecting corpses and delivering babies. But professions are not immune to self-deception. True professionalism requires the humility to seek perspectives beyond one's own expertise and the agility to adapt when others bring new insight. The profession of arms is no different.

Symptoms and Diagnosis

It was difficult for many surgeons at the height of their careers to face the fact that for the past fifteen or twenty years they might have been inadvertently killing patients by allowing wounds to become infected with tiny, invisible creatures.

Lindsey Fitzharris²

In the early 1800s, medicine was more trade than profession. What transformed medicine from butchery to one of the most respected professions in society was its willingness to integrate with other domains such as microbiology, chemistry and physics. Semmelweis may have been ignored, but later visionaries, such as English surgeon Joseph Lister, saw more success in bringing lasting change to medicine. Lister embraced germ theory, sterile practice, and new methods of anaesthesia, drawing on ideas outside what were, at the time, medicine's traditional boundaries. That interdisciplinary integration, more than any single invention, marked medicine's transition into a modern profession.

So it must be with the Australian Army.

In a 2024 address to the Australian National University's National Security College, the Chief of Army, Lieutenant General Simon Stuart, emphasised the image of Army as a profession.³ He noted, however, that being a profession was not a static state, but an ongoing commitment. Drawing from the work of prominent military theorists, the Chief of Army proposed that the profession of arms rested on three defining pillars: jurisdiction, expertise, and self-regulation.

This essay will argue that Army, by embracing integration as a mode of professional development, can serve as the connective tissue of the ADF's Integrated Force. Like 19th-century medicine, Army must evolve the three pillars not in isolation, but through deliberate integration with other domains—particularly the other services of the Australian Defence Force (ADF). To maintain jurisdiction, Army must remain relevant to society. To build expertise, it must draw on advancements in fields such as artificial intelligence (AI). And to practise self-regulation credibly, it must hold itself accountable to performance as well as ethical standards.

This essay is divided into four parts. The following three sections will examine the three professional pillars, showing how a contributory mindset, agility in organisation and culture, and a willingness to question institutional orthodoxies can position Army not as the dominant service in the joint force, but as its key enabler. The fourth section will explore practical steps towards achieving this goal.

In the century ahead, the most effective Army will not be the one that guards its traditions most jealously, but the one that adapts, integrates, and leads by example.

Professional Mandate

Authority is a relationship-based attribute: it requires validation by those who submit to it as well as by those who exert it.

Professor Michael JD Roberts⁴

Lieutenant General Stuart's concept of jurisdiction as one of the three pillars of the Army profession has its roots in the writings of Lieutenant General Sir John Hackett, among others. Although the word 'jurisdiction' is not explicitly used, the concept is undeniably embedded in his discussions of military authority, responsibility and service.

Hackett frames the military's identity around service to society, rooted in trust, legitimacy, and the management of controlled violence. In a 1962 lecture delivered at Trinity College, Cambridge, titled 'Today and Tomorrow', Hackett stated that military authority was neither inherent nor permanent; it existed only insofar as the military continued to meet society's evolving needs. It was in this lecture that Hackett introduced the now-familiar concept of 'unlimited liability'.⁵

This informs Lieutenant General Stuart's interpretation of jurisdiction. In an April 2025 address to the Lowy Institute, he expanded on his definition of jurisdiction as 'the unique service we provide to the society we serve'—adding, critically, that 'an army cannot define its own jurisdiction';⁶ it is instead generated, in healthy democracies at least, as a collaboration between the government, society and the military. This embodies Hackett's adaptive service to society: jurisdiction is not guaranteed; it is conditional upon Army's willingness to evolve, collaborate, and subordinate internal tradition to external necessity.

This matters in the joint-force context. Retaining jurisdiction over the land domain cannot be achieved through mere size, history or tradition. It must be proven through a capacity to integrate, to contribute constructively in multi-domain operations, and to innovate faster than potential adversaries. Jurisdiction is not about dominance within the ADF—it is about utility to the nation. In this light, an army that clings to parochial habits risks undermining its own jurisdiction.

Anatomy of Expertise

The foundation was laid for that great revolution in Medicine which Hippocrates first effected, and which, by detaching Medicine altogether from the science of theology, emancipated it by degrees from the slavish trammels of superstition, and elevated it in time to the dignity of a rational science.

Sir William Hamilton⁷

Professional expertise is the bedrock of Army's claim to be a profession. But the nature of that expertise is often misunderstood—especially within Army's own ranks. It is tempting to define military expertise purely in terms of tactical prowess: marksmanship, small unit leadership, or combined arms manoeuvre. These are certainly important, but they are not sufficient.

Expertise, 'acquired only by prolonged education and experience', is a defining characteristic separating a professional from a layman, according to Samuel Huntington.⁸ Applying this concept to the military, Huntington explains 'the direction, operation, and control of a human organization whose primary function is the application of violence is the peculiar skill of the officer'.⁹ Huntington's application of the professional characterisation exclusively to the officer corps appears dated in today's armies, where enlisted personnel operating high-tech equipment possess education and technical expertise to rival most officers of the 1950s, when Huntington's *The Soldier and the State* was first published. The operation of specialised equipment and coordination with others for the considered application of violence in pursuit of prescribed goals is as much a form of expertise as the coordination of these actions.

In a volatile, complex and technologically dynamic strategic environment, expertise must also include the capacity to adapt, innovate and integrate. A doctor who was first certified in the profession in 1985 could not still regard himself or herself as a medical professional without staying up to date with advances in modern medicine. Although the human body remains the same organism it was 40 years ago—just as the nature of war is unchanging—technology, societal norms, political and legal evolution all drive change with which a professional must keep pace.

So it is for the Army professional, whose opponents are not static, and whose environments are not predictable. To remain relevant and effective, Army professionals must demonstrate agility—not only in the tactical sense, but intrinsic to the way they think and operate. Like the nature of war itself, the enduring value of agility in driving operational success remains constant.

Many of Napoleon Bonaparte's early victories were characterised by a speed and flexibility that caught his opponents by surprise. French forces were able to divide into smaller elements and move through enemy territory with a small footprint, engaging in minor skirmishes individually, then combining into a larger force at the key time and location to achieve a decisive campaign victory. Napoleon used this method to envelop the Austrian army under General Mack at Ulm in 1805, without the Austrians realising they were surrounded until it was too late.¹⁰ The Prussians, too, were confounded by the French ability to move divided and converge at decisive points at Jena and Auerstedt in 1806.¹¹ Almost 100 years before the invention of radio communications, the precise coordination of Napoleon's forces over significant distances was unimaginable to the generals in greater Europe.

Napoleon's opponents recognised the devastating power of his army's ability to divide for long-distance moves and converge for major battles, but they could not emulate it. Carl von Clausewitz writes in *On War* (1832) 'nowadays, even if the army is to fight as a whole, columns need no longer be kept together so as to be able to join up before the action begins'.¹² Before becoming history's renowned modern military theoretician, von Clausewitz fought at Jena and Auerstedt as aide-de-camp to Prince August of Prussia (both men were captured later that year during the capitulation of Prenzlau). But the Prussians could not simply start copying Napoleon's tactics—moving divided and converging for the fight—because the whole system by which their forces were raised and organised was incompatible with such an approach. Prussian generals attempting to adopt a corps system akin to the French risked mass desertion from rank-and-file soldiers bound by semi-feudal obligation, under an officer corps drawn almost exclusively from the nobility and exhibiting wide disparities in operational competence.¹³ The humiliating defeats of 1806 provided the impetus for a reorganisation of the Prussian military at a systemic level—a slow process beleaguered by many hurdles, including some manufactured by those who benefited from the old structure, and who could not unchain themselves from a devout attachment to past glories under Frederick the Great.¹⁴ It was a completely transformed Prussian army that contributed to major victories against Napoleon in the battles of Leipzig (1813)¹⁵ and Waterloo (1815)¹⁶—one that mirrored the French forces not just tactically but also organisationally.

The modern Australian Army embraces agility in theory. Doctrine praises decentralised command, and exercises test improvisation and initiative to some extent. Yet in structure and administrative processes, Army is still beholden to rigid hierarchies and systems that constrain freedom of action. Units and personnel are administratively exhausted long before they are tactically tested. Modern Australian soldiers build expertise in spite of Army's administrative structures, rather than through them.

Army expertise is not unlike that of the European medical profession during its 19th century transformation. Robert Liston was one of the most famous and celebrated British surgeons of the 1840s. Standing over six feet tall, Liston was a physical, and reputational, giant of the era. His renown was built on speed with a knife and brute strength at a time—before anaesthetic—when surgery had to be swift and patients had to be held down.¹⁷

Joseph Lister was apprenticed into this surgical tradition when Liston was at the height of his fame. Most young surgeons at the time sought to be stronger and faster with a blade—to be the next Liston. But Lister, who had tinkered with a microscope since his teenage years, recognised that surgery could not advance without borrowing from adjacent disciplines—specifically chemistry and microbiology. Lister was drawn to research by French microbiologist and chemist Louis Pasteur (from whose method for eliminating bacteria in milk we derive the term 'pasteurise').¹⁸ By introducing antiseptic

methods based on Pasteur's germ theory, Lister halved surgical mortality rates within a generation. His genius was not technical skill (although by all accounts he was very skilled with surgical tools)—it was interdisciplinary agility.

Army's understanding of expertise must extend beyond land-centric capabilities to include data, technology, logistics, behavioural science, cyber and space. We must recognise that many of the innovations that will shape future warfare will not emerge from within our own knowledge base—they will come from partnerships with other services, civilian agencies, and industries currently viewed as peripheral or entirely unrelated. This will require dismantling the organisational habits that favour doctrinal orthodoxy and reward compliance over curiosity. Army must become a learning organisation—not just in professional military education (PME) or training establishments but in every aspect of military life. Army experts must be more than just excellent soldiers—they must be effective collaborators and innovators. Expertise cannot be regarded as a static trait, but must instead be seen as a collective and ever-growing capability—one that is not defined solely by our ability to close with and destroy the enemy but also by our ability to evolve structurally, conceptually and collaboratively more quickly than our enemies.

Clinical Governance

Educational reform ... involved turning medical schools, which had been mostly private proprietary enterprises run by physicians in their spare time, into graded, sequential, university-affiliated programs, bolstered by up-to-date teaching hospitals, libraries, pathology museums, and laboratories, and with a faculty of scientifically trained lecturers and distinguished clinicians.

Michael Bliss¹⁹

Lieutenant General Stuart's third pillar of a profession—self-regulation²⁰—is typically associated with ethics and standards of personal conduct. In the military context, this has long meant being accountable to laws of armed conflict, codes of conduct, and institutional values. There are pragmatic—as well as altruistic—reasons for doing so, which is why professional codes of conduct are typical of all professions. The Hippocratic Oath—attributed to the ancient Greek physician Hippocrates and still in use as a guide to conduct in the medical profession today—is one of the oldest examples of a professional ethical code.²¹ This well-known ethical standard influences the decisions of billions of people to visit doctors every year and entrust them with personal details and invasive physical examinations.

Huntington points out that this ethical self-regulation, which he labels 'responsibility', is a fundamental factor separating professions from other trades. A positive and necessary

contribution to the functioning of society is a fundamental characteristic of a profession. In *The Soldier and the State*, Huntington gives the example of the research chemist, who is a highly educated expert but whose role falls short of being classed as a 'profession' because he is a research chemist even 'if he uses his skills in a manner harmful to society'.²² A surgeon, on the other hand, who starts slicing into people for non-medical reasons is no longer acting as a surgeon. Likewise, the soldier who unlawfully inflicts violence for his own purposes outside of the rules of war ceases to be performing the role of a soldier and becomes a war criminal or terrorist.

But the concept of self-regulation must extend beyond the moral realm. It must also apply to how the institution regulates its own structures, systems and habits. A true profession is not just self-policing in terms of wrongdoing—it is self-renewing. It adapts its practices in response to new challenges, disciplines itself to stay relevant, and reforms from within rather than waiting for external impetus.

Army, and the ADF more broadly, have systems and processes in place for ethical self-regulation. Although institutionally uncomfortable, the organisation's capacity for investigation of ethical and legal failures has proven quite robust, as demonstrated by the recent Inspector-General of the ADF inquiry into alleged war crimes in Afghanistan.²³ Structural reform of the truly transformational kind, however, seems to pose a greater challenge. The administrative weight borne by Army personnel increases steadily, with little regard for its cumulative impact on operational readiness or innovation. Computer systems are more often used to replicate pre-digital processes, such as forms and minutes, rather than to truly improve the efficiency or scope of administrative practices. In the barracks, management processes remain heavily centralised, even as doctrine extols decentralised command on the battlefield.

It is here that Army must redefine what self-regulation looks like in practice. It must become a mechanism not for preserving tradition, but for protecting purpose and focusing energy on the main effort, which is and always should be the defence of Australia and its national interests. In other words, Army must learn to regulate agility. This is not a contradiction. Just as a healthy immune system knows which foreign bodies to fight and which to integrate, a self-regulating Army must know which norms to defend and which to discard. The goal is not deregulation or chaos—it is minimalist regulation: enough to provide integrity, clarity and safety, but never so much that it paralyses innovation.

This will require cultural shifts. Systems and mindsets must be reworked to value flexibility over formality, outcomes over process, and collaboration over control. Commanders and staff must be empowered to find their own solutions, supported by systems that enable rather than constrain. Unnecessary administrative friction must be weeded out of internal processes, from procurement to personnel to planning. This will require the courage to

let go of deeply held assumptions and long-unchallenged conventions, in an Army that suffers no shortage of sacred cows. If ‘tradition’ is the only justification for keeping a practice in place, then the question is not what it costs to lose, but what it costs to maintain.

To return to the medical profession during the 19th century, medical self-regulation changed not just who could call themselves a doctor but also how medicine was practised. Licensing boards and medical associations emerged not just to weed out charlatans but also to ensure the profession could evolve with new scientific knowledge.²⁴ They shifted standards away from protecting turf and towards protecting patients. Similarly, Army must redefine self-regulation to serve not the protection of institutional norms but the needs of the nation and the demands of integrated warfighting.

Prescriptions for Change

They seem to forget that there is a cause for every ailment, and that it may be in their power to remove it.

Rebecca Lee Crumpler²⁵

The preceding sections show that Army needs to transform into a more agile organisation to remain relevant as a profession. Recognising and justifying the need for organisational change is a necessary first step, but vague and lofty aspirations for transformation will not suffice. Here I will attempt to address, or at least raise, questions of how this transformation might be achieved practically. I will focus on three general fields: PME, administration, and procurement.

Transforming through PME

PME is the natural place to start the discussion of organisational transformation—building Army’s institutional agility begins with the agile and adaptive minds of Army’s people. The merits of continuous professional development (CPD) are obvious to all who already engage in it, but less clear to those who do not. Lieutenant General Stuart has raised the lack of a professional assessment in Army’s operational readiness continuum.²⁶ This is a glaring omission in an organisation that assesses weapon handling and fitness biennially (and even dental health is assessed in a mandated annual check-up). Regular training activities and exercises certainly build experience and competence, but can be missed or avoided with minimal repercussions compared to the consequences of missing a physical assessment. And annual performance appraisals may provide some assessment of proficiency, but only the most grossly incompetent performance triggers serious consequences. For an organisation that counts ‘Excellence’ among its core values, we are very tolerant of mediocrity.

The problem with implementing an annual professional competence assessment is that it risks simply becoming another element of annual mandatory training. A full exploration of the epistemological and pedagogical failings of annual mandatory training practices will require a separate essay, but suffice to say here that it is not an approach likely to contribute to professional competence. Instead, Army should look to the most successful CPD programs employed in civilian professions. Colonel Richard Barrett outlines a compelling argument for the implementation of a CPD program in his 2020 essay *The Profession of Arms Needs a CPD Program*.²⁷ Crucial to the success of such a program—measured not only in its adoption but also in its contribution to the intellectual development of personnel—will be flexibility and practitioner choice. Intellectual agility will not be built through a prescriptive box-ticking exercise, but by fostering a culture that values knowledge and learning. Attempts to formalise CPD through Skinnerian²⁸ systems of punishment and reward will create the opposite of the desired outcome.²⁹ Instead, CPD should be loosely and openly integrated with the performance appraisal process. Supervisors discuss a member's annual CPD goals early in the process—aided by organisational guidelines, reading lists and reference materials—and measure the member's CPD performance against the attainment of these goals. The system should be broad enough to allow member choice and build intellectual curiosity, but structured enough to ensure CPD is not simply a tokenistic annual mandatory training platitude. For supervisors, managing subordinates' PME goals while meeting their own is another standard by which their performance can be measured.

Administrative Transformation

The notion of training as one fights is a well-established military dictum.³⁰ While efforts are made to ensure training exercises are as realistic as possible, the inconsistency between how Army administers itself and how it expects to perform in combat is often overlooked. Current administrative practice has Army turn mission command principles³¹ on their head in the barracks environment. While operational doctrine favours pushing decision-making down the ranks, administrative practice typically pushes decision-making up the ranks, often to dizzying heights for matters of trivial importance. The cognitive dissonance this approach engenders in leaders up and down the chain of command can only undermine battlefield performance. Regardless of what occurs in training activities, where the risks are mostly simulated, junior leaders who have never been entrusted to make high-stakes decisions with real-world consequences cannot suddenly do so for the first time in combat, especially if their own senior leaders are also not habituated to trusting subordinates.

Addressing this issue is not simply a matter of changing the approval level of key administration, although this technical adjustment will be helpful. More important will be the cultural change required to accept mistakes—including ones that cost the organisation money—from well-intentioned junior leaders who make an erroneous administrative decision. A system that is accepting of mistakes and flexible in correcting them encourages decision-making, whereas a system that punishes harshly even accidental transgressions forces subordinates to push decision authority ever higher in the interest of self-preservation.

Paralleling reform of administrative authorities should be reform of how administration is initiated and processed. It is somewhat absurd that several decades after computers became commonplace in every ADF workplace, many administrative processes are still initiated by submitting a form. As digital representations of printed documents, online forms do not provide a marked efficiency benefit over the paper versions that preceded them more than 30 years ago. Computers provide opportunities for the implementation of significantly more efficient and individually tailored administrative practices. Current generative AI capabilities can even do away with forms entirely. It is well within the scope of a generative AI to simply take in a member's plain language explanation of their administration needs and initiate all the necessary application processes without a person ever needing to fill in details on a digital form. In many cases, where a decision is strictly based on a rigid policy, the AI is also better suited than a human to instantly make a determination on an application, although entrusting this authority to a computer may be too much too soon for current Army leaders. Ultimately, those managing administrative practices need to start considering the art of the possible, rather than simply maintaining the systems that are already in place.

Procurement and Recruiting

Equipment procurement and personnel recruiting may seem to be very different fields, but in the Australian Army today they both suffer from the same two problems: they take too long and cost too much. The solution is similarly common to both fields: a change of approach from optimising to 'satisficing'. The economist Herbert Simon introduced the concept of satisficing in his 1972 paper 'Theories of Bounded Rationality'.³² As opposed to optimising—finding the absolute best solution—satisficing is more efficient for situations in which time is limited, or when it is not entirely clear what the best solution will turn out to be.

In terms of procurement, satisficing means giving high priority to proven equipment that is good enough, economical and ready now, rather than engaging in lengthy and expensive trials and development activities that hold out the promise of potentially delivering a perfect equipment solution over a distant horizon, and the unspoken risk of going over time and over budget on a costly white elephant that never realises its developers' lofty

ambitions.³³ Accepting that we cannot know exactly what the character of the next major conflict will be means giving priority to quick, simple and efficient equipment procurement that is adaptable. And if Australia is forced into conflict with less than 10 years' warning, as the National Defence Strategy forecasts,³⁴ then any equipment that takes a decade to propose, trial, manufacture and introduce across the force is of little use.

Achieving agility in procurement will require a willingness to look past the multibillion-dollar defence primes to smaller manufacturers and the broader commercial sector. Nowhere is this more important, and in greater need of reform, than in communications. It is absurd that one of the greatest challenges facing most modern militaries, including the ADF, is limitations in the compatibility and usability of communications systems. Soldiers spend weeks and months training to gain basic proficiency in communications tools with complicated operating systems and problematic compatibility flaws, all the while carrying in their pockets devices capable of communicating with anyone on the planet, which every operator instinctively understands how to use with no formal training. This is not to suggest that Army should replace its communications systems with mobile phones, obviously, only that the technology sector, not the defence primes, is where communications solutions will be found. And we must challenge the seeming convention that military communications devices cannot be user friendly.

The same solution to the equipment procurement problem can also be applied to procuring personnel. Army's current approach to recruitment follows an optimising methodology—candidates are screened, checked and tested to ensure only the most suitable make it through. This process takes time, and still ultimately results in occasional poor hiring choices, because no screening process can be perfectly effective. Instead of fighting this reality, Army should accept it and change its approach to recruitment from 'slow in, slow out' to 'fast in, fast out'. Joining the Army should not be a long and difficult process, and nor should removing a new member who proves unsuitable. Instead, the approach should be quick to bring people in and quick to remove those identified as unfit by their immediate supervisors—such as the junior NCOs at recruit and initial employment training. If we accept that we will inevitably hire some people who do not share our values, and entrust our junior leaders (who have demonstrated through years of service that they do) to recognise these problem hires, then we can introduce efficiency to the recruitment process. This approach risks bringing in 'bad apples', but the current approach guarantees that some of the best potential soldiers are lost to other employers while also not perfectly screening out all unsuitable candidates. Entrusting junior leaders at training establishments with the power to remove new soldiers who do not live up to Army's standards is also an excellent way to engender mission command principles in administrative practices.

Prognosis

I contend that our profession must be fundamental to our Army: a ‘first principal’ that underpins and shapes all others. We must consider it, understand it, invest in it. But above all we must believe in it.

LTGEN Simon Stuart³⁵

If Army is to fulfil its purpose as a profession within the ADF, it must evolve in step with the strategic environment, just as medicine continually transforms in response to scientific breakthroughs. Because our jurisdiction is conditional, our expertise must be adaptive and our regulation must be self-driven.

Jurisdiction refers to the Army’s claim over the land domain. But in an era of integrated, multi-domain operations, that claim cannot be taken for granted. Army’s continued relevance depends on its ability to support and enhance joint operations, not dominate them. Just as the early medical profession had to concede that patient care required input from other fields, Army must recognise land power as only one element of national military power. Our jurisdiction must be earned and continually re-earned through relevance, utility and adaptability within joint force operations.

Expertise gives the profession its authority. But in a complex, evolving battlespace, expertise must mean more than soldiering competence. It must include fluency in joint capabilities, comfort with emerging technologies, and openness to ideas developed outside Army’s historical remit. Tactical agility has never been solely about battlefield brilliance—it is deeply rooted in organisational structures. Army’s operational excellence will depend not just on how we fight but also on how we structure, train and empower personnel.

Self-regulation is the profession’s greatest privilege and its greatest burden. In a joint context, this means proactively discarding legacy habits, systems and cultural traits that no longer serve operational effectiveness. If our processes and preferences obstruct joint integration, it is our responsibility to change them. Just as medical boards redefined who could practise medicine based on evolving standards, Army must be willing to reform itself with a focus on serving the mission.

Integration in the ADF is not just a matter of aligning systems and units—it is a mindset that values contribution over control, and shared outcomes over single-service wins. Army, as the largest service, sets the tone for joint interactions. If Army approaches joint operations with inflexibility, parochialism, or excessive bureaucracy, it not only hampers joint success—it signals to our partner services that we are insincere about integration. But if Army leads with humility, flexibility, and a willingness to adjust internal practices to better serve the whole force, it becomes an enabler of integration. A profession confident

in its identity does not need to defend every tradition or internal norm—it can adapt without losing its essence, which has always been about service, not self-preservation. This is the professional posture Army must adopt: not merely maintaining standards but evolving them in concert with the force it serves.

This is how medicine evolved into the respected profession it is today. The medical profession once defined itself by narrow expertise and insular culture, but the breakthroughs that propelled it forward—anaesthesia, germ theory, X-ray imaging—came from other disciplines, and from people who saw old problems in new ways. The doctors who embraced these insights—who redefined their expertise and restructured their practices—transformed medicine from trade to profession.

Army now stands at a similar inflection point. Our strategic environment demands agility, collaboration and innovation. As the service with the most personnel and the smallest platforms, Army's best way to contribute to the integrated force is to serve as an enabler of whole-force effects. We cannot wash our hands of our responsibility to the Australian society that provides our professional mandate—we must seek expertise outside our traditional fields of dominance, even if it means admitting past failures and accepting future risks. By re-examining our jurisdiction through a joint lens, expanding our definition of expertise, and exercising self-regulation that is reformist rather than defensive, Army can live up to its professional ideals.

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/ PREPARING THE ARMY AS A PROFESSION FOR MOBILISATION

MAJ Robert Bruce

2025 CA Essay Competition
Runner Up

Our peace strategy must formulate our war strategy, by which I mean that there cannot be two forms of strategy, one for peace and one for war, without wastage—moral, physical and material when war breaks out. The first duty of the grand strategist is, therefore, to appreciate the commercial and financial position of his country; to discover what its resources and liabilities are. Secondly, he must understand the moral characteristics of his countrymen, their history, peculiarities, social customs and systems of government, for all these quantities and qualities form the pillars of the military arch which it is his duty to construct.¹

JFC Fuller, *The Reformation of War*

Army, as a profession, needs to set the conditions through which to enable rapid mobilisation for conflict. Currently the Australian Army appears to be precluded from vigorously pursuing mobilisation preparation, due to a lack of clear mandate within the current strategy. The National Defence Strategy 2024 (NDS) sets the primary strategic objective of deterrence and does not mention mobilisation. This presents the Army with a dilemma of justifying mobilisation preparation in the event of a failure to achieve the primary strategic objective. If this dilemma is not addressed, and Army's approach to mobilisation preparation is not reconciled with the NDS, there is a risk of undermining mobilisation preparations through lack of understanding and under-resourcing. This essay seeks to address this dilemma by analysing how Army can pursue mobilisation preparation when viewed as a function of the profession. In doing so, it presents recommendations as to how Army as a profession can derive a mandate for mobilisation preparation congruent with the NDS.

This essay presents two key arguments through which to justify its recommendations. Firstly, if the Army is a profession, then Australian society dictates the need for mobilisation preparation as a requirement for the profession. This is a social constructivist approach best viewed through James Burk's model of the military profession. Secondly, mobilisation can and should be integrated into our approach to deterrence by considering mobilisation as an interpretive structure through which deterrent effects are communicated. To make these arguments, this paper will begin by defining mobilisation and examining the development of the concept of the military as a profession. It will then explore the Army profession through Burk's pillars of jurisdiction, expertise and legitimacy. It will contend that mobilisation preparation can be legitimated in the eyes of society by describing it as within the jurisdiction of Army. The confluence of mobilisation and deterrence will then be explored through the pillar of expertise. Finally, it presents civil–military relations as the key component for assuring the legitimacy of mobilisation as a function of the Army profession. While providing recommendations throughout, this essay concludes that if mobilisation is viewed as a function of the profession, the impediments of the NDS can be overcome, thereby enabling Army to fully pursue mobilisation preparation.

Mobilisation

Mobilisation, as it relates to military usage, is primarily about the preparation of the nation and its resources for war. The previous publicly released Australian Defence Force (ADF) mobilisation doctrine provides a solid foundational definition, with mobilisation defined as 'the process that generates military capabilities and marshals national resources to defend the nation and its interests'.² United States (US) Army doctrine provides a more specific Army-focused definition, stating:

Army mobilization is the process of bringing the Army to a state of readiness for war, contingency, or national emergency. This includes activating all or part of the Reserve Component (RC), as well as assembling and organizing personnel, supplies, and materiel.³

These doctrinal definitions are broadly consistent with academic definitions.⁴ For the purposes of this essay, a combination of the ADF and US Army definitions will be utilised. Mobilisation should be read as the marshalling of resources and capabilities at either the national or army level (inclusive of the activation of reserves and force expansion) in preparation for war.

The definition of mobilisation proposed in this essay is by no means conclusive. It is acknowledged that the term may be used to describe the preparation of any number of organisations in the event of 'war, crisis, or disaster'⁵ and that there are ongoing discussions about the levels and phases of mobilisation in the context of defence versus

national mobilisation.⁶ It is also worth noting that ‘mobilisation’ is often used in tandem with ‘force expansion’.⁷ Recently the *Australian Army Journal* featured an article titled ‘Defining Land Force Mobilisation’ which details the nuances of the definition and the variety of usages in far more detail than will be attempted here.⁸ For the purposes of discussing the Army profession, the proposed definition is sufficiently detailed to explore recommendations for mobilisation preparation.

The Military Profession and James Burk’s Model

The conceptualisation of the military as a profession is a relatively recent development. Two early seminal texts in this area were Samuel Huntington’s *The Soldier and the State* (1957) and Morris Janowitz’s *The Professional Soldier* (1960).⁹ Huntington sought to establish the officer corps as distinct from ‘warriors of previous ages’¹⁰ and to elevate the status of military officers to the level of other professionals such as lawyers and doctors.¹¹ Huntington observed that ‘the distinguishing characteristics of a profession as [a] special type of vocation are its expertise, responsibility and corporations’.¹² By defining the military profession through these pillars, Huntington established an early model for analysis. However, Huntington largely sought to separate the military profession from politics, which has led many to be critical of this aspect of his writing.¹³ Janowitz, while acknowledging Huntington’s model, emphasised group identity and a ‘system of internal administration’, which involved a body of ethics and a standard of performance.¹⁴ Further distinguishing Janowitz’s model from Huntington’s was the former’s belief that the officer corps required an understanding of politics.¹⁵ These early writings form the intellectual foundations for the military as a profession, providing a useful framework for analysing how militaries and their societies have responded to changing geopolitical circumstances.

This framework was further developed by Burk through his model of the military profession. Burk’s study, while synthesising Huntington’s and Janowitz’s works, provides a description of the formulation of norms and the interplay between society and the military over time. As Burk states:

To call an occupation a ‘profession’ is usually to make a positive normative judgment about the work being done, and, since we think that professional work is a social good, whatever we call professional work also reveals something about what we believe is required for the well-being of society.¹⁶

The corollary of this point is that as the strategic circumstances adapt over time, so too do the normative judgements by society about what the military is required to do for the wellbeing of society. To make this point, Burk quotes Samuel Haber defining professional activities as ‘social artifacts fashioned by public events and usage’.¹⁷ Therefore, to understand and define a profession is to recognise the societal norms, at a particular time, to which the profession is expected to conform.

In Burk's model there are three factors through which to examine the military profession; these are jurisdiction, expertise and legitimacy. Jurisdiction is defined by 'the boundaries of the domain within which expert knowledge is applied'.¹⁸ Thus jurisdiction is prone to expansion and contraction in line with the societal requirements, the changing character of war and strategic circumstance. Expertise is broadly defined as specialised abstract knowledge and skills. Burk argues that the military's professional identity at the end of the 20th century was founded on its claim to expert knowledge in the management of violence, but acknowledges that this expertise could be expanded.¹⁹ Finally, legitimacy refers to the trust that society places in a profession regarding the application of this expertise within the bounds of its jurisdiction.²⁰ By exploring the Army profession through the pillars of jurisdiction, expertise and legitimacy, the profession can be prepared for rapid and effective mobilisation.

Jurisdiction and Normative Structures

The first step in preparing the Army profession for mobilisation is to affirm its jurisdiction in this area. While Burk employs the word 'jurisdiction' when considering the Army profession, it may be equally valid to consider this in terms of norms. Burk makes an explicit connection to norms when he states that the labelling of an occupation as a 'profession' makes a 'positive normative judgment about the work being done' and reveals what is believed to be required for societal good.²¹ Norms 'describe collective expectations for proper behaviour of actors with a given identity' and this describes both 'regulative and constitutive elements'.²² Importantly, by considering Burk's concept of 'jurisdiction' through a normative lens, this allows for recognition of the evolving nature of norms in society. Burk stresses this point by describing the adaptation of the military profession's role over the last century—from the management of violence in the early 20th century to the management of defence during the Cold War and finally the management of peace once the Cold War ended.²³ Given these adaptations over time, and in line with Carl von Clausewitz's warning about 'arbitrary relationships',²⁴ the Army can ill afford to assume what normative expectations Australian society carries with regard to mobilisation and the Army.

To affirm the Army profession's jurisdiction, Australian society should be consulted regarding its understanding and beliefs about the Army and mobilisation. Recent history demonstrates that the Australian public's understanding of the ADF cannot be assumed. In 2015, in the lead-up to the release of the 2016 Defence White Paper, a major community consultation was conducted regarding public attitudes towards and understanding of Defence. The consultation produced a report entitled *Guarding Against Uncertainty: Australian Attitudes to Defence*.²⁵ The report revealed a significant disconnect between the Australian people and the ADF. It stated 'the panel heard

repeated concerns that much of the Australian community did not have a good understanding of their present-day defence force'.²⁶ While this report is now a decade old, it remains unclear if this attitude still prevails. Consequently, the Army should not wait for an existential crisis to confirm what Australian society expects with regard to mobilisation.

The war in Ukraine is demonstrative of the risk that misalignment of norms poses to mobilisation. For Russia, mobilisation has required conscription, which has brought to the fore norms about the use of Russian conscripts in war. The Russian people expected that conscripts would only be used on Russian territory.²⁷ When evidence arose of conscripts being used on the Ukrainian front line, it was not immediately acknowledged by the Kremlin, resulting in campaigns from Russian NGOs to acknowledge the true use of these conscripts.²⁸ Issues with the mobilisation more generally have generated protests from Russian wives and mothers.²⁹ While this has not been assessed to be particularly damaging to Russian mobilisation (and may even have been co-opted),³⁰ in a democracy the impact may be considerably different. These examples demonstrate that transgressions of the normative framework, whether deliberate or unintentional, may have implications that hinder mobilisation. It is therefore important for the Army to baseline existing norms.

Importantly, it is insufficient to simply understand these norms; professions must play an active role regarding their jurisdiction. Given that society's prescriptions for social good change over time, the profession is therefore required in a consultative manner to 'define and defend the domain within which they work'.³¹ In the context of mobilisation, the Army needs to consider Australian society's understanding of the requirement for mass in high-end conflict. The war in Ukraine has generated a broad consensus among commentators that mass is still of critical importance in modern war.³² Technological asymmetry or sophistication is yet to compensate for a deficit in numbers, with mass required to counter the adversary's mass.³³ Furthermore, AI-enabled or autonomous weapon systems are unlikely ever to completely remove the requirement for a large number of humans somewhere in the combined arms system. Jack Watling makes this point regarding the depth of support required for automated systems.³⁴ The ongoing requirement for mass in high-end conflict presents a powerful argument for the Army to ensure mobilisation remains within the remit of the profession, an argument that nonetheless needs to be made explicitly to the Australian public.

The struggle to generate and retain mass has caused the Ukrainian Armed Forces and its government to reconsider several of Ukraine's laws and norms around mobilisation. In an October 2024 interview, Ukrainian defence minister Rustem Umerov revealed that only 12 per cent of new recruits are volunteers.³⁵ Approximately 16 per cent of the population who are eligible to serve have not renewed their contact and personal details with draft officers.³⁶ One of the ways to address the issues regarding manpower has been to reconsider the criminalisation of absent without leave (AWOL) cases. AWOL numbers

have been described as 'endemic'.³⁷ This is reflected in figures from the Ukrainian prosecutor-general's office showing a sharp increase in the number of deserters from 2022 to 2024; in 2024 the figures reached highs of 19,922 battlefield desertions and 41,950 AWOL cases registered.³⁸ In response, laws have changed to allow first-time offenders to return to service, provided the offender did not flee from the battlefield. Units and brigades which have opened their ranks to returning AWOL absconders have enjoyed high levels of recruitment from this source.³⁹ Anecdotally, absconders who return to different units do so due to the good reputation of the gaining unit, in the hope of better treatment and service.⁴⁰ In particular, prestigious and elite units in Ukraine that conduct their own advertising and recruiting have had fewer manpower shortages.⁴¹ This demonstrates how reviewing existing norms and laws can assist in mobilising the requisite mass for high-end conflict, and how a profession can positively impact its jurisdiction.

Recommendations Regarding the Army Profession's Jurisdiction

The lessons of the Ukrainian War provide two immediate recommendations for the Australian Army to act on in order to affirm and mould its jurisdiction as a profession with regard to mobilisation. Firstly, the Army should commission a public consultation. In a manner similar to the community consultation in 2015 for the 2016 Defence White Paper, this consultation should be aimed at understanding the public's perception of the Army, their current grasp of the strategic situation, and their expectations around high-end conflict, particularly as it relates to mobilisation. A specific example is that existing norms on the use of reserves are likely to have changed following 2nd (Australian) Division's tasking with a domestic security role.⁴² Confirmation of the impact that this task has on the collective expectations of Australian society will aid the Army, as a profession, to prepare for mobilisation.

Secondly, the findings of this consultation should then be used to inform the Army profession's engagement with society regarding its mobilisation jurisdiction. Topics which the Army might be expected to address include the persistence of mass in modern war, the inability of AI/autonomous systems to ameliorate this requirement for mass, recruitment policies and concepts for localised recruiting. This engagement should take several forms, from articles and other publications to proposals for legislative change. Documents such as *The Australian Army Contribution to the National Defence Strategy 2024*⁴³ establish important waypoints in this regard by providing publicly available reference material to inform such discussions. By pursuing these two recommendations, the Army will affirm its jurisdiction, as a profession, thereby creating space to expand its mobilisation expertise.

Expertise and Integrating Mobilisation into Deterrence

The second step in preparing the Army, as a profession, for rapid mobilisation is to examine its expertise on mobilisation. For Burk, expertise rests on the Army's 'claim to expert knowledge in the management of violence'.⁴⁴ Importantly, Burk argues that the nature of this knowledge is not static and has evolved over time. Until World War II, the foundation of this claim lay in an 'emphasis on the *science* (not the art) of war'.⁴⁵ The development of nuclear weapons during the Cold War and the concomitant creation of national security and strategic studies resulted in an expansion in scope of the profession's expertise.⁴⁶ This argument is compelling when read alongside Burk's views regarding the adaptation of the military profession's jurisdiction—that is, from the management of violence in the early 20th century to the management of defence during the Cold War and finally the management of peace once the Cold War ended.⁴⁷ Ultimately there is a requirement for different expertise in this evolving role. While Burk does not explicitly make this connection, he argues that the conceptualisation of the expert knowledge necessarily adapts with the role. For the Army seeking to prepare for mobilisation, this becomes a question of what knowledge is required and how it is conceptualised.

The NDS's expression of strategy and strategic objectives presents a difficult challenge for the Army in conceptualising mobilisation expertise. This difficulty is most readily observed in the NDS's circuitous expression of deterrence—that is, that the strategy of denial seeks to deter by deterring through denial. Deterrence is almost exclusively expressed in the context of purchasing capabilities or of working within an alliance to deliver a denial effect. Consideration of the communicative aspect of deterrence is limited to a single line about 'signalling' to a potential adversary that Defence has capabilities and friends which would frustrate any plans of aggression.⁴⁸ The result is conceptually unclear, with no discussion of mobilisation.

The NDS's lack of conceptual clarity around deterrence has historical precedent: the same issues were evident during the Cold War. In the Cold War the 'new strategy of deterrence' conflicted with many of the traditional military ideas and goals, given that the 'object of military force now is not to win a war but to prevent it'.⁴⁹ At the heart of this confusion was a widening of the term 'strategy'.⁵⁰ Hew Strachan's seminal article 'The Lost Meaning of Strategy' provides an authoritative account of this confusion.⁵¹ Central to Strachan's argument is that strategy is often conflated with policy.⁵² During the Cold War this conflation occurred between strategy and foreign policy.⁵³ The result was that conventional military forces, intent on mobilisation for total war, were replaced by 'force(s) in being' designed to achieve deterrence.⁵⁴ Today, in a similar fashion, Australia has adopted a strategy of denial⁵⁵ whereby the primary strategic objective is deterrence,⁵⁶ to be achieved by an 'enhanced force-in-being'.⁵⁷ It is worth noting that Paul Dibb in his 1986 review of the ADF recommended a 'Strategy of Denial' but conceded that this strategy

was more akin to a policy.⁵⁸ This concession eerily foreshadows Strachan's critique of the conflation of strategy and policy decades later. With no discussion of mobilisation, a lack of conceptual clarity surrounding deterrence, and possible conflation between strategy and policy, the NDS provides little substance in which to ground an argument for mobilisation.

To provide a modicum of theoretical structure, it should be inferred that the NDS is pursuing deterrence by denial. This inference is supported by the Defence Strategic Review, which mentions 'deterrence *through* denial' twice and juxtaposed with its alternative, deterrence by punishment.⁵⁹ Early thinkers during the Cold War were chiefly concerned with the development of nuclear weapons and thus deterrence by punishment.⁶⁰ However, deterrence by denial, which came to the fore primarily at the end of the Cold War, focused on the use of conventional forces to achieve deterrence.⁶¹ Glenn Herald Snyder provides an apt summary of the two forms and their corresponding logic:

Denial capabilities—typically, conventional ground sea, and tactical air forces—deter chiefly by their effect on the ... aggressor's calculus, [and] estimate of the probability of gaining his objective. Punishment capabilities—typically, strategic nuclear power for either massive or limited retaliation—act primarily on the ... aggressor's estimate of possible costs, and may have little effect on his chances for territorial gain.⁶²

More recently, Alex Wilner and Andreas Wegner expressed this more simply as 'punishment deters through fear of pain, denial deters through fear of failure'.⁶³ Through this apposition, deterrence by denial emerges as the form of deterrence most obviously aligned to the NDS, and it provides a simple coherent formulation of deterrence for integration with mobilisation.

Mobilisation integrates with deterrence by denial by providing an interpretive structure. Emile Simpson in *War from the Ground Up* describes how these 'interpretive structure(s)' operate in conflict to provide meaning.⁶⁴ Simpson argues that 'strategy must in reality configure the abstract template of war to provide an interpretive structure that has purchase on its audiences'.⁶⁵ An understanding of the adversary and their decision-making calculus is critical. As Thomas Schelling asks:

But what configuration of value systems for the two participants—of the 'payoffs,' in the language of game theory—makes a deterrent threat credible? How do we measure the mixture of conflict and common interest required to generate a 'deterrence' situation? What communication is required, and what means of authenticating the evidence communicated? What kind of 'rationality' is required of the party to be deterred—a knowledge of his own value system, an ability to perceive alternatives and to calculate with probabilities, an ability to demonstrate (or an inability to conceal) his own rationality?⁶⁶

As Schelling identifies, there is a complex and evolving interplay between the deterrer and the deterred. Mobilisation contributes to this by simultaneously providing communicative actions and evidence. Thus, the pattern of mobilisation in pursuit of deterrence becomes dialectic.⁶⁷ Antulio Echevarria describes this process as a ‘fragile’ ongoing exchange which requires ‘constant attention’ to ensure the ongoing cultivation of deterrence in the mind of the target.⁶⁸ It is the combination of force structure and preparedness conceived in the context of an adversary’s plan that makes it credible.⁶⁹ The intent to deter is therefore credibly communicated by the various actions of mobilisation by a state.

Mobilisation for the purposes of deterrence, however, must be used cautiously. Reflecting on World War I, Schelling argues that mobilisation for deterrence would have appeared no different to mobilisation for war.⁷⁰ Schelling’s point is that to the target of deterrent strategy, the difference between defensive and offensive mobilisation is likely to be difficult to discern.⁷¹ However, Schelling concedes that World War I mobilisation was reliant on mechanical factors which are not necessarily relevant to modern mobilisation. Further to this, if the mobilisation is pursued in such a way as to reduce the impact or success of surprise attacks, this could communicate a deterrent effect.⁷² Indeed, as Jack Watling stated in his recent book *The Arms of the Future*, ‘a credible defence can be emplaced without suggesting an intent to attack’.⁷³ The advent of clear, detailed satellite imagery has enabled the interrogation of logistic chains to determine whether a combatant is actually preparing for combat operations.⁷⁴ Watling argues that unambiguous force structure can be used to signal intent.⁷⁵ Thus mobilisation can be conducted in support of deterrence by denial without being misconstrued, although this requires careful consideration of communicated signals and their impact on the intended target.

Recommendations Regarding the Army Profession’s Expertise in Mobilisation

It is recommended that the Army develop a model for the integration of mobilisation into a deterrence framework. As this is a currently understudied area, it will require a multi-disciplinary approach including history, legal, security and strategic studies. This will provide a more solid theoretical backbone to the Australian expression of deterrence, culminating in the creation of options with which Australia can seek to manipulate escalation dynamics. Key to this will be the development of stages or phases within the mobilisation framework which directly support the credibility of Australian deterrence. In practical terms, the result of this study should trigger new doctrine and planning, with a particular focus on publicly accessible material. This material can then be used to support the argument that mobilisation expertise forms part of the Australian Army profession, with the Army employing this expertise to directly contribute to the primary strategic objective of deterrence.

Legitimacy

Establishing legitimacy is the final step in preparing the Army profession for mobilisation. Burk's exposition on legitimacy in his oft-cited chapter in *The Future of the Army Profession* is incomplete. This is because Burk, somewhat unhelpfully, explains this factor in the negative, focusing on the challenges to legitimacy to define it. Specifically, he highlights the deleterious effects of modern scepticism and 'uncertainty about "objective truth"' as obstacles to the military profession's legitimacy.⁷⁶ Burk's esoteric epistemological inquiries almost entirely obfuscate his definition. Arguably, his article 'Theories of Democratic Civil-Military Relations', written in the same year, provides a more thorough account of his thoughts on legitimacy as it relates to the military profession.⁷⁷ In this article, he provides a detailed description of the scope of civil–military relations, stating:

The empirical domain of civil-military relations is large. It includes direct and indirect dealings that ordinary people and institutions have with the military, legislative haggling over the funding, regulation and use of the military, and complex bargaining between civilian and military elites to define and implement national security policy.⁷⁸

Importantly, Burk uses the article to call for 'a new normative theory of civil-military relations for mature democracies'.⁷⁹ This focus on civil–military relations echoes his discussion on dialogue, the 'public's trust' and the development of 'sustainable partnerships' within his model of the military profession.⁸⁰ By synthesising Burk's work, it becomes evident that Burk perceives civil–military relations as a key component of assuring the legitimacy of the military profession.

A central tension within civil–military relations lies in the oscillation between the mobilised and demobilised states. This is most readily evident in an exploration of the 'citizen-soldier ideal'.⁸¹ The issue, as Burk sees it, is the 'gap' between the citizen and the soldier, which has widened as citizens have become less likely to be required to defend their democratic state.⁸² Mass standing armies have been reduced in favour of small professional armies reliant on mobilisation to produce mass as required.⁸³ For Burk this necessarily requires questioning as to how to encourage citizens to 'participate in public life and to take responsibility for the defense and well-being of their society'.⁸⁴ On the other hand, Janowitz makes an equally valid point about the 'civilianizing' effect that mobilisation can have.⁸⁵ In relation to the mobilisation of a 'military force for deterrence', Janowitz states:

The line between the military and the larger society weakened because of military dependence on civilian industry and science, and because of the impact of the mobilization of large numbers of civilians for wartime service. 'Total war' made both soldier and civilian objects of attack and served to attenuate the distinction between the military and civilian sectors of society.⁸⁶

The corollary is that the gap (and the state of civil–military relations) alters between the pre- and post-mobilisation states. Two important conclusions should be drawn from this. Firstly, the gap between citizens and soldiers must be considered in all messaging relating to mobilisation and, where possible, reduced. Secondly, the establishment of any Army ethic, culture or institution must allow for a degree of civilianisation upon mobilisation. Thus, for Army to cultivate legitimacy as a profession concerned with mobilisation, planning and communications, it will need to demonstrate sensitivity to the changing nature of civil–military relations from the pre- to the post-mobilised state.

Civil–military relations are also relevant to the consideration and formulation of strategy. For Huntington, the increased participation of civilian entities in the formulation of strategy was a key concern.⁸⁷ Importantly, he highlighted that a wealth of strategic writing in the 1960s was conducted by academics, while military officers were left to ‘lag behind’ in the development of strategic thought on deterrence.⁸⁸ The result was a gap in the writing of military policy in the US. This led to allegations at the Pentagon that the ‘civilian “whiz kids”’ were ‘unduly contemptuous of the military officers for their backwardness and ignorance’.⁸⁹ In practice there must be a balance between the civilian and military entities, given the iterative and dialogic nature of strategy. Strachan’s views on strategy as they relate to civil–military relations are relevant here. He states:

In the ideal model of civil-military relations, the democratic head of state sets out his or her policy, and armed forces coordinate the means to enable its achievement. The reality is that this process—a process called strategy—is iterative, a dialogue where ends also reflect means, and where the result—also called strategy—is a compromise between the ends of policy and military means available to implement it.⁹⁰

To be effective in this process, there is a requirement for members of the profession to cultivate ‘strategic mindedness’ and in turn contribute to the dialogue.⁹¹ Simply put, the Army profession will not be perceived as legitimate if it cedes the intellectual space on deterrence and mobilisation to others.

Recommendations Regarding the Army Profession’s Legitimacy in Mobilisation

To cultivate legitimacy in the civil–military relations space, there are four immediate recommendations. Firstly, reduce the citizen–soldier gap. This recommendation is already recognised in part through the call for a larger reserve force.⁹² Efforts to increase the reserve force, however, should consider not just the ‘capability’ that these reserves bring but also their impact on national defence consciousness within communities. Reserve members have a unique position of participating in daily civilian life with an increased awareness of Defence’s equities, which can give them an important role in connecting the Army with local communities. Secondly, the Army’s messaging regarding

mobilisation requires increased awareness of the citizen–soldier gap. As Burk argues, the decreased requirement to defend the democratic state impacts the citizen’s views more broadly, indicating that deontological arguments may not be as impactful.⁹³ Thirdly, decisions about the institutional Army need to consider Janowitz’s ‘civilianizing’ effect post mobilisation. This means future decisions, particularly around culture and ethic, should take into account the more diverse citizen-soldier rather than just the full-time professional soldier of today’s standing army. This point is about ensuring Army’s culture and ethic are accessible to everyday Australians who, in the event of high-intensity conflict, may be called upon to serve. This leads to the fourth recommendation in relation to legitimacy: to reinvigorate the study and discussion of these topics in such a way as to impact civil–military spaces and strategy. In part, the legitimacy of the Army profession’s purchase on mobilisation will be judged by its ability to contribute intelligently to the dialogue. The overarching effect of these recommendations is to ensure the validity of the Army’s jurisdiction and expertise, as a profession, in the eyes of the various stakeholders concerned with civil–military relations.

Conclusion

If Army is ill-prepared to mobilise for high-intensity conflict, it will be insufficient to respond that mobilisation was not part of the National Defence Strategy. While the Army has a role to perform within the NDS, there are certain duties owed to the Australian people that run deeper than the current strategic focus. By taking a social constructivist approach through Burk’s model of the military profession, with the pillars of jurisdiction, expertise and legitimacy providing a strong framework, Army can set the conditions for rapid and effective mobilisation. Mobilisation preparation becomes justified as a legitimate expectation of society, while emphasising the importance of the connection between Army and the society it serves. Importantly, viewing mobilisation as a function of the Army profession elevates it beyond the confines of the current strategy and provides a theoretical framework through which actionable recommendations can be made and implemented.

About the Author

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ENDNOTES

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- 19 Ibid., p. 49.
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KEOGH CHAIR ADDRESS

Professor Risa Brooks

Keogh Chair and Allis Chalmers Professor of Political Science
at Marquette University

Chief of Army Symposium 2025, Australian Parliament House, 26 August 2025

Good morning, everyone. Thank you, Brigadier Campbell, for that kind introduction. I would also like to thank Lieutenant General Stuart for inviting me to be here today, and his team, who have welcomed me so graciously. I am delighted to visit your beautiful country.

It is my great honor today to speak to you on the relationship between army and society—an issue about which I am very passionate.

I want to begin with the overarching theme of my remarks today: that the relationship between army and society is foundational to any democracy's capacity to safeguard its security. By that I mean its ability to protect from external threats to its economy, institutions, values, its population's welfare and wellbeing.

When societal-military relations are unhealthy, it is more difficult to build and maintain an appropriately resourced, responsive, tactically adept and strategically minded army. Such an army is less capable of deterring foreign aggression and protecting society if deterrence fails.

The societal-military foundation is vital in this era of immense global change, and especially given the growing stakes of strategic competition in the Indo-Pacific.

Now, more than ever, we must attend to fundamentals, including societal-military relations, to assure that our democracies are prepared to navigate these challenges.

Before turning to the substance of my remarks, I want to make two quick points of clarification. First, I speak to you today as a specialist in US and more broadly democratic civil-military relations. My aim is to paint a sweeping picture of the issues across democracies so that we can see the landscape clearly.

I hope, however, that there are elements of my talk that illuminate the particular experience of Australia and prove useful to you in that respect.

I will also use the generic term military, rather than army, throughout my talk because many of my insights apply broadly. But in most democracies—as, I suspect, here in Australia—the army is the service that is most tied to the citizenry and sees itself as being rooted in it. So, the issue of societal-military relations is especially imperative for the army.

My remarks today are organised around two questions. First, what is a healthy relationship between society and the military in liberal democracy? And second, what can be done to support and promote that healthy relationship?

Let me begin with the first question.

I am going to answer it initially in the negative; that is, I will explore what is *not* a healthy relationship between society and the military, in order to bring the issues into relief.

Here I am going to pick a bit on my own country, the United States, first. Several years ago, the author and journalist James Fallows wrote an article describing what he called the ‘Tragedy of the American Military’, in which he discussed how the public views the military. He described a dynamic that we might characterise as a kind of blind reverence. The public deeply admires the military but, as he saw it, this regard could be superficial and was often combined with a lack of knowledge or substantive engagement. Fallows saw this as a tragedy because what he believed the US military really needed was the public’s attention, not its adulation.

Today in the US there are many signs of this social esteem. Attend a baseball game and one will often see soldiers brought on to the field with a big display of patriotic symbols, or service members and veterans will be vaunted in public venues in other ways. Of course, this regard for military service has many positive aspects.

The concern is that these grand displays may substitute for, or even mask, the need for deeper engagement. In fact, many Americans know very little about the military. They do not know much about the wars it has fought in, the organisational challenges it faces or even simple facts about military service. Surveys by U.S. Recruiting Command show that many don’t know the variety of jobs one can have in the military or that you can even have a dog if you serve.

Now the causes of this dynamic are complex, including a concentration of military service in families—over 80 per cent who join have had a family member who served; the geographical location of military bases; patterns of recruitment; and the advent of what is called the all-volunteer force, which marks the end of conscription in the United States in 1973.

Regardless of its causes, however, this blind reverence can yield a superficiality that inhibits deep engagement between society and the military.

A related dynamic in democracies occurs when there is a mythology or mystification of the military or its history and accomplishments. This idealisation, too, can inhibit the emergence of a healthy relationship between society and the military. Commemoration and national memory are essential in democratic societies, as is honoring the sacrifice of those who have served.

Yet romanticising the military and its history can obscure and distract from addressing contemporary problems. Society may get stuck in a particular image of the military and its historical role that is detached from its current character and the security challenges it faces. Balance needs to be struck between the past and the present to ensure a healthy societal-military dynamic.

I want to now turn now to a different class of problems in which there is an ambivalence or, even worse, an underlying current of suspicion toward the military in democratic societies. Here it is helpful to note that there are in fact inherent frictions or complexities in relations between liberal democratic societies and their militaries. Military sociologists have long recognised these tensions. Liberal societies privilege the individual and value nonconformity, while militaries emphasise the group, are hierarchical, and are deeply grounded in tradition. Navigating those cross-cultural differences can be difficult.

In addition, the very purpose of a military can foster ambivalence for some citizens. They may equate engaging with the military with an endorsement of war itself. Of course, the point of a military is to prevent war and to protect society if there is no other option. And only by engaging with the military can the public be sure that the armed forces are well prepared for that task and conforming with societal values in the process.

Finally, there is one other unhelpful societal-military dynamic to touch on, which is when society regards the military with indifference or even benign neglect. Members of the public just don't think much about the military. They have little exposure to what their military is doing, its purpose, and little interest in finding out. They are just fine to delegate these matters to the government and focus on concerns of the day. While it may seem benign, this indifference can actually prove corrosive to healthy societal-military relations and to the country's security. Without that engagement, the government, defence and the military may not receive the needed support or face the requisite scrutiny to assure that they are up to the task of protecting the state and society.

So what should be the goal? What is a healthy relationship between society and the military?

First, that relationship should be based on mutual trust and respect, in which the military *has earned society's regard*. In this relationship, the public should ideally approach the military with what I would describe as a stance of respectful scrutiny. By that I mean understanding that the military performs a needed, if at times uncomfortable, task of threatening and employing violence to protect the security of the country's citizens.

It means taking it upon oneself to be knowledgeable about the military and asking careful questions while demanding transparency and accountability. That scrutiny should both applaud success and demand action in the face of failure. It requires posing questions in good faith, with the intent to uncover and improve in order to safeguard the institution and its members.

In short, the public must hold the military to a high standard, unrelentingly so, while also appreciating the role it plays in the difficult and turbulent security environment of today.

Relatively simple, right?

Of course, I realise this is a tall order. Rarely if ever is this ideal met, but societies can fall closer and farther from the ideal.

This brings me to my next question, which is what can be done to promote a healthy relationship between the military and society?

I would argue that all of us in this room and beyond have a role to play. Academics, researchers, members of civil society, the media, civilian officials and service members themselves can help expose society to what the military does and familiarise them with it.

To do this, they must meet the public where they are and share insights with its members in ways that are accessible and even fun. This might occur through writing, and reporting, personal conversations and public outreach, and, where appropriate, through social media or engaging with popular culture. There is lots of room for creativity and new ideas here.

There are also some specific things that civilians and the military itself can do to promote a healthy societal-military relationship, and I want to take some time to delve into those.

I will begin with the civilian side.

Elected leaders and public servants have some distinctive roles to play in ensuring healthy societal-military relations. One thing they can do is assure that the military is as capable and effective as possible, so that it may earn the public's trust and respect.

Here it is important to remember that the civilian leadership in a democratic system plays a vital and unique role. It is the translation mechanism from the will of the people into the actions of government and the state, including the military. This requires going beyond a baseline of civilian control, in which elected leaders have the final say over what the military does and how it is resourced. It means that civilians in the government and bureaucracy establish formal processes and informal norms to ensure a robust and critical, but constructive, evaluation of the military and its decisions. The public needs to know that the civilian leadership is itself engaging in respectful scrutiny of the military.

This is easier said than done. Indeed, the history of civilian control in democracies shows that there are important pitfalls to be avoided. One is for civilian leadership to be overly confrontational, failing to engage or marginalising the military when interacting with its leadership. Civilians should regard the military's expertise, and solicit and carefully consider its leaders' advice.

There is also the reverse danger—that is, that the civilian leadership is inadequately critical of the military. Civilian leaders must avoid being overly deferential and adapting to military positions without adequate scrutiny.

The lesson here is this: collegiality among civilian and military leaders based on trust and respect is essential; but also, civilians and military leaders bring various and distinct equities, responsibilities and expertise to the table. A bit of constructive disagreement across the civil-military divide can be healthy. It is likely needed for the best outcomes to prevail.

In this vein, civilian leaders can also ensure that institutional structures, incentives, and informal practices and routines are functional and that they do not rely too much on individual personalities. Doing so can render civil-military relations precarious, dependent on the idiosyncrasies of individuals. Well-crafted institutions also ensure continuity and robustness of effort within and across governments.

Elected leaders can also help build oversight capacity by investing in fostering more expertise in military affairs outside the armed forces.

Several of my colleagues based in Canada and the US who work on civil-military relations have recently completed a very large comparative study of oversight functions in democracies across the globe. One of the key findings in their research is that there is often too little expertise in defense and military-related matters in civil society, the bureaucracy, and in the committees and staffs of government officials. So there is a lot of work to be done here.

To bring all this back to the theme of the day: why does civilian oversight matter for societal-military relations?

Because, when civilian control, understood in these process terms, is robust, the military will be in a better position to carry out its mandate. It is more likely to be appropriately resourced and organizationally healthy. It will better be able to serve the interests of society and earn its trust and respect.

The civilian leadership also plays another key role in the societal-military relationship. That is to speak to the public about any challenges facing the military and be forthright when it is falling short at meeting expectations. Elected officials must also be willing, when appropriate, to support the military leadership engaging directly and honestly with the public, including about difficult issues.

That may appear a bit counterintuitive. Perhaps limiting information about challenges or negative outcomes is essential to avoid alienating the public. But I suspect that it rarely actually works that way. Indeed, one of the superpowers of democracy is the capacity to share problems and concerns and develop resilience in society to navigate them.

I might also add that obscuring information also means that the public lacks the capacity to hold the government and military to account for failures, which likely means the problems that generated the poor outcomes in the first place are more likely to persist. Finally, political leaders must speak to the people about the security challenges of the day. They must make the case to society as to why having an appropriately resourced and structured military is essential to their security. To do that they need to explain the international strategic environment and expose them to the threats as they see them.

Political leaders also need to explain the mandate and missions they intend to give the military, not just internationally but domestically, and define its jurisdictions in relation to the civil community relative to other state institutions and capacities. Elected leaders must decide what are the purposes of the military and communicate that to society.

Last, but not least, let me turn to the military and what it can do to assure healthy societal-military relations.

Essential is that its leaders attend to the profession of arms and ensure its wellbeing. Only when the profession is healthy can the military earn the respect of society and create a foundation of trust.

In particular, I want to focus on one crucial aspect of the military profession: its role in self-regulation and accountability.

A defining feature of a profession is that its members are granted autonomy to practice their craft contingent on maintaining the public's trust. As such, a key component of a profession is holding itself accountable for how well it serves society.

For the military, its domain of accountability encompasses everything from how it prosecutes war and performs in armed conflict, how its leaders run the military organisation and how well it protects the welfare of the men and women who serve in its ranks.

Indeed, if there is one sure way to undermine the trust essential to a healthy societal-military relationship, it is for the public to see that military leaders are failing to hold themselves and the institutions to account. No military in a democratic society can thrive without robust accountability for its actions.

In this regard, I would encourage military leaders to consider what I call their ‘theory of accountability’. For some military leaders, accountability entails holding individuals to account for failures of judgment, incompetence or poor leadership and applying disciplinary measures as appropriate up and down the chain of command.

To be sure, holding individuals responsible is essential; too often, militaries fall down in how well and thoroughly they assess culpability and mete out punishments, especially at senior levels. That is corrosive to trust not only with society but also within the military itself.

Yet also important is what is missed in this individually oriented theory of accountability. That is, the need to address the institutional and cultural causes that shape individual behavior and enable adverse actions and decisions in the first place. If the military is to earn the respect of society, military leaders must tackle these institutional-level causes of poor outcomes and performance, while also holding individuals to account.

I have spoken at length about the role of civilians in ensuring robust oversight. But military leaders, too, have an important obligation at the civil-military nexus. They owe elected leaders and civilian officials forthright advice and must be candid and honest about the costs and risks of different policies and actions. They should avoid what the scholar Carrie Lee calls ‘indirect politicization’ of military advice. This occurs when military leaders anticipate the preferences of political leaders and conform their advice accordingly, sometimes compromising their own views in the process.

At the same time, they must avoid the false conviction that their perspectives should prevail and be mindful of the mistrust that is bred by contorting advice in ways that privilege particular outcomes. The military leadership must commit to transparency with civilian leadership and offer advice candidly and forthrightly.

Again, all of this is to ensure the military remains healthy and effective, which is foundational to trust with society and to maintaining its earned respect.

The military, too, needs to invest in communicating with the public and encouraging ownership and engagement in its affairs. The public need to know that the military belongs to *them* and serves and protects its interests.

Perhaps most importantly, the military must seek to win the people’s respect through its excellence and performance. Having society’s adoration is not the same as earning its respect.

There are two final points I want to make about the military’s obligations to ensuring healthy societal-military relations before closing my remarks.

The first, I know from some experience, may step on some toes. I hope you will nevertheless find it useful food for thought and know that I mean these comments with all good will.

I have spoken about how the public should relate to the military. But service members also need to think about how they regard the society they serve.

Let me elaborate with reference to an article that journalist and author Tom Ricks wrote in the 1990s about his experiences interacting with U.S. Marines during their boot camp training. Ricks writes that he was dismayed to observe that after returning from their leave post training, many of the Marines said they felt alienated from their old lives. The Marines he met also spoke disparagingly, even contemptuously at times, about civilian society, citing the public's physical unfitness, undisciplined and uncouth behavior, selfishness and consumerism, as they saw it.

Ricks is citing an especially acute example of the estrangement and sense of superiority with which *some* service members regard civilian society. Survey research suggests that such attitudes, while not dominant, are also not an especially unusual phenomenon within democratic militaries around the world.

Now, to be clear, having pride in military service is essential. And service members *are* held to high and different standards than civilian society, for good reason. There are differences between military and civilian life, as I have noted.

But in some cases those differences can morph into something akin to arrogance and contempt. Such attitudes are deeply corrosive to the foundation of mutual trust essential to healthy societal-military relations. They are also contrary to the principle that the military serves and submits to society—the 'responsibility ethic' that underpins the military profession.

Senior leaders in democracies must be vigilant against the emergence of such views and role model healthy attitudes toward society themselves.

Finally, I will close with one last obligation that the military has in a liberal democracy. Without it, *there can be no* healthy relationship with society.

That is for its members to reflect upon and understand their commitment to uphold democracy. That commitment can have a taken-for-granted quality in established democracies: it can feel remote and abstract. It may seem like a non-issue.

Yet, it is vitally important because in countries around the world, we are seeing an erosion and hollowing out of democratic principles of government. In many cases, this erosion includes efforts by political leaders to undermine the military's commitment to serve all of society and its capacity to stand apart from partisan divisions, in favor of transforming it into an ally of a particular faction or party.

There is also concerted effort today by foreign actors to undermine democratic militaries. Authoritarian governments are trying to level the playing field through active propaganda campaigns aimed at dividing democratic militaries by amplifying societal tensions within them. The global adversaries of democracy know that a military's commitment to serve the common good is a remarkable strength. It enables initiative, innovation and resilience, and underpins military effectiveness.

For all these reasons, I would encourage leaders in every democracy—both civilian and uniformed—to inoculate their forces against such pressures.

They should invest in education and socialisation of their military members to strengthen and deepen that understanding of the democratic commitment. Do not assume that the military's core responsibility to uphold the principles of democracy is self-evident to all who serve. Even the most professional militaries may become vulnerable. This is not a time for complacency. The risks are too great.

Thank you.

About the Speaker

Dr Risa Brooks is Allis-Chalmers Professor of Political Science at Marquette University, Wisconsin, USA, and a non-resident fellow in the Future Security program at New America, as well as Senior Associate at the Center for Strategic and International Studies. She is the author of *Shaping Strategy: The Civil-Military Politics of Strategic Assessment* (Princeton), co-editor of *Creating Military Power* (Stanford), and *Reconsidering American Civil-Military Relations* (Oxford). Her work has appeared in *Foreign Affairs*, *The Washington Post*, *The New York Times*, and numerous academic journals. Dr Brooks earned her Ph.D. from the University of California, San Diego, and previously held research roles at the International Institute for Strategic Studies in London and Stanford's Center for International Security and Cooperation. Her research focuses on U.S. and comparative civil-military relations, strategic assessment, and military professionalism.

/ BOOK REVIEW

The Very Long Game: 25 Case Studies on the Global State of Defense AI

Editors: Heiko Borchert, Torben Schütz and Joseph Verbovszky

Springer, 2024, ISBN 9783031586484, 603 pp, RRP EUR €49.99 (hardcover), or downloadable pdf available at: <https://link.springer.com/book/10.1007/978-3-031-58649-1>

Reviewed by: Callum Hamilton and Adam J Hepworth

Around the world, states and defence organisations are rapidly developing their capacities to seize emergent opportunities in the military use of artificial intelligence (AI). Recent technological advances have enhanced the integration of cloud computing, data infrastructure and user interfaces. These developments are increasing the scope of human-machine interaction and improving the integration of AI within military capabilities. Today, AI-enabled systems are in use in active Middle Eastern and European conflicts, and in grey zone actions within the cyber domain that are becoming increasingly prevalent throughout the world.

The Very Long Game captures these developments in a series of 25 national case studies that provide a representative sample to help us understand and contrast emerging approaches to the military use of AI. This is the most comprehensive analysis of its type to date, representing a valuable resource for defence policymakers, industry and innovation units seeking to make sense of and accelerate the adoption of evolving global military AI landscapes.

Readers in the field of military AI will benefit greatly from the introductory chapter, in which the editors synthesise case studies and perspectives of the contributing authors. By summarising the national case studies, the editors make it clear that most countries and militaries:

- aim to develop technological advantage and leadership in the global AI industry
- define AI based on its literal meaning, generally as machines performing tasks that ordinarily require human intelligence
- view AI as an enabling technology or force multiplier, and emphasise applications within existing capabilities and force structures

- aim to use AI to accelerate friendly decision-making and disrupt adversaries
- focus narrowly on machine learning techniques leveraging recent digital modernisation initiatives for data and cloud infrastructure
- lack identified pipelines, funded programs, development environments and open architectures to rapidly translate AI applications into military capability
- face market barriers and institutional challenges to integrating AI into national industrial bases, regardless of political system or economic model
- centralise responsibility for adoption of AI with accountable officers, project offices and innovation units at the defence or service level.

The Very Long Game's use of case studies enables readers to compare and contrast national approaches, providing a useful perspective from which to recognise points of convergence and divergence. For example, most Western-aligned countries have mirrored the US approach, vesting responsibility for defence AI coordination, implementation and strategic guidance in some variation of a 'Chief AI Officer' supported by a project office. This approach contrasts with the Chinese strategy towards defence innovation, which has for some time focused on the 'intelligentisation' of warfare. 'Intelligentisation' refers to the need for information dominance, which can be achieved either by disrupting an adversary's decision cycles or by outpacing them. To this effect, emphasising military users' ability to exploit opportunities to apply AI at the edge may offer greater efficiencies compared to more reactive, centralised approaches. Other noteworthy national case studies include those of:

- **Ukraine**, which is engaged in 'the first conflict where both parties compete in and with AI', innovating and adapting with technology to seize transient advantages. Ukraine's experience highlights that conventional 'human-in-the-loop' approaches to the use of AI may have become outdated. The Ukraine example indicates that human oversight is increasingly seen as a 'formality' that inhibits the potential of autonomous systems by increasing the costs entailed in achieving direct control in contested environments. Since the book's publication, Ukraine has claimed that AI has been applied to some drones used during Operation Spider's Web to strike targets at Russian airfields, even after loss of signal with human operators
- **Turkey**, which contends that AI enhancements to decision-making systems would accelerate the adoption of autonomous systems, which Turkey views as not yet suitable for effective human-machine interaction. From the Turkish perspective, AI offers an initial layer of machine-machine control to help humans make faster decisions and to simplify human-machine interactions
- **the Netherlands**, which is leveraging its leadership in international law forums to develop global AI governance frameworks based on legal principles and maintaining command accountability. Dutch-led initiatives such as the Responsible AI in the

Military Domain Summit and the Global Commission for Responsible AI in the Military are driving militaries to translate principles into global norms for practitioners, while shaping their freedom of action to design and responsibly use AI-enabled capability.

The authors track the development of different waves of AI technology to highlight how states are harnessing recent advances in cloud computing, data infrastructure, and human-machine teaming in a military context. In response to recent commercial successes in applying machine learning and natural language processing techniques to ingest datasets and generate outputs, many states are now investing in similar capabilities to provide decision advantage to their future armed forces.

The Very Long Game highlights how militaries around the world are responding to emerging developments by investing heavily in data and digital infrastructure and platforms to develop, test, train and deploy AI technologies. The case studies emphasise a trend among states of implementing *data-centric* strategies for AI in the military. Data-centric approaches emphasise continually improving the quality, quantity and relevance of data to enable effective AI model training and performance. While this mirrors approaches commonly used in the commercial world, the editors raise some concerns about how data-centricity integrates with forces employing AI deployed in dynamic operating environments, often characterised by imperfect information and uncertainty.

The editors' concerns are particularly relevant in land environments where deployed machines face significant friction to negotiate complex terrain and interactions with human-centric operations. Uncertainty and deception by an adversary are enduring characteristics of warfare that challenge the ability of humans and machines to effectively adapt and respond to a wide range of contested and unstructured operating environments. Given this known situation, it should be expected that adversaries will attempt to disrupt AI-enabled systems, such as by compromising training datasets or the input data that machines rely on to process the environment and produce correct outputs. AI-enabled systems must therefore be designed and developed to integrate with the decision-making sequences that commanders and operators use to navigate environmental and operational complexity. A commander's ability to effectively and reliably use AI-enabled capability within operations requires situational awareness of prior decisions, adversarial actions, and an ability to anticipate expected behaviours and outcomes. The variability inherent in operational environments challenges defence organisations to train algorithms using datasets sourced from previous operations that are unlikely to be representative of future deployments. Synthetic data may supplement existing datasets, but it still requires developers to make assumptions about future adversaries and operating environments.

To address these challenges raised by the editors, data-centric approaches to AI model design and development must integrate with training and use at the tactical edge. Militaries face the technical challenge of providing computing power and networks to forward areas of operation, while end users face the operational challenge of controlling and adapting AI-enabled systems to their tactical needs in contested environments. There is therefore a need for decision-makers and developers to engage more closely with warfighter end users to understand how their needs may evolve depending on, for example, their area of operations, command, corps, sub-unit, platform(s), training and qualifications, or an adversary's order of battle. Developing the capacity within data-centric approaches to continually adapt and reconfigure applications to suit different end users would allow AI-enabled capabilities to be scaled at the tactical edge. This outcome could be achieved by providing tactical-level specialists with tailored lines of support to meet the unique needs of end users applying AI across the integrated force.

The Very Long Game outlines the contemporary applications of AI in the military. As militaries adopt AI-enabled systems more systematically, there is an emerging requirement for AI policies that translate theory and principles into practice. To ensure the responsible use of AI in accordance with national policy and obligations under domestic and international law, states will need to be prepared to establish new systems of governance and assurance. The sociotechnical approaches that connect practitioners and AI models with established systems of control remain an open and evolving challenge for militaries globally.

About the Reviewers

Callum Hamilton is AI Policy Lead of the Australian Army Robotics and Autonomous Systems Implementation Coordination Office (RICO) within Future Land Warfare Branch. In this role, Callum supports the Australian Army's responsible application and use of AI and autonomous systems in the land domain. Callum holds a Bachelor of Laws (Honours) and Bachelor of International Relations from Bond University and is currently completing a Graduate Diploma of Legal Practice at the College of Law.

Lieutenant Colonel Dr Adam J Hepworth is Director of the Army RICO. In this role, Adam leads the advancement of emerging technology, including robotics, autonomous systems, AI and autonomy for the Australian Army. Adam holds a Bachelor of Science in Mathematics from the University of New South Wales, a Master of Logistics and Supply Chain Management from the University of South Australia, a Graduate Diploma in Scientific Computation and a Master of Science in Operations Research from the United States Naval Postgraduate School, and a Doctor of Philosophy in Computer Science from the University of New South Wales. He is a Visiting Fellow at the University of New South Wales and an Expert Member on the Global Commission for Responsible AI in the Military.

/ BOOK REVIEW

The Dark Path: The Structure of War and the Rise of the West

Author: Williamson Murray

Yale University Press, 2024, ISBN 9780300279686, 473 pp, RRP US\$40 (hardcover)

Reviewed by: Matthew Jones

Williamson Murray's *The Dark Path: The Structure of War and the Rise of the West* offers more than a sweeping survey of Western military history. It presents a profound intellectual excavation of how war has not only followed but often propelled the ascent of Western civilisation. From the rise of bureaucratic states in the 16th century to the technological and ideological revolutions of the 20th and 21st, Murray's central thesis is straightforward yet formidable: warfare and social transformation are locked in mutual causality. The book invites deep reflection from any military reader, but for the Australian Defence Force (ADF) it also poses urgent questions about preparedness, strategic culture, and the nature of unpredictable future wars.

Murray identifies five military-social revolutions, each transforming the conduct of war and the shape of societies. These are (1) the rise of the modern state, (2) the Industrial Revolution, (3) the ideological mobilisation of the French Revolution, (4) the American Civil War as a convergence of ideology and industry, and finally (5) the scientific and computing revolution from 1944 to the present. These chapters are not merely historical; they are conceptual. Each demonstrates how states that adapted their institutions, ideas and capacities to the prevailing character of war gained not only military victories but structural dominance.

This is no linear triumphalist account. Murray critiques the widespread failure of strategic foresight across eras, emphasising that elites and military professionals consistently misunderstand the character of future conflict. He warns that the very technological capacities that once underwrote the West's dominance may now become its vulnerabilities, citing cyber threats, institutional rigidity, and the rise of authoritarian models of warfighting.

Murray's warning resonates strongly with Australia's current defence discourse, with the

ADF facing ‘the most challenging strategic circumstances since the Second World War’.¹ Yet, as Murray might ask, are our conceptual tools and institutional cultures evolving in tandem with the character of emerging conflict?

One of Murray’s most striking claims is that war is not simply a tool of policy but a structuring force in history; it shapes systems, disrupts equilibria, and births new orders. Clausewitz’s famous dictum ‘war is a continuation of policy by other means’ is thus only part of the story.² Murray suggests that war is also a *creator* of policy, ideology and civilisation itself. For the ADF, this insight demands a broader intellectual framing: that force design and strategic planning must engage not only with the technological aspects of modernisation but also with war’s more profound social, ideological and systemic ramifications.

In this context, Murray’s historical examples offer specific provocations. Consider the French Revolutionary *levée en masse*, a national mobilisation born from ideological upheaval. Or consider how railroads and industrial mass production during the American Civil War introduced logistical and operational tempos previously unimaginable. These were not merely shifts in doctrine; they were structural transformations. Similar revolutions are visible today in the accelerating nexus of artificial intelligence, multi-domain operations, cyber capabilities and grey zone conflict. Yet our institutions (educational, strategic and political) still largely remain within an intellectual framework forged in the Cold War.

For the Australian Army, the lesson is clear: innovation cannot be siloed within procurement pipelines or doctrine development groups. Murray suggests the past is a prologue, but cautions: ‘If the fundamental nature of war never changes, the opposite is true of war’s character.’³ These character changes are fuelled by periods of systemic disruption, institutional friction and unexpected overmatch. To prepare for future wars (especially those that arise rapidly or in ambiguous escalatory environments), the Army must become not just more lethal but more intellectually agile. This includes cultivating a strategic culture that values historical understanding, encourages dissenting analysis, and embraces conceptual experimentation.

Murray warns that the very technologies that enhanced Western dominance—computing, precision, surveillance—are now being leveraged by rival powers who do not share the same liberal democratic norms. He does not argue that the West is doomed but instead warns of strategic complacency. The ‘dark path’ is not inevitable; nor is continued ascendancy. The ADF must, therefore, grapple with the possibility that the next war will not resemble any recent examples in the Middle East or the Pacific.

Moreover, Murray's emphasis on the unpredictability of conflict has strong contemporary echoes. He observes that no elite has ever correctly predicted the character of the next major war, whether that be in 1914, 1939, 2001 or 2022. For Australia, this is a sobering reminder that wargaming, scenarios, and force structure decisions must be informed not only by intelligence forecasts and capability trends but also by humility. The 'unanticipated', be it technological disruption, mass mobilisation, or ideological warfare, must be placed at the centre of defence planning, not its periphery.

To that end, *The Dark Path* should not be read as a conventional military history but instead as a strategic provocation. It demands that officers, strategists and policymakers ask difficult questions: are our institutions intellectually prepared for systemic shocks? Are we building a force that reflects likely missions or only desirable ones? Are we educating leaders not just in tactics and operations but also in history, sociology, and the philosophy of war?

The Australian Army, in particular, can benefit from Murray's integrated view of warfare. His analysis suggests that strategy and society are not separate realms. A resilient and adaptable military must reflect the society it defends but also challenge that society to confront the reality of conflict. As Australia considers the future of conscription, cyber defence, territorial resilience, and joint regional operations, Murray's work offers a conceptual map, albeit a dark one.

In conclusion, *The Dark Path* is essential reading for leaders in the ADF and Australian strategic community. It does not make for comfortable reading; it challenges many assumptions underpinning liberal democratic defence policy. But that discomfort is productive. Murray reminds us that military advantage is neither permanent nor inevitable; it is the product of continuous, often painful, adaptation. If Australia is to remain secure in an era of strategic competition and systemic unpredictability, it must absorb not only the historical lessons of the West's rise but also the deeper conceptual patterns that underpin the structure of war itself.

About the Reviewer

Major Matthew Jones is an Army Reserve infantry officer and civilian paediatric surgeon currently serving as SO2 Strategic Analysis at the Australian Army Research Centre. He has commanded at a company level, posted as an instructor on the Combat Officers' Advanced Course, and deployed on multiple domestic operations. A recent graduate of the Australian Command and Staff Course, he holds a PhD in paediatric surgery, a Doctor of Medicine and a Master of Surgery, among several other tertiary qualifications. His current research focuses on the Chief of Army priority research area 'Defence of Australia'. He currently lives in Adelaide with his wife, Natalie, and their two daughters.

ENDNOTES

- 1 Australian Government, *National Defence: Defence Strategic Review* (Canberra: Commonwealth of Australia, 2023).
- 2 Carl von Clausewitz (trans. JJ Graham), *On War* (London: N Trübner & Co, 1873).
- 3 Williamson Murray, *The Dark Path: The Structure of War and the Rise of the West* (Yale University Press, 2024), pp. 8, 18.

/ BOOK REVIEW

Defeat and Division: France at War, 1939–1942

Author: Douglas Porch

Cambridge University Press, 2023, ISBN 9781107047464, 742 pp, RRP AU\$53.95 (hardcover)

Reviewed by: John Nash

One of the most fascinating aspects of the Second World War is France's rapid defeat at the hands of Germany in mid-1940. The success of the 'Blitzkrieg' was a shock to many and changed the dynamics of the war. It is easy to see the fall of Paris as the end of France's war, but this is far from the case. In the five years that followed, French military forces and political machinations were significant in Allied strategic considerations.

Douglas Porch has written widely on French military history and is well placed to write on France in the Second World War. *Defeat and Division* is the first of two volumes to examine France's war, covering the period 1939–1942.¹ It is a comprehensive analysis of France's preparations for war and the foundations of its defeat following Germany's invasion. It holds many lessons of value for students of military history, experts in military preparedness, army professionals, and those interested in coalition management.

France's role in the war, especially after 1940, is often misunderstood, and Porch sets out to clarify and reorient these popular but inaccurate views of France's war. An important starting point is the acknowledgement that, as Porch says, 'France did not exit the war with the signing of the June 1940 armistice'.² With this in mind, Porch explores the full range of French experiences during the first phases of the war, starting with the build-up to 1939, then mobilisation and the so-called 'Phoney War', followed by military operations and defeat, to round out the coverage of the conventional aspect of the war. Two transition chapters are also included; these focus on the political situation of Vichy France, and the oft-overlooked topic of French prisoners of war (POWs), both their experience and the issue of their use by Germany as a bargaining tool for France's good behaviour. Porch then moves on to the mobilisation of French resistance, especially externally, and the power plays leading to Charles de Gaulle rising to prominence. The volume culminates with the narrative moving to Africa and the Allied invasion in Operation Torch.

For those interested in military preparedness, Porch's examination of how France was situated entering the Second World War is fascinating reading. After examining the political and diplomatic manoeuvrings and policy of appeasement, Porch surveys French rearmament in the late 1930s. This review is focused on the two least prepared services, the air force and the army. In essence, air force mobilisation was a disaster as it dealt with insufficient industrial capability, antiquated aircraft designs and a lack of doctrine, and the air force was engaged in intense inter-service rivalry with the army.³ As with the air force, the army suffered from problems in both organisational capacity and the quality of materiel available. France had one of the largest armoured forces in the world at the time, but French tanks had small fuel tanks and were equipped poorly for the radio age, having either no radios, or radios that had limited range or were able to receive only.⁴ More seriously, the French Army simply did not have adequate doctrine or understanding of the tank as a weapon of war. Tanks were largely employed to support infantry—who did not know how to use them effectively—and were committed piecemeal against much larger German armoured formations, often with inadequate air or infantry support.⁵ Worse still, anti-aircraft guns were inadequate, both in quality and in numbers, and their control was a source of tension between the army and air force.⁶ Finally, all of this was hampered by an unwillingness to embrace radio communications, with field phones and dispatch riders/runners seen as the primary means of communication, and even carrier pigeons rating highly.⁷ Such materiel dysfunction and ill preparedness was a poor foundation for national defence.

These materiel and doctrinal problems were perhaps only symptoms of a much more serious problem: a lack of direction from the top, and a poor state of professionalism in the French military. The newly minted minister at the Air Ministry in 1938, Guy La Chambre, recognised the parlous state of national defence:

beginning with the fact that the government did not have an overall national defense plan coordinated with the three services, with budget allocations to match. Nor did the French military have a coherent command structure able to define a national defense architecture and a joint services combat doctrine.⁸

All organisations and hierarchies are subject to politics and tribalism, but the French Army of the 1930s was particularly divided and parochial, and generals became labelled by 'networks, connections, and religious habits'.⁹ Such a toxic culture within the officer corps is summed up by Porch: 'But this was the French army, after all, where it was said that lieutenants are friends, captains are comrades, majors are colleagues, colonels are rivals, and generals are enemies.'¹⁰ Moreover, the French Army's adoption of the methods of the Prussian staff course, after their defeat in 1870–71, might have borne fruit in the 19th century, but by the 1920s and 1930s the French staff course had become stale and unimaginative, focused on rote learning and tactics, and reducing many problems to mere calculations to be solved by formulae.¹¹ This no doubt contributed to the paucity of

effective doctrine leading into 1939–40. Finally, inter-service rivalry was rife. It was not only with the air force that the army was in dispute, and indeed the French Navy saw itself as the elite force, aristocratic and even religious in its disposition and self-importance.¹² This was the state of the French military as it faced down the threat of German invasion in 1939–40.

The decision to mobilise after the German invasion of Poland came on 3 September 1939. The *levée en masse* joined the Maginot Line as France's bulwark against invasion. Herein lies an illuminating case study of how *not* to do mobilisation. The French failure was both military and societal. From the outset, the terrible toll of the First World War hung over France, and many questioned whether Hitler and a resurgent Germany could be stopped.¹³ Porch argues that the failure of the *levée* itself was not preordained, but badly mismanaged.¹⁴ Those mobilised were required to take three to four days' worth of food with them. Reception centres were understaffed, there was insufficient room to house reservists, and many barracks lacked sufficient beds. Meanwhile, soldiers were issued outdated equipment, if there was enough to go around at all.¹⁵ Much of this mismanagement returns to the aforementioned issue of the French staff course, which had provided insufficient training and, most of all, insufficient numbers of staff officers to manage mobilisation. Just over half of the men eligible for call-up were in uniform by Spring 1940.¹⁶ Thus the *levée en masse* was not only of dubious quality; it was also lacking in *masse*.

On the home front, mobilisation proved deeply unpopular, especially as the Phoney War dragged on. From the start there was no clear narrative of why the French were mobilising. To many, the threat was far away in Poland and not, as in 1914, on French soil.¹⁷ As 1939 turned to 1940 and the months passed, military and civilian morale plummeted as people tried to make sense of a war without fighting, because 'mobilization without combat made the war seem like an abstract concept, relegated since October 1939 to the back pages of the papers'.¹⁸ During this long wait, the *levée* engaged in desultory training, lacking in expertise, equipment, or even sufficient ammunition, and doing little to dispel the boredom of the soldiers.¹⁹ When given leave, they were shocked to find a society that was not on a war footing in many respects, with those in uniform often treated with suspicion or contempt by civilians. This perfectly illustrates the dangers of mobilising too early, with little planning, with insufficient equipment, and without a narrative to drive popular support.

Thus when the Phoney War became real, the French were not prepared.

Porch pulls no punches:

What the historian is left with is a French military that was so operationally and tactically inept and out of date, and so poorly equipped and indifferently led, that even different force disposition most probably would not have saved the Allies from defeat.²⁰

Porch does an excellent job of narrating France's defeat. In the context of a journal focused on the army profession and idea of mission command, it is worth singling out Porch's contrast of the German and French approaches. While the German 'Blitzkrieg' was fuelled by *Auftragstaktik*, the French way was a rigidly top-down system of orders and control. Porch summarises this in his acerbic style:

[French] Officers with no orders who acted on their own initiative courted charges of insubordination, especially if their decision resulted in a reverse, which alas was the fate of most French decisions.²¹

French commanders established headquarters well behind the lines, and their aforementioned reliance on static phone lines and runners made it easy for them to lose contact with subordinate commands, rendering command and control difficult. It is an excellent example of how poor leadership culture, command, control and communication can destroy military effectiveness.

With chapters three and four covering the combat operation in France, Porch then turns to the oft-overlooked issue of French POWs in the aftermath of their capitulation. Some 1.8 million French soldiers surrendered, many having not even fired a shot, 'a national humiliation that translated into a psychological crisis'.²² Porch's examination covers both the experiences of the POWs as a group and how they were used by the Germans as leverage over the French. Essentially they were hostages to be traded for good French behaviour and used as a labour force to make up for the shortfall of working-age men in Germany.

The establishment of the Vichy government in France signalled a new phase of France's involvement in the war. Porch does an admirable job of capturing the nuances and shifts of politics and society in France and in the French colonies. The best-known phenomenon in this period is of course the idea of 'the French Resistance'. Porch does well to cut through the noise and lay out a more accurate way of considering this, not as 'the French Resistance' but as 'resistance in France'.²³ There was no unified bloc of resistance, but instead numerous groups with different ideologies, methods and loyalties that could never be united. This is why Charles de Gaulle and his externally based organisation were able to triumph politically in the postwar period.²⁴ Indeed, de Gaulle was very cool on the resistance movements, and did not like the presence of Allied personnel in such movements because it undermined the mythmaking of France having

liberated itself.²⁵ This was a sore spot for de Gaulle. As Porch illustrates, the French forces under de Gaulle were far less effective than he claimed, and less effective than other exiled forces such as the Polish. De Gaulle's obstinacy and arrogance in this regard did much to damage France's standing with the other Allies.²⁶

Defeat and Division is not a small book, but it is absolutely essential reading for those interested in the Second World War. Porch's narrative and analysis are both cutting and insightful. He pulls no punches but is not unfair in his analyses. This book should be read by anyone who is looking at military preparedness, mobilisation or the army profession, as the lessons from the French Army's defeat in 1940 are illuminating. Many myths and misunderstandings are demolished by Porch, and it is an invaluable contribution to the scholarship of the Second World War.

About the Reviewer

Dr John Nash is an Academic Research Officer at the Australian Army Research Centre. Previously he was a researcher at the Australian War Memorial for the Official History of Australian Operations in Iraq and Afghanistan, and Australian Peacekeeping Operations in East Timor. He was awarded a PhD from the Australian National University in July 2019. He is also a Lieutenant in the Royal Australian Naval Reserve, with nine years' full-time and 11 years' reserve service as a Maritime Warfare Officer. He was the inaugural winner of the McKenzie Prize for the Australian Naval Institute and Chief of Navy Essay Competition—Open Division, 2019. His most recent publication is *Rulers of the Sea: Maritime Strategy and Sea Power in Ancient Greece, 550–321 BCE*, Volume 8 in the series 'De Gruyter Studies in Military History'. His other publications include articles in the *Australian Army Journal*, the *Journal of Advanced Military Studies* (Spring 2024), the *Journal of Indo-Pacific Affairs* (March–April 2022) and the *US Naval War College Review* (Winter 2018, vol. 71). His areas of research focus include sea power and maritime strategy, littoral warfare, land power, and strategic studies.

ENDNOTES

- 1 The second volume will be the subject of an additional review by this reviewer in a future edition of the *Army Journal*. The second volume is Douglas Porch, *Resistance and Liberation: France at War, 1942–1945* (Cambridge University Press, 2024).
- 2 Douglas Porch, *Defeat and Division: France at War, 1939–1942* (Cambridge University Press, 2022), p. 4.
- 3 *Ibid.*, pp. 29–36.
- 4 *Ibid.*, p. 40.
- 5 *Ibid.*, pp. 36–40.
- 6 *Ibid.*, pp. 42–43.
- 7 *Ibid.*, p. 44.
- 8 *Ibid.*, pp. 45–46.
- 9 *Ibid.*, p. 47.
- 10 *Ibid.*, p. 54.
- 11 *Ibid.*, p. 75.
- 12 *Ibid.*, pp. 55–57.
- 13 *Ibid.*, pp. 71–72.
- 14 *Ibid.*, p. 72.
- 15 *Ibid.*, pp. 72–74. Interestingly, this echoes many of the issues that plagued France’s mobilisation in the Franco-Prussian War of 1870–71. See Rachel Chrastil, ‘Mobilization’, in *Bismarck’s War: The Franco-Prussian War and the Making of Modern Europe* (Penguin, 2023), pp. 27–43.
- 16 Porch, *Defeat and Division*, p. 76.
- 17 *Ibid.*, p. 81.
- 18 *Ibid.*, p. 110.
- 19 *Ibid.*, pp. 102–108.
- 20 *Ibid.*, p. 134.
- 21 *Ibid.*, pp. 143–144.
- 22 *Ibid.*, p. 230.
- 23 *Ibid.*, p. 376.
- 24 *Ibid.*, pp. 372–382.
- 25 *Ibid.*, p. 376.
- 26 *Ibid.*, p. 432. One should not forget the fact that the US and British had to arm, equip and sustain the French forces. See David D Dworak, *War of Supply: World War II Allied Logistics in the Mediterranean* (University Press of Kentucky, 2022), pp. 51–54, 182. Book reviewed by the author in *Australian Army Journal* 22, no. 2 (2025).

/ BOOK REVIEW

Urban Battlefields: Lessons Learned from World War II to the Modern Era

Editor: Gregory Fremont-Barnes

Naval Institute Press, 2024, ISBN 9781682477243, 392 pp, RRP USD\$44.95 (hardcover)

Brutal Catalyst: What Ukraine's Cities Tell Us About Recovery From War

Author: Dr Russell W Glenn

Key Point Press, 2024, ISBN 9798990915879, 532 pp, RRP AU\$45.05 (hardcover)

Reviewed by: Albert Palazzo

Urban operations are the type of battle that the military like to avoid but inevitably have to fight. The aversion is easy to understand. Urban fights usually result in heavy casualties, particularly among trapped civilians, and cause widespread destruction to housing and infrastructure. As the scale of firepower available to combatants has grown, the brutality of urban operations has commensurately increased. In earlier times, cities could be besieged and starved into submission, but since the start of the firepower age no-one has found a painless way to take a city that did not want to be taken.

There is a simple reason why the fight for cities is unavoidable. A city is where a majority of the population lives, where an adversary's government is located, where media is concentrated, where critical logistic hubs are found and where much of the enemy's vital national infrastructure sits. In addition, humanity has tended to establish cities at strategic points, such as on the shores of a good harbour, at the confluence of rivers, or near a pass through a mountain range. Humans also prefer locations with ready access to resources—in other words, cities are on or near desirable terrain that cannot be disregarded. As people continue to migrate to cities, the urban mission is likely to become more central, not less. Those who serve in the military, particularly those in the land force, will have little choice but to understand how to fight—and prepare to fight—in a city, despite any desire to avoid such operations.

In this context, these books by Gregory Fremont-Barnes and Russell W Glenn deserve the attention of all thinking military professionals. Individually, they are excellent and timely works; read together, they cover the entire gamut of how to take, manage and restore a city. Fremont-Barnes, as the editor of *Urban Battlefields*, and Glenn, as the author of *Brutal Catalyst*, make critical, insightful and complementary contributions to our understanding of how to undertake the urban fight and how to manage a city's population, both while the contest rages and in its aftermath. The 11 contributors to *Urban Battlefields* focus on the battle itself, drawing out lessons for those who may have to face the challenge of a future urban fight—after all, 'the wise man learns from the mistakes of others', as Otto von Bismarck once remarked. Glenn's focus is less on the battle and more on what happens once the fight has ended and the process of rebuilding and rejuvenation begins. The two works also differ in their focus. As befits a collection of essays, *Urban Battlefields* ranges widely across 20th and 21st century case studies, with the exception of an essay on the 1846 battle for Monterrey in the war between the United States and Mexico. By contrast, Glenn's goal is to highlight what needs to be done to rebuild and restore urban life in Ukraine as a result of its current war with Russia.

The reader will likely be familiar with some of the battles that are the focus of *Urban Battlefields*. Much has already been written on the fights for Manila, Grozny, Mogadishu and Fallujah, although it is surprising that Fremont-Barnes did not source an essay on the battle for Hue. Perhaps Hue has already received sufficient coverage and there was little left to discover. In fact, this is why his inclusion of chapters on the less covered fights for Ortona (1943), Cherbourg and Saint-Lô (1944), Warsaw (1944), Seoul (1950), Gaza (2009) and Raqqa (2017) are so welcome. These less popular battles give the collection a certain freshness, and this reviewer found Lee Windsor's and Jason Geroux's chapter on Ortona particularly thought provoking.

There is a consistency in Fremont-Barnes's collection. Over the past several centuries, urban battles have taken on a certain pattern. Common elements include restricted fields of fire, the presence of subterranean features and multi-storey buildings, a challenging communications and command environment, and a defender that can hide much more easily than in the surrounding countryside. The terrain's natural advantages all lie with the defender, which forces the attacker to proceed slowly and to choose between expending lives and expending ordnance. As the authors demonstrate, in cities from Ortona to Gaza it is often easier, quicker and safer to level a building than to clear it.

Even with the assault force's best intentions these battles invariably prove costly to civilian populations. When US forces closed up on Manila, the plan was to methodically clear the city rather than destroy it. As Brian Drohan shows in his essay, ferocious Japanese resistance, Japan's use of civilians as hostages and shields, and rising American casualties forced a change in US practice. Rather than lose American soldiers (which the US needed for the invasion of the Japanese homeland), the hammer came out and

Manila's buildings were the anvil. Those caught inside, combatants and civilians alike, simply died. As all the essays in *Urban Battlefields* demonstrate, such is the pattern when taking a city.

Military professionals may find Glenn's focus on the recovery from war less interesting than its actual waging. This would be unfortunate. That the military will be able to avoid having a role in the recovery phase of war is about as likely as its being able to avoid an urban battle in the first place. In fact, this likelihood is the essence of Marine General Charles Krulak's observation on urban combat that became known as the 'Three Block War'. As some troops engage the enemy, other force elements may guide civilians to safety, while others try to restore the urban water supply. Soldiers are likely to encounter residents who align with the enemy and will thus need to be guarded and protected, while for other civilians the military will need to provide care and offer hope. Expecting to evade recovery operations is unwise. Soldiers should plan for this activity instead.

Recovery operations are a key element in bringing peace to a war-devastated region. As soldiers know, the true goal of war is not victory on the battlefield. Rather, it is achievement of a war aim, which is then followed by resumption of the conditions of normality that peace aims to bring. Eventually, the military will be able to hand over much of the reconstruction to government agencies, as well as to national and international aid organisations—as Glenn highlights—but until that happens, it is the military that will be doing the heavy lifting. In fact, even during the conflict the military must be cognisant of what may be too vital to destroy (no matter the tactical situation) because it provides an essential service that will be soon needed. None of this is easy; nor can it be made up on the fly, as the US experience in Iraq demonstrated after the removal of the Saddam Hussein regime. Done right, reconstruction requires complex and detailed planning, the kind of planning at which the military can excel when tasked with it as a priority. Glenn also makes it clear that perception is critical because, in the internet age, the world will be watching and no force wants to win the tactical battle only to lose the strategic one. The Australian Army might consider expanding its civil-military cooperation capability so that anticipatory planning, before a crisis hits, becomes a part of its standard planning process.

A reviewer can always find something to quibble about, although in the case of these books this has been harder than usual. In every collection some essays stand out more than others, sometimes simply due to the reviewer's background and personal biases. For me, Douglas Winton's 'The Battle for Fallujah' came across more as a post-operation report than as a studied analysis. Equally, while Fremont-Barnes's case study on the battle for Monterrey is an enjoyable and interesting read, it struggles for relevance as the only pre-World War II chapter. Perhaps Fremont-Barnes can use it as the starting point for a second volume on earlier urban conquests—a step this reviewer would welcome. Glenn could have brought greater discrimination to *Brutal Catalyst*. He is a well-known urban warfare scholar, so the book is packed with the detail that reflects his passion for

the subject, but as a result it is arguably longer than needed. For example, some of the non-Ukraine backstory is not core to the main narrative.

War is ultimately about control of the people and the resources that the land contains. In fact, people are themselves a resource too and—as leaders of the Australian Department of Defence are fond of saying—they are our most important one. This has only become more accurate in the information age. Cities are likely, therefore, to be the critical battleground of the future and an unavoidable one. Fremont-Barnes and Glenn deserve to be read by military professionals. It is through incorporating the lessons these authors offer that the military will underpin its readiness for the wars to come. I recommend both without reservation or hesitation.

About the Reviewer

Dr Albert Palazzo is an Adjunct Professor at the University of New South Wales, Canberra, in the School of Humanities and Social Sciences. Formerly he was the long-serving Director of War Studies in the Australian Army Research Centre. His latest book is *The Big Fix: Rebuilding Australia's National Security*, in which he argues for a different Australian security policy and a more relevant organisation for the ADF.

/ BOOK REVIEW

Mao's Army Goes to Sea: The Island Campaigns and the Founding of China's Navy

Author: Toshi Yoshihara

Georgetown University Press, 2023, ISBN 9781647122829, 176 pp,
RRP USD\$34.95 (softback)

Reviewed by: Dan Phelan

Much of China's history, from its ambition and grandeur through to its conflict with foreign powers, has come from and been tied to the maritime domain. In its conquest of and victory over the Kuomintang (KMT), the Chinese Communist Party (CCP) faced the arduous task of building a navy from the ground up with limited resources and pressing influences coming from all directions, including the Korean War restricting the CCP's ability to take the island of Formosa (Taiwan). By analysing the formation and early campaigns of the People's Liberation Army Navy (PLAN), this book provides insight into some of the operational decisions the modern Chinese navy might take in the South China Sea.

Mao's Army Goes to Sea: The Island Campaigns and the Founding of China's Navy, by Toshi Yoshihara, examines this area and the recent history of the latter period of the Chinese Civil War and revolution. The book traverses this history as the PLAN shifted its focus from a predominantly land campaign against the KMT, forcing it to the south of China, to forming a naval fleet from a small number of the KMT's coastal defence fleets which were abandoned, defected or surrendered. The CCP's capability transformed from one with little central control and scattered sympathetic armed groups (such as the Qiongya Column in Hainan), to a fulfilled fighting force with growing naval capability and greater centralised control. The author draws parallels with this short period of history, comparing the PLAN in its early days from the period of 1949 to 1950 to some elements of its organisation and structure today. This comparison provides the basis for Yoshihara's commentary on how the PLAN might operate in a contemporary naval campaign. In doing so, he finds that the PLAN's contemporary leadership still draws influence from nostalgia born of its historical mandate when developing its policies and practices.

The book covers a range of events and elements in the formation of the PLAN. In Chapter 1, Yoshihara introduces the scope of the book and explains the scholarship and study that is included in it. The book then introduces the East China Navy as the formative precursor to the PLAN, tying it into the formation of the PLAN in Chapter 2. In this chapter, Yoshihara also introduces the sequence of actions that the PLAN was deciding upon for a conquest of Taiwan. As Yoshihara outlines, this would either be an island-by-island attack or replicate US military island-hopping strategies. Importantly, the chapter fills an intellectual gap in Western scholarly understanding about the seemingly 'obscure' nature of China's seaward turn during and after the Chinese Civil War.

Chapters 3 and 4 analyse the East China Navy's early days of formation and introduce a key character in China's naval history, Zhang Aiping. In April 1949, Zhang assumed control of the East China Navy, which was newly created as an entity within the structure of the People's Liberation Army (PLA). Zhang faced considerable obstacles in his efforts to raise the service, due to limited available resources. But through a pragmatic vision, he was able to utilise former Nationalist naval officers and sailors to undertake modest-scale campaigns late in 1950. This served as a proof of concept, testing and validating ideas while enabling the national navy to be stood up. In September 1950, the PLAN was created as an independent navy separate to the PLA, with Xiao Jinguang appointed as the first commander. Yoshihara examines the influence of Zhang on Xiao and unpacks the early doctrines of the PLAN. Taking a long-term view of Chinese sea power and its requirements, a key motto of the PLAN was to 'look to Western navies, learn useful lessons'. Yoshihara concludes this discussion of the founding of the PLAN and its history by focusing on Xiao's enduring influence on the PLAN today.

Chapters 5 and 6 consider the key events and campaigns the PLAN undertook during this period of its formation, including the smaller island campaigns of Xiamen, Kinmen and Zhoushan in the west and south-west of China. Contrasting these early campaigns to the larger offensives of Hainan Island and the Wanshan islands, these chapters showcase the evolution of the PLAN over a short period. Yoshihara analyses a variety of Taiwanese and PLA accounts to provide different insights into the results and outcomes of these campaigns.

Chapters 7 and 8 present Yoshihara's own assessment of the formation period of the PLAN. First, Yoshihara assesses the PLA's 'seaward turn' through original analysis of Chinese scholarship and appraisal of the campaigns and events previously discussed. Yoshihara also presents contemporary analysis of Chinese civilian-military partnerships, including an assessment of how the PLAN has been able to supplement military capabilities with Chinese civilian ships, and its experimentation with resupply infrastructure. Yoshihara also provides recommendations for future research in order to develop deeper understanding of this period. One suggested area of inquiry includes the impact of the Korean War in setting back the PLAN's modernisation plans due to the shift of focus by the CCP from the PLAN to the People's Liberation Air Force throughout the conflict.

Mao's Army Goes to Sea: The Island Campaigns and the Founding of China's Navy presents a unique and interesting perspective that is useful to anyone interested in understanding the historical context within which the PRC's modern-day navy operates. The author also usefully contrasts historical analysis with observations on how the PLAN is studied and understood today. The book's intended audience would likely be those interested in and curious about defence studies, the Indo-Pacific, and Chinese military history. Written in a clear and concise manner, this is a book that can be easily understood by those less familiar with Chinese studies and sea power.

Yoshihara ultimately seeks to analyse the early chain of events that led to the founding of the PLAN, alongside its early period of campaigning as the CCP pushed the KMT to Taiwan. Overall, this book is extremely valuable for the insights it provides into the formation of the PLAN. Readers of this book will be well placed to understand the impact of the PLAN's early campaigns against the KMT, and to assess how modern-day Chinese practitioners have used lessons learned from this period to shape the policies and practices applied in contemporary conflict. Through grounded assessment of sources, this book presents a digestible narrative that provides useful insights into the foundations of China's modern navy.

About the Reviewer

Daniel Phelan is a Cyber Security Strategy Specialist at the Department of Defence. Previously he was a graduate within the department, undertaking a rotation with the Australian Army Research Centre. He holds a Bachelor of Information Technology and Arts and a Diploma of Languages, with majors in International Relations, Computer Networks and Security, and Mandarin Studies from Monash University.

/ BOOK REVIEW

De Gruyter Handbook of Drone Warfare

Edited by: James P Rogers

De Gruyter, 2024, ISBN 9783110741926, 517 pp, RRP EUR €139.95 (hardcover)

Reviewed by: Carl Rhodes

The use of drones in warfare has expanded significantly over the past two decades and, as with the applications of any new technology, many questions have been raised about their past, present and future role. These enquiries encompass not only the technological capabilities of drones and their effectiveness on the battlefield but also the ethical implications of remote force application, the integration of drones into the principles of 'just war' theory for various conflict scenarios, and their potential impact on civilian populations. While many argue that drones are simply a continuation of a longer evolutionary trend enabling the application of force from distance with improved precision, it is undeniable that drones have garnered public and research attention in a way that few other weapons have since the atomic bomb.

The *De Gruyter Handbook of Drone Warfare*, edited by James Patton Rogers, addresses these questions comprehensively across the past, present and future of drone warfare. This substantial publication, comprising 517 pages, draws upon the expertise of 37 contributors across 30 standalone chapters that delve into a wide range of drone-related research topics. The contributors hail from diverse backgrounds, including military, history, law, research and human rights. Each chapter includes a comprehensive list of references, enabling readers to pursue further exploration of topics of interest.

The book consists of four sections, commencing with introductory chapters that explore the historical and scholarly aspects of drone warfare. Daniel Gettinger's chapter, 'Defining Drones', serves as a foundational introduction by providing a concise historical overview of combat drones, spanning from World War I to the present day. Amelie Theussen's chapter, 'Drones and International Law', establishes a useful reference point for subsequent chapters by examining the unique legal challenges associated with drones and their deployment by various nations over the past two-and-a-half decades.

I found two chapters in this initial section to be less connected to the overall themes of the handbook, specifically the chapters related to drone art in combat and to the role of gender and drones in counterinsurgency. Both topics are important but were not explored again elsewhere. The authors of the chapter on the latter topic demonstrated a comprehensive understanding of the role of gender in counterinsurgency operations, but I found the connection to drones a bit more tenuous.

The handbook then chronicles the period known as ‘the First Drone Age’, spanning from 2001 to 2020, during which the United States extensively utilised drones in counterinsurgency campaigns both within and outside established conflict zones. This section primarily concentrates on the deployment of medium-altitude long-endurance drones, such as the Predator and Reaper. Christopher Fuller provides an in-depth historical account of the CIA’s drone program, dating back to the 1980s, and elucidates the role of CIA drones following the September 11 attacks. While drones were touted as a more effective means of combat against terrorists and insurgents who operate in concealed environments, chapters in this section offer a valuable analysis of the overall impact on civilians potentially affected by drone strikes. Furthermore, Daniel Brunstetter examines the legality of employing drones for self-defence against hostile groups outside of conflict zones and assesses whether this should override the sovereign rights of a country where a strike may occur.

The subsequent section explores the concept of ‘the Second Drone Age’, a period characterised by a significant expansion in the types of drones employed, tactics utilised, technologies integrated, and actors involved in drone operations. Drones have played a pivotal role in numerous conflicts since 2020, including Russia’s invasion of Ukraine, Libya’s civil war, and combat in Africa, Yemen and Ethiopia. Notably, violent non-state actors have also harnessed the capabilities of drones to support their endeavours. This section presents an in-depth analysis of the drone operations employed in these conflicts, evaluating their effectiveness or shortcomings on the battlefield. The examination of these conflicts proved to be the most captivating and insightful chapters of the book for me.

The concluding section focuses on ‘the Third Drone Age’ and addresses the emerging challenges posed by drones. Topics covered include the impact of rapidly advancing technology that enables drone swarming and enhanced autonomy, the application of international law to inexpensive, small drones, and methods for countering drone threats. Commercial off-the-shelf drones are prominently featured throughout this section. The 10-year retrospective chapter authored by Michael Kreuzer, which draws upon his doctoral dissertation findings on the diffusion of military drones, provides valuable insights. Overall, Kreuzer’s model of military diffusion and proliferation trends is validated. However, the absence of predicted investment in counter-drone technology resulted in his thesis underestimating the number of nations capable of effectively fielding small armed drones.

Overall, James Patton Rogers's handbook is a valuable resource and a crucial reference for a diverse range of audiences. The comprehensive list of authors and the quality of their contributions are noteworthy. As one of the few in-depth texts on drone warfare, the book serves as a valuable resource for individuals seeking to delve deeper into a specific aspect of contemporary drone research. Experts in international law, military ethics, the impact of war on civilians, and the influence of technology on military operations will find specific chapters that connect their areas of interest to the latest drone-related research, complemented by a detailed bibliography.

For individuals interested in drones, robotics, and autonomous systems in general, the entire book is a worthwhile read, albeit a lengthy one. Fortunately, the standalone nature of the individually contributed chapters allows for a gradual consumption of the substantial handbook. Each chapter can be read independently, enabling readers to complete the book at their own pace.

About the Reviewer

Dr Carl Rhodes is the founder of Robust Policy and a senior fellow with the National Institute for Deterrence Studies. He hosts the Deterrence Down Under podcast and previously served for 25 years with RAND Corporation.

CALL FOR SUBMISSIONS FOR THE AUSTRALIAN ARMY JOURNAL

The *Australian Army Journal (AAJ)* focuses on the presentation of contested and evidence-based research and analysis. The Australian Army Research Centre (AARC) is looking for well written, scholarly *AAJ* submissions on topics related to Army and the land domain, with a particular focus on the priority research topics identified in the Army Futures Research Framework. These topics include:

State of the Australian Army Profession. The analysis of the past, present and future state of the profession of arms in an Integrated Force, including how Army needs to adapt to the enduring nature and changing character of war.

Littoral Manoeuvre. Operations and manoeuvres in the Indo-Pacific including the protection of key trade routes and maritime approaches.

Defence of Australia. Army's contribution to the Integrated Force in homeland defence.

Robotics and Autonomous Systems and Artificial Intelligence (AI) Governance. Assurance mechanisms for AI in operational settings, and systems of enabling infrastructure.

The AARC welcomes submissions from professionals of all ranks and experience, academics, industry and think-tanks. Articles should comprise structured arguments that lead to logical conclusions or recommendations that can help posture Army for future land warfare challenges in the short, medium and long term. The AARC is particularly interested in *AAJ* submissions that:

- deliver analysis based on tactical or operational level experience
- provide a perspective on issues that challenge orthodox views
- place the lessons of historical experience in a contemporary context.

Process

Authors work with the AARC's editorial team in a process of iterative review. Initially, submissions are assessed for their suitability by the AARC Academic Research team, with selected articles then subjected to a double-blind review by an academic and a subject matter expert. Articles deemed appropriate for further consideration are presented to the AAJ Editorial Advisory Board for consideration. The Director General, Future Land Warfare is the ultimate publication authority for all AAJ content.

Please note that the AARC cannot accept articles which have been published elsewhere or are currently under consideration for publication with another journal.

Word length (including endnotes)

Journal articles can be between 4,000-8,000 words in length (excl. references)

Book reviews should be between 800-1200 words (excl. references)

Author biography

A 100-word (approx.) biography should be included that outlines a summary of your educational history and professional experience.

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Are you studying towards a postgraduate degree or doctorate and writing a substantive research paper related to the land domain? If you have written an original manuscript on a priority topic identified in the [Army Futures Research Framework](#), the Australian Army Research Centre (AARC) may be interested in publishing your work as an AARC Occasional Paper (<https://researchcentre.army.gov.au/library/occasional-papers>). Priority topics include:

State of the Australian Army Profession. The analysis of the past, present and future state of the profession of arms in an Integrated Force, including how Army needs to adapt to the enduring and changing character of war.

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A 100-word (approx.) biography should be included, that outlines a summary of your educational history and professional experience.

Paper abstract

A paper abstract should be included. The purpose of the abstract is to summarise the major aspects of a paper. A good abstract will also encourage a reader to read the entire piece. For this reason it should be an engagingly written piece of prose between 200 and 500 words that is not simply a rewrite of the introduction in shorter form.

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Please make your submission using the AARC's [Contribute](https://researchcentre.army.gov.au/about-us/contribute/contribute-article-paper-or-publication) page (<https://researchcentre.army.gov.au/about-us/contribute/contribute-article-paper-or-publication>).

AUSTRALIAN ARMY RESEARCH CENTRE

The Australian Army Research Centre (AARC) was established in mid-2016 in accordance with the wishes of the then Chief of Army Lieutenant General Angus Campbell. It is the successor to the Land Warfare Studies Centre, and sits as a Directorate within the Army's Future Land Warfare Branch in the Land Capability Division of Army Headquarters.

Role

The AARC conducts strategic studies, research and analysis, fosters debate and advocates the value of the joint land force to Government, academia and the public.

Charter

The AARC is dedicated to improving the Army's understanding of the State of the Australian Army Profession. Its purpose is to promote the contribution of the land force to integrated operations in peace and war. The AARC conducts applied research on the employment and modernisation of Army with particular reference to Australia's circumstances and interests. It raises the level of professional debate on war and its challenges within the Army, the nation and international audiences. The AARC enhances the professionalism, leadership and ethical awareness of Australian soldiers and officers.

To disseminate ideas and to promote debate, the AARC maintains a vibrant publication program. The AARC's flagship publication is the *Australian Army Journal*, now over 70 years old, on its website: <https://researchcentre.army.gov.au/library/australian-army-journal>. The AARC also publishes Occasional Papers, Reading Lists, the Land Power Forum and other shorter works on its website.

The AARC contributes to Army's understanding of the future character of war and the advancement of land power through a number of initiatives. These include:

- contributing to the development of strategic concepts, strategies, and force structure options
- publishing intellectual debate through the *Australian Army Journal*, Occasional Papers, and the Land Power Forum
- managing the Keogh Chair and the Staff Ride Programs
- managing the Army Research Scheme
- mentoring the work of CA Scholars and CA Honours Students.



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