

Air Power

The Future of Australian Air Power: A Soldier's View

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This paper provides a soldier's view of the future of Australian air power. It argues that the professional experiences of the last 25 years are increasingly irrelevant, given the uncontested nature of the airspace during that time. A return to great power competition, and an accelerating change in the character of warfare, means we must re-imagine 'airmindedness' for the middle decades of the 21st century. The paper proposes one way of addressing this is a shift from air-land integration to all-domain orchestration. The paper then examines how such a re-imagining might take place, through the medium of the ongoing transformation of the Australian Army. It proposes new concepts, unified by the 'big ideas' of manoeuvre and targeting. It considers adjustments to command and control (C2), with a particular focus on airspace below 10,000 feet and the ideas of 'supporting/supported' command. It examines next generation capabilities. Finally, it considers a unifying culture between the Australian Army and the Royal Australian Air Force. The paper concludes by proposing that amphibious and littoral warfare should be the litmus test for integration: the most complex of military operations, and the place where we must orchestrate if we are to thrive.

Introduction

I have been supported by air power throughout my 25 years as a soldier. I recall standing as part of an armoured battlegroup in Kuwait on the eve of the invasion of Iraq in 2003, watching with wide eyes as Tomahawk cruise missiles flew over us to start the war. Just 7 years later I was in Afghanistan, at the peak of the Predator-era, leveraging what was at the time the most sophisticated aerial surveillance system constructed in human history to find, fix and strike insurgent networks. I returned to Afghanistan towards the end of the campaign to command an air-mobile Brigade Reconnaissance Force. Here, I not only leveraged lift and attack aviation to outmanoeuvre the insurgent but I did so under comprehensive ISR and close air support. At a highpoint of our tour, my Joint Terminal Attack Controller (JTAC) and I had no less than 17 assets allocated in our 'stack'. I have always had the air power guardian angel above me.

My appreciation for this has grown over time. As a young officer my vision was firmly focused down at my compass and my feet, or at most a couple of thousand metres along the barrel of a tank main armament: blinkered by inexperience. But as time passed, I become increasingly aware of the value of the air domain that existed all around me. In air power parlance, I developed 'airmindedness' (Royal Australian Air Force, 2022). I would not have survived without it.

As I stand here in the early years of a new era of great power competition, however, I have come to a realisation. Almost all my previous experience is irrelevant, for one

principal reason: at no stage in my career has the airspace been contested. The alliances and coalitions I have fought for have manoeuvred in the air domain with impunity, uncontested and supreme.

It is the opposite today. The airspace of the modern battlefield is – and will now always be – highly congested and viciously contested. The full gamut of traditional threats is being applied by peer (and indeed beyond-peer) adversaries, with both a mass and precision not seen since World War II.

Even more confronting are the new threats emerging as the character of war changes at the fastest rate certainly since the industrial revolution, if not in human history. The spectre of massed and truly-autonomous remote systems, kinetic space weapons, cyber-attacks and electronic warfare make the air domain an increasingly lethal space.

As an Australian soldier, it is therefore clear to me that I must re-imagine my view of the utility of air power from my perspective on the land. I must take into account a number of thorny factors: Australia's strategic challenges, our revised National Defence Strategy (NDS) (Department of Defence, 2024), the emergence of new domains of war, the remarkable impact of technology, and the evolving cultures and characters of the Services, to name but a few.

This paper is my attempt at this re-imagining, an effort to bring my airmindedness into the middle decades of the 21st century. It proposes one way of grappling with the challenges of the future: through a shift in thinking from air-land integration, to all-domain 'orchestration'.

The transformation of the Australian Army: looking up at the sky, not just out to the sea?

The Australian Army is in the midst of its most significant transformation in generations, as it strives to meet the direction of the NDS to 'optimise for littoral manoeuvre with a long-range land and maritime strike capability' (Department of Defence, 2024). Both elements of this direction have significant implications for the Army's relationship with the air domain, and for the frame of our airmindedness.

This starts with the establishment of the littoral as the Australian soldier's primary operating environment. The littoral is described in its simplest terms as 'the part of the country that is near the coast', drawn from the Latin *littoralis* meaning 'of or pertaining to the seaside' (Australian Army, 2024). It immediately conjures a mental image of a land/sea interface: a battlefield beset by brown water, shallows, mangroves, coastal urban sprawl, beaches and rivers. The Army's capstone publication has on its cover a determined infantry soldier valiantly dragging himself out of the surf (Australian Army, 2024). He is, perhaps unsurprisingly, looking down at the beach, probably considering his life choices.

This mental image is, however, insufficient. The Army's conceptualisation of the littoral must be inclusive of all domains: of the airspace above, the space terrain and the entirety of the electromagnetic spectrum (EMS). Such a realisation should make our soldier instinctively, and probably nervously, glance up at the sky above; at the hundreds and indeed thousands of kilometres of manoeuvre space that have clear access to the beach.

The breadth of this battlespace is only increasing, particularly when one takes into account the second part of the NDS direction to the Army – the requirement for 'long-range land and maritime strike'. The more military explanation of the littoral is 'the area of the sea that influences the land, and the area of the land that influences the sea' (Australian Army, 2024). This has traditionally been measured in the tens of kilometres. The introduction into the Army's arsenal of the High Mobility Artillery Rocket System (HIMARS) and the Precision Strike Missile (PrSM) will soon extend this to up to 1,000 kilometres, with an apogee of missile flight in the tens of thousands of feet (Conroy, 2025). The concept of the littoral, while still firmly tied to the coast, can now have a horizon far beyond its traditional meaning.

This airspace has long been congested but there is now a new factor: persistence. During the invasion of Iraq in 2003, the only flying assets owned by my battlegroup were the bullets, tank rounds and artillery shells at our disposal. Their flight was dumb, predictable and designed to be terminal. The exponential growth of remote and autonomous systems – from First Person View (FPV) drones to loitering munitions – has changed all that. It is now entirely realistic for a land force to have a form of intimate 'close air support' in the air, all the time, at every echelon from squad to brigade, and all controlled at that echelon (or even operating without human direction). The airspace below 10,000

feet has now become so cluttered that some air power experts have started referring to it (helpfully or otherwise) as the 'air littoral', distinct from the 'blue air' above (Bremer & Grieco, 2021).

The demand for the Army to re-conceptualise the littoral is telling of the scale of change in the environment. It is no longer good enough for the Australian soldier to be fixated on the horizontal plane. Every soldier stood on coastal terrain must be able to perceive it in all three dimensions, thousands of feet high, and potentially with a horizon of hundreds of kilometres. The need, however, is for aviators who can do the same in return: able to understand the complexity of the littoral in all domains, and the conduct of operations within it.

Indeed, one can argue that a new era of air-land integration is needed, one characterised by an inter-Service and all-domain empathy that goes far beyond anything we have achieved so far.

Of echelons and autonomy in the littoral: the shift to all-domain orchestration

Air-land integration has a long pedigree, particularly in World War II and the Indo-Pacific. General Dwight D. Eisenhower was clear in the aftermath of World War II that Operation Overlord would never have succeeded without the closest coordination between the air and land forces in Normandy (Eisenhower, 1948, pp. 539–540). In the South West Pacific Area (SWPA), from Buna-Gona to Aitape-Wewak, the integration of the missions of General George Kenney's Fifth Air Force, including the No 9 Operational Group of the Royal Australian Air Force (RAAF), with United States (US) and Australian amphibious and littoral operations lay at the heart of McArthur's island-hopping strategy (Wright, 2024). By the early 1980s the US Army had captured the need for deliberate integration of air and land operations in the concept of 'AirLand Battle': a significant intellectual step that went much of the way to set the stage for the tactical and operational successes of the 1991 Gulf War and beyond (Skinner, 1988).

Today, however, the ideas of 'integration' and 'coordination' seem insufficient. They are too slow and leave too many seams to be exploited. I believe the Australian Defence Force (ADF) needs to go beyond these historical concepts and explore an approach of all-domain orchestration in order to succeed on the modern battlefield. Orchestration should bring into the mind of the reader the image of a musical conductor and an orchestra: the seamless weaving together of various specialist instruments of military power to make the whole far more than the sum of its parts. This is a complex blend of science and art. But how to achieve it?

The Chief of Army Lieutenant General Simon Stuart recently described the Australian Army's transformation through the medium of 'four Cs': concepts, command and control, capability, and culture (Laird, 2025). This is a useful tool to consider how we might better achieve orchestration of the air and land (and indeed all) domains.

First to 'concepts'. A mere glance at the NDS and the evolving character of warfare in the wars in Ukraine and the Middle East makes it clear that we will need to develop

a range of concepts that, if not truly unique to Australian military culture, are certainly new, unusual and challenging.

Remarkable advances in missile and surveillance technology, for example, imply a very real and tangible threat of short-notice, very-long-range strike against Australian assets, both in the near region and domestically. This threat is new. Combine this with the accelerating proliferation of remote and automated/autonomous systems of all sizes, and the need for a sophisticated Australian Integrated Air and Missile Defence (IAMD) concept is obvious and pressing. Similarly, the wholesale Army tilt towards a focus on littoral and amphibious warfare, one that taps into the character of the Pacific War but with the added potential for hypersonics and layered electronic warfare (EW) attack, requires new concepts of joint littoral warfighting fit for the battlefields of the 21st century. Even newer is the potential for an offensive land-based missile/strike contribution to the control of the air or the sea. The list goes on.

I do not intend to develop these concepts here (other far more qualified professionals are already doing this work). I will instead consider the method by which they might be orchestrated. Like a musical composition, each concept will need to consider how to weave together all-domain actions in time and space to achieve the desired outcome. An orchestra rightly does not approach this by committee; it relies on a composer or conductor. In the ADF, this has manifest in the idea of 'Joint Force Integrators': a Service that takes the conductor role for a given concept, when it predominately resides in their traditional domain. For IAMD, this is rightly the RAAF. For joint littoral warfare, where the outcome is most often on the land, it is the Army. In theory, the conductor ensures that concepts are developed through careful consultation, but without the dangers of consensus.¹

This is a strong approach, but I argue that we also need to agree a series of core, cornerstone ideas that tie it all together. The first requirement, I believe, is to double down on our collective commitment to the philosophy of manoeuvre warfare. The most used definition of manoeuvre is that of the US Marine Corps, who describe it as 'a warfighting philosophy that seeks to shatter the enemy's cohesion through a variety of rapid, focused, and unexpected actions which create a turbulent and rapidly deteriorating situation with which the enemy cannot cope' (US Marine Corps, 1997). This remains the most suitable unifying approach for

a modest-sized military such as ours, one with a necessary focus on asymmetry within a strategy of denial.

Nothing that has emerged so far in the changing character of war fundamentally challenges this. The codification of new domains has not definitively demanded alternatives to manoeuvre theory; it is still just as useful and relevant to speak of 'manoeuvring' in space and cyberspace to achieve positional advantage over an enemy. Despite all the talk of a 'drone revolution' in Russia's illegal and immoral invasion of Ukraine,² both sides continue to strive to achieve manoeuvre (although this is now exceptionally hard in a continental, land-based attritional war in Eastern Europe).³ The inherently psychological idea of manoeuvre should, I believe, continue to unify the ADF's new multi-domain warfighting concepts.

The second unifier should be the practice of 'targeting'. For soldiers this has long, and I argue unhelpfully, been the province of specialists or experts: an outcome of the post-9/11 Predator-era innovations of the global war on terror (GWOT). This separation is now a false doctrine, which requires renunciation. Targeting must become a common practice for soldiers, aviators and sailors of all ranks and specialisations, one that brings us together through a single lexicon, unified doctrines and a connecting mindset. Achieving this will require genuinely new approaches. On the land, the training and exercising of ground force commanders has traditionally focused on combined arms tactical manoeuvre, with targeting often left as a specialist adjunct. This must evolve to a far more reasoned balance for commanders of the skills of tactical manoeuvre and the skills of targeting. This is the case from Battlegroup to Divisional level: the echelons where orchestration is turned into violent action most effectively.

Importantly, a common practice of targeting does not imply a common approach to weaponeering. This remains, rightly, a single-Service expertise. As a ground force commander, I do not need to understand the intricate workings of F-35 munition selection, any more than a P-8 pilot needs to understand the data-systems that underpin a HIMARS strike. But we do all need to be talking the same language about the targets we are selecting, why we are selecting them, and the psychological effect we are seeking to have on the enemy by striking them at the time and place of our choosing.

An understanding of common concepts brings us neatly to the second 'C' of command and control (C2). Form follows function, and therefore our systems of C2 need to

1 For the dangers of a 'consensus' approach, one need look no further than the wisdom of Margaret Thatcher in the Sir Robert Menzies Lecture at Monash University in 1981. In her speech, Thatcher described consensus as 'the process of abandoning all beliefs, principles, values and policies in search of something in which no-one believes, but to which no-one objects – the process of avoiding the very issues that have to be solved, merely because you cannot get agreement on the way ahead. What great cause would have been fought and won under the banner "I stand for consensus"?' (Thatcher, 1981). Later in life she concluded that consensus was 'the absence of leadership'.

2 Australian Prime Minister's statement on Russia's illegal and immoral war of aggression against Ukraine (Albanese et al., 2025).

3 In a recent RUSI *Insight Papers*, for example, respected analyst Dr Jack Watling discusses how the Ukrainian Armed Forces are developing new and emergent approaches to combined arms manoeuvre. These emergent approaches remain rooted in manoeuvre theory, rather than rejecting it (Watling, 2025).

evolve in line with new approaches of orchestration. Starting at the forward line, the JTAC employed at the Company-level should likely remain as the mainstay of terminal control. This highly respected and understood model is underpinned by nearly two decades of air-land integration in the GWOT, and there is little sense or reason to discard it. It has value as a steady cultural connection between ground and air forces, if nothing else. Evolution is, however, probably required at every level above, driven by the need to grapple with the challenging space that some refer to as the 'air littoral'.

As highlighted earlier, the airspace below 10,000 feet is becoming increasingly congested, with persistent and loitering air and aviation assets being deployed at every echelon, and in an intensely contested EMS.⁴ New ADF C2 constructs need to resolve the C2 of this airspace. The possessive ground commander in me instinctively wants to control this important aspect of my Area of Operations (AO), with freedom to decide what flies where and when, and more importantly what munitions enter and leave the battlespace.

Nevertheless, I am long enough in the tooth to know that this aspiration is likely impractical and outdated: even if it was feasible, I would be woefully unprepared within my headquarters to assume such a responsibility. A far more realistic model below 10,000 feet is the 'supported/supporting' command relationship that is becoming common in modern warfare, underpinned by far greater integration of air and land C2 nodes at each echelon. 'Supported/supporting' relationships can work when underpinned by pragmatism, clarity of intent, humility and personal empathy between commanders.

The Australian Army is taking steps to optimise our C2 structures for better orchestration between the air and land domains. The 7th Brigade Headquarters (HQ) is increasingly tailored for the execution of air-land strategic force projection as the Army's Contingency Force Brigade (Brennan, 2023). The creation of the 10th Brigade, inspired by the US Army's multi-domain task force, provides the platform to orchestrate long-range fires and medium-range ground-based air defence into all-domain operations (Sydenham, 2025).

The most substantial and important change, however, is the re-elevation of the Division as the Army's unit of action. This is founded in the judgement that the Division is the best echelon from which we can orchestrate truly all-domain tactical actions for littoral and land warfare. The Divisional HQ is the sweet spot: the place where 2-star command experience, situational awareness, intelligence, secured communications and tactical engagement authorities all come together. It is, in my judgement, where the RAAF might best evolve its scarce land C2 footprints: in conceiving the future form of the Tactical Air Control Party

(TACP). This is where the challenge of command and control should be addressed.

The final layer for C2 consideration, with just one degree of separation from the Division, is at HQ Joint Operations Command (HQ JOC). Here, I offer support to the work already underway. HQ JOC's shift to a component model of C2 is the optimal approach to allow orchestration of air and land operations, specifically at the theatre level. The focus here is rightly on the effective force-generation, synchronisation and enduring sustainment of the ADF's precious air assets across a primary theatre that includes 51% of the earth's surface, ensuring that they are available at the right time and place to provide the best net military benefit.

Again, I believe a common mindset and lexicon of 'manoeuvre' and 'targeting' will support a healthy relationship between the Army-provisioned Joint Force Land Component Commander (JFLCC) and Joint Force Special Operations Component Commander (JFSOCC), and the Joint Force Air Component Commander (JFACC) – no matter who is 'supported' or 'supporting' at any given moment. HQ JOC is also the natural place for integration into coalition C2 structures for the air domain: a practice well founded on the RAAF's generational investment in relationships with the US Air Force.

New concepts and C2 structures are then underpinned by the third 'C': capabilities. This is where the NDS's focus on an 'integrated force' should come to the fore. The ADF's next generation of air-land capabilities must be integrated by design, from first principles, if we are to successfully create a technological nexus for orchestration. It will not be enough to come together at the point of convergence. The most urgent areas of focus are increasingly clear, mostly centred on common systems to enable C2: data backbones and standards, joint targeting networks and machine-speed processing at the tactical edge. The careful alignment of the air battle management project (Conroy, 2024) and the land command, control, communications, computers and intelligence (C4I) modernisation project (AusTender, 2025) demonstrates that this work is already broadly underway, and I do not need to repeat it here. The ADF is working hard to pull the sensor, the decision-maker and the shooter closer together.

What I do seek to emphasise, however, is the importance of realism in context. Those responsible for integrating ADF capabilities in an era of great power competition must all approach it from a common understanding of the environment in which we are going to fight. To me, this means war. Not crisis, not conflict, not limited intervention, but full-scale war – likely as an underdog and against a beyond-peer adversary. Our project plans and slide presentations tend to sanitise this reality but Ukraine and Gaza show us that war remains as Clausewitz described it, as a phe-

⁴ It should be noted that aviation assets are considered a 'land power' capability; force generated and operated by the Army as part of the land warfare combined arms fighting system.

nomenon of brutal violence, inherent unpredictability, paralysing fear and confounding friction.

This visible zeitgeist of modern war should make us suspicious of anyone who offers a 'silver bullet': a single system or capability that will make the battlefield predictable, 'transparent' or that will offer a decisive edge. History, including the last four years, tells us that they are almost certainly wrong. Quite simply, if drones, satellites, missiles or cyber operations were truly revolutionary in modern war, then the war in Ukraine would be over by now. It is not. Because they are not.

So instead we must develop capabilities, both on the ground and in the air, that are fit for the realities of Clausewitzian, full-scale war. These cannot rest on an assumption of perfection. As then Lieutenant Colonel H. R. McMaster wisely told us in 2003, this is a dangerous fallacy (McMaster, 2003). Our capabilities must instead be built for friction and degradation. They need to be 'good enough' to survive in a highly contested EW environment. They need to be able to take hits and keep on fighting. We need to invest in the mundane as much as the hyper-technical: common logistics and airfield engineering equipment as much as attack aviation and fifth-generation aircraft. Manoeuvre is still reliant on sufficient mass, so assets need to be cheap enough and simple enough that we can regenerate them quickly, domestically and at reasonable cost. Above all, our next generation of capabilities must be ready to be adapted once the true character of war reveals itself. Simplicity, it is worth remembering, is a principle of war. These are perhaps the most relevant lessons of Ukraine and Gaza.

The greatest challenges, and perhaps the greatest risks, lie in the effective application of autonomy and artificial intelligence (AI). Our status as a tech-savvy middle power with a modest-sized military demands that we make the most of this opportunity. It is the only pathway to achieving the mass we will need to manoeuvre against numerically superior adversaries, and the only way we will grapple with the data-heavy complexity of modern war. But we must be clear-eyed on the environment within which we are seeking to apply these technologies, and realistic about what they can achieve and when. The air domain seems like the ideal place to experiment with autonomy and AI: it carries an impression of being clean and clinical (the domain of 'surgical strikes'), where the dispassionate calculus of analytics can presumably thrive. We must not be persuaded by this. The air and land domains are intrinsically intertwined and likely to be equally chaotic in a full-scale, regional war.

Take, for example, one of the best examples of friction in war: air-land fratricide and target misidentification. This has been a problem since at least 1943, when 34 C-47 transport aircraft of the US Army Air Force were shot down by friendly fire in just two days in Sicily, decimating the 82nd Airborne Division (Meilinger, 2013). It remained a problem 60 years later in the invasion of Iraq. I vividly remember the fear I felt as US Marine Corps Cobra gunships, to which we had no communications, fired missiles into abandoned enemy armoured vehicles just metres away from our tanks. We were not sure if they knew who we were, or if we were next. Tragically, two A-10 Thunderbolts of the 190th

Fighter Squadron got it wrong just days later, mis-identifying and strafing reconnaissance troops from our colleagues in the Blues and Royals, killing Lance Corporal of Horse Matty Hull (Ministry of Defence, 2003). Russian aircraft friendly-fire losses in Ukraine suggest that the addition of two decades of technology has made no tangible difference (Zabrodskyi et al., 2022).

So, will autonomous systems, or those controlled by AI, accentuate or reduce this risk? Optimists will assure us that it will be the second: that autonomous systems will be more effective at identification and discrimination than humans. Again, we should carry a healthy suspicion. Like most things in autonomy and AI, the core questions are likely to be about sufficiency of trust and confidence, set in the context of war. What level of system positive identification (PID) confidence should be required before last-mile autonomous terminal guidance is unleashed into Australian systems, amongst Australian troops? 100%? 95%? Or does expediency in war demand it to be much lower? How well will this trust and confidence stand up against the fog, fear and friction of real battle? How important is social licence in the use of these technologies? Such questions should be front and centre as we consider the most advanced air-land capabilities of the future.

The final 'C': culture and the profession of arms

The final 'C', that of culture, is deserving of a section of its own. Despite all the technological discussion above, both the Army and the RAAF remain rightly committed to being people-centric organisations. This is where we are already most united. While we may seem very different as military branches, we recruit from the same gene pool: intelligent, fit, adventurous young Australians who want to serve their country. It is often no more than a sliding-doors moment of decision that defines whether a recruit wears the light blue of the RAAF or the khaki of the Army. Soldiers and aviators are connected by their nationality, attitude and motivation. By Australian culture.

These cultural connections provide the ideal foundation for a new, intimate era of all-domain orchestration. The best medium to achieve this is easy to identify: it is the 'profession of arms'. The fact that soldiers, aviators and sailors all belong to a common profession, in the traditional sense of a profession like law or medicine, is one of the strongest opportunities we have to come closer together. We are well poised to do this; indeed it is directed to us at the highest level. Chapter 6 of the ADF's capstone doctrine, Australian Military Power, makes it clear that every member of the Defence Force is part of a common Australian profession of arms (Australian Defence Force, 2024, pp. 67–76).

The team in ADF HQ have invested heavily this last four years in codifying a common set of professional ideas in the series of publications entitled 'The Ethos of the Profession of Arms'. From character to ethics, leadership to command, the core foundations have been established (Australian Defence Force, 2026). The existence of a common Australian martial profession is therefore not a matter for conjecture

or debate: it is instead a stated position of ADF doctrine and policy, to which all Services must adhere.

The idea of a Western profession of arms has its historical roots in the land domain, and it is therefore unsurprising that the Australian Army is strongly committed to it. The Army's current senior leadership sees strengthening the Army's professional foundations as a vital factor in our comprehensive response to the NDS. In 2024, they commissioned a holistic 'review of the state of the Army profession' (Stuart, 2024a, 2024b, 2025). Note the use of the language of 'the Army profession'. This is an important nuance. It is not for the Army to review or critique the ADF's capstone expression of the profession of arms. It is instead for us to consider how the Army best expresses that direction within the land domain's cultural sub-set: how we adhere to the ADF's professional standards when providing our specific expertise of fighting wars on the land.

This review has helped us 'see ourselves' as a Service. Importantly, it has also helped us explain ourselves to our sibling Services. A year into the review, I believe the approach has value for better all-domain orchestration, and I commend it to the RAAF as being potentially useful. Like a Venn diagram, I contend that all three Services require a distinct expression of the ADF's unifying profession of arms. We each have strengths specific to our domains, the result of decades if not hundreds of years of institutional experience of fighting in the air, on the land, or on and under the sea. This diversity is a strength in itself, which must be embraced and protected. It is what makes the whole more than the sum of its parts. The better defined the Service 'circles' of the Venn diagram, the better we can analyse and draw together the best overlaps without diluting the richness of Service culture.

The ADF is particularly suited to a cultural approach defined by Service professions and then unified by the profession of arms. Each Service maintains a highly developed training and education system optimised to teach warfighting within their specific domain. These systems are genuinely world-class. The ADF's highly developed joint professional training and education enterprise then creates the interconnecting sinews between them. All that is needed are some tweaks to optimise how we best use this network for professional adaptation. First, we might draw together closer relationships between ab-initio schools. Just 20 kilometres separates the Army's 1st Recruit Training Battalion from the RAAF's No 1 Recruit Training Unit, so it makes sense that the 'airmindedness' journey for the Army's recruits could start from the very outset. Second, both Services might invest in a shared professionalisation of NCO education (an area of traditional underinvestment in comparison to officer development).

Finally, and in an enduring theme, the whole enterprise could be more sharply focused on a common context of the study of war and large-scale warfighting. The case-in-point here is the Australian Defence Force Academy (ADFA). With the current Chief of Air Force (Royal Australian Air Force, n.d.), Chief of Navy (Royal Australian Navy, n.d.), Vice Chief of the Defence Force (Australian Defence Force, n.d.-b.) and the Chief of Joint Capabilities (Australian Defence

Force, n.d.-a) all as graduates, ADFA is rightly the jewel in the ADF crown for developing inter-Service cultural connections at the very outset of the profession. The last 20 years, however, have seen the curriculum and faculty increasingly focus on science, technology, engineering and mathematics (STEM), as well as cyber and business degrees, with a commensurate reduction in investment in the traditional study of war as a phenomenon: the canons of war studies, military history, classical strategy, civil-military relations and politics (Mazanov, 2018).

In an era that the NDS describes as the 'most challenging strategic environment since the Second World War', I believe this comparative investment represents a risk (Department of Defence, 2024, p. 5). The need for STEM degrees in a high-tech ADF is undeniable, but all professional study should be grounded in the brutal realities of war's nature if it is to be relevant for an age of great power competition. This sharpens ADFA's original purpose: the teaching of undergraduate studies in a military context as the foundation of the profession of arms (something civilian institutions cannot do). A reinvestment at ADFA towards this purpose might prove confronting, but a clear-eyed, common understanding of war is essential for adaptation. It will benefit not only the Army/RAAF relationship but also the ADF's readiness for war as a whole.

Therefore, I commend a profession of arms cultural approach to all-domain orchestration. For this to work, though, one final principle must be in place. All soldiers, aviators and sailors must consider themselves part of a shared profession. This sounds self-evident but it cannot be taken for granted. Samuel P. Huntington, one of the original architects of the modern profession of arms, argued in the late 1950s that 'military professionalism is synonymous with officership' (Huntington, 1957). The modern Australian Army challenges this division between officers and enlisted, arguing that everyone who wears the uniform must be part of the same profession, connected by a common code of honour and conduct (Stuart, 2024b). This has triggered a valuable cultural debate within the Army. Do all of Australia's aviators consider themselves part of a shared Air Force profession? Or is there perhaps a divide between pilots and ground crew that would test the RAAF's collective will to fight in war? It is not for me to answer these questions, but I respectfully believe they are worth asking.

Conclusion: amphibious and littoral warfighting as the litmus test

For the last two years, RAAF Glenbrook has kindly hosted the senior leadership of the Australian Army for a strategic framing discussion. It is a beautiful and historic venue. First World War artwork adorns the conference room: images of biplanes, bombs and leather jackets, and the proud faces of the first Australian military aviators. It never takes long for someone (Army or RAAF) to reflect that these are as much Army memories as those of the Air Force, given the Australian Flying Corps' roots in the Army in 1912 (Australian War Memorial, 2021). The reality is that both Services are cut from the same historical cloth and should be close, institutional siblings. The two World Wars,

Vietnam, and Iraq and Afghanistan have all made the importance of effective air-land integration clear. This is not a point of contention.

Our ability to achieve effective integration over the last hundred years, however, has not always been smooth. Air Vice Marshal Stephen Edgeley tells us, for example, that the Australian Army Air Corps was formed as a direct result of the RAAF's decision to deprioritise light aircraft support to the Army in the 1950s (Edgeley, 2023, pp. 14–18). The Army has, at times, failed to make its own priorities and needs clear, and the RAAF has often emphasised high-tech strike to the detriment of less-glamorous investments in forward air controllers and air liaison officers. Protectionist behaviours have manifest most when budgets are tight, and shared institutional catastrophes like the 1996 Blackhawk incident have left scars. However, when it has really mattered – in war – both Services have quickly broken down such barriers. This was particularly the case in the Pacific War, where (as Alan Stephens tells us) 'Australian soldiers received blue ribbon service from their nation's air arm' (Edgeley, 2023, p. 26). When the chips have been down, the Army and the RAAF have been there for each other.

The evidence is mounting that we are now approaching another of those times. A new era of great power competition is combining with a character of war that is changing faster than perhaps at any time in human history. This environment threatens large-scale war against beyond-peer adversaries. Time is not on our side. We need to adapt now, avoiding the traps of inter-war thinking; as Field Marshal William (Bill) Slim argued after Burma, 'in peace, the function of tactical air support of land operations is apt to fade, but in war it's urgency will increase' (Mankowski, 2016).

I have argued in this paper that this environment demands an approach that goes beyond air-land integration, to all-domain orchestration. A new era of collective air-mindedness. This is feasible, but it will require focused consideration and aligned investment across our two institutions: in concepts, in C2, in capability, and particularly

in culture. Importantly, we must work hard to make the most of the collective strengths of our unique Service identities, but without blurring or diluting them. Integration is a means to a battlefield end, not an end in itself.

How will we know if we are succeeding? My final conclusion is that we should look at amphibious and littoral warfighting as the litmus test for progress. These are rightly viewed as the most complex and challenging of military operations. They are also the most likely medium where Australian air and land assets will fight together for real in our region. If we cannot thrive fighting together in the archipelagic battlespace in our north, or in our own littoral regions, then we are highly unlikely to be able to defend Australia effectively. The tests of each Talisman Sabre, and other like-minded exercises, are therefore critical. The performance of the Amphibious Task Group Headquarters, the ADF's best lightning rod for joint tactical action, should be a dominant marker.

As with most things in history, however, this is not the first time we have faced such a challenge. It last emerged in 1942 with the Imperial Japanese attacks on Darwin, and with the need to transform the Australian military for the defence of Australia, and for the trials of the Pacific War. The years of amphibious and littoral warfighting that followed stand as the apogee of the relationship between the Army and the RAAF, perhaps the finest hours in our shared history. From the Kokoda Track to Lae, neither Service could have succeeded without the other (Air Power Development Centre, 2020). This is a collective experience we should work hard to exploit, especially as it ended in an outcome that is increasingly rare in modern war: that of victory.

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References

- Air Power Development Centre. (2020). The Air Campaign over the Kokoda Trail. *The Runway*. Air Force. <https://runway.airforce.gov.au/resources/link-article/air-campaign-over-kokoda-trail>
- Albanese, A., Marles, R., & Wong, P. (2025). *Three years on, Australia stands with Ukraine*. <https://www.minister.defence.gov.au/statements/2025-02-24/three-years-australia-stands-ukraine>
- AusTender. (2025). *Land4140S3CCISTS-2V1*. AusTender. <https://www.tenders.gov.au/Atm/ShowClosed/6dd573d0-fdef-4a91-a2f8-53cfb659a8cd?PreviewMode=False>
- Australian Army. (2024). *Australian Army Contribution to the National Defence Strategy 2024*. Australian Army. <https://www.army.gov.au/our-work/strategy/australian-army-contribution-national-defence-strategy-2024>
- Australian Defence Force. (n.d.-a). *Chief of Joint Capabilities: Lieutenant General Susan Coyle AM CSC DSM*. Australian Government. <https://www.defence.gov.au/about/who-we-are/leaders/chief-joint-capabilities>
- Australian Defence Force. (n.d.-b). *Vice Chief of the Defence Force: Air Marshal Robert Chipman AO CSC*. Australian Government. <https://www.defence.gov.au/about/who-we-are/leaders/vice-chief-defence-force>
- Australian Defence Force. (2024). *ADF-CO-0 Australian Military Power Edition 2*. Department of Defence.
- Australian Defence Force. (2026). *Doctrine*. The Forge. <https://theforge.defence.gov.au/doctrine>
- Australian War Memorial. (2021). *The Australian Flying Corps: Warfare in a new dimension: the Australian Flying Corps in the First World War*. Australian War Memorial. <https://www.awm.gov.au/articles/first-world-war-flying>
- Bremer, M. K., & Grieco, K. A. (2021). The Air Littoral: Another Look. *The US Army War College Quarterly. Parameters*, 51(4), 67–80. <https://doi.org/10.55540/0031-1723.3092>
- Brennan, R. (2023). *First for brigade air and land integration*. Department of Defence. <https://www.defence.gov.au/news-events/news/2023-08-11/first-brigade-air-land-integration>
- Conroy, P. (2024). *Government invests \$500 million in defence capability and delivers job boost*. Australian Government. <https://www.minister.defence.gov.au/media-releases/2024-04-24/government-invests-500-million-defence-capability-delivers-job-boost>
- Conroy, P. (2025). *First test in Australia of advanced strike missile being co-developed with United States*. Australian Government. <https://www.minister.defence.gov.au/media-releases/2025-07-25/first-test-australia-advanced-strike-missile-being-co-developed-united-states>
- Department of Defence. (2024). *National Defence Strategy*. Australian Government.
- Edgeley, S. (2023). *Creating a Potent Joint Force: The Practical Evolution of Inter-Service Cooperation*. Air and Space Power Centre. <https://airpower.airforce.gov.au/publications/creating-potent-joint-force-practical-evolution-inter-service-cooperation>
- Eisenhower, D. D. (1948). *Crusade in Europe*. Doubleday.
- Huntington, S. P. (1957). *The Soldier and the State: The Theory and Politics of Civil-Military Relations*. Harvard University Press.
- Laird, R. (2025). *Australian Army's Strategic Pivot: Adapting for the Indo-Pacific Century*. Sir Richard Williams Foundation. <https://www.williamsfoundation.org.au/post/australian-army-s-strategic-pivot-adapting-for-the-indo-pacific-century-dr-robbin-laird>
- Mankowski, M. (2016). An essay on the Success of Air-Land Integration during the Burma Campaign in World War II—An illustration of the importance of leadership, adaptation, innovation, and integration. *Australian Army Journal*, 13(2). <https://researchcentre.army.gov.au/library/australian-army-journal-aaj/volume-13-number-2-spring/essay-success-air-land-integration-during-burma-campaign-world-war-ii-illustration-importance-leadership-adaptation-innovation-and-integration>
- Mazanov, J. (2018). *ADFA: Fit for Purpose?* Australian Army Research Centre. <https://researchcentre.army.gov.au/library/land-power-forum/adfa-fit-purpose>
- McMaster, H. R. (2003). *Crack in the Foundation: Defense Transformation and the Underlying Assumption of Dominant Knowledge in Future War*. US Army War College. <https://doi.org/10.21236/ADA416172>
- Meilinger, P. S. (2013). Fratricide. *Air Force Magazine*, 68–71. <https://www.airandspaceforces.com/PDF/MagazineArchive/Documents/2013/January%202013/0113fratricide.pdf>
- Ministry of Defence. (2003). *Operations in Iraq: Lance Corporal of Horse Matty Hull*. UK Government. <https://www.gov.uk/government/fatalities/lance-corporal-of-horse-matty-hull>
- Royal Australian Air Force. (n.d.). *Chief of Air Force: Air Marshal Stephen Chappell DSC CSC OAM*. Royal Australian Air Force. <https://www.airforce.gov.au/about-us/leadership/chief-of-air-force>
- Royal Australian Air Force. (2022). *The Air Power Manual* (7th ed.). Air and Space Power Centre.
- Royal Australian Navy. (n.d.). *Chief of Navy: Vice Admiral Mark Hammond AO RAN*. Royal Australian Navy. <https://www.navy.gov.au/about-navy/leaders/chief-navy>
- Skinner, D. W. (1988). *Airland Battle Doctrine*. Strike and Amphibious Warfare Research Department. Center for Naval Analyses. <https://doi.org/10.21236/ADA202888>

- Stuart, S. (2024a). *Chief of Army Symposium Keynote Speech "The Human Face of Battle and the State of the Army Profession."* Australian Army. <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>
- Stuart, S. (2024b). *The Challenges to the Australian Army Profession.* Australian Army. <https://www.army.gov.au/news-and-events/speeches-and-transcripts/2024-11-25/challenges-australian-army-profession>
- Stuart, S. (2025). *Strengthening the Australian Army Profession.* Australian Army. <https://www.army.gov.au/news-and-events/speeches-and-transcripts/2025-04-03/strengthening-australian-army-profession>
- Sydenham, T. (2025). *Capability calls up 10 Fires Brigade.* Department of Defence. <https://www.defence.gov.au/news-events/news/2025-05-12/capability-calls-up-10-fires-brigade>
- Thatcher, M. (1981). *Speech at Monash University (1981 Sir Robert Menzies Lecture).* Margaret Thatcher Foundation. <https://www.margaretthatcher.org/document%2F104712>
- Watling, J. (2025). *Emergent Approaches to Combined Arms Manoeuvre in Ukraine.* Insights Papers. RUSI. <https://www.rusi.org/explore-our-research/publications/insights-papers/emergent-approaches-combined-arms-manoeuvre-ukraine>
- Wright, P. H. (2024). *Air Force Doctrine Paragon: General George C. Kenney.* LeMay Center for Doctrine Development & Education, Air University. <https://www.doctrine.af.mil/Portals/61/documents/Paragon/Jan-2024-Paragon.pdf>
- Zabrodskyi, M., Watling, J., Danylyuk, O. V., & Reynolds, N. (2022). *Preliminary Lessons in Conventional Warfighting from Russia's Invasion of Ukraine: February–July 2022.* RUSI. <https://static.rusi.org/359-SR-Ukraine-Preliminary-Lessons-Feb-July-2022-web-final.pdf>