

## Innovating for Impactful Projection

*Getting useful things quickly rather than perfect things too late*

Rory MacNeil and Mark O'Neill

*...our national interest lies in having a clear set of international rules of the road, around trade and around freedom of navigation—the global rules-based order—along with having the capability to hold any potential adversary at risk much further from our shores. In order to achieve both of these objectives we need a defence force that has the capacity for impactful projection across the full spectrum of proportionate responses...what is absolutely critical is that we now build a defence force that has the capacity in its specific platforms and people to be able to achieve this strategic posture.*

-Deputy Prime Minister Richard Marles MP, Hansard, Wednesday 15 February 2023

Australia's security is increasingly challenged by emerging pressures, great power competition, and an increasingly threatening strategic environment. New circumstances invariably require new approaches in statecraft and strategy. History's enduring lesson is nations who do not adapt to new challenges at first fail to thrive, and then they fail. We have been told the Defence Strategic Review, recently passed to the Australian Government, will bring a new era in strategic thought. It will direct the building of a strategic posture to protect our national interests and way of life. While the purpose of such an approach is enduring, the new strategic thought and posture necessary to rapidly adopt a doctrine of *impactful projection* will require a profound departure from the strategic stasis of recent decades.

Australia's defence and security environment is different from that which existed over the nearly half century since the release of the [1976 Defence White Paper](#). Australia was indeed a 'lucky country' during the last two decades of the 20<sup>th</sup> Century and the early 21<sup>st</sup> Century. It is important to acknowledge and understand how this history has shaped where we are today. It is the context through which Defence has until now seen itself and approached perceived problems.

Towards the end of the 20<sup>th</sup> Century, thermonuclear war represented Australia's only truly existential threat. Our immediate defence and security lay in a still-developing region of the world which posed neither existential threat nor profoundly complex security issues. The 1976 White Paper began an era of the long-term institutionalisation of a gap between hope, plans and expenditure. [The 1987 Defence White Paper](#) brought in the idea of 'strategic warning time'. This was seemingly policy genius - helping to account for, or at least provide semi-plausible excuses, for the development of some defence capabilities in the absence of any immediate or credible threat. The downside was it was equally capable of presenting an inherently logical argument to deny procurement of other potentially necessary capabilities. Hindsight suggests the idea of 'strategic warning' allowed the relative tardiness evident today in aspects of Defence capability acquisition to grow. When threat imminence or proximity aren't an issue, schedule also inevitably becomes less of an issue - and poor practice can become enculturated. A key indicator of this is the growth in the number and complexity of Defence processes associated with capability acquisition over recent decades.



Australia's immediate and key strategic challenge is to rapidly adopt the new doctrine of *impactful projection*. Defence's current capability development models are based on a now defunct idea of 'warning time'. With that false sense of security gone, we now must rapidly develop or acquire new capabilities. This will require adoption of an innovative new capability development and acquisition model. Thankfully, Australia need not invent a bespoke approach from first principles – this has been done before, most recently by a strategic competitor within the Indo-Pacific.


The Chinese People's Liberation Army's (PLA) approach to military modernisation over the past 30 years offers an example we may learn from. China observed the superiority of the United States' approach to Airland Battle and network-centric joint operations in the Gulf Wars, the Kosovo War and the Second Taiwan Strait Crisis. Starting in the early 1990s, China recognised it could not deter or defeat the US to achieve its key strategic objectives – particularly forced unification with Taiwan. China responded by developing new doctrine and capabilities specifically to counter the US in China's immediate maritime front-yard. The PLA has progressively reformed and modernised over the last three decades to meet this purpose. This modernisation saw development of a new strategy with accompanying doctrine and capabilities, which Western analysts refer to as Anti-Access Area Denial (A2AD). The central concept of A2AD is to provide impactful projection from the Chinese mainland, including through layered, redundant cyber, electronic warfare, missile, intelligence, surveillance and reconnaissance envelopes covering the First and Second Island Chains.

A key component of China's A2AD strategy has been to develop and field a vast array of increasingly capable missiles – particularly ground-launched missiles. These are particularly important to the Chinese strategy because the platforms (trucks) are cheap and lightly crewed relative to frigates and fast jet aircraft. This makes them highly asymmetric. In acquiring this deep armoury of missiles China adopted a spiral development program.

Approaches like China's spiral development begin by building a small run of whatever missile you can, with whatever currently available technology you can access. The key is to get something useful quickly rather than something perfect too late. The rapidly acquired missiles enter it into service and continue testing and evaluation. This in turn informs constantly prototyping upgrades and new variants through domestic research and development. Again, small numbers are initially built and rapidly accepted service. The 'rinse and repeat' cycle aids iterative modernisation and continuity of production – resulting in deeper magazine stocks over time and lower overall cost per unit. The key idea is iterative rapid prototyping and (relatively) small production runs. The outcome for China has been exponential growth of a domestic industrial capacity to produce a wide variety of progressively more capable weapons and systems, providing layered threat defence envelopes from asymmetric platforms, and all using sovereign intellectual property. From missiles to surveillance, electronic warfare, cyber and space capabilities – the spiral development model has broad utility.

When a competitor follows this model of capability development, a nation cannot afford to simply continue doing what has essentially failed to date. Engaging in 'Grand Design' programs where we defer building and deploying operational capabilities until we have finished a perfect, exquisite design and development process is a path to failure in our present circumstance. Such an approach is a luxury only usefully afforded those without imminent concerns or temporal challenges. We have lost our strategic warning time and the strategic environment is so dynamic we cannot rely on today's capability requirements remaining static.

Australia needs to adopt a more dynamic and evolutionary acquisition model. Something like the PLA's approach – but tailored to suit our liberal democratic system. We must be willing to develop



capabilities incrementally, starting with basic, functional, and adequate working systems which fit our strategic approach of *impactful projection*. We need to build small runs of these, deploy them, test them in service, and use the findings to design and develop subsequent prototypes. And then iterate through building and deploying those in small numbers too. A key factor in such an approach is frequent iteration rapidly builds ‘magazine depth’ as the new missiles aren’t replacing obsolescent ones, they simply add more capable weapons to an already assured magazine. Such an approach also creates an incentive for Australian industry to grow its sovereign capacity to by assuring continual funding for competent and reliable industry partners.

It is imperative the capabilities we focus on developing through such an approach are asymmetric. It would be the very definition of madness for a medium power like Australia to seek direct capability match in competition with a superpower. The strategic concept of *impactful projection* accommodates development of a sovereign asymmetric defence capability which will serve Australia’s national interests, means and geo-political situation. Like China we too have a ‘first island chain’. Through developing and fielding a large number and wide variety of (especially ground based) long range missiles Australia can create its A2AD envelope that another military force would have difficulty crossing.

Of course, missiles alone aren’t a ‘silver bullet’ (despite appearances...). Key to Australia’s success in the new strategic era will be building an integrated Joint Force. This force will necessarily have complementary capabilities to offer support and security to key systems. It will assure maintenance of asymmetry against numerically superior threats that possess a capability edge. Investments in enabling systems such as sensors, intelligence, and secure communications link (to enable targeting within the A2AD zone), assured supply chains, infrastructure and a resilient workforce will be critical. This will require more thought, innovation and delivery of results than that seen over recent decades. Such ideas aren’t as exciting as getting a hundred new fast jets or some other exquisite symbol of a ‘capability edge’. But they are necessary if our strategy is to be adequate.

Strategy remains a practical activity. Australia’s new strategic imperative drives a requirement for change to cut through a legacy system typified by decades of process growth and inertia so the capabilities for *impactful projection* are realised in a timely manner. The practical requirement for innovation is self-evident and, importantly, an immediate path to pursue it is available. Defence’s challenge is to have the courage to innovate before necessity removes that option.

## About the Authors

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