

Sharpening the Edge of Australia's National Deterrence Capability



**SIR RICHARD
WILLIAMS
FOUNDATION**

4/20/23

Williams Foundation Seminar 30 March 2023

By Dr. Robbin F. Laird, Research Fellow, The Sir Richard Williams
Foundation

Sharpening the Edge of Australia's National Deterrence Capability

WILLIAMS FOUNDATION SEMINAR 30 MARCH 2023

Introduction	2
The Seminar Approach, Intent and Program	3
Aim	3
Background	4
The Seminar	4
Industry Perspectives	5
Australia and Deterrence in a Global System in Flux	5
Shaping a Nuclear Submarine Enterprise in Australia: The Perspective of Vice-Admiral Jonathan Mead	9
The Perspective of Air Marshal Chipman, RAAF	14
Capability	14
Resolve	15
Signalling	16
The Perspective of LTGEN Simon Stuart, Australian army	18
The Perspective of General Wilsbach, the PACAF Commander	21
The Perspective of Air Marshal Harvey Smyth	24
Shaping the Australian Defence Base for Greater Deterrent Effect	27
ISR and Deterrence: Or How Detection is a Key Part of the Deterrence Effort	34
Shaping a Way Ahead for Australian Defence	37
The Perspective of the Chairman of the Sir Richard Williams Foundation	39
The Program	42

INTRODUCTION

The latest Williams Foundation Seminar was held on March 30, 2023 in Canberra.

It was entitled “Sharpening the Edge of Australia’s National Deterrence Capability” and focused on the strategic transition of Australia and the ADF in meeting the challenges of the decade ahead.

I asked one of the young officers who attended the seminar what they got out of the seminar: “We are facing a significant strategic shift and those of us just now in service need to understand what the focus of the defense of our country is and will need to be as we work to defend our country.”

Another young officer said: “The last generation fought abroad; now we are defending our country and in our region. How are we going to do so effectively?”

That rather put it succinctly what the distinguished group of speakers was needed focused on doing.

The seminar itself was placed midway between two major government announcements about the changing approach to defense. The first was the announcement with regard to the way ahead with the generation of a new nuclear submarine capability for Australia and the second is the forthcoming release of the Defence Strategic Review, expected in late April.

For me, this session reminded me of my first engagement with the Williams Foundation in 2014 which led to my first seminar report. “On Tuesday, 11 March 2014, the Sir Richard Williams Foundation conducted its biannual seminar on ‘Air Combat Operations, 2025 and Beyond.’ The seminar explored the challenges and opportunities afforded by the introduction of fifth-generation air combat capabilities.”

Well, we have almost reached 2025, and the focus of the 2014 seminar was indeed on introducing the F-35 into the ADF and the transformation which could be created to evolve the capabilities of the ADF as an integrated force able to operate across the spectrum of warfare.

For the next decade, the seminars held by the Foundation provided detailed looks at that transformation through the presentations of senior ADF leaders and analysts about the evolving strategic environment and the evolving ADF capabilities and concepts of operations.

I have detailed that decade in my book, [Joint By Design: The Evolution of Australian Defence Strategy](#) which was published in late 2020.

As Vice Admiral (Retired) Barrett noted in his wrap up comments at the end of the seminar on March 30th: “As the Chairman of Williams, Geoff Brown, indicated at the beginning of the day we are taking a different tack with this seminar and the one to follow later in the year.

“The subject that we discussed over the last couple of hours has been around deterrence where previously at these conferences, we’ve been talking very specifically around fifth generation capability throughout the ADF.

“So the idea that we would gather, and we would have an array of esteemed speakers who would inform us, educate us, but also challenge us, to assist us in being able to formulate our thinking about the way ahead made a great deal of sense.”

What Barrett said was very much in line with what the younger generation of officers wanted to discuss and learn about.

But I must add that I have been working defense issues for a long time, in Europe and in the United States as well as in the Pacific. And for one who worked through the 1980s on the Euro-missile crisis, the Soviet confrontation with a Europe in transformation and certainly about nuclear weapons, the discussion of deterrence at the seminar took me back to work with Herman Kahn and Zbig Brzezinski which I did in the past.

What is deterrence in this period of the 21st century?

And what can we learn from a past which has been forgotten as we fought the land wars?

The seminar took a broad view of the challenge of deterrence, that deterrent effects are not simply a result of what the ADF can do with its allies and partners but what the Australian polity, economy, culture and society can deliver in competing with the 21st century authoritarian powers and cooperate with allies going through a very fluid situation in their domestic polities, societies, cultures and economies.

The concluding presentation of the seminar by the head of the RAAF, Air Marshal Chipman, provided a comprehensive look at deterrence from the standpoint of a middle power, and drew together a number of the insights of other speakers as well.

"I mentioned earlier that deterrence works on the threat of escalation.

"But we must be clear, as a Middle Power, this must stop short of actually provoking conflict.

"Deterrence fails at the point conflict begins.

"Strategic competition is dynamic and unstable: peripheral interests might become core over time.

"For a deterrence strategy to succeed through a prolonged period of strategic competition, we must also build pathways for de-escalation.

"This is as important in force design and force posture as it is to campaign design.

"The capabilities we invest in, where we stage them and how we intend to use them.

"De-escalation pathways restore the pre-crisis or pre-conflict balance of power. Seizing a diplomatic off-ramp too early may cede advantage; too late will cause unnecessary attrition.

"Our successful deterrence strategy will need to consider escalation and de-escalation in equal measure."

Building capabilities to do so, having a society resilient enough to deal with a wide-range of threats, to have allied cohesion significant to be credible, and learn how to combine military capabilities with the art of statecraft which understands the minds of our authoritarian competitors is a work in progress.

And in future seminars we will see the learning process playing out.

THE SEMINAR APPROACH, INTENT AND PROGRAM

Williams Foundation Conference, Sharpening the Edge of Australia's National Deterrence Capability

30 March 2023

Aim

The aim of the March 2023 seminar is to explore what deterrence means to Australia and its interests in the context of being a globally respected, responsible, non-nuclear weapon capable middle power.

Second Line of Defense

It will consider all national means that contribute to deterrence - diplomatic, economic and military - and discuss the limits to deterrence as a national strategy. In doing so, it will examine what a characteristically Australian deterrence looks like, balancing the need for a defensive posture and the ability to strike into the broader region, and the implications for the national industrial base.

Background

For a decade, the Sir Richard Williams Foundation seminars have focused on building an integrated 5th generation force. In air power terms, the ADF force structure substantially 'locked in' for the near to medium term, there is now a need to prepare for the next generation of technology.

However, new thinking is required to ensure the ADF can fight tonight as well as being prepared for the future. Air power history suggests there will be a highly innovative phase (Generation 5.5) before we get to the next transformative change. But where will that innovation come from? And can we afford to wait for the next generation to arrive?

Emerging geo-strategic, economic, and demographic trends continue to impact the environment in which Australian air power must raise, train, sustain and operate, demanding an increasingly sophisticated and balanced approach to the development of technology, workforce, policy, and process. As covered in previous seminars, this will involve the increased influence of space and cyberspace.

While technology will continue to drive the development of air and space power, a focus on technology alone is not enough to win in strategic competition. It will require an approach which is able to make best use of Australia's geography, a relatively small but highly skilled population, existing and new partnerships, and creative thinking to provide credible options and choices at the lowest possible level of political risk.

In 2023, the theme of the seminars will therefore shift focus towards the challenges and opportunities in an Australian context, and through an air power lens exploring the following themes:

- Shaping the force for high end deterrence and action;
- Articulating the case for modern asymmetric force;
- Survivability in terms of people, basing, platforms, communications and networks;
- Novel technology 'pathways' to fielded capability (from requirements, through acquisition to operations); and
- Affordability in the context of a global economic challenges.

These themes will necessarily drive the exploration of future technologies at various maturity levels, including for example quantum and nano technologies; laser and other-directed energy technologies; propulsion systems; and AI.

This will also be necessary to identify national vulnerabilities, including the need to understand the environment (physical and virtual); how to generate scale and mass; the dependency on space (particularly for PNT); logistics writ large (fuel, basing, supply chains, planning etc.); workforce trends and data dependency and interdependencies.

The Seminar

The March seminar will focus on deterrence from first principles and explore the strategic need while paving the way for the September seminar, which will get into the detail with the 'Future Requirements of a National Deterrence Capability.

The opening session will introduce deterrence in strategic terms and provide an update in the context of emerging Government policy and international arrangements such as AUKUS. It will examine the importance of balancing a fundamentally defensive posture with the need to strike across domains and with purpose into the broader region.

The middle session will introduce industry partners and the need for a broader perspective of Defence industry as an integrated part of the deterrence apparatus. It will also examine the need for alignment with international partner policies, concepts, and force structures in the spirit of both interchangeability and interoperability.

Finally, Service Chiefs are invited to offer their perspectives on the emerging challenges, priorities and opportunities in the context of a characteristically Australian deterrence concept.

Industry Perspectives

Industry participants are invited to contribute to the discussion about deterrence in terms of either policy, process, technology, infrastructure, and workforce, or a combination of all. The intent is to promote industry as being more than simply a fundamental input to capability but more as an essential element of national power.

Topics for industry consideration are:

- Workforce Management and Development
- System Readiness
- Training System Effectiveness & Mission Rehearsal
- Communication and Network Resilience
- Decision Superiority
- Future Technologies
- Basing, Logistics & Supply Chains

AUSTRALIA AND DETERRENCE IN A GLOBAL SYSTEM IN FLUX

The initial presentation to the seminar was by AIRMSHL John Harvey (Retd). He has written a well-regarded assessment of deterrence published in 1997 and in his presentation, he looked back at that assessment as well as discussing the way ahead in the current decade.

His presentation focused largely on establishing a base-line understanding of deterrence, and in a meeting with him in the week after the seminar he discussed key challenges going forward.

Harvey noted that the “most common definition of deterrence is the following: “the threatened use of force to convince an adversary ‘not to do something.’”

“There are three threat mechanisms on which deterrence is based: denial—where the aim is to defeat the aggressor’s forces involved in the potential hostile action; retaliation—where the aim is to exact a proportionate cost from the aggressor without necessarily directly defeating the attacking forces; punishment—where the aim is to raise the cost of aggression, through, for example, targeting the population of the aggressor force without necessarily targeting their military capability.”

Harvey then identified three determinants of the success of deterrence: capability –the ability to carry out the threat on which the deterrent threat is based; credibility—whether or not there is seen to be commitment to

Second Line of Defense

carrying out the deterrent threat; communication—how effective the deterrer is in communicating the threat to the potential aggressor.”

Harvey noted that deterrence is a means to an end, that it is “a tool at the service of policy.” He went on to argue that “at best, deterrence is a stabilizing mechanism—it cannot remove the source of tension in an adversarial relationship. It may, however, be essential in stabilizing a situation such that diplomatic and political solutions can be found.”



FIGURE 1 AIRMSHL JOHN HARVEY (RETD) SPEAKING AT THE 30 MARCH 2023 WILLIAMS FOUNDATION CONFERENCE.

At the outset, Harvey stated that although the essentials of deterrence remained the same for Australia, there are significant changes since he wrote the book.

On the one hand, there are changes in the means. He identified two: “the importance of the information domain and the emergence of cyberwarfare; and the increased importance of space to military operations and space as a future warfare domain.”

On the other hand, there is a major geopolitical shift: “the rise of China as a major military power across all warfare domains, including nuclear weapons.”

If we add to this the significant shift in the alliance structure along with the adversarial set of challenges, the magnitude of the shift can be seen in terms of the deterrent challenge facing Australia.

As the Chief of Army, LTGEN Simon Stuart put it in his presentation: "Pax-Americana was an historic anomaly. The norm in human history is a violent transfer of power from one empire to another – and 14 of the 16 transitions between empires in human history have involved wars. We live in an era that might be described as post-peak globalisation. Understanding how the international system works, what the great economic or trading blocks are, is an endeavour we need to understand."

I would add that understanding China as an adversary is a major task all on its own. We have a younger generation who grew up as beneficiaries of the benefits of the Chinese way of playing globalization. Why are they now an adversary?

China and Russia have operated within our societies in ways the Soviet Union could only dream of doing. A great term which captured this reality is the term *Londograd*. Similar realities exist in the United States and Australia concerning the degree of Chinese involvement in our domestic lives.

And the significant deterrence history we generated in the 1980s is more an historical museum than a set of experiences to be learned from. And when you add to that the state of our knowledge of our authoritarian competitors and how their leaders define risk assessment and knowing what deters them, we face a real challenge. You cannot rely on funding from Confucius Institutes to train our own analytical capability on the nature of our competitors.

This means that shaping effective deterrence and practicing the art of statecraft for Australia and its allies in a world in flux will be difficult, challenging and not easily achieved. When I talked with AIRMSHL Harvey (Retd) the week following the seminar, he underscored the challenging nature of the transition.

In our discussion, Harvey underscored that what was required in the new context a whole of government, society and whole of alliance capability. With regard to mobilization, he made the very sound point that mobilization was important across the whole of government and society to deal with a variety of challenges, not just defence. Indeed, if one correlated mobilization simply with defence, that would lead to failure to focus on the much broader challenge which is best characterized by a capability for national resilience.

From this point of view, deterrence then is based on social cohesion and national cohesion to sustain Australia through the pressures which the changing global system puts upon her.

The presentation by Secretary Michael Pezzullo of the Department of Home Affairs indeed focused specifically on this question of the broader question of national resilience which was of enhanced importance in the new phases of Australian defence.

Pezzullo focused largely on the experience of Australia in World War II when the country was slow to respond to the threat but over time became mobilized to in fact deal with the challenges. Pezzullo cited Brendan Sargeant's work on strategic imagination to make the point that "our capacity to envisage and prepare for the future is a function of the limits of our strategic imagination. The effective exercise of strategic imagination in the 1930s would have seen a better prepared and more resilient Australia."

Pezzullo then noted: "Strategies are tasked with conceptual as well as particulars, different strategic assumptions, policy settings and operational capabilities, Australia's part would have generated different risk calculations for Japan. Amongst other things Australia should have adapted a geographically focused strategy, which would have dictated the building of a different military force based around an air defense system across the north of Australia, a long-range bomber force, a larger army and a land force which was able to deploy to the Australian territories and Papua and New Guinea, across northern Australia and potentially into our new littoral region."

Second Line of Defense

Pezzullo concluded: “My thesis is in terms of resilience and deterrence; democracies will always be slow to start. Because we don’t focus on war. We don’t focus on conquest. And we don’t focus on the totalitarian aggregation of all functions of states around a single leader, around a single ideology for a single program. We live our lives. So we’re slow to stand, because we live freely.

“My contention is that history teaches us that we finish more strongly. And why is that? As you’ve seen that today in the Ukraine, the mobilization of consent is by popular will and organic and is not dictated and a ferocity that can overcome any tyrant and that is perhaps the ultimate deterrent.”



FIGURE 2 SECRETARY PEZZULLO SPEAKING AT THE 30 MARCH 2023 WILLIAMS FOUNDATION SEMINAR.

Clearly, we have now entered such a time and how will the art of statecraft be combined with the enhanced deterrent effect of the ADF and allied military forces in the service of an effective practice of the art of statecraft?

If we look back at [Sargeant's essay referred to earlier](#), a number of the key challenges facing Australia and its allies are underscored:

“Two decades of ADF deployments to the Middle East and Afghanistan has built operational capability but perhaps at the cost of narrowing our ability to think strategically about our interests. This has been recognized, and recent policy statements such as the Defence Strategic Update 2020 have begun a process of reorientation to the Indo-Pacific as the area of our primary strategic concern. There have been the beginnings of an outreach towards other strategic relationships in our region, notably Japan and India, though this work is slow and will be very challenging.

“We have struggled to develop a confident position in relation to China, and we have perhaps been more optimistic than we should have been about China’s strategic ambition. This argues for a much more agile policy and a much more aggressive approach to the construction and management of our strategic interests. Others have framed this in terms of a stronger, more geographically centered regional focus in our policy and activity that might manifest itself in a much greater engagement with Indonesia and other South East Asian countries.

“I agree with this approach, but I would frame it also in terms of a much richer imaginative engagement with the Indo-Pacific more broadly, with a recognition that even as we have our own distinctive Australian identity, we are part of this community and that the nature of the community also shapes our identity and the way in

which we might live in this world. Such an imaginative engagement might lead us to see what we might learn from the strategic traditions across the many Indo Pacific countries if we allow them to challenge our strategic imagination.

“We might also question why, as a community, we have in recent years made border protection the overriding policy and institutional imperative for the construction of our national security system, when the much larger and more strategically pressing issue is how we engage with the Indo-Pacific during a period of major change to the global strategic order? We might ask whether this preoccupation with the border constitutes the major contemporary failure of our strategic imagination...

“The work of policy, an art of desire, is to say what the world might be. The work of strategy is to create the path towards that world, responding to all the known and unknown impediments that are likely to emerge. Policy lives mostly in the world of imagination; strategy lives mostly in the world of experience. The art of the policy maker and the strategist is to bring imagination into the world of experience and through this to create strategy that can change the world. In times of great change, the challenge is to imagination, for continuity in strategy is likely to lead to failure. Sir Arthur Tange, an important figure in Australian foreign and defence policy making and strategy, once said that strategy without resources is no strategy.

“In my professional life those words were a touchstone. My argument now is that as we learn to live in the Indo-Pacific, strategy without imagination is sterile.”

SHAPING A NUCLEAR SUBMARINE ENTERPRISE IN AUSTRALIA: THE PERSPECTIVE OF VICE-ADMIRAL JONATHAN MEAD

In March 2020, I was visiting Western Australia including HMAS Sterling. I was there to visit the HMAS Rankin, one of the Collins class submarines homeported at [HMAS Sterling on Garden Island](#). When I informed a senior U.S. Navy Admiral that I was going to visit the Royal Australian Navy at Garden Island, he wrote: “Awesome, say hello to the fellas down south, incredible team! And absolutely critical in/out of a fight.”

Little did I know at the time of my visit which was 12 March 2020, that in fact I was visiting a future SSN base. I also did not know that I was about to have to escape Australia to get back to the United States with the onset of the pandemic.

In my visits to Australia during the period when Australia was working with France on the build of a new generation diesel-powered submarine, my work with the U.S. Navy, my time in France at my Paris apartment and discussions with the French, and my discussions in Australia gave me a good view of progress on this program.

Then in September 2021, while in my apartment in Paris, the Australian, British and American governments announced that Australia was to cancel the French program in favor of an SSN program which would involve the three countries or the Anglo-Saxons as the French refer to the three, although it is difficult to view the United States or the UK in this light as the two countries change significantly.

Being in France, I certainly had a chance to talk with the French and with colleagues in the United States I could do so by phone and video, and of course reached out to Australian colleagues to sort out an initial read on all of this as well.

I wrote several pieces on this development at the time, but not surprisingly, the most perceptive of the pieces was built around an interview with Vice-Admiral Tim Barrett (Retired).

Second Line of Defense

This is what I wrote in a piece published [19 October 2021](#):

“During my visit to Europe earlier this Fall, the surprise announcement of the Morrison Administration’s decision to shift from their French alliance to deliver a long-range diesel submarine to acquiring nuclear submarine capability through an alliance with the United States and Britain was made. I talked with both French and Australian analysts and provided my initial assessment in a series of articles which highlighted the decision and the dynamics of change associated with that decision.

“But what was clear that the strategic environment has changed dramatically from when the Australian government made its decision to stay with a conventional submarine capability. The nature of the Chinese threat as well as the actions of the Xi Administration has clearly driven a shift in Australian thinking and perceived needs for longer range operational capability in the Indo-Pacific region.

“At the same time, its closest allies in the region the United States and Japan clearly recognize the need to expand their capabilities to operate throughout the region to complicate Chinese operational considerations, and to deter via more capability to operate throughout the wider Pacific as well.

“The announced decision highlighted an 18-month period with Vice Admiral Jonathan Mead in charge on the Australian side of negotiating within the new nuclear submarine alliance to deliver Australian solutions. I [interviewed Mead](#) when he was head of Navy Capability in 2016. He then went on to be Commander Australian Fleet and then Chief of Joint Capabilities and Command of Joint Capabilities Group. He has a strong ASW background as well as working closely with the other member of the Quad, namely India. He is now the Chief of the Nuclear -Powered Submarine Task Force....

“I had a chance to discuss these issues on October 14, 2021, in a phone interview with Vice-Admiral (Retired) Tim Barrett, with whom I have had the opportunity to discuss maritime issues since 2015. As the exact nature of what will happen in the program is a work in progress and not really open to public disclosure until that 18-month period is completed, we focused on the context and how one might assess that context.

“Vice-Admiral (Retired) Barrett made three key points. First, the nuclear submarine effort was a strategic one, which was about Australian defense and not primarily focused on a priority on ship building on Australian soil. It is crucial to understand that this is about adding core defense capabilities earlier rather than later and would almost certainly encompass interaction between shaping the eco system for the operation of Australian nuclear submarines and the presence of allied nuclear submarines working with the Australian eco system.

“The second key point was that the priority needed to be focused on adding nuclear submarine capability to the evolving USW or ASW capability which Australia was already building out. The Australian government recently decided to add another squadron of Romeo helicopters to the fleet, and has procured P-8s and Tritons as part of an expanded ASW or USW warfighting capability. The submarine is not a silver bullet for ASW or USW mission sets but part of the evolution of the kill web approach to ASW and USW missions going forward....

“According to Barrett: “The submarine decision is part of a broader set of decisions with regard to how the ADF should respond to the challenges in the Indo-Pacific. This was a deliberate and considered position from the Navy’s perspective, but the political and geopolitical circumstances have changed. This is not the first time that Australia has sought or considered the acquisition of a nuclear submarine.”

“The third key point was that flexibility and innovations will be part of working out a way ahead and he noted that Mead had worked with him previously. When Commander of the Australian Fleet, then Commodore Mead was instrumental in working an innovative plan to manage a temporary capability deficiency for fleet

fuel tanking. To shore up a gap, the RAN 'leased' a Spanish Navy oiler for 8 months, and the RAN crews trained on the ship and operated the ship in support of the Australian Fleet.

"Eventually, the RAN acquired two new Spanish oilers, but the kind of innovation demonstrated in this example, will almost certainly be part of the way ahead in meeting the challenges of accelerating the operational acquisition of nuclear submarine capacity in support of Australian defense.

"According to Vice Admiral (Retired) Barrett: "The strategic environment has changed. We need to reconsider the balance between sovereign capability for a thirty-year build and the need for creation of capability in the near term. The earlier 30-year period build approach should not be the dominant approach; the capability and its presence to shape deterrent capabilities is crucial and work out over time how the build side of this effort is clarified and put in place. The program needs to be driven by the need for creative capability options first."

Now after the 18-month period, the three countries announced their joint decision on how to proceed on the Australian approach to acquiring nuclear attack submarine technology and capability. To do so, will require Australia to build a comprehensive enterprise to operate, maintain, to sustain, and build an Australian nuclear attack submarine.

The comprehensive approach to do so was announced in mid-March 2023 in San Diego by the three heads of state. The Williams Seminar was held on 30 March 2023 and is sandwiched between this event and the public release of the strategic defence review sometime in April.

The Australian government released a report laying out how it saw the "partnership for the future" or "the AUKUS nuclear-powered submarine pathway."

Why is Australia transitioning to an SSN capability?

SSNs are a game-changing capability. The superior stealth, speed and range characteristics of SSNs better meet the maritime security needs of all three AUKUS partners in the decades ahead.

Stealth	Speed	Range
<ul style="list-style-type: none">SSNs can operate with a significantly lower chance of being discovered by adversaries.	<ul style="list-style-type: none">SSNs are faster than diesel-electric powered submarines. Nuclear power enables submerged submarines to drive at high speeds without affecting the period they can remain at sea.	<ul style="list-style-type: none">SSNs are designed to operate across vast expanses of ocean, with their range and endurance limited only by the need to replenish supplies. Australia's SSNs will not need to be refuelled during their lifetime, meaning they can patrol for longer.

FIGURE 3 GRAPHIC FROM AUSTRALIAN GOVERNMENT REPORT ON AUKUS NUCLEAR-POWERED SUBMARINE PATHWAY.

Second Line of Defense

In that report, the government describe the advantage of nuclear-powered submarines and why Australia was transitioning to an SSN capability. "In the future security environment of the Indo-Pacific, conventionally-powered submarines will be increasingly less able to meet Australia's needs. The United Kingdom Royal Navy and United States Navy retired their last conventionally-powered submarines in the early 1990s because SSNs have superior stealth, speed, manoeuvrability, survivability and endurance when compared to diesel-electric powered submarines."

At the Williams Seminar, Vice-Admiral Mead provided an overview to the approach being taken to establish a nuclear submarine enterprise in Australia.

In essence, the approach is three-fold.

In the first phase, UK and US nuclear submarines will visit HMAS Stirling, and the Royal Australian Navy will learn how to support these ships during their visits. As part of this standup phase, Australia will work with the United States in operating Virginia class submarines.

In the second phase, Australia will obtain Virginia class submarines and operate anywhere from three to five of these boats going forward.

And in a third phase, Australia will particulate with its partners in shaping a new class of SSNs, which will be British designed but enabled by U.S. technologies. In this third phase, Australia will have built its own submarine yard at Osborne where in effect this would be the fourth nuclear submarine yard in the trilateral alliance. In other words, the notion of building an arsenal of democracy through allied cooperation would be realized.

Vice-Admiral Mead started his presentation by indicating that "in 2027, the U.S. will forward rotate Virginia class submarines to Australia and the UK would rotate one nuclear submarine to HMAS Sterling. The aim of this effort will be to allow Australia to deeply immerse itself in a nuclear-powered program. We will be doing maintenance on Virginia class submarines and will be doing crewing of these submarines out of Western Australia.

"After a period of about four or five years, we will reach the point where our partners and we will be able to ensure that Australia is a safe and secure steward of nuclear technology, of nuclear materials and nuclear reactors. From that point in time, the United States would offer us for sale or transfer up to five Virginia class submarines."

This would constitute the standup and launch phase for Australia shaping a nuclear submarine exercise, and really the key one to ensure a capability being able to operate to replace the Collins class submarines. This is really the key effort which enables the threshold to be crossed into a period of operating nuclear submarines.

In my view, this also allows Australia to build its con-ops for integrated USW and ASW with the P-8s, Tritons, and various air and maritime assets, including the coming of maritime autonomous systems to build an integrated offensive-defensive capability to protect Australian sea lanes.

What then follows is working through what a follow-on submarine program would look like. And this effort will entail in depth cooperation with both the UK and the United States. According to Mead: "It will be a follow-on to the British nuclear-powered submarine but will incorporate U.S. technology, including weapons, sensors, VLS combat systems and torpedoes."

Vice-Admiral Mead then looked beyond the pathway discussion to the broader question of what Australia needs to do for this effort to be successful.

The first element is addressing the strategy and being able to gain support for the effort within the Australian public. "We are going to have to be very clear on our strategy."

Second, Australia must successfully manage the trilateral working relationship. "How can we make the best of Australia working with the U.S. and the UK to deliver this capability?"

Third, creating, training and sustaining the appropriate workforce for the enterprise is a major challenge within Australia. "We will be the first country in the world to operate a nuclear submarine without having a civilian nuclear industry. This presents some unique challenges."

Fourth, Australia needs to build the appropriate infrastructure both in terms of basing and in terms of the shipyard itself. There will be some unique aspects to the yard including shaping high security protection for the yard as well. "We need to design the yard, build the yard and start building the nuclear-powered submarine by the end of the decade."



FIGURE 4 VIDE-ADMIRAL MEAN SPEAKING AT THE WILLIAMS FOUNDATION SEMINAR ON 30 MARCH 2023.

Fifth, Australia needs to build an industrial base for this effort which can support and sustain the effort into the indefinite future. Osborne will become the fourth nuclear submarine yard to go with the two in the U.S. and the one in the UK. "Osborne will become one of the most advanced and complex technological hubs in the world."

Sixth, the security of the enterprise is a major element for success. In addition to the physical security mentioned earlier, the IAEA involvement will be significant in verifying the quality of Australian nuclear power stewardship. "If we don't have the international community along with us, the enterprise will fail."

Second Line of Defense

But the point of all this effort was highlighted by VADM Mead at the beginning of his presentation: “there is no more powerful instrument of conventional deterrence than a nuclear-powered submarine capability.”

THE PERSPECTIVE OF AIR MARSHAL CHIPMAN, RAAF

How can Australia as a middle power deter a major power like China from the use of force against Australia and to undercut Australian interests and way of life?

This is a challenging question to pose as the world is changing significantly in the post-pandemic world and with it the evolution of the relationship among authoritarian powers and the dynamics of change within the liberal democratic allies of Australia as well. The technologies of war are in the process of significant change although the basics of war and conflict persist.

At the seminar, Air Marshal Chipman provided his perspective on how the ADF and the RAAF will evolve with the deterrent challenge in the evolving context. His focus was upon deterrence from the perspective of a middle power and its ability to deliver a deterrent effect.

At one point in his presentation, he highlighted a way to understand deterrence. “ADM Harry Harris, the former Commander of INDOCOM, explained deterrence with a simple mathematical equation: deterrence = capability * resolve * signalling. If anyone of these is zero, then the product, deterrence, is zero! Resolve and signalling are orchestrated through diplomacy, but they are underpinned by military capability.

“We influence the calculus of our potential adversaries in all that we do. Force generation is not just the act of preparing for war, it also signals our preparedness for war, and therefore serves to deter it. We should think strategically about our force generation signalling.”

If we examine these three aspects – capability, resolve and signalling, we can look at Chipman's presentation in terms of how he dealt with each of these elements of deterrence.

Capability

The question of capability must be determined in relationship to whom you are trying to deter. Given the growing capability of our authoritarian adversaries for precision strike and magazine depth, we have focused on greater ability to disperse or disaggregate force and to work ways to integrate the effects which a distributed force can deliver even though distributed. This is what I have underscored as the shaping of a kill web force.

Chipman emphasized in his presentation several aspects of this trajectory of change. “We are also sharpening our deterrence capability by strengthening our resilience to military coercion and intimidation. A resilient Middle Power will minimise the consequences of adversary actions, through passive measures such as hardening, deception and dispersal. And by refining our agile fighting concepts to manoeuvre across our network of northern bases, through all domains; complicating and obscuring the adversaries' targeting options.

“Active measures that protect critical infrastructure and vulnerable supply lines, that strengthen our national resilience, will also help convince potential adversaries of the futility of their action.”

Working air assets with ground and sea assets to deliver a combined effect, often referred to as multi-domain effects, is a key focus of attention for the RAAF as well. As Chipman put it: “We have successfully transitioned to the F-35, with its world-leading ability to achieve surprise, gain access, sense and share targetable data, and deliver lethal effects both in offence and in defence.

“Integrated with the Super Hornet, Growler and E-7A Wedgetail, our air combat team is formidable. And they're ready. We test them regularly, through exercises such as TASMAN SHIELD, which recently teamed our full air combat system with two Air Warfare Destroyers to practice high-end, integrated, multi-domain warfare.”

“We are investing in long-range weapon systems, capable of striking well-defended warships on the move at great range from Australia. This will be an important complement to our maritime and land forces. Together, we'll present a complex, integrated, multi-domain challenge for potential adversaries to penetrate.”

This trajectory of change has taken a decade to achieve. In January 2012, I published an article in The Proceedings entitled “[The Long Reach of Aegis](#)” which projected how the F-35 and Aegis destroyers could create the kind of combat effect Chipman talked about. It was not exactly a best seller at the time.

Resolve

With regard to resolve, the challenge is for deterrence to be a whole of government and whole of society effort. This is hard, particularly after the land wars which have largely been experienced as a boutique military engagement. This will require taking serious looks and change with regard to economic and cultural relationships with China, sharpening realistic energy policies, shaping cyber and information resilience at home, and other macro-economic changes far beyond the ability of the ADF to generate.

Chipman did not speak to these aspects of resolve in any depth, but focused on what resolve meant in terms of the ADF itself. Chipman spoke to the general issues of resolve in these terms: “it is also in our strategic culture to stand defiant when subject to coercion or intimidation. There is a role for deterrence here, through our readiness, resilience and the resourcefulness of our people. We generate combat power, integrated across domains, in pursuit of our national objectives, for the purpose of preventing conflict. But we remain resolute to act if our deterrence strategy fails.”

He referred to the skill and initiative of the men and women who make up the ADF. If we are to operate successfully a kill web force, we need to have creative and capable warriors who can operate effectively at the tactical edge led by senior leaders not pre-occupied by micro-management.

And Chipman's counterpart, the PACAF Commander General Wilsbach underscored the growing impact which integrated deterrence can have on the authoritarian powers. I will write more on this in the coming articles generated from the conference and forthcoming interviews, but the point here is the ability of allied forces to work effectively and to do so within a crisis setting enhances the deterrent power of any member of the coalition, but certainly scales up the potential impact of a middle power. An effective middle power must master “coalitionability”.

As the Colonel and now Major General Anders Rex of Denmark put in our seminar held in 2015 in Copenhagen: “Col. Anders Rex, Chief of the Expeditionary Air Staff of the Danish Air Force, coined a phrase “coalitionability” to express his focus on the core requirement of allied air forces and defense forces shaping ways to work more effectively with one another in dealing with twenty-first century challenges.”¹

As Air Marshal Chipman put it: “Our capability and willingness to stand alongside allies and likeminded partners – with combined diplomatic and military weight. Our readiness to act in unison, with political and

¹ Laird, Robbin. *Joint by Design: The Evolution of Australian Defence Strategy* (p. 70). Kindle Edition.)

strategic alignment underpinned by technical, procedural and human interoperability. The threat of responding as an alliance will exacerbate a fear to attack and strengthen our deterrence capability.”

Chipman went on to enhance those comments: “It is surely the central pillar of a Middle Power deterrence strategy – to operate in concert with allies and partners in pursuit of common interests. To deter other nations from acting against those interests by presenting strength in numbers, wherever and whenever that is demanded of us. This is not about surrendering sovereignty, but rather sharing it among trusted allies and partners – to advance our national interest. This is the experience of our alliance relationship with the United States for over 70 years.

“But of course, this strategy extends beyond the United States. Through training, education, key leadership engagement, development assistance and crisis response. Building partner capacity, strengthening our partner’s sovereignty will help inoculate our region from the predations of others.”

Signalling

Now let us turn to signalling. This is key aspect of deterrence but a neglected one during the land wars. It is a forgotten art. In the 1980s, much of my work in Europe and with the Russians during the Euro-missile crisis and then the run up to what would become the unification of Germany was in the domain of communication and signalling. We only avoided nuclear war in 1983 by activating communication and signaling networks.

How are we going to do that today? How do we do so with the Chinese? The Russians? The North Koreans? All three are Pacific powers and will shape the play of conflict in the region.

Air Marshal Chipman in his presentation focused on the central significance of thinking through how the adversary might think in a crisis and to calibrate our messages to do so. Messaging obviously comes through actions as well as words, but both are important.



FIGURE 5 AIR MARSHAL CHIPMAN PRESENTING AT THE WILLIAMS FOUNDATION SEMINAR MARCH 30, 2023.

This is how he put it: “Imagine you are a leader of one of the most powerful nations on earth – with deep financial resources, extraordinary industrial capacity and an impressive military capability. Power, prosperity, longevity pull on all three strings of Thucydides famous triptych – fear, honour, interest.

"From your vantage point, advantage is easily accrued or coerced. What cannot be coerced can ultimately be compelled. What has long been coveted can now be imagined, and may even be within your reach.

"How might your ambitions be deterred? What might make you fear to attack?

"A rational leader might start with a cost-benefit judgement. Relative interest and relative power are the core ingredients that will shape this judgement.

"How important is this interest? Is it a core interest or peripheral to your national objectives? How do your interests intersect the interests of others? How determined, committed or desperate will they be to defend them?

"What is your military advantage – in technical and numerical terms; your strategic reserve and capacity to absorb counter actions; what about your experience, resolve, fighting spirit.

"Is your force as capable as you believe it to be? Recent expeditions in Europe might give pause to ponder.

"Is your adversary concealing strengths? Will they escalate in ways you can't anticipate? Will they mobilise allies and partners against you?

"These uncertainties will play on your judgement in a military sense, as will relative economic power and international legitimacy. The potential these challenges might present across all operational domains and elements of national power simultaneously, must in itself influence your thinking.

"Surely, for a rational actor, doubt lingers...How might you control your destiny if you choose a path of uncertainty?"

He concluded his presentation with some general observations about what one might call "the practice" of deterrence or what I would call the ability to operate your military force within the general context of the art of statecraft, which in my view seems a lost art but one which we need to recover and to build a credible version for the global order we are living through rather than some kind of net zero utopia.

"Let me finish on a cautionary note. I mentioned earlier that deterrence works on the threat of escalation. But we must be clear, as a Middle Power, this must stop short of actually provoking conflict. Deterrence fails at the point conflict begins.

"Strategic competition is dynamic and unstable: peripheral interests might become core over time. For a deterrence strategy to succeed through a prolonged period of strategic competition, we must also build pathways for de-escalation. This is as important in force design and force posture as it is to campaign design. The capabilities we invest in, where we stage them and how we intend to use them.

"De-escalation pathways restore the pre-crisis or pre-conflict balance of power. Seizing a diplomatic off-ramp too early may cede advantage; too late will cause unnecessary attrition. Our successful deterrence strategy will need to consider escalation and de-escalation in equal measure.

"So let me conclude. Our Middle Power deterrence capability is fixed by relative interest and relative power dynamics. Where a potential adversary's core interests are at stake, deterrence requires strength, and strength comes in numbers. It is axiomatic of Australia's strategic culture, that we seek to work with allies and partners in defence of our common interests, and this will endure."

“Which takes us back once again to the mind of our potential adversaries. To ensure they understand our core interests, and interpret our signals accurately, so that we might compete, deter and de-escalate without provoking conflict.”

THE PERSPECTIVE OF LTGEN SIMON STUART, AUSTRALIAN ARMY

With the Australian Army having been heavily invested in the Middle East land wars and working closely with the U.S. Army in those endeavours, what is role in the enhanced emphasis on the direct defense of Australia?

Of course, each of the services and the joint force itself is facing how to meet the challenge of direct defense, but the question of the relationship of the land forces to the joint direct defense of Australia is especially challenging.

At the Williams Foundation Seminar on deterrence, LTGEN Simon Stuart, COS of the Australian Army, provided a general look at the deterrence challenge, the role of the ADF and of the Australian Army.

Although he noted in his speech “that that there is anything uniquely Australian about deterrence as part of our strategy, or indeed how we might practice it. “

But with the emergence of what is often called great power competition, the role of nation has been enhanced and the need to shape national approaches even when interactive with key allies is central to the way ahead for national deterrence.

LTGEN Stuart then addresses the question of an Australian approach from that perspective: “If there were to be such a thing as a uniquely Australian way of deterring, it would surely be founded by what defines us as a nation and what defines us Australians.

“Who are we as a nation, and who are we as a people in the middle decades of the 21st century?

“A uniquely Australian approach to deterrence would surely be founded in what our national aspirations were, our strategic culture, and approaching the task of deterrence from that perspective. So, the founding question for me is: how do we conceive of and combine our amazing national endowment?

“Our enviable strategic geography, our stewardship of a significant proportion of the Earth’s surface – both the land mass and the seas that we are responsible for, and over 40 per cent of the Antarctic continent, which we lay claim to.

“We are among the world’s top 15 economies, we have convening power both regionally and globally, we have a vibrant and diverse successful social experiment in our society today, our amazing human capital, and we have a series and a set of alliances and partnerships which are the envy of many.

“We have the capacity to be a global energy and food superpower.

“We have incredible natural resources, both those that have been in demand up until now, and those that will be in demand in the future. And the capacity to draw on 65,000 years of human history and endeavour on our continent.

“So how can we conceive of that wonderful endowment, and how do we conceive bringing it together?

“Are we outwardly focused and engaged, or are we insular and closed?

“And, for everyone who wears or has worn our uniform today – and certainly for every Australian soldier – the answer to the question ‘who are we?’ is of fundamental importance to service.

“Because we need to understand for whom and for what we are serving. And if we are in the fight, those questions are brought into even sharper relief.



FIGURE 6 LTGEN STUART SPEAKING TO THE WILLIAMS FOUNDATION SEMINAR 30 MARCH 2023.

LTGEN Stuart then addressed the key question of the nature of the new strategic context within which Australia or other liberal democracies are now operating.

“Pax-Americana was an historic anomaly. The norm in human history is a violent transfer of power from one empire to another – and 14 of the 16 transitions between empires in human history have involved wars.

“We live in an era that might be described as post-peak globalisation. Understanding how the international system works, what the great economic or trading blocks are, is an endeavour we need to understand.

“There are a range of theories, but personally I like Parag Khanna’s new regionalism model because it emphasises partnerships, and partnerships within the context of regional blocks from an economic perspective – but also from the other elements of national power, which are in the ascendancy in the global system today.

“To some of our more recent history and the thinking from the 1980s that shaped our national security and defence policy, strategy and practice over the last 30 years.

“The thinking that we do today, and the decisions that our elected representatives make today, will influence our policy and practice over the next few decades.

“That thinking, in my view, failed to engage with the world as it was, failed to engage with globalisation, either refused to engage or didn’t recognise pretty much everything we’ve actually been doing these past few decades.

“It was defensive and inward looking.

Second Line of Defense

“And finally, the wars we’ve been involved in, the wars we’ve been fighting over the last 20 years, the so-called ‘wars of choice’, did not touch Australia and did not touch Australians.

“They were a Defence endeavour, involving only the military element of our national power, and largely an ADF endeavour. They did not touch the society we live in.”

What then shapes a way ahead for the ADF in this new historical era is the importance of being embedded in a broader national approach requiring skill sets beyond those expected of the military

LTGEN Stuart the addressed some of these broader capabilities.

“How does our national aspiration and our national identity find expression in our strategic thinking and our policy and practice. It finds expression via statecraft, which is the mobilisation and orchestration of all elements of national power.

And the key areas of focus are that people like us need to help our elected representatives deal with are founded in national identity, and national unity, and therefore the wellspring of unity and purpose.

“It relies on social cohesion. It relies on the means by which to execute the strategy – that is our economy – the means connote and provide agency for us as a nation.

“It will rely on an involved relationship between the private and public sector, on better harnessing the incredible capacity of our academy.

“It will rely on the practice of statecraft on a more expansive engagement with partners and the development of partnerships.”

LTGEN Stuart finally focused on the military element of deterrence. “The military element of national power needs to be four things. Firstly, it needs to reflect our national identity and aspiration.

“It needs to reflect the nature of the challenges, the threats and the competition. And it needs to reflect the nature of our strategy, which in its broadest terms is shape, deter and respond.

“It needs to respect the arc of human history, and the history of warfare, and respect the requirement to balance between the enduring human nature of warfare and its changing character – which is generally speaking dominated by technology.

It needs to ensure relevance – relevance and credibility that are relative to a pacing threat, and an operating environment, and the opinions of our allies and partners.

“It also needs to be resourced, because a strategy without means is an illusion.

“So our strategy today calls on us to shape the environment, deter actions against our interests, and be ready to respond with military force in all five domains when required.

“But shape, deter and respond does not connote a linear progression or the luxury of focusing on one at the expense of others.

“It is all three, all at once and in five domains, in the context of the execution and application of statecraft.

“If deterrence fails, war and its very unpredictability demands an ADF that is relevant and credible in all five domains – a system of systems that has the best chance of mission success whether we are deterring or we are prevailing in the conquest of war.

"To come back to the point about strategy being an illusion is it is not resourced, there are key questions that are being asked today in our nation.

"We have a pretty good sense of what it costs. There is a sharp focus on what we can afford, and then there are choices about what we are willing to pay.

"Each of those price points brings with it a risk profile, and those are the difficult decisions that our government needs to make.

"Those are difficult decisions to which we need to contribute the best advice that we possibly can."

LTGEN Stuart then focused on the way ahead for the ADF and the Army.

"Given the nature of our strategic circumstances, whatever we do requires us to do it quickly. Velocity matters.

"One way we can sharpen the edge of deterrence is by embracing new and emerging technologies and balancing that with the incredible human capital we enjoy in our country.

"I'm going to quote our Chief of Air Force from his excellence speech, which I commend to you, which he gave as a keynote at the Chief of Air Force Symposium in Melbourne as a precursor to the Avalon Air Show recently.

"He said: "It is easy to be seduced by technology; to do so would be to forget that national security is a national endeavour.

"The impediments to boosting capability delivery are often policy related, procedural or cultural. While advanced platforms teamed with cutting edge and disruptive technologies can be game-changes, we won't realise their advantage without evolving our thinking that delivers the military power element of deterrence."

"I think for me that really summarised the set of dilemmas and choices we face today in terms of responding to the strategic environment.

"Another way forward is leveraging the existing strengths of our Defence Force by ensuring we have a sharper focus on how we design our force, which is integrated and greater than the sum of our constituent parts.

"One that is increasingly builds into the architecture a strong and abiding sense of partnership with allies and regional partners.

"Because in an era of great power competition, having more friends is better than having less.

"In our region we have very good relationships with our partners. And the people-to-people relationships we enjoy have been grown and cultivated and reinforced over many, many years and stand us well for the future.

"Shared interests matter, and the many collective agreements like AUKUS and like FPDA and the Quad, and like the support we have of the ASEAN political architecture matter and stand us in good stead for tomorrow.

"From an Army perspective, from the contribution of land power to that integrated force, we offer presence, persistence, asymmetry through first-mover advantage, utility, and incredibly good value for money."

THE PERSPECTIVE OF GENERAL WILSBACH, THE PACAF COMMANDER

Second Line of Defense

General Wilsbach, the PACAF commander has come to the Sir Richard Williams Foundation seminars since he was the 11th USAF Commander. And as PACAF Commander, he has attended in person or virtually several.

As I noted in my interview with [Air Marshal Chipman](#): “I started by raising the point that the other air force commander who spoke at the seminar was General Wilsbach, the U.S. Pacific Air Force Commander. I noted that General Wilsbach has come to several Williams Foundation Conferences, the first being when he was 11th Air Force Commander. His interest in working with Australia is suggestive of the evolving U.S. relationship with the ADF and in particular the RAAF relationship with PACAF. It is not widely known that General Wilsbach has an Australian Deputy Commander, which reflects the nature of the evolving relationship.

“Air Marshal Chipman: “General Wilsbach has been a fantastic partner for Australia. He has been interested in our evolution and commits a lot of his time and his intellectual firepower to working with us. He has created a position for an Australian Deputy Commander in his headquarters. We are very fortunate to have someone who recognizes the value of our strategic partnership.”

At this seminar, General Wilsbach's focus was on integrated deterrence. He discussed the concept by first examining at how he looked about both concepts and how they then came together into a single construct.

“First, let's look at integration. It's useful to sort integration into three tranches: military, interagency, and across Allies and Partners. The military tranche is likely the best understood as we have made tremendous strides towards joint integration in the past few decades. The key to joint integration is command and control. C2 is what separates a professional fighting force from an armed mob.

“The ability to clearly communicate intent and relevant information undergirds armed conflict, and those who have failed in that task have paid in lives. Within INDOPACOM, we recognize the need to enhance our C2. What worked in Iraq and Afghanistan is not sufficient for this time or this region and we must adjust accordingly. To that end, we are iterating on a Joint Fires Network that leverages current capabilities while we procure new capabilities designed to flatten network architecture and get data where it needs to go, when it needs to be there.

“This network leverages the best practices and equipment on-hand today to link INDOPACOM together and has created an environment more joint than any I have seen in my 37 years of service. Crucially, it leans on starting our planning process with the joint perspective. PACAF Airmen routinely operate with Sailors at sea, Soldiers on the ground, Marines in the air, and Guardians managing orbital assets—often all at once.

“Here in Australia, you have demonstrated your commitment to joint operations through your Joint Training System and collocating your service joint force contributions under the Chief of Joint Operations. This naturally leads to the main benefit of joint integration—joint fires.

“Each service brings unique capabilities to the fight, and that means that F-35s may not be the best shooter for a target. Maybe a submarine would be a better solution, or an island-hopping Marine force with short-range coastal cruise missiles, or an Army hypersonic artillery battalion far back from the front lines. The point is that it doesn't matter who takes the shot so long as the shot is effective.”

General Wilsbach then turned to what he considered to be the second tranche of integration, namely, interagency capabilities. “While our militaries are powerful forces, they are still tools. And like any tool, they are best applied to the range of problems they were designed to address. Thankfully, our governments have agencies purpose-built to cover domains in which the military is not built to operate....

“It also gives us the same opportunity that INDOPACOM has capitalized on with our joint planning—integration by design instead of by accident. National governments have a wide range of agencies for a

purpose—each has strengths that complement others to support and defend national interests. Aligning those strengths toward a common goal is how that integration best serves its citizenry and is something we as air leaders must be cognizant of how to best utilize our capabilities. All that said, the integration of processes within one country will never be as strong as the integration of those processes across many.”

He argued that integration is a key capability which the liberal democratic nations have compared to the 21st authoritarian powers. “Just as it doesn’t matter which platform engages a target so long as the target is hit, it doesn’t matter who directs what effort supporting the international order so long as it remains stable.

“Our adversaries are incapable of that level of trust, transparency, and integration. Could you imagine a Russian general as a PLAAF deputy commander? I can’t! If I were an adversary planner, seeing a host of Allies and Partners moving in concert across every level of government with joint integration would keep me up at night.”



FIGURE 7 GENERAL WILSBACH SPEAKING AT THE WILLIAMS FOUNDATION SEMINAR, 30 MARCH 2023.

Then General Wilsbach turned to deterrence and more to the point to what he considers to be the essence of integrated deterrence. “To me, it comes down to credibility. Our credibility is determined by two things: readiness and willingness. Both our nations are answering whether we can respond to destabilizing actors that choose to defy international norms by increasing our readiness.”

He then highlighted the kind of actions which makes deterrence credible. “We can deny adversaries the expected benefits of their aggressions, impose cost on them that they are not willing to accept, or show that we’re so resilient, we can overcome any impact they might have on us.

Second Line of Defense

“The first message of denial is, in essence, the will to fight. Investment in modernization is one way to convey this message. More capable platforms allow us to respond to Chinese destabilization efforts across the Indo-Pacific more effectively, whether that’s an E-7 providing airborne C2 during an unprofessional intercept by the PLAAF or space assets providing overhead imagery of the PRC gray- zone actors trespassing in a nation’s exclusive economic zone.

“The second message of cost imposition is simple on its surface but has layers to consider. First and foremost, we all understand that no one wins if a conflict with China breaks out in the Indo-Pacific. That would be the worst-case scenario for every nation that calls the region home and is the last thing any of us want.

“So if an aggressor chooses to cross that line, they are already willing to bear considerable cost. That’s why the deterrence must be credible and convincing. You cannot leave room for doubt that the cost could be tolerable. To do that, you need to know who should receive that message. In authoritarian regimes, it must reach the few people at the top who hold all the decision- making authority. They may never bear the cost personally, but their power relies on the fear and submission of those who will.

“The third message is in line with Secretary Pezzullo’s remarks on resilience. Agile Combat Employment is one way we can create a resilience effect in combat. Through dispersal, mobility, and flexible C2, our forces use ACE to create enough targeting dilemmas for an adversary that we’ll always have forces in the fight to challenge them.

“As another example, Australia has inspired the region by demonstrating resilience to diplomatic and economic coercion. Similar actions of resilience are occurring in fields as varied as air defenses to industry supply chains.”

He concluded with this correlation of integrated deterrence with the kind of global development which liberal democracies favor.

“Denial, cost, resilience. Ideally, our deterrence actions should convey all three messages simultaneously. If I were an adversary planner, seeing capable forces across multiple, like- minded nations committed to action, able to deny my goals at overwhelming cost to me, and resilient enough to weather any of my attacks, that would keep me up at night. Integrated deterrence requires integration, readiness, and willingness, but it also needs one more thing—belief.

“Committing to upholding peace and stability is not an easy path to take. It requires significant investment of both time and resources, constant maintenance, and hard choices by leaders like yourselves. All of that requires a belief that it is worth it. I believe upholding the international order that has led to the most prosperous time in world history is worth it. I believe standing as a shield against authoritarianism is worth it. And I believe preserving our shared values of democracy, human rights, and freedom is worth it.”

THE PERSPECTIVE OF AIR MARSHAL HARVEY SMYTH

At the seminar, Air Marshal Harvey Smyth, the Deputy Commander Operations, presented a UK perspective of the challenges facing the UK and her allies in the contentious 2020’s. I first met Smyth when he was the head of the UK F-35 program. In an interview I did with him 2016, Air Commodore Smyth highlighted the coming of the F-35 the UK joint force. In that discussion, he highlighted the importance of the F-35 in enabling coalition operations, which is now considered a key element for integrated deterrence.

This what we emphasized [in that interview](#): “It can be easily forgotten that the USAF and the RAF have not flown the same aircraft for a very long time indeed. The RAF and the Marines have flown Harriers and along

with the Spanish and Italians formed a three-decade Harrier community. And Smyth as a Harrier pilot underscored the importance of this shared legacy moving forward.

“As an RAF pilot with significant maritime and carrier operational experience, we are shaping a collegiate and joint way ahead with the Royal Navy which brings the RAF domain knowledge of ways to operate in the extended battlespace with the coming of the F-35B to the new Queen Elizabeth class carrier.

“Being radical, I think it would make sense to put a picture of the Queen Elizabeth class carrier on our RAF recruiting poster: the RAF and the RN are jointly delivering the UK's future Carrier Strike capability, and all RAF Lightning pilots will spend some of their time at sea, as I did throughout my 16-year career in Joint Force Harrier – we are forging an integrated approach together, which is incredibly exciting.”

The point simply put is that Smyth has been working integrated deterrence via the F-35 program for several years. But this was before Brexit, before several years of turbulence in UK and European politics and the return of war to the European context.

But it was also prior to the recognition of the broader challenges posed by the global reach of the 21st century authoritarian powers. When my co-author and I decided to write a book on the [return of direct defense in Europe](#), which we started to write in 2014 and published in late 2020, our original publisher wanted this book to focus on Russia.

We significantly disagreed. We argued that the challenge for Europe's direct defense was posed equally by China as a force within Europe and operating globally. Our view was an anomaly at the time, but it is no longer.

In fact, Air Marshal Smyth underscored that we now face a Euro-Atlantic-Pacific global threat envelope and that the UK is focused on shaping its contribution accordingly within the scope of its means. He argued that the UK recognized that global deterrence was the critical focus of their defense effort, but such a focus clearly needed to encompass close working relationships with allies going forward. He made the point that even for the United States it was beyond its capability to fight a two-front war.

This meant that shaping more effective allied cooperation through a process of integration was critical and that is what is meant by integrated deterrence. But such an aspiration cannot be realized within the legacy limits on information and technology sharing.

As he underscored: “The key to success will center on our ability to share more of our intelligence, share more of our information, sharing more data, and share more technology. We need to work together to identify the gaps and the vulnerabilities in our deterrence posture that an adversary might exploit. And we need to work out how best to work as a collective, rather than as individual nations. This is really, really hard to do.”

Air Marshal Smyth emphasized that in spite of its successes, NATO scoped to European defence was not enough for today's UK deterrent structure. “It is clear that given the changing threat picture, effective defense deterrence will mean working through other groupings further beyond NATO, and beyond the Euro Atlantic theater, with a renewed emphasis on the concept of strategics, developing and establishing new frameworks, and building a new international security architecture to manage systemic competition and escalation.

“And in today's multipolar environments, the UK will continue to develop a broader deterrence toolkit to include information operations and offensive cyber tools and make greater use of open-source information alongside our historically more classified intelligence capabilities.”

Second Line of Defense

“We will launch a new economic deterrence initiative to strengthen our diplomatic and economic tools to respond to and deter hostile acts by current and future aggressors. On nuclear, of course, the foundational component of UK is an integrated approach to deterrence with our minimal but credible, independent, UK nuclear deterrent. It is assigned to the defense of NATO to ensure that potential adversaries can never use their capabilities to threaten the UK, or indeed our NATO allies...

“We would consider using our nuclear weapons only in extreme circumstances of self-defense, including the defense of NATO allies, and of course, only the Prime Minister can authorize their use.

“But in addition to our nuclear deterrent, the UK’s conventional, cyber, and space forces are now becoming sufficiently capable, resilient, deployable and adaptive, to deter potential adversaries from engaging in conflict and to win if indeed, deterrence fails.



FIGURE 8 AIR MARSHAL HARVEY SMYTH SPEAKING AT THE WILLIAMS FOUNDATION SEMINAR 30 MARCH 2023.

“Beyond these military instruments, we’ll also see UK working the much wider aspects of state power to increase the costs of aggression by hostile actors above and below the threshold of armed conflict. The UK will continue to develop such levers to adapt to the changing global threat environments. In particular, we will strengthen our economic capabilities and information statecraft...”

Air Marshal Smyth brought to the attention of the audience, the recent update of the 2021 UK Strategic Defence Review. The [Integrated Review Refresh 2023](#) or the IRR was released last month. And in that review, deter and deterrence was frequently cited throughout and provides a good overview of the current UK government’s view of the deterrence challenge facing Britain and her allies.

Based on this document, Air Marshal Smyth discussed the UK current concept of deterrence.

As Air Marshal Smyth underscored: "We are all very familiar with the three C's of traditional deterrence: capability, credibility, and communication. But in the UK, we're now finding it helpful to consider integrated deterrence through the lens of an additional three C's: comprehensive, coordinated, and coherence.

"First, deterrence must be comprehensive, as discussed in the IRR. This means taking into account all state levers of power and tailoring our approach to maximize use of those levers of power that are best suited to change the perceptions of a specific adversary. The integrated approach attempts to avoid the age-old temptation of over focusing on the military instruments of power... To be truly comprehensive, integrated deterrence must be both multi domain and multi-agency.

"Second, deterrence must be impeccably coordinated with allies and partners so that the impact of our actions are greater than the sum of the parts, from force posturing, all the way to the imposition of economic sanctions. None of us can do this alone.

"And whilst we have all worked hand in glove for many decades in terms of deterrence and defense, in today's information driven, intimately connected, rapidly dynamic but ever shrinking world, there is always more effort required, especially if we are to truly deliver a coordinated, integrated, and determined effect.

"Lastly, we need to take a more coherent approach to developing our deterrence strategies, understanding the complex interplay across the spectrum of conflict and considering the temporal nature of crises to ensure that our activities remain aligned with the overall objectives and desired end states.

"It is fair to say that capabilities available to state and non-state actors in today's complex world have blurred the traditional thresholds of conflict...And also understanding the role and the impact of strategic or nuclear messaging well below the nuclear threshold, as well as how to manage escalation over time. And this is definitely something Russia's invasion of Ukraine has brought into sharp focus.

"Thus, alongside the long-standing capability, credibility and communication aspects of deterrence, we add three more C's of deterrence: comprehensive, coordinated and preparedness.

"And for me, there's no question that the development of integrated deterrence remains incredibly complex both by necessity and by design across government, and working with allies is challenging enough in the best of times, but for sure, the juice is definitely worth the squeeze."

SHAPING THE AUSTRALIAN DEFENCE BASE FOR GREATER DETERRENT EFFECT

A major aspect in shaping Australia's approach to enhanced deterrence is greater sustainability for the ADF and greater resilience for the Australian nation as a whole. Part of the equation is how to augment defence stocks and the ability to sustain the force when external supply chains are under pressure or attack.

What changes does Australia need to make to better positioned to do so?

And how does Australia work with its allies to shape a more credible allied arsenal of democracy?

Dr. Alain Dupont provided a wide-ranging overview on the challenges facing the credibility of an allied arsenal of democracy, in terms of an ability to produce weapons and other war consumables, as well as the ability to sustain equipment in higher intensity operations.

As Dupont characterized the very significant challenge facing the liberal democracies: "The country or alliance that can deliver the biggest punch and outlast adversaries will win. Right now, that is not us. The arsenal of Second Line of Defense

democracy has been replaced by the arsenal of autocracy. The Ukraine conflict has exposed Australia's and the West's thin, under-resourced defence industrial base. If we don't fix the problem – and quickly – we won't prevail in a conflict with a better equipped adversary.”

Dupont illustrated his argument by focusing on the production of a key consumable in the Ukraine war, namely 155mm artillery shells.



FIGURE 9 SLIDE FROM PRESENTATION OF DR. DUPONT AT WILLIAMS FOUNDATION SEMNAR

This aspect is what the French have referred to recently as the need to have an effective “war economy” by which they are referring above all to the consumables namely, the things you need to have to fight a protracted war.

This is a key challenge as the West simply has hollowed out basic consumable production for just-in time wars supported by just-in time supply chains.

But neither the industrial base nor the supply chains are up to prolonged conflict of any sort. If Australia and the West want to deter the post-Cold war legacy approach to defense industry and supply chains will simply not be adequate. A major re-think and re-structuring is in order.

What the West can do to deal with this problem is to shape more alliance wide production and stockpiling. By realizing that the United States is no longer configured to be the arsenal of democracy, one credible way ahead is alliance-wide production, such as the recent EU decision on community wide weapons production.

But this will not happen in Australia unless the government actually funds buying the consumables necessary for prolonged operations.

Another speaker at the seminar, Kate Louis, head of Defence and Industry Policy, Australian Defence Group, underscored that although the Australian government had put in place various “push” efforts to incentivize Australian defence industry, there have not been robust, consistent and steady “pull” efforts to grow that industry. Put bluntly, if you don't spend a steady stream of cash on munitions, as an example, industry will not

build them and shape the industrial base capable of being ramped up. It is difficult to ramp up if you have hollowed out.



FIGURE 10 KATE LOUIS SPEAKING AT THE WILLIAMS FOUNDATION SEMINAR 30 MARCH 2023.

A second element highlighted by Dupont was more effective ways to work with the various foreign suppliers.

He noted that Australia is the fourth largest defence importer globally which means that its platforms are foreign sourced even if in some cases they are assembled in Australia.

But if the allies have tight supply chains with no real depth, how on earth can Australia expect to be at the head of the line in getting timely supplies with any tactical or strategic sustainment depth?

A major aspect of any Australian rethink must entail generating local production to support their foreign equipment, and building on a new model of an alliance arsenal of democracy, building for allied needs not just Australian needs.

This point was made by a third speaker in the defense industrial section of the seminar. Ken Kosta, Vice President, Australian Defence Strategic Capabilities Office, Missiles and Fire Control, Lockheed Martin, made this point. He commented: "Our goal is to participate in global operations which includes meeting demand in excess of Australian initiatives.

"Lockheed Martin, in partnership with the U.S. government, and the government of Australia intends to cooperatively add to near term operations, and supply chain capacity for key munitions and subsystems. In support of capability depth, Lockheed Martin plans to construct a flexible factory in Australia that can quickly adapt to meet a multitude of integration platform requirements."

Second Line of Defense



FIGURE 11 KEN KOTA SPEAKING AT THE WILLIAMS FOUNDATION SEMINAR 30 MARCH 2023.

A third element discussed by Dupont are the challenges which he thinks must be met to move forward in creating a realistic and effective industry in Australia to support defense.

He summarized these challenges in a single slide in his presentation:

OUR PROBLEMS

- We have no defence industry strategic plan or funding model that provides a pathway to greater self-reliance.
- Our peace-time acquisition system is slow, rigid & risk averse.
- The ADF is too reliant on overseas suppliers.
- Red tape is strangling defence innovation.
- Australian defence industry has insufficient scale.

FIGURE 12 SLIDE FROM DR. DUPONT'S PRESENTATION TO THE WILLIAMS FOUNDATION SEMINAR.

To shape the kind of industrial system which could support the ADF in its wider deterrence efforts, sustainability and self-reliance are critical. Deterrence is rooted in an ability to endure; not just to engage and support a 10-day military excursion.

Dupont emphasized that to be successful Australia needed to build to scale in selected sectors. He argued that in this sense, "we need to seriously invest in our own defence industry and scale-up emulating South Korea, Sweden and Israel. And that growing a competitive, export oriented defence industry must be a national priority requiring a whole of nation approach."

But to generate the capital to build targeted industry which could become effective in export markets is a challenge to be met. In Dupont's view: "Private capital must be incentivized to invest in defence infrastructure and national security enablers." He argued to do so requires new approaches to partnerships between the public and private sectors.

Kate Louis also focused on the importance of government getting behind a scaling up of the defence sector, but being realistically effective in so doing. She noted: "the government has a range of levers to shape the industrial base and the industrial strategy that that wants to shape."

But what are the objectives to be met by working in a particular defence industrial area, and will government be consistent in supporting buys from that industrial sector and support exportability of that sector?

What defense industrial infrastructure does Australia need to operate in prolonged conflict?

How can it do so?

How can it fund those capabilities?

Second Line of Defense

How can government focus in a consistent way on sustaining those capabilities?



FIGURE 13 DR. ALAN DUPONT SPEAKING AT THE WILLIAMS FOUNDATION SEMINAR 30 MARCH 2023.

The question of industry and defence infrastructure is different in many ways from what was needed in World II. Cyber and space infrastructure are two cases in point. At the seminar, Nick Leake, head of satellite and space systems, Optus, provided a presentation which highlighted how challenging supporting and defending space infrastructure can be.

In his presentation, Leake highlighted the space network which OPTUS operates. As he put it: “the best kept secret in Australia is that we actually have a satellite business as well. We operate critical infrastructure every single day through our satellite networks. We maintain infrastructure to the highest level. And what keeps me awake at night is what could happen in space to that infrastructure.”

During the presentation, he discussed how their network serves the Australian Department of Defence as well. They operate a satellite in a particular location (as required by international regulations) to provide spectrum to support the Department.

But to operate any of their satellites within the location allowed by their international filings, they navigate the satellite within their allocated space to provide for the services provided. What Leake indicated was that they faced the significant challenge of maintaining the integrity of their satellite and its network which requires constant effort on their behalf not only for cyber security but for the physical security of the satellite itself.

What is required to ensure satellite physical security is ongoing space domain awareness (SDA). “We need SDA capability to operate our spacecraft. The SDA capabilities are extremely important for OPTUS to maintain and operate our spacecraft. This means that the SDA capability that gets built by Defence, allies and private organizations is critical to operate our space infrastructure.”

He added: "It does worry me a lot is the effect states like China which have launched more satellites than the U.S. over the past 12 months will have on our infrastructure. What are they doing with their satellites? What capabilities will they have?"

Leake indicated as well innovations which they are pursuing in the dynamic development of their space network as well. One such innovation will be seen with the launch and operation of their 11th satellite. "This will be Australia's first fully software defined satellite. What does this mean? It allows you can alter the capacity of the satellite operating within its area of operations by altering the software to offer new services."



FIGURE 14 NICK LEAKE SPEAKING AT THE WILLIAMS FOUNDATION SEMINAR 30 MARCH 2023.

Another innovation is the planned launch of a fuel pod to hook up with one of their satellites to provide more energy for the satellite to operate. The basic satellite functions well but is running low on fuel and by hooking a pod up with it, they will be able to extend the satellite's life.

"The particular satellite in question will run out of fuel by 2026. We have decided to use what we call a mission extension pod which is fundamentally a fuel tank to extend the operational life of the satellite."

Thus, when talking about the defense industrial base needed for Australia or its allies, one needs to widen the lens to understand what is required in terms of industrial and services infrastructure.

A final point made by Dupont was that the AUKUS agreement – which is been largely discussed in terms of nuclear submarines – could be part of reshaping how key allies can work together to shape a collaborative arsenal of democracy effort. Specifically, Dupont was referring to what has been called Pillar 2 of AUKUS.

The second pillar is focused on cooperative development between the AUKUS partners on Advanced Capabilities. The AUKUS pillar two covers an array of strategic technologies, most of which could be

Second Line of Defense

regarded as general technologies, or dual-use technologies. It is in this sense that Dupont argues that “AUKUS could revolutionise Australia’s defence industry if we can make both pillars work.”

Kate Louis made a similar point highlighting the need for the U.S. to deal with the way it implements its ITAR system. She noted: “AUKUS is not just a military capability, but offers a way to operatize new industrial ways of cooperation. For example, AIA (The Aerospace and Industrial Association) generated an excellent input to the Congress with regard to ITAR and Export Reform. This is really an excellent piece of work that I have not seen before in terms of driving change.”

In short, shaping an Australian enterprise to support defense in terms of the technologies most relevant to Australian deterrence is a key challenge facing Australia as well as those allies who wish to create an arsenal of democracy in common.

ISR AND DETERRENCE: OR HOW DETECTION IS A KEY PART OF THE DETERRENCE EFFORT

Jake Campbell, Triton Program Director, Northrop Grumman Australia highlighted one area within a deterrence strategy, namely how detection can enable various deterrent actions?

Campbell, an experienced RAAF officer with many years of experience in the ISR area. I first met Jake when he had been appointed along with the current chief of the RAAF, Air Marshal Chipman, as the co-heads of Jericho. There initial focus was very much in line with Jake’s current work on Triton and his thoughts on “deterrence by detection.”

He started his presentation by highlighting his focus as follows: How does Australia’s detection capabilities contribute to the overall deterrence package?



FIGURE 15 JAKE CAMPBELL PRESENTING AT THE WILLIAMS FOUNDATION SEMINAR MARCH 30, 2023.

His answer was that it depends on where and how that capability was exercised by the operational forces and I would add the ability of the political authorities who are working with the operational forces to get the

deterrent effect. Put in other terms, it is the challenge of having the right military tool kit combined with the practice of the art of statecraft.

Campbell argued that “deterrence can only be successful with a clearly defined and communicated outcome and with the ability to use a carefully balanced mix of necessary options to deliver that outcome. What we are really talking about is deterrence by design.”

With this laydown of the concept of deterrence, he then highlighted the perspective of one analyst which emphasized the following: “Adversaries are less likely to commit opportunistic acts of aggression if they know they are being watched constantly and that their actions can be publicized widely.”

Detection is part of the deterrence package but for it to work as such, it must be linked to capabilities for credible action and there needs to be a track record of a state actually responding in an appropriate manner to a threat once detected.

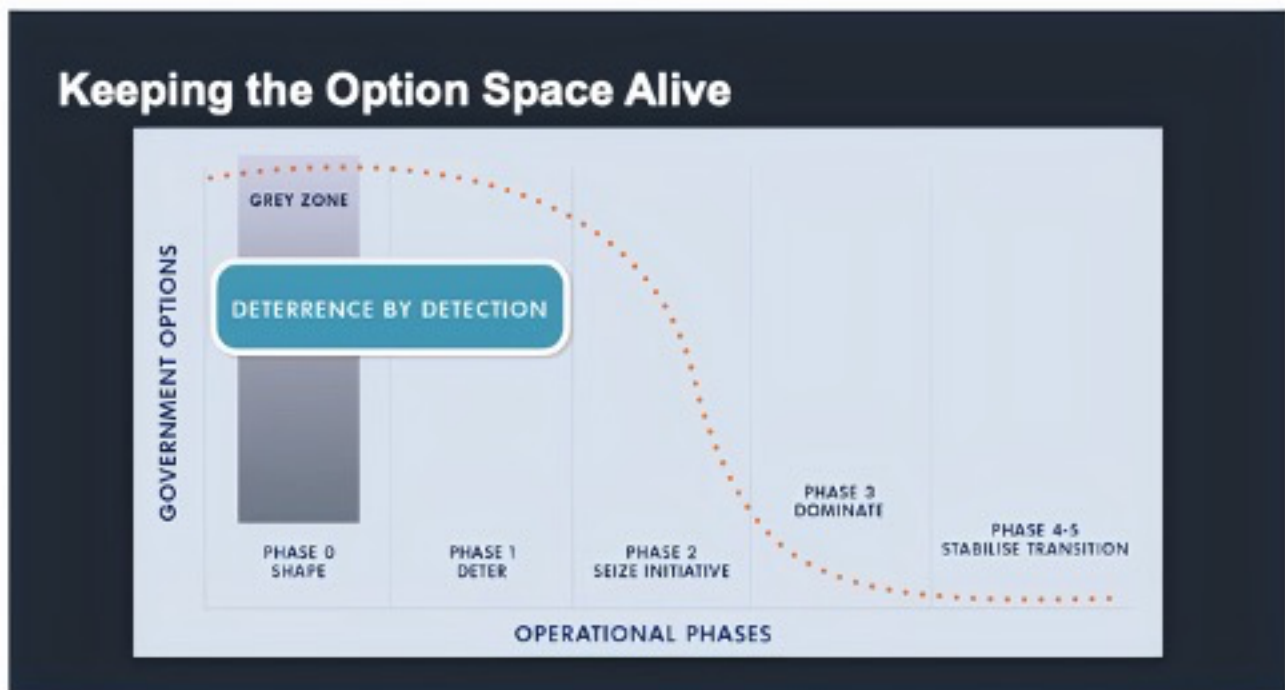


FIGURE 16 SLIDE FROM JAKE CAMPBELL'S PRESENTATION TO THE WILLIAMS FOUNDATION SEMINAR.

This is how Campbell characterized the above point: “Deterrence is only possible and effective if Australia has a clearly defined and communicated deterrence outcome.” Campbell cautioned that “deterrence by detection only works if it is linked to a credible deterrence response option, and a willingness to respond on order to deliver a combined deterrence effect.

He expanded on that point as follows: “What is Australia’s balance of interests that drive the deterrence outcomes? And ultimately what is Australia deterring? Is it an attack on Australia? Our sea lines of communication? Is it our offshore network infrastructure, our critical onshore infrastructure? Is it an attack on our region? Whether that’s the Southwest Pacific or Southeast Asia or law of the sea, or an attack on our allies? Are we trying to deter an attack on Taiwan? Are we trying to deter a superior adversary, a near peer adversary or a rudimentary adversary?”

Second Line of Defense

Campbell argued that when focused on deterrence by detection, the role of layered ISR changes in the various operational phases of what one might consider a deterrent process or perhaps continuum. The slide below was how Campbell visualized the phases or continuum.

He put his assessment this way: "While deterrence by detection can deliver strategic effects, deterrence is also effective in phase zero and phase one operation by leveraging quality ISR information when carefully coordinated with the public and classified use of that information.

"In early phases, the full force of diplomatic, economic, and public information efforts can be brought to bear. Once combat operations have commenced, the scope of those options are significantly reduced and the effectiveness of deterrence by detection is clearly significantly reduced.

"Detection operations can serve to suppress the effectiveness of gray zone operations by enabling public and international community awareness. And when necessary, the ability to use non-military responses."

He warned that "there is a risk that we will collect too much, or low fidelity data. To be effective Australia and our allies need better ways to turn the collected data into actionable intelligence....

"And there is a risk that the intelligence community won't make the important information public. Balancing the need to protect versus the need to create deterrence will be challenging, but we need to do so for deterrence to be effective."

In his assessment, Australia is building out the kind of layered ISR capability necessary for the art of deterrence by detection. He visualized the notion of layered ISR as follows:

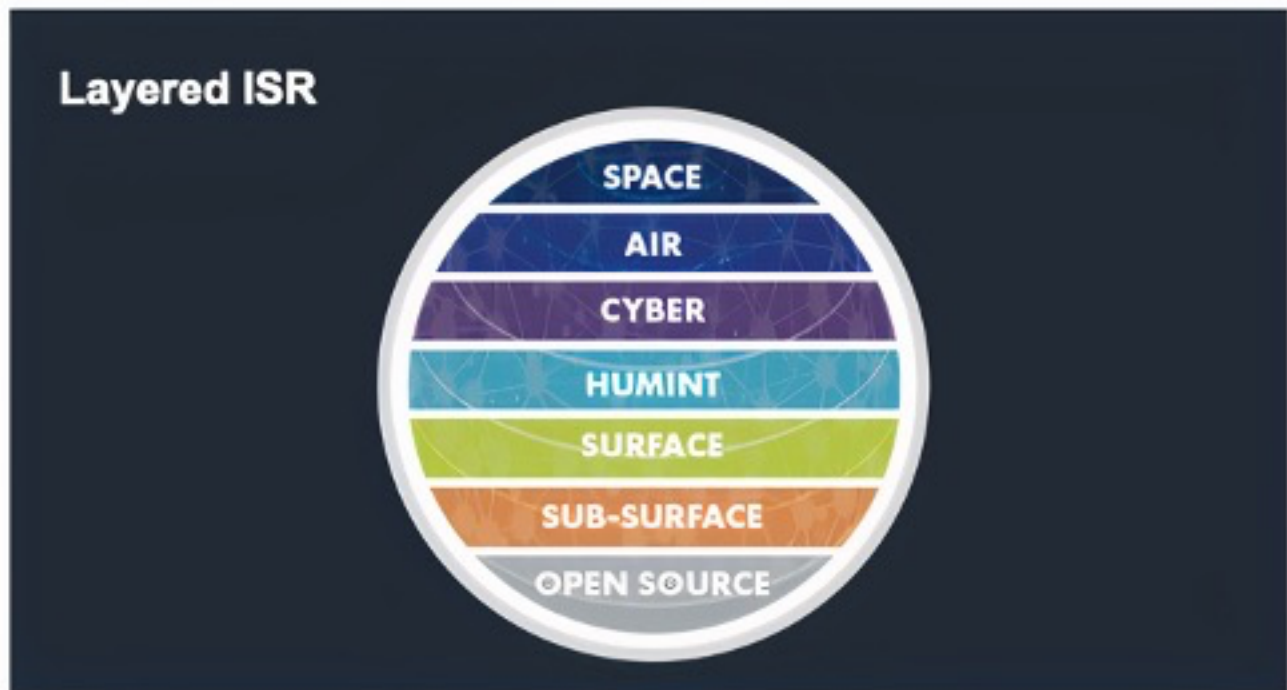


FIGURE 17 SLIDE FROM JAKE CAMPBELL'S PRESENTATION TO THE WILLIAMS FOUNDATION SEMINAR.

He underscored that “critically layered ISR must be backed by a responsive sophisticated intelligence capability that can exploit the ISR product quickly to enable selective public release of information and shine a light on aggressive gray zone tactics or conventional force posture changes.”

Campbell concluded that the evolution of layered ISR and its role in deterrence was a key area for industrial-government collaboration, cooperation and successful delivery of ongoing capabilities.

“Deterrence resilience will depend upon industry’s ability to field advanced sensors and platforms quickly and efficiently. Digital engineering has much to offer here. But we also need to find better ways to rapidly reconstitute capabilities. And I’m not just talking about low end capabilities; we need to be able to reconstitute our high-end capabilities quickly. Industry also has a role in making the ISR layers more robust through new concepts for ISR, backed by resilient communications pathways. And I encourage defense and the services to include industry as you start to develop new thinking.”

SHAPING A WAY AHEAD FOR AUSTRALIAN DEFENCE

The Williams Foundation seminar on deterrence held on 30 March 2023 provided a chance to think about the way ahead for Australian defence. The seminars started with the introduction of the F-35 as a forcing function into the ADF and the shaping of a joint force by design.

But much of that thinking was built to support the strategic environment envisaged in the mid-decade best expressed in the defence white paper of 2016.

As the late Brendan Sargeant characterized the 2016 White Paper: “The 2016 White Paper was an important document because it restored the underlying funding framework that the 2009 White Paper envisaged but was never able to sustain. The underlying vision of the force that was evident in 2009 was reinvigorated in the 2016 White Paper and a funded investment program was established. This was an important achievement.

“The 2016 White Paper also recognised that Defence was more than the ADF, but also included the broader Defence system. We saw a much more sophisticated recognition of the importance of enablers (what Nick Warner in a landmark speech when he was secretary had called the broken backbone of Defence).

“It put renewed emphasis on defence industry, particularly with the recognition that industry is an element of capability. At the heart of this White Paper was a recognition that we needed to rebuild the Australian Navy, so the shipbuilding agenda, which we are all now grappling with, was born in that document.

“But it also had two other very interesting features. One was that it removed the prioritisation framework for the development of the force structure that had been evident in the 2013 and 2009 papers, and in preceding papers such as the ones in 2000, 1994 and, most importantly, the one in 1987. It was a significant break with the past. This is perhaps the most controversial element of the paper.

“But perhaps the most interesting element of the 2016 document was that it gave enormous priority to the maintenance of the rules-based order, a theme that also occurs in the 2017 Foreign Policy White Paper. The 2016 Defence White Paper has many achievements, but its focus on the rules-based order is now starting to look a bit wistful.”^[1]

Wistful indeed and we have entered a global era with many chartered unknowns.

The re-thinking of Australian defence is occurring precisely when its allies in the Pacific and in Europe are re-thinking and re-working their approaches to the future of defence in a very different world when it was simply trying to ensure that the authoritarian powers complied with the rules-based order.

Now they are focused on building a new one.

That is why the Williams Foundation team established a seminar which focused on first principles: what are the nature of the defense challenges which Australia faces in this new historical epoch?

And what is the role of the ADF and its recalibration and re-design within the new context?



FIGURE 18 VICE-ADMIRAL BARRETT (RETIRED) SPEAKING TO THE WILLIAMS FOUNDATION SEMINAR 30 MARCH 2023.

Vice-Admiral (Retired) Barrett underscored the focus of the seminar in his concluding comments as follows: “As the Chairman of Williams, Geoff Brown, indicated at the beginning of the day we are taking a different tack with this seminar and the one to follow later in the year.

“The subject that we discussed over the last couple of hours has been around deterrence where previously at these conferences, we’ve been talking very specifically around fifth generation capability throughout the ADF.

“So the idea that we would gather, and we would have an array of esteemed speakers who would inform us, educate us, but also challenge us, to assist us in being able to formulate our thinking about the way ahead made a great deal of sense.”

I discussed at further length Barrett’s thoughts on the transition a week after the seminar.

He emphasized that “we have to look at the broader strategic redesign of Australian defence within which the ADF will be re-crafted. Our views of deterrence in this new period are not yet fully formed and it is the broader perspectives that need to guide the way ahead for the ADF.

“We need to settle our understanding of deterrence as a foundational effort or we will simply end up with a platform centric perspective driving this or that new platform without consideration of what these new capabilities bring to the deterrence equation.

“What is needed is a national enterprise that looks across all parts of government, be it statecraft, diplomacy, economic or military capabilities. It is essential that we drive towards an understanding of what deterrence means to us and for us.”

We did not dwell on the submarine issue but he naturally touched upon it.

His argument was the role of being able to operate successfully in the underwater domain is key for the ADF in a broader deterrence strategy.

Clearly, my own work for the U.S. Department of Defence has made it very clear that the speed, agility, stealth and range of a nuclear submarine make it a key element enabling the U.S. Navy to play a much more effective role in operating in the underwater domain and with the multi-domain kill web approach they are finding ways to more effectively include the nuclear submarine fleet within joint firings solutions as well.

Barrett argued: “I often hear comments that there has been little debate about the need for a submarine capability and that more needs to be done before a decision to proceed is made. In reality, there has been significant open debate and critique in the last decade – but few have taken the opportunity to read it, understand it, or educate themselves about that debate.”

Building capability is part of deterrence.

As Barrett concluded: “It is not simply about process; it is about outcome. Deterrence is empowered by a demonstration of the will of a nation to be able to act to meet its own interests which comes not only through political actions but industrial ones as well. It is an ability to draw on the strength of the whole nation which can be demonstrated in building out new capability which enhances the ADF's ability to act supported by the nation.”

[1] Laird, Robbin. *Joint by Design: The Evolution of Australian Defence Strategy* (pp. 325-326). Kindle Edition.

THE PERSPECTIVE OF THE CHAIRMAN OF THE SIR RICHARD WILLIAMS FOUNDATION

The Chairman of The Sir Richard Williams Foundation, Air Marshal Geoff Brown (Rtd.) provided his assessment and a look ahead for the next seminar to be held in September 2023. Brown felt that the seminar provided perspective on where Australia stood as it addressed its way ahead in the new situation. There was confidence in the force in being, but clear recognition of the need to craft adaptations in the years ahead.

This seminar provided a sense of the transition point; the next one will focus on some of the key challenges or problems which need to be addressed moving forward.

One key element of the seminar was highlighting progress in coalition cooperation in the Pacific. Brown noted that the current PACAF, General Wilsbach, has made a strong working commitment with Australia and this has been reflected in “how close that relationship has become in the wake of the common F-35 acquisition.” The presentation by Air Marshal Chipman reinforced this key point of a deepening of a collaborative working relationship.



FIGURE 19 AIR MARSHAL (RTD.) BROWN OPENING THE WILLIAMS FOUNDATION SEMINAR 30 MARCH 2023

Brown noted that when Australia engaged in developing the Wedgetail, both the UK and the U.S. hosted RAAF crews to become familiar with air battle management on the AWACS. Now with Australia seeing the U.S. and the UK adopting the E-7, “we are paying back a debt.”

VADM Mead highlighted the nature of the nuclear submarine enterprise, and identified how an established capability, the Virginia Class submarine, was coming to Australia sooner rather than later and was another example of coalition cooperation in the Pacific.

Brown underscored that strengthened coalition cooperation was a key part of deterrence. “Our ability to work together and the systems work we have been doing certainly adds complications to any Chinese calculations about conflict and its outcomes.”

Brown then highlighted the presentation by Secretary Pezzullo. In Brown’s perspective what Pezzullo conveyed was the importance of investing in Australia’s deterrent capabilities now rather than risking a major conflict where the costs would be significantly higher. The old expression, “penny wise and pound foolish” comes to mind as a warning about the importance of having a more resilient Australia with greater deterrence impact versus a less focused Australian effort.

The seminar extensively discussed the need to build a different kind of defence industrial capability to support Australia and the allies. The gutting out of industry in Australia, or the West more generally in favor of a globalization transfer of industry to China has left us very vulnerable. Brown argued: "We need in shore production; we need to consider paying a premium in order to have the industrial capability we need in case of a crisis. Globalization only works if a rules-based order is respected; China isn't thus changing the nature of the challenge."

Looking forward to the next seminar, Brown characterized the way ahead as follows: "We dealt with the big picture in this seminar. We will address specific national challenges we need to meet and how we might do so. It is very difficult for Western countries to maintain focus. We need to identify those strands of capability we need to commit to and support consistently in the years ahead."

THE PROGRAM

Williams Foundation Conference

Sharpening the Edge of Australia's National Deterrence Capability

30 March 2023, National Gallery of Australia

Updated 17 March 2023

Time	Topic	Speakers
0800-0830	Registration and breakfast	
0830-0835	Welcoming Remarks	AIRMSHL Geoff Brown AO (Retd) Sir Richard Williams Foundation
0835-0840	Introduction and MC	SQNLDR Sally Knox Sir Richard Williams Foundation
0840-0910	Fundamentals of Deterrence	AIRMSHL John Harvey AO (Retd)
0910-0940	Deterrence from a UK Perspective	AIRMSHL Harvey Smyth, CB, OBE, DFC Deputy Commander Operations, Royal Air Force
0940-1010	Resilience and Deterrence	Mike Pezzullo, AO Secretary, Department of Home Affairs
1010-1040	Integrated Deterrence	Gen. Kenneth Wilsbach USAF Commander Pacific Air Forces, HQ Pacific Air Force
1040-1110	Break – Morning Tea	
1110-1135	Reinvigorating the Industrial Base	Dr Alan Dupont AO Chief Executive Cognoscenti Group
1135-1155	Manufacturing Deterrence	Ken Kota, VP MFC Lockheed Martin
1155-1225	Defence and Industry Policy Implications	Kate Louis Australian Industry Group
1225-1245	Deterrence by Detection	Jake Campbell, AM Triton Program Director Australia, Northrop Grumman
1245-1305	Operating critical infrastructure in space	Nick Leake Head of Satellite and Space Systems, Optus
1305-1400	Lunch	
1400-1420	Title TBC	Vice Admiral Jonathan Mead AO, RAN Head of Nuclear Powered Submarine Taskforce
1420-1440	Chief of Army Perspective	LTGEN Simon Stuart AO, DSC Chief of Army
1440-1500	Chief of Air Force Perspective	AIRMSHL Robert Chipman AM, CSC Chief of Air Force
1500-1520	Formal Close	AIRMSHL Geoff Brown AO (Retd) Sir Richard Williams Foundation