

2024 Air and Space Power Conference

Transcript – Threat Casting to Develop Sustainable Readiness and Resilience

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PETER DEAN: Good afternoon, all and thank you to Chief of the Air Force for the kind invitation to speak today. I am squashed between CJOPS and CDF which is not the world's most comfortable position to be in. This is my third domain conference in the last 12 months or so. The army conference and the sea power conference in the 2023, post the DSR being released, this is the first post the National Defence Strategy and Integrated Investment Plan. It is fantastic to note the commonality of vision coming out from all the speakers. In that vein, General Bilton spoke about campaigning and translating strategy into action, creating capacity across the force by blending raised terrain and sustained activities and operational activities. CDF will follow me with future challenges to shape and impact the ADF's ability for sustainment readiness and resilience. I will try and thread the needle between the talks and approaches and value-add to the panel we had yesterday by drawing my topic on issues of deterrence and resilience together in the Australian context.

I have been asked to talk about my topic in the context of threat-casting. That is the multidisciplinary method and model of - to model a range of potential futures and threats out to 10 years time. Threat-casting's purpose is to be adaptive and provide continuous feedback into risk models. It is a futures field and threat-casting is descendant from scenario planning. Here I want to draw us back to the Defence Strategic Review, or DSR, and recently-released NDS. I won't delve into the academic details of threat-casting as a method but rather I want to draw parallels between threat-casting's approach that I just outlined and the DSR, and these concepts of resilience and readiness.

Firstly, the DSR was required to look out through intelligence assessments at

a 10-year future window, just like threat-casting requires. Secondly, it generated very specific scenarios to drive force structure in the ADF. Third, it put Defence planning into a two-year national Defence cycle, informed by a net assessment planning process to ensure continuous feedback and updates. As the independent lead, Sir Angus Houston and His Excellency directed myself and the other members of the DSR team, the DSR was to be the first net assessment. It was to set the scenarios and out of this emerged fundamental changes to Defence requirements, based on the intelligence assessments.

One of the foundational changes was the move from low-level threats under the Defence of Australia construct to major war threats. The focus on a regional balancing strategy, deterrence by denial at the national level and a military strategy of denial. So moving from the blue box where the defence of Australia was fundamentally focused for the future of the ADF to operating and considering operations in the red box at the top end of the conflict of spectrum. But also, at the same time, not overlooking the constant requirement for the ADF to be engaged in low-level operations, particularly as we saw climate change moving to become a threat generator.

These are some of the most important but often overlooked changes coming out of the DSR. The defence planning basis, in fact I would argue this is the most important change. Most of the commentary has focused on kit and capability and the endless cycle of platform debates. If you want to give me a coronary, let's talk about the B21 and the DSR. One of most radical changes in the DSR was not about those things, which the media obsess about, which is about the planning basis that is not often talked about. In the 40-year history of Australian Defence White Papers between 1976-2016, those white papers translation of strategic guidance, in terms of priority for strategic risks, geographical focus and general tasks for the ADF, into capability is one of the main historic weaknesses in Australian defence planning. This goes all the way back to the 1970s idea of the core force concept. A key exception to this was the 1986 Dibb Review and the '87 white paper which provided an implicit force structuring scenario for the defence of Australia and explicit guidance on how the ADF would operate the defence in-depth strategy it outlined. The DSR sought a

fundamentally new framework, based on the changes to the threat assessment. As Professor Stefan Frohling noted "The most important paragraph of the DSR is that the ADF needs a much more focused force, structure based on net assessment, a strategy of denial, the risks inherent in the different levels of conflict and realistic scenarios agreed to by government".

Political endorsement of force design scenarios are key elements of defence planning but in Australia, it has not traditionally been done that way. Rather, it is a concept we most often define in the United States or in NATO, for instance, especially when the Cold War was dealing with the most highest levels of strategic risk. By instilling this approach, the DSR introduced a net assessment analytical model. While it has many applications in this context, the DSR makes it clear the review required the ADF to be designed to meet one extant actual, clear and present threat, rather than a range of possible scenarios or notional adversaries and we heard about that earlier today.

It is also noted this occurs across three levels, competition, which particularly CJOPS just spoke about, but limited conflict, that is where both sides accept that limited stakes impose limits to escalation and the acceptance of cost of conflicts. Of course, as the slide points out, the risk of major war, where both sides fight to disarm and thus to impose their will upon their adversary.

In terms of scenarios that threat-casting talks about, these I am not going to delve into in the DSR given their classified nature. It is consistent with a threat-casting approach and thus for the future of net assessment and for national defence strategies to come for Australia, is the ability to assess alternative action back-casts as well as data analysis, technical documentation and communication are both future threats and the actions that do not become trapped in the cycle of chasing the latest technological development, or alternatively, rigidly sticking to a single view of a threat-based analysis that does not change.

Time will also tell if the two-year cycle of the National Defence Strategy informed by net assessment will survive the three-year Australian Federal election cycle. This approach to defence planning is, as I noted, the big change and to go back to Stefan Frohling again who noted "The section on force design in the DSR is not just the most brief but also the most important and, if

implemented, would well warrant the Deputy Prime Minister's moniker that this is the most ambitious review of them all". Much, especially in the media, has been said about the DSR statement that noted that the ADF was not fit-for-purpose. This has nothing to do with the force in being, or the leadership of the ADF or the Defence organisation and everything to do with the change of defence planning basis from low-level conflict to the risk of major war. The threat has changed, so must the ADF.

This new framework is reflected in the National Defence Strategy in section 6.3 for those who read that far down in the document. To enable the shift to an integrated focus-force, Defence is moving away from a domain-centric approach to ADF force design. That will be focused on capability development that addresses specific strategic and operational needs, based on realistic and prioritised scenarios. An approach that the VCDF stated recently was liberating when redesigning integrated investment program. The other key concept that must be addressed is the end of 10 years warning time. The capability development this means, as the same section as the NDS highlights, involves bringing minimal viable capabilities into service, as effectively and efficiently as possible. This will ensure capability-development is appropriately lined with strategy and resources and for all of you out there working on programs, that is not rewriting your program submissions to say "By the way this is the minimum viability capability and this is the shortest time we can get it into service". The clearest example is the navy surface treat outcome and the move to a new general purpose frigate that is off the shelf, in the water and with the first three being built overseas.

While the scenarios themselves are classified, the risk and the threat is clear. Net assessment for defence planning is a threat-based planning approach but one where the Defence effort is focused on one dominant, well understood and immediate risk. The clarity of that threat can be found in multiple documents and sources but I want to highlight just three. The 2024 Defence Industry Development Strategy, page 1, figure 1, military expenditure by region in Asia and Oceania, 1998-2023, the 25-year period. It shows we are currently at record high levels of defence spending in our region and with a 45% increase during this period, driven overwhelmingly by spending in East Asia. Given Japan has only

recently announced the doubling of its defence spending this increase largely comes from one country. It starts with C and ends with A and it is not Costa Rica.

Add to this considerable changes to Chinese approach to its foreign and defence policy since 2013, so what does that mean? This is best captured in Foreign Minister Wong's speech to the National Press Club on 17 April 2023, one week before the public release of the DSR. I highly recommend everyone to read that, the best articulation of Australian grand strategy by an official in 20 or 30 years, I think.

Foreign Minister Wong noted what we want to avoid is a region that is "Closed, hierarchical, where the rules are dictated by a single major power that suits its own interests. We instead want a region of rules, standards and norms so a large country doesn't undermine the fate of a smaller country. To get there, we need a regional balance of power that keeps the peace by shaping the region we want. We need a sufficient balance to deter aggression and coercion, a balance to which more players, including Australia, much contribute if it is to be durable. A balance where strategic reassurance through diplomacy is supported by military deterrence". Why this is a concern is because of what the third document, the National Defence Strategy states. I will quote "China is improving its capabilities in all areas of warfare at a pace and scale not seen in the world for nearly a century. This has happened without transparency about its strategic purpose and China has employed coercive tactics in pursuit of those objectives, including forcefully handling of territorial disputes and unsafe intercepts of vessels and aircraft, operating in international waters and air space in accordance with international law. Some of the initiatives in the Indo-Pacific lack transparency around China's purpose and scope". In my simple world of being a strategic studies professor, threat is capability plus intent.

Why has resilience, therefore, become such a theme with that foundation? As our Prime Minister Anthony Albanese stated "Australia's goal is not to prepare for war but to prevent it through deterrence and reassurance and building resilience". It is critical here - what is critical is the DSR talks about deterrence and resilience as conceptualised together. The DSR recommended and the Government accepted an approach founded on deterrence by denial, resilience is a key feature

of a denial strategy. Resilience is key in thwarting an opponent's attempt through cost-imposition. As noted, compliance by cost imposition can work against an opponent with low resolve, with limited resilience or little hope of eventual respite but compliance by cost-imposition is especially difficult to make work against opponents that do not fall into these categories. National resilience is a broad concept and much which what needs to occur goes far beyond the Defence department, as Tom Rogers from the AEC explained yesterday but it does have specific requirements for Defence. As the DSR stated, the ADF must improve its ability to withstand, endure and recover from disruption because as it states, a resilient Australia will be less susceptible to coercion.

The DSR provided a list of 11 key areas for national resilience. This cannot be understood without linking it to the needs in the DSR and National Defence Strategy for a more whole of government, whole of nation coordination, enhanced statecraft and enhanced alliance with the United States and greater engagement with key partners such as Japan, India, New Zealand, the Republic of Korea, Indonesia, Singapore, Fiji, Papua New Guinea and the list goes on.

After all, what Australia is focused on is a regional balancing strategy that can only be achieved as the Foreign Minister noted by a balance to which more players much contribute for it to be durable. In deterrence terms, resilience is about need to identify and prioritise critical assets, capabilities, functions and dependencies. As James Pennant noted, deterrence and resilience are intimately-connected. Deterrence is about understanding threats and using levers that might force an adversary to reconsider their objectives and actions against you. Resilience is about understanding yourself and the measures you can take to become a less attractive target or to bounce back more quickly from a setback. This combination of deterrence and resilience has developed into a key emerging area of 21st century governance.

In military terms, the DSR's key areas for national resilience include enhance military preparedness, advanced munition manufacturing and a national industrial base. The latter is addressed in the aforementioned industries strategy. Advanced munitions manufacturing in long-range guided weapons is a road map from Defence and it is imminent.

To drill down and finish the paper's main focus, I will talk about enhanced preparedness and readiness. Readiness and sustainability are two components of preparedness. This is nothing new. To quote from the 1994 Defence White Paper, readiness is expensive, requiring higher rates of training activity, including expensive collective training and live weapon-firing. Near complete staffing and fully provisioned and maintained equipment holdings, readiness must therefore be held at the level appropriate to our strategic circumstances and programs of activity. Our 2020 Defence Strategic Update noted "Readiness for high-intensity warfare, the focus under the DSR, relies on the sustaining of key capabilities and material, especially munitions".

It is interesting to know when you look at the 2024 IIP, Integrated Investment Plan, it includes \$21 billion for theatre logistics, \$21 billion for guided weapons and explosive ordinance and \$18 billion for the resilience northern bases. This is the largest single injection into the ADF logistics system since the Second World War. This is also reflective of regional trends. It has been widely publicised that Japan is currently doubling its Defence spending. Most of the commentary in relation to that has centred on Japan's development of a counter-strike capability. It has been a significant injection of funds starting in the '23 financial year to backfill spare parts and munitions, areas that have been long overlooked in Japan to improve the sustainability of operations. Its 2024 financial year budget doubled down on this and this was added to the 2023 Defence industrial base enhancement law that the Japanese passed. The '24 Defence budget allocates new resources to establishing a research department within the acquisition, logistics and technologies agency to quote revolutionised Tokyo's traditional approach to Defence research, development and acquisition.

For air power, given we are at an Air and Space Power Conference, reassessing resilience measures and enhanced preparedness is key. We have heard about the RAAF efforts in the 30s and during the Second World War to enhance its ability to operate from Australia and to provide a force that can reconstitute major power conflicts. We have heard about the building up of the northern base network. One of the key outcomes for air force from the DSR was its focus on work force, especially to increase the aircrew and groundcrew

numbers. For resilience in high intensity conflict, air force needs to consider how its reserve forces operate and reconsider its training and education continuum. The key question is how agile, adaptive and responsive do the RAAF structures and use of regular, reserve and potentially hybrid units and formations have to be, to ensure it balances readiness for immediate contingencies against the need to have a force that is able to reconstitute itself for long-term high-intensity operations. Fundamentally, this is about the balance between deterrence, readiness for contingency response and preparedness for conflict if conventional deterrence fails.

These are a reminder that enhanced preparedness needs to focus on scale and the intensity of the threat and missions provided. These have changed. Ukraine has reminded us that western air forces, that three decades has seen aircraft assets and personnel concentrated into small number of super bases has generated vulnerabilities in a peer competitor environment. Ideas and concepts of dispersion, hardening, camouflage, concealment, deception, integrated air and missile defence, once again have become mainstream to air force thinking. This means reassessing doctrine, tactics, operational requirements, logistics requirements, sustainability levels, logistics needs and different ways of using manpower and force employment and as we have heard through areas such as agile combat employment.

I will draw to a close by quoting from the Chief given it is his conference. "We must address the resilience of our air bases, supporting infrastructure, ICT and fuel and explosive ordinance to sustain air and space operations. To force generate the resilience we need to fight with integrated systems in a contested environment. The resilience piece needs to be driven by innovations to drive and imagine how we will sustain and project air and space power against an adversary capability of exploiting our vulnerabilities in all domains". That was Air Marshal Rob Chipman. Those that generate air and space power to adapt and innovate and in their landmark study on military effectiveness, the military historians and strategic analysis Williamson Murray and Alan Millet noted in peace time "Innovation moved along only as fast as organisation's concerns influenced the process. Only external political intervention could speed the process, usually by appointing military

zealots to key positions and providing greater financial resources. Armed forces accepted innovation only if it was tied to clear strategic challenges, organisational enhancement and operational clarity". They also noted that while inter-service cooperation seldom occurred, transnational same service cooperation certainly did. A challenge for our integrated force development is to break that barrier of inter-service restrictions to cooperation. It must be overcome.

These two authors noted "We came to appreciate the role of innovators, disciples and the importance of field-testing beds. We also found few silver bullet technological breakthroughs but cycles of testing that produced technological modifications of new and existing capabilities, or what we call sustaining rather than disruptive innovation". In many ways the observations of Murray and Millet are not overly new but they were empirically derived. What their study uncovered is whether or not, particular military organisations have a culture that supports adaptation and innovation in the face of changing circumstances or contradictory evidence. This came down to does it have the right leadership and does it have the right culture? Because they noted "All military organisations get the next war wrong to a certain extent. The more effective are those that recognise flaws in their visions of future war and adapt to the actual conditions they confront". Unfortunately, history tells us that this doesn't appear to be the normal pattern. The historical records suggest the exact opposite. Instead of adapting their doctrine and approach to reality, for the most part military leaders and organisations have attempted to make reality fit their preconceived notions until they and their forces fail or face obvious failure.

Having a leadership and organisational culture that embraces change as continuity, and emphasises continuous adaptation, innovation is the key to delivering on the changes required in the Defence Strategic Review and National Defence Strategy that are set against the levels of risk in the Indo-Pacific that we have not seen in Australia since the three decades from the 1930s to the Second World War and to the advent of nuclear weapons and the Cold War in the 1950s. Thank you. (APPLAUSE)

JACINTA CARROLL: Thank you, Professor Dean and for demystifying the net

assessment process and threat-casting and providing a wonderful, seamless link to explaining how this drives Defence strategy. You spoke about this concept of national defence, a national approach. We have had quite a few questions on that. I will lead with that and just ask for those in the audience, if you would like to ask a question, raise your hand while we go through this one. Commentators have cited the need for a National Security Strategy. For those who aren't Australian, this is something that comes up fairly regularly around election cycles. A National Security Strategy, or similar to orchestrate national resilience and enhance integrated statecraft across government. Do you agree with this sentiment?

PETER DEAN: Yes.

JACINTA CARROLL: Moving from that...

PETER DEAN: I am one of those commentators and before I worked on the leads in the DSR, Stephen Smith and I wrote pieces together arguing for a National Security Strategy. I can't explain why government hasn't embraced this. That is up to them. I think it is a missing piece of the puzzle in our architecture. When the DSR got released, the first text message I got was "How did you get the first half of the National Security Strategy squashed into the Defence Strategic Review?" That was the first thing that was asked of me. By announcing we are doing a regional balancing strategy and deterrence by denial, those are concepts that go beyond defence. Again in the National Defence Strategy, it talks in those contexts. How the government coordinates that is up to them. My personal view, as a professor of strategic studies and academic nerd, the pieces of the puzzle fit together when they have continuity. I have tried to explain the assessment piece through to deterrence. I honestly think, to get the whole of nation which this type of strategy requires, because we are at the top end of that threat spectrum, we need a mechanism, driven by PM&C and the central part of government to coordinate that. We don't have that at the moment. It is up to the government to explain how they are doing that in the absence of that or where they might go. They don't seem keen at the moment.

JACINTA CARROLL: Do we have any questions here in the audience, front row?

>> Thanks very much. Richard from the United Kingdom. Brilliant explanation, and so thank you for making it so clear and logical and crisp. One of the key questions when we think about deterrence and think about our military capability is how much is enough. And I just would be interested in your perspective on how you're making that judgement and how that judgement was made through the development of the NDS?

PETER DEAN: Look, first of all, I'll start with understanding deterrence or explaining deterrence is like nailing jelly to a wall. It's not the easiest concept. But we went down the pathway of deterrence by denial because denial is about making gains by an adversary hard to come by versus punishment, which is making the pain of achieving that far greater. And deterrence is more about, I think, a general theory of strategic relations, and communication is really key about this. We know deterrence really only exists in the mind of your adversary, but it also has to exist in the minds of your allies and partners for reassurance. Quantifying the levels is really difficult. But one of the things that I have been pointing out recently, we can yet again get caught very much in the kit and capability discussion question - is it AUKUS submarines, is it B-21s, is it extended nuclear deterrence and intercontinental ballistic missiles? The other part not spoken about enough is political will. We see that implicitly through our international engagement and working with allies and partners. We see that through the AUKUS agreement, through many other mechanisms. I think we have to focus very heavily on that political will, which is at our political leadership level, to get that deterrence element correct. One of the things I think deterrence has come back into vogue and why we looked at it in the review is fundamentally deterrence is about maintaining the status quo. This is not about using forces to change existing conditions. For those adopting deterrence, it's about - as the balancing strategy says - it's about maintaining a favourable balance of power. And ultimately the states, like Australia and Japan, Korea, you know, and I think, in fact, most states in our region, are status-quo states. It's about maintaining that status quo. So, I mean, it's the trillion-dollar question,

probably: What is the level of military preparedness and capability we need that provides deterrence? Versus: What's the political component? I don't know the answer to the last one. The DSR set up the framework to allow the NDS to work through the problems and the Integrated Investment Program to get us to a better place about the military capability component of that. And I think, really, the other key aim that we set up was ensuring - this is about asymmetric cost imposition at the operational tactical level. What are the asymmetric capabilities we can get after in a denial strategy to make that? That's why nuclear powered submarines are key, why some of the capabilities, this is why space is critical. This is why people are critical. In fact, I would argue the most important asymmetric capabilities we have is the training and education of our people and the way we do operational concepts in Australia's military and its friends' and allies', versus our potential adversaries. I know I've talked around your question, I'm really sorry. If I could give you a number or tell you a platform, I'd love that. I would also be a billionaire myself by selling it to every armaments company and government around the world. But this is the nuance about doing strategy that is easy for us to write down and so difficult for us to actually execute in practice.