Strike, deterrence, and the RAAF

Wing Commander Jo Brick¹ Williams Foundation Air Power Seminar, 23 August 2018 National Convention Centre, Canberra

Strike: 'The ability to attack with the intention of damaging, neutralising or destroying a target' AAP1000-D, *The Air Power Manual*, 6th ed²

'An air force without bombers isn't an air force' Sir Donald Hardman³

Introduction

Good morning ladies and gentlemen. I feel very privileged to address this esteemed audience by starting off this Williams Foundation Joint Strike Seminar. My address will provide an overview of the intersection between deterrence strategy, the development of strike capability in the Royal Australian Air Force (RAAF), and contemporary considerations regarding integration and the development of joint strike.

Since the advent of air power in the early 1900s, the threat of bombardment – both nuclear and conventional – has been perceived as one of the most effective measures for deterring potential aggressors or punishing those who have dared to cross the threshold of force. Deterrence is broadly defined as 'discouraging states from taking unwanted military actions, especially military aggression'.⁴ The strike capability that is offered by air power as a result of its characteristics – reach, responsiveness, firepower, and precision – and have made it a useful means by which to assert a deterrence strategy. Notably, much of the discussion in the 1970s and 1980s focused on the central place of air power in delivering Australian strike capability. In relative terms, during this period, land and maritime forces were not seen to have a significant role in offering a deterrent strike option, though both of them did add to Australia's overall deterrence posture. Further, much of the deterrence thinking during the

⁴ Michael J. Mazarr, Understanding Deterrence. Santa Monica, CA: RAND Corporation, 2018. <u>https://www.rand.org/pubs/perspectives/PE295.html</u> (accessed 08 August 2018). For an overview of deterrence, see Jenna Higgins, '#jointstrike Part 1: Defining Deterrence', 05 August 2018. <u>http://centralblue.williamsfoundation.org.au/jointstrike-part-1-defining-deterrence-jenna-higgins/</u> (accessed 06

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² Air Power Development Centre. *The Air Power Manual* (6th ed). Canberra: Air Power Development Centre, 2013; p. 25; p.56.

³ Quoted in Alan Stephens. *Going Solo – The Royal Australian Air Force 1946 to 1971*. Canberra: Australian Government Printing Service, 1995; 362.

<u>http://centralblue.williamsfoundation.org.au/jointstrike-part-1-defining-deterrence-jenna-higgins/</u> (accessed 06 August 2018).

Cold War focused on strategic nuclear options that were delivered via Intercontinental Ballistic Missiles or heavy bomber aircraft. This again skewed much of the thinking regarding deterrence towards the primacy of strike via air power. The relatively favourable position occupied by Air Forces in this regard became a solid foundation for an independent Air Force that was not just an adjunct to the Navy or Army. The end result of all these developments was a line of reasoning that inevitably fused deterrence with strike (bombardment) and air power. This model was useful for Western countries during the Cold War, when there was a known threat – the Soviet Union –that could form the subject of detailed deterrence strategies; and when air power capability was the most appropriate option to support it.

The contemporary security environment offers a different set of challenges from the Cold War that arise from the changing character of war. There are multiple, diverse, threats from both state and non-state actors; the information domain has become a vital part of the battlespace that must be managed accordingly; and there have been revolutionary developments in the means and methods of war. This includes the increasing accuracy and range of weapon systems available to all the Services, the development of non-kinetic options that may also offer the same effects as traditional kinetic strike, and an integrated approach to warfare. All these factors will require Australia to determine the kind of military posture that is required to maintain an effective and credible deterrence strategy in this context. While deterrence and strike will continue to be linked, air power is unlikely to remain the primary provider, with greater emphasis being placed on the enhanced capabilities delivered by joint strike. Further, as the lines between peace and war become blurred, strike as a deterrence option must be nested within broader conceptions of diplomacy and strategic engagement that accommodate ongoing shaping and influencing efforts, through effective management of the information environment, that form Australia's narrative of deterrence.

Deterrence and airpower

Strategic concepts and theories about deterrence became linked to air power as it was perceived as the means by which classic deterrence strategies could be applied.⁵ Adapting the classical airpower theorists, Arthur 'Bomber' Harris advocated that area bombardment, and striking at materiel and industry, provided the ability to effectively end wars more swiftly by undermining the morale of the civilian population through strategic bombardment.⁶ Such

⁵ Denial and punishment are broadly the two aspects of deterrence theory. For further discussion, see Mazarr, 'Understanding Deterrence'.

⁶ For a discussion on the debates involving aerial bombing, see Charles S. Maier, 'Targeting the city: Debates and silences about the aerial bombing of World War II', *International Review of the Red* Cross, Vol. 87, No.

bombardment, or the threat of it, provided states with the capability to reach beyond the 'front line' and to use force as a coercive measure against other states, beyond the need to defeat or attrite its deployed military forces. Air power therefore became a sellable and explainable solution for the execution of deterrence strategies. In addition, the use of the atomic bomb in Hiroshima and Nagasaki in 1945 led to a visceral appreciation of the dramatic and widespread effects of aerial bombardment, using this new weapon system. In 1946, Bernard Brodie claimed that 'Everything about the atomic bomb is overshadowed by the twin facts that it exists and that its destructive power is fantastically great'.⁷ Consequently, much of the academic literature in this field highlights the fact that nuclear weapons 'really did all the "talking" that was necessary' as a method of deterrence.⁸ This common understanding is what guided nuclear deterrence theories during the Cold War, to the point that a level of 'Mutually Assured Destruction' was enough to deter both sides from undertaking both conventional and nuclear conflict with each other. Air power continued to play a significant role in deterrence strategies throughout the Cold War and beyond, which is exemplified by the Australian experience.

The Australian experience - deterrence, airpower, and the RAAF

The First World War experience involved the use of fledgling air power capabilities, yet it was not until the post-war period that the link between strategy, deterrence, and air power was made. In the Australian context, the link between air power, naval, and military forces was considered in the maritime strategies that underpinned British Imperial Defence plans in the 1920s and 1930s. These plans determined that any threat to British Imperial interests in this region would be dealt with by the Royal Navy, with support from Australian military forces, including the newly created RAAF.⁹ In 1925, the then Chief of the Air Staff, Air Commodore Richard Williams, wrote a memorandum on the role of aircraft in securing Australia's maritime approaches, highlighting the importance of air power in the defence of Australia in a maritime strike role.¹⁰ This was an important memorandum that provided a foundation from which this new service could counter the hostile attitudes towards its existence as an

^{859,} September 2005; pp. 429-444. See also Giulio Douhet. *The Command of the Air* (translated by Dino Ferrari), Washington: Office of Air History, 1983.

⁷ Quoted in John Stone, 'Conventional Deterrence and the Challenge of Credibility', *Contemporary Security Policy*, Vol. 33, No. 1, pp.108-123; p. 116.

⁸ John Stone, 'Conventional Deterrence', p. 116.

⁹ See Air Power Development Centre, 2013; p. 25.

¹⁰ See discussion in Alan Stephens. *Going Solo*; 2. See also Air Power Development Centre. *The Air Power Manual* for the air power roles.

independent service, because the strike mission could be considered as something more than simply providing support to the other services.

The development of strike capability in the RAAF proved to be a challenge, due largely to the limited resources available during its formative years. In this post World War One period, the classical air power theorists - primarily Douhet, Trenchard, and Mitchell - proposed the virtues of strategic bombardment as a means to end wars quickly by targeting the civilian population.¹¹ These ideas were tested during the Second World War, when aerial bombardment was used extensively by Allied and Axis powers in an attempt to erode the resolve of the opposing populace, as well as strike at the means of war production and materiel support. The RAAF experience in contributing manpower to the RAF for the war in Europe, and contributions made to General Douglas MacArthur's campaign in the South West Pacific meant that the RAAF amassed experience in a number of, what are now, recognised air power roles – particularly control of the air, and strike.¹² The RAAF's capability to undertake a maritime strike role was clearly demonstrated during the Battle of the Bismarck Sea in March 1943. This battle involved a number of set piece actions by naval and air forces against Japanese logistics convoys that had set out to consolidate the Japanese presence on New Guinea. Arguably, the deciding factor in this successful battle against the Japanese was the maritime strike conducted by aircraft from the RAAF and US Army Air Force aircraft, including Beauforts, Bostons, Flying Fortress, and Mitchell bombers.¹³

The RAAF experience during the Second World War undoubtedly consolidated the perceptions of its senior leaders regarding the contribution that strike and control of the air could make to realising strategic goals. The controversial appointment of Sir Donald Hardman, a British officer, to the position of RAAF Chief of the Air Staff led to significant reforms to the RAAF command and control, force posture, and strategic outlook.¹⁴ Hardman believed that strike was a fundamental means by which to attain control of the air. He said, 'true and enduring air superiority' could only be attained by striking at the enemy to deprive him of the means of conducting air warfare.¹⁵ While Hardman's views on the importance of strike to the creation of air superiority reflected the majority view of airmen at the time, his

¹¹ See Mark J. Conversino. 'The Changed Nature of Strategic Air Attack', *Parameters – US Army War College Quarterly*, Winter 1997-1998.

¹² Stephens, *Going Solo*, pp. 2-3. See also

¹³ Air Power Development Centre. 'Battle of the Bismarck Sea', *Pathfinder – Air Power Development Centre Bulletin*, Issue 256, November 2015. See also Stephens, *Going Solo*, p. 5.

¹⁴ Air Power Development Centre, 'Sir Donald Hardman's Reorganisation of the RAAF', *Pathfinder – Air Power Development Centre Bulletin*, Issue 106, March 2009.

¹⁵ Stephens, *Going Solo*, p. 38.

successor Air Marshal McCauley was tasked by Defence Minister Sir Philip McBride to rearm the Air Force with a different focus. Minister McBrides' new policy directed that the primary responsibility of the RAAF was to protect maritime forces from air attack.¹⁶ The new policy consolidated the RAAF's primacy in air defence, maritime strike and reconnaissance, which was subsequently supported by significant Defence funding apportionment from 1954 to 1957.

During the late 1950s military strategic guidance asserted the prevalence of limited war over global war, and the need for Australia to develop military forces that could form part of an alliance or take independent action to defend Australia's northern approaches against potential aggressors. Strike aircraft, for the purposes of deterrence, were central to this policy. The Chiefs of Staff Committee at the time considered that China and Indonesia posed the likely air threat to Australia.¹⁷ The Sukharno policy of 'Confrontation' towards the new state of Malaysia also elevated the perceptions of the threat posed by Indonesia in the early 1960s. These factors led to policies that emphasised the need to deter such potential aggressors through the development of a strong air strike capability. As a result, in 1963, the Menzies government ordered a number of 'Tactical Fighter Experimental' or 'TFX' bombers – later renamed the F-111, which remained the RAAF's primary strike aircraft during the Cold War until its retirement in 2010.¹⁸

Before the decision to acquire the F-111, tactical nuclear weapons for the Canberra bomber were also considered, but the option was shelved due to intelligence assessments that dismissed the possibility of nuclear attack on Australia as a primary target. Further, reliance was placed on the nuclear umbrella provided by the United States under the ANZUS alliance.¹⁹ For the RAAF, the conventional bomber became the 'strike force' that was seen by the air staff as 'the essence of deterrence' and 'the primary expression of military strength'.²⁰ Strike aircraft were necessary for seizing control of the air through destruction of enemy air forces on the ground, followed by the destruction of strategic targets, and then support to the Navy and Army.²¹ This doctrinal foundation was maintained throughout the 1980s and 1990s. Former Chief of the Air Staff, Air Marshal David Evans wrote: 'In Australia's situation the

¹⁶ Stephens, Going Solo, pp. 38-39.

¹⁷ Stephens, *Going Solo*, p. 46.

¹⁸ Stephens, *Going Solo*, p. 39. For a detailed examination and discussion of the decision to acquire the F-111, see Mark Lax. *From Controversy to Cutting Edge. A History of the F-111 in Australian Service*. Canberra: Air Power Development Centre, 2010.

¹⁹ Stephens, *Going Solo*, p. 368.

²⁰ Stephens, *Going Solo*, p. 369.

²¹ Stephens, Going Solo, p. 369.

ability to hit back quickly and to attack selected elements of an enemy's armed forces... rests with the strike aircraft of the RAAF. It is indeed the only practical form of retaliation against an enemy ensconced in the island chain to our north'.²² Evans discussed the 'RAAF combat triad' consisting (at the time) of the F-111C aircraft armed with 'smart weapons', the P-3C Orion and the F/A-18 Hornet. The 1987 Defence White Paper focused on defence of Australia and focused on the need to protect the 'air sea gap', echoing the memorandum written by Sir Richard Williams in 1925.

The future of strike and deterrence – the importance of a narrative for deterrence and a joint approach

I have focused largely on a role for the Air Force in providing a strike capability, via a bomber force, that was historically recognised as vital for deterrence in a number of strategic policies from the Cold War onwards. Indeed, the reach, speed, and firepower that could be delivered by conventional aerial bombardment made air power the most likely capability to be used in a limited deterrence strategy. However, developments in military capability, including non-kinetic options such as cyber-attack, have provided the ADF with the opportunity to create integrated joint capabilities to support Australia's deterrence strategies. For example, the acquisition of deployable land based anti-ship missiles, long-range rocket systems, and mobile surface-to-air missiles will enable the Australian Army strike into Australia's maritime and air approaches.²³ These capabilities will provide the Australian Army with the ability to undertake maritime strike roles that were once considered the domain of the RAAF.

The need for an effective joint force as a credible deterrent was foreseen by Air Marshal Evans in 1990, when he said: 'If the Australian force is seen likely to be capable of swift, positive and effective counteraction, and if the enemy estimates that he would be unable to prevent such counteraction, he may well be deterred from initiating hostilities against Australia. That is, there would be no low-risk option available to the enemy. This is of course the very best defence this country could have – the ability to deter any action inimical to Australia's interests. However, this concept of deterrence can succeed only if the Australian

²² David Evans. A Fatal Rivalry – Australia's Defence at Risk. South Melbourne: The Macmillan Company of Australia Pty Ltd, 1990, 39-40.

²³ See Colonel Chris Smith and Dr Al Palazzo, 'Coming to Terms with the Modern Way of War: Precision Missiles and the Land component of Australia's joint force'. *Australian Land Warfare Concept Series Vol. 1*, August 2016 <u>https://www.army.gov.au/sites/g/files/net1846/f/160819_- concept_-lw_-</u> australian_land_warfare_concept_series_1_-unclas_0.pdf (accessed 03 August 2018).

Defence Force is seen to be capable of causing an attacker unacceptable damage and if the Australian government is seen to have the will to use such force.²⁴

Indeed, the focus of the current ADF Service Chiefs is on the further development of joint and integrated capabilities that will provide the government credible options for conventional deterrence. For example, the Chief of Air Force, Air Marshal Davies, highlighted at the Air Power Conference earlier in the year, '[w]e have seen that air power can strike deep; integrated with the joint force, it can generate decisive effect... Airpower must be comprehensively integrated across the joint force to contribute meaningfully to the future fight'.²⁵

While the Cold War and nuclear weapons changed the discussion in relation to deterrence, it remains an enduring part of international relations.²⁶ One of the three major Strategic Objectives listed in the *2016 Defence White Paper* is 'Deter, deny and defeat attacks on or threats to Australia and its national interests, and northern approaches'.²⁷ However, despite the continuity of deterrence, the strategic environment has changed significantly since the Cold War. The strategic environment has become complicated by factors such as the proliferation of non-state actors and the existence of security problems that blur the lines between war and peace, which demands a new approach. Further, while nuclear deterrence and the threat of nuclear weapons 'speaks for itself', conventional deterrence is challenging because it requires the opponent to process and receive a deterrence message as the sending party has intended. These variables leave much room for miscommunication and misinterpretation.

While deterrence has always been considered a whole-of-government strategy, the added complexity of the current strategic context requires us to re-consider the importance of all elements of national power. An example of this is the holistic approach to deterrence that can be found in Russian strategic culture, which takes a 'cross-domain' approach to coercion that is tailored for different actors. What is interesting about the Russian approach is the significance that is accorded to the informational tools of influence, involving manipulation of

²⁴ Evans, A Fatal Rivalry, p. 37.

²⁵ Brendan Nicholson, 'RAAF Chief Leo Davies: We Face the greatest evolution of air power in our history', in ASPI *The Strategist*, 20 March 2018, <u>https://wwwaspistrategist.org.au/raaf-chief-leo-davies-face-greatest-</u> evolution-air-power-history/ (accessed 27 July 2018). For some discussion of self-reliance and the importance of

a joint force, see Stephan Fruhling, 'The Concept of Self-Reliance', *Australian Journal of International Affairs*, Vol. 68, No. 5; 531-547.

²⁶ Patrick M. Morgan, 'The State of Deterrence in International Politics Today'. *Contemporary Security Policy*, Vol. 33 No. 1, April 2012, pp 85-107, p. 85.

²⁷ Commonwealth of Australia. 2016 Defence White Paper; Canberra: Department of Defence, 2016, para3.11.

an opponent's perception of reality to impact on decision-making.²⁸ Termed, 'informational struggle', it involves a holistic merging of digital and cognitive-psychological actions; it is unified in that it synchronises kinetic and non-kinetic military effects; and it is continuous or uninterrupted in that it is employed in peace and in war.²⁹ The Russian approach involves a merging of hard and soft instruments of power. Conventional deterrence theories are centred on military capabilities – I just spoke about joint and integrated warfare previously. However, given that deterrence is largely about communication and credibility, the incorporation of hard and soft power, and the focus on information effects in Russian deterrence theory has much to offer the Western strategist considering deterrence in the 21st century.

Conclusion

Eliot Cohen wrote that: 'Air power is an unusually seductive form of military strength, in part because, like modern courtship, it appears to offer gratification without commitment'.³⁰ This is perhaps why air power has traditionally been perceived as the best means for carrying out deterrence strategies. This capability was complemented by nuclear weapons as deterrents for the superpowers during the Cold War. However, the emergence of new security threats such as non-state actors, and the significance of information as the currency of the 21st century, means that approaches to deterrence must be reconsidered. Credible conventional options for Australia go beyond air power, and require an effective and integrated joint force. Communicating a credible message to opposing countries requires a consistent narrative that involves hard and soft power options and a consistent deterrence message that bridges war and peace. These approaches to deterrence require Western countries, such as Australia, to take a long term and coordinated approach to national strategy, whose credibility is underwritten by a resilient and capable joint force.

²⁹ Adamsky, 'From Moscow with coercion', 42.

²⁸ Dmitry (Dima) Adamsky, 'From Moscow with coercion: Russian deterrence theory and strategic culture', *Journal of Strategic Studies*, Vol. 41, Nos. 1-2, 33-60, 41.

³⁰ Eliot Cohen, 'The Mystique of US Air Power', Foreign Affairs, January / February 1994.

REFERENCES

Adamsky, Dmitry (Dima), 'From Moscow with coercion: Russian deterrence theory and strategic culture', *Journal of Strategic Studies*, Vol. 41, Nos. 1-2, 33-60

Air Power Development Centre. *The Air Power Manual* (6th ed). Canberra: Air Power Development Centre, 2013

Air Power Development Centre. 'Battle of the Bismarck Sea', *Pathfinder – Air Power Development Centre Bulletin*, Issue 256, November 2015.

Air Power Development Centre, 'Sir Donald Hardman's Reorganisation of the RAAF', *Pathfinder – Air Power Development Centre Bulletin*, Issue 106, March 2009.

Cohen, Eliot, 'The Mystique of US Air Power', Foreign Affairs, January / February 1994

Commonwealth of Australia. 2016 Defence White Paper; Canberra: Department of Defence, 2016.

Evans, David. A Fatal Rivalry – Australia's Defence at Risk. South Melbourne: The Macmillan Company of Australia Pty Ltd, 1990.

Fruhling, Stephan, 'The Concept of Self-Reliance', Australian Journal of International Affairs, Vol. 68, No. 5; 531-547.

Higgins, Jenna. '#jointstrike Part 1: Defining Deterrence', 05 August 2018. <u>http://centralblue.williamsfoundation.org.au/jointstrike-part-1-defining-deterrence-jenna-higgins/</u> (accessed 06 August 2018).

Lax, Mark, *From Controversy to Cutting Edge. A History of the F-111 in Australian Service.* Canberra: Air Power Development Centre, 2010.

Maier, Charles S., 'Targeting the city: Debates and silences about the aerial bombing of World War II', *International Review of the Red* Cross, Vol. 87, No. 859, September 2005; 429-444

Mazarr, Michael J., Understanding Deterrence. Santa Monica, CA: RAND Corporation, 2018. <u>https://www.rand.org/pubs/perspectives/PE295.html</u> (accessed 08 August 2018)

Morgan, Patrick M., 'The State of Deterrence in International Politics Today'. *Contemporary Security Policy*, Vol. 33 No. 1, April 2012

Nicholson, Brendan. 'RAAF Chief Leo Davies: We Face the greatest evolution of air power in our history', in ASPI *The Strategist*, 20 March 2018, <u>https://wwwaspistrategist.org.au/raaf-chief-leo-davies-face-greatest-evolution-air-power-history/</u> (accessed 27 July 2018).

Smith, Chris and Palazzo, Al, 'Coming to Terms with the Modern Way of War: Precision Missiles and the Land component of Australia's joint force'. *Australian Land Warfare Concept Series Vol. 1*, August 2016 <u>https://www.army.gov.au/sites/g/files/net1846/f/160819_-_concept_-_lw_-</u>__australian_land_warfare_concept_series_1 -_unclas_0.pdf (accessed 03 August 2018).

Stephens, Alan. *Going Solo – The Royal Australian Air Force 1946 to 1971*. Canberra: Australian Government Printing Service, 1995