



# The Sir Richard Williams Foundation Address - Chief of Air Force: Air Marshal Geoff Brown AO - Air Power's Role in Australia's Maritime Strategy

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## Introduction

Errol, thank you for your invitation to speak today. General Hurley, Air Marshal Binskin, colleagues, distinguished guests, ladies and gentlemen, it is a pleasure to be here this afternoon and to have the opportunity to discuss a range of issues concerning our national security and the role of the RAAF in this.

The theme of this seminar *Control and Protect in the Maritime Environment*, is both a timely and important one. It is a topic that well reflects the significant role the Sir Richard Williams Foundation plays in furthering strategic debate in this country, as well as highlighting the seeming convergence in Defence and Policy spheres of late around the centrality of a maritime strategy as the appropriate context for Australian security thinking.

The Williams Foundation has, I think, and not by accident I am sure, hit upon perhaps the most important security policy discussion to be had in this country since the last White Paper issue in 2009. And as our forces transition to withdrawal from operations in Afghanistan over the next few years, it is timely that we clearly set the context for Australian strategic discussion.

The topic I have been asked to address today is, like that of my colleagues, the potential risks and gaps in the capacity of our services to meet the challenges of the 21<sup>st</sup> Century within the maritime environment.

Again, I thank the Williams Foundation for the opportunity to address this topic, particularly as I feel it gives me the platform to elaborate just how well I think the RAAF is prepared to meet these challenges.

## Geography

To reflect briefly on the past first though, it was Sir Halford Mackinder in a lecture to the Royal Geographical Society in London in 1904, who suggested that: "Man and not nature initiates, but nature in large measure controls".

In essence Mackinder was arguing that; it is nature that shapes geography, and that in fundamental ways geography matters. Geography mattered in 1904 and it matters today. Geography mattered for continental Europe at the turn of the 20<sup>th</sup> Century and it matters for Australia in the 21<sup>st</sup> Century.

For Australia, it is geography that has fundamentally shaped who we are. It has shaped how we live, how we trade and how we interact with other states. It has shaped how we perceive our security needs today and into the future, and it has shaped our military forces and

strategic thinking likewise. Geography has, in short, determined what sort of nation we are - and that nation is a maritime trading one.

### **Maritime grand strategy**

Australia, whether we consciously acknowledge it or not, has more or less since federation operated some form of maritime strategy. Be it one premised upon our traditional affinity and ties with Great Britain, or one that recognised the importance of our trans-Pacific alliance with the USA. Our ability to function as a maritime trading nation has been underpinned by our ability to use the oceans surrounding our shores as safe and secure means of engaging with our neighbours and trading partners.

So today when we speak of *Controlling and Protecting in the Maritime Environment* we are in fact speaking of what has been the basis of our way of life ever since we became an independent sovereign state.

If this is the case, then it somewhat begs the question of why we might want to discuss what must surely be such a self-evident truth.

The reason I believe, this discussion is warranted and justified at this point in time is because as the Williams Foundation paper on *Control and Protect* suggests, the obvious basis of a maritime strategy for Australia has over time become obscured and subsumed under a raft of valid but perhaps secondary strategic considerations.

I hope therefore, very briefly today to lay out the case why I believe conceptualising Australian military strategy within a grand national maritime strategy is an appropriate and sensible approach. Furthermore, I hope to establish the clear and unambiguous roles for the RAAF in this approach, and how our capabilities, people and professionalism meet the challenges of this environment, before turning finally to a quick assessment of potential risks facing the RAAF.

There can be no escaping the fact that we are an island nation and while we have uninterrupted connection to the global community, we are divided geographically from the rest of the world by the sea. It would be easy to suggest that to secure Australia we only have to ensure we are able to deter or deny any attempts to attack Australia - or in the event of lodgement by an enemy - defeat or repel them. In other words Australian defence strategy ought primarily (and perhaps solely) to be centred on the territorial defence of our national sovereignty

**Importance of trade** - Clearly territorial defence can never be diminished or neglected, however, important as this view is, it misses the broader context that Australia's prosperity, and indeed our way of life, is based around our ability to trade, and more precisely, to be able to trade across the oceans. Without belabouring the obvious, I think it is worth reiterating the fundamentals of our national circumstance, especially as they are so easily and perilously assumed away.

**The maritime divide** - The vast majority of this trade is conducted over the maritime divide between ourselves and our trading partners around the globe. Crucial trading routes, the presence of large and growing regional naval capabilities, as well as transnational security concerns such as piracy, drive Australia to put the Indian Ocean alongside the Pacific Ocean at the heart of our maritime strategic and defence planning. Unimpeded access through the

maritime commons, stability within our region, the security of our trading partners and a continued preservation of international order are all conditions that influence our approach to security.

In short, in the absence of an existential threat to our territory, anything that threatens our ability to conduct trade over the seas is the greatest and most consequential risk to our security and way of life. A peaceful, cooperative and stable maritime environment is the necessary precondition for our continued national prosperity.

***Fragility of stability*** – International stability, however, can be fragile. The security environment can rapidly, and without forewarning, transition from a state of relative peace and calm in to a violent state of turmoil; threatening the essential preconditions of our maritime trading way of life. Normally, if history is a reliable guide, this will occur at 2 AM on a Sunday morning during the holidays. The end of the Cold War, the sudden and unforeseen events of 9/11, and the recent uprisings in the Middle East attest to this fragility. For these reasons we cannot assume the regional stability we observe today is guaranteed to remain so. Stability and security, most especially for a trading nation, go hand in hand. The level of stability we might enjoy in our region is causally linked to the level of security we would deem necessary to our preferred way of life.

***Access to the maritime commons*** - For these reasons, as is commonly accepted, Australia's interests are not just limited to our sovereign territory or to our immediate neighbourhood, but stretch throughout the Asia Pacific region and extend globally. Consequently and axiomatically, unfettered access to the maritime commons across which we trade, and stability within our region are pivotal to the continuation of our way of life and our standard of living. All this of course is largely a matter of little controversy. Similarly, the implications of this are obvious, if not commonly well understood.

***Sea lines of communication*** – Unfettered sea lines of communication, unwavering support to international law, laws of the sea and good order at sea are all necessary conditions to ensure trade and commerce flourish to the benefit of all involved. The upholding of all of these are clearly in our national interest.

***National security objectives*** – It would come as no surprise then that successive Governments have maintained that our national security objectives and national strategy reflect the need, to not only defend Australia and its direct approaches, but to ensure our capability and capacity to act as a free maritime trading nation. Such a strategy, a maritime strategy, would amongst other things;

- enable us to go to the aid of friendly states in our region,
- to control and develop our important offshore resources, including oil and gas.
- have the capability to control fisheries, illegal immigration, smuggling, piracy, and
- exercise the capability to maintain a level of security anywhere around our coasts or offshore islands.

Clearly, these capabilities will not always, or only, be exercised by the Australian Defence Force.

***Whole of government enterprise*** – A maritime strategy, if it could possibly need further elaboration, is a whole of government enterprise. Defence, as we have discussed today, plays a large role, but it does so in concert with all relevant federal and state governmental

organisations. And, as has been suggested earlier, it does so importantly, in partnership with industry and the private sector.

### **ADF's Maritime Strategy**

**FJOC and Defence changes** – The Williams foundation paper *Control and Protect* rightly argues that a number of global normative and contextual changes have fundamentally altered Australia's defence calculus, suggesting the need for a new approach to defence thinking. Defence has, I would argue, not been unresponsive to these changes and I see many of the recommendations embodied in the '*Control and Protect*' paper resident in the Future Joint Operating Concept (FJOC) 2030 which was released last year. The FJOC outlines the levels of strategic response that Defence must undertake across a spectrum of tasks and domains.

**Shape, Deter, Respond** - These options range from:

- understanding the geopolitical and operational context of our national interests,
- shaping the environment to influence strategic and operational conditions in our favour,
- assisting civil authorities at home and abroad,
- conducting activities that deter potential adversarial behaviours, through to
- undertaking control operations in order to deny or defeat an adversary's actions.

The parallels between the Williams Foundation '*Control and Protect*' approach and FJOC's '*Control and Influence*' are to my mind unmistakable. This is a good thing and I would suggest it highlights a convergence of thinking regarding conceptualising Australian security in terms of shaping and influencing in the first instance.

It also allows us to contextualise Australia's defence strategy within the much broader national maritime strategy, whereby defence of our way of life as a trading nation is as important as the territorial defence of our sovereign land. Security in this context takes on a much broader and extensive nuance. Military strategy consequently, forms but a part of the larger national strategy, and is subordinate to it.

**ADF in Shape, deter, and respond** - Australia by any global measure is a tolerant society. Consequently, the application of force is only countenanced when all other response options have been exhausted. This means clearly, that the ADF will not have a major role in many of the response options Government may choose to pursue. Indeed, the ADF's maritime strategy is predicated on understanding and shaping the environment where our national interests lie, providing a deterrent against any that seek to act against Australia, and then if absolutely necessary, denying or defeating any adversary that attacks or threatens Australia or its interests. This potentially extends throughout our maritime environment.

**Maritime strategy** – Finally with regards to Australia's military maritime strategy, it is probably redundant of me to note that a maritime strategy is not synonymous with a naval strategy. Defence's maritime strategy, involves air, sea and land forces operating jointly to influence events in the littoral together with traditional blue water maritime concepts of sea denial and sea control. The ADF contribution to our national maritime strategy is, and can only ever be, considered a joint contribution. This ought to be neither a startling nor a novel

revelation. Joint maritime operations have enjoyed a sound heritage and an important place in Australian defence thinking most particularly since World War Two.

**One in, all in** – To give an example of this concept in operation we need only to consider General Douglas MacArthur's 'island hopping' campaign from New Guinea to the Philippines. The unique characteristics of each service were required to control the air, control the sea lines of communications and then secure the islands required to achieve victory in the South-West Pacific. Forward airfields enabled the projection of land-based airpower that provided the ISR, control of the air, strike and air mobility that history records were vital in enabling sea and land forces to conduct their operations. Without land forces there would have been no forward bases, and without sea power there would have been no projection capability of the land force. Together the land, sea and air forces constituted a power far greater than the sum of their parts. No maritime strategy can achieve success without the use of each service's core capabilities.

### **Air Force's role in the ADF's Maritime Military Strategy**

Historian Alan Stephens once described the Japanese assault on British and Australian forces in Singapore and the Malay Peninsula as a case of "hardened professionals ... putting complacent amateurs to the sword". Alan was undoubtedly right in his assessment of the state of the RAAF in 1941. He goes on to say however, that within a few short years the RAAF represented a combat experienced and capable force that in the words of Sir Fredrick Shedden were 'magnificent'.

Air Force has not forgotten the hard lessons of campaigning in the South West Pacific during World War Two and today Air Force puts real aerial firepower and a hard combat edge to the ADF's capacity to *control and protect* our maritime environment. It is within this context of providing a spectrum of force options to Government, from shaping the environment for cooperative collective advantage through to defeating an adversary with combat forces, that today's Air Force plays a vital role.

**Irreducible minimum components** - While our land is surrounded entirely by sea, it is also covered 100% by air, and this fact too fundamentally influences our strategic approach to national security. Air, land and sea forces are of course the irreducible minimum components of our national security approach, and my colleagues have discussed the roles of their services in Australia's maritime strategy. Air Power is the third element in this triad.

Since its inception as a military tool 100 years ago, air power has played a crucial role in every conflict Australia has been involved in. I posit that air power is more critical to our national security today than any time in our past, and its impact on our maritime strategic environment will only continue to grow. Our national security enterprise is empowered by the influence air power provides.

**Air power options** - Underpinned by technology but realised through our people, air power force projection capabilities are unique to the Air Force. Air power is, and is seen as, a flexible option that can be scaled up or down to suit the circumstance and the force demands. It can incur a minimal footprint on the targeted area of influence whilst offering measures of precision, discrimination and proportionally unavailable through other means. Most particularly, the ability of air power to hold as risk targets across the maritime environment is a force capability that only Air Force can provide.

***Air Force's contribution*** - Air Force's contribution to national security has historically been, and continues to be, realised through the four key air power roles of;

- Control of the Air,
- Strike,
- Air Mobility, and
- Intelligence, Surveillance and Reconnaissance.

The names we give these roles may have changed over the years, but they encapsulate the core functions that air power has provided to operations since military aviation was first developed as a significant form of warfare.

***Enduring roles*** - These roles are enduring and fundamental to air power's contribution to national security and they are terms that you hear consistently whenever I speak about Air Force and air power. They underpin the ways and means Air Force interacts and operates with Army, Navy and other government organisations.

***Missions*** - These roles themselves are underpinned collectively by a range of other missions; from Close Air Support and Offensive Counter Air, through to Airlift and Anti-submarine warfare. Each mission involves discrete activities undertaken to realise an air power role, but act synergistically to create effects (as the old saw goes) greater than the sum of the individual parts.

***Criticality of air power*** - Throughout the last decade, operations in the Middle East, and more recently in Libya, have underscored the criticality of these air power roles to the achievement of operational objectives and political aims. Time and again Army, Navy and indeed Air Force activities have been successfully conducted under the umbrella of air superiority, enabled by airborne ISR and strikes, and supported by ubiquitous airlift.

***Capabilities*** – Over time Air Force has developed a broad range of capabilities to contribute to the security needs of Australia and I will take a few moments to elaborate on some of the most pertinent of these.

***Hornets*** - Through the Classic F/A-18, and more recently the Super-Hornet, we have the ability to control the airspace in areas directed by Government. We proved during the deployment of our fighter aircraft to the MEAO that we have the ability to strike prescribed targets with precision and lethality. Whether the task is responding to troops in contact, suppressing a command and control node or striking a maritime surface combatant, effective and lethal combat air power is available to protect Australia's maritime interests when needed. These same forces are able to give a hard edge to control operations throughout our maritime environment.

***Maritime Patrol*** - The eighteen AP-3C Orion aircraft the Air Force currently operates for maritime patrol tasking, and more recently over-land surveillance in the Middle East, provide the nation with a world-class capability to monitor and protect its maritime approaches. Successive upgrades to these platforms ensure they meet or exceed the requirements of our land and naval elements.

**ASW** - Anti-submarine warfare is critical in securing our maritime environment. As we transition out of the Middle East greater emphasis will be placed on the Anti-submarine warfare mission to bolster our ability to provide force protection. I recognise anti-submarine warfare as a true joint enterprise, encompassing the suite of capabilities open to the ADF. We look to revitalising this mission and see its future involving networked Air Warfare Destroyers, ANZAC and Adelaide-class frigates with their MH-60 Romeos, and Collins-class submarines working with our AP-3C and Maritime Unmanned Aerial Systems. These air assets will be supported by our KC-30 aerial refuelling tankers and space-based assets, as well as utilising the electronic capabilities of the Wedgetail AEW&C.

**ISR** – The introduction into service of Wedgetail provides Australia with a range of capabilities it could previously only access by leveraging off our allies. Wedgetail represents a fundamental shift in airborne surveillance technology. By providing situational awareness across huge swaths of the battlefield, simultaneous tracking of airborne and maritime targets, control of air defence assets, communications relay and surveillance of the electronic spectrum, Wedgetail will significantly enhance Australia’s capacity to control and protect the maritime environment.

**Airlift** – A cornerstone military activity in any maritime strategy of is the ability to move people and equipment. Mobility is truly a joint enterprise. The Navy’s future amphibious ships will provide an unparalleled capacity in our Australian context to move a fighting force across large distances. The size and endurance of its vessels will enable follow-on combat and sustainment activities. The RAAF’s C-17, C-130, and in the future the Battlefield Airlifter, provide Australia with the ability to move people and equipment across large distances relatively quickly. Not only do the air power characteristics of speed and reach compliment the sea power traits of capacity and presence, they can work in harmony to increase the effectiveness of the other. Sea and air power combine to generate the speed, reach, capacity and presence needed to support Australia’s national security interests.

## **Air Force 2030**

**Capability versus capacity** – I acknowledge we expect to face some technical and integration hurdles over the next few years as we work to maximise the effectiveness of our legacy platforms and bring in new ones. But historically this has generally been the case with acquisition and sustainment. Through tenacity and professionalism I see no reason that we will not overcome any technical issues we will confront. We always have.

**Scalable capacity** - Our challenge for the future is to match capabilities with the capacity to meet Government expectations. Capacity as I see it is a scalable quantum. It is having enough equipment and enough people with the right training and education to meet the goals and expectations placed before us.

JSF is a great example of this capability versus capacity debate.

**Joint Strike Fighter** - The Air Force’s transformation to the Force 2030 construct continues with the acquisition of the fifth-generation Joint Strike Fighter, with its advanced electro-optical and infrared sensors along with a wide range of air-to-surface and air-to-air weapons. The JSF’s advanced airframe, autonomic logistics, avionics, propulsion systems, stealth, and advanced firepower capabilities will ensure that the F-35 is the most lethal, supportable and survivable aircraft to be operate our areas of interest.

What does this mean for our national security? It means we will have access to capability and technology a generation ahead of other contemporary aircraft in our region. It means our ability to provide protection for our forces in all aspects of the maritime environment will take an evolutionary step forward.

Of particular note, the JSF will bring with it for the first time our ability to hold at risk a range of regional targets across our maritime environment from extended stand-off range through the employment of JASSM. This is a significant capability that alters the calculus of power projection in the region. Combined with Wedgetail, AWD and P-8 the networking capability of the JSF will redefine Australia's ability to control its maritime environment.

The JSF is the only platform we will have available with the ability to operate the area denial, anti-access maritime environment that will dominate the battlespace of tomorrow. The Super Hornet is an outstanding multi-purpose fighter, meeting a number of our future needs, but to fight and survive in the complex environments of the future requires the stealth, weapon and integrated situational awareness capabilities only available in the fifth generation JSF. In the complex maritime environment of tomorrow, anything less than fifth generation aircraft will find themselves on the wrong side of an asymmetric fight.

But capability is only one side of the equation. There has been much discussion on the number of JSF we will need to meet our preparedness requirements. Platform numbers are determined by factors such as the complexity of the environment, number of expected concurrent tasks and our training needs. Our operating environment is not becoming any less complex and we do not expect our preparedness requirements to reduce, thus in the context of Australia's maritime strategy we need four combat squadrons and this equates to 100 JSF.

**P-8 Poseidon** - Defence's ability to provide security in the maritime environment will be further enhanced through the acquisition of the P-8 Poseidon, the planned replacement for the AP-3C being acquired under Project Air 7000. Along with a high altitude, long endurance multi-role unmanned aerial system, the P-8 will meet the increasing capability demands for maritime patrol, maritime strike and overwater ISR required for the security of Australia's maritime approaches.

**Concurrency** - Concurrency and capacity go hand in hand. VCDF spoke earlier on the linkage between capability preparedness and concurrency and the ADF responsibilities to perform various missions, potentially at the same time or carefully managed over concentrated periods of time. Our ability to respond concurrently is tied directly to the level of capacity we retain. Achieving and maintaining the right level of capacity is an area of continual challenge for the Air Force and the broader ADF.

**Risk** – There are a number of risks that Air Force faces as we move forward and evolve our force to meet the challenges of the 21<sup>st</sup> Century maritime environment. The risk to not being able to realise the full potential of a capability, or taking too long to reach a desired level of capability is one significant risk that is intrinsically linked to capacity. Do we have enough equipment or enough of the right people?

It is a fallacy, even if a commonly held one, that advances in technology automatically enable the size of a workforce to be reduced. While technology does allow us to reduce the

number of platforms we acquire because of advances in multi-mission functionality, it normally comes at a cost of more specialised support personnel.

**PED** - The burgeoning field of information Processing, Exploitation & Dissemination management exemplifies where we will need more specialised people not less to meet the insatiable demands for information. We are acquiring systems with increased collection capability, able to deliver more extensive ISR to the warfighter. From full motion video and electronic warfare that supports complex networked operations, our ability to bridge the information divide is undergoing substantial improvement. But these advances come at a cost of more highly trained specialists.

**Workforce numbers** - We are acquiring new precision weapon systems that will enhance our ability to operate in the maritime environment, but the greater the precision of the weapon, the greater the requirement for ISR and targeting support. Realising the potential of these weapons requires new skill sets and the ability to process the vast increases in data that these systems will collect. We need a workforce that can match our collection capabilities. This requires not just an increase in numbers but a fusing of pre-existing skills with a new cadre of competencies. We need to adjust our recruiting and training methodology to reflect this changing characteristic of air power.

**Combat Support** - Equally, to realise our capabilities at the directed state of preparedness requires a combat support team capable of sustaining home base and expeditionary operations. Competing pressures from health, engineering, communications and security elements of the public sector makes maintaining sufficient numbers of appropriately skilled staff challenging. Combat support is the backbone of our air power capability and Air Force is seeking to attain the right numbers and balance of skill sets to meet our future needs.

**Rebalance** - Air Force is undertaking a program of rebalancing its workforce to ensure we have the right people trained on the right equipment by the right time. This is not a new program. With every generational change in technology we have faced the same challenge. When we transitioned from the analogue Mirage fighter into the digital Hornet we required a workforce that was savvy in electronics rather than clocks and dials. We will continue to evolve our force through the evolution of our workforce, our platforms and our thinking. It's a task we have embraced rather than shrunk away from, and as we act deliberately to evolve our force by design we will mitigate to the greatest extent possible the risks inherent in our dynamic security circumstance.

### **Closing**

Geography it seems, still matters. The countries of the Indian Ocean Rim are home to more than 2.6 billion people, almost 40 per cent of the world's population. The security of its waters and those of the Pacific and Asia goes to the heart of global, regional and Australian strategic interests. Our strategy for the future, whether at the grand or military level, revolves around our place in our maritime environment. The Air Force is transforming to meet the challenges of the future front on. I am confident that the men and women of the RAAF, along our brothers and sisters in the Army and Navy are ready to respond to whatever mission the Government places upon us.

**Thank you**