



**Royal United Services Institute of Australia (RUSI)**  
**“The Role of the RAAF in Australia’s National Security”**  
**- Chief of Air Force: Air Marshal Geoff Brown AO -**

26 July 2012

*(Check against delivery)*

## **Introduction**

**Salutations.** Ladies and gentlemen, it is a pleasure to be with you today to address a topic which I am most passionate about; the role of the Royal Australian Air Force in the security of our nation.

Firstly, let me thank the chairman of RUSI and the members of the Institute for this opportunity and to share some of my vision for the RAAF in the coming years, most particularly in the challenging budgetary circumstances we find ourselves in at present and into the next decade.

**Balancing priorities.** As you would appreciate, ensuring that Australia’s security needs are not only well met for the present but are provided for in the decades ahead is a complex and difficult task. It’s a task that includes balancing a raft of competing priorities, managing capability development and sustainment challenges on a daily basis, balancing workforce pressures against capital investment and ongoing operating costs, attempting to forecast the dynamics of our regional and broader security environment, as well as ensuring our national infrastructure can support the sorts of security capabilities we seek to develop. It’s a task that Government, with advice and assistance from a range of departments, undertakes within the context of some considerable global economic fragility and the domestic implications of such uncertainty.

Yet amidst the apparent sea of uncertainty that our Government faces, there are indeed some enduring and reliable landmarks from which they can gain a measure of certainty, some lighthouses of clarity (to extend the metaphor), which can aid our Government in navigating its way through the shifting tides of change. These constants are, I would suggest, the enduring foundations of our strategic security circumstance. They are the solid realities of our geo-political context and the sure implications that flow from these realities.

**Security fundamentals.** You may by now be wondering what on earth the Chief of Air Force is doing waxing lyrical about the enduring foundations of national geo-strategic circumstance. Well the connection is in fact very real. Not only is it real but its immediate and forefront in my thinking about my responsibilities as Chief to provide air power for Australia’s security. National grand strategy is the setting in which I, and my fellow Service chief’s, operate as we lead our organisations to deliver military power. For while the ADF, and the RAAF within it, may only play a bit-part in national strategy, it is quite obviously an important and indispensable part. It’s a part that is fundamentally shaped by the security environment we find ourselves in, and our national strategy to secure and advance our national interests within that context.

And so when I look out and see the dynamism of the international political, economic and security environment, and our Government’s responses to this turmoil, I look for those enduring foundations upon which our national security is founded to provide direction, stability and confirmation to my task of guiding the Air Force into the future. And perhaps in times of budgetary tightening, which we in Defence and a range of departments now face, it is quite natural and

reasonable for us to lock onto the fundamentals of national security, and those tasks, roles and functions which we must absolutely perform to most adequately provide for Australia's security.

**Enduring interests.** It was Lord Palmerston (Foreign Secretary and two time Prime Minister under Queen Victoria) who reportedly once famously quipped that "Britain had no eternal allies and no perpetual enemies, only interests that were eternal and perpetual." And perhaps we likewise have eternal interests, and that it is these interests which shape the roles, tasks and functions our military must perform.

These fundamentals, and the implications of them for the Air Force is the topic I wish to address in a little detail today.

There are, I would suggest, three prime drivers that condition the role of the Royal Australian Air Force in the current and future security environment. They are; Australia's national security strategy, the enduring roles of air power, and the level of capability available to execute these functions.

**Key drivers.** At the forefront of these drivers, and the most consequential of them, is the strategy that underpins Australia's approach to security. Today I hope to briefly lay out the case why I believe conceptualising Australian military strategy within a grand national maritime strategy is an appropriate and sensible approach when we come to discuss the role of the RAAF in Australian national security. 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 finally pointing to some of the issues that will influence the RAAF's ability to meet its responsibilities within this strategy.

## **Maritime Strategy**

**Geography.** It is of course a well established fact that for Australia, it is geography that has fundamentally shaped who we are. From Robert Hughes to Donald Horne, Australian commentators and authors have noted how that through our history our geography has shaped how we live, how we trade and how we interact with the international community of 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 at essence a maritime trading one.

**Trade.** 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 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 the use of the oceans and airways surrounding our shores as reliable means of engaging with our neighbours and trading partners.

So today when we speak of a security strategy we are in fact speaking of what has been the basis of our way of life ever since we became an independent sovereign state.

**Continental versus Maritime strategy?** There can be no escaping the fact that we are an island nation, and while we enjoy an uninterrupted connection to the global community through the many communication and information mechanisms available, we are divided geographically from

the rest of the world by the sea. It would be easy to suggest that to secure Australia we have only to ensure we are able to deter or deny any attempts to attack this country - or in the event of lodgement by an enemy - defeat or repel them. In other words, it can be argued that Australia's defence strategy ought, primarily, and perhaps solely, to be centred on the territorial defence of our national sovereignty. But this may very well be a somewhat myopic view given the global nature of contemporary security.

Clearly, territorial defence can never be diminished or neglected, however, important as this view is, it perhaps 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 and airways.

**Defence policy traditions.** None of this of course is new or novel thinking. Regional stability, maritime trade and maritime security are long standing themes in Australian national security thinking. Michael Evans has for example discussed at length the competing traditions of Australian Defence policy, from Fosterite to Creswellian, from global interventionists to defence of Australia. No matter how Australia conceives that its security might best be met, the inescapable context is one premised upon our maritime geography.

The debate regarding the best security policy for Australia is, I would guess, far from a settled matter, however, to return to the enduring geostrategic landmarks I spoke of earlier, there are some factors that determine what our force ought to look like regardless of which side of the policy debate you find yourself. These are the enduring tasks for the military that I believe fall out of our status as a maritime trading nation. 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

**Maritime commons.** The vast majority of our trade is conducted over the maritime and air 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 elementally 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 and through the air 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.

**Unfettered access.** Consequently, the enduring tasks for the ADF, and specifically for Australian air power, centre around ensuring Australia has the ability and freedom to continue its way of life as a maritime trading nation. Unfettered access to the maritime and air 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. For these reasons it is generally argued, and more or less well accepted that, 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 potentially, globally. The implications of this are, I would suggest, obvious, if perhaps not commonly well understood.

**National Interests.** 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.

**WoAG enterprise.** A maritime strategy, if it could possibly need further elaboration, is a whole of government enterprise. Defence, and indeed the Air Force, plays a large role, but it does so in concert with all relevant federal and state governmental organisations. And it does so importantly in partnership with industry and the private sector.

**Force in a maritime strategy.** Australia by any global measure is a tolerant society. Consequently, the application of force is only authorised when all other avenues of resolution and response options have been exhausted. This means clearly, that the ADF will not have the lead 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 the entirety of our maritime environment.

#### **Engagement in the maritime strategy.**

Presently we find ourselves as a nation, despite our important and ongoing engagement in Afghanistan, in a time of otherwise relative peace with no existential threats to our national sovereignty. We are, however, facing substantial financial constraint imposed by Government and a reduced Defence budget as a percentage of GDP. This fiscal reality combined with our present geostrategic context determine to considerable extent how Air Force can go about providing appropriate air power to meet our national security needs. This is clear and evident and it demands an appropriate response by Air Force and the ADF.

**Cooperative engagement.** I would suggest to you that the response required is one that balances the need for Defence to continue to generate, sustain and employ, when necessary, a balanced and capable military force, with the fiscal constraint imposed within the context of the relative peace and stability we enjoy in our region. The cornerstone of that balance, I would further suggest, entails the ADF adopting a cooperative engagement focussed approach within our region backed by credible and effective military capability. In short, this means a tilt toward *understanding and shaping* our region in cooperation with our friends and neighbours in lieu of a focus on *denying or defeating* potential adversaries. But there are some important caveats to this which I will address in due course.

This approach is not substantially new. Australia has for a number of years now worked diligently to foster deeper Defence to Defence ties and cooperative efforts across our region – in

humanitarian assistance and disaster relief, peacekeeping training and operations, exercises and training and maritime security. The shift is one perhaps in how we conceive our defence strategy – cooperative and collective, vice a more autonomous self-reliant defence of Australia approach – although I am careful not to overstate or overplay this shift. Nonetheless, although this implies a subtle shift it is an important and consequential one. It is a shift that has implications for Air Force structure and capability which I will discuss in a little detail shortly.

**In sum.** To sum up then to this point in time, I hope to have made the following points clear. Firstly, while Australia currently has combat forces deployed on operations abroad, we face at home a relatively benign security environment. Secondly, our national strategy can be best characterised as one that acknowledges our relatively benign circumstance and is essentially a maritime strategy to ensure our ability to continue as a successful and prosperous maritime trading nation. Thirdly, Defence faces substantial fiscal constraint imposed by Government and that this forces us to hone our capabilities and structure for optimal effect with minimum outlay. Fourthly, in light of the foregoing, perhaps the most appropriate strategic approach is one that leverages off our good regional relations to further build confidence and cooperative measures across our near and extended neighbourhood to best shape a secure, stable, amicable and prosperous region.

With this background set then, let me now proceed to discuss the roles, tasks and functions that Air Force air power plays in this context.

#### **Four fundamental and enduring roles**

Since its inception as a military tool nearly 100 years ago, air power has played a crucial role in every conflict Australia has been involved in. I would suggest 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 capabilities air power provides and it is the Royal Australian Air Force that delivers this air power for any joint response to a national security crisis.

**Strike, ISR, Air Mobility and Control of the Air.** So what does an air force bring to the joint fight? In my opinion air power today, and really since the First World War, has essentially performed four key functions. It observes things, it strikes things, it moves things through the air, and it controls the air environment. To put these into current doctrinal terms, air power functions to provide ISR, Strike, air mobility and control of the air. I use this construct not only because it really very accurately describes the core air power roles, but because these four enduring roles need to be considered holistically.

**The power of air power.** Air power is essentially the ability to perform all of these four roles and while you can perform any one in isolation, you need all four together, all the time, to project credible and effective air power capability. This is an important point I want to stress because I think too many people labour under the false impression that all you need at any one time is any one or two of these to have both an air force and an air power capability...I disagree. Air power is the result of the synergistic combination of all of these roles. What puts the *power* in air power is the ability and capacity for a force to effectively conduct all of these roles together in an orchestrated fashion to create effects. I will take up this point a little later as I firmly believe that in order to create these four roles you need a particular kind of air force, regardless of strategy or budget.

But first, let me take each of these roles in turn and discuss how they fit into our national strategy and where Air Force is moving in regard to each role.

## **Air Mobility**

Firstly, we as an air force move things through the air.

Air mobility is a cornerstone activity in virtually any military strategy. From the Berlin Airlift to the national response to Cyclone Yasi in North Queensland, the RAAF has a long history of responding to crises that require the rapid movement of people and equipment over long distances at very short notice. The capability to move things through the air is critical to a maritime strategy, if for no other reason than the distances involved in our primary operating environment are so enormous. A credible military capability in our maritime context must be a responsive one. Air mobility is the backbone to that capability, none more so than in the all too frequent emergency response situations we find ourselves facing each year right across our maritime approaches.

**C-27J.** The Air Force will continue this tradition with the acquisition of the C-27J. Announced at the May Air Power Conference by the Minister of Defence, the battlefield airlifter will close the gap we have in our mobility spectrum, further enabling Army and Navy to achieve their tactical objectives. The Spartan, scheduled for delivery in 2015, will enable more than four times the number of airfields to be reached in Australia and twice more in the Asian region than can be accessed by the C-130. The C-27J and is the right aircraft for our Australian environment.

**C-17.** In addition, November this year will see the arrival of our sixth C-17 which will double the number of C-17 aircraft available for operations at any one time from two to four, enhancing Australia's ability to move people and equipment across large distances relatively quickly.

The additional C-17 increases the response options available to Government and will extend the life of the C-17 fleet by reducing the use of each aircraft.

## **ISR**

The second thing we do is to observe things from the air, whether they be on the ground or the sea. The strategic, operational and tactical situational awareness developed from airborne surveillance enables not just air activities, but is fundamental in the conduct of our land and maritime operations, as well as the activities of many other governmental agencies.

To manage the battlespace, the area where all land, sea and air activities of interest occur, requires Air Force to possess a number of recently introduced key systems. Our Vigilaire command and control system fuses of 245 different inputs from 45 systems varying from ground based to space based systems. Vigilaire has been operating since December 2010.

**Wedgetail.** The other significant capability besides JORN is the Wedgetail, Airborne Early Warning and Control aircraft. I am pleased to advise that Wedgetail is on track to achieve its initial operational capability later this year.

Wedgetail represents a fundamental shift in airborne surveillance technology and although not often seen by the Australian public, it truly is a game changer in its ability to control the battlespace. By providing situational awareness across huge swaths of the battlefield, simultaneous tracking of airborne and maritime targets, control of air defence assets,

communications relay capabilities and surveillance of the electronic spectrum. Wedgetail will significantly enhance our capacity to control and protect Australia's land, sea and air environments.

**AP-3C / P-8.** Alongside the introduction of the Wedgetail, I am also pleased to report that our program to replace the AP-3C, our maritime surveillance and response capability, continues to be on track. As I have alluded, the maritime environment is central to our way of life and for many years the AP-3C has played a critical contributing role in securing our sea lines of communication. Its replacement, the P-8 Poseidon is a highly capable maritime patrol and strike platform, which alongside its essential adjunct, the Multi-mission Unmanned Aerial System, will continue to secure our maritime and land environments. The P-8 Poseidon project is one of my key capability initiatives and one which the Government recognises has utility right across the spectrum of possible operations in our maritime environment.

## **Strike**

The third role air power plays is that we strike things on the land and sea, from the air. The ability to attack prescribed targets with precision, discrimination, and potentially lethality, is a critical element of what Air Force brings to the Joint fight.

We proved the effectiveness of this ability during the 2003 deployment of our fighter aircraft to the Middle East Area of Operations. 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 interests when needed. Strike, normally the most visible activity in any conflict, has a large impact on an adversary's ability to fight, but it also carries the most risk.

**JASSM.** The introduction of the standoff weapons such as the AGM-158 Joint Air-to-Surface Standoff Missile (JASSM) reduces the risk to our strike platforms from air and ground threats and provides us for the first time the ability to hold at risk a range of regional targets across our strategic environment from an extended stand-off range.

**JSOW.** JASSM achieved its Initial Operating Capability on the Classic Hornet in December last year, and alongside the AGM-154C Joint Standoff Weapon JSOW on the Super Hornet fills Australia's strike capability needs previously provided by the F-111.

Together these represent a significant capability that alters the calculus of power projection in the region. Our operating environment is not becoming any less complex and we see no reason to expect preparedness requirements to reduce. The requirement to maintain persistent air coverage in most operational environments is a key element of our preparedness.

## **Control of the Air**

Finally, but importantly, the most fundamental thing we do is to control the air domain. Without control of the air all land, sea and air operations remain at substantial risk.

**F/A-18.** Air power's primary role is, and always has been, control of the air. Our ability to ensure freedom from air attack enables our land, air and sea forces the freedom to manoeuvre as well as the freedom to attack. This ability is delivered by our upgraded classic F/A-18s, and more recently the Super-Hornet, enabled through our ISR and Battlespace management capabilities.

**A Balanced Force.** Earlier I noted that given our political, economic and security circumstances that a strategy that embraced a cooperative and collaborative approach to regional security was probably a most sensible and appropriate one to adopt. I also noted that such an approach would have consequences for Air Force structure and operations, with some caveat. The caveat I refer to is by now I hope quite obvious and it is that, despite a focus more toward shaping our region in lieu of one premised on responding to threat, it remains paramount for Air Force that our force structure provides the basis for a balanced and credible air power capability. An Air Force that is not balanced, not credible and not sufficiently capable is a false hope at best and a deception at worst, and certainly one not in Australia's interest to maintain.

I would like therefore to take a few moments just to elaborate on why I so strongly advocate for a balanced air force and what this actually means.

**Synergy.** In general terms, a balanced air force is one that is capable of performing all of the four fundamental air power roles that I have described in such a fashion as to be able to create desired air power effects. In order to do this, our ninety odd years of experience has shown that the force needs sufficient quantity and quality of systems, people, processes and structure to synergistically weave all four roles into an orchestrated campaign of some description.

**Unbalanced = unworkable.** Air power is a complex and multifaceted capacity that needs to be considered in a holistic fashion. A little bit of air mobility, a little bit of ISR or a little bit of strike, do not an air power capability, nor an air force make. To suggest otherwise, as is periodically proposed by well intentioned but misinformed commentators is false thinking and dangerous. Even our own history is replete with examples of when our air force was distorted by all sorts of political or budgetary pressures such that it became unbalanced and unworkable. The state of the RAAF in 1938 is surely a classic example of a force distorted to such degree as to substantially lose its utility.

**Full spectrum capability.** I think that as a force we have learned this lesson well. It is now a bedrock belief in our organisation that for a small force like the RAAF, we must at all costs remain a balanced force capable of all air power roles across the spectrum of conflict - from high end warfighting to humanitarian assistance to those in need. But if I can push this point a little further, the basis for our dogmatic view on this point is not because Air Force is enamoured with technology and the latest and greatest capability or systems, but fundamentally because we understand, with considerable experience and wisdom now, that air power needs to be generated, sustained and employed in a very particular fashion if it is to have maximum usefulness and effect.

Our experience has shown us, and this is reflected in our doctrine, that in order to usefully employ air power you need to do so with the capacity to firstly control the air, secondly to be able to observe and sense the environment, third with the ability to transport things through the air, and finally with the hard edged capability to strike lethally when required.

A force designed primarily to conduct air mobility tasks in support of disaster relief missions at the expense of the other roles, is a useful and valuable tool for Government and a valuable commodity for any country, but it is not an air force! Likewise an air force structured primarily to support counterinsurgency like operations has merit and utility, but it is not an air force and certainly not the sort of air force required to provide air power to secure this nation.



**Challenges to balanced force.** But what you might object, if our strategy was to wholly embrace the notion that we ought primarily act to engage with our neighbours and friends to shape the region to our mutual collective preference? Surely you don't need a potent air combat capability or a balanced force for that scenario? Do you really need a balanced air force to operate a maritime strategy? Surely, I would answer you do!

**Regional security.** In order to enact the very sensible policy of focussing on engagement and the development of cooperative regional security architectures within a maritime strategy, Australia needs to be seen as a neighbour and friend worth having. That is, a partner who brings something, in this case credible military capability, to the partnership. Regional security, whether collectively, commonly or bilaterally conceived is still premised on sufficient regional military capability. Operating a maritime strategy necessitates the capability to keep open sea lines of communication, to ensure free and unfettered access to the maritime commons, and to ensure good conduct at sea, safe from illegal interference or threat. Quite simply someone, and preferably all partners in the arrangement, need to contribute to the security capability by providing capable balanced forces. At present and into the future this is exactly what the ADF provides.

**Virtual = unworkable.** Furthermore, a disparate virtual air force, in which the air power roles are spread across several nations is not an air force at all, on the pragmatic grounds that such an arrangement is unworkable in practice. For a regional security arrangement to hold a credible air power capability it must include several air forces, all balanced and effective, contributing to the common cause. In other words the four air power roles can't be distributed amongst a collection of national forces, they must be resident in each air force if they are to actually constitute an air power capability, as I have argued already.

**Joint force.** To elaborate a little further, not only are capable air forces required in a regional engagement approach, but so too are integrated joint force capabilities, such as we currently have in the ADF. These forces need to be able to, and be practiced at, operating together across all sorts of operational scenarios. They need to be trained and exercised in creating joint effects and they need to be interoperable with partner and allied forces.

**MacArthur's Island hopping campaign.** If I can give an example of how a balanced force within a thoroughly joint context operates to provide potent military force in our region, I would refer to General Douglas MacArthur's island hopping' campaign across the South-West Pacific from New Guinea to the Philippines during World War Two. The unique characteristics of each service were required to control the air, control the sea lines of communications and secure the islands 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.

**Why 5<sup>th</sup> Generation?** Finally, if I can turn to what is essentially a question about why we need a balanced force, I would like to address a question I am frequently asked; Why are 5<sup>th</sup> generation fighters so important to our future security?

Our approach to high-end war fighting capabilities is to ensure we can achieve a level of lethality and survivability that exceeds those of past, present, and future potential adversaries. While I cannot predict the future, one important lesson I take away from history is that the next conflict may not look like any of the previous ones.

**Control of the air.** Planning to fight the last war is a fatal mistake for any nation. We need a combat system that delivers on our prime responsibility, that of control of the air, across the entire spectrum of conflict. If you chose not to have control of the air across the range of potential crises, you commit yourself to the belief that you have a choice in all the fights you undertake; though history unfortunately may not back up this belief. A strategy of winning only some of the time undermines the essence of national security. 5<sup>th</sup> generation aircraft provide Australia the capability to succeed in the air across the spectrum of conflict, and for Australia, the JSF is the weapon system that will provide this capability for many decades.

**Red Flag.** Now in my view, there is probably a little too much made of the stealth in 5<sup>th</sup> generation characteristics as the defining characteristic. The secret of success in air combat is really about the overall situational awareness of the proponents.

What I define as situational awareness is the ability in the cockpit, or formation, to determine what has happened, what is happening and what might happen. The intersection of the three tends to be a reasonable description of situational awareness.

My best example of situational awareness came from when I had the privilege of participating in a Red Flag Exercise.

Red Flag is a large scale air exercise designed to give aircrew an experience of the first five combat missions in a large scale conflict. As you can imagine it is the most complicated airborne training available to undertake in the ADF.

It takes place in the deserts of Nevada over a two or three week period and involves a dedicated and highly qualified opposition forces (Red Air), often involving upwards of 120 aircraft. The missions often involve getting packages of aircraft, strike and transport, through a very complex air defence environment to series of targets

I had the opportunity to fly in an opposition Red Air F-15D fitted with a sophisticated EW jamming capability. I was looking forward to being on the mission having been on the receiving end of "Red Air" over the years. However, instead of witnessing the normal attrition of a strike package I witnessed a demonstration of the superiority of the fifth generation aircraft.

What I didn't account for was the effect of the eight escort F-22s. The good thing about Red Air is that you are allowed to regenerate if you suffer a simulated kill.

So what happened? Well we advanced into the airspace about 40nm and were killed with no idea who or what had caused our demise. We regenerated and the next time only advanced 20nm. We regenerated a total of 5 times and only advanced a maximum of 40nm into the airspace; such was the dramatic superiority of a 5<sup>th</sup> generation aircraft.

Post flight I was then fortunate to view the engagement from the viewpoint of the F-22 formation. The level of situational awareness was dramatically different. The F-22 pilots had a complete gods-eye view of the battle space and the differences between the benchmark 4<sup>th</sup> generation

aircraft and a 5<sup>th</sup> generation aircraft were quite stark. It is this situational awareness that determines who wins and who losses in the fight for control of the air.

Now winning or losing one element of a operation may not sound pivotal to the overall success of a campaign, but it is worth remembering that the last Australia soldier to be killed by an air attack was in 1943 and it was a *Kamikaze* attack on HMAS Australia in January 1945 that saw the last Australian sailor to die from enemy air. Our opponents in every conflict since have not been so lucky.

I agree with the old adage - 'With control of the air, you may lose; but without it, you most certainly will.'

This lesson remains as valuable today as it was in the past. Gen George Kenney who was MacArthur's air Component commander once said; 'Air power is like poker. A second-best hand is like none at all - it will cost you dough and win you nothing'.

## **Closing**

We are, as a people, justifiably proud of our country and clearly we value our way of life, a way of life that is underpinned by trade and secured, ultimately, by the Australian Defence Force. Our strategy to maintain this security into the future entails cooperative engagement with our friends and neighbours in the region with sufficient credible forces adapted for operations in our maritime environment. Thus it is prudent and necessary that we maintain a balanced force, capable of responding to whatever crisis unfolds, be it humanitarian or major combat. Such thinking of course has been the hallmark of Defence strategy for many years, but it bears reiteration today in the circumstances in which we find ourselves. Air Force is certain of our role in national strategy and in our vital contributions to national security. We have a very clear understanding of what is required of us and what it takes to fulfil those responsibilities. I believe we have the forces, either in being today or programmed for acquisition in the next decade, to ensure we maintain a credible air power capability, fit to meet the exigencies of our maritime strategy. We have the right personnel, the right relationships with our neighbours, and the right stuff to fulfil our roles.

Air Force, as an element of the joint force, provides the Government with scalable and proportional options that bridge the strategic and operational divide. Whether it is via air mobility or our principle role of control of the air, the men and women of the RAAF are ready to respond to whatever missions the Government places upon us.

I proudly say without reservation; we have the most powerful air force east of India and south of China.

## **Thank you**