



Aviation Historical Society 2011
Arthur Butler Memorial Lecture
- Vice Chief of Defence: Air Marshal Mark Binskin
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VCDF acknowledges VIPs and the Aviation Society committee members.

Ladies and gentlemen, good evening and thank you for both the warm welcome I have received this evening and the generous invitation to deliver this year's Arthur Butler Memorial Lecture.

As many of you will know, this year marks the 90th anniversary of the formation of the Royal Australian Air Force. In 1921, the RAAF began operating as an independent force. One of the inevitable and perhaps more valuable activities of marking a significant anniversary is that we tend to take a distinct look at our past, take stock of our present, and place an increased focus on what our future may hold—especially as we now look to 2021 and the centennial celebrations of our air force. It should come as no surprise then that as we mark 90 years of service to Australia, the Air Force has adopted a theme of Tradition, Innovation and Evolution as the three pillars of our celebrations. This evening is an opportunity to share with you some of the particular observations I have made these last 10 months—how the Air Force has contributed to the nation since 1921, its changes and how we are positioned to evolution into the force of 2021.

From our perspective here this evening, two events occurred in 1921 that have particular relevance. First the Royal Australian Air Force was formed. Only the second air force in the world, the formation represented an appreciation within Australia that the exercise of air power has applications beyond just supporting maritime and land forces. The second event was that a 19 year old Arthur Butler left the employment of Lithgow Small Arms Factory to

work in the Australian Aircraft and Engineering Company at Mascot Airfield, and so began his long and eventful association with aviation in Australia.

When you consider the experience of Sir Richard Williams, the man widely considered the *Father of the RAAF* and those of Arthur Butler certain similarities emerge. In 1921, both men were treading new ground as relatively junior players within their respective vocations. For Williams as the head of a new service with the rank of Wing Commander, he was far outranked by his fellow heads of service. Regardless, Williams worked assiduously with single-minded determination to strengthen his young service, expand air routes across Australia and retain the top job in the RAAF. Williams held the position of the Chief of the Air Staff on and off for 18 years, until forced out by the Government in 1939.

Likewise, in 1921, Arthur Butler was a very junior member of an embryonic civil aviation industry. And, like Williams, Butler demonstrated commendable foresight and courage for such a young man to forge out a career in an industry that was new, not just to Australia, but was still establishing itself around the globe. An illustration of Butler's passion and determination is evidenced by the impressive CV he rapidly established. In the first nine years of entering the aviation industry, he obtained his Ground Engineers licence and his Pilots licence—designed, constructed and test flew his own aircraft—as well as setting an England to Australia flying record—all by the time he was 28 years old. And, like Williams, Butler's departure from the aviation business was in some ways precipitated by Government policy and a distinct lack of official support.

In a similar fashion, the formation of the RAAF occurred at a time when the doctrine and strategies of air power were very much in their infancy. While World War One had provided invaluable experience in the operation of aircraft, there had as yet been no experience anywhere in the world of raising and sustaining an air force in peacetime. Nor was there any template provided for the seamless integration of air power into the broader joint environment—a means of meeting Army and Navy needs, while also enabling the RAAF to conduct independent operations suited to the unique characteristics of air power. These were the problems facing air arms around the globe and were not unique to Australia.

Furthermore it was necessary to build the RAAF in a period of post war asperity and not a little interservice tension. Despite these challenges the force that emerged from the 1920s and 30s, while having shortcomings, was able to provide for the massive expansion demanded of World War Two and the highly professional force that the RAAF sustained in the post war years.

One element that had a positive effect on the early RAAF was the veterans of the World War One Australian and British flying services who became part of the emerging Air Force. These aircrew and ground staff came to the RAAF with a wealth of wartime experience and I am certain had a particular influence on their peers and on the day-to-day conduct of operations. Without these members it is difficult to see how the RAAF could have managed as well as it did in the years leading up to 1939.

It is also in these early days we see the traditions of the Air Force emerging, and it is in these traditions I believe the RAAF has been well served. Some of the core strengths of today's Air Force —its flexibility, dedication and passion for success have grown as a natural result of our traditional values more than any other reason. When I speak of traditions, I refer not just to the pomp and ceremony of the parade ground and dining-in-nights, rather I refer to the professional attitudes and actions of our early members that influenced their less experienced peers and have since become normal practice. We have seen examples of the enduring legacy of our early members during and after World War Two—in the skies over Germany and on the airfields of Milne Bay, in MiG Alley and hovering over the Battle of Long Tan. These past members laid the ground work for what we now call our values and traditions.

During my appointment as the Air Commander Australia and later as the Chief of Air Force, I have been privileged to witness first hand on any number of occasions just how Air Force traditions have had a positive influence of on our members. When South East Queensland was inundated by flood waters Air Force members were out with the rest of their communities sandbagging, mopping up and bringing in much needed support. Later when Cairns was threatened by Cyclone Yasi, the Air Force mounted an aero medical evacuation that cleared the Cairns Hospital of vulnerable patients. In my current role of VCDF, the

feedback I receive daily regarding the performance of Air Force men and women in operations and in exercises, reinforces my belief that the qualities that drive Air Force members to excel in all they do has been fostered by the examples of our forebears achieving success through dedication, professionalism and hard work. It is no accident that the Air Force selected *Tradition* as the first pillar of our celebrations for this year.

In a healthy forward looking organisation, a sense of tradition is a powerful and valuable asset. In the case of the Air Force, it establishes benchmarks across a number of vitally important attributes within our workforce. Two such attributes are the desire to constantly improve and the other is to not just accept change, but to wring every advantage that such opportunities present. The combination of this drive and open mindedness fosters constant innovation. The second pillar of this year's anniversary.

Examples of RAAF innovation abound throughout our history. Last year I awarded the first of what has become the annual AVM H.N. Wrigley Air Power essay prize. This award was named in honour of the RAAF's first conceptual thinker on air power. Throughout a long Air Force career, Wrigley shaped how the RAAF thought about air power roles and strategy. His writings of the 1920s, while not gaining the world wide attention of contemporary air power theorists such as Trenchard, Douhet and Mitchell, were nevertheless as profound and important to the development of conceptual thinking in the RAAF. The doctrine manuals of today still echo many of Wrigley's ideas on air power strategy, characteristics and roles.

Whereas Wrigley was an innovator that changed how we think, a contemporary of his, Lawrence Wackett, sought to develop our technical and design capability. Wackett became the driving force behind the establishment of the RAAF's first aircraft experimental section in 1924. This section, based in Randwick, produced the first aircraft operated by the RAAF that was designed and constructed by the Air Force, as well as the first Australian aircraft to fly around Australia. Wackett also got the Air Force thinking deeply about aircraft design and local construction. In the years following the close of the experimental section the RAAF established performance and handling units and today, the Aircraft Research and Development Unit carries on the trials and experimental work on ADF aircraft and systems

in close association with external bodies such as the Defence Science and Technology Organisation.

Yet not all innovation is conducted at the high end of technology. To help fund our future capability Defence has been actively pursuing a strategic reform program. This program empowers Defence members from our junior members to the senior managers to seek efficiencies in all aspects of Defence activities.

A component of SRP, the Air Force Improvement Program has been realising savings through studies of day-to-day business and asking the question *how can we do this better?* For example, No 1 Combat Communications Squadron reviewed how they supported nearly 80 exercises conducted across Australia each year. A collaborative unit effort cut the time taken to task equipment from days to less than an hour; reduced handling and transport overheads and eliminated unnecessary inventory.

It is our positive, forward looking, young members across Air Force that are generating accumulative savings that is making the Reform Program a reality and a success.

Constant innovation from an organisation that embraces change and with a tradition of success cannot help but evolve. From inception to today, the RAAF has sought constant improvement, adapted as the demands of peace and war have dictated, and has maintained pace with the technology that has always been an important enabler to air forces around the world. It is because evolution will continue to shape the future Air Force as it has in the past, *Evolution* was chosen as the third pillar of our 90th anniversary.

As the air force replaced aircraft, built new bases, deployed on operations and developed new capabilities it has clearly changed from the force it was in 1921. That change has been a constant feature of the Air Force experience, and it is a story of positive change. Looking at our history, I believe there have been six periods where this change has been more profound and in at least two instances it has been more a case of a controlled *Revolution* rather than *Evolution*.

The first of these phases occurred in the mid 1930s, when the probability of war became ever more likely and the Australian Government began spending more on Defence after a long period of frugal budgets. The RAAF needed new aircraft to replace an obsolete fleet of predominately bi-plane aircraft. Between 1935 and 1939, the RAAF's budget, manning and aircraft fleet more than tripled in size. Operating infrastructure also increased with new bases being established all around Australia.

The significance of this transition cannot be understated. The senior officers of the RAAF were under pressure to expand exponentially and were coming to terms with the problems such rapid expansion caused. Training, accommodation, logistics requirements, flying safety, human resource management, medical services, the list goes on. Yet these issues were being better understood and addressed. Consequently not only was the RAAF growing, but senior management were being educated on how to expand an air force. That skill set became critical in the next phase of Air Force growth generated by World War Two, this was the first of the revolutionary changes.

The war service record of the RAAF's men and women speaks for itself. It is a chapter of the RAAF story that is illustrated with courage, dedication and hard fought campaigns. Incredibly the RAAF grew through the conflict to become the fourth largest air force in the world, peaking at 182 000 personnel and over 5500 aircraft. For all that growth, within three years of the war's end the RAAF had reduced in size close to its 1939 levels, the second of our revolutionary changes. The enduring difference however was that the RAAF now had an understanding and an ability to exercise air power at the strategic, operational and tactical levels of conflict. This has become an enduring component of how we think, act and plan for the future.

That mature ability led to the next major phase of Air Force evolution in the 1960s. In this decade we transitioned from the first and second generation jet aircraft to the third generation Mirage and F-111 fighter and strike aircraft. We replaced our obsolete transport aircraft with turboprop Hercules and rugged Caribou air lifters. Capable P-3 Orion aircraft were introduced into our maritime patrol fleet and our rotary wing component matured into a force multiplier in the jungles of Vietnam. We became an air force of global reach,

developed deterrence with significant strategic weight and developed a new technologically focused workforce.

It is that workforce that took the Air Force into the philosophical changes that have found their origins in 1987 period—the year that Air Marshal Ray Funnell became the Chief of the Air Staff. He had become concerned about the poor understanding of air power across the organisation and the absence of Australian specific doctrine to guide Air Force development. Under Ray's direction the Air Force produced its first indigenous air power doctrine and established the Air Power Studies Centre, now known as the Air Power Development Centre. The resulting Air Power Manual and the influence of the expanding body of work coming from the APDC have been a great enabler. Today the Air Force can look at capability improvements against criteria such as national policy, strategic goals, emerging threats and coalition interoperability. We now speak of *Professional Mastery* in addition to *Technical Mastery*, and the Air Force's contribution to the full spectrum of Joint military operations is clearly understood: from humanitarian and disaster relief, to Peacekeeping through to state on state conflict. The post 1987 Air Force became more articulate with regard to air power. This change was important, as the next phase of evolution came upon us, and the ability to think and communicate clearly suddenly became very important.

As the last century was in its final decade and the 21st century dawned, three important events took place. First, the Cold War ended with an unexpected suddenness. Immediately the balance of power around the globe changed and the peace dividend appeared to be lost in a rush of conflicts such as the 1990-91 Gulf War and persistent clashes in the Balkans. At a time when many Western Governments were looking at downsizing their defence forces, it seemed that the demands on air power to maintain the peace grew exponentially.

Second, the impact of technology enabled the development of precision guided munitions supported by more sophisticated Intelligence, Surveillance and Reconnaissance systems providing real time targeting information. Concurrent to this was the growth of networked information systems and development of concepts centred on effects based operations rather than on mass destruction. Decision cycles became shorter and the need to know became ever more critical. These changes resulted in the RAAF looking at weapon systems

that would *enable* the more traditional strike capabilities in order to maximise the effects air power could generate in the conflict space. These and other changes have resulted in a step change in capability similar to that experienced in the 1960s.

The third event was the terrorist attacks against the US on 11 September 2001. Australia, like other nation states around the world realised that terror networks had become global in reach and it was necessary to destroy those networks and to remove from power those people and governments who supported them. The RAAF like its partner services has been a significant part of Australian's contribution to the global coalition that is dismantling the international terror networks.

Against this backdrop of change, technology and conflict, the Air Force now stands on the cusp of its next major change. Currently we are maturing our ISR networks with the integration of the new Wedgetail aircraft into our ground-based systems such as JORN and Control and Reporting Centres. This network is being further enhanced by the Heron remotely piloted aircraft capability we are now operating in Afghanistan.

Our strategic airlift capability is has been enhanced through the development of our new KC-30A Multi Role Tanker Transport aircraft as well as by the recent acquisition of a fifth C-17 aircraft, with a sixth airframe a possibility.

As recently as last month, our air combat capability achieved a significant milestone with the arrival in Australia of the last of 24 F/A-18F aircraft as part of the capability replacement for the now retired F-111 fleet.

The Air Force is changing and evolving—just as it should. In the years leading to our centennial year, we will witness further change. Our air combat capability will be further enhanced with the arrival of the F-35 Joint Strike Fighter. These aircraft will represent a transition to fifth generation aircraft—optimised for operations in a networked enabled battlespace, the F-35 will be as much an information node as it will be a combat platform. We are also looking towards the introduction of the next generation of Maritime Patrol capability in the form of manned aircraft supported by remotely piloted ISR platforms. We

will also have a stronger presence in space and will be operating with greater alacrity and finesse in the cyberspace domain.

So what is not changing and evolving? Clearly, what is not going to change is our reliance on skilled and dedicated people. Senior Officers say time and time again, our most important capability is our people. This is not a motherhood statement but reality. Without the right people, properly trained and educated, without good leadership and direction, the Air Force becomes an inert machine. Capability becomes just another word and doctrine and plans gather dust on bookshelves.

Ninety years ago, Sir Richard Williams relied on his personnel to keep the Air Force flying, and I can assure you, Air Marshal Geoff Brown the current Chief of Air Force, relies on his people just as much.

We need to ensure that we continue to attract the right people into the Air Force, give them a sense of purpose, the skills and tools they need and then trust them to do their jobs. Part of ensuring that our people continue to step up to the task is to instil a common purpose and understanding across the force. It is for these reasons that acknowledging our past, our triumphs as well as our tragedies and failures are so important to any military service. This year the Air Force's 90th anniversary is such an opportunity to acknowledge and applaud the service of the nearly 310 000 men and women who have served in the Air Force since 1921. They have built a service with an outstanding record and a set of values and traditions second to none.

Ladies and gentlemen, I now appear to have come full circle in my thoughts and observations. Clearly I feel justifiably proud of the Air Force, it was a privilege to have led the force as its Chief and I still feel very close to the RAAF in my current role as VCDF. I have now perhaps spoken long enough. Once again I would like to thank you for your kind invitation to be here tonight and for the opportunity of giving the 2011 Arthur Butler Memorial Lecture.

Good evening and good cheer to you all.