



# Wings

## AUTUMN 15

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### COVER



The Avalon 2015 Australian International Airshow and Aerospace & Defence Exposition is scheduled for the period 24 February to 1 March at Avalon, Victoria. The theme of the Airshow is 'HEROES of the Sky'. The Australian Defence Force will again partner with the Australian International Airshow at Avalon. As always, the RAAF

Roulettes will feature with their precision aerobatics.

Cover: Lance Halvorson Photos: RAAF

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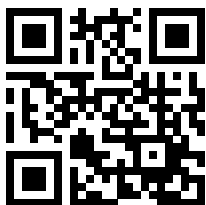
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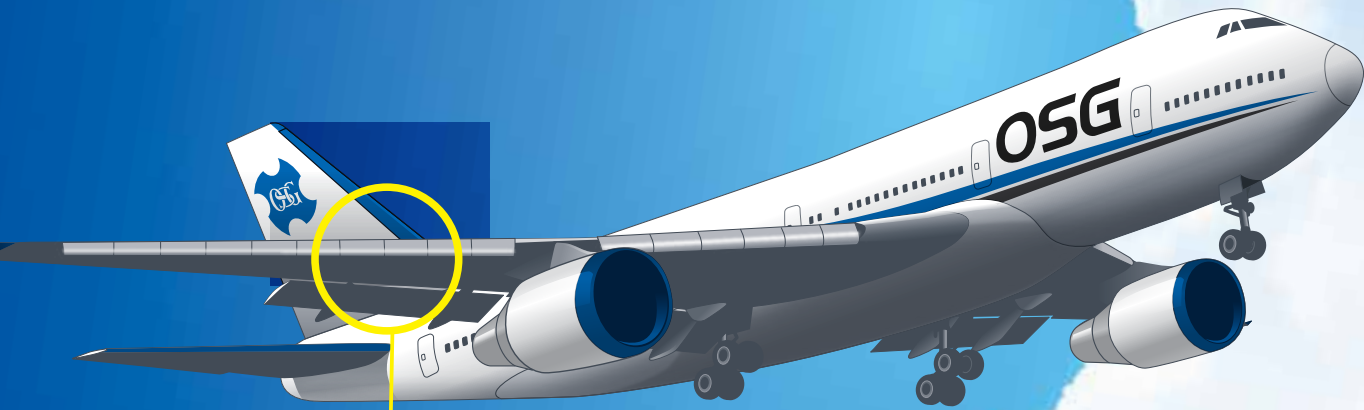
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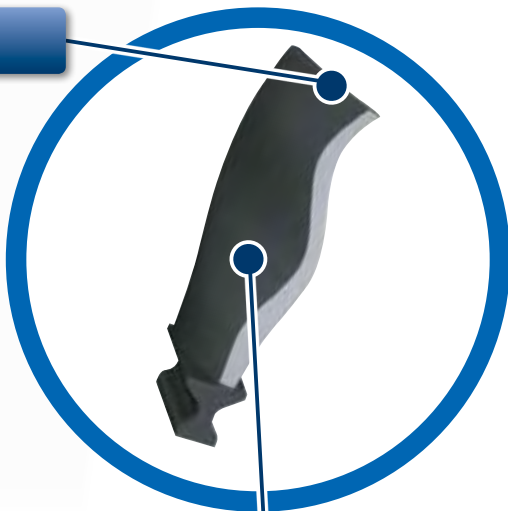


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# President's Message

## It's Deja Vu All Over Again

For many *Wings* readers what follows is their likely view on submarines. On the 8<sup>th</sup> of January 1944, during a midwinter 'Percussion' patrol in the Bay of Biscay, Sunderland 'U' of No 10 Squadron (RAAF) sighted U-426 outward bound at a distance of 12 miles in excellent visibility. The Submarine remained on the surface confident its daunting armament could deal with the Sunderland but the aircraft was able to close to 1,200 yards and hosed the U-boat's gun platforms with its newly Australian devised four fixed bow-mounted machine guns.

The first bombing attack failed as the depth charge trolley jammed, but, before the U-boat could dive, the Sunderland repositioned and pressed again to drop six depth-charges near the vessel, which lost way, listed and began to sink by the stern. Within minutes U-426 slid from view.

Of course, the RAAF's concerted efforts then and now to vigorously pursue submarines underpins their formidable doctrinal capabilities. In fact, a close examination of those capabilities contours up that marvellous redundantly mangled saying of US Baseball icon Yogi Berra 'It's Déjà Vu all over again' – such is the alignment with the doctrinal capabilities of military aircraft or airpower with which readers may be more familiar.

Like air power, submarines offer strike, intelligence gathering, surveillance and reconnaissance at great reach. Submarines have always leveraged their greatest attribute – stealth – to multiply the effect of these missions and allow covert operations although technology in more recent times is now offering similar stealth effect for military aircraft. At a higher level, airpower and submarines afford strategic deterrence, a high value national security output.

Both submarines and air power can determine the outcome of a war as air power did in the Pacific in World War II and submarines seriously threatened to do in the Atlantic. Even a single attack using airpower or submarines can influence a war as the Doolittle Raid did in April 1942 and as did the sinking of HMS Royal Oak in October 1939.

Both these events had a big impact that went beyond the damage inflicted. The Doolittle Raid by Mitchell Bombers on Tokyo and other places on Honshu Island demonstrated that Japan was vulnerable to air attack served as retaliation for Pearl Harbour and provided an important boost to US morale while damaging Japanese morale. The sinking of HMS Royal Oak anchored at Scapa Flow in Orkney, Scotland soon after the beginning of World War II by the German submarine U-47 did little to affect the numerical superiority enjoyed by the British navy and its Allies, but had a considerable effect on wartime morale on both sides. For the British it was a disaster deeply felt especially as of the 883 sailors who perished 126 were boys under the age of 18. On the German side the raid made an immediate celebrity and war hero out of the U-boat commander, Gunther Prien.

The sinking also produced a complete rethink of port defences. Before the sinking of Royal Oak the Royal Navy had considered the naval base at Scapa Flow impregnable to submarine attack, and U-47's raid demonstrated that the German Navy was capable of bringing the war to British home waters. The shock resulted in rapid changes to dockland security and the laying, at great expense, of the Churchill Barriers at Scapa Flow - causeways that shut off previously useable channels around Scapa Flow.

Interestingly the Barriers also cut off the livelihood of the local population in quite a blunt fashion. Orkney residents, initially Norwegian and then Scottish after the Islands were had been annexed in 1472 by the Scottish Parliament following the failed payment of a dowry for James III's bride, had been fishermen for centuries but with the building of the causeways and the strengthening of security in channels with submarine nets, they were unable to venture out to their fishing grounds. In true innovative Celtic and Viking fashion they turned to raising chickens for a living which flourished as a thriving business until the early 1950s when a savage storm blew the chickens off the Islands!

Submarines, like the capacity to generate air power, are essential capabilities for the Australian Defence Force. For around 100 years both have made a vital contribution to Australian national security and will increasingly need to do so for the future. Australia's geo-strategic circumstances and our role as a global military and economic player dictate the necessity for the type of off-shore reach which submarines and air power can deliver. Both, however, require a level of investment that Australia cannot afford to squander, sums of money that demand cost-effective acquisition and maintenance processes.

In the case of Australia's Future Submarine the associated policies to lay out these processes are entering a crucial stage. Disappointingly, the Government has characterised the matter in its Issues Paper, released last July, to inform the development of the 2015 Defence White Paper as being about Defence capabilities and not about propping up local economies with on-shore procurement. This short hand approach belies the complexity of the issues and is behind the Australian public's call (as evidenced in the Defence White Paper consultation process) for more explanation and information about crucial Defence Issues rather than the commentary and spins on offer. They deserve to be informed on all the considerations - capabilities, access to design, alliances, sovereignty, defence industry and risks.

I encourage readers to follow this debate closely. A good starting point is to visit [www.subsummit.com.au](http://www.subsummit.com.au) (A Summit to be held in Adelaide 24-26 March 2015) and register for a free report on Australia's Future Submarine. I should declare my interest here in that the Royal United Service Institute of Australia of which I am National President, is the lead partner in staging the Summit.

Brent Espeland  
National President

## Australian International Air Show – Avalon 24 Feb-1 Mar 15



The Avalon 2015 Australian International Airshow and Aerospace & Defence Exposition is scheduled for the period 24 February to 1 March at Avalon, Victoria. The theme of the Airshow is 'HEROES of the Sky'. The Australian Defence Force will again partner with the Australian International Airshow at Avalon.

- ADF Aircraft expected to participate at the Airshow include:
- F/A-18F Super Hornet
- F/A-18 A/B Hornet
- Hawk 127 lead-in fighter
- C-17A Globemaster
- AP-3C Orion
- KC-30A Multi Role Tanker Transport
- PC-9/A
- KA350 King Air
- E-7A Wedgetail
- Air Force's Roulettes
- Navy's AS350B Squirrel and MRH-90 'Taipan' helicopters, and
- Army's ARH Tiger and MRH-90 helicopters

There will also be major displays of the ADF's ground-based equipment and capabilities including:

- Military Working Dogs
- Air Force Band
- Federation Guard
- Explosive Ordnance Display
- Deployable Communications Display
- Air Force Engineering Display
- Mock-up of a F-35A (Joint Strike Fighter)
- Army Light Armoured Vehicle (ASLAV)

The Airshow and Exposition is an important opportunity for Defence to emphasise its close working relationship with the aviation defence industry, both here in Australia and internationally and, to promote opportunities in Defence for the next generation of air and ground crews.

For more information, tickets and conditions of entry see [www.airshow.com.au](http://www.airshow.com.au).

Air shows capture the imagination of many; the participants, industry and the public. They are opportunities for manufacturers to show their air and space products, (and open

their order books), aircrew to display the aircraft, both static and flying, and their capabilities. Maintenance and technical crews show their skills and the technologies available to them and the myriad of support businesses display and offer aviation related publications, shirts, mugs and other aviation objects d'art.

But, the main reason people attend is to see and be enthralled by the 'big iron', the aircraft. Not only current in-service military and civil aircraft types, but prototype and just released aircraft.

The aerial demonstration teams of air forces almost always attend; in Australia, the RAAF Roulettes, with their PC9s, are always an attraction with their precision close formation flying.

### Historic Air Shows

Over the years, air shows have had many titles and descriptions: airshow, air display, aviation pageant, aviation spectacular, aviation open day, international air exposition and a few others. But, they were all about flying aircraft, and in some cases, air balloons and airships.

Following a directive from the Minister for Defence, the RAAF held its first air show at the Flemington Racecourse in Melbourne on 13 Dec 1924. A crowd of 7000 people

paid to watch the show from within, plus many more who watched from outside the ground. All the Air Force's current types, except the Fairey IIID seaplane, were involved in displays of landing in confined areas, picking up and dropping messages, low-level bombing, formation flying, air drill, mock air combat, ammunition dropping, aerobatics and races.

Other than a DH-9 crash at the conclusion of the aerial combat display, the program went as planned. However, the real drama occurred three





days earlier, when 20 aircraft flew from Point Cook to rehearse for the show. Three DH-9s and an Avro 504 were damaged in landing mishaps, with the Avro destroying a section of railing and ending up on the steeplechase course.

For many years, the RAAF held air displays to coincide with Air Force Week and the Battle of Britain commemoration in September of each year. In the late 1960s, RAAF air displays were changed to coincide with the anniversaries of the formation of the RAAF, 31 March 1921.

Major RAAF air displays were held to commemorate the RAAF Jubilee in 1971. Displays were held at all major RAAF bases in Australia throughout March. A big drawcard at these displays were the Phantom aircraft, without doubt the biggest crowd pleaser the RAAF has had until the introduction of the F111 and the F/A 18 aircraft in 1973 and 1983.



**Roulettes in Macchi aircraft overfly 6SQN F4-E Phantoms taxiing at RAAF Pearce at Air Show in 1973.**

*Photo: Lance Halvorson*

The inaugural airshow at Avalon was held in 1992. Heavy spring rains in the weeks before made the airfield a muddy quagmire and because of rain up until the eve of the show, cancellation was a distinct possibility. However, the rain eased and the show went on. Had it rained heavily on one of the days, the airshow would probably have been abandoned. The sodden state of the airfield created many problems during the airshow, mostly to do with facilities and infrastructure.



**Four F/A-18 aircraft in flypast at Avalon Air Show 2009.**

*Photo: LAC Chris Dickson, RAAF*

## Display Flying

One activity all airmen enjoy, be they members of the highly acclaimed RAAF *Roulettes* or a squadron pilot utilised for flypasts at low-key unit events, is participation in an air display. It is the chance you have to show your pride in the aircraft, your unit, the Service, and in your own ability.

The differences between normal operations and flying in an air display result from pressure generated by the air show environment. A pressure brought on by flying in front of a large number of spectators, by the need to give a performance which compares favourably with others on the program, and by the sheer excitement generated by the often carnival-like atmosphere.

While flight safety considerations in display flying are the same as those which apply in normal squadron operations, failure to practise them rigorously can and frequently does result in a highly visible and costly accident. The keys are supervision and self-discipline. A safe and successful performance starts long before show day and the role of the supervisor is paramount. He or she must select a suitable pilot or crew, approve a choice of manoeuvres, monitor training, and give final blessing from personal observations prior to the first public presentation.



**An F-111 overflies RAAF Base Amberley on its last flight, 3 Dec 10.** *Photo: Lance Halvorson*



**Bob Hoover in a North American P-51D Mustang at air display Cannon AFB, New Mexico, 1968.**

*Photo Lance Halvorson*



**Four AP-3C aircraft flypast at RAAF Base Edinburgh, SA, Nov 14** *Photo: RAAF*

Those of us who have been around for a few years have experienced times when we chafed under what we considered overly restrictive limits on the quantity and quality of air show participation. These periods usually followed one or more disastrous accidents—usually the result of a lack of supervision or a lack of self-discipline: the young pilot working up a display with minimal supervision; the pilot who practises at a minimum of 300 ft and then flies at 50 ft on show day; and so on.

Remember, operational flying is hazardous enough without trying to add a little 'extra' to the show.

Display Flying paragraphs reprinted from *0104 Focus Display Flying*, Director of Flying Safety, with permission of RAAF.

Enjoy the 2015 Air Show, it will be exciting for spectators and participants.

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Freightquip's most recent project has been supporting the supply of the new Aircraft Loader fleet and has provided the opportunity to showcase to the RAAF, Freightquip's ability to deliver local technical expertise and support. Combined with enhanced OEM support, Freightquip has led the training, delivery and on site equipment commissioning assisting with the fleets transition into service.

Freightquip and TLD have partnered together in delivering to the RAAF a new ACL fleet consisting of a single specification delivering fleet

continuity. Beyond the advantages of the equipment, Freightquip brings enhanced operator, maintainer and parts support and has also developed a compliant and accompanying RAAF approved Training Package for both Operators and Maintainers. These courses have been implemented as per contract commitment and we look forward to further assisting the RAAF when and where required.

We have seen to date the successful delivery and implementation of the full compliment of units into Richmond and Amberley Bases with the roll out of the remaining fleet into other bases on schedule.

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The feedback from all RAAF stakeholders has been extremely positive throughout the entire project. Through the culmination of all of the stakeholders input, the first units entered into limited operational service in November 2014. This in itself was a major milestone as this operational activation was well in advance of the original projections.

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# A look on Israel Aerospace Industries' Heron Family of UAS

Israel Aerospace Industries (IAI) is a world leader for over 40 years in Unmanned Aerial Systems. One of its leading products is the innovative "Heron" Family. A master in performance of ISR Missions, Heron covers hundreds of square kilometers in any terrain below, as deserts, mountains, peeking through dense tropical forests, scanning the coastal plains deep at sea and more.

Heron's sensors provide the optimal sensing for every possible scenario at all times. With mission endurance spanning over days and nights, its electronic intelligence gear is sweeping the spectrum for suspicious signals, on-board radars perform wide-area surveillance over land, sea, jungle or urban terrain, while sharp-eyed electro-optical payloads enable operators to positively identify and designate targets for further action.

The Heron I UAS is a robust, combat proven multi-mission system, adapted for a broad range of tasks, utilizing diverse mission payloads. The modern Heron carries multiple payloads for line-of-sight missions or beyond line of sight using satellite communications. Its sensors feed ISR data to the ground segment and to tactical-level end users in real-time. Heron is equipped with an automatic takeoff and landing system (ATOL) based on years of operational experience. The system integrates two redundant reference systems – laser and Differential GPS (DGPS), to maintain maximum safety through these critical phases of the mission, in day night rain and zero visibility. IAI's UAVs are serving more than 50 customers and more than 20 countries worldwide, accumulated to more than 1,200,000 operational flight hours, flown throughout the world: Afghanistan, Iraq, Kosovo, Libya, and the Middle



East, from the Asian and North African deserts, through the mountain ranges of the Himalayas and Andes, to the African, Asian and Amazon tropics, to the cold winter of northern Scandinavia and Canada. The Heron family has accumulated 250,000 operational flight hours worldwide.

Heron unmanned aerial system (UAS) will return to Australia from Afghanistan as part of a plan to ensure that Royal Australian Air Force (RAAF) pilots maintain the necessary skills to operate unmanned aerial systems until the introduction of their future UAS- Triton.

"The Heron is a proven capability– providing 'eyes in the sky' for our troops in the Middle East" said Australian Minister of Defense Senator David Johnston. "The retention of the Heron systems following their withdrawal from Afghanistan later this year will ensure that Australia remains at the forefront of this advancing technology. This is prudent planning for possible future defense scenarios."

Once back in Australia, the Heron UASs will be used for training purposes; providing Australia with greater opportunities for training, and developing robust tactics, techniques and procedures for operating complex UAS platforms. This will also aid integration [of the UASs] into Australian airspace. The Heron can also be used at the request of state governments for civilian roles, such as assistance during natural disasters.

In 2009, the Australian Department of Defense (DOD) awarded a contract to MacDonald, Dettwiler and Associates Ltd. (MDA), a Canadian company, to supply Heron systems to Australia for operations by the RAAF in support of troops deployed in Afghanistan, for intelligence, reconnaissance, and surveillance (ISR) missions, as part of Project NANKEEN. The project is due to continue in Australia for several additional years.



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# Electronic Warfare in Offensive Air Operations

Ever since military forces started to use the electromagnetic spectrum in support of air operations, opposing forces have attempted to prevent their use through either a hard kill (German attacks on the RAF Chain Home Radar sites during the Battle of Britain) or soft kill (German attempts to disrupt or bend the radio beams (Oboe) used to direct RAF Bomber Command Pathfinder aircraft towards their targets in WWII). Like all aspects of warfare, there is no "silver bullet" since countermeasures are usually developed to offset the attack. This is particularly relevant in EW since the very use of a portion of the spectrum against operational forces is of itself a training cycle for the target of the emissions.

Because of the size and weight of equipment and the need for human interface with that equipment, early airborne EW systems were developed using multi-crew aircraft. However, these large aircraft were vulnerable to attack particularly with development of Integrated Air Defence Systems (IADS) that integrated surveillance, tracking and guidance radars with the full range of air defence weapons: air defence fighters, SAMs and AAA guns. Fielding of IAD Systems resulted in development of aircraft able to operate in a hostile air environment and support strikes against defended targets.

The F105 Wild Weasel used by the USAF over North Vietnam was an early example of the type used to support strike missions through attacks against the IADS including systems such as the SA-2 Ground-to-Air missiles employed by North Vietnam. The Wild Weasel systems were able to detect and analyse electromagnetic signals and direct anti-radiation missiles against missile guidance systems. Accompanying F105 aircraft armed with bombs were used to attack air defence systems pinpointed by the Wild Weasels.

With continued development of EW systems in both weight/size and capability fighter type aircraft are now capable of conducting many of the missions once restricted to large multi-crew aircraft. These missions include passive operations such as Enemy Order of Battle (EOB) analysis and Kill Chain analysis and active operations such as Suppression of Enemy Air Defences (SEAD), Force Protection and Maritime Support as follows:

EOB analysis involves development of detailed information on the location, frequencies and capabilities of possible enemy systems that could diminish the capabilities of friendly systems. Since air defence systems include long (early warning) and short (missile guidance) range systems, EOB analysis requires systems able to monitor as much of the electromagnetic spectrum as possible. Even then physics decrees that the higher the frequency the more accurate the location.

Kill Chain Analysis is the term given to analysis of the electromagnetic spectrum in a hostile environment and disseminating that information electronically to other parties in near real time so that fleeting targets such as mobile SAM sites can be engaged. The aim is to shorten the decision cycle of friendly forces and lengthen the decision cycle of enemy forces: in air force terminology affect OODA (Observe, Orientate, Decide, Act) loop of both friendly (reduce cycle time) and enemy (increase cycle time) forces.

SEAD involves the degradation or defeat of integrated enemy air defence systems thus enabling attack forces to enter defended enemy territory. Hard and soft kills are usually made in combination to degrade IADS capability

Force Protection involves prevention of enemy use of the electromagnetic spectrum to conduct attacks against friendly ground forces. These operations could be used to deny the enemy use of the spectrum to communicate and/or initiate Improvised Explosive Devices (IED).

Maritime Support is the term given to operations to protect the fleet from attack by anti-ship missiles and radar directed gunfire. It involves degradation or defeat of electronic location, targeting and guidance systems.

The EA-18G Growler, the latest Western development of fighter type EW capability, is replacing the EA-6B Prowler in US service. Whereas the Prowler is manned by one pilot and three systems operators the Growler is a two place aircraft developed from the FA-18F: the EW role is considered too complex at this stage for single pilot operation. It is understood that even with two seats the USN tends to operate the Growler in pairs to provide full EW capability, accuracy and self-protection. The capability and flexibility of the Growler was demonstrated recently when a squadron operating over Iraq in the Force Protection role switched to SEAD over Libya in under 48 hours.



**USN EA-18G Aircraft Photo: Boeing Company**

While very capable in self-protection as well as its primary EW roles, the Growler in the USN is not an attack fighter. While the Growler is capable of utilizing guided weapons the USN has separated the two roles apparently because Growler crews are stretched maintaining skills in their primary EW role.

Without fighter type EW systems in the Air Order of Battle the ADF could suffer significant losses during any attempt to operate in contested airspace. If required to operate in contested airspace the ADF would have to rely on allied support.

*By Errol McCormack, Chairman of The Sir Richard Williams Foundation*

# EA-18G Growler and Airborne Electronic Attack



A cutaway diagram showing the key EW systems. Photo: Boeing/USN

The decision to procure 12 x EA-18G Growler (EW Super Hornets), in addition to the 24 x F/A-18F Super Hornets and F-35 aircraft, will result in the RAAF gaining an outstanding electronic warfare capability for Australia, unmatched in our region for some time. The ALQ-218 receivers on the Growler are state of the art, but a new tactical jamming system will be required, probably the New Generation Jammer (NGJ), or an upgrade of that system. However, in the interim, the ALQ-99 will probably be procured. Initial operational capability of the NGJ in the US Navy is planned for 2019.

The NGJ will have vastly improved capability, such as increased radiated power, new modern jamming modulations and the ability to target multiple, geographically separated threats simultaneously.<sup>1</sup> However, effectively jamming enemy

airspace requires a large amount of independently generated prime power, a serious technical challenge.

The US Navy, USAF and US companies are 'reserved' in their discussions on what is/should be incorporated in the NGJ, but systems that can deliver 'tailored data streams' for electronic attack and cyber –invasion, ie, a weapons system that can direct cyber effects into a radar/communications system, are likely to be well advanced. Such data streams can be fired into an antenna that ISR indicates is integrated with a target network. Air defence networks have extensive data communications networks that are susceptible to electronic and cyber attack.

As the AEA roles for the EA-18G are highly specialised, crews will be trained in the USA at NAS Whidbey Island, Washington State.

<sup>1</sup> Bob Ferrante, VP and GM of ITT Electronic Systems' Airborne Electronic Attack Department



Diagram depicting the Full Spectrum Airborne Electronic Attack (AEA) provided by the EA-18G Growler Photo: Boeing/USN

## Key Roles

- **Suppression of Enemy Air Defences:** counter enemy air defences using both reactive and pre-emptive jamming techniques.
- **Stand-off and Escort Jamming:** highly effective in the traditional stand-off jamming mission, but with the speed and agility of a Super Hornet, it will also be effective in the escort role.
- **Non-Traditional Electronic Attack:** dramatically enhanced situational awareness and uninterrupted communications enables the EA-18G to achieve a high degree of integration with ground operations.
- **Self-protect and Time-Critical Strike Support:** With its Advanced Electronically Scanned Array (AESA) radar, digital data links and air-to-air missiles, the EA-18G has self-protection capability and effective target identification.
- **Growth:** high commonality with the F/A-18E/F, nine available weapon stations and modern avionics enable cost-effective synergistic growth for both aircraft, setting the stage for continuous capability enhancement.

## Airborne Electronic Attack (AEA) Capabilities

- The EA-18G's ALQ-218 wideband receiver combined with

the ALQ-99 Tactical Jamming System provides a capability against any radar-guided surface-to-air threat.

- Selective-reactive technology enables the EA-18G to rapidly sense and locate threats with a significantly higher degree of accuracy than was previously possible. This improved accuracy enables greater concentration of energy against threats.
- The advanced modular ALQ-227 Communication Countermeasure Set enables the EA-18G to counter a wide range of communication systems and is readily adaptable to an ever-changing threat spectrum.
- Interference Cancellation System (INCANS) enhances aircrew situational awareness by enabling uninterrupted communications during jamming operations

By Lance Halvorson

## Acknowledgements

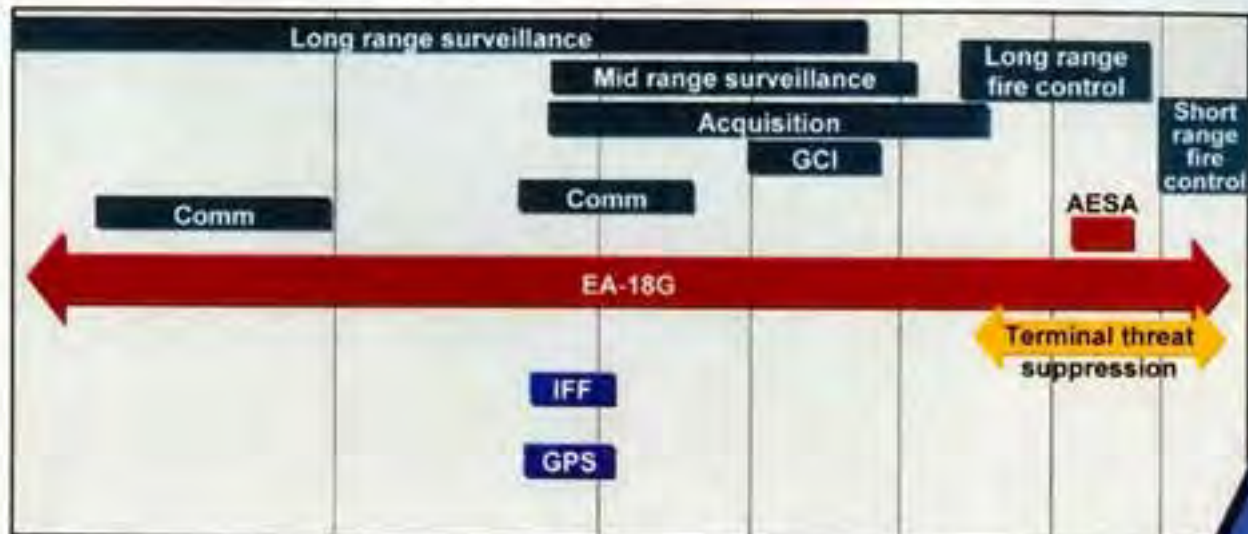
GPCAPT Phil Gordon, Director Air Combat Transition Office and Boeing

Boeing

US Navy

ITT Electronic Systems

## IADS Suppression Demands Full RF Spectrum Coverage



*EA-18G meets the full the joint spectrum requirement*

Diagram of the RF Spectrum Required for Defence System Suppression. Photo: Boeing/USN

An EA-18G Growler, XE 573 166857 of the VX-9 "Vampires", cruises over the desert during a mission, 3 Nov 09. Photo: Boeing Company



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**Embedded Virtual Avionics (EVA™)** is delivered on-board trainer, fighter and rotary wing aircraft, with each being configured with an emphasis on the specific trainee/operational pilot's requirements. EVA can be installed on basic or advanced trainer aircraft, transforming the aircraft into a virtual advanced fighter while maintaining the hourly training costs of a trainer. The embedded training system virtual avionics suite is designed to shorten the training gap which exists today between trainer and modern fighter aircraft, and allows the trainees to operate advanced systems, such as virtual Radar, Optical sensors and Electronic Warfare systems, as well as virtual Air-to-Air and Air-to-Ground weapons. The embedded training system is manufactured in a minimal integration single LRU configuration, thus reducing aircraft integration costs.



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Australian and international cooperation on the Lightning II makes fifth generation capability accessible to our allies, while also providing industrial participation and sustainment opportunities. The F135 propulsion system is built with components produced by world-class manufacturers in Australia, and Australia will take on the responsibility of providing heavy engine maintenance in the Asia Pacific region beginning in 2018. We congratulate Australia for being selected for this engine sustainment work, and we look forward to working together with Australian industry to deliver best value manufacturing and sustainment services for the RAAF and global F135 fleet.

Australia received delivery of its first two aircraft in 2014, and their pilots are now flying at the international training hub at Luke AFB, Arizona – making Australia the first of 10 nations to begin flying operations there. Mission availability for the engine has remained at 98 percent and the engine continues to prove itself in flight test milestones, such as air starts and demanding high angle of attack testing. The RAAF is now seeing first-hand how the F135's cutting-edge capabilities meets the complex and diverse needs of the RAAF and Australia's allies.

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President, Pratt & Whitney Military Engines

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# F111 Recollections 1969 - 1975

by Tony Wilkinson

## Introduction

In early 1967 I was selected as part of the initial deployment of 2 Squadron from Butterworth, Malaysia to Phan Rang, South Vietnam. A dream posting which involved 6 months in Vietnam (with possibly occasional visits back to Butterworth to visit mum and the kids) then back to Amberley via Butterworth to pick up the family and then onto the USA in 1968 for conversion onto the F111C and finally, ferrying the new aircraft to Australia. It all seemed too good to be true – and it was.

A few weeks before the deployment my posting was cancelled (to be replaced by FltLt Blue O'Neill) and I was off to East Sale for the Advanced Navigation (AN) Course on the understanding that the first priority was for me to return to Canberra's for presumably a normal 12 month posting to Vietnam and, of course, no F111 conversion in the USA. Needless to say I was not a happy little vegemite as I stood on the empty tarmac at Butterworth and watched the Squadron fly off to Vietnam.

But, as they say, what goes around comes around. Following the AN Course I remained on staff at the School of Air Navigation and, the following year (1968) spent 14 weeks 'swanning' around the UK waiting for a HS 748 for delivery to Australia. In the meantime the F111 program had ground to a halt with problems in the aircraft's wing carry through box and the RAAF crews, who had completed their training in 1968, came home without the aircraft. Then without warning in July 1969 I was posted to the USA for the first F111 exchange at Nellis AFB, Nevada.

## The Exchange Experience

On arrival at Las Vegas in August 1969 I was met at the airport by Flt Lt Ian Westmore who, together with Sqn Ldr Ivan Skipworth and Flt Lt Neil Pollock, was still at Nellis as part of the instructional team sent to help train the Australian crews (who had all since returned to Australia). Flt Lt Bob Bruce was the fourth member of this team but he had returned earlier to Australia on compassionate grounds and was not replaced. Their presence was very fortunate for me since nobody had informed the USAF at Nellis that I was coming.

This became all too apparent on the Monday morning when I presented myself at the 428<sup>th</sup> Tactical Fighter Squadron and asked to see the Commanding Officer. After I had introduced myself and been invited to sit down we had a great chat for about 20 minutes whereupon he thanked me for seeing him, shook my hand and started to say farewell. Realising there was some misunderstanding I asked him if he was aware of why I was there. He didn't, and when I showed him my copy of the orders he visibly blanched and exclaimed "do you know what squadron this is?" To which I innocently replied "the 428<sup>th</sup>?" to which he said "yes – but it is also the ALPHA Squadron with first priority for nuclear deployment by Tactical Air Command. The security problems of accommodating

a foreign national are such that there must have been a mistake!"

This was not a good start and it only got worse. There was no allocation of on base housing and, more importantly, there was no provision for any training on the F111. However, with Westy's assistance, the housing problem was resolved with a private rental down town and we managed to convince the 4527<sup>th</sup> Combat Crew Training Squadron to let me start the academic part of the conversion while we all tried to sort out an approval for the flying training. Fortunately for me a vacancy occurred when one of the navigators was suddenly retired (a Lt Col he had reached 20 years service without the requisite promotion) and I was offered the slot. The conversion was made easier with Westy as my flight instructor (no language difficulties) and in December 1969 I finally arrived as the newest Weapons System Officer of the 428<sup>th</sup> Tactical Fighter Squadron.

My security problems, which had been swept under the carpet during training, now surfaced. But fate stepped in when, only a few days after my arrival, the wing fell off one of the squadron's aircraft, killing the crew, and the entire fleet was grounded. The crew (Lt Cols Tom Mack and Jim Anthony) was recovering from a shallow dive bombing CCIP manoeuvre when the wing separated giving them no chance to safely eject. While I was fortunate to have just completed my training I had had only two F111 flights in the 428<sup>th</sup> and it was 10 months before I flew another operational training mission.

While the F111's were undergoing cold proof load testing in the General Dynamics facilities at Fort Worth and Waco, Texas, the F111 squadrons at Nellis were allocated Lockheed T33s. These had been quickly recovered from long term storage in the Arizona desert to enable the pilots to get their AFR 60-1 flying, and hence flight pay entitlements. The navigators had to get theirs in the base flight C54 by flying around for 7 hours at a time in the back of the aircraft reading Playboy magazines. Fortunately I found a USAF Regulation which exempted a foreign exchange officer, and in this particular instance me, from this useless time-wasting requirement. Eventually we were allowed to fly in the back seat of the T33's which was a definite improvement and much more fun since we could now travel cross-country on weekends. As aircraft started to come back into service in the latter months of 1970 my security problems raised their head again and I was only allowed to fly the occasional ferry flight From Fort Worth and Waco, Tx to Nellis and McClellan AFB. Then I was transferred by the Wing Commander to the recently renamed 442 Trng Sqn without any written orders which meant that the training squadron could not approve any flying for me. However, my copy of the orders governing the exchange position specifically stated that "the incumbent of this position cannot be transferred by any authority other than AF Headquarters". When I quoted this to the Deputy Wing Commander and suggested that unless the situation could be resolved it might be helpful to request the Australian Embassy for clarification he heartily endorsed the idea. The Embassy was not pleased, to put

it mildly, saying the exchange was an agreement between governments etc etc, and to leave it with them.

The next morning I reported as usual to the training squadron only to be told that I was to report immediately to the CO of the 428<sup>th</sup>. There I was informed that I was back in the squadron and, when questioned on what basis, was told I would be crewed with a US pilot, participate in all phases of training etc etc - exactly as per the job description. The CO even said that I need not even bother to come to work when I was not scheduled to fly – and to please not complain to my Embassy again. Apparently the Wing Commander had received a phone call from General Ryan, the Chief of Air Force, at 4 o'clock that morning reminding him that if he could not handle this exchange program he could quickly find a replacement who could.



First flight – 27 Oct 1969

I never had any more worries and for the remaining 12 months of my tour and enjoyed all the experiences of an exchange – even to the extent of participating in “no-for” exercises.

## The F-111A

The first impression of Nellis AFB in 1969 was overwhelming. Here there were three operational F111 squadrons (the 428<sup>th</sup>, 429<sup>th</sup> and 430<sup>th</sup>) each with some 25 aircraft and a training squadron (the 4527<sup>th</sup>) for a total in excess of 100 aircraft on the flight line. Added to this was the Fighter Weapons School with a bunch of F4s and F105s and the Thunderbirds Aerobatic Display Team. An awesome display to someone whose past flying experience was the Canberra bomber with no radar and a WW2 visual bombing system.

The transition for a Canberra navigator to the F111 was a huge challenge and could be compared to a pilot converting directly from a Tiger Moth to a Mirage. Once airborne most of the F111 pilot's responsibilities are computer driven and automatic whereas the navigator's duties are only just beginning. The Inertial Nav System took the hard work out of the basic A to B navigation but mastering the attack radar, which is the heart of the nav/bomb system, takes considerable experience and skill. As somebody who had never operated or interpreted a radar in his life, and was now faced with one that could paint a barbed wire fence and deliver a bomb with unprecedented accuracy, this was more than just a new experience. Noticing other navigators didn't seem to be having much trouble I asked them for the secret. Their answer didn't help much – “it's just like the system in the B58 except it works!” I had a long and difficult learning curve to catch up to these ex SAC weenies. It was only in recent years that I discovered that the earlier RAAF navigators had been given an introductory radar bomb/nav course at Sacramento before transitioning to the F111 at Nellis.

Fortunately for me, but unfortunately for the squadron's performance, most of the aircraft in the 428<sup>th</sup> were crewed

by two pilots who were mostly just waiting to upgrade to the left seat and had little incentive to master the systems in the right seat. This made me look better than I was but, as a result, the squadron had failed a recent Operational Readiness Inspection and was directed to replace its right seat pilots with navigators (as the other more successful squadrons had done). This preference for all pilot crewing was typical of the fighter pilot mentality prevalent in TAC at that time but had been accentuated in the 428<sup>th</sup> by their earlier deployment to SE Asia in the Harvest Reaper programme. This was not a particularly successful exercise because of its premature deployment of the F111, a lack of understanding of the operation and limitations of the aircraft systems and the technical problems resulting from low level sabotage during initial manufacture by General Dynamics.

This lack of understanding of the systems was well illustrated as late as 1968 when Flt Lt Pollock initiated an ejection at Nellis because of an extreme aft centre of gravity problem resulting from a faulty fuel gauge. The F111 had an analogue fuel gauge with two pointers – one for each of the two centre fuselage tanks. All the tanks – fuselage, wing and drop tanks - had a selectable digital readout and totalisator for all the tanks. But, in this case, the analogue gauge was unserviceable and the aircraft was cleared for flight on the understanding that the digital readouts were serviceable. Unfortunately no-one realized that the analogue gauge controlled the aircraft's C of G by means of small micro switches on the back of the Fore and Aft pointers. When the pointers get too far apart, or too close together, one set of switches opens, turns off the corresponding fuel pumps until the pointers return to the required separation, the switches close and the pumps resume operating. In this case, since the gauge was unserviceable, all the fuel gradually emptied from the forward tank and the aircraft developed an aft C of G problem. This was not immediately obvious to the crew since



**Last flight -10 Dec 1975**

the sophisticated flight control system ensured the control stick retained its normal central position and it was only when the pilot select full flap at 400 ft on final approach that the elevator command exceeded its control limit and the aircraft pitched beyond the vertical, rolled some 40 degrees and, at the very last minute, Pollock initiated a successful ejection. Since the pilot was US Navy, and there was no USAF aircrew to blame, all future flight orders were changed to ensure there was always one USAF member on board.

Probably the biggest problem in the early aircraft, and this continued through to the early 70s, was a birdstrike. The forward windscreens were one tenth of an inch thick Venetian glass since this was the only material available at the time to satisfactorily minimize any visual distortion resulting from the very shallow angle of incidence and curvature of the screens. It was understood that a bird as small as a 10oz swift could penetrate at the normal cruising speed of 480kts. The problem was compounded by the fact that the ejection handles were between the two seats and it was not uncommon for the navigator to initiate the ejection in the confusion following a birdstrike penetration of the cockpit. Eventually thicker plexiglass windscreens, with acceptable visual properties were developed and installed to the great relief of the crews.

In the final days of my exchange the squadron deployed to Holloman AFB in Texas to participate in exercise Coronet Organ V, a precursor to the current Red Flag exercises. This was a declared "nofoin" exercise but the CO offered to seek approval for both my recently arrived replacement, Flt Lt Al Pearson, and I to participate. Since such a request could be expected to end up in 12<sup>th</sup> Air Force's too hard basket I suggested he write to say that he intended to take us both unless informed otherwise. To my surprise he agreed and, not unexpectedly, the system did not react until we got to Holloman and an RF4 squadron, who had left their RAF exchange pilot behind, complained.

The response from 12<sup>th</sup> AF was swift – we were to return to Nellis immediately - but after the CO requested that his in-exercise tasking be reduced by 20% (since he was now losing 20% of his crews) we were allowed to stay and participate on the proviso that we were not involved in any of the nuclear oriented missions. That only left the supersonic

and heavyweight missions and the exercise was the highlight of my exchange tour and, indeed, my F111 experience.

Such exercises were, and are, extremely realistic. Fake targets were constructed in the Nevada desert with aircraft tasked to destroy them while evading the air and ground defensive forces. My last exercise mission was a typical single aircraft F111 strike with twelve 500lb Mk82 bombs against a no-show SAM site using a radar offset aim point. The mission was real copy book stuff and the stick of 12 bombs all landed inside the Star of David outline of the target. A post strike photo by an RF4 verified the complete destruction of the site and the photo was used as THE PHOTO of the exercise – but only after any mention of my participation in the exercise, since I wasn't even supposed to be there, had been removed. The

CO was very apologetic about this and had kindly requested my permission which, of course, I gave.

Shortly thereafter I returned to Australia and Al Pearson continued the exchange. In 1972 members of the 428<sup>th</sup> returned for what turned out to be the F111's final tour in SE Asia and, significantly, they returned while he was still at Nellis. Many of their operations in Vietnam were highly classified and unfortunately the RAAF showed no interest in learning from them so Al Pearson respected the confidences he had received. One story he did relate however, without breaking any confidences, significantly reflected the capability of the aircraft.

The F111 normally operated as a single aircraft at night and at low level. On this particular sortie the crew had a target in downtown Hanoi which was reputedly one of the most highly defended targets in the world. The briefing was to make "just the one pass and haul ass" regardless of whether the target was acquired or not. The crew missed the target on the first pass and, contrary to orders, made not one but two further passes before delivering the ordnance. On climbing out, and passing into safe territory, they discovered that the rotating red anti-collision beacon had accidentally been left on the whole time - and there was not a single hit on the aircraft. This deployment to SE Asia was a resounding success and finally laid to rest any lingering criticisms of the capability of the F111.

## Return to Australia

Back in Australia the interim loan of 24 replacement F-4s had been negotiated, the RAAF crews had completed their training in the USA and, by September 1970, the last of the 24 aircraft had been delivered to Amberley. While I was in transit with my family across the Pacific my posting was changed from flying duties on Canberras to flying on F-4s. This necessitated an impromptu conversion at Amberley which I shared with Lyall Klaffer and Neil Pollock. We three were the only additional aircrew to be trained on the F-4 in Australia and all the F-4 aircraft were returned to the USAF by June 1973.

The first six F111Cs, led by Gp Capt Jake Newham and Wg Cdr Trevor Owen in A8-125, finally arrived in Australia as the

last of the F-4s was leaving. These initial ferry crews had returned to the States earlier in the year for training and I, for whom full training was considered unnecessary, had to wait until the first aircraft had arrived and I could get a cheaper refresher from Ian Westmore. And then, with Sqn Ldr John Emery, I was part of the third ferry flying A8-139 via Honolulu and Pago Pago.

This was certainly far different to my earlier experience with the HS 748 which was a single aircraft taking 10 days and landing at London-Rome-Athens-Luxor-Bahrein-Karachi-New Delhi-Calcutta-Bangkok-Singapore-Djakarta-Bali-Darwin-Alice Springs-East Sale. For that we were just given a bunch of maps, money and diplomatic clearances, told to use BOAC facilities when required and GO! The F111 ferry should have much simpler since it only involved three stages, only overfly and landed in US territory and was in a formation of six aircraft. But every man and his dog became involved with everything briefed ad nauseam down to the finest detail. We even had to carry the 500gal drop tanks on the fixed outer pylons which limited the wing sweep in flight to 26 degrees. The drag on these tanks was immense and barely increased our range but they were considered necessary to fill a small 200 mile dead zone if an engine was lost, provided the tanks were jettisoned, midway between McClellan and Honolulu. And, of course, the tanks could only be jettisoned off the fixed outer pylons. Commonsense eventually prevailed in later years and I don't believe these tanks were ever used again for transit across the Pacific.

Despite all the planning and briefings the ferries did not go as planned. We were 500 miles out of McLennan when John Emery noticed that one of the drop tanks was not feeding. So back we went to a not so friendly welcome since they thought they had finally gotten rid of us. But we had just settled back into the BOQ when we were roused and told to try again – the tank was considered to be just a slow feeder which would eventually empty. So off we went again, watching the fuel flow like a hawk, until the tank finally emptied three quarters of the way across the pond. Arriving late we only had time for a couple of quick beers before a feed, bed and early get up to depart for Pago. Once again we were left behind with a different unserviceability on start up and we returned to the BOQ. This time we thought we might get an extra day in Honolulu (whoopie!) but once again we were speedily fixed and on our way. Arriving late at Pago it was again just time for a quick beer, feed, into bed and early start for the final leg to Amberley. This time everything went as planned and all aircraft arrived safely and together.

Subsequent ferries were routed by Fiji and one arrival in a thunderstorm was reportedly very hairy with the aircraft running very low on fuel. But that story is for others to relate.

Conversion courses back at Amberley were quickly up and running. No 82 Wing was officially disbanded and an Air Staff established in Base Headquarters. I was transferred from 82 Wing Training Officer to Air 2A and, finally, to 6 Sqn as the Nav Officer. When I departed in December 1975 the F111 was in full operational service and we had yet to lose our first aircraft.

# Aircraft Losses in Vietnam

## US Air Force

During the Vietnam War, thousands of US aircraft were lost to anti-aircraft artillery (AAA), surface-to-air missiles (SAMs), and fighter interceptors (MiGs). The great majority of U.S. combat losses in all areas of Southeast Asia were to AAA. The Royal Australian Air Force also flew combat and airlift missions in South Vietnam, as did the Republic of Vietnam. Among fixed-wing aircraft, more F-4 Phantoms were lost than any other type in service with any nation. In total, the United States lost in Vietnam almost 10,000 aircraft and helicopters, excluding number of UAVs. South Vietnam's army lost 2,500 aircraft and helicopters, excluding number of UAVs. North Vietnam lost 150 - 200 aircraft and helicopters.

All told, the US Air Force flew 5.25 million sorties over South Vietnam, North Vietnam, northern and southern Laos, and Cambodia, losing 2,251 aircraft: 1,737 to hostile action, and 514 in accidents. 110 of the losses were helicopters and the rest fixed-wing. A ratio of roughly 0.4 losses per 1,000 sorties compared favourably with a 2.0 rate in Korea and the 9.7 figure during World War II.

## United States Navy

Twenty-one aircraft carriers conducted 86 war cruises and operated 9,178 total days on the line in the Gulf of Tonkin. 530 aircraft were lost in combat and 329 more to operational causes. Resulting in the deaths of 377 naval aviators, with 64 airmen reported missing and 179 taken prisoner-of-war.

## United States Marine Corps

U.S. Marine Corps aircraft lost in combat included 193 fixed-wing and 270 rotary wing aircraft.

### Sources for USAF figures:

USAF Operations Report, 30 November 1973  
Campbell, John M. and Hill, Michael. *Roll Call: Thud*. Atglen, PA: Schiffer Publishing Ltd., 1996.

Hobson, Chris. *Vietnam Air Losses, USAF, USN, USMC, Fixed-Wing Aircraft Losses in Southeast Asia 1961-1973*. North Branch, Minnesota: Specialty Press, 2001.

### Sources for USN carrier-based figures:

Francillon, René. *Tonkin Gulf Yacht Club: US Carrier Operations off Vietnam*, Naval Institute Press (1988)

US Air-to-Air Losses in the Vietnam War

US Air-to-Air Victories in the Vietnam War

LCOL Frank Hill USAF

## Project Air 5428

Project Air 5428 intends to provide Air Force, Army and Navy with a new fixed wing Pilot Training System (PTS). The system will provide platforms for flight screening and cover all facets of undergraduate pilot training from basic flying up to entry into Air Force Lead-In Fighter and Operational Conversion Units. The system will also provide candidates for the Helicopter Aircrew Training System (HATS) to be delivered under Project AIR 9000 Phase 7.

The PTS is also responsible for the initial training of Qualified Flying Instructors (QFIs) to support the PTS and fixed-wing operational training. Airborne platforms selected for pilot training will also be assessed for their suitability for use by the Forward Air Control Development Unit (FACDU) and Air Operations Support Group (AOSG). If suitable, these aircraft will be acquired under AIR 5428.

### Background

The project aims to utilise basic and advanced training systems to increase the efficiency and effectiveness of the fixed wing PTS. Specifically the system will:

- Enable an increase in graduation numbers.
- Generate pilot skills consistent with advanced 4th/5th generation aircraft.
- Enable the withdrawal of current training media.
- Provide solutions for the integration of synthetic training systems.

All pilot training will be conducted within Australia. The ADF intends to retain the military elements of the existing PTS, including military flying schools and the use of predominantly military QFI for student instruction.

### Australian Industry Opportunities

The requirements are anticipated to include:

- Development of the PTS (including curriculum, training media such as training aids, manuals and supporting software). It is expected that Australian industry and overseas Original Equipment Manufacturers (OEM) will establish teaming arrangements for software development and other training requirements.
- Development and maintenance of a Training Management Information System.
- Participation on a cost-effective competitive basis in the global supply chain of the aircraft OEM.
- Development and/or support of PTS related infrastructure.

The training aircraft are expected to be commercial - or Military-off-the-Shelf. It is anticipated that the acquisition will provide the level of technical transfer and Intellectual Property (IP) access from the OEM necessary to ensure Australian industry is in a position to provide the necessary support of the aircraft in-country.

### Throughlife Support

Subject to further definition, through-life industry involvement is anticipated to include:

- Updating and enhancing the PTS (including curriculum, training media such as training aids, manuals and supporting software).
- Provision of support services to training aircraft, the synthetic training environment, facilities and systems.
- Maintenance of a Training Management Information System.
- Training delivery.

### Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

### Planned Schedule Highlights

Year of Decision	FY 2012-13 to FY2014-15
Initial Operating Capability	FY 2015-17
Tenders closed	31 March 2014

### Industry Aspects

Project Air 5428 seeks to replace the RAAF PC-9 advanced trainers and the CT-4 basic trainers used at BFTS Tamworth, with new aircraft and a greater industry support from 2017. Responses to the RFT must include two locations: the responder's preferred site and a second option for RAAF Base East Sale, Victoria.

Defence advice is that "The project will introduce new basic and advanced training systems to increase the efficiency and effectiveness of the ADF's fixed wing Pilot Training System (PTS). The system will enable an increase in graduation numbers; generate pilot skills consistent with advanced 4th/5th generation aircraft; enable the withdrawal of current training media; and provide solutions for the integration of synthetic training systems."

In addition, "The system will provide platforms for flight screening and all phases of undergraduate pilot training from basic flying up to entry into Air Force Lead-in Fighter and Operational Conversion Units. The system will also provide Navy and Army candidates for the Helicopter Aircrew Training System to be delivered under Project AIR 9000 Phase 7."

Probable inclusions in the requirements could be development of curriculum, training media and supporting software for the PTS. Other possible inclusions could include mission system training in the curriculum by covering mission planning, 3D situational awareness, use of sensor outputs, threat analysis and weapon systems management. However, the main aim should be to learn to fly competently, in a modern environment and leave the weapons systems and threat environment to advanced training.

BAE Systems Australia provided some details on its Project AIR 5428 bid, tenders for which closed on 31 March 2014.

The company has teamed with CAE Australia and Beechcraft to offer a solution based around the Beech T-6C aircraft. BAE Systems Australia general manager aviation solutions,

John Quaife said in a statement, "The T-6C has amassed more than two million flying hours, which means ADF training will not be compromised by emergent airworthiness issues," adding that the BAE-led team brought together a combined track record in military flight training, project management and mission systems sustainment. "We are a strong, complementary team that understands the Australian environment and training requirements of the ADF."



**Beech T-6C parked in front of a BAE Systems Hawk, Williamtown, NSW. Photo: BAE Systems**

A 'Team 21' bid from Lockheed Martin, Pilatus and Hawker Pacific is offering the Pilatus PC-21 in a proposal based on the Republic of Singapore Air Force's Basic Wings Course at RAAF Pearce.

The PC-21 is an entirely new design with shorter wings and a more powerful engine. It is faster than the T-6C, with better performance but requires a longer takeoff distance.



**Pilatus PC-21 aircraft. Photo: Pilatus**

Web site links are: <http://www.pilatus-aircraft.com/#39>  
[http://www.beechcraft.com/military/assets/military\\_trainers.aspx](http://www.beechcraft.com/military/assets/military_trainers.aspx)

Compared with the old PC-9 they are supposed to replace, both T-6C and PC-21 have a much more modern, open design cockpits, with the ability to simulate modern jet. However, no pure jet is on the horizon yet.

## Choice of Location

In May 2011 BAE Systems won an IBFT contract for the Australian military's flight school in Tamworth, New South Wales. Under the six-year contract, with six one-year extension options, BAE Systems Australia provides flight screening for around 275 candidates, as well as basic flight training for 150 students.

Defence advice is that "at first pass approval in July 2009, the Australian Government agreed that RAAF Base, East Sale, would be publicly identified in the tender documentation as a basing solution for the future basic flying training school, noting that prospective tenderers would be required to tender for another location in addition to East Sale. All basing proposals will be considered on a value for money basis with the final basing decision being made by the Government when a second pass approval decision on AIR 5428 is made."

## Where to Now?

East Sale is a strong contender for a Pilot Training School; the Victorian Government and the Shire of Wellington are lobbying strongly for the basic flying training base to be located at RAAF Base, East Sale. However, there are so many training establishments at East Sale, how many more are needed?

Retention of Tamworth for ab initio training would seem desirable from many aspects – infrastructure and weather being two important factors. Basing all-through pilot training at East Sale would seem to be less desirable than other options, eg, RAAF Base Pearce, WA.

The evaluation of AIR 5428 will consider the whole training system, not just the aircraft. Supportability from both the Defence and industry aspects, systems updates and life-of-type costs will be major considerations.

A single aircraft solution is an option. How this will cover the full gamut of flying training is unknown. Some ex-RAAF instructors consider that all-through high performance trainers will not satisfy the need for developing sound, basic, consolidated aircraft handling skills. In their opinions, a two aircraft system, basic and advanced, following flight screening in a basic type, is the most effective system of military flight training, even when preparing for a career flying 4<sup>th</sup> and 5<sup>th</sup> generation aircraft.

There is ample evidence that shows how effective RAAF training has been in the past, using a two aircraft training system using the Winjeel and the Vampire. The training provided many pilots with solid benchmarks and the lessons learned have been applied many times in their flying careers.

A turbo-prop trainer for initial training and a jet trainer is a possible option that embraces the two aircraft concept. Another option is a basic aircraft like an upgraded CT-4, followed by a high performance turbo-prop trainer, like now. Basic and advanced training on one aircraft type will be a challenge to the students and the flying instructors

Whichever option is chosen, too much emphasis on simulators and synthetic training may not provide the pure flying skills that pilots need. Recent aviation incidents in the commercial world indicate that these skills are essential.

Lance Halvorson

Acknowledgements:

*RAAF Air 5428 Project Web site*

*BAE Systems*

*Lockheed Martin Company*

## A Tradition Continues

The first war in which aircraft attacked ground forces and each other ended 90 years ago, at the 11<sup>th</sup> hour of the 11<sup>th</sup> day of the 11<sup>th</sup> month of 1918.

Australia's air arm was the first in the British Commonwealth after that of the mother country.

Australia was the only Dominion to organize and maintain its own flying units on active service. Its airmen went to war with the Australian Naval & Military Expeditionary Force to German New Guinea six months before the ANZAC landings; although the need did not arise for them to even uncrate their aircraft.

Five days before the ANZAC landings the Half-Flight sailed for the Baghdad expedition.



**GPCAPT Carl Schiller OAM CSM, addresses guests at the Air Force Association Pilgrimage to the Australian Flying Corps Memorial at Point Cook** *Photo: RAAF Museum*

Over four years of war and destruction 324,000 of the 425,000 Australians who served served in foreign lands; 61,720 Australians died and 156,000 were wounded or taken prisoner. Of the 324,000, 2,694 served with the Australian Flying Corps: 178 of those were killed.

Shortly, after the War, the Australian Flying Corps Association was formed with two objectives - firstly to maintain "the comradeships established during their War service"; secondly to support those "who remained in the air Service (and those) serving and who (would) serve in the RAAF".

For many years, the Association sought an appropriate design for a memorial to commemorate "the sacrifice of their fallen comrades", which they decided should be erected at the birthplace of the RAAF, the first dedicated military airfield in the world – Point Cook.

Finally, on 16 November 1938, the memorial erected at the rear of the Parade Ground at Point Cook, funded entirely by the Australian Flying Corps Association, was given into the custody of the RAAF, represented by the then Chief of the Air Staff AVM (later Air Marshal Sir Richard) Williams, "Father of the RAAF".

So began the tradition of the Australian Flying Corps Association's annual pilgrimage to Point Cook, still the oldest continuously operating military airfield in the world.



**RAAF Museum Winjeels & CT4s flypast for Air Force Association Pilgrimage to the Australian Flying Corps Memorial at Point Cook** *Photo: RAAF Museum*

In the late 1980s, when the number of members of the Australian Flying Corps Branch had fallen to the point that the Branch could no longer maintain the tradition of the Pilgrimage, alone, the then State Council of the Division agreed to accept responsibility for conducting the Pilgrimage.

The Pilgrimage is held in November, as close as practicable to the anniversary of the World War I armistice, because its original purpose was to pay tribute to the members of the Australian Flying Corps who served during that conflict. The inscription on the memorial reads: "Dedicated to the glorious memory of our comrades of the Australian Flying Corps, Royal Naval Air Service, Royal Flying Corps and Royal Air Force who at the birth of the air service during the Great War 1914-1919 made the supreme sacrifice and whose sacred trust of imperishable honour and duty to country is now given into the keeping of the Royal Australian Air Force.

Despite the war-to-end-all-wars, there was a Second World War and subsequently there have been other conflicts, police actions, peacekeeping and peacemaking operations.

The pilgrimage now pays homage not only to those pioneer airmen but to all who have served their country in all wars and war-like operations, including currently deployed members of the RAAF. It remembers those who have died subsequent to their service, and those suffering as a result of their service.

Until 1973, when the National Memorial to the RAAF was unveiled in Canberra, the Australian Flying Corps Memorial was the only general memorial to the RAAF in Australia. In that year, a bronze plaque was added to the its base bearing the inscription: "In Memory of Members of the Royal Australian Air Force who served in the 1939-45 War and subsequent Wars".

The RAAF Association's Annual Pilgrimage to Point Cook conducted on 9 November 2014 drew an attendance of 130 members of the Association, the RAAF National Servicemen's Association and the RAAF Vietnam Veteran's Association. Staff and Cadets of the Australian Air Force Cadets provided Standards Bearers and members of the Catafalque Party.

GPCAPT Carl Schiller RAAF OAM CSM delivered the key note address. The Presidents of the Air Force Association (Victorian Division), Bob Brackin, and the RAAF National Servicemen's Association, Laurie Bell, also addressed the gathering.

A highlight of the Service was the double flypast by three Winjeels and two CT4s, provided by the RAAF Museum.

Following the Service, guests retired to the edge of the airfield to enjoy a free BBQ provided by the Air Force Association. During the afternoon they were entertained by a display of formation flying and solo aerobatics by the Museum's aircraft.

By RAAF Association (Victoria Division)

### Australian Flying Corps Memorial, Point Cook

*Photo: RAAF Museum*



# My Time at Transport Support Flight

## Memories of Transport Support Flight (TSF), Butterworth, 1968-69

By Doug Hurst

These memories are from an era long gone, of the time 45 years ago when some 40% of the RAAF's operational capability was in South East Asia, mostly in Malaysia and Vietnam.

The RAAF was in Butterworth, Malaysia, as part of FEARF, the Far East Air Force. It included RNZAF aircraft and a significant RAF presence, with Lightning fighters in Singapore, and various transports and SAR helicopters in Singapore, Butterworth and the Malay Peninsula. RAAF C-130s were frequent visitors, along with RAF Vulcans and other combat aircraft.

TSF was part of this large and busy air force world - albeit a small part that seldom rates more than a brief mention in official histories and is all but forgotten by most Butterworth veterans. My own TSF memories are patchy, so what follows is not a history. It is simply an account of some things I still remember about those times.

The unusual has tended to stick more than the mundane. One persistent memory is of a barman in Brunei who strangled a python and had taken heads in his youth. I met him when we flew the Butterworth cricket team to Brunei on the invitation of the Shell company running an off-shore oil field.

The trip was a bit unusual for us, even in those times. Our main roles were to provide VIP services to Australian diplomats and visiting firemen, and the more mundane RAAF support tasks that took up most of our time. We had six C-47 Dakota aircraft and four crews. An aircraft fitted out with airline seats was used for VIPs – the others were basic transports.

So as the name suggests, we flew transport support to Australian military and government units in the region. Most of the RAAF tasking was within the Malay Peninsula and to and from Singapore and Vietnam. Only occasionally did the

odd and unusual, like the trip to Shell in Brunei, come up - and when it did it could widen horizons more than a bit.

In Brunei, each Butterworth visitor was hosted by a Shell employee. My host was an English seismologist who had discovered the Nigerian oil fields and now spent weeks working in the Borneo jungle with natives whose language he had learned. He loved cricket and wanted to talk about nothing else - I only found out about his impressive achievements from his wife when he wasn't there.

He took me to the Shell Club for a drink and dinner. It was here I met the barman in question. He was a broad shouldered, muscular man of medium height and a cheery disposition. It was only when my host pointed out a framed newspaper article in the bar did realize there was more to him than first appeared.

The article was headlined: *Man Strangles Python* and included a photo of the barman in the middle of a row of men holding a dead python at least three metres long. There was also an account of how the snake had dropped down on him in his boat while he was checking his fish traps, only to find it had bitten off more than it could chew when he strangled it.

The python strangler also had a row of blue tattoo marks around his neck. I asked my host what these meant and he casually replied: 'Oh, they're for the Japanese heads he took during the war.' Needless to say, he had no problems keeping order in the bar.

TSF started life as C Flight, No 2 Squadron, following the basing of its Canberra bombers in Butterworth in 1958. When 2 Squadron Canberras went to Vietnam in 1967, C Flight was made into a separate unit and renamed Transport Support Flight.

By the time I arrived in early 1968, the Dakotas were getting old but they were well maintained and still a useful asset. Indeed, apart from the fact that they cruised at a maximum of 150 knots (at the best of times) they had only two problems – no air-conditioning and no weather radar.

The first was a problem because parked aircraft could get very hot during the day, and by the time we had loaded up and taken off we were often dripping with sweat. To cope, we carried iced drinks and drank heartily during the climb. If we carried important passengers we took a RAAF steward along who dispensed drinks ASAP after take-off. It was all a bit uncomfortable, but manageable.

The same could not be said for the lack of weather radar. The area is justly famous for some very nasty weather - especially in the wet season when massive cumulus clouds build rapidly on the hills and blow in from over the sea. We could usually fly during the day, when we could see the clouds, but avoided flying at night, except in special circumstances. But even in the daytime, we couldn't see into clouds like radar can.

I recall one time heading north along the west coast of peninsular Malaysia when we faced a wall of cloud ahead near the tin mining town of Ipoh. Seeing no option but to fly through it, we picked what looked to be the best course and flew on.

When in cloud we hit severe turbulence and a massive updraft that put the vertical speed indicator up against the stops and sent the altimeter winding rapidly through thousands of feet. I watched as we went through 18 000 feet. We then reached the other side of the cloud and entered a down draft equally as strong as the updraft.

We descended quickly down to about 8 000 feet then suddenly burst out into clear air to see the tin mines around Ipoh, with their pools of green and blue water, spread out below. To say this was a welcome sight is to seriously understate the case. Very relieved, and thinking our ordeal was over, the captain tried to increase power - only to find there wasn't any to be had.

The propellers were turning in the slip-stream but the engines were not working. We were effectively a heavy glider, descending down to who knows where, when the starboard engine roared into life with a loud bang and a flash of flame from the exhaust. The port engine soon did the same and our ordeal was over.

When back home we checked the flight manual and figured out what had happened. To try and limit our rapid climb rate the captain had throttled back, but had overdone it. With too little airflow to keep them clear the carburettors had iced up. When out of the cloud, the drier air melted the ice enough for it to be sucked into the engines, causing the noise and the flash.

Happily, such events were rare. However, weather is always a factor with flying. It was just that this was more so in tropical places like Malaysia - especially if big hills are also involved, as they were with the supply drops we did to police forces hunting communist terrorists in the mountains that form the spine of Peninsular Malaysia.

The communist terrorists (CTs as they were invariably called) were a major problem in the 1950s, producing widespread violence and unrest and tying up hundreds of thousands of police and military personnel. They were now largely defeated, confined to an area along the Thai/Malaysia border - where flying was restricted by the threat of ground fire - and driven back into the hills in small groups.

The local police set up camps in the hills to hunt down these

small CT groups and we dropped supplies to them. The police camps were usually in jungle covered mountainous terrain that made them hard to find in all but clear weather - a rarity, as there was usually some cloud about, or fog in the valleys.

As a result, we sometimes had to circle around a bit to locate the target police camp. The next step was to plan and do the drop, which was done by British Army specialists who packed and dispatched the load. This was done on a call from the cockpit through the space left by removing the back door before flight. With the door off it was very noisy down the back and head-phones on long leads were used, along with safety straps, by everyone working there.

The altitude, high humidity and heavy load meant that in most cases we could not maintain height on one engine. As a result, the actual drop run was always done within the speed and height limits needed to cope with an engine out, and always downhill towards a river that could be followed down to the coast.

I did a number of supply drops without incident, but just before I arrived an aircraft had lost an engine near the drop zone and followed a river down to the coast where they landed at a nearby airfield. My memories are happier ones - of flying low over the continuous jungle canopy with occasional flowering trees rising up from the sea of green.

It was quite beautiful from above, but it was the original 'tiger country' and not a desirable habitat for humans like us. For most of us the only tiger we wanted to see at close quarters was the one on cans of the local beer.

I quite liked Tiger Beer, but it didn't like me and I switched to drinking gin and tonic, reasoning that the quinine in the tonic had to be a good thing in a malaria zone. The medics told me this was wishful thinking, but you have to drink something in a hot climate and I stuck with G & T when the beer was disagreeable.

The Mirage squadrons at Butterworth exercised with the RAF in Singapore from time to time and we usually flew their troops and fly-away kits down and back. The relative speed differences always amused me - we took about two hours to fly Butterworth to Singapore, the Mirages did it in well under thirty minutes. They could, and occasionally did, go even faster but only at the risk of shattering a few windows along the way.

As well as Malaysia/Singapore ops, we did fairly frequent flights to Vietnam and back. Most were to fly RAAF personnel to and from leave in Penang, technical people accompanying Canberras ferried over for deeper maintenance at Butterworth, and various folks needing a ride between Butterworth and Vietnam.

My first trip was to Vung Tau where the Caribous and Iroquois helicopters were based. It was a US Army airbase, very crowded but well suited to their operational needs. Domestic accommodation was stretched to the limits when the RAAF arrived and they were initially accommodated in Vung Tau in two old French Villas.

When word of this got back to Australia some suspected that those posted to Vung Tau were living in the lap of luxury. The reality was very different. The villas were crowded, rat

infested and a security nightmare. No 5 Airfield Construction Squadron came to the rescue and built on-base work and domestic facilities, which, for a war zone, were very good.

I speak from experience, having spent a few days in Vung Tau with a busted engine during my early days in TSF. It was all very quiet and I was shown the local town, fed and watered at the Hawks Nest (the club of the Mohawk squadron) and introduced to the famous 'back-beach' crabs at a beach-side restaurant.

The engine fixed, we returned to Butterworth where I reported that I had been to the war but not seen any trace of it. I also reported this thought to my father. He received the letter the same day as the Tet offensive broke out, with big initial gains, and wrote back along the lines that he hoped I had no input into Allied intelligence.

The early gains of Tet were eventually repulsed and the whole event became something of a disaster for the VC and regular North Vietnamese forces – although you would never know it from press reports of the day that frequently saw Tet as the beginning of the end for the Allies.

On occasion we also went to Saigon via Tan Son Nhut airfield, reputed to average a movement every minute, day and night. As most flying was day-time, this made it extremely busy, with more than one movement per minute during the day.

Peace-time air traffic separations were abandoned. Take-offs, for instance, often involved a number of aircraft lined up on the runway, with each in turn starting to roll when the one ahead was airborne and cleaning up.

It all worked remarkably well, thanks in no small part to the outstanding team of USAF controllers headed by a very senior master sergeant. They sometimes invited pilots into the tower to watch. A friend, a helicopter pilot, arranged an invitation and was so impressed he asked the senior controller how anyone could control what he was watching.

The controller grinned and replied: 'We don't actually control it, we just sort of referee it.' Well, whatever they did, it worked. Tan Son Nhut had far fewer incidents and accidents than anyone could reasonably expect with the traffic density involved.

Things were even less controlled outside the airfield control zone, where 'flight following' was provided but aircraft were largely responsible for their own control and collision avoidance. This too seems like a recipe for disaster, but it wasn't.

Given the vast amount of traffic, the 'Big Sky principle' – based on the fact that there's a lot of sky out there and the chances of two aircraft being exactly in the same bit simultaneously are very small – was largely vindicated. Most, however, have a 'near miss story'. Mine involves a formation of F-100s that flashed past in the opposite direction about 100 feet above us as we approached Phan Rang – so close that I could see the rivets.

I did a number of trips to Phan Rang, mostly flying technical and R&R people to and from Butterworth. We usually stayed overnight, and like Vung Tau this was no hardship as 5 ACS had also done excellent work there to create good facilities and accommodation – including the only flush toilets on the base.

Phan Rang was a very large base and home to F-100s and the USAF version of the Canberra, the B-57 - and, of course, our Canberras. Although the perimeter fence was attacked from time to time, and the enemy liked to sometimes fire rockets in, it was secure in the sense that it was not likely to be overrun at short notice.

Although it is seldom remembered today, RAAF Airfield Defence Guards were part of No 2 Squadron. I saw them in action one night when the base perimeter fence was attacked on the far side of the base from where we were watching. It was quite a show.

USAF transport aircraft circled above the action, dropping parachute flares that turned night into day. Bright flashes and explosions lit the sky as airfield defence guards and the enemy exchanged fire and F-100s from the base strafed and bombed.

The F-100s were flying very short missions, simply taking off, making attack runs and landing again to rearm in a constant stream of aircraft. Things came to a sudden halt when a fully armed F-100 ground to a stop in the middle of the runway with a blown tyre (probably because the pilot also accidentally activated a wheel brake when applying rudder).

Whatever the reason, a fully armed aircraft was now stationary in the middle of the runway and operations had ceased. The pilot quickly opened the canopy and got out. Just as he did so a small rescue helicopter - nicknamed Pedro the Swift because of the way it darted about – hovered over the F-100 and dropped vast amounts of white, fire-retardant foam over it and the pilot.

The pilot staggered off the runway dripping with foam. As he did so, a big machine like a bulldozer arrived and pushed the aircraft off the runway. The whole incident probably took less than two minutes and flying immediately resumed as before.

Throughout the proceedings, the local public address system had periodically advised us not to worry, that things were under control and we were not threatened. This turned out to be true, the fighting soon died down and everyone was happy – except, I imagine, the foam drenched F-100 pilot and the enemy whose attack had failed yet again.

I also did a full Ambassadorial tour of South Vietnam, flying the Australian Ambassador and staff to places large and small. I can't remember most location names and as my log book was burnt in a fire I can't check. But I do remember going to Da Nang, where I slept though a rocket attack after a drink or two, and where I saw an unforgettable sign over the entrance to the flight planning area. It read:

## WARNING

You are entering an anti-gravity area. If you have not noticed, it is because:

## DA NANG SUCKS.

The sign was not new, so it seems those in charge agreed.

The Ambassadorial tour was only possible because South Vietnam is actually quite a large place and the war was sporadic and spread out. In most places, most of the time, there was little or no enemy threat. The problem was, this was not assured – it was all a bit unpredictable – and this seems to have escaped the RAAF officer who planned the tour.

This became obvious when we landed at a small airfield, the name of which I can't recall. We dropped the party off for a three-hour visit to a nearby town and began playing cards in the shade of the wing. At larger airfields we would wait in the terminal, but the only building here was a concrete bunker that looked uninviting so we chose the shade of the wing instead.

Some minutes later a US army sergeant came over. He asked how long we were staying and told us that the airfield was not secure. He and his men lived in the concrete bunker and checked airfield security just before aircraft arrived, but couldn't guard against things like mortar attacks. No one parked there – they just unloaded and loaded, then left.

He invited us to join him in the bunker. This we did, watching all along for a mortar to lob on to our aircraft, but this didn't happen. When the party arrived back we greeted the offending RAAF planner with the news that we were lucky our aircraft was still in one piece. He made no comment, there was no further discussion and we left ASAP. As the old saying goes: 'no names, no pack drill', but I still remember who he was.

My final memory of time in Vietnam concerns how an airline made a politician look more foolish than usual and embarrassed a RAAF CO.

The airline was the innovative US carrier Braniff, who entered into the spirit of the 1960s by painting their aircraft in pastel colours and dressing their stewardesses in the epitome of sixties style and colour to match the aircraft.

To do their part to support the troops at Christmas, Braniff sent some aircraft and teams of stewardesses bearing simple gifts and seasons greetings to Vietnam. There were no stewards, just good looking young women dressed in the height of 1960s fashion. This was, of course, before the thought police took over and airlines could still make such decisions. And, in this case, that was a very good thing.

The politician concerned was an Australian (who will remain nameless in case I don't have all the detail right). Anyway, the essence of the story is that this hapless individual and crew decided to go to Vietnam to boost the morale of our troops over Christmas, and we flew him and his crew to Phan Rang.

To hear his words of wisdom the squadron was assembled in a large outdoor area after dinner. When the Great Man arrived, many were reading the newspapers from home we had brought with us featuring full-page pictures of protest activities in Australia and related articles. As it turned out, this was interesting preparation for what they were about to hear.

Having been introduced by the squadron CO, our man began by saying that the entire nation, every man, woman and child, supported what they were doing and thanking them for their efforts. This was clearly 'polite speak' rubbish. It was obvious from the newspaper accounts that quite a few Australians didn't support our presence in Vietnam. The assembled squadron nevertheless sat quietly until a group of brightly dressed Braniff stewardesses appeared to the left.

Instantly voting with their feet, large numbers stood up and hurried across to chat with the girls. Embarrassed, the CO called for them to return, but soon realized this was pointless and just stood there with a resigned look on his face. Braniff is no longer with us, but I have not forgotten them and the

part they played in helping an out of touch politician get his just deserts in Vietnam.

So although I was never posted there, I saw bits and pieces of Vietnam during the war, especially Vung Tau and Phan Rang where our aircraft were based. But that said, I have never considered myself a Vietnam Veteran, although by current definitions I am. But there are veterans and veterans, and I doubt many veterans would see me as one of them.

In general, I agree with them. Knowing well the dangers faced by the infantry, ADGs, and those who flew in the war, and how brief and comparatively safe my visits were by comparison, I am guided by Will Rogers' quip that: 'We can't all be heroes, someone has to stand on the roadside and clap as they march by' and join the roadside crowd.

Next to our neighbourhood of Butterworth and Penang Island, we got to know Singapore best. It was then the region's most developed and modern place, with a mix of people, great food, good hotels and public buildings, a large port, and so much more that made it the natural regional hub of trade and commerce.

The shopping was amazing. If shopkeepers didn't have something many would arrange to get it for you in very short time. A good shopping venue was Changi Village, near RAF Changi, then a large transport base. (The international airport was at Payar Lebar, nearer the city.) We often stayed at RAF Changi and were regular customers of a shop in the village so good we joked they could get you anything from a watch to an elephant - but you had to order the elephant overnight.

Compared with today, the island was mostly a collection of villages with a smallish city and large port to the south and airfields in the north. The air traffic was already heavy and very well organized and run. There were standard in and out routes and all traffic was directed to and from four airfields by skilled controllers using radar and a continual stream of patter, changing from one aircraft to another by saying 'break, break' and the next aircraft's call sign.

I was told the controllers worked in pairs. One decided what had to be done and the other talked on the radios. The work was so intense they had a rest every hour before re-entering the fray. I never confirmed this, but obviously something along those lines happened. It was a very professional effort, typical of what Singapore was becoming then and is now.

On one Singapore trip we took a young British Army officer to Butterworth. He had spent a week or so in Singapore with the army to widen his horizons before beginning further training, and told us he had concluded that Singapore would fall apart when the British left. How naïve can you get. We knew Singapore better than that and told him the Singaporeans couldn't wait for the Brits to leave so they could do things their way – which, of course, proved to be completely true and modern Singapore continues to impress and amaze.

Thailand was a popular destination for all the reasons it is today – agreeable people in a country that is modern and old, western and eastern and usually a welcoming place for visitors. Like everywhere, they had their share of crooks and villains. Few were more villainous than the pirates in

Songkhla who operated high-speed boats north into the Gulf of Siam with ruthless efficiency, and of course there was the usual crime all countries suffer. But that was not the norm and the Thailand we visited was generally peaceful and safe.

To my surprise, north-east Thailand has a pronounced dry season and red soil, and in the dry is more like western Queensland than the green and lush world I had imagined. The mighty Mekong is the border with neighbouring Laos. Even that far from the sea it is very big, and the row of clouds that forms along it in the dry season can be seen from miles away.

My first visit was to take part in a SEATO (South East Asia Treaty Organisation) exercise by flying participants around Thailand. We were based in Korat, one of six USAF airbases, all officially Thai Air Force bases, but in reality American. The others were Ubon, Udorn, Takhli, Nakon Phanom and U-Tapao. By our standards they were very big indeed, with 5 000 or more personnel and lots of aircraft.

This arrangement owed much to a civil war in neighbouring Laos during the 1950s. One side, the communist Pathet Lao, was backed by the Soviet Union and North Vietnam. In 1960 major riots in the Laos capital, Vientiane, raised fears among Thais living along the Mekong River, and in the country generally, that if Laos went communist, Thailand could be next. US bases on Thai soil were seen as a much better alternative.

Korat was a typical USAF airbase, with three combat squadrons of F-105 Thunderchiefs, a squadron of an electronic intelligence version of the Super Constellation, and various transports and trainers. The F-105s were operating into North Vietnam and taking heavy losses – we were told they had replaced most of their aircraft in just six months owing to losses.

The scale of the air war over the north, and the quality of the North Vietnamese opposition, came as a big surprise to us. We knew, of course, about the war in the South, but the war raging daily in the north, the air battles with various MiGs and the deadliness of the Russian surface-to-air missiles got virtually no coverage in our press and very little in our intelligence reports.

We soon learned from talking to the F-105 pilots that it was pretty big stuff, demanding and dangerous. Some, like US navy pilot Senator John McCain, finished up in the Hanoi Hilton. The Officer's Club had a number of plaques over the bar listing pilots who had completed a tour of 100 missions. A single plaque listed those who done 200 missions, with honorary mention of two who had done 198 missions and not come home.

While we were there an F-105 returned with a heat-seeking missile that had failed to explode jammed up the tail-pipe. The engine was still OK, but with the jet efflux partly blocked the pilot couldn't get full power and just made it back to base. When on the ground he couldn't taxi effectively and pulled to the edge of the taxiway so the aircraft could be towed in. When back in the lines he got out and saw the missile, still jammed in the back of his aircraft. We met him later that day, sitting in the bar drinking to his good fortune and still visibly shaken.

I also did two ambassadorial tours of Thailand. These tours were very sought after, as they always included a few days in and around the charming northern city of Chiang Mai during the cooler part of the year. Chiang Mai is far enough north that for some months each year it is dry and warm, not humid and hot like Bangkok is almost all the time.

This, along with the fact that Chiang Mai offered a delightful and relaxing blend of ancient and modern, including first-rate hotels, made it irresistible to the foreign affairs people based in crowded, hectic, hot and humid Bangkok. The tour also went to other places, many quite interesting, but Chiang Mai was always the highlight, as I believe it still is on the tourist map today.

Laos was different again. The legacy of its French Colonial past and recent fighting was still evident and, like Thailand, there were Buddhist temples everywhere. Vientiane, the capital, is on the Mekong across from northern Thailand. It has some nice French colonial buildings and wide streets, but the most memorable feature was a large concrete temple at the intersection of two major roads that cut the city like a giant cross.

Some years previous, the Americans had given the Laotians enough concrete to build an international airport with a 10 000 foot runway. Instead, the Laotians built an airport with a 5 000 foot runway and the giant temple. The Americans labeled it The Vertical Runway and the name stuck.

It is a substantial structure, and although dedicated to peace and harmony it proved to be an ideal place for an armed force to take over and control a large area in the city centre. Apparently it saw quite a bit of fighting in the early 1960s, and still bore the scars of bullets from attackers when I saw it a few years later. I saw it again recently on a TV documentary, fully restored, painted in bright colours and now filling its intended role.

French food was still available, especially exceptional Onion Soup in the hotel we frequented, and French bread. But the biggest attraction to some tourists those days was drugs. You could buy almost anything, and it was all cheap. Many of the drugs in Vietnam during the war came through Laos. Some, our embassy people told us, were flown to Vietnam by Laotian army generals in C-47 Dakotas provided as part of an Australian aid package.

That I can't confirm - but I do know that Vientiane had attracted some Scandinavians seeking Shangri La. Just how many is uncertain, but being tall and blond they stood out like the proverbial sore thumb among the locals. Apparently, they had set out for Kathmandu, but in Vientiane had found what they wanted – cheap drugs and cheap food – and stayed. To get there many had hiked across Vietnam, war or no war, to reach Paradise.

Eventually, the inevitable happened. They ran out of money and began begging in the streets and stealing to support their drug habits. The Laotians got sick of them, put them in a boat and sent them across the Mekong to Thailand. The Thais took one look at their ragged, dirty clothes, scruffy beards and drugged outlook, gave them some food and sent them back again.

The Laotians didn't want them back, fed them, turned the boat around and began talks with the Thais about what to do with them. In the meantime, they were stuck on the boat and spent more than week on the river. We arrived just when this circus was coming to an end. The Thais agreed to accept them on the condition they were cleaned up and out of the country within days – paid for, I assume, by their governments or long suffering parents.

Vientiane was home to some Air America and Continental Airways people who did all sorts of overt and covert flights for US government agencies. Much of their work was simply openly flying people around in non-military aircraft for diplomatic reasons. Some were staying at the hotel we used and happily talked about this side of their work. They also shared local knowledge, including their booklets listing airfield and air traffic details for Laos – the only source of up-to-date data available, and very helpful to us.

Vientiane is well inland and gets very hot at times, with temperatures over 40C the norm. One rest day we had done the tourist thing and by midday the heat drove us to seek an air-conditioned sanctuary – which just happened to be a café bar. It was dimly lit and we were the only customers until a tall man dressed in a felt hat, moleskin trousers and elastic sided R M Williams type boots walked in. He ordered a beer in an outback Queensland accent, then turned around and greeted us cheerfully.

It turned out that he was from Longreach where he had been managing a cattle station that changed hands and made him redundant. While staying at the local pub wondering what to do next he got a phone call from someone in Canberra offering him a job in Laos helping the locals breed cattle. He had never heard of Laos, but he looked in up in an atlas and finding the offer intriguing, accepted after lengthy discussion with his wife – who also had never heard of Laos.

So we asked him what he did. His answer was along these lines. He had a Holden ute and drove it to the local villages with a large esky of beer on ice in the back. He didn't speak Lao so he had some signs made up. On arrival, he held up a sign reading "take me to the chief" or something similar. He then found some shade and handed beers around while he showed them signs of Australian beef cattle, along with an undertaking to teach them how to turn their scrawny, boney bovines into big, strong Aussie-type beeves.

It all sounded like a bit of a joke, but he said it worked well, he was having immediate success and was making friends everywhere. I asked what he did and he said it was easy because: 'they breed their cattle backwards.' Maybe I'd had one beer too many, but this conjured up visions to me of cattle in all sorts of convoluted and impossible positions until he explained what he meant.

It really was easy. For generations the Laotians had castrated the strongest bulls to pull their ploughs and used the others to breed from. The inevitable outcome was poorer and poorer cattle. He simply pointed this out and helped the villagers run a recovery breeding program. The ambassador later told us he was the most successful aid worker in the country. And not only did he like his work, but he thought hot and dusty Vientiane and surrounds was: 'a beaut place, just like Longreach.'

There were no ambassadorial tours of Indonesia. President Suharto had ended 'Confrontation' with Malaysia on assuming power, but the years of mutual suspicion under Sukarno, with his liking for Soviet aircraft and ships, was only slowly abating. Nevertheless, I was lucky enough to go to Indonesia and have good look around.

Our task was to fly an Australian aid team installing a long-range, HF radio, air-traffic link throughout the archipelago. The need for such a link was driven home when I submitted a flight plan, only to be given a frequency to call enroute to file it and get a clearance. The controller concerned had no way to contact people at our destination and was enthusiastic about the forthcoming HF link that would allow him to do so. Nothing had happened yet, but one heart and mind had already been won.

The national tensions were not shared by most Indonesians who were generally welcoming and friendly – sometimes to our detriment. We couldn't drink the water in most places. Foreigners and the better hotels boiled water and placed a bottle in the bathroom for teeth brushing. Not understanding this quaint custom, and thinking that for some odd reason we preferred our water from a bottle rather than the tap, everywhere we went someone had filled a bottle from the tap for us and put it in the bath room.

We took clean water with us and emergency rations of soft drink in case the water ran out. It was only when this happened in one place that we discovered that the emergency soft drink was all Fanta – never my favourite drink and definitely not so after two days of drinking it exclusively and brushing teeth with it.

Some airfields we visited had Indonesian Air Force aircraft of Soviet origin parked to one side. Most were just sitting there from lack of spares and money to keep them flying. Many had flat tyres, with the bottom of the tyre so merged with the tarmac by the heat you could no longer see where the tyre ended and the tarmac began.

But perhaps the most interesting fact about Indonesia in those days was the population figure: 90 million. Despite government population control programs it's almost three times that high now. Malaysia too has grown to more than twice the population in 1969.

Indeed, the entire region is much changed. In Vietnam most people have been born since the war, as have many of the Australians who now happily visit there.

I am now a genuine 'oldie', left over from more turbulent times, an old codger with fading but happy memories. So if the past really is another country, as so many have told us, I can only thank TSF for its part in taking me there and showing me a few of the highlights. I hope you have enjoyed what I can remember about the trip.



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## The Lille Air Raids of August 1918: Shaping and Preparing the Battlespace

*If the credit for the defeat of the German forces—as in the main it does—belongs to the Allied infantry, the way was paved for that infantry by the Allied airmen.*

— Fredrick Cutlack

### *The Official History of Australia in the War of 1914–1918 Vol. VIII*

In August 1918, Nos 2 and 4 Squadron of the Australian Flying Corps (AFC) conducted two raids on German airfields near Lille, France. These attacks resulted in the destruction of over 50 enemy aircraft, multiple hangars as well as associated airbase and transport infrastructure. These successful attacks at a tactical level also demonstrated how the application of air power had evolved over the course of the war. Starting from simple reconnaissance flights in August 1914, the concept of flying operations had developed to reflect a far more mature understanding of the need to control the air and the effects that air power could generate across the broader military campaign.

Established in September 1912 by Army Order 132/1912, the AFC began World War I with one flying unit consisting of four airworthy aircraft and only a rudimentary understanding of how the new air arm could be employed in conflict. By August 1918, the AFC had a Central Flying School, four squadrons deployed on operations—one in the Middle East and three on the Western Front—and four additional operational training squadrons based in the UK. Importantly, the experience gained by its members in the war equipped the AFC's officers with a mature understanding of the operational and tactical application of air power. The raids on the Lille airfields in August 1918 are an excellent example of how the understanding of the application of air power had progressed, not just within the AFC but also across the air arms of all the belligerent nations.

In the weeks leading up to the raids, the RAF's No 80 Wing, which included the AFC's Nos 2 (SE5a) and 4 Squadron (Sopwith Camels), conducted numerous offensive patrols in the area around Lille and the Lys Valley. These patrols resulted in frequent dogfights with German fighter aircraft such as the Fokker triplane and Pfalz scout. Wider operations included constant bombing and strafing attacks on troop concentrations, trench lines, supply lines and trains. Regardless of the nature of operation undertaken, the opportunity to engage with enemy aircraft was pursued with vigour. The overall intention was to weaken the German forward areas in preparation for the ground offensives planned for September along the front lines of the Flanders area.

It was unlikely that the almost random interception of enemy aircraft during the offensive patrols of this period could achieve control of the air. An assessment of the operations conducted during this period indicates that the rate at which the Germans

were losing aircraft was well within their ability to replace. This fact was highlighted in late July when a noticeable increase in German aircraft was reported in the area. This increase in enemy numbers resulted in major air-to-air combat over Aubers Ridge on 31 July, as each side attempted to launch attacks on opposing ground forces in the area. It required a concentrated effort on the part of the Allied squadrons before local control of the air could be reasserted. The engagements of 31 July clearly indicated that if the Allies were to achieve any form of enduring control of the air, a significant change in operational tactics was required.

BOMBING RAF. 1 <sup>st</sup> JULY to 11 <sup>th</sup> NOV. 1918. BALLOON					
SQUADRON	IN FLAMES	CRASHED	O.O.C.	DRIVEN DOWN	DESTROYED
4AFC	19	57	36	7	22
88	20	33	53	15	
2AFC	10	30	48	16	
92	4	15	8	1	
103	5	12	30	3	
46	3	11	5	4	1
54	2	2			
TOTALS	63	160	180	46	23

**The No 80 Wing scoreboard at the end of World War I: the contribution of Nos 2 and 4 Squadron to the air war over Flanders is readily apparent.**

The first Allied response was to increase the size of the Allied fighter formations conducting offensive patrols. Encountering larger formations, the German air force would either leave the area or attempt to send up larger formations of their own. Quite naturally, this led to more dogfights of considerable size and duration. Overall though, the Allies were able to exert a growing control of the air that enabled attacks on ground targets to be continued while limiting the occasions of German observation aircraft encroaching into Allied airspace.

The opportunity to make a significant difference to the degree of control of the air occurred in mid August. The offensive in the Somme on 8 August drew German reserves away from the Flanders area. To take advantage of the dislocation of the German forces, No 80 Wing launched two orchestrated raids on two of the largest German airbases in the Lille area—Haubourdin and Lomme—and also on the adjacent railway hubs. The twin intent of the raids was to destroy the air capability of the enemy at a time when they were least able to replace their losses, and to disrupt the main lines of supply prior to the forthcoming ground offensive.

Just after midday on 16 August, the AFC's Nos 2 and 4 Squadron launched from the airfield at Reclinghem, France, loaded with incendiary and explosive bombs and as much ammunition as could be carried. With their escort of the RAF's No 88 Squadron (Bristol Fighters) and No 92 Squadron (SE5a), the 65 aircraft assembled into a large, multilayered formation over the airfield. Flying east in a shallow arc via La Bassee, the large Allied formation forced any enemy aircraft in the area to retreat to their airfield. On arriving over Haubourdin air field, Harry Cobby, commanding No 4 Squadron, led what was to be a devastating attack with an estimated 37 aircraft destroyed on the ground and one in the air. Once the airfield and all possible targets had been attacked, the raid shifted focus to the adjacent railway lines, trains and rolling stock. Any clearly identifiable military vehicle or position became a target, as the AFC aircrews conducted a particularly thorough attack on the area.

On the following day the tactics were repeated. This time the airfield at Lomme was the primary target, followed by the surrounding railway infrastructure. Again the attack was effective; enemy aircraft in the air returned to base at the first sight of the approach of the large Allied formation, only to become targets for the bombing attacks. This raid achieved the same level of widespread destruction as the first, with at least 17 aircraft on the ground being destroyed. It was during this attack that the only casualty suffered by the AFC squadrons during.



**Smoke billows from the first bombs dropped by Nos 2 and 4 Squadron, AFC, on Lomme Aerodrome, Lille, France 17 August 1918.**

While the raids themselves were dramatic, the longer-term effects were even more so. In the following weeks the German air presence was markedly diminished, enabling Allied air power greater freedom of operations. This level of control of the air contributed directly to a series of successful ground assaults. Any attempt by the German airmen to conduct reconnaissance or artillery spotting flights was effectively blocked, while Allied air forces were almost completely free to conduct these operations themselves. Blinded and

increasingly isolated from their supply routes, the German resistance in the Flanders area around Lille and the Lys Valley was significantly weakened, greatly facilitating the Allied ground advance into that area. Adaptive and effective use of air power had established the foundations of success on the ground in a manner that has been repeated in conflicts ever since: El Alamein, D-Day, Desert Storm and Operation Iraqi Freedom, to name a few.

## Key Points

- Control of the air is a prerequisite for the success of any operation.
- Typically the air campaign should begin well before the ground campaign.
- The ability of air power to shape and prepare the battlespace is a key component of modern military operations.

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## Diploma Cadet Squadron Frognall

A scheme which provided the RAAF with graduate engineer officers for 25 years closed on 12 December 1985 after a graduation parade at Frognall, in the Melbourne suburb of Canterbury, reviewed by the Air Officer Commanding Support Command, Air Vice-Marshal Peter Scully. From its beginnings in February 1961 as 'Detachment A' of the Radio Apprentice School, then Diploma Cadet Squadron from 1962, and Engineer Cadet Squadron (ECS) from 1976, the unit administered officer cadets who were studying for engineering diplomas and degrees at the Royal Melbourne Institute of Technology. Until 1976 the squadron shared facilities at Frognall with the Melbourne Telecommunication Unit, which had occupied the site since its acquisition in 1942. With the closure of the ECS, future intakes of RAAF engineer students attended the new Australian Defence Force Academy. The base at Frognall closed down in March 1986 and was sold by the Commonwealth a short time later.



## Iraq and the Transformation of the Royal Australian Air Force

By ROBBIN LAIRD on February 03, 2015

Washington often grumbles about its allies and their contributions — or lack thereof — to the common defense. But some allies are making key investments in 21st century weapons to operate against 21st century threats.

A good example is the Royal Australian Air Force (RAAF) and its operations against ISIL in Iraq. The RAAF strike force flew from Australia to the Middle East using its own tankers and airlift. It's been a long road to this sort of deployment. The Aussies entered the 21st century with an aging Air Force. The transformation really began when they added the C-17, which was at the end of its production run.

"Government suddenly realized that they had the speed and capacity to make an Australian flag appear anywhere in the South Pacific region within 12 hours and then have a revisit capability within the next 24 hours or less, if you're utilizing two or more aircraft," said Air Commodore Gary Martin, now the Air Attaché in Washington but most recently commander of the Air Mobility Group, "This was a shift from a three- to four-day process to one of 12 hours. This changed us from being tactical airlift to strategic airlift. With the C130, it always took a day to get offshore and then another day to get to the first point after that. With the C-17, we could now conduct an operation from anywhere in Australia, pick up a load in Australia, get offshore, and come back home before 9:00. This was a quantum leap for the RAAF and for the Government."



The new A330MRTT tanker is the next piece in the transformation of the small but capable Australian military. The impact of the tanker, which can be refueled itself, has already been significant in allowing the Aussies (individually and in terms of coalition contributions) to engage with extended reach, range and endurance.

Another key piece is the Wedgetail, an advanced air battle management aircraft. In many ways, the Wedgetail is the E-10, which the American Air Force decided not to buy. The Wedgetail is not simply a new form of AWACS. The AWACS is pushing the upper limit of what it can do. By contrast, the new Multi-Role Electronically Scanned Array (MESA) radar on the Wedgetail is a whole other animal, able to reshape what a battle management radar can do over time in working with new aviation assets.

Recently, the Wedgetail set an Aussie air combat record in Iraq. Here's how the Australian Ministry of Defense put it: "At 16 hours and 18 minutes, the E-7A Wedgetail's mission

entailed the command and control of large numbers of Coalition aircraft operating in Iraqi airspace as part of the multi-national air campaign confronting ISIL. Commander of Australia's Air Task Group, Air Commodore Steve Robertson commented on what the endurance mission meant for Australia's air power capability.

"After already being on station for a number of hours, the Australian Wedgetail crew was advised the Coalition aircraft due to relieve them was delayed," Air Commodore Robertson said. In response, the Wedgetail crew quickly assessed their ability to coordinate additional air-to-air refueling and agreed to substantially extend their mission."

Both the Wedgetail and the KC-30A (known by many as the Airbus A330) have made their first operational appearance in Iraq. The two planes allow the Aussies to operate as a coherent strike force in Iraq and to work closely with coalition partners.

The movement of the RAAF from Australia to Iraq was a defining moment for the RAAF and marked the first time they self-deployed an air combat package, equipment and personnel over such a long distance and in such a short period of time. The KC-30A made it possible with the C-17.

As of mid-January, the KC-30A fleet has delivered more than 10 million pounds of fuel to Aussie and coalition aircraft. And the press of operational requirements has led the tanker to be certified for an increasing array of coalition aircraft as well.

The KC-30A has now been certified with aircraft from five countries, including the United States, France, Britain, Canada and Saudi Arabia.

"There was some hesitation as the US Navy looked at the KC-30A for AAR operations. However, in the Fall of last year NAVAIR came to Australia to test the aircraft refueling the F-18. These tests were very successful and we provided the USN with a robust level of confidence in the KC-30A as a result," Air Commodore McDonald said.

The Wedgetail and the KC-30A will be joined in the next few years by Aussie F-35s, which will be part of what the current Chief of Staff, Air Marshall Brown is calling Plan Jericho. This initiative will formally be announced at the Avalon Air Show at the end of February in Australia. Plan Jericho is designed as an overall transformation effort by the RAAF in support of joint and coalition forces.

As a result of these purchases, the Aussies will boast one of the youngest allied air fleets in the decade ahead. The youth of those platforms are driving cultural change in the Australian military, as Air Vice-Marshal (Ret.) John Blackburn argued in an interview late last year.

"These changes in the RAAF may in turn influence how the US Forces use their range of capabilities. In perhaps a unique fashion we're at the intersection of a set of relationships with U.S. Navy, the U.S. Air Force, the Marines," Blackburn said. "This relationship is especially strong at the operator level where the innovations are clearly going to occur. We will clearly tap into the US and allied F-35 community to drive change on how to integrate that change with overall force transformation."

Courtesy of Breaking Defense



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## Operations in Iraq

The strike list compiled by CentCom include aircraft from United States aircraft and coalition aircraft operating in the region against ISIL: Australia, Belgium, Britain, Canada, Denmark, France and the Netherlands are operating in Iraq with the US and Bahrain, Jordan, Saudi Arabia and the United Arab Emirates are operating with the US in Syria.

SYRIA/IRAQ TARGET TYPES	Target Count
Tanks	58
HMMWV's	184
APCs/MRAPs	26
Technical Vehicles	303
Other Vehicles	394
Artillery/AAA/Mortar	79
Staging Area	41
IED Positions	11
Command Posts/C2 Buildings	16
Checkpoints	92
Guard Shacks	17
Other Buildings/Barracks	980
Fighting Positions	673
Bunkers	52
Boats	14
Stockpiles/Caches	23
Oil Infrastructure	259
<b>Grand Total:</b>	<b>3,222</b>

Source: Centcom CCCI. Current as of Jan 7 2015

The most surprising thing about the target list of 3,222 ISIL targets struck during the air campaign is the number of tanks, Humvees, Mine-Resistant Ambush Protected vehicles (MRAP) and Armored Personnel Carriers. The (MRAP) and Humvees are American-made military equipment seized by ISIL as it swept the Iraqi Army aside on its way from Syria to Mosul. The trucks bristling with guns that we all grew to know in Somalia, are the single most common target behind "other vehicles."



**A MRAP used by US Forces in Iraq.**

The other interesting number is the 259 strikes against oil installations. However, the damage effects on these targets are unknown.

Source: Centcom.com

## WAAAF Branch – WA Division

The WAAAF Branch WA is a functioning Branch of The Royal Australian Air Force Association (Western Australian Division) Inc. They meet monthly at RAAFA Headquarters in Bull Creek, and celebrated the 73<sup>rd</sup> Anniversary of formation of the WAAAF with a luncheon at the RAAFA Club in March 2014. 59 Members and guests attended.

The Branch produces a quarterly newsletter - the "*ESPRIT*" - and it is sent out to 160 subscribers. A copy is kept in the Serials Section of the WA Battye Library. Most of the Branch members - including a few UK WAAF - are reaching the 90 year milestone and the oldest member is 102.

A book in the Aviation Heritage Museum is Women's Auxiliary Air Force 1941 - 1945, **ROLLCALL**.

It lists all the 3,345 WA girls by service number and name used on enlistment. The book was compiled by WAAAF girls in 1988 with a second revised printing in 2005 giving married names where known. WA is the only State to have a complete list of all those who enlisted in WWII in the WAAAF. A copy of Roll Call is held at the Australian War Museum and the London War Museum.

The Branch is indeed fortunate that a number its members live on the Estate which makes it easy for members to attend meetings and functions. If walking is a problem it is easy to hitch a ride on the "Oldsmobile" ( Golf Cart) which runs a regular route around the Estate 9 am-1.30 pm.

The NORWAAAF Group includes members who live north of the UBD and who meet regularly at the RSL Anzac House, Perth. They keep in touch and join the Bull Creek group for special occasions.

Members from the Rockingham -Safety Bay area, which is about 30 km south, meet regularly at the Rockingham RSL. Membership received a boost recently when two ex WRAAF joined their group. The ex servicewomen's group from the RAAFA Estate, Meadow Springs (Mandurah, 60km south), meet regularly and join the Bull Creek Group when they are able. All the sub Groups receive the Bull Creek Group's minutes of meetings.

Regular yearly fund raising functions for the Branch have been fashion parades - April and October, and a "Pleasant Sunday Afternoon" a performance by the Sing Australia Choir. When none of the girls feel able to carry on, a younger resident of the Estate helps in arrangements. The Group made Fay an Honorary Member of the WAAAF and invited her to their luncheons.

Age is certainly taking its toll - but the Group has decided to carry on for as long as they are able. Their 75<sup>th</sup> Anniversary (formation of WAAAF in March 1941) is due on 2<sup>nd</sup> Monday in March 2016 - it was suggested that this could be their last meeting, but depends on the number of members still available.

**June Perry**

President

WAAAF Branch WA



# WHATEVER THE TARGET



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SECURING THE FUTURE

## AFC Pilot Victim of Baron Von Richthofen

On 23 January 1917, German ace Baron Manfred von Richthofen claimed his only Australian victim of WW I. Second Lieutenant John 'Jack' Hay, an Australian serving with No 40 Squadron Royal Flying Corps (RFC) shot down two German planes before becoming the 17th (of 80) victim of von Richthofen. Aircraft from No 40 Squadron and those of Jasta 11, led by von Richthofen, fought near Lens, France.

During the battle Hay's plane caught fire after being attacked by von Richthofen flying a red Albatros D.III. Hay leapt, or fell, from his plane to his death. British pilots were not issued with parachutes at that time and it was not unusual for pilots to leap to a quick death rather than burn in the highly combustible aircraft. Hay's body was recovered by Canadian troops and buried at Aire communal cemetery near the squadron's base in France. The grave marker (pictured) was initially placed on a cut-down FE 8 propeller on his grave. It was later given to his family and brought back to Australia. Hay -- who had turned 28 the previous day -- was born in Sydney and a grazier in civilian life before enlisting in the RFC in 1916.



The grave marker for 2nd LT John Hay at Aire, France.  
Photo: Office of Air Force History

## World War I – Squadron Numbering

The numbering of AFC Squadrons in World War I was confusing. Apart from the AFC squadrons being designated with RFC squadron numbers, the Australian Defence Department and the Military designated the squadrons by their ordinal numbers, eg, 1st Squadron, 2nd Squadron, the order in which the squadrons were formed.

The RFC used cardinal numbers, eg, No 68 (Aus) Squadron, No 71 (Aus) Squadron; cardinal numbers referred to the number in a given set (or Wing). The 2nd Squadron AFC should not be confused with No 2 Squadron RFC.

It was not until January 1918 that AFC squadrons were designated No 1 Squadron, No 2 Squadron (and others), Australian Flying Corps.

## No 10 Squadron (RAAF) and U-426 Sinking

On 8 Jan 1944, during a midwinter 'Percussion' patrol in the Bay of Biscay, Sunderland 'U' of No 10 Squadron (RAAF) sighted U-426 outward bound at a distance of 12 miles in excellent visibility. Confidently remaining on the surface, U-426 opened fire at five miles with its daunting armament of an automatic 30mm gun and four 20mm cannon. Sunderland pilot, FLG OFF J. P. Roberts closed to 1,200 yards and hosed the U-boat's gun platforms with his four fixed bow-mounted machine guns (a new armament devised by the Australians for the Sunderland).

The first bombing attack failed as the depth charge trolley jammed, but, before the U-boat could either dive or reopen fire, Roberts banked steeply and attacked from the starboard quarter. The action caused chaos on the U-426 bridge. Six depth-charges fell near the U-426, which lost way, listed and began to sink by the stern. The Sunderland made a further machine-gun attack after which the German crew quickly abandoned their vessel. Within minutes U-426 slid from view.



U-426 down by the stern and sinking

## Major Henry Petre Visit to RAAF Base Point Cook



Major Petre seated in antique Deperdussin trainer

On 26 January 1961, RAAF base at Point Cook received a nostalgic visit from Major Henry Petre DSO MC — the man who selected the area as home of Australia's first military airfield. He was a solicitor in England when appointed during 1912 to become

instructor at Australia's future flying school. Arriving at the end of January 1913, he inspected various sites before recommending Point Cook on 13 March. Lieutenant Petre commanded the school when it commenced operations a year later, and was promoted honorary Captain shortly before the first pilots graduated in November 1914. Petre himself saw war service with the Australian Flying Corps in Iraq in 1915-16, before returning to England and the Royal Flying Corps. Leaving the RAF in September 1919, he resumed legal practice until retiring in 1958. He died in London on 24 April 1962, not long after he visited Australia.

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## A Gathering of Eagles



## A Gathering of Eagles for the 75th Anniversary of The Battle of Britain

**Hobart, Tasmania 18th, 19th, and 20th September 2015 - A Commemoration of Air Power**

### INVITATION

The Royal Australian Air Force Association, Tasmania Division, extends to all Royal Australian Air Force members, past and present and their guests an invitation to attend A Gathering of Eagles to be held in Hobart on Friday 18th, Saturday 19th and Sunday 20th of September 2015 to commemorate the deeds and sacrifices of the Royal Australian Air Force, the Royal Air Force and Allied Air Forces in all conflicts past and present.

### ACTIVITIES

#### **CIVIC RECEPTION – Friday 18 Sep 2015**

For VIPs, interstate visitors and RAAFA Members attending the Formal Dinner. By specific invitation from the Lord Mayor of Hobart. Dress, RAAF 1A Uniform Lounge Suit

#### **HAPPY HOUR**

Friday 18th September – RAAF Memorial Centre, 61 Davey Street, Hobart at 1700-2130 hrs. Drinks and Snacks. Dress – Casual.

#### **REMEMBRANCE SERVICE**

Saturday 19th September at St David's Cathedral at 1300 hrs. Dress: RAAF 1A Uniform or Lounge Suit with full size medals.

#### **29 SQN – EXERCISE OF RIGHT OF ENTRY TO CITY OF HOBART**

1430 hrs – March from St David's Cathedral down Macquarie Street and past the Town Hall saluting base

#### **DINING IN NIGHT**

Saturday 19th September at Tattersall's Park Elwick Function Centre 1900 hrs for 1930 hrs.

Cost \$95.00 each all inclusive. Dress: RAAF Winter Mess Dress, Dinner Suit or Lounge Suit (with miniatures).

Guest Speaker: (TBC)

#### **CENOTAPH SERVICE and WREATH LAYING**

Sunday 20th September at the Hobart Domain Cenotaph at 1100 hrs. **Full size medals**

**Commemorative Address:** TBA.

#### **BARBEQUE LUNCHEON**

Sunday 20th September at the RAAF Memorial Centre, 61 Davey Street, Hobart at 1215 hrs. (No Charge.)

#### **RAAF SUPPORT**

The Australian Flying Corps and Royal Australian Air Force

Association is most grateful to the Chief of Air Force, for the provision of RAAF support to these commemorative activities.

The RAAF Association also acknowledges the valuable contribution given by the Commanding Officer and Members of No 29 (City of Hobart) Squadron.

### ACCOMMODATION

Special rates have been offered by the following – please request the "Battle of Britain" rate when booking:

#### **The Old Woolstore Apartment Hotel:**

Phone: 03 6235 5355

Email: [reservations@oldwoolstore.com.au](mailto:reservations@oldwoolstore.com.au)

#### **Hotel Grand Chancellor:**

Phone: 03 6235 4535

Email: [groupreservations@hgchobart.com.au](mailto:groupreservations@hgchobart.com.au)

#### **Hadley's Orient Hotel:**

Phone: 03 6237 2999

Email: [reservations@hadleysshotel.com.au](mailto:reservations@hadleysshotel.com.au)

#### **Salamanca Inn:**

Phone: 03 6223 3300

Email: [info@salamancainn.com.au](mailto:info@salamancainn.com.au)

### CONTACT DETAILS

If you are interested in obtaining further details about these events, contact the State Secretary, RAAF Association, Tasmanian Division at:

Address: 61 Davey Street, Hobart, 7001

Phone: 03 6234 3862 (Wed 10am to 3pm) Message Bank active during non attendance times

Email: [raafatas@netspace.net.au](mailto:raafatas@netspace.net.au)

State Secretary and Function Co-Ord:

SQNLDR Alan Robertson 0418 545 207

Assist CO-ORD

WGCDR Jen Robertson 0427 005 076

Treasurer: Mrs Helen Watling (03) 6234 3862

Chairman BoB Planning Committee: AVM Peter Scully 0402 274 163

Bookings, accompanied by the amount of the subscription, are essential. Members may make a direct credit to the Association Account – RAAF Association Tasmania Division WESTPAC Bank BSB 037001 Account 100766 or by cheque payable to the 'RAAF Association' and sent to the Association address.

## 11SQN Empire Flying Boat and USAAC Pilots

On 23 December 1941, No 11 Squadron Empire flying boat A18-10 (ex-QANTAS "Centaurus") departed Darwin carrying 22 pilots of the USAAC 24th Pursuit Group and the 27th Bomber Group who had been withdrawn from the Philippines. Flying via Groote Eylandt, Townsville and Rockhampton, the aircraft arrived in Brisbane the same day. "Centaurus" was later destroyed during a Japanese air raid on Broome on 3 March 1942 and officially written off on 16 April 1942.



Former Qantas Empire Flying Boat



Plaque commemorating the flight from Philippines to Brisbane.

Article and Photos: Office of Air Force History, RAAF.



A Qantas Super Constellation, Perth Airport, 1960.  
Photo: Lance Halvorson

## RAAF AOC in Far East Air Force, Malaya

After arriving in Singapore on 30 December 1952, Air Vice-Marshal F.R.W. Scherger assumed appointment as Air Officer Commanding (AOC) the RAF in Malaya on 1 Jan 53. The appointment was the first British command given to an Australian air officer since the end of World War II. The mix of RAF and RAAF squadrons under his command was then engaged in anti-terrorist operations during the Malayan Emergency. The AOC was responsible for directing those operations under the overall authority of the Commander-in-Chief Far East Air Force (whose command ranged from the Indian Ocean to Hong Kong). AVM Scherger quickly decided that his Air Headquarters should not be located in Singapore but alongside the Army's Director of Operations, General Sir Gerald Templer, in Kuala Lumpur. When Scherger's term ended after two years, the AOC post alternated between RAF and RAAF officers (three more Australians being appointed) until terminated in 1968.



AVM Scherger (right) and Mrs Scherger were met on arrival at Singapore by the current RAF AOC and his wife.



A former RAAF C-47 at 2012 Air Pageant, Point Cook Mar 12.  
Photo: LACW Nikki Freeman



## BOMBER COMMAND COMMEMORATIVE DAY FOUNDATION (VICTORIA)

Patron: Wing Commander Peter S. Isaacson AM DFC AFM DFM

Convenor: Mrs. Robyn Bell

323 Union Road, Balwyn, Victoria, 3103

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Mosquito



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The Bomber Command Commemorative Day Foundation (Vic) is pleased to announce the 4th year of commemorating the service and sacrifice of the men and women who served and those who paid the ultimate sacrifice in WWII.

In Conjunction with the Shrine of Remembrance we will be conducting the 2015 service at the Shrine at 12.00 noon on Sunday June 7th

Concurrent observances are held in Canberra, Queensland, South Australia and Western Australia together with overseas observances

in New Zealand, Canada and the United Kingdom.

Enquiries:

Robyn Bell

03 9890 3107 / 0439 395104

brucebell@netspace.net.au



Stirling



Hampden



Wellington

## Bomber Command Commemorative Day Foundation (Vic) Cocktail Party

**Date: Saturday 14th March 2015 Time: 6 – 9pm**

**Venue: Nurses Memorial Centre**

**431 St Kilda Rd (Entrance off Slater St.) (Tram stop 23)**

Bubbly, Beer, Red and White Wine, Soft Drink and some Yummy Fancy Finger Food.

\$40.00 donation per head

Please note that this party is aimed at not only continuing and promoting the wonderful developing fellowship of the Bomber Command Family, but also unashamedly a fundraiser to enable the Commemorative Day Foundation to continue its work in hosting the Annual Commemorative Service.

RSVP please by 28th February 2015 to: Robyn: 0439385104  
brucebell@netspace.net.au

Jan: 0402032019 : jandimmick@bigpond.com

Payments: Cheque payable to M. D. Leicester BCCDF – Vic  
(post to 26 Canonbury Circle, Seabrook, Vic, 3028)

Direct Debit to: BSB: 633-000, Account No. 152839908  
(Include your name in the reference section).



A restored RCAF Lancaster bomber on a low pass at Saskatoon Airport, Canada 2009. Photo: Saskatoon Tower



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## End of Training at Uranquinty

The Air Board announced on 19 Dec 58 the move of No 1 Basic Flying Training School (1BFTS) was to move from Uranquinty, New South Wales, to Point Cook, Victoria. Originally established during WW II to meet the needs of the Empire Air Training Scheme, the Uranquinty base had been retained after the war to provide refresher courses for qualified pilots.

After that function was relocated to Point Cook in 1948, the base's facilities were turned over for use as a migrant centre. However, in September 1951, after the Menzies Government believed that Australia faced the prospect of being involved in another major war within three years, the Minister for Immigration was informed that the RAAF required Uranquinty once more. Arrangements were made to relocate the 900 migrant residents. By 1958, when the RAAF required fewer aircrew, the base was finally closed.



Uranquinty, 1943

## Seeking details on Wing Commander A. N. 'Noel' Constantine

- Australian Spitfire Ace in Burma, 1943/44.

In the Burma campaign of the Second World War from June 1943 to March 1944, Australian Squadron Leader Noel Constantine was the commanding officer of No 136 Squadron RAF. In January 1944 at their Ramu airfield in north east India, 136 Squadron combined training and familiarisation with their new Spitfire Mark VIII fighters with daily readiness for a Japanese offensive.

At 1115 on 15 January 1944 ten Spitfires of 136 Squadron scrambled, led by their Squadron Leader Noel Constantine, to intercept enemy aircraft over the Maungdaw area. Ten minutes later Constantine spotted at least twelve Japanese aircraft, Zeros and Oscars, 10,000 feet below and ahead. The enemy aircraft were flying west over a ridge of hills, south east of Maungdaw. Constantine led his section into the attack, and together with Flying Officer Butler and Flight Sergeant Wilding shot down three Zeros. The section damaged another five Japanese aircraft.<sup>1</sup>

In a ploy to counteract the superior performance of the Spitfire, the Japanese brought in additional fighters and a new tactic. Some Japanese fighters would fly at a much higher altitude



Wing Commander  
A N Constantine

Photo:  
*Australian War Memorial*

above slower aircraft lower down. The lower flying aircraft were used as decoys to lure the Spitfires into attack, and then the higher Japanese fighters would dive onto the Spitfires.

On 20 January 1944 at 0915 in response to a report of a large number of enemy aircraft sighted over Maungdaw, Squadron Leader Constantine scrambled with ten other Spitfires of No. 136 Squadron.<sup>2</sup> Two aircraft returned to base with engine trouble, before the remaining nine climbed to 30,000 feet.

A little after 0945 at least fifty Japanese aircraft were spotted between 18,000 and 24,000 feet. Unbeknown to Constantine these were the latest Japanese fighters, the Ki-44 Tojo. Even more enemy aircraft could be seen below 10,000 feet, making perhaps close to 100 in the vicinity. Some of these Japanese decoy planes were often a gleaming silver colour with a mirror finish, or a shiny black with wavy lines of green.<sup>3</sup>

Another Spitfire pilot in the section, Australian Flying Officer Garvan later commented, 'I could see more than twenty-five without looking hard.' Undaunted, Constantine led his nine Spitfires, outnumbered perhaps by around eight to one, onto the enemy aircraft at the lowest altitude.

On Constantine's eighth attack onto a decoy, he found two of the Tojos on his tail.

I went into an inverted spin and blacked out completely. I came to, thought I was in hospital and remember calling for tea. Then I discovered I was about to crash, put the Spit right way up and fainted again. I was very near the jungle when I recovered the second time and found two Japs were firing immediately ahead of me. I darted down some gulleys and so lost them.<sup>4</sup>

In the dogfights which lasted about twenty minutes, Constantine's Spitfires claimed five victories, four probables and six damaged.

On the debit side Flight Sergeant Kennedy was shot up, and forced to bale out. While parachuting down, Kennedy was killed by machine-gun fire by a Japanese fighter. Some kind of justice was done, as that same enemy fighter was shot down by AA fire.

Constantine shot down one Tojo, and claimed four more probables or damaged.

Sources:  
(Endnotes)

<sup>1</sup> NA, UK, AIR 27/953/67, No. 136 Squadron RAF, Operations Record Book, January 1944.

<sup>2</sup> Saunders, op. cit., pp. 312/3, and *Wings of the Phoenix*, p. 44.

<sup>3</sup> RAF Dept of Defence, *Wings of the Phoenix*, p. 46.

<sup>4</sup> Veteran's account, Squadron Leader AN Constantine, *Wings of the Phoenix*, p. 46.

Author's Note:

Wing Commander Noel Constantine, described in the official RAF history as a great Australian and inspirational leader, came from Albury, NSW, and Cowes, Phillip Island, Victoria. He was reported to have died in an air crash after the war, while air lifting medical supplies in Indonesia.

Bryn Evans – author of *The Decisive Campaigns of the Desert Air Force 1942-1945* (Pen & Sword 2014), is seeking reminiscences, records, writings or photographs pertaining to the life of Wing Commander Constantine, and on other veterans who served in the Burma campaign. Contact: email [bryn.evans@ozemail.com.au](mailto:bryn.evans@ozemail.com.au), Tel 02 9438 1939/Mob 0428 108 081

## RAAF Veterans' Residences Trust

The RAAF Veterans' Residences Trust was established by an act of Parliament on the 12<sup>th</sup> December 1953. The Trust was established for the purpose of providing residences for former members of the Air Force and their families.

The capital of the Trust was provided from a prize captured by Commonwealth Forces during World War II. The prize originated from the capture of a German vessel, *MV Rostock* (2,542 tons) on the 16<sup>th</sup> September 1944. The *Rostock* was sighted off the French coast by a RAAF 10 Squadron Sunderland Flying Boat, captained by Flight Lieutenant Jack Mabbett and two RN motor torpedo boats were contacted to intercept and capture the vessel.

The crew of the Sunderland were:

FLT LT Jack Mabbett – Pilot/Captain  
 FLG OFF Tom Hughes – 1<sup>st</sup> Pilot  
 FLG OFF Bob Brent – 2<sup>nd</sup> Pilot  
 FLG OFF 'Robbie' Robertson – Navigator  
 FLT SGT Gordon 'Slim' Jarvis – Flight Engineer  
 SGT Lindsay 'Butch' Arnold - Flight Engineer  
 FLT SGT Allan Bagshaw – WOAG  
 FLT SGT a. Mcleish – WOAG  
 SGT Brian Jameson – Air Gunner  
 FLT SGT Doug Nance  
 FLT SGT Bob Marsham – Air Gunner

A full account of the capture of *MV Rostock* can be found at [www.defence.gov.au/raaf/rvrt/history](http://www.defence.gov.au/raaf/rvrt/history)

The Air Force share of the prize amounted to \$458,000. Over the years this amount has been invested and applied to obtain 76 residences throughout Australia. The residences are located in: Brisbane, Sydney, Melbourne, Adelaide and Hobart. The residences generally comprise a one or two bedroom unfurnished but self-contained unit.

Further information about the Trust, eligibility and tenancy can be obtained from:

The Manager  
 RAAF Veterans' Residence Trust  
 Ground Floor – Building L474  
 RAAF Williams Laverton Vic 3027  
 Phone: 03 9256 0003 • Email: [raaf.vrt@defence.gov.au](mailto:raaf.vrt@defence.gov.au)



**A 10SQN Sunderland on takeoff at Pembroke, UK. September 1944. Photo: RAAF**



**MV Rostock, Bremerhaven. Photo: RAAF**

## RAAF Ends Link to RMC

On 10 Dec 1930, the eight Air Force cadets who remained at the Royal Military College (RMC), Duntroon, after the graduation of the senior class two days earlier, were withdrawn by the RAAF to continue their training at Point Cook. The move came after the Government had announced in August that RMC would be moved to Victoria Barracks in Sydney at the end of the year, as an economy measure during the Depression.

The change ended an association which began in 1923 when RMC graduates were seconded to the RAAF, a process that had grown in 1925 when each year four RMC graduates proceeded direct to the Air Force. From 1927, the Air Board began selecting the applicants for RMC who were to eventually join the RAAF. As a result of these arrangements, the RAAF had four ex-Duntroon Chiefs of Air Staff between 1954 and 1969.



**RMC graduates and cadets (rear row) at Point Cook, 1931 Photo: Office of Air Force History**

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If you are leaving the Defence Force and wondering how to increase your salary in the New Year here are 4 easy ways to increase your earning potential out in the civilian world.

### 4 easy ways to increase your earning potential!

1. Increase your management prospects - Updating your skills through training courses is a great way to increase your skills and knowledge, stay current and show employers that you take your career seriously. Having a mentor in the field you wish to escalate in is a fantastic way to not only improve your skills and knowledge but also introduces you to important contacts, assists with perspective and vision as well as providing you with an experienced sounding board. Stepping up the ladder is a sure way to help you step up the pay scale.

**Salary of a General Manager or Operational Manager - \$50,224 - \$185,121**

<http://www.payscale.com/research/AU/Job>

2. Increase your versatility – many companies are combining roles together to save costs eg Human Resources may also absorb Learning and Development and/or Work Health and Safety. Having skills and qualifications in a number of areas that complement each other is a great way to make you a more versatile and employable person.

**Work Health Safety Manager - \$59,558 - \$186,992**

<http://www.payscale.com/research/AU/Job>

3. Becoming a Trainer and Assessor in your field – To be a trainer of your industry means that you really are having an impact on that industry as you are training the future and determining its quality, it's also quite a nice ego boost to know you are one of the chosen ones to train the up and coming generation of your trade.

Below is a sample of average salary ranges for a variety of job roles compare to that of a Vocational Education and Training Trainer and Assessor. (<http://www.payscale.com/research/AU/Job>)

Trainer and Assessor - \$51,324 - \$105,315 (Vocational Education and Training - VET)

Australian Soldier - \$48,155 - \$103,017

Construction Worker - \$31,540 - \$74,914

Electrician - \$41,050 - \$94,432

Automobile Mechanic - \$32,050 - \$61,679

Plumber - \$38,307 - \$86,208

Accountant - \$39,199 - \$81,385

HR Coordinator - \$43,562 - \$72,383

4. Contracting – there are many reasons why companies are moving toward contract staff; to cover busy periods, cover maternity leave or special projects to name a few. Not only do contract roles generally offer more pay they also often offer flexibility, experience across a number of companies as well as providing a foot in the door in a particular company or an introduction to another desirable company you may want to work for on a future contract.

Some ideas for contract roles include:-

- Quality Auditor – an auditor may be contracted as an internal or external quality auditor.

**Quality Assurance Auditor - \$46,994 - \$100,836**

<http://www.payscale.com/research/AU/Job>

- Project Manager – it is common practice for specialist project managers to be contracted for the lifecycle of the project.

**Project Manager - \$61,139 - \$179,739**

<http://www.payscale.com/research/AU/Job>

As the New Year gets underway here are a few tips to try and increase your salary, whether it be within the Defence Force or time to take the step to moving onto a new role or career.

“Education is the most powerful weapon which you can use to change the world” Nelson Mandela.

Whether you are learning from a training course, a mentor or life experiences make sure you learn every day and you will be sure to progress in a positive way, including your career and your salary.

## Advocacy, Entitlements and Support (AES) Spot<sup>1</sup> Training ESO Practitioners

### Introduction

Last time I wrote, I started the article by saying: *I am feeling a bit of a charlatan as I sit to write for this quarter's Wings AES Spot*. Ahem! That was twelve months ago. Those of you who have not succumbed to Alzheimer's may recall that I was taking a holiday. I did – for six months; but, I didn't expect my pen would run dry for 12 months as a result. So, mea culpa all round, and on with the task at hand.

### Rationale

This quarter, I'd like to talk about the training program that prepares 'worthies' who want to support veterans, ex-service personnel and dependents, and the future of '*mates helping mates*'. The article is prompted by the review of veterans' advocacy currently underway by Brigadier Bill Rolfe, AO (Retd).

The initial findings of the review are soon to be considered within the Department of Veterans' Affairs (DVA), in consultation with the ESO (Ex-Service Organisation) Round Table (ESORT). By way of explanation, ESORT is chaired by the Secretary DVA, meets four times a year, and is attended by all the major ESOs.

The outcome of deliberations is going to be crucial for the way in which support is made available to the ex-service community for many years to come. A reasonable level of understanding of the background is therefore important to inform discussion by veterans, ex-service and serving personnel, and their dependents. I hope you'll stick with me through the 'drier' paragraphs below and forgive my passion if it becomes a little over the top.

### What is TIP?

TIP, the Training and Information Program, is funded by DVA to train volunteers who want to become 'practitioners'. Practitioners who prepare VEA/SRCA/MRCA compensation claims and reviews for veterans, ex-ADF personnel or dependents including war/defence widow(er)s are called Pension Officers, and those who conduct appeals to the VRB and AAT are called Advocates. Those who link clients with welfare support services provided by Commonwealth, State and Local Government Departments and agencies and private sector organisations are called Welfare Officers.

TIP course are delivered by 'Presenters' - experienced practitioners from one of the three streams who have demonstrated interest in training volunteers and the ability to deliver courses. Many hold a Certificate IV in Training and Assessment at TAE40110 standard; however, this is not yet obligatory. (I expect certification to become mandatory in future and deliberations on the Rolfe Review can be expected to identify a transition period and process.) Almost all TIP presenters are still active practitioners within an ESO.

Volunteers who wish to undertake TIP courses can choose from one of three streams training: VEA/SRCA/MRCA compensation courses and the welfare course to name two, the third being the war/defence widow(er) course that combines parts of compensation and welfare.

There is, of course, no barrier to completing all three streams. Those who do, bring a very complete suite of knowledge and skill to supporting ESO members. However, it does take dedication and time to follow that path as the volume and complexity of the legislation and policy involved is substantial.

Most TIP courses are of two or three days' duration, and the volume of legislation and policy to be covered means the time passes quickly. For this reason, most streams conduct courses at two successive levels around 12 months apart. During the inter-course period, trainees are expected to receive on-the-job training (OJT) and mentoring within their parent ESO, tutored by an experienced practitioner. Unfortunately, not all ESOs comply. Hopefully, this failure will be remedied post-Rolfe Review.

If a trainee's ESO is not providing OJT and mentoring, he or she may have to locate an experienced practitioner in another ESO with whom cases can be discussed and queries resolved. TIP presenters routinely hand out their business card and invite contact at any time. In other words, presenters can provide the support for trainees that some ESOs are not.

At this point, it is probably worth my spending a few words on OJT and mentoring, and the rationale for their being so important. While TIP and ESOs have no accepted definitions, the ones I find useful follow:

- OJT is close 'hand-holding' by an experienced practitioner which takes the trainee through welfare/compensation procedures step-by-step, and is repeated until the tutor is satisfied the trainee is ready to proceed to the next course of TIP training or to mentoring during cases of similar complexity.
- Mentoring is a 'hands-free' process for trainees of known capabilities (through OJT), which involves preliminary discussion of a case, hands-free completion by the trainee with support available on request, followed on completion by review of the product, key issues and lessons learned.

There are two main reasons why OJT and mentoring are vital.

First, there is the obvious one: the volume and complexity of the legislation and policy the trainee has to work with. It is simply impossible to learn on a two or three day course the content and ramifications of the materials. Indeed, trying to memorise so much detail is probably beyond even those gifted with strongest photographic memory. We of more humble capacities should really be setting ourselves the objective of gaining a thorough familiarity with where to locate the information we need to tackle a case.

Second, there are the demands of the practitioner's role. Irrespective of which stream you may practice in, you apply what you understand. The more ably you can apply

<sup>1</sup> This article was prepared by R.N. (Dick) Kelloway, National VP AES, NSW-ACT Chair of TIP, practicing advocate and pension officer for RAAFA, the RSL and APPVA.

your understandings, the more competent you will be as a practitioner. Indeed, it is the ongoing unsatisfactory quality of too many claims, reviews and appeals submitted by practitioners that continues to spur reviews such as that being conducted by Brig. Rolfe. The presumption, of course, is that a high level of competence equates to high quality products. Experience seems to indicate the presumption is sound.

I should add a note here that complaints about welfare practice seldom reach DVA because the legislation welfare officers apply is administered by other departments. This in no way suggests that welfare is less important or of less value to the ex-service community. The exact opposite is the case. We pension officers and advocates tend to have a few months' engagement with a claimant or appellant and not see them again. But, welfare officers are generally with those 'for life' who they help. Indeed, welfare support covers a client-base that extends from pre-natal to post-mortem. Now that surely defines dedication!

## How does TIP Train?

Until quite recently, TIP training was conducted face-to-face and presenters' style tended to be the traditional classroom instruction we of the Vietnam-era and before have been exposed to most of our lives. Great for kids! Perhaps? Inappropriate for adults! Boring as bat-poo! Glazed eyes, little absorbed and less than optimum outcomes! Fortunately, IT has come to the rescue, and TIP now has on-line courses at two-levels of training for MRCA and Welfare, and single-level courses for SRCA and GARP. OK, I hear you saying: What is GARP? Wait. I'll explain, but I will have to digress.

After VEA and MRCA, GARP is the most important legislative instrument available. It is used by Repatriation and Military Compensation Commission Delegates respectively to translate medical reports on, and the lifestyle consequences of a claimant's conditions into a numerical score that determines the level of compensation. Needless-to-say, a pension officer or advocate who understands GARP is very likely to be more competent than another who doesn't. Posting of a GARP course on-line was therefore a TIP priority, and presenters require completion of the course before experienced pension officers attend the training course to become advocates to the VRB (Veterans' Review Board).

But back to how TIP trains. With the advent of courses on-line, trainees can now open the course when it suits them, where they are and take as much time as they need to cover the materials. The courses are completed module by module. At the end of each module is a revision session. These take the form of multiple choice questions. The embedded logic requires that all revision questions be answered correctly before you are allowed to progress to the next module. TIP has a presenter available on-line to respond to any queries or difficulties you might encounter.

Trainees' ability to learn on-line is opening a fundamental change in what happens on face-to-face courses. Rather than they being the place in which the legislation and policy is taught, face-to-face courses are becoming the place in which understanding is applied. So, progressively, case studies are replacing teaching. Over the two or three days of each face-to-face course, trainees will analyse a number of increasingly complex case studies. These will focus on

consolidating understanding and developing skill in applying understandings to prepare a claim or refer a client to a welfare service provider.

The Rolfe Review recommends TIP adopt 'adult-learning principles'. Through the changes that are underway, TIP already has this recommendation in hand. Trainees should shortly start returning to their parent ESO after TIP training with a reasonable modicum of skill.

## What about ESOs?

I've already mentioned that too many ESOs are falling down on their responsibility to provide OJT and mentoring. This, is without doubt, as much a cause of poor quality claims as is the old-style didactic teaching process long-used by TIP. The upshot of this combination of errors is that clients who might have had an entitlement to rehabilitation and/or compensation have missed out.

Unless, every practitioner is as skilled as reasonably possible, is committed to doing the very best for every client he/she represents, and is totally professional in the way he/she goes about practice, it is the client who is disadvantaged. If ever a transgression were unconscionable, this has to be it!

As you'll be aware, the tradition of 'mates helping mates' emerged spontaneously from WWI battlefield experiences, and was heightened by returned service personnel's circumstances back in the Australian community. It is therefore a tradition that is approaching its centenary. Against this background, for a practitioner to do anything other than his/her very best for a 'mate' is indictable. The souls of those who served must be damning those practitioners who fail to do so!

Regrettably, too many weakly effective practitioners, too often supported by their ESO, find it too easy to hide their inadequacies behind a shield of blame. *DVA is at fault! DVA's out to frustrate every claim and appeal!* (You'll get the picture. The language used is inevitably far more profane.) Every such allegation should be met with scepticism. Your immediate response should be: *Let's have a look at the claim form, or appeal, or referral to a welfare agency.* RAAFA would be delighted to deposit a dollar into the kitty for every occasion that the fault lay with the practitioner, not the Delegate.

To tie a bow around the prevalence of such allegations, I am reminded of the DVA Senior Legal Officer's comment at the start of a course he convened. Talking to a group of practitioners he said: *Our task, jointly, is to ensure that every eligible service person receives their full entitlements. Not one bit more. But, not one bit less.*

On perhaps two occasions in around a hundred appeals or claims, I have felt that, while I did my best as a practitioner, I was not met better than halfway by the Delegate. This was not only disappointing but seems contrary to the case law. More than once I have seen in a judgement: *As the intent of the Act is to be beneficial, the veteran should be given the benefit of the doubt.*

Next time you hear a practitioner or ESO executive bad-mouthing a Delegate's decision, press the point. *Where does the fault really lie?* As long as it is easier to blame DVA, ineffective practitioners will be letting down their mates – and getting away with it!

## What about the Future?

Three issues come into sharp focus as soon as the future is considered: the reducing number of practitioners as Vietnam-era practitioners retire, VET accreditation of TIP courses and certification of practitioners, and authorisation as a practitioner.

RAAFA's discussions with serving RAAF personnel at command level and on the hangar-floor or in the crew-room, and with recently-separated veterans, show, incontestably, that the 'tradition' is undiminished. It may be expressed differently, but it is a grave disservice to the contemporary cohort to judge difference as being indifference. The evidence is that contemporary veterans and their families are not joining RAAFA, RSL, DFWA or other 'traditional' ESOs. Many prefer loose confederations based on unit or military employment; however, some formal groups are emerging such as Soldier On and Mates4Mates.

From a traditionalist's perspective, this is seen to be 'splintering'. That it is occurring should neither surprise, nor dismay. Contemporary values are different, experiences in the networked battle-space are different, living off-base in the community is different, the high level of autonomy and individual responsibility in the modern Air Force is different, and information technology is omnipresent. These, and other factors will inevitably be eliciting a different outlook.

To encourage understanding by the Vietnam-era generation, some thoughts expressed by contemporary veterans follow:

- Our experiences are totally different to your service and combat exposures.
- We respect, but cannot relate to, you older veterans and ex-Service personnel.
- We've each having worn an ADF uniform, but that is the only potentially relevant commonality.
- We have no interest in the alcohol consumption and gambling habits of you earlier generations.
- We want family-orientated activities.
- Our spouses have a crucial role in our lives, and must be involved in pre-deployment training and decompression;
- Our spouses need a course to help them recognise our mental and other health symptoms and signs of disorders.
- We need traditional ESOs to find a way to make meaningful room for us.
- We recognise the therapeutic value of helping our mates who are not travelling well.

The challenge facing those of us who are practicing and training is, therefore, to engage the next generation of 'mates who want to help their mates'. To do so, it must clearly be on their terms, must respect their values, must understand their outlook, and must help them focus their motivations so that legislated support is part of their 'mix'. This should not be difficult. Their contemporary values, facilitated by information technology, have brought 'connectedness' and caring to a previously unimaginable and unattainable level.

Penultimately, there is the 'elephant in the room': accreditation and certification. Immediately this issue is raised in traditional ESOs and amongst the current crop of Vietnam-era practitioners, DVA is blamed. The stoutness of the rejection is, by any measure, diametrically opposed to the tradition of

'mates helping mates' to the very best of the practitioner's ability. The notion of doing one's best for one's mates, suggests a never-ending striving to do the job better. Inherent is the essence of professionalism: a lifelong pursuit of improved performance by continuous learning and enhanced practice.

Even the most cursory perusal of the ongoing series of reviews of veterans' advocacy shows that DVA is crucially aware of the human factors engaged in volunteering. In none of the reviews is there any hint whatsoever of imposed solutions. The Rolfe Review is explicit: TIP courses and volunteers should move progressively towards VET-readiness over a transition period.

RAAFA's interviews with serving and recently-separated RAAF personnel shows consistently that they expect the practitioners who support them to be formally qualified and professional. This should not be news. Almost every in-service course they attend confers certification at an appropriate VET level. Understandably, certification is their expectation.

To be credible against this background, practitioners will need to come to the party. Again, even the most cursory attempt to understand VET certification will highlight RPL – recognition of prior learning. Although neither DVA nor TIP has yet appointed an RTO (Registered Training Organisation), accreditation of TIP training course and certification of practitioners and presenters cannot happen until an RTO is appointed. No hint of immediacy or imposition there! When RTO appointment happens, the types of ADF employment, the ADF qualifications gained, and the nature and quality of the claims submitted will be relevant to RPL awarded when a practitioner is certified. For presenters, added to these considerations will be the type of training conducted in the ADF, and the nature and quality of the instruction they have delivered for TIP should be considered by the RTO.

This brings me to authorisation. I am deeply concerned that many ESOs and practitioners are unaware of the potential risk they are placing themselves as a result of long-standing authorisation practices. Too many ESOs authorise their TIP-trained members as practitioners on completion of the TIP course. As emphasised above, the volume and complexity of the legislation renders adequate understanding an impossibility in two or three days. It takes careful tutoring by an experienced practitioner to develop a trainee's understanding and skill to the point where competency begins.

Not accidentally, at this point the trainee is ready for the next TIP course. It is at this point that TIP has the next course available. The next round of TIP training builds on the understandings and skills gained from the preceding course and OJT with an experienced practitioner. Once again, further OJT and a program of mentoring are required before the level of competency is acquired that will enable authorisation by the ESO as a practitioner. An ESO's authorisation is therefore a public declaration that the trainee has demonstrated the competency to do the best by members by way of claim, review, appeal or welfare support.

Crucially, authorisation also has legal and financial consequences as it triggers indemnification insurance under VITA. I am not a lawyer, but I am a confirmed sceptic about insurers. Perhaps this an application of the 'precautionary principle'? I believe the VITA insurer would reasonably expect that those it indemnifies will possess a standard

of competency that contains its insurance risk within a commercially acceptable level. The ESO's authorisation of a member as a practitioner is therefore linked with the insurer's acceptance of a level of commercial risk.

If an aggrieved client lodges a claim for damages against the practitioner that provided support, the insurer will investigate how and why the claim arose. Understandably, the insurer will seek to assure itself that the practitioner was competent and acted in a way that was consistent with the level of risk it assumed when it extended indemnification. How the ESO assured itself that the practitioner was competent will, I presume, be a key component of the insurer's discovery process.

Given the volume and complexity of the legislation, the limitations inherent in TIP training, and many ESOs failure to provide OJT and mentoring, I hope you will realise that there is risk in ongoing practices. I am concerned that, were the insurer to discover that an ESO had authorised without providing OJT and mentoring and without assuring competence, it may decide that the practitioner and ESO have failed to comply with the terms of insurance. In this event, were the claimant to litigate and to be successful, and the court to award damages, the practitioner's and the ESO's assets would be at risk.

If the preceding analysis is valid, the risk inherent in long-standing practices argues cogently for change.

## Conclusions

RAAFA's survival depends on the contemporary generation of RAAF, ex-RAAF personnel and their families being interested in membership. The clear strength of their concern about their mates, that their families be involved, that their spouses be trained to help them, that we understand the differences between the generations, and that we make room for them in our institutions combine to suggest a way forward. RAAFA has already started down this path, but real effort is now required. This will require contact, communication, and discussion to maximise its effectiveness.

An essential start is for serving personnel and their spouses to attend TIP training courses. The availability of on-line courses facilitates this. If you or your spouse would like to enrol in an on-line course, I invite you to email me at [chair@tipnsw-act.org.au](mailto:chair@tipnsw-act.org.au). Completion of an on-line course or a follow-on face-to-face course does not commit you practice.

RAAFA sees an immediate advantage in the understanding you will gain from the learning experience. Irrespective of whether you are still in the service or not, your understanding is an opportunity to correct the rumour and misinformation that prevails in crew-rooms, on the hangar floor and in casual discussions between families. Your input, if informed, may help a mate learn of his/her entitlements, who to contact for help, and how to start the process of securing rehabilitation and/or compensation.

I also note that a number of RAAF personnel have already undertaken TIP training in an official capacity. Commanders have realised the advantage in having serving personnel TIP trained. Where their duties are to provide in-service counselling, administer personnel with conditions entailing eligibility for MRCA/SRCA/VEA support, or transition

administration the need is almost a foregone conclusion. Discussions with senior serving personnel at a recent seminar reveal that contemporary ADF commanders accept as a responsibility of command preparing their personnel for post-service life.

May I close this article by encouraging all readers with even the most remote interest in helping their mates to contact me about TIP training.

## Improving Primary Care Mental Health Treatment For Veterans

The Abbott Government is strengthening the support available to general practitioners to identify and treat Australia's veterans with mental health issues with the release on 11 December 2014 of a new online training program.

Minister for Veterans' Affairs, Senator the Hon. Michael Ronaldson, has launched a unique online training program for GPs that provides an overview of the mental health issues faced by veterans and will assist GPs in more effectively identifying issues early.

Called *Working with Veterans with Mental Health Problems*, the one hour accredited training module was developed for the Department of Veterans' Affairs (DVA) by the Australian Centre for Posttraumatic Mental Health (ACPMH) and the Royal Australian College of General Practitioners (RACGP) and is available to GPs through the RACGP *gplearning* website.

The new online training program seeks to provide GPs with a better understanding of mental health issues affecting veterans including their military experience and its impact on families, the special assessment and treatment considerations for veterans, and the services and resources currently available for veterans and their families.

Combined with the new Australian Defence Force (ADF) post-discharge GP health assessment, the Government is supporting GPs in identifying any early signs of mental and/or physical health problems among veterans. All former serving ADF personnel, including those who have served in the permanent or reserve forces, can access this once-off comprehensive health assessment from their GP, with a Medicare rebate available.

Further facilitating effective treatment of veterans is the addition of a veteran and ADF indicator on the Personally Controlled Electronic Health Record (PCEHR) to allow current and former ADF personnel to self-identify.

This will greatly assist health care practitioners to identify patients who may have entitlements to DVA or other Commonwealth funded health services.

RACGP President, Dr Frank R Jones said it is vital for GPs to possess a good understanding of military and veteran experiences to aid in building a positive relationship with a veteran that promotes optimal health outcomes.

"The *Working with Veterans with Mental Health Problems* activity focuses on practical strategies to assist GPs to

effectively engage with veterans and provide early and effective treatment for mental health issues and related problems,” Dr Jones said.

Senator Ronaldson said that primary care was an important entry point to identify both physical and mental health issues amongst ex-serving ADF personnel and the Government was providing general practitioners with the tools to do so effectively.

“The mental health and wellbeing of our service personnel is an issue the Government takes very seriously. We are committed to working closely with veterans, health professionals and the wider community to ensure all generations of service personnel have access to effective treatment when they need it,” Senator Ronaldson said.

*Working with Veterans with Mental Health Problems* is available to RACGP members through the RACGP’s gplearning website. <http://gplearning.racgp.org.au/> For more information on the ADF Post-Discharge GP Health Assessment, go to DVA’s At Ease Professional website. <http://at-ease.dva.gov.au/>

## Qantas Proudly Supports Gallipoli Centenary

The Australian Government and Qantas announced in January a collaboration to support ANZAC Centenary activities marking the 100th anniversary of the Gallipoli landings.

Minister for Veterans’ Affairs and Minister Assisting the Prime Minister for the Centenary of ANZAC, Senator the Hon. Michael Ronaldson made the announcement alongside Qantas Group CEO Alan Joyce at the airline’s Sydney Jetbase.

“The Anzac Centenary is a milestone of special significance to all Australians as the First World War played such an important role in defining us as a nation and as a people” Senator Ronaldson said.

The Government appreciates the generous contribution of Qantas in supporting this significant period of commemoration and ensuring that more Australians can travel to Turkey for the services.

Qantas has added a special flight for Australians travelling to Turkey for Anzac Day – the Boeing 747 seats 364 people and will depart Sydney for Istanbul on 21 April, via Perth.

“This additional flight is a great initiative by Qantas, and will provide the opportunity for many Australians who received a ticket in the ballot to travel to this historic Anzac Day commemoration,” Senator Ronaldson said.

Qantas has a strong connection to Gallipoli where two of its founders served, Sir William Hudson Fysh KBE DFC (1894 – 1974) and Paul McGinness DFC DCM (1896-1952).

Qantas has agreed to provide return flights for the widows of Australian First World War veterans travelling to Turkey for Anzac Day commemorations at Gallipoli. The widows, aged in their seventies to early nineties, will attend the commemorations as official guests of the Australian Government and will travel as part of an official mission party.

The widows will each be accompanied by a carer and support staff from the Department of Veterans’ Affairs (DVA), including nurses and an Australian Defence Force doctor.

Following an expression of interest process undertaken last year, DVA is continuing to work with the widows and their carers to ensure their fitness for international travel in April.

“Qantas is proud to be working with the Australian Government and the Department of Veterans’ Affairs to support the Centenary of ANZAC events,” said Qantas Group CEO Alan Joyce.

“We are honoured to be carrying war widows and their carers to Turkey so they can attend commemorative services at Gallipoli.

“Two of Qantas’ founders, Paul McGinness and Hudson Fysh both served with distinction in the First World War and today, their legacies remain strong as do our ties with the services of the Australian Defence Forces.”

Senator Ronaldson said that while Anzac Day 2015 in Gallipoli will be a key commemorative event in the Anzac Centenary Programme, the programme will extend until November 2018 when the 100th anniversary of the armistice will be observed.

“Those without attendance passes for Anzac Day 2015 may consider visiting Gallipoli on 6 August 2015 for the Battle of Lone Pine commemoration service. Australians can also attend a Dawn Service in Australia or watch the television broadcast of the Gallipoli and Villers-Bretonneux services on the ABC” he said.

The ballot for attendance at Anzac Centenary commemorations at Gallipoli is now complete. A waitlist, for those who were unsuccessful in previous allocations, is open until 31 March 2015 to reallocate places that become available. Only those with a ballot attendance pass can attend the official Anzac Day commemorations at Gallipoli in 2015.

For more information on Anzac Day commemorations at Gallipoli in 2015 visit [www.gallipoli2015.dva.gov.au](http://www.gallipoli2015.dva.gov.au) or visit [www.anzaccentenary.gov.au](http://www.anzaccentenary.gov.au) for information on the Anzac Centenary Programme.

## Review Confirms Priorities for DVA

The Australian Public Service Commission (APSC) released in December 2014 its Capability Review report of the Department of Veterans’ Affairs (DVA).

A Capability Review is a forward-looking, whole-of-agency review that assesses an agency’s ability to meet future objectives and challenges. I welcome the release of this report.

Since being sworn in as Minister for Veterans’ Affairs, I have made it my priority, alongside DVA, to ensure that the services and support delivered to the veteran community are the best they can be.

The report highlights key areas where the Department can improve to ensure the best possible outcomes for the veteran community.

Many of these areas identified in the report have already been recognised by myself and the Department and have not come as a surprise. Since the report was written almost

a year ago, considerable improvements have been made to online services, access to mental health support, reducing red tape for contemporary veterans, expanding client reach and access to services and improving ICT capability to ensure better service delivery.

It is my highest priority as Minister for Veterans' Affairs to ensure services and support are delivered to the veteran community in the most effective and efficient manner possible.

While my Department and I acknowledge that there is still much work to be done, it is also important to note the report raised a number of positives for the Department. Primarily, and something that I am very proud of, is that the staff of DVA are strongly committed to supporting the Australian veteran community.

The Department is acutely aware of, and is responding to the significant challenges needed to improve the services and support we provide to the veteran community, and are working towards making DVA a better organisation for clients, stakeholders and staff.

To view the report visit [www.dva.gov.au/aboutDVA/publications/corporate/Pages/index.aspx](http://www.dva.gov.au/aboutDVA/publications/corporate/Pages/index.aspx)



## Blood, Sweat and Courage

41 SQUADRON RAF, 1939-1942  
 Author: Steve Brew  
 960 pages; photos: Over 350 B&W images, plus sketches, aircraft profiles, maps and tables  
 Cover: Hard cover with dust jacket  
 Publisher: Fonthill Media ([www.fonthillmedia.com](http://www.fonthillmedia.com))  
 Availability: Most book stores  
 Price: Unknown Further information: <http://brew.clients.ch/bsc.htm>

41(R) Squadron RAF is one of the oldest Royal Air Force squadrons in existence. It will celebrate its Centenary in 2016. The unit has seen service from World War I, through Policing Duties in Aden in the 1930s, throughout World War II, and more recently in the First Gulf War and Yugoslavia.

'Blood, Sweat and Courage', by Brisbane author and 41 Squadron Historian Steve Brew, is a detailed account of this gallant Squadron's wartime activity between September 1939 and July 1942. The book complements its sister volume, 'Blood, Sweat and Valour' (Fonthill, 2012), which examines the unit between August 1942 and May 1945. The first volume was hailed by the Australian War Memorial as "one of the finest unit histories of modern times". His much anticipated second volume, 'Blood, Sweat and Courage', will be released in Australia in January 2015.

The book recounts the unit's role within battles, operations, offensives and larger strategies, and details experiences made by the pilots and ground crews participating in them. The work lends a strong emphasis to the men who earned the enviable reputation the Squadron still enjoys today.

Over 960 pages, Brew describes 41 Squadron's courageous actions over Dunkirk and during the Battle of Britain, its offensive operations over the Continent and the English Channel, its

defensive activity against the Luftwaffe's tip-and-run raids on the south coast, and its planned deployment to Russia.

'Blood, Sweat and Courage' evokes the feeling of the period, portraying not only a factual account but also one that captures the colour of life on a Second World War fighter squadron, with a balance between material of a documentary nature and narrative action, intertwining fact with personal recollections of events, serious events with humour, and sobering statistics with poignant after-thought.

'Blood, Sweat and Courage' and 'Blood, Sweat and Valour' include biographies of all 325 of 41 Squadron's World War II pilots. Twenty-five per cent of the Squadron's pilots were drawn from the Commonwealth, and included 33 Australians (10%), 24 Canadians (7%), and 19 New Zealanders (6%).

Flying Spitfires throughout the War, 41 Squadron's pilots claimed 200 aircraft destroyed in the air and one on the ground, 61 aircraft probably destroyed in the air, 109 aircraft damaged in the air and 22 on the ground, and 53 V1 flying bombs destroyed and one damaged. Countless ground targets were also destroyed or damaged.

'Blood, Sweat and Courage' was officially launched at the RAF Club in London, England, in December 2014. Guests included the current Officer Commanding 41 Squadron, Wg Cdr Steve Berry, and former Officer Commanding 41 Squadron Air Marshal Sir Christopher Harper KCB, who wrote the Foreword.



## The Australian Flying Corps - A History

Author: Norman Clifford  
 Not yet published: 710 pages, with black & white photos  
 Publisher: Not yet published  
 Availability: Preview only  
 Email: [www.raafa.org.au](mailto:www.raafa.org.au)

*The Australian Flying Corps- A History* is the third volume of Australian aviation written by Norman Clifford. It tells the story of each AFC unit from training days in Australia and UK until they were in action in Europe and Egypt, until war concluded in 1918. Currently, in preview phase only.

The author details the various Schools for Aerial Warfare that were setup by the Royal Flying Corps, the AFC Squadrons in the field, air fighting and the demobilisation of the AFC squadrons in 1918. He deals with the establishment of four combat squadrons and four training squadrons of the Australian Flying Corps and the technical training in Britain.

Chapters describe aeroplane types, armament, gun-belt round mix, synchronising systems, bomb loading, fighting tactics, and cameos of aerial combat. It tells of battery observation fire; counter battery fire, trench reconnaissance, photography, bombing No 3 with its RE8s, contact patrols, dawn patrols, counter attack patrols, low flying patrols, low level bombing No 2 Squadron in the SE5a and No 4 Squadron with its Sopwith Camels - and latter with Sopwith Snipes.

The volume tells of the hard work by the Australian two-seaters during the last weeks of the conflict, and the deadliest phase

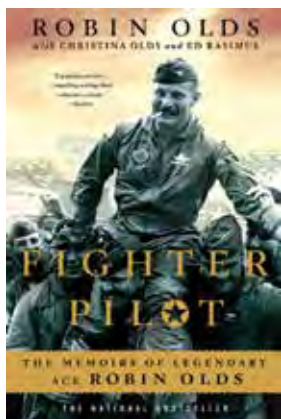
of all, amazing aerial battles involving hundreds of fighting machines. The story of Australian's four training squadrons is less known. They, like their operational contemporaries, were extremely effective air units and are described in detail, including photographs.

For the first time in any historic publication, a chapter covers the shutting down of the squadrons. Lieutenant-General John Monash, Australia's foremost fighting leader, became 'Director-General of Repatriation and Demobilisation'. Under his control, Australian forces in the UK, France and Belgium, including Squadrons, began the long withdrawal from the UK and various war theatres.

Eighth squadrons of the AFC, three fighting in Europe, No 2 Squadron in France, No 3 in Belgium and No 4 with the Army of Occupation at Bickendorf, Cologne, Germany, No 1 Squadron in Egypt and four training squadrons (No 5,6,7,& 8 Squadrons) in England. They were well organised and experienced no problems due to the intelligent organisational ability of Monash.

At the end of the war, the squadrons assembled at the port of Havre, crossed the Channel and, together with the four training units, boarded HMT Kaiser-I-Hind. Specially obtained for the long awaited return trip to Australia; they departed with war brides and other military personnel. No 1 Squadron personnel joined the vessel in Egypt.

Lance Halvorson



## Fighter Pilot: The Memoirs of Legendary Ace Robin Olds

Authors: Robin Olds with Christina Olds and Ed Rasimus

e-Book: 417 pages, no photos.

Publisher: Macmillan Publishers, USA

Availability: Kindle Store; [www.amazon.com](http://www.amazon.com) RRP: US\$8.11

Published in paperback in 2008, released by Kindle as an e-book in 2010

Born in 1922 into a US Army Air Corps family, Olds cut his teeth at the feet of the WWI 'pursuit' pilots with whom his father had flown over France. Rickenbacker, Spaatz, Eaker, Arnold, Udet, Mannock and a host of others were his father and step-mother's household guests. Tales of flying and fighting in the air, chivalry, laughter, and mutual respect left an indelible mark. The young Olds did not fly first until the age of eight, but could name every aircraft in the US inventory by sight and sound before his fifth birthday. Perhaps, however, it was his father's strong support of Billy Mitchell during the General's court martial that encouraged the rebellious streak that marked Olds' military career.

Olds disregard for authority was, however, evident from his earliest days as a fighter pilot. Already fretting that WWII would be over before he flew in combat, Olds was grounded in early 1944. The Army Air Corps had decided West Point graduates were not to be posted to England until they held the rank to be a flight commander. Any flying done in the US until they were promoted was a waste of training hours, better expended on pilots who would go earlier. Olds 'bucked the system' successfully. Taking

leave, he travelled to Wing headquarters, found the Sergeant who 'cut orders', and he and five other West Pointers were on their way to war.

Following his graduation from West Point in 1943, after a compressed three-year course, flying training led to his first operations over France in 1944 from RAF Wattisham, initially in the P-38 Lightning before his squadron re-equipped with Mustangs. By war's end he had 12 confirmed kills, had been promoted to Major at 22 and commanded a fighter squadron.

The next twenty years of post-war life were not the life any 'knuck' would relish. Olds did, however, make the best of it. Extraordinary connections in Washington and marriage to a Hollywood movie star provided opportunities for influence when the system attempted to control a renegade LTCOL and later COL. Despite ground and headquarters posting, and despite the heavy hand of SAC 'weenies' in USAF policy, Olds still managed to fundamentally alter the way in which fighter squadrons were trained, to transition to jets, to (again) incense high command by leading a formation aerobatic display in the F-101 Voodoo at RAF Bentwaters. His commanding general was so incandescent about the latter that he marked Olds efficiency report 'NEVER to be promoted, and thundered at him he 'was the kind of officer who should be in South East Asia'. Olds saluted smartly and responded he 'was hoping the general would say that'. Although he had missed Korea, Olds was on his way to Ubon.

After a one-week conversion to the F-4C, Olds arrived in Thailand on 30 September 1966 to command the 8th Tactical Fighter Wing. It was Olds' turn to be incensed – by disinterested staff in continental US (CONUS), indifference to 'cattle-class' arrangements across the Pacific, and the discourtesy of staff throughout SE Asia. His logic: if I am treated like this but am able to gain attention by using rank, how much more unacceptable must it be for enlisted men and women. He was even less delighted by state of the Wing. To say that he lifted its morale by the bootstraps, grossly understates his achievement. It was during No 79 SQN's operations from RTAF Base Ubon that RAAF fighter pilots would have come into contact with Olds.

Through sheer strength of character, deep concern for the welfare of all ranks, logical mind, extraordinary leadership, support by General Momyer at 7th Air Force Headquarters (despite Momyer's personal dislike of him), and despite micromanagement of the war at other levels from the White House down and rampant careerism throughout the USAF, he changed the face of the air campaign over North Vietnam. His assiduous analysis of intelligence, disregard for proforma solutions, development of tactics demanded by the real situation, and his success in getting the various wings working together in strike packages are a testimony to the man as an operational commander. It would be easy to race through 'Robin Olds' at the level of 'ripping yarn' and defiance of authority. But, the real story is to be found in Olds' reflective discourses. His trenchant criticism of the 'system', deep thought about command, insight into human nature, irrepressible humour, personal values and philosophy evidence a depth that escapes many who attain high rank.

Olds was eventually promoted to Brigadier General. Ever questioning and challenging, a maverick to the end, he retired in 1973. Olds died at home in 2007, his daughter Christina with him, surrounded in his mind (and soul) by the fighter pilots he had known so intimately, and had truly led. The piano tinkles, the beer swills, the crowd roars, his father says he's proud of him... Robin Olds 'has flown home'.

Richard Kelloway



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# Warrant Officer Norman Small- 460 Squadron RAAF, Bomber Command



The Mildura RSL RAAF Memorial and Museum has received an unexpected Christmas present.

It came in the form of a bequest of \$2,000 from the estate of Norman Small, former Deputy Principal of Ouyen Primary School, and a teacher at Kulwin when he enlisted in WW2.

According to Museum Historian Ken Wright, Warrant Officer Small was

a quiet modest man and the Museum did not learn of his heroic war service with Bomber Command until recent years.

A Bomb Aimer in four engine Lancasters of 460 Squadron RAAF, he defeated the odds and participated in 21 operations over Germany in 1944/45, including Bremen, Essen, Cologne, and Hitler's retreat Berchtesgaden. His captain and pilot was Flying Officer Murray Nottle, after whom his only son Murray was named.

Ken Wright was invited by his dear friend Helena Cattnach to give the RAAF eulogy at his Ouyen funeral. He told those present that Bomber Command aircraft destroyed enemy transport and manufacturing facilities with up to 1,000 bombers participating every night. "Our squadrons flew in all kinds of weather, encountered enemy fighters and heavy flak, and came back night after night in spite of losing up to 90 aircraft. No less than 55,000 crews of Bomber Command made the ultimate sacrifice, more than 4,500 being Australians. Of 60 Mildura and District RAAF fatalities world-wide in WW2, no less than 25 served in Bomber Command!"

After preliminary Army service, WOFF Small enlisted in RAAF aircrew and trained in Canada en-route to the UK. There he was stationed at Padgate, became friendly with a young lady dress-maker named Marjorie and there was an understanding they would marry.

However, he was posted to join 460 Squadron RAAF at Binbrook in Lincolnshire. There, an aircraft crash helped him to meet his future wife under strange circumstances. She was a Scottish girl from Carlisle, near Glasgow, named Elizabeth Fleming.

Norm related that he was upstairs in a cottage on the Base when he heard one of their aircraft approaching. It scraped the roof off the cottage and there was a huge blast. The aircraft was burning and ammunition exploding. Some WAAF's had been thrown into a ditch by the blast, and Norm found Lizzie dazed and confused. He rescued her, and they became close friends. At war's end before marrying her he had to write a

"Dear John" letter to his first love Marjorie telling her he was marrying Elizabeth!

Returning to Australia, Norman resumed his career with the Education Department, teaching at Bear's Lagoon, Red Hill, East Loddon, Kyneton, Manangatang, and Hampton. During the years 1960-72 he left the Department and taught at a number of private schools, including Brighton Grammar School and Hailebury College.

Norm and Elizabeth did not drive or own a motor car, and they arrived at Ouyen Station in 1977 with hand luggage and their dearly loved budgerigar! He had been appointed Vice-Principal of Ouyen Primary School and they were met by Helen Cattnach, beginning a warm friendship between the Small and Cattnach families.

As Helen said, Norm was a wonderful teacher, loved by his students, and admired by all privileged to work with him. Elizabeth died in 1993 and after her death Norm decided to write a book about British WAAF's, sending letters to many newspapers there seeking names and details of service life. The book was published in England, and was a success.

However, there is a twist to this tale! One of the letters began- "Dear Norm, Are you the same Australian airman that I fell in love with at Padgate RAF Station?" Subsequently, Norm and Marjorie resumed their close friendship. However, while neither would leave their home country, both crossed the world twice to visit and, during recent years, spoke on the telephone at frequent intervals.

By Ken Wright OAM JP

Chairman/Historian, Mildura RSL RAAF Memorial and Museum





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## RAAF links endure at Canberra Airport

Sir Frederick Scherger, the first RAAF officer to become Chief of Defence Staff and be promoted to the four star rank of Air Chief Marshal has been honoured at Canberra Airport with the renaming of the main thoroughfare into the Fairbairn precinct to Scherger Drive.

"It is important that we sustain the both the historical and contemporary links between Canberra Airport and the Australian Defence Force," Canberra Airport Managing Director Stephen Byron said.

"We are delighted that the current Chief of Defence Force, Air Chief Marshal Mark Binskin joined us to preside over the ceremony naming Scherger Drive."

ACM Binskin said during his flying days 'Scherger' was widely regarded as the RAAF's most outstanding pilot.

"He was awarded the Australian Flying Cross in 1940 for his exceptional service as a pilot and flying instructor. He was one of the few Australians to command American Air Forces and later, British Commonwealth Forces and brought significant operational experience to the role of Chief of Air Staff. After his retirement from the RAAF he headed the Australian National Airlines Commission and the Commonwealth Aircraft Corporation.

"It is fitting that a road in the airport precinct in our nation's capital will now bear the name of a man who played such an influential role in Australia's military and civilian aviation history."

Mr Byron said: "Scherger was something of a trailblazer – an exceptional airman, highly decorated and later an astute leader and quite visionary in his contribution to defence acquisition and strategic policy development.

"There couldn't be a more appropriate person to honour here at Canberra Airport and it adds to our close ties with the RAAF in particular and Defence and industry more broadly."

Some of those ties include: Canberra Airport funding the upgrade of the RAAF Memorial Grove in Canberra and a memorial site at Fairbairn; the naming of the David Warren Complex at Fairbairn in honour of the inventor of the black box flight recorder; sponsoring the Australian Business Defence Industry Unit (ABDIU); and sponsoring Air Force Rugby League and The Long Ride (a Defence motorcycle event raising money for Prostate Cancer, in which CDF participated last year).

"Canberra Airport's links with Defence are wide and deep. We are located at the geographic heart of defence decision-making in Canberra – 15 minutes from Parliament House, less than 10 minutes from Russell and Campbell Offices, and 20 minutes from HQJOC – and Brindabella Business Park is Canberra's defence industry hub where defence and industry come together with Department of Defence offices alongside those of the likes of Raytheon, KPMG, QinetiQ, Airbus Defence, Mediarware, and Cisco to name a few.

"Our biennial Open Day welcomes a large Defence presence typically including a hot air balloon, Defence Force Recruiting stand, Hercules aircraft on display, and an F/A-18 flypast.

"We are the only capital city airport in Australia to enable the community to get 'up close and personal' with these aircraft, free of charge, and thousands flock to the precinct to participate," Mr Byron said.



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