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# **INSIDE**

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### Editor

Mark Eaton wingseditor@hotmail.com PO Box 1269 Bondi Junction NSW 1355

President Carl Schiller OAMCSM

#### Vice Presidents Governance

**Bob Bunney Advocacy & Entitlements Richard Kelloway OBE Communications & Media** Lance Halvorson MBE

Secretary Peter Colliver natsec@raafa.org.au

Treasurer **Bob Robertson** 

### Publisher

Flight Publishing Pty Ltd wings@flightpublishing.com.au

### **DIVISION CONTACTS**

- ACT secactraafa@bigpond.com 0428 622 105
- NSW admin@raafansw.org.au 02 9393 3485
- QLD raafaqldpres@gmail.com 0417 452 643
- SA raafaad@internode.on.net 08 8227 0980
- TAS secretary@raafatas.org.au 03 6234 3862
- VIC office@raafavic.org.au 03 9813 4600
- WA enquiries@raafawa.org.au 08 9288 4710

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Front Cover: A Dakota about to take off from Binders Base, Mawson. A range of RAAF aircraft, including a DC3 Dakota, was based year round at Mawson from 1956-60. The aircraft were used extensively and successfully to survey over a million square kilometres of Australian Antarctic Territory, including the vast and remote Prince Charles Mountains. Photo, Ian Bird.

### **MATERIAL CLOSING DATES**

Winter Issue - 14 April Spring Issue - 14 July Summer Issue - 14 October Autumn Issue - 14 January





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# From the President's Desk

I am humbled and proud to take up the appointment of National President of the Air Force Association following the untimely passing of Brent Espeland last September. There have been many kind words written and spoken of his selfless contribution towards improving veterans' needs. My aim and that of the Association's National Board is to continue his pathway.

Very recently, the National Board agreed to strengthen the Association's appeal to veterans of all generations and to increase its focus on supporting former and serving Air Force members and their families. The Association's membership demographic comprises mostly older veterans who have different needs to the younger generations. The 'one size fits all' doesn't apply and, consequently, the Association will develop a suite of welfare and support policies, and programs relevant to all generations.

The Association has worked closely with government and its agencies to shape policies and programs that best support past, present and future Air Force members. It has achieved an excellent reputation for its work in this space and intends to adopt a 'hands on' approach to helping those who require assistance. It acknowledges there are many organisations currently providing support to veterans. The Association does not intend to compete, but work collaboratively with them. It will present an option of a support agency with extensive knowledge of Air Force work and lifestyle.

The membership is a kaleidoscope of air force experiences that can be shared at fellowship and other occasions, and it is through these experiences we believe the Association has the relevant understanding to support the Air Force family. The Association's executives have varied Service backgrounds: The President of the WA Division is an exwarrant officer whose predecessor was an ex-sergeant; the former President of the QLD Division was an ex-warrant officer; and the President of the NSW Division is an ex-warrant officer who has retired Star ranking officers on his State Council. Many other appointments are filled by retired officers and exairmen. The Association has female representation at the Female Veterans and Families' Needs Forum, and the Younger Veterans Contemporary Needs Forum. It welcomes the opportunity for greater female representation at all levels of management, not just to achieve gender equality, but to ensure the Association that strives to support the Defence and wider-communities has a balanced perspective.

The Air Force Association has been introverted about telling the Defence community of its work towards improving veterans' benefits, and so it intends to ensure our former and serving members are well informed of the assistance it can provide. The Association recognises the sacrifices made by the members and their families to protect the peace and safety Australians enjoy today.

Carl Schiller, OAM CSM National President

# Call for the Commonwealth Superannuation Corporation to be included in The Royal Commission into misconduct in the banking, superannuation and Financial Services Industry

The Government advised the Royal Commission would consider the conduct of banks, insurers, financial services providers and superannuation funds. However, the Royal Commission's Terms of Reference excluded the Commonwealth Superannuation Corporation (CSC) from the inquiry. The CSC administers military and superannuation funds for over 700,000 people, including 230,000 serving and former serving service personnel, and clearly plays a significant role in the well-being of our Service colleagues and their families.

There have been many wide-ranging criticisms of the CSC's operation, and so the Returned & Services League of Australia (RSL) and the Alliance of Defence Service Organisations (ADSO) have issued a Joint Media Statement calling for the CSC to be included in the Royal Commission's examination of these institutions. The Air Force Association supports the 'call' and considers at the very least, the CSC's inclusion should provide the transparency expected from the inquiry. Members who may have experienced issues with the CSC are encouraged to provide comments to info@veteranclawback.com.au or ComSuper-Military Entitlements at pb250571@gmail.com.

Carl Schiller, OAM CSM National President



View the ADSO web site: URL http://adso.org.au/

# **ANTARCTIC PILOT**

Extracts from the 1960 diary of the late Ken Assender

**Transcribed by George Cresswell** 

### Foreward

The last time the RAAF had a wintering contingent with aircraft in Antarctica was at Mawson in 1960.

The members were:

SQNLDR JC Kichenside (Co-Pilot), FLTLT E A Bloomfield (Navigator), FLGOFF G Dyke (Pilot), FLGOFF K Assender(Pilot), FLGOFF N W Hanson(Signaller), FSGT H V Carne (Engine Fitter), SGT K Felton (Engine Fitter), SGT R D Murphy (Airframe Fitter), SGT H B Harris (Airframe Fitter), SGT J T Arthur (Electrical Fitter), SGT D V Monks(Radio Fitter), SGT B P Rutter (Instrument Fitter).

They operated two aircraft - a Dakota and a Beaver. Incidentally, John "Smoky" Arthur, was the Mawson Station Fire Warden.

Through 1960 they flew many aerial photography and supply missions. The team faced successive challenges, such as loading the Dakota, wings removed, on the foredeck of the Thala Dan. unloading it onto pontoons to be floated ashore at Mawson, fitting the wings (300 or so nuts and bolts for each one) with the wholehearted assistance of all station members, operating the aircraft in the cold, and, finally, the destruction of both aircraft in a terrible blizzard that ended RAAF involvement over winters with ANARE.

The RAAF did operate single engine aircraft in the summers of 1961-62 and 62-63 but from then on the work was done by various contractors.

Alf Argent, the Aviation Officer at the Antarctic Division, had the article "The Antarctic and Australian Aviation" published in the ANARE Club's journal (Aurora, March 1986). It gives excellent details of aspects of RAAF activities at Mawson in 1960.

I was at Mawson in 1960 as a young scientist and it was a privilege and education to have the RAAF as part of the experience. One of the three pilots was Ken Assender, then 22 years old, and I recently went to see his widow, Diana. Ken died in 2006, and Diana,



The RAAF contingent at Mawson 1960. Photo: Geoff Newton

like many of us older folk, are facing up to down-sizing.

I asked if she knew whether Ken had a diary from his year down south. She produced it in no time at all and I took it home to take a look through it.

Ken was one of those blokes who never big noted himself. With difficulty one can put together the following: After Mawson and the RAAF he'd gone on to do things like fly a De Havilland "Dove" for the NT Department of Health (operating the Flying Doctor Service), become Australian Airlines' senior Boeing 737 pilot, lose his job when Prime Minister Hawke fired all of Australia's pilots during the 1989 dispute, act as navigator in numerous Sydney to Hobart yacht races, work as a tax consultant, volunteer at the Antarctic Division photography section, train pilots in simulators at Tamworth and work for Hobart Coastal Radio as a volunteer.

Ken's diary entries were brief and to the point but seemed to capture most of what took place at Mawson - in fact many things I was unaware of or had forgotten.

Here are a few;

**3 May:** "We went back to Rumdoodle today and finished the six tie down holes to a depth of 4 feet by lunchtime. If the Dak pulls these tie downs out I will be very much surprised. In fact if anything short of an atomic explosion moves them I'll be surprised." The holes were into the ice-GC.

**9 June:** "A lecture on the Aurora from George Cresswell this evening. He did not tell much that people did not already know." The story of my life-GC.

**13 June:** "Harry nearly blew himself up with a hydrogen bottle. He was screwing the cap on when it blew out right next to his face. He got a few bad caustic burns and a small scratch but otherwise is ok."

I would like to focus on his entries over four weeks during November-December 1960.

Two tractor trains left Mawson in August and travelled 300 miles south to a featureless area surrounded by the Prince Charles Mountains, and the trains, with several tents, became Binder's Base. En route temperatures as low as -58 C were encountered and one tractor fell into a crevasse and took four days to extricate.

The Dakota was used to ferry expeditioners to and from Mawson. Geologist Ric Ruker, Nev Collins and Ian Bird carried out a very trying one month journey with dog sled and a Weasel (a vehicle, not an animal) to the mountains in October-November. It was cold at -40 C and the Weasel broke through a snow bridge over a crevasse and took two days to recover.

At the same time Bill Kellas and Oleg Zakaroff, in separate little wooden caravans out there on the cold Antarctic plateau for six weeks, took weather observations and ran radio skeds, while the snow drifted up to roof level. Bill was nursing what turned out to be a cracked tibia from a fall on the sea ice at Mawson while carrying a barometer to the Dakota. The barometer was unhurt. He didn't think the pain was anything serious.

The RAAF team moved with their aircraft into caravans at the base they named Rumdoodle (after W.E.

Bowman's book "The Ascent of Rumdoodle") about 30 km inland from Mawson on 6 December. After a truly major blizzard overnight they awoke on the morning of 9 December to find the Beaver destroyed and the Dakota had snapped its tie downs and blown away.

Ken's diary entries follow and l've included photos, a map, satellite images, and an expansion from Syd Kirkby related to Ken's entry at the end of 3 December, together with a couple of Syd's photos at the Mawson Escarpment and the Lambert Glacier. Syd also identified the mountains mentioned in the captions.

## Ken's diary entries, November-December 1960

### 25 November

"Spent the day at Rumdoodle fixing up the camp before we move up there in the near future."

#### 26 November

"Made a flight in the Dak to Amundsen Bay for a pick up. We made two landings at Rumdoodle. The wind was coming out of the mountain and it was very turbulent. Had quite a bit of trouble controlling the aircraft on take off."

### 27 November

"Didn't wake up 'til 2 pm today and not feeling 100%. The Ruskies also arrived in an IL12."

### 28 November

"Most of Mawsonites were suffering from overdoses of Russian de-icing



The Dakota being towed ashore on its raft of pontoons by Thala Dan's boat. Photo, Ken Assender

fluid that they had been drinking the day before. The Russians didn't get away today (which was expected anyway). I put on a movie for the Ruskies during the afternoon and a slide show of Australia during the evening, before another film."

### 29 November

"The Ruskies got airborne not long after the Dak. The Dak did photo run 2H then returned to Mawson as cloud started to close in."

Fly to Binders Base 300 miles south **30 November** 

"After waiting around all morning for the weather inland to improve we got the ok at midday. After lunch the Dak got off with all the lads and gear, but twenty minutes out the port donk started vibrating so they returned to Mawson. The maggy was 20 degrees out. This was fixed and the Dak left again at about 6:30 pm followed about an hour later by myself and Kirkby in the Beaver.

There was a fairly strong southerly wind which cut our ground speed down to 60 knots. They made the trip into a five hour one arriving there at 12:30 am. While we were tying the Beaver down the rest of the boys put up our tent. We had a quick brew and then hit the bunk although the sun was still well above the horizon."

Syd Kirkby said about the scene: "Looking South and the mountains are, right to left, eastern flank of Mt Menzies, Mt Scherger (behind and partially obscured by), Mt McCauley and the low dome of Mt Dummett (Mt Ruker visible behind)."

### 1 December

"Slept through until about midday when everyone arose for breakfast. The Beaver was very difficult to start as it may have been I was unused to starting it in such low temperatures -23 C. However, after refueling and a bit more engine trouble (it was mostly carby icing I found out later) I carried out a recce with Geoff and Ric to Goodspeed Nunataks and Mt Menzies.

The operating conditions are not all one might want here. To start off I am my own servicing team. The runway is sastrugi up to about 15cm with a larger sastrugi if you happen to overrun. There is a constant drift snow, sometimes up to 4m high."

#### 2 December

"It seems to be the thing down here to sleep through until around midday. It was cold last night -26 C. Went to carry out the daily on the Beaver and the



Ric Ruker and Neville Collins assessing a problem. And then the dogs decided to have a fight. They did recover the Weasel after a couple of days. Photo: Ian Bird

oil was damn near solid. The weather closed in anyway and no flying was possible. At one stage it completely clouded over in a matter of 5 minutes.

Helped dig four sledges out for the homeward journey. Two of them were down a metre and a half in the snow. The barge caravan, which you couldn't quite stand up in, and its sledge are completely covered with drift snow. It is used as the radio shack and meal house."

### 3 December

"The usual rising time; it must be the height (6500 feet) which makes your sleep so good. A perfect day so I set off for the Mawson Escarpment with Syd and Ric (surveyor and geologist respectively-GC). We found a landing spot ok fairly close to the southern end. The Lambert Glacier is really something to behold as it is just a mass of tortured ice flowing steadily out to the Amery Ice Shelf. The escarpment is also a most impressive piece of rock, just about every colour you could think of in the rocks.

We were on the ground about six hours with Syd getting astro fixes. Ric was away most of the time cracking a few rocks.

While we were on the ground the Dak flew overhead on a photo run and we had a talk on the radio. They told us Henk (OIC) had lost the jeep through the sea ice.

On the way back we had quite a bit of engine trouble, which is not the best for the nervous system over that tiger country."



Ric Ruker and Neville Collins assessing a problem. And then the dogs decided to have a fight. They did recover the Weasel after a couple of days. Photo: Ian Bird

Syd, in May 2017, felt he should expand on Ken's last sentence:

"We landed on a small area of stagnant ice in an embayment on Mawson Escarpment and it was a pretty snug fit. The 80 km wide Lambert Glacier is a maelstrom of torn ice on which you would struggle to land a helicopter even if you had a couple of hours fuel reserve. It is utterly bloody insane.

This region is a comparative billiard table compared to the area around where we crossed - and is less than half as wide."

"To get back to Binder's, Ken deemed it prudent to get a bit of altitude under us before the crossing. We climbed to (from memory) about 8.000 ft, say 5000 or so feet above the glacier and headed out towards Binder's. Our smug feeling about the good jobs we'd done at the escarpment along with the easy banter went right out the window about seven or so minutes into the crossing when the engine began to run as rough as a chaff cutter. Ken immediately did his pilotly things without result and then turned back to our little bit of stagnant ice safe haven near the escarpment. As we descended, the engine ran progressively better until by the time we were over the haven, the ONLY possible landing spot in God knows how far, it sounded just like a bought one."

"Ken circled for a few minutes, declared that the engine had now settled, climbed back to full altitude and headed out again. About five or so minutes later the trouble recurred.

This time we landed back at our haven and Ken climbed all over the aircraft looking for a possible source of the problem. None.

Start engine, some Swiss watches run less smoothly. Climb to about 8000 feet and head out, this time knowing that there was now only enough fuel to go direct to Binder's, no stuffing about. And it continued to run like a Swiss watch all the way home, and it only took a week or so for my aching, overstressed anal sphincter to unclamp."

I quote Ken "....which is not the best for the nervous system over that tiger country. All hail the new King of Laconic."

### 4 December

"Up at 12 noon, the normal breakfast and then flew Ric and Neil to Goodspeed Nunataks but could not land due to the ground being about 7300 feet high. Gave him a close inspection of a couple of outcrops then returned to Binders to refuel. During the trip I got the Dak on the radio. It was coming to do a photo run then land at Binders and pick up dogs, gear, Ric and Bill Dick and return then to Mawson.

After refueling with Syd and Neil as passengers we flew back to Mawson. The take off was again hairy. The plugs went this time I think. Anyway we made it out but the donk was still a bit rough. When we got back to Mawson we had about 150 rev drop on left magneto. The Dak got in half and hour after us.

While we were unloading the Dak, Henk slipped on the ice and fractured his ankle."

#### 5 December

"Did my usual preflight on the Beaver and then flew to Rumdoodle for the summer.

I am wearing all the clean clothes for the months stay up here at the moment. Should smell good when I return to Mawson."

The RAAF team gets set in its own base at Rumdoodle - a big summer program in front of it

#### 6 December

"No flying today. Finished off the monthly returns but cannot type them as the large typewriter is still down at Mawson. The caravans have now been rearranged here. I am sleeping in a three man one with Jim and Bruce Harris. There are two more four man sleeping vans and two in the radio van. We have a community cook house in the old workshop caravan which has turned out quite successfully so far."

### 7 December

"Made an attempt to fly a couple of photo runs in the Dak today but the wild camera could not get any suction so we had to return to base. After lunch, flying was cancelled and we spent the afternoon doing a few odd jobs and reading. Am now on my second book since arriving here.

Eventually they got Baz on the camera and he found that it was a suction leak which he remedied. Jim had to do a couple of trips from Mawson in the Beaver bringing gear, etc up."

### 8 December

"GD and Avro erected the wind fence that had been prefabricated at Mawson. Jim arrived up here with the Beaver, which was tied down behind it. When he came up he brought a couple of bottles of home brew that we knocked off before dinner. After this we went to



Beaver on sea ice, Mawson station. SGT Felton moving away with eagerness having done his job getting it ready to fly,16 April 1960. Photo George Cresswell.

bed and slept like logs. A blow came up during the night."

Powerful blizzard destroys Beaver and carries away Dakota

#### 9 December

"When we woke up in the morning we were really in the middle of a blizzard. The caravan was rocking and rolling.

About 10 am five of the boys went out to the wind fence on a sledge towed behind the D4 - our only mode of mechanical transport around here. When they arrived they found the Dak had broken away and could not be seen.

The tie down points on the Beaver had come off and it had flipped over on her back, minus wings. All in all, not a very good picture.

They went out again in the afternoon and found the Beaver had now also gone, and the workshop caravan also was missing.

We could not get through to Mawson on any of the skeds to give them the story, but on the 6:15 sked we managed to get a few words through. The blizzard was really bad all day; most of the caravans moving, even though they are guyed."

As Tim Bowden reported in "The Silence Calling", Kevin Felton up at Rumdoodle noted in his diary full fuel drums, upright and weighing about 160 kg, were being blown across the ice at walking pace.

Meanwhile, at Mawson weather observer Harry Munstermann recalled in May 2017 there was a wind gust of 120 knots that shook the met hut while he was in it. All day the wind speed was 80 to 85 knots. What was unusual was there was no drifting snow and so the anemometer didn't get clogged up. He could see empty wooden boxes and fuel drums flying through the air.

Harry felt reasonably sure the Dak wings were secured with two seven tonne breaking strain cables, while the fuselage had a 10 tonne cable.

Graeme Currie reported in May 2017 with the Dak, "...cables were torn apart and only the frayed ends were left going into the ice."

#### 10 December

"The weather had cleared a bit although it was still snowing and quite a lot of drift about. We got the whole message through to Mawson about 11 am.

We just waited around for the weather to clear so we could go out and start a search for the Dak.

It seemed to clear around 7 pm and the boys set out in the sledge towed by the D4 to see what they could find. Ted and Smoky had been out to the wind fence previously and found a few things out of the Beaver. Just before they left Smoky was up on a ridge behind the camp and he said he could see the Dak a long way off. She seemed to be right side up although in a slot or something. They did not find the Dak. They found the workshop caravan, which could have been what Smoky saw. They arrived back around 1:30 am."

11 December

"Wind and drift all day."



Syd Kirkby and Ken Assender at the Mawson Escarpment "haven". Syd was observing a daylight star for a position fix, a technique that he had used semi-routinely in during 1956, his earlier time in Antarctica. Syd says he was encouraged and guided by Hymie Spigl, WA Government Astronomer. Photo: Ric Ruker

### **12 December**

"Still blowing fairly hard around 40 knots. Neil, Terry and Ian went for a walk along the sea ice to the Dak. They tried to bring some gear back but the wind was too much for them so they let it go. (Ted's nav bag and a radio. Both recovered later by sledge.) Did a bit of typing, catching up on old stuff."

### 13 December

"Wind still high. Went to the hangar in the morning but nothing doing so didn't bother in the afternoon. Tried to get a case of beer out of Ralph today, am running short and he still has about four dozen but refuses to sell or trade any. Says he is going to take them home."

### 14 December

"The boys arrived back from Rumdoodle today although there is still a lot of drift about."

### **15 December**

"Left this morning at 11:30 for Ringoya where we are setting up a base camp for salvage operations on the Dak. The Dak is about 2 miles further down the coast. Walked most of the way to Ringoya, and then got a short trip on the motorbike then walked around to the Dak. It is on an ice cliff around 300 feet above the seaice on a fairly steep rise. 960 feet of rope and a sledge was used to lower the gear to the sea ice where is was loaded onto a dog sledge and towed behind the motorbike to Ringoya. We finished about 10 pm then walked back to Ringoya where we had a meal and settled down for the night."

### 16 December

"We got to bed around 3 am with 5 comfortably in a polar pyramid tent. Just before going to bed the sun was streaming above us out onto the icebergs; they were a glorious golden colour.

Climbed out of the bunk around 11 am, packed all the gear up then started walking back to Mawson. Most of the boys were exhausted when they arrived back. Heard that the government had cancelled next year's RAAF for Mawson."

### **17 December**

"A very relaxing day. Typed out my report from Binders.

There was nothing except rum punch to drink. Did not touch a drop due to what happened the last time the Russians were here. Hit the bunk early."

#### 18 December

"Out of the bunk around lunch time after a good rest. Cleaned out my room after lunch, which really needed it. Got together a few items for RTA (return to Australia)."

### 20 December

"Jim and a few of the boys went to Rumdoodle and picked up a few things such as salvageable equipment from the Beaver and the Dak tie downs for examination."

#### 22 December

"The wonderful job of slushie again came my way today but it was relatively easy with not one argument with Ralph." - the cook, GC.

### 23 December

"Bill and Harry went to the Dak today on the motorbike and carried out their own salvage operation. They returned with a haversack full of gear."

### 26 December

"Got out of bed at midday. Then after dinner they got us cutting up a few seals, was nearly sick with the smell, not the best on a day after."

### Postscript

The loss of the Dakota meant the crew bringing the two Caterpillar D4 tractor trains back from Binder's Base to Mawson (Newton, Jennings, Hill and Cresswell) didn't have enough fuel to get home.

Navigator/engineer, Jennings, located an old fuel depot so one train could get home, but one D4 and train was left 180 miles from Mawson.

In April 1961, with rapidly shortening days, and perhaps unwisely, a party of five in four vehicles set out from Mawson to recover the 1960 tractor train.

They had a succession of engine failures after 50 miles or so and finally had to leave their vehicles. They beat a retreat with sleeping bags and only chocolate to eat in awful conditions and were extremely lucky to get back the 37 miles to Rumdoodle after 36 hours, with one sleep in the open.

One person had frost bitten feet.



Beaver flying over weather observer Bill Kellas. Crevassed area near Mawson where some expeditioners went to test their ice skills on Sunday afternoons, 3 May 1960. Photo George Cresswell.



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# TWO WAY LESSONS

# F-35 and F-22 teach each other new tricks

A dozen years after the F-22's operational debut and two years after the F-35 was declared ready for combat, the flow of lessons learned is running both ways.

![](_page_15_Picture_3.jpeg)

The new F-35 helmet offers a wealth of information—and options—to pilots. Michael McCool/USAF

At the outset of the F-35 Joint Strike Fighter program, there were high expectations that it would benefit from lessons learned from its elder stablemate, the F-22 Raptor, also made by Lockheed Martin.

Now, a dozen years after the F-22's operational debut and two years after the F-35 was declared ready for combat, the flow of lessons learned is running both ways. The two fifth generation fighter programs are working together to reduce costs and make both systems more effective.

The F-22 has been a pathfinder for the F-35: Its formations and methods of employment are a model for the junior fighter. In return, the small F-22 fleet is gaining economy-of-scale benefits by getting in on parts buys with the far larger—and growing—F-35 fleet. More advanced and hardier stealth features on the F-35 are working their way back to the F-22, the two aircraft share radar features, and operational and manufacturing experience with the F-35 are helping define upgrades for the Raptor.

"The F-35 and F-22 were always meant to operate alongside one another, so it makes a lot of sense to apply that same logic to the programmatic side of both platforms," said Lockheed Martin F-35 program manager Jeff A. Babione. "We're constantly taking advantage of newer, more advanced technologies and processes. If we can apply the same advances to the F-35 and F-22, we drive costs down and pull schedules to the left on both programs."

The F-22 pioneered fifth generation tactics and those are being applied straight to the F-35, according to Col. Paul "Max" Moga, commander of the 33rd Fighter Wing at Eglin AFB, Fla. The 33rd trains new F-35 pilots, but Moga spent years in the F-22, as an instructor and demonstration pilot and later as a squadron commander, after starting out in F-15s.

Regarding employment techniques on the F-22 and F-35, "I would describe them as a direct transfer," Moga said. In the F-22, the key to employment is "managing signature, sensor, and what we refer to as 'flow,'" which he explained is how the plane and pilot sense the battlespace, steer between threats, and get into the optimum position to engage. That same concept applies to the F-35, he said.

Though fourth generation aircraft pilots have to manage visual and infrared signatures, "it's not until you get in the fifth gen world that you really concern yourselves with radar signature management. ... That is a core competency of any fifth gen platform, and that is a direct transfer over from the F-22 to the F-35." Pilots of both jets must "manage our signature as we employ the aircraft and optimize our survivability and lethality," Moga said.

The F-22 was a "generational leap" over fourth gen fighters such as the F-15 and F-16, and it took a conscious shift in culture to shed old tactics that were no longer relevant when the F-22 came online, he noted.

In a fourth generation jet, a wingman must provide "mutual support" within visual range, "welded" to the flight lead just a few miles away. But "pretty early on in Raptor tactics development, we realized that, based on the capabilities of the airplane, we didn't need visual mutual support. We needed a mutual support by presence, which, for us, can be upward of 10, 15, 20 nautical miles away from one another," said Moga.

For a former fourth gen pilot who has always depended on someone close by

having his back, "it takes a while to get used to that," Moga said.

# **GROWING UP FAST**

Now, in the F-35 as well as the F-22, "we train our younger wingmen to operate outside the visual [support] environment, which means they have more responsibilities on their shoulders." They have to grow up fast, Moga said.

In both jets, "our young wingmen are making tactical decisions and executing accordingly at a level that historically, in our fourth gen fleet, we would not expect out of them until they were a seasoned flight lead, if not a mission commander or instructor pilot," he assessed.

Fifth gen pilots have to "get up to speed a lot quicker because when they're by themselves, the consequences can get dire if they make an improper or incorrect tactical decision." There's no "safety net" of "somebody being two miles away from them that can clean somebody off their six o'clock," he noted.

This is all made possible by the extraordinary sensor capability in both aircraft that draws information from both onboard and offboard sensors and from the sensors of their wingmen's jets. "You no longer need four ... or eight sets of eyeballs to scan the horizon and look for threats and put together the tactical picture that you need to execute. ... The aircraft does all that for you," he explained. In fact, it's so much data that sometimes "it's more than you need."

The airplanes' missions are complementary. The F-22 is primarily an air superiority fighter with ground attack capability, while the F-35 is optimized for attack, with dogfighting capability as well. By remaining unseen and undetected, the F-35 can use the stealth dogfight tactics already well-established by the F-22, though perhaps not to the same speeds and altitudes.

One mission not shared between the two is close air support. Moga said CAS is a new one for him to learn. Though early on the F-22 units did try to practice CAS, Moga admitted that "we kind of got off track back in those years." Since then, the F-22 operators "got back in our lane and realized there were other platforms that were really optimized for that mission far more efficiently and effectively."

The F-22 has been a success story in Operation Inherent Resolve, Moga asserted. Though its high-end dogfight capabilities have never been tested in combat, "I think the F-22 has performed tactically better than most people thought it was going to in theater." When not "gainfully employed," dropping bombs or escorting packages of other aircraft, the F-22 has proved stellar in other ways, putting together "the electronic order of battle, ... the airborne order of battle," and then conveying that information "back to the platforms it may be more applicable to."

A lesson learned—and one certainly being applied on the F-35—is "the importance of maintaining accurate and up-to-date mission data files," Moga noted. This is another area where exhaustive information on regional threats is applicable to both airplanes. The software facility that loads both aircrafts' mission data files is at Eglin. USAF and partner nations collaborate to populate the databases with every threat known to intelligence.

"There's a lot of work to be done, and it's a fast-moving ball game, but we're making a lot of progress," he said. Still, "we've got a little ways to go before we can raise the flag and say we're where we want to be," Moga added.

The F-35 pilot wears a helmet that shows practically all aircraft, environment, and target data, but this capability came along after the F-22 was designed. While it would be impractical and expensive to backfit the F-22 fleet with the "see through the floor" electrooptical systems on the F-35, "most of the pilots flying [the F-22] would like ... some version of a helmet" that displays data and allows the full use of more advanced weapons, Moga asserted. Both jets can carry the AIM-9X short-range dogfight missile, for example, but only the F-35 can aim the missile far off-boresight (at a high angle off the nose of the airplane), because the missile can be cued by the pilot simply looking at the target and designating it. Lacking a targeting helmet, the F-22 can't employ that tactic.

The F-35 helmet is "a game-changer," Moga asserted. Besides offering the offboresight shooting capability, "there's also other utilities they can use it for now that they have an air-to-ground-mapping SAR (synethetic aperture radar) ... capability."

The helmet and cockpit displays in the F-35 also offer "many more options" for calling up and displaying information. Though for an "old guy" like him, the wealth of displays and information can be "overwhelming," Moga said, young pilots take to it quite naturally.

"When I watch their tapes in the debrief and I see how quickly they're changing their displays from this to that and spending half a second to get just what they need and then flipping back ... it's pretty phenomenal." The young pilots were reared on "Windows and Playstation," he noted. A new helmet is on the short list for F-22 upgrades.

# **STEALTH ARMOR**

The stealth coatings transfer between the jets is "one of the larger success stories" in the crossplay of the F-22 and F-35, Moga said. "The coatings and

![](_page_16_Picture_20.jpeg)

SSgt. Anthony Ovechka inspects an AIM-9X missile on an F-22 at Hill AFB, Utah, during a Combat Archer exercise in 2016. R. Nial Bradshaw/USAF

![](_page_17_Picture_1.jpeg)

Airmen prep an F-35 for a night flight at Luke AFB, Ariz. A1C Caleb Worpel

surfaces on the F-35 are a direct result of the lessons we learned with the ... LO (low observability) management on the F-22."

The coatings on the F-22 were "very problematic" for a number of years because the F-22's stealthy surfaces still require a degree of putty and tape to smooth the surfaces. On the F-35, though, the stealth treatments "are exponentially easier to maintain, sustain, and restore," he pointed out.

"It's easier for the maintainers to fix the aircraft, it's quicker, and we have a much more accurate tool" to assess the normal degradation of stealth surfaces and its effect on signatures. Now, Lockheed is looking at ways that it can apply the F-35's resilient stealth coatings to the F-22. If successful, it could sharply reduce maintenance man hours per flight hour and result in more jets being available for action at any given time; a significant benefit considering the smallness of the F-22 fleet, which numbers only 187 airplanes, including test and training birds.

"We're now making a more concerted effort to apply what we've learned on the F-35 to the Raptor," Babione said, "as we continue to develop and upgrade both platforms."

The F-35's stealth coatings have held up far better than those of the F-22 in the "salt spray, ocean environment, high humidity" conditions of the Florida coast, said Ken Merchant, Lockheed's vice president for the F-22 program, in an interview with Air Force Magazine. "We're looking at taking Jeff (Babione's) topcoat from the F-35 and bring that over to the F-22," he said. This would "add a bit of weight, because it's a little heavier material, but it's spread evenly over the airplane so it doesn't cause me a CG (center of gravity) issue." Whether the Air Force will approve the change in materials is still "pre-decisional," Merchant said, but it offers a potential payoff in substantially reduced maintenance costs.

Though the F-22 would still need some caulking and taping, it's already benefitting from a new leading-edge material. The old stuff "got real brittle over time," Merchant said, but the new material is "just more flexible and durable." It goes by the name "maximum toughness boot." It was partly developed at the F-35 program, "and they've got something very similar." Lockheed has opened a "speed line" at its Marietta, Ga., facility to replace the old material with the new.

Getting the F-22 and F-35 sharing technologies is "a drum I've been beating since I got here," said Merchant, who retired from the Air Force as a major general in 2014. He worked on F-22 utilities development in the mid-1990s and headed the Air Armament Center at Eglin AFB, Fla., among many program management duties in his career.

He sees opportunities in common software—made possible by an open systems architecture for both the F-35 and F-22—new common processors, the new radar waveform, and in economiesof-scale on parts.

"When I got to Raptor, if I go to a vendor and say, 'Hey, I need 187 of these [parts], plus spares,' I get a price tag that's pretty high," he said. "And when Jeff goes to them and says, 'Hey, I need 2,000 plus spares, the price comes down a lot.'" Combining orders for parts on things like "auxiliary power units, ... environmental control systems," and many other basic utilities can save big dollars, Merchant asserted.

On every new order, he asks, "Is there a way we can get a lift off each other, here?" The opportunities to do so are multiplying, he said, because of diminishing manufacturer syndrome: An increasing number of cases where the original vendor pulled out of the business to pursue something more lucrative or just because technology has moved on. In those cases, the two programs are looking for common replacements.

The benefit of adding the F-22's parts needs to those of the F-35 approaches "10 percent," Merchant reported.

Both programs are pursuing open mission systems with sharing of parts in mind. "At some point," he said, the aircraft may be able to swap circuit cards and both use the software that drives them. An upgrade to the software-based radio on one, for example, could, with little or no tweaking, work on the other. Eventually, "everything's plug-and-play, for the most part." They will also be able to use commercial cards, which will drastically reduce the cost, again, because of the economies of scale.

"The radar's probably the biggest win we've had so far," Merchant said. The two jets using a common waveform, but he could not go into detail except to say that they now share "some software and functionality" of the radars, particularly in ground-mapping mode.

The two jets still have different electronic architectures, but "the stuff that's pumping out of those TR (transmit/ receive) modules is very much the same." Electronic warfare capabilities are similar and eventually could use the same hardware as well.

In self-protection, the aircraft can share common flares and magazines, "common EW," or electronic warfare systems, but mostly in the utilities, such as avionics, subsystems, hydraulics, and interfaces for weapons.

Merchant also said a new helmet

will advance the F-22's capabilities, and he's looking to redo the cockpit as part of an F-22 "midlife update."

The flat panels in the F-22 cockpit were cutting-edge when they were built, but compared to modern flat screens, they are thick and bulky. Merchant sees a chance to replace them with an F-35like display thin enough that the new processors could fit right behind them, allowing easier service and freeing up space elsewhere on the airplane for growth mission hardware.

"It's lighter, and I have a shorter wire run" to do the new displays, he said. "I have a team looking at what the pilot interface would look like" in an upgraded Raptor cockpit.

# NOT EVERYTHING TRANSFERS

One thing the jets could not share is the F-35's electro-optical targeting system (EOTS), the diamond-shaped wedge under the F-35's "chin" that provides many of the visual and infrared sensors other jets must carry in pods. Though the Air Force is considering an infrared search and track (IRST) system for the F-22 to help it better see stealthy adversaries, Merchant said, "we really don't have the real estate" in the same

location on the F-22. "We're looking at other options." He was unable to elaborate due to classification.

In cooperation with the Air Combat Command, Merchant said, Lockheed is looking at trying out some new capabilities for the F-35 on the F-22 first.

"I can get things on the jet much quicker," he said, "because I don't have to do the negotiations with the foreign partners" to wedge an improvement into the already-robust F-35 Block IV program. Babione can lend Merchant some engineers "that would work on my team with the uniqueness ... maybe there's ... an extra connection, some bit of software," that would have to be finessed, but both jets could use the result.

A small number of F-35s could then be tested with the improvement, and if it works, it could be deployed on the F-22 first as the F-35 production line is adjusted. "And you save a whole lot of money," Merchant insisted. Otherwise, with two engineering and production teams—unlikely to come to a common solution—"the Air Force is spending twice to get that same capability on two jets."

Babione said the fifth gen synergy doesn't stop between the F-22 and F-35. "There will absolutely be more technology sharing across various Air Force programs," he said, noting that fifth gen technologies are migrating to the company's T-50A candidate for the new Air Force trainer, its JSTARS recap offering, "and other Skunk Works efforts," referring to the company's advanced technology shop. Merchant said that, although Lockheed has not vet been asked, it's possible the Air Force will request it to collaborate with Northrop Grumman on the service's other fifth gen aircraft, the B-21 bomber. An antenna designed for the F-35, for example, proved a perfect "drop-in" fit for the B-2 and will soon be fitted to the F-22.

"We'll see more of that moving forward," Babione said.

"There are incentives—financial and otherwise—for everyone involved here to find more synergy across programs. Synergy between the F-35 and F-22 is a good example, but certainly not the only one," according to Babione.

### Courtesy John A. Tirpak Editorial Director Air Force Magazine

Main picture: An F-15 (top), two F-35s, and two F-22s fly in formation over the Nevada Test and Training Range. USAF is looking to field systems that will aid communications between fourth and fifth generation fighters.

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# Waterlea Walloon gives RAAF Keys to Queensland

Quickly taking shape as one of the most anticipated masterplanned communities in the City of Ipswich, Waterlea Walloon is providing a place for members of the Australian Defence Force stationed at Amberley to call home.

Waterlea is a \$350 million residential development being built to incorporate 1,500 new homes, with residential blocks of up to 800 square metres.

Post-launch sales have already hit the \$28.4 million, but with the expanded RAAF base at Amberley only five minutes away and the population of the Walloon/Rosewood Corridor predicted to reach more than 40,000. Waterlea Development Manager Andrew Cook said there is still more than enough opportunity to secure a spot in the growing estate.

"We really are in a unique position to provide Amberley base personnel and the wider community with the entire lifestyle," Mr Cook said.

"Its location provides a peaceful country style of living with natural attractions perfectly suited for families, but we haven't needed to sacrifice creature comforts for this experience.

"Waterlea is also within close proximity to Ipswich and is well connected by roads and transport to Brisbane, Queensland's capital," he said.

Ipswich is located only 10 minutes away from Waterlea by car while Brisbane is 45 minutes, and both city centres are connected to a train line

![](_page_19_Picture_8.jpeg)

which is less than a kilometre from Waterlea's front gate.

"Waterlea is the closest masterplanned estate to the Amberley base, making the perfect option for service men and women who are looking for a new home for themselves or for their families," Mr Cook said.

The community's 1,500 homes will be spread across 13 distinct residential neighbourhood precincts, and complemented by several kilometres of cycling paths and hiking trails.

Waterlea will also feature a refreshing serpentine creek and grand parklands, accompanied by a central business hub with café, childcare and health and wellness offerings.

Amberley base staff who enjoy the outdoors will also benefit from an array of fitness stations and barbeque areas.

Mr Cook said a Waterlea home was a sound investment option for buyers due to the \$40 million being spent on infrastructure services for the Walloon region by local authorities.

"Our estate will be the first of many as population and amenities continue to grow, so it truly is a 'ground floor' situation before the market reaches heights unknown."

Waterlea land is priced from \$161,000 with house and land packages available from \$343,500, resulting in a price difference of up to \$50,000 for larger blocks compared to competing estates in the area, which are a similar distance from lpswich and further from the base.

Waterlea is located on Rohl Rd, Walloon, and is open for inspection daily from 10am-5pm. Visit www.waterlea. com.au.

![](_page_19_Picture_18.jpeg)

![](_page_20_Picture_0.jpeg)

# a refreshing NEW ADDRESS

Discover Amberley's closest master-planned residential estate. The perfect place to build your dream home.

Hallmarked by a serpentine creek and verdant landscapes that flow through the entire neighbourhood, a vibrant village hub and grand parklands, it's the perfect place to build your dream home and a beautiful future.

# Big Blocks & Greener Streets from \$161,000\*

Register your interest now at waterlea.com.au and to find out more about our special offers for the RAAF community.

Sales centre open 7 days, 10am to 5pm. T. 1800 996 752 62 Rohl Road, Walloon

![](_page_20_Picture_7.jpeg)

Artist's impres

# **OOPS**

# It's more than embarrassing, it's dangerous

I used to think I was shielded from the problems because I had always flown for organizations that required their pilots to operate IFR "to the maximum extent possible." But then I learned of a few pilots in very elite U.S. Air Force units who came very close to mistakenly landing large and expensive aircraft at very small airports ill-equipped to handle them. The problem is even worse in the civilian world and continues to this day, despite the advantages of highly automated, information-rich, advanced situational awareness cockpits. The good news is that by delving into a few high-profile examples, we can avoid having to make that dreaded phone call to say, "Boss, ah.... Got a problem. I've landed at the wrong airport."

WRONG AIRPORT

On July 26, 1985, one of the highlights of a special ceremony at Offutt AFB, Nebraska, was to be a low-altitude, high-speed pass of an SR-71 "Blackbird" spy plane. The assembled crowd knew the pilots would be overhead the runway on time, to the second. But that didn't happen; the minutes ticked by. Presently, the local news media reported that the Mach 3 reconnaissance plane had done a low-altitude, high-speed pass over Millard Airport (KMLE), a small, general aviation field with a single runway about 10 nm northwest of Offutt. Fortunately for them, the Blackbird's crew was spared even more notoriety because a landing was never part of the SR-71's much anticipated appearance.

How could this happen? Air Force officials blamed the embarrassing incident on problems with the Blackbird's navigational equipment. Although we'll never know for sure, the more likely answer is that the real "problem" with the nav gear was the crew's failure to use it for the approach. Many pilots, even those wearing space helmets, are all too eager to accept a visual approach. But we often underestimate the task.

Just imagine the difficulty of peering out the tiny windows of the SR-71 while looking for a small piece of asphalt at low altitude and high speed. Both airports have a Runway 12/30 but that's where the similarities end. Millard has a 3,801-ft. runway, while Offutt's is 11,703 ft. long. KMLE is in a small town surrounded by farmland. Offutt is a very large Air Force base and sits just west of the Missouri River some 10 mi. south of downtown Omaha. The smaller airport did not have any precision instrument approaches while the larger airport had an ILS on both ends of its runway.

Lessons Learned: Simply put, if you're going to shoot a visual approach, you need to add geography to your premission planning. You need to know what airport and runways you're looking for, and their orientation and relationship to nearby landmarks. Prominent rivers, lakes, cities, highways and topographic features all make good landmarks, but even the best landmarks should be backed up with your aircraft's most precise nav equipment. You should take advantage of any instrument approach available, even when the weather allows a visual. And finally, don't be afraid to ask ATC for a "point out" of the airport or a vector if you're unfamiliar with the area.

# AN UNSTABLE APPROACH MAY BE A HINT

Some airport pairs are just magnets for mistaken landings. One such pair is Rapid City Regional (KRAP) and Ellsworth AFB (KRCA), South Dakota. In June 2004, Northwest Airlines Flight 1152, an Airbus A319, was bound for the former and ended up at the latter. Five minutes after what the airline euphemistically called an "unscheduled landing," the passengers were told they had landed at an Air Force base and were instructed to close their window shades and not look out. The plane remained on the ground for more than 3 hr. as the pilots carefully and thoroughly

![](_page_21_Picture_11.jpeg)

explained to Air Force security officers what went wrong. The airline eventually dispatched a new crew to make the short hop to Rapid City, a mere 6 nm to the south.

Then, in August 2015, a Hawker business jet inbound to the area from the west was vectored northwest of Ellsworth for a visual approach to Runway 14 at Rapid City. Descending out of a cloud layer, the crew misidentified Ellsworth as their destination and completed an unauthorized landing.

The most recent event occurred 4 min. after sunset on July 7, 2016, when Delta Air Lines Flight 2845, an Airbus A320, landed at Ellsworth after an extended downwind to lose speed and altitude. Two hours and 21 min. of waiting ensued for the plane's crew and passengers while airmen at Ellsworth followed their protocol, which was well established from four wrong airport landings within the previous year.

How could this happen? In the case of Delta Flight 2845, the crew appears to have been conscientious professionals in most regards. Their trouble began when they arrived from the east too high and too fast for the visual. This necessitated a vector to the northwest to extend their downwind in order to lose altitude and speed. When the first officer (FO) finally told ATC they could accept a left turn onto base and they had the airport in sight, they were 12 mi. north of Rapid City, less than 2 mi. abeam of the extended centerline, and 6 mi. north of Ellsworth. The approach controller advised the pilot "cleared visual approach runway onefour. Use caution for Ellsworth Air Force Base located 6 mi. northwest of Rapid City Regional." The FO acknowledged the approach clearance, and said to the captain "you got the right one in sight?" The captain replied, tellingly, "I hope I do."

The captain selected a direct radial to the final approach fix for Runway 14 at Rapid City, and armed the approach. The aircraft captured the approach, but once on final, the crew got "fixated" on making a visual approach to the only runway they saw, estimated to be about 6 mi. away. The captain disconnected the autopilot, had the FO clear the flight director, and started a steeper than normal descent for the runway. As the airplane was descending through 500 ft., the captain said "well that's kind of \*%@!^# up. Most \*%@!^# up approach I've made in a while."

The pilots later said they misheard the controller's warning regarding Ellsworth, and thought their destination was only 6 mi. ahead, not 12. They didn't realize they were at the wrong airport until after landing.

Lessons Learned: Despite this crew's best efforts at briefing approaches to both runways at Rapid City, as well as the proximity of Ellsworth, it was probably the expectation that their runway was 6 mi. ahead and the unstable approach that sealed their

![](_page_22_Figure_9.jpeg)

Delta Flight 2845 Flight Path

fate. The first lesson is to plan to arrive into the terminal area on speed and on altitude because bleeding that energy can mean getting too far away from your destination to execute a reliable visual approach once you get turned around.

If you do end up miles away from your destination, request an approach and let the automation fly the aircraft to the final approach fix before disconnecting the autopilot or accepting the visual. If runway or airport lighting is not what you expect to see, or is missing, go around or confirm before continuing the approach. And most importantly, if you find yourself in an unstable approach, don't bend the rules, just go around.

If these pilots had done that, they probably would have noticed the B-1B Lancers parked on the ramp and we wouldn't be using their experience as an example here.

## USE ALL SITUATIONAL AWARENESS TOOLS AVAILABLE

On the night of Nov. 20, 2013, an Atlas Air crew operating a massive Boeing 747 Large Cargo Freighter, commonly known as the "Dreamlifter," mistakenly landed at Col. James Jabara Airport (KAAO), short of their intended destination. McConnell AFB (KIAB), in Wichita. Although Wichita's weather was good, the pilot flying (PF) programmed an RNAV GPS approach to Runway 19L at McConnell. The pilot said previous VFR approaches to McConnell had often put him at a higher altitude than expected and that difficulties in picking out McConnell's runway prompted him to make the instrument approach.

Even though the Boeing was still 25 mi, north of the destination, the Wichita approach controller cleared "Giant 4241" for the RNAV GPS Runway 19L approach with the restriction to cross WITBA (the IAF) at 4,000 ft. About 5 min. later, with the airplane at 3,900 ft., 12 mi, north of McConnell and 4.6 mi, north of Jabara. the controller instructed the pilot to contact McConnell tower. The pilot kept the Boeing on autopilot until passing WITBA, at which time he saw a brightly lit runway slightly to his left that seemed to match the one for which he was searching. Believing the aircraft was too high to land safely, he disconnected the autopilot and increased the rate of descent toward what he thought was Runway 19L

![](_page_23_Picture_1.jpeg)

A Boeing 747LCF Dreamlifter. Photo Frank Kovalchek

at McConnell; unfortunately, it was Runway 18 at Jabara.

Moments after touching down, when puzzled controllers told the pilot that he was 9 mi. north of his intended destination, he made an unusual, uncomfortable admission: "Uh, yes sir, we just landed at the other airport."

How could this happen? The crew had flown southbound into an area east of downtown Wichita where there were four airports with similar runway configurations: Jabara, the Beech Factory Airport (KBEC), the Cessna Aircraft Field (KCEA) and, finally, McConnell. However, they did not brief each other about the other airports or the 19L approach lighting system that could have helped them to verify that they were landing at McConnell. When the pilot spotted the wrong airport he was still well outside a normal glidepath intercept point for the correct airport; he should have realized an abrupt, unstable approach should not have been necessary.

**Lessons Learned:** Atlas Air now requires pilots to remain on an instrument approach procedure — even in visual conditions — until passing the final approach fix. But even this procedure fails to address the root cause of the incident: The pilots lost situational awareness and didn't realize their destination was still 9 mi. ahead.

To help establish and maintain situational awareness, you should brief nearby airports to avoid possible confusion. You should use all available information in the cockpit and on the approach plate to remain situationally aware. You can use range rings, waypoints, DME and even crossing radials to determine when a descent should be started. If your avionics can display electronic vertical guidance (a glideslope needle, a VPATH indication or even a synthetically derived vertical path), stay on it until you can safely transition or "connect" to visual vertical guidance from the runway (VASI, PAPI, etc.).

We naturally "connect the dots" with lateral navigation, by deleting discontinuities in the FMS flight plan. Apply this concept to your vertical navigation as well. And if what you see out the windows differs significantly from what you see in your cockpit, ask for help. "Tower, we have an avionics issue here, can you confirm you see us on about a 5 mi. final for Runway 19 Left?" It sounds weird and may earn you some ribbing at the bar, but it could save your job or perhaps even your life.

## **TRUST BUT VERIFY**

About an hour after sunset on the clear, dark night of Jan. 12, 2014, Southwest Airlines Flight 4013, a Boeing 737, mistakenly landed at M. Graham Clark Downtown Airport (KPLK), 6 mi. north of the intended destination, Branson Airport (KBBG), in Branson, Missouri. The flight had been cleared to land on Runway 14 at Branson, which was 7,140 ft. long. Instead, the flight landed on Runway 12 at KPLK, which was only 3,738 feet long. Both crewmembers stood on the brakes for the last 50 ft. or so with the aircraft finally stopping only 340 ft. from the end of the runway, just short of a steep ravine.

How could this happen? The crew was initially cleared to the IAF for the RNAV (GPS) Runway 14 at Branson when they spotted what they thought was Branson's beacon in the distance. About a minute later, the approach controller called the airport at "eleven o'clock and one five miles." But this statement was misleading because the shorter runway was at 11 o'clock and 15 mi., while Branson was actually at 10 o'clock and 20 mi. The captain, who was handling the radios, asked the FO if he was "OK?" and the FO replied, "I'm OK with it." The captain called "field in sight" and they were cleared for the visual approach to Runway 14.

As they got closer, the FO stated, "We're high," and turned right, away from the airport, to configure and lose altitude. When they turned back toward the runway, they were totally visual and focused on making a successful approach and landing on the only runway they saw. Due to gusty winds, and the lack of an ILS, the captain was

![](_page_23_Picture_14.jpeg)

Southwest 4013 came within 50 feet of this steep ravine at the end of the short runway at M. Graham Clark Airport. Photo NTSB

preoccupied looking out the heads-up guidance system (HGS) for glideslope and airspeed information, and was no longer cross-referencing anything in the cockpit, including the 5- and 10mi. range rings he had previously set around the landing runway.

Lessons Learned: The crew had set themselves up for success by having the correct instrument approach in view as well as additional avionics system cues to show distance remaining to the intended runway. But they dropped these cues after an erroneous call from approach control confirmed their expectation of seeing the runway where they had earlier spotted the wrong airport beacon. Had at least one pilot continued to cross-reference the approach they could have realized they had rushed themselves toward the wrong airport.

# IT COULD HAPPEN TO YOU

Even if you have the correct airport in your sights, you still have the task of finding the correct landing surface. This can be difficult at night, especially when runways are closed, approaches are out of service or the airport is undergoing construction, as is so often the case.

A few minutes before midnight on July 7, 2017, Air Canada Flight 759, an Airbus A320, was cleared to land on Runway 28R at San Francisco International Airport (KSFO). Instead, the crew lined up on and then overflew parallel Taxiway C, which had four heavily fueled airliners on it packed with over 1,000 passengers. When the pilots spooled up the engines to abort their landing, the Airbus was just 85 ft. above the surface, and dipped to as low as 59 ft. before climbing to safety. In postincident interviews, both incident pilots stated that, during their first approach when they almost landed on the airliners waiting to take off, they believed the lighted runway on their left was 28L, and that they were lined up for 28R.

How could this happen? It appears KSFO management did its best to inform all airport users of the status of 28L. Construction on that runway was part of a project that started in February 2017, and Notices to Airmen (NOTAMs) were issued to alert operators of its operational status. In addition, at the time of the near miss, the Automatic Terminal Information Service (ATIS)

![](_page_24_Picture_7.jpeg)

UAL1 (23:56:01): where's this guy going?

![](_page_24_Figure_9.jpeg)

Air Canada Flight 759 approaches a crowded taxiway. Photo NTSB.

included an advisory that Runway 28L was closed and that its approach lighting system was out of service.

Meanwhile, runway and approach lighting for Runway 28R were on and set to default settings, which included a 2,400-ft. approach lighting system, a precision approach path indicator, touchdown zone lights (white), runway centerline lights (white at the approach end), runway threshold lights (green) and runway edge lights (white at the approach end). Lights for Taxiway C were also on and set to default settings that included centerline lights (green) along its length. Default settings also included edge lights (blue) and centerline lights (green) illuminating the transition or stub taxiways from the runway to the taxiway.

The ILS approach to Runway 28R at KSFO allows pilots to capture the runway's localizer course of 284 deg. as far out as 16 DME. The typical visual approach to Runways 28L and 28R, on the other hand, begins with the QUIET BRIDGE VISUAL which brings aircraft in on the SFO VOR 095-deg. radial (a 275-deg. course inbound) until the Dumbarton Bridge around 6 DME. At that point aircraft are expected to visually align to their assigned runways. The visual alignment can be tricky at night because the approach is over the featureless San Francisco Bay and the start of Runways 28L and 28R sit on a peninsula surrounded by water. There

can be little to no contrast between the runways, and the lights of aircraft on parallel taxiways can be mistaken for runway lights. The Air Canada pilots appeared to have been victims of expectation bias: They thought they saw Runways 28L and 28R, but actually saw Runway 28R and Taxiway C.

Lessons Learned: An FAA spokesperson says they will "no longer issue visual approaches to air crews approaching SFO at night when an adjacent parallel runway is closed." The pilots will be forced to use instrument landing system approaches or satellitebased approaches that help them line up for the correct runway. We can improve upon that idea by always having an electronic course available to any approach made at night.

The Air Canada pilots said something did not look right to them. At 300 ft. above the ground, the flight crew contacted the tower, mentioned seeing lights on the runway, and requested confirmation that they were cleared to land. When pilots get that "hinky" feeling, or become aware of unresolved ambiguities, it's best to go around. But despite all the technology, in the end, it was an alert crewmember on United Airlines Flight 1, the first airplane in the taxiway queue, who most likely averted the worst aviation disaster in U.S. history by broadcasting: "Where's this guy going? He's on the taxiway!"

# TRANSITIONING INTO COMMERCIAL AVIATION WITH FLIGHT OPTIONS.

Flight Options is a premier flight training organisation located at the Sunshine Coast Airport, Queensland. With world-class training facilities, qualified and experienced aviation specialists, Flight Options ensures that your transition into commercial aviation is smooth and straightforward.

Flight Options operates two Level D full motion simulators, the Cessna Citation Mustang C510 and a Beechcraft King Air B200\*/KA350i. Our advanced flight training facility is purpose built with all the required training devices, as well as briefing rooms, classrooms and a dedicated learning centre for computer based training and study.

Flight Options holds CASA Part 141 and 142 flight training approvals. We are one of only a few flight training facilities in Australia where you can complete your Air Transport Pilot Licence (ATPL) Flight Test, outside of using CASA examiners.

An ATPL allows you to conduct private and commercial operations and is mandatory for all pilots wanting to operate transport category aircraft as pilot-in-command.

Flight Options' ATPL program includes a preparation course prior to conducting the ATPL Flight Test. The preparation course includes exercises as both pilot flying and pilot monitoring. Pilots are familiarised with checklist systems, scan flows, do lists and standard operating procedures related to cockpit and crew coordination, with attention on both normal and abnormal procedures. A pre-test is conducted at the end of the training to ensure that you are prepared for the Flight Test.

The ATPL course and Flight Test are conducted on site using either the Citation Mustang or King Air flight simulator.

\*Subject to CASA approval

![](_page_25_Picture_8.jpeg)

Note that pilots must hold specific prerequisites prior to attempting their ATPL Flight Test, including multi-crew cooperation experience. Flight Options can assist you through this process, so that any relevant prior experience may be recognised. We will ensure that your training is tailored to your needs while meeting the requirements of CASA regulations. Flight Options has worked with the RAAF providing initial and recurrent training to personnel and has also assisted those transitioning from the RAAF who require ATPL qualification.

Phil Laffer is the Flight Options Head of Flight Operations and has extensive flight and management experience across regional, corporate charter and international aviation, and is endorsed on a range of jet and turboprop aircraft. He holds a Flight Instructor Rating and Flight Examiner Rating, with vast knowledge and understanding of training and checking. Phil is supported by a team of highly qualified and experienced flight instructors who share between them close to 100,000 hours of flying and flight training experience in military, airline and other aviation applications.

Flight Options also works closely with Advanced Flight Theory, another Sunshine Coast based company, who provide classroom courses for the ATPL theory subjects. Together, the two organisations form a complete solution to ATPL qualification from ground theory, through to Flight Test.

Flight Options is the preferred choice for advanced flight training in Australia with world class training facilities, a welcoming learning environment and highly qualified flight instructors. You will have easy access to major airline connections, accommodation options, scenic beaches and attractions. Let us assist you in taking the next step into a successful career in commercial aviation.

Book today on +61 7 5353 5242 for exclusive RAAF rates or visit www.flightoptions.com.au for more info.

![](_page_25_Picture_15.jpeg)

# PRECURSORS AND PREVENTATIVE MEASURES

Although there are a variety of contributing factors that result in wrong airport landings, there are a few common threads we can look out for to avoid being on the nightly news. These "precursors" should raise a red flag and alert crewmembers to the potential for a wrong airport landing.

**Geography.** Airport pairings that tend to confuse approaching pilots have similar runway alignments, which is to be expected given prevailing wind conditions. The extended centerline of one airport's runway can be very near to the other's. Such airports are also often in close proximity, generally 6 to 9 nm apart. If they are too close, or too far apart, there's generally no mistaking them.

It may be helpful for pilots to add satellite imagery to preflight study. Free services such as Google Earth provide excellent situational awareness tools from a "bird's eye" view as well as 3D views from expected approach corridors.

Many modern cockpits include ways to increase geographic situational awareness. Some displays, for example, can paint the runway onto a synthetic view of the terrain. Others will allow pilots to "draw" an extended centerline to a geographically accurate depiction of the runway. Even older technology cockpits can be used to provide distance remaining and lateral cues to prevent a wrong airport landing.

**Familiarity**. We pilots seem to overestimate our memories and abilities to recall the visual picture of airport environments. Even though you may have been to an airport a hundred times, your experience may not be helpful if the last visit was years earlier. If you've been to an airport once or twice, the experience may not be applicable in different environmental conditions.

The best aid to landing at unfamiliar airports is an instrument approach, especially one with vertical guidance. Even when using an instrument approach as a "backup," you should ensure the approach is used correctly. A conventional ILS, VOR or NDB approach requires you to tune, identify and monitor. If using a satellite-based approach, ensure it is retrieved from the navigation database and loaded in accordance with the manufacturer's procedures, i.e., don't "build" it from scratch.

Pilots should think vertically as well as laterally when backing up a visual approach with instruments. Since many wrong airport pairs have very close extended runway centerlines, having the vertical glideslope or path displayed can provide the needed discriminator.

**Time of Day and Weather.** In most cases, wrong airport or wrong runway landings occur in clear weather with very good visibility. Although some wrong airport landings happen during the day, many happen at night. Our vision at night is easily tricked. Our eyes deceive our brain with respect to height, distance and closure rate — all critical visual elements for piloting.

Here again, the cure is having an instrument approach to confirm or deny what we think our eyes are telling us. With or without an instrument approach, in day or night conditions, you should also brief the expected lighting. In every example given, recognition of a difference in the approach lighting system or visual glideslope lights (VASI, PAPI) could have provided pilots a warning about landing at the wrong airport.

**Early Approach Clearance.** Another common thread to wrong airport landings is an early visual approach clearance. A radar controller's lateral callout can be wrong because of the aircraft's drift angle. A distance callout can be wrong because of the time lag of the scan, the recognition time of the controller and the transmission time to the pilot. But even with an accurate callout, pilots tend to overestimate their ability to turn calledout distance and bearing information into visual distance and direction.

Because cockpit avionics provide varying degrees of situational awareness in a visual environment, pilots must become expert consumers of the information provided. As with the other precursors, an instrument approach and other electronic means of distance measuring can keep pilots out of trouble.

**The Desire to Go Visual.** It is a profound paradox in aviation that new VFR pilots dream of becoming IFR pilots and IFR pilots yearn to fly visual approaches.

Professional IFR pilots should learn to fly visual approaches while keeping an eye on the instruments until all available lateral and vertical guidance agrees with their eyes, before relying solely on their eyes. In many cases of wrong landings, the pilots involved expressed doubt in the cockpit but continued the approach onto the wrong runway or wrong taxiway. It seems many of us are too proud to ask for help until it is too late. The cure should be obvious: When in doubt, ask. In several of our examples, a simple "do you see us on a mile final?" would have saved a career or two.

Fatigue and the Stable Approach. Pilot fatigue is often a documented factor in wrong landings, often leading pilots to fixate on the first airport or surface sighted and rush the subsequent visual landing. An early callout, it seems, is a sign of good eyesight or pilot skill. When our eyes see what we expect to see, circumstances can conspire to confirm our expectations.

A good way to avoid the rush to errant judgment, especially at the end of a long duty day, is to refrain from accepting a visual approach until the instruments agree with our eyes. If we find ourselves unexpectedly high and needing to abandon stable approach criteria, our instincts should cry out, "go around!"

# HOW TO AVOID BEING HEADLINE NEWS

Should we be overly concerned with a wrong runway or wrong surface landing? With modern avionics and the proliferation of radar-equipped approach and tower controllers, the odds are stacked in our favor. But wrong airport landings continue to occur and we very nearly had a catastrophe on our hands just last summer in San Francisco. The solution, guite often, is simply keeping our situational awareness up with an instrument approach as a backup to the visual approach. These days, with the proliferation of RNAV (GPS) approaches there can be no excuse for ending a flight on the wrong surface.

During my first year as an Air Force pilot we had two Northrop T-38 Talons crash into the approach lights of two different airports while their pilots attempted visual landings without course or glidepath guidance. I became paranoid about always picking runways that gave me both whenever possible, especially at night. After 40 years of flying, I'm thinking perhaps a little paranoia is a good thing.

Courtesy Aviation Week James Albright

# WHAT CONSTITUTES AIR POWER?

A fighter aircraft providing a public display to celebrate a national day or some other occasion of significance, or the news report of an air strike against insurgents in some far away conflict often enough represent 'air power' to the general public. There has also been a tendency to equate, or at least compare, the concept of air power to that of sea power. There is only superficial commonality between the two and are simplistic attempts to understand air power. Air power is extremely complex and has to be studied and understood as an independent and multifaceted power projection capability. It is an optimised combination of a number of components, some of which are not apparent to the casual observer.

Effective air power is the combined product of a large number of disparate elements, each of which is critical and indispensable. The relative importance of each of these elements may vary, but the absence of even one could prevent the optimised exploitation of the air domain. The more important elements are airborne systems, command and control, and the ability to exploit the electronic spectrum, indigenous industry, air bases, personnel and training, strategy and planning, and intelligence.

Airborne Systems. Air power is the ability to do something in and from the air, for which control of the air is an obvious pre-requisite. Control of the air can only be achieved through having sufficient numbers of airborne systems of the necessary calibre. There has been a misconception circulated in recent times that control of the air can be achieved by surface-to-air weapon systems. This is a fallacy. These surface-based weapons are 'air-denial' systems that can deny the use of the air domain in a clearly delineated 'time and space' and nothing more. Control of the air is a far broader concept. At the barest minimum it must be able to provide an uncontested bubble of airspace that can be superimposed over the surface and moved rapidly with the progress of the battle, which will provide one's own surface forces the necessary freedom of manoeuvre. Obviously, surface-based weapons will not provide such control. The bubble, mentioned above, is normally not sufficient and free-ranging airborne combat assets will be needed to ensure adequacy of control of the air. In addition, other

'It is possible to drop heavy loads of bombs on the enemy country without seriously affecting his ability to wage war, whereas a judicious strategy can yield great results even with limited bombing power.'

airborne support systems are critical to projecting air power effectively. Essentially, three things are crucial in terms of airborne systems— quantity, quality and specialisation.

**Command and control and electronics.** The criticality of command and control to the efficient application of air power cannot be overemphasised.

Communications are critical to effective command and control and the electro-magnetic spectrum (EMS) has become the centrepiece for the generation, sustainment and employment of air power. Reliability and adequate redundancy of communications is essential for effective application of air power. The EMS is exploited by air power for all activities that it undertakes. Therefore, uninterrupted access to the spectrum has to be ensured for air power to deliver the demanded effects.

Indigenous industry. Air power is the product of technology and it is continuously being refined through technological innovations. While an indigenous aviation industry would be a 'good-to-have' capability, in the contemporary world, even middle-power nations will not be able to afford a selfsupporting industry. The costs involved are far too high for any other than a few nations to afford. In this situation of increasing importance of technology, nations that aspire to maintain a viable air power capability must have the infrastructure necessary to accept and operate high-end technology that is vital to air power. The indigenous industry must be kept at the leading edge of technology, which in itself becomes a function of the national education base and the emphasis placed on scientific innovation in education and industry by the government. It must be noted that even a limited degree of industrial capability requires an appropriate availability level of raw materials. Air power, unfortunately, cannot be sustained by the mere importation of systems.

**Air bases.** Without a network of mutually supporting bases, with the necessary infrastructure, it will be impossible to apply air power. These bases in turn must have their own support networks—through access to ports and commercial hubs—to ensure an adequate supply of bulk goods such as fuel and ammunition. From a strategic perspective of national security, the geographical location of the bases also assume importance. The location of bases would have a direct impact on the selection of the airborne weapons systems as well as on the doctrine, strategy and concept of operations. The air bases also need protection since they are the nests where the offensive capabilities of air power are developed and nurtured.

Personnel and training. The personnel requirements to project power through the air is fairly high. Even though 'uninhabited' systems are becoming increasingly more effective, the number of people required to support, maintain and operate them efficiently is as many as required for inhabited systems. From a combat application point of view, the numbers required have not changed in the past few decades. In fact the technological sophistication of modern airborne systems demands a larger number of highly trained support personnel. This demand increases the training requirements in terms of both time and educational requirements. The importance and requirement for adequate training is often overlooked, especially in discussions of air power in the public domain.

Strategy and planning. The success or otherwise of the employment of air power is directly influenced by the development of strategy and also the deliberate planning that is done before the actual outbreak of hostilities. The application of air power is influenced, directly and indirectly, by a large number of factors. They have to be taken into account in the planning of the air campaign, a process that can be ignored only at the peril of failure. Air power can only be applied effectively if it is done within the broad strategy that is effective. Even the best air power capability will be of little use if it is employed within the ambit of a faulty strategy.

Planning and strategy are the two foundational pillars upon which the elevated status of air power is built.

### Stefan T. Possony, 1959

Intelligence. Situational awareness is the key to effectiveness in battle and is equally true for the application of air power. However, air power has the inherent capacity to gather and synthesise data to create what could be termed 'actionable' intelligence, in much greater detail and more rapidly than other domain-centric military forces. Intelligence, gathered by airborne assets and then disseminated as required forms the basis of planning and operations. This is fundamental for the application of air power.

There are other elements such as morale, logistics, research and some support services that constitute the holistic concept of air power. Even with the necessary constituents being made available, there is an intangible factor in developing and maintaining air power with the necessary staving power-the ability of the nation to evolve a sustainable 'industrialised life' for its citizens. This is so because air power is inherently a technology-enabled capability. Air power is influenced by a number of elements that are variable and can neither be exactly determined nor fully controlled. A nation that does not have a clear understanding of these variables and an appreciation of the elements that constitute air power will fail to take advantage of the enormous potential that air power brings.

Main picture The E-7A Wedgetail takes off from the main logistics base in the Middle East for another mission on Operation OKRA. *Photo CPL Brenton Kwaterski.* 

Article Courtesy Air Power Development Centre

# **Key Points**

• Air power is extremely complex and has to be studied and understood as an independent and multifaceted power projection capability.

• Effective air power is the combined product of a large number of variable elements, each of which is critical and indispensable.

• A practical national approach to industrialisation is critical for the development of air power.

# Milskil

![](_page_29_Picture_2.jpeg)

Founded in 2001, Milskil is a unique 100% Australian owned Company that provides sovereign operational training for Australia's warfighters. As a strategic air combat training partner of the Royal Australian Air Force, Milskil has been supporting simulator and ground school training for aircrew of the Classic and Super Hornet for over 15 years. Growler has recently joined this list.

Milskil understands that quality operational training is a key discriminator leading to success in battle. Milskil

readily integrates into the ADF training continuum and offers high-end instruction ranging from operational conversion, through to weapons school training and mission rehearsal. As a Fundamental Input to Operational Capability, Milskil takes very seriously its responsibility to train the next generation of warfighters.

Milskil has also provided training to Air Battle Managers of the Air Defence Ground Environment and Airborne Early Warning and Control capabilities, as well as delivering Electronic Warfare and JTAC training. Milskil offers operational support services such as range training and safety officers training, capability planning and management, staff augmentation, exercise control and white force staff. Our extensive experience designing, developing and executing constructive events, and integrating complex devices into multi-layered security domains is second to none in the Australian domain.

Milskil looks forward to continuing to provide support to the Air Force and other Defence aviation elements as 5th Generation systems are introduced and matured and as organisation structures are evolved with an increasing focus upon operational training and advanced, integrated warfighting capabilities.

![](_page_29_Picture_9.jpeg)

# **Air Power Conference**

The RAAF will be conducting its biennial Air Power Conference on the theme of Air Power in a Disruptive World over the period 20-21 March 2018 at the National Convention Centre in Canberra.

The Conference attracts more than 1000 delegates drawn from national and international Air Forces and other military Services, Government, Defence Industry, academia and think tanks. The biennial Air Power Conference has grown into a regionally and internationally respected forum which has engaged a number of important and relevant air power themes.

The 2018 Conference will provide another opportunity for the defence and security community to come together to explore how air forces are able to fully shape and exploit strategy, tactics and technology within joint military, national security and coalition operations in the emergent security environment.

Led by top international and Australian experts, we explored how geo-political strategy, environmental change and technology-based innovation are both disrupting and driving change across every level of national security. Some military organisations are well equipped to capitalise on disruption, whilst others struggle to define what the implications may be for their organisations. In this fast paced new world of innovation, increased global instability and new technology, we sought to offer a fresh perspective from which military forces might consider disruptors and drivers effecting that environment.

Themes were for the 2018 Air Power Conference viewed through the lens of air power, military and national strategy include:

- · AI, Cyber, Simulation
- · Energy, Climate and Nuclear Security
- · Geo-Political Interests and security policy
- Space and Uninhabited Aerial Systems
- Industry Collaboration
- · People, Machines and the military in the digital age

![](_page_30_Picture_13.jpeg)

# Decembeard

During the month of December 2017, the CO of 36 Squadron gave approval for his personnel to participate in 'Decembeard'. Under the Air Force Manual of Dress, beards may be worn by males if they are authorised in writing by their CO in support of a charitable cause with specified start and end dates.

'Decembeard' is a charity initiative whereby men may grow beards as a means of raising funds for those affected by bowel cancer, the second largest leading cause of cancer deaths in Australia. To date, members of 36SQN have donated \$2143.56.

![](_page_30_Picture_17.jpeg)

- 36SQN members get the itch to grow beards for charity. Photo, LAC Jesse Kane

# Hawkei Trial

Two Hawkei Protected Mobility Vehicles – Light, have arrived in the Middle East Region to conduct operational test and evaluation trials in Iraq. Soldiers from Task Group Taji 6 will utilise these vehicles throughout the trial period which will assess the sustainability of the vehicles.

The vehicles were transported from Australia's main operating base in the Middle East Region to Taji in Iraq on a C-130J Hercules.

ADF members are deployed on Operation Accordion and support and sustain ADF operations in the Middle East region, enabling contingency operations and enhancing regional relationships.

![](_page_30_Picture_23.jpeg)

A KC-30A, E-7A Wedgetail and an F/A-18F fly in formation during Operation OKRA. Defence Image

![](_page_30_Picture_25.jpeg)

KC-30A, Wedgetail and F/A-18F fly in formation during Operation OKRA. Defence Image

![](_page_31_Picture_0.jpeg)

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![](_page_31_Figure_8.jpeg)

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![](_page_31_Picture_10.jpeg)

If you would like a Mount Margaret Information Pack or for any further enquiries contact:

# Rod Tome 0487 001 002 or visit our website at www.mountmargaret.com.au

# **Operation OKRA**

On Friday 22 December 2017 Minister for Defence Senator the Hon Marise Payne, MP, announced the Government's decision to cease F/A-18 Hornet operations in the Middle East.

Australia will continue to work closely with the Government of Iraq to ensure Iraq is able to consolidate the gains made and work towards the final defeat of Daesh.

Australia remains committed to the Coalition's role in Iraq and its security forces so Iraq is able to defeat Daesh, keep its people safe and maintain its territorial sovereignty.

The ADF will continue to provide essential training, advice and assistance to the Iraqi Security forces and law enforcement personnel through Task Group Taji, and Iraqi Counter-Terrorism operations through Special Operations Task Group.

F/A-18 Hornets have operated continuously in Iraq, as part of Operation OKRA, for more than three years, but the evolving nature of the mission in Iraq requires Defence to reconsider its force disposition.

![](_page_32_Picture_7.jpeg)

(L-R) DACAUST, AIRCDRE Guy Wilson, CAF AM Leo Davies, AO, CSC and Minister for Defence Senator the Hon Marise Payne, MP announcing cessation of F/A-18 Hornet operations in the Middle East Region. Defence Image

# **Final Super Hornets Arrive Home**

The final contingent of the RAAF's strike aircraft has returned home to RAAF Base Amberley, marking the end of Australia's air strike operations in Iraq and Syria.

Prime Minister Malcolm Turnbull, Minister for Defence Marise Payne, together with CDF, ACM Mark Binskin and CAF, AM Leo Davies, witnessed the arrival of six F/A-18Fs in QLD.

The Australian Air Task Group was deployed on 21 September 2014 at short notice and commenced their first mission 14 days later. The Hornets have operated continuously for more than three years, flying more than 21,700 hours.

"The effort to establish the Air Task Group and then to sustain this mission was outstanding and RAAF's men and women have again proven themselves to be a professional fighting force," Minister Payne said.

"These men and women have demonstrated the Australian Defence Force's finest qualities in assisting our coalition partners in the fight to defeat Daesh. "I also acknowledge the valuable support our Air Force families provided while our serving members were deployed so far from home."

Since 2014, more than 2,015 personnel deployed with,

and in support of, the Air Task Group, providing security, logistics, engineering, health and combat support to enable safe aircraft operations.

Australia's Wedgetail and KC-30A refuelling aircraft will continue to support counter-Daesh coalition operations. Australia will also continue its training mission, which involves around 300 personnel at Task Group Taji and around 80 personnel in a Special Operations Task Group.

**Courtesy Defence Connect** 

![](_page_32_Picture_19.jpeg)

A routine post flight inspection of an F/A-18F at the main air operating base in the Middle East Region during Operation OKRA. The aircraft were recently welcomed back to Australia. Photo CPL Brenton Kwaterski

# Exercise Red Flag 2018

The RAAF deployed approximately 340 personnel to Nellis Air Force Base in Nevada for Exercise Red Flag, which took place from 29 January to 16 February 2018.

Established in 1980 by the United States Air Force, Exercise Red Flag centres on the world's most complex reconstruction of a modern battlespace and is recognised as one of the world's premier air combat exercises. The exercise involves participants from the United States Navy as well as the United Kingdom.

For 2018, an Orion, Wedgetail and a Control and Reporting Centre were deployed on the complex, multi-nation exercise. Four EA-18G Growlers from 6SQN were also deployed for the first time on an international exercise, since being transferred to the RAAF in January 2017.

Training alongside allied nations is critical to the success of Air Force units on real world operations; helping develop further familiarity with foreign terminology, methods and platforms.

![](_page_32_Picture_26.jpeg)

6SQN EA-18G Growlers arrive at Nellis Air Force Base, Nevada, for Exercise Red Flag 18. Photo, CPL David Gibbs, RAAF

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![](_page_33_Picture_3.jpeg)

![](_page_33_Picture_4.jpeg)

CHALLENGE. CREATE. OUTPERFORM.

### **Defence Talk**

# **New Defence Policies**

Defence Industry Minister Christopher Pyne has confirmed multiple government Defence policies will be released in the first half of 2018.

Speaking to the Australian Chamber of Commerce (AustCham) in Singapore, Minister Pyne said the release of the Defence Export Strategy, which was previously due to be released by Christmas last year, is imminent along with more policies.

"I will soon release the Defence Export Strategy, which will provide a comprehensive approach to supporting our defence industry to enjoy greater success overseas," the minister told AustCham.

The minister said the strategy, and a suite of others, will address the government's investment in innovation and support to industry.

"We are investing in innovation, increasing the support available to industry and keeping our investment program on track," he said.

"We want clarity for both industry and the Australian community to enable investment in defence industry."

Minister Pyne met with around 20 of Australia's Asia-based defence representatives in Singapore on Thursday, 18 January, to discuss their role in promoting Australian Defence exports and regional industry collaboration.

Defence Attachés are posted to Australia's Embassies and High Commissions across the region and form a critical part of our defence capability and presence overseas.

"Defence exports contribute to building the sustainable, innovative and internationally competitive industrial base we need in Australia to support our defence capability needs," he said.

"While I am today in Singapore advocating for Australia's defence industry, our regional Defence Attaché network provides a permanent international presence for promoting our defence industry interests abroad."

The minister also confirmed three other Defence policies are also due for release in the first half of the year, according to Minister Pyne.

"In the first half of 2018, the government will release a suite of policies that will put in place further mechanisms to support industry and help us shape and guide our defence industry," Minister Pyne said. "This will include the first ever Defence Industrial Capability Plan, including our sovereign industrial capabilities, a defence industry skilling and STEM strategy, and a defence industry participation policy."

Amelia McMahon Courtesy Defence Connect

# Defence Remains Top of Agenda for Treasury

Despite recent calls for the government to back away from its budgetary commitment of 2 per cent of gross domestic profit (GDP), Treasurer Scott Morrison has thrown his support behind the government's defence initiatives.

While speaking at a press conference in Sydney, the Treasurer talked up the government's recapitalisation of Australia's defence force and its strategy to increase job participation within defence industry through increased spending.

"Our commitment is being realised to defence. We are recapitalising our defence force at a rate not seen since the Second World War. We are restoring our defence forces in a way that has not been seen in generations," Morrison said.

However, the Treasurer would not be drawn on whether the government would consider senator Jim Molan's calls to lift the 2 per cent GDP spend on defence.

"We're already delivering on the 2 per cent commitment that I know Jim was a keen [proponent] of before we went into government in 2013, and I congratulate him on entering the Senate and look forward to his participation. As you know, Jim and I worked closely together on border protection when I was immigration minister. So I'm looking forward to Jim's contribution as a colleague joining the Senate as a New South Wales Liberal senator."

Earlier this year, Molan, a retired senior Army officer, said Australia had an expectation, not a right or guarantee, that the US would come to Australia's aid in extremis, but there seemed to be strong grounds to question that expectation and adjust defence policy, while remaining a staunch US ally.

"Until I deployed to Iraq with the US military in 2004-05, I made the common mistake of assuming US power was infinite," he wrote in The Australian newspaper.

"The US was indeed powerful after 1945 and even more powerful winning the Cold War."

But post-Cold War cutbacks meant that only three US Army brigades were considered fully combat ready and the US Navy has shrunk from 594 ships in 1987 to 278 today. Capability of the US Air Force had been assessed as "marginal trending to weak".

Senator Molan, a regular commentator in military matters who also advised former PM Tony Abbott on border protection, is one of a small number of MPs with recent top-level military experience.

He said the Australian Defence Force was now in the best shape it's been since the Vietnam War.

"But still we need to defend our national interests independently. In particular, we need to address our critical vulnerabilities around fuel security and high-end weapons holding. Without doing so, we could be reduced to impotence in less than a week," he wrote.

Molan said Australia was virtually alone among developed nations in not having a government-mandated strategic fuel reserve. It had been assessed that fuel supplies could be depleted within weeks through any disruption to sea deliveries, grounding the military.

![](_page_34_Picture_31.jpeg)

F-35A Lightning II departs RAAF Base Amberley. Photo CPL Casey Gaul

![](_page_35_Picture_0.jpeg)

![](_page_35_Picture_1.jpeg)

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![](_page_35_Picture_17.jpeg)

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### Defence Talk

The Bureau of Resource and Energy Economics estimated that industry stocks were 19 days of petrol, 17 days of aviation fuel and 12 days of diesel.

That problem was compounded by limited war stocks of missiles for the RAAF and Navy, which would be quickly exhausted in a conflict.

"What use is it to have the best strike fighter in the world [referring to the new F-35 Joint Strike Fighter] and the best ships in the world [under new naval program builds] if you don't have a sufficient reload of missiles and you don't have fuel for any of them," he wrote.

Tune in to Jim Molan on the Defence Connect Podcast, where he offers future insights in the nature and future of warfare, the influence of the Defence White Paper and the nation's capability.

**Courtesy Defence Connect** 

# Key Future Submarines Contract Signed

Lockheed Martin Australia and the government have signed a \$700 million contract for the Future Submarine Combat System design, build and integration, creating 200 new jobs.

The contract will cover work to 2022 and includes the design of the combat system and procurement activities to select subsystem and component suppliers. Of the 200 jobs created under this element of the project, a majority are expected to be in South Australia.

Lockheed Martin will integrate an evolved version of the United States' AB/BYG-1 Tactical Weapon Control System into the 12 new subs to create the Future Submarine's system. The system is currently used on the Collins Class submarines, as well as the US's Virginia Class nuclear submarines.

Commenting on the announcement, Lockheed Martin Australia chief executive Vince Di Pietro said the signing of the contract is an important development in the delivery of the Future Submarine project.

Lockheed Martin Australia was selected as the Future Submarine Combat System Integrator in September 2016 following a limited tender process, commencing preparatory and initial design work for the project under an earlier contract signed in November 2016.

![](_page_36_Picture_12.jpeg)

Collins Class Submarine HMAS Farncomb, departs Fleet Base East, Garden Island, Sydney. Photo ABIS Kieran Dempsey

Naval Group, the submarine designer, will commence construction of the submarine in 2022 in Adelaide.

Naval Group was awarded the Future Submarine contract in 2016. The first stage of design of the Future Submarine, known as functional analysis, was completed on schedule in October 2017. At the fourth Submarine Science, Technology and Engineering Conference in Adelaide last year, Minister Pyne revealed the submarines will be 97 metres in length and 8.8 metres in diameter.

The next stage of design, known as feasibility studies, has commenced as planned, according to Defence. All 12 submarines will be built in Adelaide at Osborne.

**Courtesy Defence Connect** 

# Australian Innovation in the Running for UK Defence Vehicle Program

Thales Australia has launched its Bushmaster MR6 protected mobility vehicle, which is currently in the running to win the UK's Multi-Role Vehicle Protected (MRVP) program.

The MR6 vehicle was unveiled at the International Armoured Vehicles (IAV) 2018 event recently

The Bushmaster MR6 offers increased blast and ballistic protection and is now powered by a 330-horsepower engine, compared to 300-horsepower for the first version, and has the same maximum range of 800 kilometres. The vehicle also has an increased troop capacity, with 12 people including driver and commander instead of 10.

The main visible difference between the Bushmaster MR6 and the original Bushmaster is that the MR6 has no windows on the side of the troop compartment. Defence Industry Minister Christopher Pyne congratulated Thales Australia for the launch of the vehicle, noting that if it is successful in winning the MRVP program, it could support job creation in Australia and the UK.

"The Bushmaster is an Australian success story, delivering for the Australian Defence Force, the local defence industry and Australia's domestic manufacturing capability," Minister Pyne said.

"Thales Australia's new vehicle builds on the original Bushmaster's battle proven world-class capability, and continues its record of safety and reliability.

"The original Bushmaster is widely recognised as one of the finest protected mobility vehicles in the world and is currently in service with eight countries. With the launch of the MR6, I look forward to Thales continuing to deliver top-class capability around the world."

Prime Minister Malcolm Turnbull recently confirmed a recent batch of Bendigo-built Bushmasters will soon make their way to their new home in Japan to join the four Bushmasters already in service in Japan.

Thales Australia built and supplied four Bushmaster vehicles to Japan in 2014 at a cost of around \$3.6 million. The combination of the eight vehicles represents Australia's biggest defence export deal to Japan.

The Bushmaster vehicles are produced by Thales Australia and have been in operation since 1997 for the Australian Army, Royal Australian Air Force, Royal Netherlands Army, British Army and the Jamaica Defence Force.

**Courtesy Defence Connect** 

# Defence and Industry Conference

The Defence and Industry Conference is a key Defence and industry collaboration event. Canberra's National Convention Centre will come alive on Thursday 02 August 2018 with informative, thought provoking presentations from Defence and industry leaders along with Q&A sessions and networking opportunities.

The Conference is an opportunity for industry to discuss with Defence officials acquisition and sustainment investment opportunities. It is also an opportunity for Industry to present its ideas and concepts to the Defence community.

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Versatility. We make it fly.

![](_page_37_Picture_4.jpeg)

# **Queensland Air Museum**

# Lockheed Neptune

![](_page_38_Picture_3.jpeg)

There's always something new at Queensland Air Museum, thanks to the mighty team of volunteers who work tirelessly on the restoration of QAM's many historic aircraft.

The Lockheed Neptune has taken major steps forward in recent weeks. This aircraft was acquired from the Beck collection in Mareeba 2016. A team of QAM volunteers travelled to Mareeba and worked in the tropical summer heat to break the aircraft up into 'bite-sized' pieces for transportation to Caloundra on six trucks. Complete restoration of the Neptune has taken over 12 months and is now nearing completion. Painting back to original colours is virtually complete as is a complete re-furbish of this giant aircraft's interior. The wings are scheduled to be re-attached following the recent addition of the tail section.

The Neptune was on display at QAM's first 'Engines Alive' day on January 13.

Come along and see all the QAM displays, a collection more than 40 years in the making, and getting bigger and better every week.

# Continental A40 Engine

![](_page_38_Picture_9.jpeg)

Queensland Air Museum's mission is 'Preserving Australia's Aviation History' and here's a fine example of the mission being put into action.

The QAM engine team, headed by Bill Furlong have recently completed a full restoration of a Continental A40 engine. The 37 horsepower (28 Kw) engine was developed during the Great Depression and was a much needed addition to power plant options for small aircraft as the other options suffered from prohibitive cost or low reliability.

First made in 1931, the Continental A40 was used in a wide range of light aircraft including Piper and Taylor. This was later developed into higher performance versions up to the A405 followed by the A50 and then the A80.

The QAM team have been working on this engine for many months now and a recent test run went off very successfully.

The Continental A40 ran at the Engines Alive day on January 13.

![](_page_38_Picture_15.jpeg)

# **Engines Alive Day**

![](_page_38_Picture_17.jpeg)

Allison Engine startup

The Lockheed Ventura restoration is virtually complete with the wings being added recently. The final painting will be completed early in 2018 and this massive aircraft will soon look like it did when operated by the RAAF between 1960 – 70.

The mighty Allison V1700 restoration is complete and ran at the 'Engines Alive' day on 13 January. For those of you out there with a V8 under the bonnet, you must hear this fantastic engine run -V12, 28 litre and turbocharged! Imagine that in your ute or SUV? This engine was developed by the General Motors aviation off-shoot, Allison for WW2 aircraft and has spent many months under painstaking restoration by very talented QAM volunteers.

'Engines Alive' was a very special event as we partnered with Vintage Calendar Girls who raise money to support cancer sufferers on the Sunshine Coast. They did a fashion parade for this event to assist with selling their calendar.

There were many other attractions, including food and drinks. With both organisations being 100% volunteer staffed, all proceeds are going to their respective causes.

Australia's largest and best display of vintage aircraft are in one fantastic location next to Caloundra Airport on the beautiful Sunshine Coast.

With more than 75 historic aircraft and many other displays, QAM is the spot to spend several memorable hours or take advantage of a visit during one of our engine run days or the open cockpit weekend.

QAM is a 100% volunteer organisation and welcomes visitors every day of the year (except Christmas Day).

See our website www.qam.com.au for full details.

![](_page_39_Picture_0.jpeg)

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To find out more visit myripleyvalley.com.au

# SATTERLEY

# St Anthony's Catholic College: a Vibrant Learning Community

![](_page_39_Picture_7.jpeg)

Situated in the northern beaches area of Townsville, St Anthony's Catholic College is a modern and vibrant learning community. Offering a Kindy to Year 12 Catholic education, St Anthony's is a Franciscan school and is proud of its "Let Your Light Shine" motto. Students are encouraged to develop academic excellence and have many opportunities to shine in the Arts, Sports and Cultural arenas.

St Anthony's Catholic College has many initiatives to support their students in their endeavours, particularly students from Defence families. The Defence Transition Mentor (DTM) program has been operating at the College now for several years and the full range of support services are provided to families, from assistance with moving to a new school to ongoing support for students whose parents may be absent due to deployment, exercise or course. Other support services include access to the counsellor and College Chaplain and the reassurance that St Anthony's is a *KidsMatter* school. These are all part of the superior Pastoral Care program that operates at the College. In Years 7 to 12, all students have a Head of House who is responsible for their academic and pastoral well-being. The Head of House works with the teacher to ensure all students are adequately supported in their studies and have access to any necessary support services.

If you are embarking on a transfer to the Townsville area, consider St Anthony's Catholic College for your family. We offer a nurturing, faith-centred and holistic education for your children. For a tour of the College or for enrolment enquiries, contact Vicki Jago on (07) 4751 7300.

![](_page_39_Picture_12.jpeg)

![](_page_40_Picture_0.jpeg)

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- Caring and qualified staff who implement our SHINE Positive Behaviour Program.
- A College bus service available to students.

![](_page_40_Picture_9.jpeg)

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![](_page_41_Picture_1.jpeg)

![](_page_41_Picture_2.jpeg)

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- Leak testing
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![](_page_41_Picture_10.jpeg)

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### **Applications include:**

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- Helicopter rotor tracking and balancing
- Vibration analysis
- Spectrum analysis

![](_page_41_Picture_24.jpeg)

Honeywell Vibrex 2000 Plus (V2K+)

For more information, please contact the friendly team at TR Calibration: 1300 790 480 info@trcalibration.com.au www.trcalibration.com.au

# Australian Air League Flying Camp 2018

![](_page_42_Picture_2.jpeg)

AAL student pilots, instructors & camp staff celebrate the end of another successful camp

Each year in January the NSW Boys Group of the Australian Air League holds a nine day Flying Camp at its Air Activities Centre at Camden Airport and with 23 eager student pilots in attendance, the 2018 Camp was the most successful yet!

The Air Activities Centre was established at Camden Airport in 1986 to allow the AAL to provide air experience flights and flying training to its members, and the annual Flying Camp is a highlight of the calendar, where cadets have the opportunity to undertake nine days of intensive flying training.

During the camp, cadets live together at the airport where they eat, study and work together as a team while undertaking flying training with the Air League's volunteer instructors. The cadets came in to camp with a wide variety of experience, for some it was their first camp where they got to experience their first taste of flight, while for others it was an opportunity to build on their training from previous camps.

Whilst the weather was not always in their favour with a few days of 40+ degree temperatures, then storms and gusting winds, they still managed to make the most of the opportunity. With the addition of 2 cross-hired aircraft the cadets achieved some impressive statistics for the week:

- Flights Completed: 100
- Most Flights in One Day: 20
- Total Flight Hours: 103.9
- Number of Landings: 343
- Litres of Fuel Consumed: 2196.89 @ \$2.20/ltr = \$4,833.16

![](_page_42_Picture_14.jpeg)

Andrew Gullotta, Marrickville Sqn, one of the cadets who achieved his first Area Solo on the Flying Camp

Some of the achievements of the camp include;

### **First Solo**

Marc Shaw - Sutherland Shire Sqn Tim Larki - Southern Highlands Sqn Myles Lauer - Hornsby RSL Sqn

### **First Area Solo**

Andrew Gullotta - Marrickville Sqn Benjamin Woodward - Camden Sqn

**Recreation Pilot License Flight Test** Oliver Tysoe - Hornsby RSL Sqn

![](_page_42_Picture_22.jpeg)

Student pilot and instructor undertaking circuits in an Air League Piper Warrior aircraft

Naturally, each of these achievements was accompanied by the traditional dunking with a bucket of water!

All of this would not have been possible without the help of the instructors, engineers and camp staff who volunteer their time to train cadets, maintain aircraft and look after cadets for the week.

The AAL Air Activities Centre at Camden is owned and operated by the NSW Boys Group of the AAL, with a fleet of training aircraft including 2 Piper PA-28 Warriors and a Cessna 152. For over 30 years it has provided thousands of air experience flights and training hours to members, helping to achieve the League's motto 'A Vinculo Terrae' - to be 'Free From the Bonds of the Earth'.

The AAL is for boys and girls aged 8 years and older who have an interest in aviation either as a career or as a hobby. They learn about aviation in all its forms through classes in theory of flight, navigation, aircraft engines and a variety of interesting subjects.

For further information contact: Australian Air League Phone: 1800 502 175 Email: info@airleague.com.au www.airleague.com.au

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![](_page_43_Picture_5.jpeg)

# Ensuring personnel and asset protection with fast arc quenching

Arc faults have been a hot topic in the electrical industry for more than a decade with much of the discussion centred on aging oil-based medium voltage switchgear and the increased risk that they pose.

NHP Medium Voltage Switchgear cubicles are designed and type tested to mitigate the consequences of internal arcs and therefore protect both the operator and the installation. Through a strategic pressure release system, the internal arc is restricted to the compartment where it originated and it does not spread towards the operator or to other compartments. The cubicles are specifically designed to minimise the consequences of an internal arc and forming a key component of this, is the option of a built-in arc quenching system 'Arc Killer' which can extinguish an arc in less than 50ms. Exclusive to NHP switchgear, Arc Killer is a unique worldwide patented system developed in Europe for the DF2 series air insulated modular type switchgear. It provides an efficient and also simple arc fault protection not only for switchgear in substations but also in the ring network without the need to send a remote trip signal to upstream CB, unlike typical systems based on arc flash relay.

Arc Killer from NHP protects medium voltage switchgear from internal arc damage and allows fast restoration of switchgear avoiding long downtime and huge financial loss. It also ensures the highest level of operator safety in the unlikely event of an internal arc fault, going beyond requirements of the Australian standards.

Arc Killer takes arc quenching to a new level providing an improved security that protects valuable switchgear and eliminates blast damage to switchrooms caused by the expanding gas high pressures and temperature generated by arc faults. Not only are the operator and the environment are shielded from harm, but the super-swift arc extinguishing system allows cubicles to be back in operation very quickly in case of an internal fault. Moreover, The Arc Killer fast operation allows full containment of the arc fault within switchgear enclosure without need for external ducting or venting. Consequently the substation design is simplified and the arc fault safety rating of switchgear is always

maintained irrespective of where and how it is installed.

The Arc Killer technology and the benefits that it brings to a site highlights the advantage of partnering with a medium voltage supplier such as NHP. In additional to the market leading range of switchgear complete with Arc Killer technology, the extended NHP medium voltage range can be called upon to help users leverage information to improve their operations, network efficiency and ultimate reliability. From the successful monitoring, evaluation and intelligent control of a distribution substation as well as substation control systems architecture, NHP is your trusted partner.

![](_page_43_Picture_14.jpeg)

### Air Force Cadets

# Commemorate Cadets who Died in Service

![](_page_44_Picture_2.jpeg)

Author Charles Page with 'Wings of Valour' and the remembrance cabinet.

On 31 August 1944, wireless air gunner, John Parr Ion was killed when his Lancaster crashed into the North Sea. His body was washed ashore on the island of Walcheren, and buried in Colijnsplatt, Netherlands.

Forty years later, his sister Norma visited the grave.

"I still recall watching him walking up our street, rucksack on his back as he turned around for a final wave before boarding the trolley bus for Perth and his final departure.

More and more families received telegrams advising their loved ones had been killed or missing in action, but somehow we bathed in the belief this wouldn't happen to us – but it did."

John Ion is one of the 49 cadets honoured by 7WG (WA) AAFC. In January 2017, an Honour Roll Board for cadets who died in service was unveiled at 7WG HQ, RAAF Pearce. The Board was funded by a DVA grant and researched and designed by Charles Page and Michael Hampson of RAAFA WA AAFC Branch.

To complement the Honour Board, a glass topped book of remembrance cabinet was placed next to the Board in January. The cabinet was designed by Charles Page at the request of WGCDR (AAFC) Rob Caldera, OC 7WG.

The cabinet displays the book 'Wings

of Valour' by Charles Page. This book is designed as a book of remembrance, with two facing pages for each cadet. It records the brave deeds of the 49 AAFC cadets from WA who died in WWII, Korean War, Vietnam War and in tragic accidents (Reviewed in 'Books in Brief').

No. 7 Wing Western Australia

# Epic AAFC marchers earn Holland's Vierdaagse Cross

![](_page_44_Picture_14.jpeg)

Vierdaagse March Group

Fourteen AAFC and staff from 3WG (NSW) who completed the gruelling Vierdaagse March in Holland during July 2017, have recently received authority to wear the coveted Vierdaagse Cross on their AAFC uniform.

The AAFC Nijmegen Team marched 166km over four days, as part of the 5,500 military from 34 countries participating in the 101st event.

The tour was led by OC 3WG WGCDR (AAFC) Paul Hughes, who was participating in his 10th Vierdaagse March.

The Vierdaagse (Dutch for 'The Four Days') is an annual walk that has taken place since 1909, with its centenary being celebrated in 2016, as it was curtailed during the WWI and WWII.

Depending on age group and category, participants have to walk 30, 40 or 50 km per day for four days.

As participants near the finish, the public present them with gladioli, a symbol of force and victory since Roman times, when gladiators were likewise showered with these flowers.

Originally a military activity with a few civilians, Holland's Vierdaagse March

now includes more than 40,000 civilians each year, and has become the world's largest walking event.

By order of a Dutch Royal Decree in 1909, the Vierdaagse Cross is awarded to participants who successfully complete the Four Days Marches according to regulations.

AAFC participants - WGCDR (AAFC) Paul Hughes (completed his 10th march) and with members undertaking the event for the first time - FLTLT (AAFC) Sharon O'Donnell, FLGOFF (AAFC) Gary Martinec, LACW (AAFC) Angela Whitehead, CUOs Hunter Glenn and Ryan Warschews, CWOFFS Jayden Norris and Benjam De Vries, CSGTs Rhys Hughes and Christie Norris, CCPL Nicholas Black and LCDTs Matthew Ma, Zachary Saric and Ivan Tam.

# First Duke of Edinburgh Award Long Service Medal to AAFC Member

WOFF (AAFC) April-Ann Currie is the first AAFC member to be awarded the Duke of Edinburgh International Award's Long Service Medal having completed more than 30 years service.

The medal honouring her extraordinary commitment was presented at 4WG (Vic) Promotion Course Parade at Puckapunyal recently by WGCDR (AAFC) Shaun Young, OC 4WG and WGCDR (AAFC) Tim Lowther, Director Operations.

"The Duke of Edinburgh's International Award program has always been popular in the AAFC, with more than a thousand cadets currently participating," said National Program Manager, WOFF (AAFC) April-Ann Currie.

"The Award is one of the world's top youth achievement awards, empowering young Australians aged 14-25 to explore their full potential, regardless of location or circumstance, with each participant learning a skill, improving their physical wellbeing, volunteering in their community and going on an adventure.

"The Award complements AFC training with a broader range of activities and skills, and is also internationally recognised," said WOFF (AAFC) Currie.

Since founded in 1956, more than eight million people in over 140 countries and territories have participated in the

![](_page_45_Picture_0.jpeg)

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![](_page_45_Picture_2.jpeg)

![](_page_45_Picture_3.jpeg)

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![](_page_45_Picture_14.jpeg)

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Duke of Edinburgh's International Award, which encourages and recognises practical experiences and life skills to create committed global citizens and help equip young people for life.

Through a challenging journey of selfdiscovery, participants are equipped and empowered to achieve their personal best, learn to take responsibility for goals and choices, make real contributions to their community, learn important life skills, overcome barriers to success, and increase career opportunities.

"Likewise, AAFC is one of the most dynamic, effective and satisfying youth programs available in this country, and open to both male and female young people throughout the nation," said WOFF (AAFC) Currie.

"AFC get to do the things most other young people only watch on television, including learning to fly aircraft solo while still in their mid-teens, using civilian and military rifles, going bush wearing camouflage uniform, operating military radios, using field signals, learning cooking and survival skills as well as enjoying interstate and international travel. They also study aeronautics, navigation, meteorology and radio communications, first aid and music."

"Cadets seeking promotion to higher ranks also undertake three weeks per year full time tertiary level training in leadership, decision making, initiative, self discipline, time management, clear thinking, public speaking, management and administration. Involvement in AAFC can generate credits for the Year 12 Certificate of Education."

"In partnership with the Duke of Edinburgh's International Award, AAFC is a real game changer for Australia, giving young people autonomy, responsibility, skills and courage so they can effectively help lead Australia in every facet of government, business and community life, well into the 21st Century," said WOFF (AAFC) Currie.

Current Cadets wanting more information on the Duke of Edinburgh's International Award should contact their Wing or Squadron Award Leader (Coordinator), or discuss the opportunities with the Squadron's Training Officer.

In 2015, the National Board of the Duke of Edinburgh's International Award – Australia, approved the Long Service Medal to recognise significant service to the Award in Australia.

![](_page_46_Picture_9.jpeg)

WOFF Currie with Duke of Edinburgh International Awards Long Service Medal

The Long Service Medal is awarded after 10 years of service in a voluntary and/or a paid capacity to the Award. A medal service clasp is awarded for each additional 10 years service. The medal is not issued as part of the Australian Honours system and can only worn on the right chest of the recipient.

The first medal presentation was made in 2016 by Governor General, His Excellency General The Honourable Sir Peter Cosgrove, AK, MC (Ret'd).

# SA AAFC Power Up

Four South Australian AAFC began their year by attending a Basic Flying Training Course 1 (BFT1) at the Murray Bridge Flying School in January. The BFT1 provides training in accordance with the Civil Aviation Safety Authority (CASA) training syllabus.

One of the participants was Cadet CPL Tomasz Kocimski from 604SQN (aged 16) and already a solo pilot.

Last year, CCPL Kocimski completed his aviation subjects through the AAFC home training curriculum and privately completed his first solo flight in a powered aircraft. Then during a Gliding Camp in October, he completed the Gliding Federation of Australia training syllabus and went solo in a DG-1000S glider. This is a great achievement – arriving at double solo status (in both power and gliding) before even getting his motor vehicle learner plates.

As a result of the BFT1 course, Tomasz traded his AAFC First Solo Badge for the prestigious AAFC General Flying Proficiency Test Badge (Cadet Pilot Badge) by gaining his Recreational Pilot's Licence. This CASA licence allows him to fly as pilot in command of a single engine aircraft with passengers, up to 25 nautical miles from the departure aerodrome.

To be awarded this licence and Wings is a huge achievement, especially for a 16 year old, and Tomasz expressed his thanks to the team at 600 (Aviation Training) SQN who supported him on this incredible journey.

"The flying camp was a fantastic opportunity to develop aviation skills and knowledge," said Cadet CPL Kocimski.

"The instructors were helpful and created a perfect 10/10 environment for learning, and I can't wait for the next one."

At January's Basic Flying Training Course was Cadet CPL Ben Anderson (aged 16), South Australia's sole powered flying scholarship recipient for 2018, and a member of 608 (City of Gawler) SQN.

Having completed BFT1, Cadet CPL Anderson is now ready to progress to more advanced training to achieve his aim of going solo.

BFT1 provides ab-initio training in accordance with the CASA training syllabus as an introduction to the flight training process. During this course the focus is on pre-circuit flight training, and covers topics such as effects of controls, straight and level flight, climbing and descending, turning, stalling, consolidation and introduction to the circuit.

Flying training is a very individual experience – all people progress at different rates. And the instructors from 600 (Aviation Training) SQN are very aware of this, and tailor the tuition to meet the needs of their trainee pilots.

FLGOFF (AAFC) Paul Rosenzweig

![](_page_46_Picture_27.jpeg)

AAFC CPL Kocimski, receives his Cadet Pilot Badge from CO 600 (Aviation Training) SQN, SQNLDR (AAFC) Robbertse

![](_page_47_Picture_0.jpeg)

# 2 BIG DAYS - SAT & SUN!

![](_page_47_Picture_2.jpeg)

FEATURING.\* CLASSIC WARBIRDS – RAAF FIGHTER JETS, HEAVY LIFT AIRCRAFT & THE ROULETTES ARMY AND NAVY HELICOPTERS – AEROBATICS BY SOME OF AUSTRALIA'S LEADING PILOTS -HISTORIC FLYING AND STATIC DISPLAYS – CHILDREN'S RIDES

# 5 - 6 MAY 2018

![](_page_47_Picture_5.jpeg)

Illawarra Regional Airport, Albion Park Gates open 9am | See website for details

![](_page_47_Picture_7.jpeg)

wingsoverillawarra.com.au

# WINGS OVER ILLAWARRA - A REAL HIGH FLYING EVENT

Wings Over Illawarra air show was held at Illawarra Regional Airport, Albion Park Rail over the weekend of the 6th and 7th May, 2017. This was the fourth year that the Airshow had been planned and organized by Bright Events Pty Ltd. This year the show was blessed with almost perfect weather, although the Sunday morning did start out a little windy, this eased and did not affect the flying display.

The show opened with the Australian Army's Red Berets parachute display team jumping from the Historical Aircraft Restoration Society owned de Havilland Caribou with the Australian and Army flags on display, followed by a spectacular display by the RAAF Roulettes formation aerobatic display team. The Australian Defence Force formation displays continued with the final appearance by the Royal Australian Navy's AS350B Squirrel Pairs display team and the arrival of 2 RAAF frontline fighters in the F/A-18 Hornets, which landed for the public to view throughout the day.

The day continued with one great display after another, including a mock dogfight between replica WWI Fokker DR1 and Royal Aircraft Factory SE5a from The Australian Vintage Aircraft Society which proved very popular as the majority of attendees would never have had an opportunity to see any WWI aircraft. Following the WWI display attendees were treated to some stunning displays by some classic fighters of WWII including a Supermarine Spitfire, P-51 Mustang and the one of the stars of the show, a Focke Wulf FW-190, making its Australian Airshow debut.

The flying displays continued all day with some amazing aerobatic displays by Red Bull Air Racer Matt Hall in his Extra 300L, Chris Clark ii) a Boeing Stearman, Paul Bennet with a superb solo display in his Wolf Pitts Pro as well as an amazing formation display with the Sky Aces. Visitors also witnessed the debut appearance of the AOPA Freedom to fly team led by Nigel Arnott in a Sukhoi 26MX, who also thrilled the crowd with a very impressive display in a Fox aerobatic glider. Visitors to the event were also treated to the first official full aerial display of the newly acquired Royal Australian Navy's Seahawk Romeo, Australia's latest weapon in anti-submarine warfare. A favorite of Wings Over Illawarra, the Russian Roolettes put on a brilliant formation display in their Russian made Yak-52s and Chinese Nanchang CJ-6s and visitors were also treated to a first for Wings Over Illawarra with a formation display by 2 Learjet 35s from Air Affairs in Nowra.

The flying program went on to feature some classic WWI and post war warbirds and trainer aircraft in the Fleet Warbirds' T-6 Texan, Paul Bennet's T-28 Trojan, Grumman Avenger and CAC Wirraway. Jeff Trappet's CAC Sabre continued to excite the crowds as one of the few examples of these jet aircraft still flying and was joined by other amazing jet displays by Mark Pracy in his L-39 Albatros, Jethro Nelson in the JP-5 and Stephen Gale in the Italian Marchetti S-211. The closing highlight was a very impressive display from an RAAF F/A-18 Hornet as the two participating aircraft departed including a simulated bombing run and well timed 200m long "Wall of Fire" on the aircraft's final pass.

This was an impressive show by any measure, and the imposing escarpment to the west of the airfield made for a spectacular backdrop. Sunday's display followed a broadly similar flow with the notable addition of the mighty C-17 Globemaster III from 36 SON at RAAF Base Amberley and the C-130 J Hercules from 37 Squadron RAAF Base Richmond, thanks to the RAAF. The hornet on Sunday was replaced by the Sabre who did the final pass igniting the "Wall of Fire".

Not only did visitors get to experience one of the best flying programs ever seen in Australia, they had the opportunity to inspect, and in many cases climb aboard, over 60 static aircraft exhibits ranging from a restored 1960s Bell 47 helicopter to a retired Qantas 747-000.

2018 Wings Over Illawarra is shaping up to be even better than 2017! Tickets are already on sale at www.wingsoverillawarra. com.au. This will definitely be a show not to be missed.

### **Books in Brief**

![](_page_48_Picture_1.jpeg)

# Wings of Valour

Author: Charles Page

**Soft cover:** 118 pages, with 200 B&W photos and colour illustrations.

**Availability:** email Charles Page - chaz747@bigpond.com **Price:** \$35.00 includes postage anywhere within Australia.

'Wings of Valour' is designed as a book of remembrance, with two facing pages for Australian Air Force Cadets. It records the brave deeds of 49 AAFC from WA who died in WWII, the Korean War, the Vietnam War and in tragic accidents.

The book is the result of an intensive and sometimes forensic search. Service and casualty files were accessed from National Archives, and further information came from the Australian War Memorial, Commonwealth War Graves, and relevant websites. The stories that unfolded from 70 year old files never cease to amaze, but making contact with relatives gave us the chance to humanise history – and show us the heart behind the facts.

Often a family member becomes the custodian of their downed relative's medals, photographs, and memorabilia. In the case of Lancaster air gunner Phillip Smith, his nephew Jim Smith shared his extensive research and photographs. And every year on the anniversary of his uncle's death, he invites the whole family, and places a photograph of his Uncle, (taken 10 days before he died) on the Honour Plaque in Kings Park, Perth.

In Northam, WA, 92 year old Hazel McPherson proudly displays the medals and photos of her brother, Raymond Broad, who was shot down over Germany. She was home when her mother received the much feared telegram. Her mother replied, "My lad was the light of our house, and everyone had to be bright with him."

The oldest relative interviewed was 98 year old Sydney Goddard, a WWII Mosquito pilot and Flight Operations Manager at MacRobertson Miller Airlines. Syd lost his brother from a war related illness, and his son was killed in a Sabre crash in 1966. Both his son and his brother are on the Honour Board, and in 'Wings of Valour'.

Also fondly remembered by his relatives, Lancaster air gunner Edward Charman, was killed on 11 November 1944– Remembrance Day.

One of the most tragic cases is of Beaufighter pilot William McGuigan, who was shot down near Ambon, in the Celebes Islands, captured by the Japanese and then killed four months

later in a war atrocity just before the end of the war.

Most of the cadets in this book never saw their 21st birthday. As they sailed through the Sydney Heads, bound for the fatal skies of Europe, they must have wondered if they would ever see home again, or see their families again. We owe these cadets a great debt. But telling their stories through this book, is one way of repaying that debt. I hope when you read their stories you will care as deeply as I did when I recreated their short lives.

Author Charles Page is a retired Boeing 747 captain and RAAFA WA AAFC Branch Project Manager History.

His published books include 'Vengeance of the Outback', and 'Wings of Destiny', which was selected for CAF's Reading List in 2010.

'Wings of Valour' is history written with empathy and makes for emotional and inspiring reading.

![](_page_48_Picture_18.jpeg)

![](_page_49_Picture_1.jpeg)

93SQN Beaufighter crew, Bofu, Japan 1946

# 22 Jan 45 - Last operational Beaufighter squadron formed

The RAAF's last wartime operational Beaufighter squadron, 93SQN - was formed at Kingaroy, Queensland, on this day. Although it had no official motto, unofficially it was known as the 'Green Ghost Squadron' and its unofficial badge proclaimed 'Spookus Sneakinus'.

The squadron's first aircraft arrived in January and for the next three months training concentrated on gunnery and rocket exercises.

On 5 March three Beaufighters departed from Oakey, Queensland, to escort Spitfires of 79SQN to Morotai.

On 11 May 1945 a squadron advance ground party embarked on the United States Army transport vessel, Sea Ray, for the voyage to Morotai, where they arrived 11 days later. The unit subsequently moved to Labuan in mid June 1945 and, following the arrival of the last 19 Beaufighters from Kingaroy on 5 August 1945, the squadron flew operations until the cessation of hostilities in August 1945.

On 4 January 1946 the squadron was allocated to escort 81WG (Fighter) Mustangs to Japan. These flights through Clark Field, Naha and Iwakuni - were completed in the second week of March 1946 following which the Beaufighters returned to Narromine.

The last flight of 93SQN was when two Beaufighters were delivered to Essendon, Victoria, on 14 May, and the squadron disbanded at Narromine on 22 August 1946.

# 22 Jan 67 - Death of Air Force Historian John Herington

John Herington enlisted in the RAAF and trained as a pilot in Australia and Canada. He flew Catalinas with the RAF's 202SQN before being posted as an instructor in March 1943. In March 1944 he was posted as 10SQN's

![](_page_49_Picture_13.jpeg)

93SQN Beaufighters, Kingaroy, 1945

![](_page_49_Picture_15.jpeg)

Air Force Historian John Herington

intelligence officer. Employed as an education officer from October, he was promoted temporary SQNLDR in January 1945 and placed in charge of the historical records section at RAAF Overseas Headquarters, London.

In 1946 the Commonwealth Government appointed him official historian to write a one volume book on Australia's role in the air war against Germany and Italy. He returned home in 1947 and was demobilized on 24 March 1948 to work full time on the project.

On completing a number of chapters, he obtained approval to publish the history in two volumes: 'Air War Against Germany and Italy 1939-1943' (Canberra, 1954), covered operations when the adversaries were evenly matched; 'Air Power Over Europe 1944-1945' (Canberra, 1963), dealt with the period when the Allies had gained air superiority over Germany.

Having rejoined the RAAF in 1951 as a SQNLDR, Special Duties Branch, Herington performed intelligence duties in Melbourne while making progress with his histories. Herington was then seconded to the Department of Supply in 1953-54 and placed in charge of security for the atomic bomb tests in South Australia.

Resigning his commission, in March 1954 he was appointed the department's regional security officer for South Australia. In 1957 he was promoted chief security officer, Melbourne. In 1964 he was posted to London as the department's senior representative.

He died of cancer on this day and was cremated. His ashes were interred in the churchyard of St John the Evangelist, Glen Iris, Melbourne.

# 24 Jan 49 – 76SQN reformed at Williamtown

76SQN was originally formed on 14 March 1942, Archerfield, QLD. The squadron was equipped with P-40E Kittyhawk fighters and served with distinction throughout the South West including Milne Bay (1942) and New Guinea (1943). Towards the end of the War, the squadron was based at Kiriwina, Momote, Noemfoor, Morotai, Tawitawi and Labuan successively.

The unit carried out its final attack mission on 14 August 1945 when four P-40s strafed Japanese aircraft in revetments in the north Keningau area on Borneo. The following day, news of the cessation of hostilities was received.

During September the squadron received a full complement of P-51 Mustangs and the Kittyhawks were issued to No 30 Air Stores Park.

The main body of 76SQN left Labuan by sea on 11 February 1946, disembarked in Japan on 21 February and moved into quarters at Iwakuni as part of the British Commonwealth Occupation Forces (BCOF).

The squadron moved to its permanent base at Bofu, Japan. In February 1948 the unit moved from Bofu back to Iwakuni where on 29 October 1948, the squadron disbanded.

76SQN re-formed on this day at Williamtown equipped with Mustang aircraft until conversion to Vampire aircraft towards the end of 1951. From July 1952 to early 1955, the squadron served with 78 Fighter Wing, then based at Malta, as part of NATO forces in the Mediterranean area.

The squadron returned to Williamtown in February 1955, and disbanded on 16 March 1955.

# Orions began operations in MEAO

On 28 Jan 03, the RAAF detachment of two P3-C Orion maritime patrol aircraft sent to the Middle East Area of Operations (MEAO) flew its first mission under Operation Slipper. Patrolling day and night ahead of the coalition invasion of Iraq, the aircraft contributed to the overall objective of achieving and maintaining sea control in the northern Persian Gulf.

The superior intelligence from the Orions' sensors provided coalition commanders with an accurate surveillance picture of surface activity, enabling potentially hostile shipping to be identified and challenged, well away from allied warships. The detachment marked the start of a commitment that flowed on into Operation Catalyst (the rehabilitation of Iraq following the overthrow of dictator Saddam Hussein) and lasted for more than five years. In that time, the two-aircraft detachment logged more than 12,000 flying hours undertaking overland reconnaissance as well as maritime patrols and oil terminal protection sorties.

Postscript: After nearly 10 years of operational service in the Middle East, the final AP-3C Orion aircraft from No 92 Wing, RAAF Base Edinburgh, returned home to Australia on 30 Nov 12. More than 3500 personnel rotated through the almost decade long deployment where the Orions were responsible for conducting overland intelligence, surveillance and reconnaissance tasks in Afghanistan and Iraq, maritime patrols of the Arabian Gulf and North Arabian Sea and - towards the end of the deployment - counter piracy missions in the vicinity of Somalia.

On 11 July 2013, the South Australian Governor, His Excellency

RADM Kevin Scarce AC CSC RANR, and Mrs Liz Scarce, hosted a ceremony at Government House to present a Meritorious Unit Citation to No 92 Wing.

More on the AP-3C Orion in Air Force service:

http://airpower.airforce.gov.au/ APDC/media/PDF-Files/Pathfinder/ PF250-The-P-3-Orion-in-RAAF-Service.pdf

This material is compiled from sources including the Directorate of History–Air Force, the RAAF Museum, the Australian War Memorial, ADF Serials and Peter Dunn. The Directorate of History–Air Force is not responsible for pre-1921 items. Whilst every effort is made to confirm the accuracy of the entries, any discrepancies are solely the responsibility of the originator.

![](_page_50_Picture_18.jpeg)

Flight Engineer Instructor FSGT Reece Dufty from No 292 Squadron gives thumbs up to the cockpit of AP-3C Orion A9-658 prior to the aircraft's final tactical training sortie from RAAF Base Edinburgh. Photo CPL David Cotton.

![](_page_50_Picture_20.jpeg)

![](_page_50_Picture_21.jpeg)

A RAAF AP-3C Orion A9-658 departs from RAAF Base Edinburgh for its final tactical training flight, prior to the aircraft's decommissioning from service. Photo CPL David Cotton.

# Springfield Lakes Hotel

![](_page_51_Picture_1.jpeg)

# Springfield Lakes Hotel – a touch of luxury during your relocation

For defence personnel relocating their families to Amberley, the Springfield Lakes Hotel offers you a touch of luxury whilst you search for more permanent accommodation in the area.

Springfield Lakes Hotel offers guests 4.5 star, boutique hotel accommodation, just 30 minutes from Brisbane and Ipswich city centres. The hotel offers 20 spacious hotel rooms over 2 floors.

With an onsite restaurant and bar providing meals, free business grade WiFi, an outdoor swimming pool, small fitness room and complimentary secure onsite parking the Springfield Lakes Hotel is the ideal transient accommodation.

Within a 2 minute walk from the hotel entrance you can find cafes, bars, takeaway, McDonalds, several small restaurants and a small supermarket, and the Spring Lake Bar and Events Centre. Not far from the hotel you will find the Springfield Train Station, Brookwater Golf Course, Willow Bank Raceway and Orion Lagoon and Shopping Centre.

With the cities of Brisbane and Ipswich on each side of

![](_page_51_Picture_8.jpeg)

us, we also offer guests the perfect base to explore the natural beauty of the surrounding hinterland and mountains. We have hiking and walking tracks,

![](_page_51_Picture_10.jpeg)

lakes, rivers and dams – all within a short drive at the Moggill State Forest, Spring Mountain Forest Park, White Rock Conservation Park.

Our staff are always available to provide you with advice on where to eat, where to shop, what to do and to help you find your way around our beautiful city.

Defence rates are offered to Defence Members and can also be passed on to family and friends.

To find out more, visit www.springfieldlakeshotel. com.au. call us directly on 07 3818 9600 or email stay@ springfieldlakeshotel.com.au

HON DAN TEHAN MP MINISTER FOR VETERANS' AFFAIRS

MINISTER FOR DEFENCE PERSONNEL MINISTER ASSISTING THE PRIME MINISTER FOR CYBER SECURITY MINISTER ASSISTING THE PRIME MINISTER FOR THE CENTENARY OF ANZAC

11 December 2017

Community groups benefit from grants funding

Minister for Veterans' Affairs Dan Tehan today announced that 82 community projects honouring Australian service men and women would share more than \$210,000 in Government grant funding.

Mr Tehan said the funding would

help local community groups to build and preserve memorials, hold commemorative events and undertake activities that teach younger generations about Australia's wartime history.

"The Government is funding local organisations to provide projects and activities relevant to their community that honour the men and women who serve in defence of our nation," Mr Tehan said.

"The variety of projects receiving funding as part of the Australian Government's Saluting Their Service grants program demonstrates the unique ways each community honours our veterans and serving personnel.

"I encourage all interested groups

and organisations with a project to review the grant guidelines and submit a request for funding to the Department of Veterans' Affairs."

The Community Commemorative Grants category of the Saluting Their Service program provides up to \$4,000 for individual projects, and applications are accepted at any time.

For more information about the Saluting Their Service program, contact the Department of Veterans' Affairs' Commemorative Grants team on 1800 555 254 or email commemorativegrants@dva.gov.au.

A list of the projects by state is attached. All funding listed is GST exclusive.

| AUSTRALIAN CAPITAL TERRITORY                              |           |            |   |              |  |  |  |
|---|-----------|------------|---|--------------|--|--|--|
| Recipient   | Location  | Electorate | Funding Description   | Amount \$    |  |  |  |
| Wanniassa School Parents<br>and Citi-zens Association Inc | Wanniassa | Canberra   | Refurbish the memo-rial at Wanniassa School.  | 4,000        |  |  |  |
| Friends of Manu-ka Pool Inc                               | Manuka    | Canberra   | Restore the Second World War Honour Roll and<br>Manuka Swimming Pool and publish a booklet of the<br>biographies of the men listed on the Hon-our Roll. | 3,039        |  |  |  |
| Total Grants - ACT – 2                                    |           |            | Т   | otal \$7,039 |  |  |  |

#### **NEW SOUTH WALES**

| Recipient   | Location            | Electorate | Funding Description   | Amount \$ |
|---|---------------------|------------|---|-----------|
| Operation Pilgrimage Group  | Ryde                | Bennelong  | Frame portraits of Victoria Cross recipients<br>for the Western Australia VC photographic<br>portraits exhibition.  | 3,000     |
| Sofala Progress Association   | Sofala              | Calare     | Install an Avenue of Honour in Sofala,<br>commemorating First World War service<br>men from the village of Sofala.  | 3,247     |
| Vietnam Veterans Peacekeeper &<br>Peacemakers Association of Australia<br>Hastings Manning Macleay Sub-branch | Port<br>Macquarie   | Cowper     | Print a history book to use with presentations<br>about the Vietnam War to school students<br>in the Cowper electorate.   | 2,727     |
| Battle for Australia Association NSW Branch   | Forresters<br>Beach | Dobell     | Hold a commemorative service in Sydney for the 75th anniversary of the Battle for Australia.  | 1,838     |
| The Entrance Long Jetty RSL Sub-<br>branch  | Long Jetty          | Dobell     | Establish a new community war memorial at Forresters Beach Retirement Village.  | 3,420     |
| Vietnam Veterans Association of<br>Australia/Central Coast Sub-branch   | Lake<br>Haven       | Dobell     | Install a flagpole at Vietnam Veterans<br>Memorial Park, Gorokan, to fly the Australian<br>National Flag on days of commemoration.  | 1,500     |
| Kiolia War Memorial Committee   | Kioloa              | Gilmore    | Upgrade the Kioloa War Memorial by replacing<br>the flagpole, installing a commemorative wall<br>and post and chain fence.  | 4,000     |
| Avalon Beach Surf Life Saving Club  | Avalon<br>Beach     | Mackellar  | Purchase and install a flagpole at the<br>Avalon Beach Surf Life Saving Clubhouse<br>to fly the Australian National Flag.   | 1,364     |
| HMAS Hobart Association NSW Section   | Erskine<br>Park     | McMahon    | Install 22 plaques in the Chapel of<br>Remembrance at Garden Island to<br>commemorate the service men and women<br>who lost their lives on HMAS Hobart I and<br>HMAS Hobart II. | 880       |

| Kellyville Public School   | Kellyville          | Mitchell       | Establish a Place of Remembrance Memorial<br>at Kellyville Public School, including 9 plaques<br>commemorating past and present conflicts.                             | 2,727 |
|--|---------------------|----------------|--|-------|
| Ebor Community Group Incorporated  | Ebor                | New<br>England | Construct a new war memorial in Ebor<br>to honour Ebor and Guy Fawkes district<br>residents who have served in all wars.   | 4,000 |
| Adamstown Public School  | Adamstown           | Newcastle      | Create a commemorative garden at Adamstown Public School.  | 2,727 |
| Glendore Public School   | Maryland            | Newcastle      | Create a commemorative garden at<br>Glendore Public School.  | 2,618 |
| Families and Friends of the First AIF<br>Incorporated  | Dubbo               | Parkes         | Hold a commemorative service for the<br>Centenary of the Battles of Third Ypres<br>at the Anzac Memorial in Sydney on 26<br>September 2017.                            | 3,000 |
| Pelaw Main Public School P&C<br>Association  | Pelaw Main          | Paterson       | Restore the Pelaw Main Public School War<br>Memorial Roll of Honour sandstone pillars.   | 4,000 |
| St Aloysius Primary School   | Chisholm            | Paterson       | Purchase and install a flagpole at St<br>Aloysius Primary School to fly the Australian<br>National Flag on days of commemoration.                                      | 1,240 |
| St Joseph's Primary School East<br>Maitland  | East Maitland       | Paterson       | Relocate a flagpole to the Anzac<br>Commemorative Garden at the school to<br>fly the Australian National Flag on days of<br>commemoration.                             | 1,364 |
| Kingscliff RSL Sub- branch   | North<br>Kingscliff | Richmond       | Install a plaque commemorating the<br>Indigenous Defence Service at the<br>Memorial Walk in Kingscliff.  | 862   |
| National Servicemen's Association<br>of Australia NSW Branch Tweed<br>Valley - Murwillumbah Sub-branch | Murwillumbah        | Richmond       | Install a plaque on the Wall of Remembrance<br>in Murwillumbah and hold a dedication<br>service to commemorate the 100th<br>anniversary of the Charge of<br>Beersheba. | 831   |
| Parkes RSL Sub- branch   | Parkes              | Riverina       | Restore locally significant wartime<br>memorabilia to be displayed at the Parkes<br>Services Club.   | 3,000 |
| Killcare Surf Life Saving Club   | Killcare            | Robertson      | Install a flagpole at the Killcare Surf Club<br>to fly the Australian National Flag on days<br>of commemoration.   | 1,364 |
| The Lions Club of Valentine  | Croudace Bay        | Shortland      | Upgrade and relocate the Anzac Memorial,<br>plaque and flagpole within Allambee Park<br>Valentine.   | 3,750 |
| Forestville RSL Sub- branch  | Forestville         | Warringah      | Upgrade the Forestville Anzac Memorial<br>Pathway and Cenotaph by digitising the<br>information.   | 1,300 |
| Total Grants - NSW – 23  |                     | То             | tal \$54,759   |       |

### QUEENSLAND

| Recipient                               | Location     | Electorate | Funding description   | Amount \$ |
|---|--------------|------------|---|-----------|
| Kilcoy RSL Sub- branch                  | Kilcoy       | Blair      | Purchase three mannequins and build a display case for the display of Light Horse memorabilia at the Kilcoy RSL Sub-branch. | 3,000     |
| Manly-Lota RSL Sub-branch               | Manly        | Bonner     | Purchase glass cabinets for the display of wartime memorabilia at Manly-Lota RSL.   | 2,727     |
| Dayboro War Memorial Association<br>Inc | Kobble Creek | Dickson    | Upgrade the Dayboro War Memorial to include all wars and conflicts since Vietnam and include peacekeeping operations.       | 3,636     |

| Nambour and District Historical<br>Museum Association Inc                             | Nambour     | Fairfax        | Preserve and frame the Rats of Tobruk<br>Association, Queensland Branch banner for<br>display at the Nambour Museum.   | 2,631 |
|---|-------------|----------------|--|-------|
| Kewana Waters RSL Sub-branch  | Buddina     | Fisher         | Upgrade the weapons display cabinet at the Kewana Waters Surf Life Saving Club to comply with safety requirements.   | 1,818 |
| Emerald State High School   | Emerald     | Flynn          | Purchase four glass display cabinets and acid-<br>free partition boxes to display and store wartime<br>memorabilia at the school.  | 2,670 |
| Australian War Animal Memorial<br>Organisation  | Toowoomba   | Groom          | Reprint a book entitled 'A Century of Australian<br>Animals at War' by Nigel Allsop to be given to<br>local schools and libraries.                                       | 3,000 |
| 2RAR Museum   | Townsville  | Herbert        | Purchase glass cabinets for the display of memorabilia at the 2RAR Museum, Townsville.   | 2,375 |
| Royal Australian Air Force Association<br>Townsville Branch                           | Kirwan      | Herbert        | Install two plaques at the RAAF Townsville<br>Aviation Heritage Centre Memorial Garden<br>commemorating the 33 Squadron Flying Boat<br>Crew and No 5 Communication Unit. | 850   |
| Hervey Bay RSL Sub-branch   | Pialba      | Hinkler        | Replace the Krait Memorial Flagpole at Dayman Park, Urangan.   | 830   |
| National Servicemen's Association of<br>Australia (QLD) Inc Tablelands Sub-<br>branch | Tolga       | Kennedy        | Install a Volunteer Defence Corps Memorial<br>Plaque at Rocky Creek War Memorial Park in<br>Tolga.   | 1,525 |
| Bloomfield Memorial Association   | Bloomfield  | Leichhardt     | Upgrade the Bloomfield War Memorial in Ayton.  | 1,180 |
| Ninth Battalions Association Inc  | Chermside   | Lilley         | Hold a Battle of Milne Bay 75th anniversary commemorative service in Chermside on 26 August 2017.  | 1,941 |
| Ninth Battalions Association Inc  | Chermside   | Lilley         | Install a permanent display at the Milne Bay<br>Memorial Library and Research Centre in<br>Chermside to commemorate the Battle of<br>Milne Bay.                          | 2,727 |
| Amiens History Association Inc  | Amiens      | Maranoa        | Install an Honour Board and a flagpole at the Amiens Legacy Centre.  | 2,313 |
| Thallon Progress Association Inc  | Thallon     | Maranoa        | Install a Second World War Honour Roll on the Thallon Anzac War Memorial.  | 3,322 |
| Wallangarra RSL Sub-branch  | Wallangarra | Maranoa        | Install commemorative plaques on the<br>Wallangarra Sub-branch Memorial Wall<br>commemorating First World War servicemen<br>killed in action.                            | 1,166 |
| Queensland Naval Brigade Historical<br>Association Southport Volunteer<br>Company     | Southport   | Moncrieff      | Purchase three mannequins and three cabinets<br>for the display of memorabilia at the Southport<br>Heritage Military Museum.   | 3,000 |
| Total Grants - QLD – 18   |             | Total \$40,711 |  |       |

### SOUTH AUSTRALIA

| Recipient  | Location                            | Electorate | Funding Description  | Amount \$ |
|--|-------------------------------------|------------|--|-----------|
| Adelaide University Football and<br>Cricket Club WW1 Memorial<br>Committee | The<br>University<br>of<br>Adelaide | Adelaide   | Install plaques at the Adelaide University Oval<br>to commemorate Adelaide University Football<br>and Cricket Club members who served during<br>the First World War. | 3,636     |
| Friends of the Prospect Library<br>Prospect Local History Group            | Sefton<br>Park                      | Adelaide   | Install Second World War and POW<br>Honour Rolls at Nailsworth Primary School<br>commemorating former students.  | 2,075     |
| Loxton RSL Sub- branch   | Loxton                              | Barker     | Produce a 'Soldier at Rest' tree carving in front of the Loxton RSL building.  | 4,000     |

| Loxton RSL Sub- branch  | Loxton          | Barker   | Purchase picture frames for the display of memorabilia at the Loxton RSL Sub-branch.  | 2,904 |
|---|-----------------|----------|---|-------|
| Loxton RSL Sub- branch  | Loxton          | Barker   | Develop educational packs for use by schools in the Loxton area.  | 2,800 |
| Truro and District Community<br>Association Inc   | Truro           | Barker   | Restore the First and Second World War Memorial in Truro.   | 4,000 |
| Warradale Community Children's<br>Centre  | Warradale       | Boothby  | Install a flagpole at the Warradale and Park<br>Holme Campuses of the Warradale Community<br>Children's Centre to fly the Australian National<br>Flag on days of Commemoration. | 1,000 |
| Department of Planning, Transport<br>and Infrastructure, auspicing Outback<br>Communities Authority | Port<br>Augusta | Grey     | Update local war memorials and honour rolls in Parachilna, Leigh Creek, Beltana and Blinman.  | 3,636 |
| Department of Planning, Transport<br>and Infrastructure, auspicing Outback<br>Communities Authority | Port<br>Augusta | Grey     | Update local war memorials and honour rolls<br>in Iron Knob, Oodnadatta, Lyndhurst and<br>Kingoonya.  | 3,636 |
| Jamestown RSL Sub-branch  | Jamestown       | Grey     | Install an interpretive audio recording about the<br>9th Light Horse at the Belalie Creek Diggers Walk<br>in Jamestown.   | 3,398 |
| 9 Battalion RAR Association SA  | Linden Park     | Grey     | Hold the 50th anniversary and final reunion for the 9th Battalion RAR in Adelaide.  | 3,000 |
| Royal Australian Regiment Association SA Branch Inc   | Linden Park     | Grey     | Purchase glass cabinets for the display of memorabilia.   | 3,000 |
| Total Grants - SA – 12  |                 | Total \$ | 37,085  |       |

### VICTORIA

| Recipient   | Location          | Electorate  | Funding Description   | Amount \$ |
|---|-------------------|-------------|---|-----------|
| Anglican Parish of St Peter<br>Ballarat   | Ballarat          | Ballarat    | Create a Second World War honour board to commemorate 12 local parishioners who died during the war.  | 3,019     |
| Ballarat Yacht Club   | Ballarat          | Ballarat    | Restore the Ballarat Yacht Club's First World<br>War Honour Board and install a flagpole at the<br>Club to fly the Australian National Flag on days of<br>Commemoration.                        | 3,094     |
| National Servicemen's<br>Association of Australia<br>Victorian Branch Northern<br>Districts Sub-branch    | Preston<br>South  | Batman      | Install a plaque at the Heidelberg Repatriation<br>Hospital commemorating the National Service<br>Schemes.  | 2,088     |
| Mount Waverley North<br>Primary School  | Mount<br>Waverley | Chisholm    | Install a flagpole at the front of the school to fly the Australian National Flag on days of Commemoration.   | 1,090     |
| Australian Peacekeeper<br>and Peacemaker Veterans'<br>Association Inc National<br>Committee of Management | Torquay           | Corangamite | Hold a 70th anniversary dinner in Canberra on<br>15 September 2017 to commemorate 70 years of<br>Australian Peacekeeping Operations.  | 2,727     |
| Bass Valley Friends of the<br>RSL   | Corinella         | Flinders    | Install a plaque in the Avenue of Honour at Bass to commemorate the service men and women from the area who died during the First World War.  | 1,784     |
| Tootgarook Primary School   | Tootgarook        | Flinders    | Purchase and install a flagpole at Tootgarook<br>Primary School to fly the Australian National Flag<br>on days of Commemoration.  | 1,364     |
| Western Port Oberon<br>Association  | Hastings          | Flinders    | Purchase a glass cabinet for the display of memorabilia at the Victorian Maritime Centre, Crib Point.   | 2,727     |
| Sale RSL and Community<br>Sub-branch  | Sale              | Gippsland   | Install three plaques on the Sale RSL Memorial<br>Wall to commemorate 70 years of peacekeeping,<br>75 years since the Second World War and all those<br>who served in the Afghanistan/Iraq War. | 1,395     |

| Signature Care Pty Ltd                | Cheltenham | Goldstein | Install an Honour Board to commemorate<br>residents who have served and a flagpole<br>to fly the Australian National Flag on days<br>of Commemoration at the Caravonica Aged<br>Care Facility.              | 3,044       |
|---------------------------------------|------------|-----------|---|-------------|
| Signature Care Pty Ltd                | Cheltenham | Goldstein | Install an Honour Board at Bendigo Community<br>Aged Care facility to commemorate residents<br>who have served in the armed services.   | 1,680       |
| Signature Care Pty Ltd                | Cheltenham | Goldstein | Install an Honour Board at Sale Community<br>Aged Care facility to commemorate residents<br>who have served in the armed services.  | 1,680       |
| Signature Care Pty Ltd                | Cheltenham | Goldstein | Install an Honour Board to commemorate<br>residents who have served and a flagpole<br>to fly the Australian National Flag on days of<br>Commemoration at the Moe Community Aged<br>Care Facility.           | 2,802       |
| Signature Care Pty Ltd                | Cheltenham | Goldstein | Install an Honour Board to commemorate<br>residents who have served and a flagpole<br>to fly the Australian National Flag on days<br>of Commemoration at the Bacchus Marsh<br>Community Aged Care Facility. | 2,802       |
| Woorinen RSL Sub- branch              | Woorinen   | Mallee    | Replace the Woorinen Honour Board which was destroyed in a fire.  | 1,375       |
| Dunkeld Public Lands<br>Committee Inc | Dunkeld    | Wannon    | Produce and install a plaque at the Dunkeld<br>Cenotaph providing information about the First<br>World War and Australia's involvement.   | 3,636       |
| Mortlake RSL Sub- branch              | Mortlake   | Wannon    | Restore the Honour Boards at Mortlake RSL.  | 3,145       |
| Total Grants - VIC – 17               |            |           | Tot   | al \$39,452 |

### WESTERN AUSTRALIA

| Recipient   | Location       | Electorate | Funding Description  | Amount \$    |  |
|---|----------------|------------|--|--------------|--|
| Centre for Western Australian<br>History                              | Crawley        | Curtin     | Publish the journal entitled 'Studies in<br>Western Australian History: War and<br>Emotions' – issue 32 for distribution to all<br>high schools in WA.               | 2,798        |  |
| Dowerin District Museum   | Dowerin        | Durack     | Present a play in Dowerin entitled 'Please<br>Send Socks: stories of a small town and a<br>Great War'.   | 3,000        |  |
| Shire of Wickepin   | Wickepin       | O'Connor   | Research and write the individual stories of<br>those who inlisted from the Wickepin District<br>and were killed in the First or Second World<br>War.                | 4,000        |  |
| Somerly Primary School  | Clarkson       | Pearce     | Install an Avenue of Honour at the entrance to<br>Somerly Primary School, commemorating First<br>World War servicemen killed in action from the<br>City of Wanneroo. | 2,727        |  |
| The RSL of Australia WA Branch<br>auspicing Albany RSL Sub-<br>branch | Perth          | Perth      | Hold a memorial service in Albany to<br>commemorate the 100th anniversary of the<br>Charge at Beersheba.   | 2,727        |  |
| Vietnam Veterans Association of<br>Australia WA Branch                | Mt<br>Hawthorn | Perth      | Place poppy tributes on the graves of all KIA<br>Vietnam War soldiers in Perth and regional<br>areas of WA.  | 607          |  |
| Total Grants - WA – 6   |                |            | Total \$15,859   |              |  |
| Total Grants – Australia – 82   |                |            | Tota   | al \$210,905 |  |

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# Advocacy, Entitlements and Support (Aes) Spot<sup>1</sup>

## Introduction

In my last two articles, I have introduced some of the influences that are impacting on the delivery of advocacy services to veterans and their families/dependents. I would like to continue this theme in this article. The views I express are my own and do not necessarily have the approval of the National Council.

### **Overview**

Indisputably, the pressures are mounting. Apart from the specific pressure that has resulted from the Senate Inquiry into Suicide by Veterans, there is the wider pressures arising from the ACNC scrutiny of the way in which ESOs are using their assets and moneys to support veterans' welfare.

Also relevant, are changes in DVA calculations on how BEST funds are disbursed to ESOs to support the delivery of welfare services. And then, more widely again, is younger veterans' disinterest in seeking the support of traditional ESOs, and the concomitant preference to create their own self-help groups. Reasonably, no traditional ESO – of which the Air Force Association is one – can ignore the clamour that is growing around it.

In a nutshell, the situation facing traditional ESOs – and other community service clubs like Rotary, Lions, etc - is 'survival'. The \$64 question is, therefore: What can AFA do about it? What follows are observations on past human and organisational behaviours, and some options that might 'brighten' the future.

## **Organisational Behaviour**

More than one Minister for Veterans Affairs has bemoaned the fractiousness of ESOs. Not only do different ESOs speak with different voices and 'fight to the death' for their 'rightful' share of Government funds, but they also dissent internecinally over 'turf'. Sub-Branches defend their autonomy from State Branches/Division, and Branches/ Divisions their right to self-determine in the face of National Office 'ignorance of the real issues'. Some reflections:

I remember reading a tome on

human dynamics a few years ago. The book was the product of 20 years of research by two lead social scientists supported by 44 co-researchers who engaged 40,000 people from 25 different cultures. In other words, it employed a sound research methodology and robust research team. Its findings were worthy of consideration. If my memory serves me well, the researchers found that, across all those people and all those cultures, 85% of people's immediate response when confronted with a challenge was purely emotional. Only 5% responded purely calmly or rationally. The other 10% populate the continuum between these poles. In short, those 'very few of us that are rational' are surrounded by a 'bunch of hot-heads'!!!

This recollection was contextualised when I recently listened to Payam Akhavan's 2017 Third Massey Lecture on the genocide in Rwanda. At Payam was the youngest-ever UN War Crimes Prosecutor (former Yugoslavia and, in 1995, Rwanda), Member of the Permanent Court of Arbitration at The Hague and Professor of International Law at McGill University. His words still ring in my ears. He said:

"Looking at our brutish past, we may well conclude that despite some progress, we remain territorial mammals with an insatiable appetite for aggression. Indeed, human kind is unique in mastering the destruction of its own kind."

Of course, I am not intimating that antipathy between the hierarchical levels of an ESO will end in bloodshed. Metaphorically, however, that contest is draining the lifeblood from any ESO that allows it to continue – or worse, promotes it.

From a rhetorical vantage point, we must ask the question: Why would an ADF member or ex-service man or woman want to join an organisation that is run by (mostly) old men, who are still behaving like rutting bulls? Contesting each other over ephemera – ego, local power, who's entitled to the last sausage. Typically, the younger veteran will have rendered six or more years' service, will have deployed several times, will have seen enough fighting to last a lifetime, may have a number of mental health and musculo-skeletal conditions, may be struggling to find employment, and is trying to settle down from the adrenaline-packed mateship of the military into life with a family. Why would they not find the support of their mates more attractive than the beer and pokies of our generation?

Then there are the stories they post on Facebook about their contact with an ESO pension or welfare officer who doesn't 'do' MRCA or DRCA, or more 'sympathetically' says: "get TPI and a Gold Card mate and vou'll be set for life". It would be great if such posts could be discounted as myths. Whether they are factual mythical is immaterial. Regrettably, they are the perceived reality for too many younger veterans. In the absence of positive experiences and favourable posts, the negative experiences of the few become the wider expectations of the many. So, what can we do? How do we change expectations? How do ESOs survive in an inconducive social and demanding regulatory environment.

## **Culture Change**

I submit that wholesale culture change is the fundamental need. Despite some instances to the contrary, without a total change of culture, traditional ESOs will simply 'fade away' as it their aging warriors die out. Vietnam-era veterans fitted into the culture bequeathed by their predecessors: obligatory attendance at interminable meetings that debated inconsequentials. The beer and sausage at the end of the meeting validated attendance.

This model will not attract younger veterans to traditional ESOs. Accepting that my contact is by no means exhaustive and certainly not scientific research, some observations follow.

All my contact with younger veterans underscores their disinterest in our generation's interests. They do not want to attend meetings. They are averse to 'beer and pokies'. They want family activities. And they want to meet informally over a coffee when they can. Their interest is captured by mateship, they are attuned to their mates' needs, they highly value spontaneity. These observations indicate a diametric relationship between their and our culture.

<sup>&</sup>lt;sup>1</sup> Article was prepared by R.N. (Dick) Kelloway, National VP, ATDP-accredited Level 3 Compensation and Level 2 Welfare Advocate.

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#### Open

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Mondays, Christmas Day & Good Friday Web: www.airforce.gov.au/raafmuseum Facebook: facebook.com/RAAF.Museum Tel: (03) 8348 6040 Fax: (03) 8348 6692

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Too many times I have heard 'aging warriors' declare with agitation: "They (young veterans) are grasping. They want everything now. They 'd better wait their turn. If they want help, they can come to us." The reality is that, our predecessors bequeathed a culture to us with which we (still) feel comfortable. Active Mess life, living on base (including when married), very few women in uniform (those that were in clerical-type roles), few wives working (time to support their husband), relatively long-term postings in stable peacetime units, and a strong rankbased hierarchical structure, shaped a type of companionship and human interrelationships that is no longer valid.

My service in Vietnam as a FAC and more generally in fighter aircraft undoubtedly provides atypical experience. As a FAC, once the fighters were on station, the ground commander turned over tactical control to me. As a fighter pilot, I was on my own but flew in support of lead. In other words, my service experience when 'on the job' was a-hierarchical. I was part of a highly networked team. Rank was irrelevant.

From conversation with young veterans, this is the situation they face not only when in combat in the intensely networked battle space. Now, in daily service experience, while the (traditional) rank structure remains and rank is respected, the 'subject matter expert' is the person to whom all turn, irrespective of rank relativities. The underlying culture is therefore grounded in knowledge, and functions on the basis of the free flow of information within a network. Add to this the immediacy inculcated by cycles of combat experience, and the subtle changes of brain function by use of smart phones, touch screens and access to the web.

No wonder, the pace of our generation's life and our hierarchicallyingrained responses are foreign to the young veteran and his/her family. So, to return to the point: the need for fundamental culture change.

Put bluntly: if we want young veterans to join our ESOs – to rescue from extinction the traditions that formed them – it is the culture of our institutions that we must change. The view that 'they have to come to us' is self-defeating. It is up to us to show the young veteran community that Payam Akhavan's bleak observation does not apply to us. As

ESO Members, it behoves us all to prove that we are not 'insatiably aggressive, territorial mammals' who will sacrifice our institutions for a momentarilysnatched personal glory, as leaders, or for a beer and a sausage as ordinary members. And, we need to show that when confronted by a challenge – especially a challenge to our institutions' survival – that can act rationally.

### The Way Forward

Culture change needs a 'vision' – a compelling mental picture of the desired future. In so doing, we need to remember that we are the current custodians of the traditions that were bequeathed to us by our predecessors. If the 'founding fathers' could come back now to see what has become of their vision, what would they say? I warrant that it would be something along the lines of: "Well that wasn't what we had in mind'.

Fortunately, our institution, the Australian Flying Corps and Royal Australian Air Force Association Inc has started a transformation process. We are now the Air Force Association Ltd a fundamental change of legal structure that should enable us to squarely meet regulators' scrutiny. Critically, we have also begun a fundamental reconsideration of our vision. Like all traditional ESOs, we are struggling to engage younger veterans in defining AFA's vision. National Council has released a draft vision strategy for Division and Branch responses. From a strategic planning and change facilitation perspective it is a lovely piece of thinking and drafting – a document we can take proudly, but respectfully, to the serving and ex-RAAF service personnel that will continue the traditions of old but mould them to they remain relevant to future generations.

But National and State Councils cannot by themselves energise the cohort of young veterans and their family/dependents. Every member has a critical part to play in canvassing the vision to young Air Force veterans. A quick glance at DVA statistics will show how many veterans live in your Local Government Area. Some of them will be ex-Air Force. Your local radio station or local paper, your Branch's newsletter or contacts in local information sharing bodies, your children's or grandchildren's friends may be or know ex-Air Force personnel, some may be 'friends' on Facebook with others who may in

### **Veterans Information**

turn 'like' a post that canvasses the availability of the vision strategy and AFA's need for feedback. Those of us who are advocates are especially wellplaced to canvass the document.

A century ago, personnel returning from WW I were incensed by the lack of support their incapacitated colleagues, and widows and orphaned children were receiving from government. The tradition of 'mates helping mates' was founded. The intense caring that young veterans demonstrate for their mates, indicates how strongly ingrained and how fresh that tradition is. In other words, the foundations for AFA's continuance are in place. We just need to build the bridges on which our generation and the young generation of veterans can meet. There they can decide the future – together.

If there were a rationale, Payam Akhavan evokes it: *"Feeling injustice is an emotional and spiritual connection with the suffering others. The problem with the world is the lack of empathy."* AFA's tradition of 'mates helping mates' is founded in empathy. To start building the bridge from our side we need to imagine the injustice that a young veteran must feel when turned away by – metaphorically or actually – by a culture that is unresponsive to his/ her need. We all have a part to play in ensuring that such a culture is eliminated.

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![](_page_67_Picture_1.jpeg)

F-35 Lightning IIs have flown thousands of sorties powered by the F135 propulsion system, developed from the highly successful fifth-generation engine for the F-22 Raptor. Pratt & Whitney partners with customers around the world to provide sustainment solutions that keep the F-35 Lightning II dependable and affordable. We are proud to power today's most advanced fighter aircraft. Now, we are advancing engine technology to provide the next generation of fighter engines for tomorrow's defence needs.

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![](_page_67_Picture_4.jpeg)

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